

**A REGULAR MEETING
OF THE TOWN OF LADYSMITH COUNCIL
AGENDA
6:30 P.M.**

Tuesday, December 1, 2020

This meeting will be held electronically as per Ministerial Order No. M192

Pages

1. CALL TO ORDER

Call to Order 6:30 p.m. in Open Session, in order to retire immediately into Closed Session.

Members of the public are welcome to attend all Open Meetings of Council, but may not attend Closed Meetings.

2. CLOSED SESSION

Recommendation

That, in accordance with section 90(1) of the *Community Charter*, Council retire into closed session in order to consider items related to the following:

- labour relations or other employee relations - section 90(1)(c)
- negotiations and related discussions respecting the proposed provision of a municipal service - section 90(1)(k)

3. OPEN MEETING (7:00 P.M.)

Please follow this link to view the meeting:

<https://www.youtube.com/channel/UCH3qHAExLiW8YrSuJk5R3uA/featured>

4. AGENDA APPROVAL

Recommendation

That Council approve the agenda for this Regular Meeting of Council for December 1, 2020.

5. RISE AND REPORT- Items from Closed Session

6. MINUTES

6.1. Minutes of the Special Meeting of Council held November 10, 2020

6

Recommendation

That Council approve the minutes of the Special Meeting of Council held November 10, 2020.

6.2. Minutes of the Regular Meeting of Council held November 17, 2020

8

Recommendation

That Council approve the minutes of the Regular Meeting of Council held November 17, 2020.

7. DELEGATIONS

7.1. Ladysmith RCMP Policing Priorities

Staff Sergeant Wes Olsen, Detachment Commander, will provide an overview of policing goals and priorities for the Town of Ladysmith.

8. 2021 BUDGET: INTRODUCTION OF WATER RATE BYLAW AND CONTINUATION OF GENERAL OPERATIONS

8.1. 2021 Financial Plan Discussions - General Operations

14

Recommendation

That Council:

1. Revise the date of the next Financial Plan discussions from December 17th to December 15th to coincide with the next regular Council meeting;
2. Direct staff to amend the Financial Plan policy to include the allocation of 2.5% of the prior year municipal taxes to the infrastructure reserve for 2021; and
3. Confirm the current Financial Plan policy to include the allocation of 10% of the prior year municipal taxes to the general capital fund for 2021.

8.2. Public Input and Questions

Residents can submit questions to Council via email at info@ladysmith.ca during the meeting.

9. DEVELOPMENT APPLICATIONS

9.1. Development Variance Permit & Development Permit for Multi-Family Development at 107 Rollie Rose Drive

16

Recommendation

That Council:

1. Issue Development Variance Permit 3090-20-04 to vary the maximum height of a principal building from 10m to 14.9m, and to reduce the number of parking stalls from 2.0 to 1.5 per dwelling unit with two or more bedrooms, for a multi-family residential use located on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive).
2. Issue Development Permit 3060-20-09 for a multi-family residential development on Lot 13, District Lot 103, Oyster District Plan EPP75579 (107 Rollie Rose Drive) on the condition that:
 - a. the permittee provide security in the amount of \$5,000 to be used in the event of damage to the Streamside Protection and Enhancement Area (SPEA) resulting from a contravention of Development Permit 3060-20-09; and
 - b. the permittee provide security in the amount of \$180,547 in the event that conditions respecting landscaping in Development Permit 3060-20-09 are not satisfied.
3. Authorize the Mayor and Corporate Officer to sign Development Variance Permit 3090-20-04 and Development Permit 3060-20-09.

9.2. OCP and Zoning Bylaw Amendment Application – Lot 20 Trans-Canada Highway and 670 Farrell Road

188

Recommendation

That Council:

1. Direct the applicant to continue working with staff on Zoning Bylaw and Official Community Plan Amendment Application No. 3360-19-02.
2. If desired by Council, review the site plan attached as Attachment A to the staff report dated December 1, 2020 and provide further clarification or conditions relating to layout, community amenity contributions, and parks made in Council Resolutions CS2020-071, and CS2020-073.
3. Specify any further conditions that Council wishes to impose prior to *further* consideration of the application by Council.

4. Specify any further conditions that Council wishes to impose prior to *final* consideration of the application by Council.

10. COMMITTEE MINUTES

10.1. November 10, 2020 Committee of the Whole Recommendations 204

Recommendation

That Council direct staff to prepare a report regarding bans on single use plastics.

11. REPORTS

11.1. Poverty Reduction Plan Update 209

Recommendation

That Council receive for information the report dated December 1, 2020 regarding the Poverty Reduction Plan Update.

11.2. COVID-19 Parks, Recreation & Culture Program Rate Adjustment 217

Recommendation

That Council receive for information the staff report dated December 1, 2020, regarding COVID-19 Parks, Recreation & Culture Program Rate Adjustments.

11.3. Machine Shop and Arts & Heritage Hub: Direction on Next Steps 223

Recommendation

That Council:

1. Endorse the final version of the Arts & Heritage Hub Concept Report prepared by Hotson Architecture attached as Appendix A to the December 1, 2020 staff report;
2. Direct staff to allocate up to \$75,000 from the Waterfront Projects allocation to proceed with obtaining construction drawings and cost estimates for Phase 1 elements of the Arts & Heritage Hub that are ineligible for ICIP and ICET grant funding and report back to Council once design and costing are complete;
3. Endorse the Terms of Reference for the Arts & Heritage Hub Steering Committee attached as Appendix B to the December 1, 2020 staff report; and
4. Direct that staff and the chosen design firm for Phase 1 of the Arts & Heritage Hub work collaboratively with local First Nation artists on the design of the proposed artist studio building.

12. BYLAWS

12.1. Bylaw 2057: Revenue Anticipation Bylaw

273

The purpose of Bylaw 2057 is to provide for the borrowing of money in anticipation of revenue, effective January, 2021.

Recommendation

That Council give first three readings to Town of Ladysmith “2021 Revenue Anticipation Borrowing Bylaw 2020, No. 2057”.

12.2. Bylaw 2058: Waterworks Regulations Amendment Bylaw

277

The purpose of Bylaw 2058 is to amend water utility rates effective January, 2021.

Recommendation

That Council give first three readings to Town of Ladysmith “Waterworks Rates and Regulations Bylaw 1999, No. 1298, Amendment Bylaw 2020, No. 2058”.

13. NEW BUSINESS

14. QUESTION PERIOD

Residents can submit questions to Council via email at info@ladysmith.ca during the meeting.

- Persons wishing to address Council must be Town of Ladysmith residents, non-resident property owners, or operators of a business.
- Individuals must include their name and address for identification purposes.
- Questions put forth must be on topics which are not normally dealt with by Town staff as a matter of routine.
- Questions must be brief and to the point.
- No commitments shall be made by the Chair in replying to a question. Matters which may require action of the Council shall be referred to a future meeting of the Council

15. ADJOURNMENT



MINUTES OF A SPECIAL MEETING OF COUNCIL

Tuesday, November 10, 2020

5:30 P.M.

This meeting was held electronically as per Ministerial Order No. M192

Council Members Present:

Mayor Stone
Councillor Jacobson
Councillor Johnson
Councillor McKay

Councillor Paterson
Councillor Stevens
Councillor Virtanen

Staff Present:

Allison McCarrick
Erin Anderson
Chris Barfoot
Jake Belobaba
Geoff Goodall

Donna Smith
Ryan Bouma
Mike Gregory
Sue Bouma

1. CALL TO ORDER

Mayor Stone called this Special Meeting of Council to order at 5:30 p.m., recognizing that it was taking place on the traditional unceded territory of the Stz'uminus First Nation.

Mayor Stone advised that although there is a different procedure for Remembrance Day this year, the Legion is still appreciative of any donations to their annual Poppy Campaign. The Mayor encouraged people to continue supporting the Legion by donating to the campaign.

2. AGENDA APPROVAL

CS 2020-322

That Council approve the agenda for this Special Meeting of Council for November 10, 2020.

Motion Carried

3. 2021 BUDGET WORKSHOP - WATER AND SEWER UTILITY INTRODUCTION

Council received for information the report from the Director of Financial Services, dated November 10, 2020, regarding Water and Sewer Rates for 2021 by unanimous consent.

3.1 Presentation and Council Discussion

Staff presented details of the proposed sewer and water budgets for 2021, and responded to Council's questions.

Council recessed at 5:46 p.m. to allow for the public to submit questions regarding the budget discussion. Council resumed the meeting at 5:50 p.m.

3.2 Public Input and Questions

Members of the public enquired about the 3% increase in user fees, forecasted decreases in annual water consumption, the anticipated liabilities against reserves, and the anticipated time that the debt, approved in January 2020, would be executed. A member of the public inquired as to what is included in the "Reserve" and "Other" categories in the proposed budget.

4. ADJOURNMENT

This Special Meeting of Council was adjourned at 5:59 p.m. by unanimous consent.

Mayor (A. Stone)

Corporate Officer (D. Smith)



MINUTES OF A REGULAR MEETING OF COUNCIL

Tuesday, November 17, 2020

5:00 P.M.

This meeting was held electronically as per Ministerial Order No. M192

Council Members Present:

Mayor Aaron Stone
Councillor Amanda Jacobson
Councillor Rob Johnson
Councillor Tricia McKay

Councillor Duck Paterson
Councillor Marsh Stevens
Councillor Jeff Virtanen

Staff Present:

Allison McCarrick
Erin Anderson
Chris Barfoot
Jake Belobaba
Geoff Goodall

Donna Smith
Julie Tierney
Chris Geiger
Mike Gregory
Sue Bouma

1. CALL TO ORDER

Mayor Stone called this Regular Meeting of Council to order at 5:00 p.m., in order to retire immediately into Closed Session.

2. CLOSED SESSION

CS 2020-328

That, in accordance with section 90(1) of the *Community Charter*, Council retire into closed session in order to consider items related to the following:

- negotiations and related discussions respecting the proposed provision of a municipal service - section 90(1)(k)

Motion Carried

3. OPEN MEETING (7:00 P.M.)

Mayor Stone called this Regular Meeting of Council to order at 7:00 p.m., recognizing that it was taking place throughout the traditional unceded territory of the Stz'uminus People, and expressing gratitude to be here.

4. AGENDA APPROVAL

CS 2020-329

That Council approve the agenda for this Regular Meeting of Council for November 17, 2020, with the following amendments:

- Remove item 9.1., " Development Permit and Development Variance Permit for Multi-family Development at 107 Rollie Rose Drive (Lot 13)" due to incorrect information contained in one of the applicant's attached reports. It will return to a future Council meeting once the applicant has provided an updated report.
- Add item 13.1., "COVID-19 Parks, Recreation & Culture Program Rate Adjustment".

Motion Carried

5. RISE AND REPORT- Items from Closed Session

Council rose from Closed Session at 6:51 p.m. without report.

The following item from the Closed Meeting of Council held November 3, 2020 was reported:

CE 2020-148

That Council:

1. Approve the renewal of the lease agreement with land owner Paul Jorjorian for use of 17 and 25 Roberts Street as a municipal parking lot for a period of three (3) years at a rate of \$775 per month in 2021; \$800 per month in 2022; and \$825 per month in 2023, plus applicable taxes;
2. Authorize the Mayor and Corporate Officer to execute the agreement.

6. MINUTES

6.1 Minutes of the Regular Meeting of Council held November 3, 2020

CS 2020-330

That Council approve the minutes of the Regular Meeting of Council held November 3, 2020.

Motion Carried

7. PROCLAMATIONS

7.1 National Child Day

Mayor Stone proclaimed November 20, 2020 as National Child Day in the Town of Ladysmith.

8. 2021 BUDGET WORKSHOP: FINALIZE WATER AND SEWER UTILITY RATES AND INTRODUCE CAPITAL BUDGET

8.1 Budget Presentation

Staff gave a presentation that reviewed details of the proposed sewer and water budgets for 2021 and introduced the capital projects. Staff responded to Council's questions.

8.2 2021 Water and Sewer Rates and Preliminary Capital Plan

CS 2020-331

That Council:

1. Direct staff to prepare an amendment to the Water Rates Bylaw 1999, No.1298 to increase each consumption rate by 3%, effective January 1, 2021;
2. Confirm the Sewer Rates remain the same;
3. Direct staff to prepare the 2021 Sewer Parcel Tax Bylaw at \$350; and
4. Direct staff to prepare the 2021 Water Parcel Tax Bylaw at \$459.

Motion Carried

8.3 Public Input and Questions

A member of the public submitted a question asking for more detailed information about the storm water master plan. Staff responded to the question.

Council recessed at 7:39 p.m. to allow for the public to submit additional questions regarding the budget discussion. Council resumed the meeting at 7:41 p.m. No additional questions were submitted.

9. DEVELOPMENT APPLICATIONS

9.1 Development Permit and Development Variance Permit for Multi-family Development at 107 Rollie Rose Drive (Lot 13)

Item 9.1, "Development Permit and Development Variance Permit for Multi-family Development at 107 Rollie Rose Drive (Lot 13)" was removed from the agenda.

10. REPORTS

10.1 Official Community Plan Review

CS 2020-332

That Council:

1. Approve the Official Community Plan Steering Committee Terms of Reference attached as Appendix A to the report from the Director of Development Services;
2. Approve the Official Community Plan Project Charter attached as Appendix B to the report from the Director of Development Services;
3. Endorse a legal budget of \$7,000 and incidentals budget of \$10,000 for the Official Community Plan Review ; and
4. Direct staff to increase the Official Community Plan Development budget from \$150,000 to \$220,000 with \$200,000 to come from Gas Tax, \$10,283 to come from the OCP Reserve, and \$9,717 to come from General Government Reserves.

Motion Carried

10.2 UBCM Community to Community (C2C) Forum Program Application

CS 2020-333

That Council:

1. Authorize staff to apply to the Union of BC Municipalities, for up to \$5,000 during the December 2020 application intake for the Regional Community to Community Forum Program to support a community forum with the Stz'uminus First Nation Council, to be held prior to March 31, 2021; and
2. Approve the allocation of up to \$5,000 as the Town's contribution.

Motion Carried

11. BYLAWS

11.1 Bylaw Status Sheet received.

12. CORRESPONDENCE

12.1 Correspondence dated November 9, 2020, from Ladysmith Family and Friends (LaFF)

CS 2020-334

That Council donate \$1,500 to the Ladysmith Family and Friends 12 days of Holiday Cheer fundraiser, with funds to come from the 2020 Grants in Aid budget.

Motion Carried

CS 2020-335

That resolution CS 2020-334 be amended to include "for the 'LaFF pancake breakfast in the comfort of home' Holiday Cheer Day".

Amendment Carried

Resolution CS 2020-334, as amended, reads:

That Council donate \$1,500 to the Ladysmith Family and Friends 12 days of Holiday Cheer fundraiser for the "LaFF pancake breakfast in the comfort of home" Holiday Cheer Day, with funds to come from the 2020 Grants in Aid budget.

Main Motion, As Amended, Carried.

13. NEW BUSINESS

13.1 COVID-19 Parks, Recreation & Culture Program Rate Adjustment

CS 2020-336

That Council:

1. Authorize staff to resume offering Parks, Recreation and Culture services using the established admission fees and passes according to "Town of Ladysmith Community Centre and Facilities Fees and Charges Bylaw 2018, No. 1968"; and
2. Offset revenue shortfalls by authorizing the use of funds received through the Provincial COVID-19 Safe Restart Grant for Local Governments.

Motion Carried

14. UNFINISHED BUSINESS

14.1 Mayor's Reconsideration of Resolution No. CS 2020-322 Holland Creek Supply Main (Phase 2) Tender Award

Under Section 131 of the *Community Charter*, Mayor Stone required Council reconsideration of Council Resolution No. CS 2020-322, defeated at the November 3, 2020 Regular Council Meeting.

CS 2020-337

That Council reconsider Resolution No. CS 2020-322 regarding the Holland Creek Supply Main (Phase 2) Tender Award.

Motion Carried

CS 2020-338

That Council award the contract for the Holland Creek Supply Main (Phase 2) to Don Mann Excavating Ltd. for \$288,298.50 including GST.

Motion Carried

14.1.1 Holland Creek Supply Main (Phase 2), Negotiated Schedule

CS 2020-339

That Council direct staff to include in the contract with Don Mann Excavating Ltd. a construction period of 45 days plus up to 3 days in the spring to complete final preparations and paving for the Holland Creek Supply Main (Phase 2).

Motion Carried

15. QUESTION PERIOD

There were no questions submitted by the public.

16. ADJOURNMENT

This Regular Meeting of Council was adjourned at 8:02 p.m. by unanimous consent.

Mayor (A. Stone)

Corporate Officer (D. Smith)

STAFF REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services
Meeting Date: December 1, 2020
File No:
Re: **2021 Financial Plan Discussions - General Operations**

RECOMMENDATION:

That Council:

1. Revise the date of the next Financial Plan discussions from December 17th to December 15th to coincide with the next regular Council meeting;
2. Direct staff to amend the Financial Plan policy to include the allocation of 2.5% of the prior year municipal taxes to the infrastructure reserve for 2021; and
3. Confirm the current Financial Plan policy to include the allocation of 10% of the prior year municipal taxes to the general capital fund for 2021.

EXECUTIVE SUMMARY:

This is the fourth budget discussion meeting. In order for staff to proceed with the budget, some decisions on the allocation to capital and the allocation to the infrastructure reserve are necessary.

PREVIOUS COUNCIL DIRECTION:

Per Town of Ladysmith Financial Plan Bylaw 2020, No. 2036:

Pursuant to Council's direction, the Town will build a reserve to fund major capital projects. A minimum of 10% prior year's municipal tax levy will be transferred to General Capital projects. For the year 2020, the Town will put aside 2.5% of the prior year's municipal tax levy. For the future years beginning in 2021, the Town will set aside a total of 5% of the prior year's municipal tax levy for asset replacement.

INTRODUCTION/BACKGROUND:

Discussions regarding the 2021 Financial Plan began in early November. At the first meeting, staff presented a 5.51% municipal budget increase and highlighted where some of the cost drivers are occurring. Since that time the Province announced additional funding specifically related to dealing with COVID-19. Staff are reviewing options where this funding could be applied. Additionally, it is expected that the Town will receive at least 1% in new construction revenue (non-market change) which will also reduce the overall property tax increase.

In order to move forward with the Financial Plan, some decisions are required to shape the 2021 budget. On November 17th, staff presented the general capital plan which included a 10%

allocation to capital. This allocation, which is calculated as 10% of the 2020 municipal taxation, amounts to \$740,000. Council could choose to reduce the allocation, which, in turn, reduces taxation.

The 2020-2024 Financial Plan reduced, due to COVID-19, the allocation for asset replacement from 5% to 2.5% with the expectation to return to the 5% level in the 2021-2025 Financial Plan. The 5% asset replacement allocation was included in the original 5.51% budget increase. Council could choose to reduce the allocation to the infrastructure reserve, which, in turn, reduces taxation.

ALTERNATIVES:

Council can choose to:

1. Further reduce taxation by drawing funds from prior year surplus. This option is not sustainable as expenses increase.
2. Direct staff to look for other expense-reducing options.

FINANCIAL IMPLICATIONS:

Decisions regarding the financial plan affect property taxation.

LEGAL IMPLICATIONS:

Decisions regarding the budget will be incorporated into the annual Financial Plan policy.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Citizens are encouraged to participate in the budget process.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

All departments are responsible for their operating and capital budget requests.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Infrastructure | <input checked="" type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Thompson, Acting Senior Planner
Meeting Date: December 1, 2020
File No: 3060-20-09 & 3090-20-04
Re: Development Variance Permit & Development Permit for Multi-Family Development at 107 Rollie Rose Drive

RECOMMENDATION:

That Council:

1. Issue Development Variance Permit 3090-20-04 to vary the maximum height of a principal building from 10m to 14.9m, and to reduce the number of parking stalls from 2.0 to 1.5 per dwelling unit with two or more bedrooms, for a multi-family residential use located on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive).
2. Issue Development Permit 3060-20-09 for a multi-family residential development on Lot 13, District Lot 103, Oyster District Plan EPP75579 (107 Rollie Rose Drive) on the condition that:
 - (a) the permittee provide security in the amount of \$5,000 to be used in the event of damage to the Streamside Protection and Enhancement Area (SPEA) resulting from a contravention of Development Permit 3060-20-09; and
 - (b) the permittee provide security in the amount of \$180,547 in the event that conditions respecting landscaping in Development Permit 3060-20-09 are not satisfied.
3. Authorize the Mayor and Corporate Officer to sign Development Variance Permit 3090-20-04 and Development Permit 3060-20-09.

EXECUTIVE SUMMARY:

An application for a Development Variance Permit (DVP) and Development Permit (DP) to permit the construction of a multi-family residential development on the subject property, located at 107 Rollie Rose Drive, has been received. It is recommended that DVP 3090-20-04 and DP 3060-20-09 be approved as the proposal is generally consistent with the applicable Development Permit Area guidelines, and the variance proposal to increase the building's height and reduce the number of parking stalls is considered reasonable based on the analysis provided in this report.

PREVIOUS COUNCIL DIRECTION

N/A

INTRODUCTION/BACKGROUND:

The 2.7ha subject property is located off Rollie Rose Drive, near the intersection between Rollie Rose and Dogwood Drive. The property is covered by mature second growth and regenerating riparian area which is approximately 20 to 80 years old. The property is bounded on the west by a hydro corridor (a smaller hydro corridor also runs through the property near the eastern boundary). To the north is the Holland Creek trail network, and to the south single detached housing runs along Rollie Rose Drive.

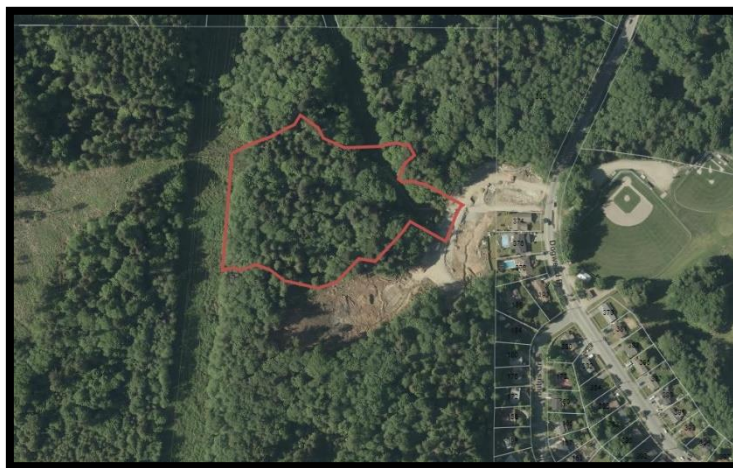


Figure 1: Aerial photo of subject property (outlined in red). Parcel boundaries in the subdivision are not shown as mapping has not been updated to include this new subdivision.

There are two unnamed tributaries which run through the property and converge near the middle of the property, draining into Holland Creek. The property slopes from a crest above Heart Creek. The crest approximately follows the northern property boundary.

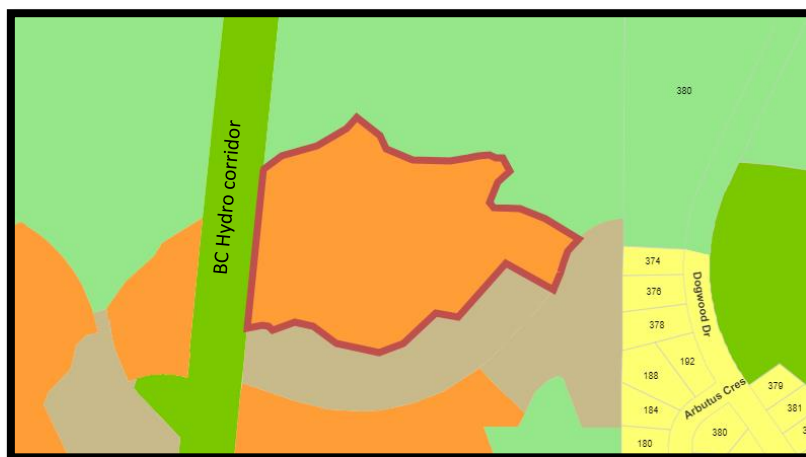


Figure 2: Zoning map of subject property (outlined in red) and neighbouring properties. Single family residential areas appear in light brown and yellow. Multi-family residential areas appear in orange. Parks appear in green.

The applicant is proposing to construct an “L” shaped 96-unit four storey apartment building, with stepping of the foundation to match the existing grade. An accessory storage building, picnic shelter, garbage and recycling building and 153 surface parking stalls are also proposed. A driveway with a culvert crosses the tributary on the eastern side of the property, and connects Rollie Rose Drive to the development. The crossing has been approved by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) under section 11 of the *Water Sustainability Act*. A public footpath is proposed which is required by a Statutory Right of Way registered in favor of the Town. The path will use the same crossing to connect Rollie Rose Drive to the Holland Creek Trail system, north of the property. The property falls within Development Permit Area 8 – Multi-Unit Residential Environmentally Sensitive Area (ESA), Development Permit Area 7 – Hazard Lands, and Development Permit Area 6 – Riparian.

The applicant is requesting a variance to increase the height of the apartment building from 10m to 14.9m to accommodate a fourth storey, and to reduce the required parking from a total of 178 spaces to 153 spaces. Due to the siting of the proposed apartment building, a variance is also required to reduce the setback of the apartment building from the watercourse. This can be varied through the DP under section 490 of the *Local Government Act* and Development Permit Area 6 guideline i)h), which allows a watercourse setback to be varied where the setback is consistent with the Streamside Protection and Enhancement Area as indicated in the report from the Qualified Environmental Professional (QEP). The reduced setback is supported by the QEP's Riparian Areas Protection Regulation Assessment Report, as well as the Geotechnical Engineer's Geotechnical Assessment (both reports form part of Schedule H of DP 20-09).

It is noted that a previous version of DP 20-09 was scheduled for consideration at the November 17th Council meeting. However, this item was taken off the Council agenda due to an error found in Appendix 6 of the QEP's Riparian Areas Protection Regulation Assessment Report. The error has been corrected and an updated version of the report forms part of DP 20-09 as Schedule H.

DISCUSSION/ANALYSIS:

Variance Proposal:

The subject property is designated Multi-Family Residential in the Holland Creek Local Area Plan (HCLAP), attached as Schedule C to Official Community Plan Bylaw No. 1148, and is zoned Low Density Residential (R-3-A) in Zoning Bylaw No. 1860. The proposal is consistent with the HCLAP designation and the Zoning Bylaw, with the exception of the proposed variances:

Table 1: Summary of Proposed Variances

Zoning Bylaw Regulation	Permitted/Required	Proposed	Variance
Maximum height of a principal building	10.0m	14.9m	4.9m
Minimum number of parking spaces per 2+ bedroom dwelling unit in a multi-family residential building	2.0 spaces per 2+ bedroom unit 2.0 spaces x 57 units = 114 spaces	1.5 spaces per 2+ bedroom unit 1.5 spaces x 57 units = 86 spaces	0.5 spaces per 2+ bedroom unit 28 spaces
Watercourse setback	For parcels with a slope greater than 5%: 9.0m to the natural boundary or 21.0m from the centre line of the watercourse, whichever is greater.	10.5m from the high water mark (natural boundary)	-

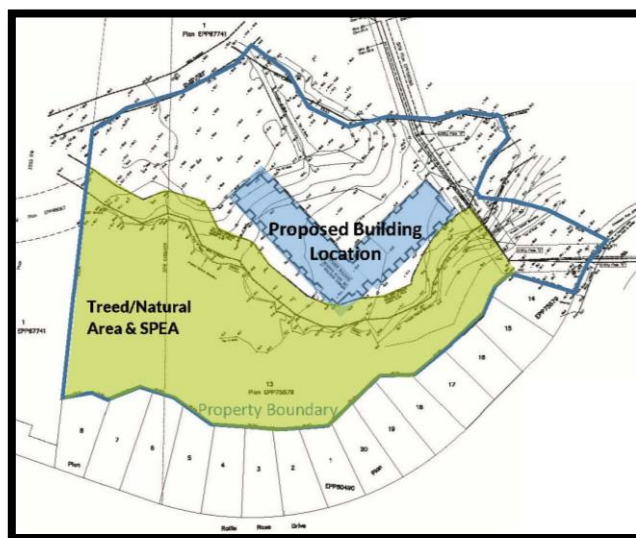
DVP 20-04 - Height & Parking:

The applicant is proposing to vary the height of the proposed 96 unit apartment building from 10.0m to 14.9m in order to accommodate a fourth storey on the building. The increase in height would accommodate additional units in the building without needing to expand the

footprint of the building. The density of the proposed development is 35.5 units per hectare, which is compliant with the 37 units per hectare maximum in the R-3-A zone.

The applicant is also proposing to vary the minimum number of required parking spaces. The proposed apartment building contains 39 one-bedroom units and 57 two-bedroom units. The Zoning Bylaw requires a minimum of one parking space per one-bedroom unit and two parking spaces per two-bedroom unit. When visitor and accessible parking requirements are also included, the total number of required parking spaces for the proposed development is 178. The proposed variance would reduce the number of required parking spaces to 150, however, the applicant is proposing 153 spaces. DVP 20-04 is attached (see attachment 1).

The applicant's rationale for the increase in height and reduced parking is based on achieving minimal site disturbance by reducing the footprint of the development. Under the proposed design, only about 50% of the subject property would be developed; the remainder would be the Streamside Protection and Enhancement Area (SPEA) and a large forested area between the SPEA boundaries (see figures 3 and 4). The applicant has provided a rationale letter which is attached to this report (see attachment 3).



Watercourse Setback:

The Zoning Bylaw requires a minimum setback from watercourses depending on the slope of the property and the width of the watercourse.

Figure 3: Subject property showing combined SPEA and natural area, to remain free from development.

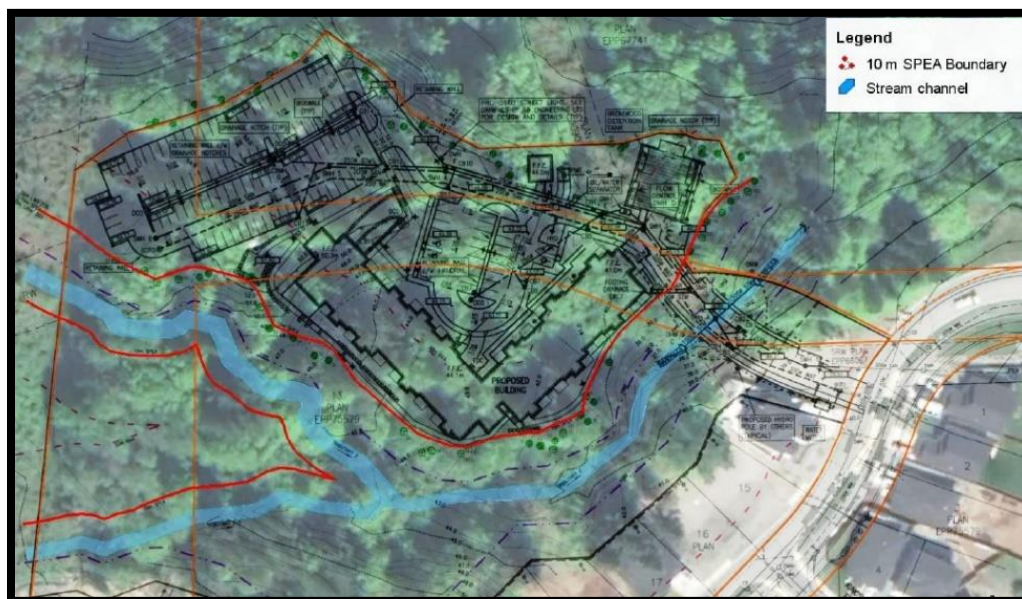


Figure 4: Subject property showing location of proposed development, SPEA boundary and stream channel.

According to staff's calculations, the proposed apartment building would not meet the required setback for parcels with a slope greater than 5% (the average slope is approximately 8%). At its closest, the proposed apartment building is located approximately 10.5-11m from the natural boundary of the watercourse, just outside the SPEA. As such, it is proposed that the watercourse setback be reduced to 10.5m to accommodate the location of the proposed apartment building. The subject property falls within Development Permit Area 6 – Riparian (DPA 6) which allows variances to the watercourse setback where the setback is consistent with the SPEA as indicated in the QEP report. As such, this variance would be granted under DP 20-09.

Public Feedback:

Through the DVP process, the Town has received five submissions from the public regarding the proposed height and parking variances, one of which is a letter signed by 33 people (see attachment 2 for submissions). The views expressed, with staff comments, are summarized in Table 2.

Table 2: Summary of Public Concerns & Staff Comments – DVP 20-04

Public Concerns/Comments	Staff Comments
Increase in height will cause an increase in noise	Noise levels are not expected to increase beyond what would otherwise be expected from a shorter apartment building containing the same number of units. Noise levels are regulated by the Town's Noise Suppression Bylaw No. 1478 and the Nuisance Abatement Bylaw No. 1893.
Increase in height will cause a decrease in privacy for neighbouring single family parcels	The proposed apartment building is situated approximately 37m from the rear parcel lines of the nearest single-family parcels. The area in between consists of a vegetated SPEA and treed area which will remain intact. The trees within this area average 36.5m in height (see figures 3 and 4) and overlook from the balconies of the apartment building into neighbouring yards is not expected.
Light shining into neighbouring yards	Lighting is required to be cast downward, following "dark-sky principles" in accordance with DPA 8. The tree buffer between the single family and multi-family area also screens light.
Concerns about building rising above the tree line	The trees in the SPEA and the natural area are approximately twice the height of the proposed apartment building (and will continue to grow). A rendering showing the height of the trees compared to the height of the building submitted by the applicant is attached (see attachment 4).
Overflow of parking onto Rollie Rose Drive/not enough parking	The proposed reduction in parking is considered reasonable and necessary to protect existing natural areas. An average of 1.6 parking spaces is provided per dwelling unit.
Property not qualifying for proposed density; parcel not large enough due to SPEA area	SPEAs are included in the total parcel area used to calculate density. The proposed density is compliant with the R-3-A zone and OCP.

Development Permit Areas:

The subject property is subject to the following three Development Permit Areas (DPAs):

- DPA 6 – Riparian
- DPA 7 – Hazard Lands
- DPA 8 – Multi-Unit Residential Environmentally Sensitive Area (ESA)

The proposed development has been reviewed for consistency with the DPA 6, DPA 7 and DPA 8 guidelines. Tables 3 to 5 provide observations about the proposal's consistency with the DPA guidelines. The ability to issue development permits within DPA 6 and DPA 7 is delegated to the Director of Development Services. In this case, since DPA 8 is applicable and because the applicant has also submitted a DVP application, the development proposal is being presented to Council for consideration as one package. Proposed DP 20-09 is attached (see attachment 5).

Development Permit Area 6 – Riparian:

The purpose of DPA 6 is to protect the natural environment, ecosystems and biological diversity of fish bearing and non-fish bearing riparian areas. It is noted that the subject property is subject to the Provincial Riparian Areas Protection Regulation (RAPR) and as such, the applicant is required to submit to the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) a RAPR assessment report by a qualified environmental professional (QEP). The QEP submitted two previous RAPR reports to MFLNRORD which were rejected for failing to meet the assessment and reporting criteria. The QEP submitted a third RAPR report with revisions, which was approved by MFLNRORD on October 15, 2020. A fourth revision of the RAPR report was submitted by the QEP because an error within the previous report was found. The revised report was approved by MFLNRORD on November 17, 2020. The Town may not approve a riparian DP until Provincial approval has been received.

Table 3: Summary of Proposal's Consistency with DPA 6 – Riparian Guidelines

Guidelines	Observations
A riparian assessment report must be prepared by a Qualified Environmental Professional (QEP).	<ul style="list-style-type: none"> • A revised Riparian Areas Protection Regulation (RAPR) assessment report was submitted to MFLNRORD by QEP Dave Clough in September 2020. • On October 15, 2020 the Town received notification from MFLNRORD that the RAPR report has been approved. • An error was noticed in Appendix 6 of the RAPR report and the QEP sent a revised version of the report to MFLNRORD. The Town received notification from MFLNRORD that the revised version had been approved on November 17, 2020. • The proposed development will not result in harmful alteration, disruption or destruction (HADD) to fish habitat. • A 10m wide Streamside Protection and Enhancement Area (SPEA) has been identified by the QEP and is mapped in the RAPR report, attached to DP 20-09 as Schedule H. • The RAPR report and DP 20-09 provides conditions for protecting the SPEA before, during and after construction, including regular monitoring by the QEP and a post-construction monitoring report. • Native and drought tolerant plants are proposed within the Riparian Assessment Area (RAA). • Native plants are proposed within the SPEA to enhance the understory. • A sediment and erosion control plan has been prepared and is attached to the RAPR report (Schedule H of DP 20-09) • A stormwater management plan has been prepared and is attached to the RAPR report and DP 20-09.

Development Permit Area 7 – Hazard Lands:

DPA 7 applies to areas of the Town with steep slope conditions. The purposes of DPA 7 are to prevent land slippage and sloughing, safeguard private property from potential damage, minimize disruption to slope stability and prevent development in areas where slope instability hazards exist. The proposed development has been reviewed for consistency with DPA 7 and is generally consistent with the DPA 7 guidelines. It is noted that the applicant has submitted a geotechnical assessment to support the application. Table 4 provides observations about the proposal's consistency with the DPA 7 guidelines.

Table 4: Summary of Proposal's Consistency with DPA 7 – Hazard Lands Guidelines

Guidelines	Observations
No significant excavation or filling; and no buildings on areas subject to bank instability or to potential damage from bank instability	<ul style="list-style-type: none">• The proposed building location is mainly flat, with a portion of the structure located into a slope inclined 25 degrees to the south.• Some excavation of a few metres of unsuitable overburden materials is required to provide a suitable base of support. Overburden materials are generally considered near the surface and shallow, according to the geotechnical assessment.
Avoid areas subject to unstable slopes and site buildings in accordance with setbacks and other requirements determined by a geotechnical engineer	<ul style="list-style-type: none">• The geotechnical assessment indicates a low risk of slope instability at the building location.• The geotechnical assessment indicates that steeply dipping slopes to the north represent a moderate to high probability of slope instability in the form of seismic stability and thus recommends that all civil works be located behind a 30 degree reference line. The geotechnical engineer has confirmed that the proposal is consistent with this recommendation.
Provide for disposal of surface run off and storm water; divert drainage away from areas subject to sloughing	<ul style="list-style-type: none">• The geotechnical assessment has evaluated a proposed stormwater management plan, which is attached to DP 20-09.
Avoid disturbance of steep slopes	<ul style="list-style-type: none">• The proposed building sites and parking areas are not located on the steep slopes observed at the north end of the site.
Retaining walls should be terraced. Plant material should be incorporated into the retaining wall design	<ul style="list-style-type: none">• Proposed retaining walls will have plant material incorporated into their design.
Maintain existing trees and vegetation to control erosion and protect banks	<ul style="list-style-type: none">• The SPEA and additional areas will be maintained in their natural state, as shown in figures 3 and 4.• A vegetative buffer will be maintained surrounding the development area.
Access/Pathways	<ul style="list-style-type: none">• Footpaths work with the topography.
Provide a geotechnical report	<ul style="list-style-type: none">• A geotechnical assessment has been prepared by Lewkowich Engineering Associates Ltd.
Sequence/time development to reduce impacts of development	<ul style="list-style-type: none">• Sequencing and timing of development is not specified.

Development Permit Area 8 – Multi-Unit Residential ESA:

The lands included in DPA 8 include the following forest ecosystems: Douglas Fir, Arbutus, Western Red Cedar, and Bigleaf Maple. The ecosystems contain intact contiguous forest stands; dry, rocky outcrops; and sensitive riparian areas with tributaries to Holland Creek and Rocky

Creek. Integration of the site's natural topography, the protection of its natural environment and sensitive ecosystems are all important objectives of DPA 8. The proposed development has been reviewed for consistency with DPA 8 and is generally consistent with the DPA 8 guidelines.

Table 5: Summary of Proposal's Consistency with DPA 8 – Multi-Unit Residential ESA Guidelines

Guidelines	Observations
Form, Character and Exterior Design	
Contemporary west coast design, reflective of Ladysmith's built heritage	<ul style="list-style-type: none"> The proposed design is contemporary, albeit heritage elements are not reflected in the design.
Scale/neighbourhood identity	<ul style="list-style-type: none"> The proposed buildings are of a human scale and the architectural theme and massing are consistent throughout the building's design.
Response to site topography	<ul style="list-style-type: none"> Buildings are stepped with the site topography.
Façade	<ul style="list-style-type: none"> Building facades are articulated through the use of varying colours, finishes, projections and rooflines.
Exterior materials	<ul style="list-style-type: none"> Exterior cladding consists of high quality, fibre cement ("hardie-board") horizontal plank and panel siding. Natural elements such as rock and wood are not used on the apartment building's exterior; however, the proposed picnic shelter consists of timber frame, and boulders are used as retaining walls in prominent locations on the site.
Private outdoor space	<ul style="list-style-type: none"> All residential units contain a private balcony. Balconies are screened from each other with vertical walls.
Underground/underbuilding parking areas	<ul style="list-style-type: none"> No underground parking is proposed. However, the surface parking is proposed to be reduced through a variance (DVP 20-04), reducing the overall area used for parking.
Parking garage entries	Not applicable.
Building Siting and Conservation	
Building & Window placement	<ul style="list-style-type: none"> The proposed buildings are placed close to the forested SPEA. Units on the south side of the building will have views of the forested SPEA. Windows are large and plentiful, maximizing views to the outside and allowing for natural ventilation. The building is proposed to utilize low flow plumbing fixtures and LED lighting.
Building orientation	<ul style="list-style-type: none"> More than half the units are south facing; however, presence of the nearby SPEA, which contains tall trees, may cause some shading for south facing units.
Site Design & Circulation	
Views from Arbutus Hump	<ul style="list-style-type: none"> Not applicable.
Orientation towards street & semi-public space	<ul style="list-style-type: none"> A SPEA and single family parcels separate the property from the street (Rollie Rose Drive), therefore the building cannot be oriented to the street. A street oriented semi-public space between the building and the street is also not possible.
Outdoor common space	<ul style="list-style-type: none"> An outdoor common space for residents is provided and includes a shelter with picnic tables.

Guidelines	Observations
Surface parking	<ul style="list-style-type: none"> • Surface parking is located in three distinct areas or “clusters”, one of which is located in the front of the building. • The three surface parking areas work with the existing topography. • Landscaping surrounding each of the parking areas is proposed. • Though not required by the DPA 8 guidelines, the applicant is proposing a minimum of four electric-vehicle charging stations in the parking area.
Pedestrian circulation & linkages	<ul style="list-style-type: none"> • Pedestrian pathways linking Rollie Rose Drive to the interior of the site are proposed. • Pedestrian pathways in front of the building and connecting to the parking areas consist of concrete. • Pedestrian pathways at the rear of the building, between the building and the SPEA, consist of crushed aggregate. • A public pedestrian pathway is proposed along the driveway into the site from Rollie Rose drive. The pathway is intended to provide a connection from Rollie Rose Drive to the Holland Creek Trail by utilizing the culvert crossing over the watercourse. The pathway is required under a Town statutory right-of-way registered to the property title.
Strata roads	<ul style="list-style-type: none"> • The driveway within the site incorporates pedestrian pathways.
Bicycle Parking	<ul style="list-style-type: none"> • Outdoor and indoor bicycle parking will be provided. • Outdoor bicycle parking is provided near the building’s main front entrance. • Indoor storage areas are provided near the stairs/elevator on each floor. • Though not required by the DPA 8 guidelines, the applicant is proposing electric-bike charging stations inside the building.
Natural Environment and Sensitive Ecosystems	
Land clearing	<ul style="list-style-type: none"> • Land clearing is not proposed prior to issuance of DP 20-09. • Danger trees inside and outside of the SPEA will be treated in accordance with the approved RAPR Report, attached as Schedule H to DP 20-09. • The applicant is proposing to clear only one section of the subject property, the rest of which will remain intact forest.
Identification of green space to be protected	<ul style="list-style-type: none"> • Additional forested areas located outside of the SPEA on the subject property will be retained, as shown in figure 3. Any future land clearing would require another DP.
Protection of SPEA	<ul style="list-style-type: none"> • The large SPEA located on the site (see figure 4) will be protected in accordance with DP 20-09 and the Provincial Riparian Areas Protection Regulation. • No development activities are permitted within the SPEA.
Riparian Assessment Area	<ul style="list-style-type: none"> • See table 3.
Identify SPEA during construction	<ul style="list-style-type: none"> • Identifying the SPEA boundary with stakes, flagging, rope line and snow fencing is required before construction, in accordance with DP 20-09 and the RAPR report.
Construction environmental management plan	<ul style="list-style-type: none"> • A construction environmental management plan is included in the RAPR report and forms part of DP 20-09.
Sediment and erosion control plan	<ul style="list-style-type: none"> • A sediment and erosion control plan is included in the RAPR report, which forms part of DP 20-09.
Bird breeding surveys	<ul style="list-style-type: none"> • Nest sites are protected under the Provincial and Federal legislation.
Steep slopes	<ul style="list-style-type: none"> • See Table 3.
Fire smart (landscaping)	<ul style="list-style-type: none"> • Most plantings will be native, drought tolerant, deciduous species. Some conifers are proposed including yew, fir, dwarf hemlock and red cedar. Conifers make up approximately 5% of the proposed plantings.

Guidelines	Observations
Tree preservation plan	<ul style="list-style-type: none"> The applicant has submitted a Windthrow and Hazard Tree Assessment prepared by a Registered Professional Forester, which is attached to the RAPR report and DP 20-09. The assessment identifies protection measures for SPEA trees with root zones that fall within the construction area, as well as including recommendations such as retaining trees that require removal as coarse woody debris within the SPEA, and treatment of hazard trees.
Landscaping, Energy & Water Conservation, and GHG Emission Reduction	
Landscape plan	<ul style="list-style-type: none"> A landscape plan for the site has been prepared by a Landscape Architect and is attached to DP 20-09.
6.0 m landscape buffer along hydro corridor	<ul style="list-style-type: none"> Four western red cedar trees are proposed in a small section of land adjacent to the BC Hydro right-of-way on the western property boundary to act as a buffer. Other sections of the property adjacent to the BC Hydro right-of-way along the western property boundary are to remain in their natural forested state.
Native and drought tolerant plants	<ul style="list-style-type: none"> New landscaping plantings consist of native and drought tolerant species.
Stormwater management	<ul style="list-style-type: none"> The proposed stormwater management infrastructure includes bio-swales.
Rainwater collection	<ul style="list-style-type: none"> The geotechnical assessment identifies that site conditions are not conducive to the installation of an on-site stormwater infiltration medium (other than those identified on the stormwater management plan, such as bio-swales) but may be conducive to the installation of stormwater detention features. An oil-water separator is proposed and is required by the Zoning Bylaw.
Refuse, recycling and organics areas	<ul style="list-style-type: none"> Waste collection areas are located within an enclosed building on the site, the form and character of which is consistent with the design of the multi-family buildings.
Exterior lighting	<ul style="list-style-type: none"> Exterior lighting will be downcast, following “dark sky” principles.
Retaining walls	<ul style="list-style-type: none"> Retaining walls are proposed to be cast-in-place concrete and/or made from large boulders. Vegetation will be incorporated into the retaining wall design.
Monetary security	<ul style="list-style-type: none"> DP 20-09 requires a bond of \$180,547 to ensure landscaping is carried out in accordance with the landscape plan and RAPR report recommendations.
Landscaping standards	<ul style="list-style-type: none"> The proposed landscaping conforms to the BC Landscape Standard.
Monitoring	
Conditions included in DP	<ul style="list-style-type: none"> DP 20-09 requires a post-construction monitoring report prior to issuance of an occupancy permit to ensure that SPEA protection measures are followed.
Monitoring by a QEP during site clearing and construction	<ul style="list-style-type: none"> The RAPR assessment (Schedule H in DP 20-09) requires the QEP to undertake regular monitoring during construction.
Release of landscaping security to be accompanied by a report	<ul style="list-style-type: none"> A report from the Landscape Architect is required prior to release of the required landscape security. A report from the QEP is required prior to release of landscape security for plantings in the SPEA.

Development Permit Security Conditions:

[Section 502 of the Local Government Act](#) allows the local government to require the applicant to provide security to ensure that landscaping and environmental protection measures are met.

The local government can use the security to correct landscaping conditions that have not been met, or to correct damage to the natural environment resulting from a contravention of the DP.

As a condition of DP 20-09, staff recommend that the permittee provide security to the Town for the following:

- security in the amount of \$5,000 to correct damage to the SPEA ; and
- security in the amount of \$180,547 for landscaping. \$172,795 for landscaping outside the SPEA and \$7,752 for infill planting within the SPEA.

Under DP 20-09 releasing the above-noted security is conditional on:

- receipt of a post-construction monitoring report from the QEP that verifies that measures in place to protect the SPEA were followed and that the SPEA has not been damaged;
- receipt of a post-planting report from the Landscape Architect for non-SPEA landscaping; and
- receipt of a post-planting report from the QEP for SPEA plantings.

Summary:

As the proposed development is generally compliant with the DPA 8, DPA 7 and DPA 6 guidelines, staff recommend issuance of DP 20-09. Monetary security conditions are in place to ensure that landscaping and environmental protection requirements are followed.

Concerns about the building's height, overlook, and lighting will be mitigated by the substantial treed buffer between the proposed apartment building and the single-family residential area. The proposed number of parking spaces, 153, is considered by staff to be reasonable for the 96 unit residential building. As such, it is recommended that DVP 20-04 also be issued.

ALTERNATIVES:

Council can choose to:

- 1) Refuse the parking variance component of DVP 3090-20-04.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 2) Refuse the height variance component of DVP 3090-20-04.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 3) Refuse DVP 3090-20-04 in its entirety.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 4) Refuse issuance of DP 3060-20-09 based on non-compliance with the DPA guidelines.
 - Reasons must be provided based on non-compliance with the DPA guidelines.
- 5) Refer the application back to staff for further review.

FINANCIAL IMPLICATIONS:

None.

LEGAL IMPLICATIONS:

The *Local Government Act* allows Council to vary zoning regulations excluding regulations of use, density and rental tenure through issuance of a DVP. Subsequently, Council can vary the parking and height provisions as proposed in DVP 3090-20-04.

If DP 3060-20-09 is refused, reasons must be given based on the DPA 8, DPA 7 or DPA 6 guidelines because issuing a DP is not a completely discretionary decision of Council. Additionally, DP 3060-20-09 cannot be approved unless DVP 3090-20-04 is approved first since a DP cannot authorize a development that does not comply with the Zoning Bylaw. If Council rejects DVP 3090-20-04 it must also reject DP 3060-20-09.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Notice of the proposed height and parking variances under DVP 3090-20-04 was issued in accordance with the requirements of the *Local Government Act* and Development Procedures Bylaw No. 1667. On August 6, 2020 a notice was delivered to the property owners/residents within 60m of the subject property. At time of writing, five submissions have been received (attached). Concerns stated in the submissions are summarized in Table 2 (see 'Public Feedback'). Staff received inquiries regarding issuance of a second notice, however re-notification is not required unless the proposed variances change.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The application was referred to Infrastructure Services (Engineering), the Building Inspector, the Fire Chief and the Town's Arborist. Their comments have been addressed in the draft permits and/or will be addressed through the building permit stage.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENTS:

- 1.** DVP 3090-20-04
- 2.** Public Submissions
- 3.** Applicant Letter of Rationale (November 6, 2020)
- 4.** Applicant Submission – Height Rendering (August 26, 2020)
- 5.** DP 3060-20-09



TOWN OF LADYSMITH DEVELOPMENT VARIANCE PERMIT

(Section 498 Local Government Act)

FILE NO: 3090-20-04
DATE: December 1, 2020

Name of Owner(s) of Land (Permittee): 1223434 B.C. LTD., INC.NO. BC1223434

Applicant: Jacquie Kinnersley (Westmark Construction Ltd.)

Subject Property (Civic Address): 107 Rollie Rose Drive

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Town of Ladysmith 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 Town of Ladysmith described below and any and all buildings, structures and other development thereon:

LOT 13 DISTRICT LOT 103 OYSTER DISTRICT PLAN EPP75579
PID: 030-477-638
(107 Rollie Rose Drive)

3. Table 8.1: Required Off-Street Parking Spaces of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860", as amended, is varied for the subject property to reduce the required parking spaces for a proposed multiple-unit dwelling:

From:

COLUMN 1 USE	COLUMN 2 REQUIRED NUMBER OF SPACES
Multiple-Unit Dwelling, Townhouse Dwelling	1 bedroom: 1 per <i>Dwelling Unit</i>
	2 or more bedrooms: 2 per <i>Dwelling Unit</i>
	Plus 1 per 5 <i>Dwelling Units</i> to be designated and signed for visitor parking

To:

COLUMN 1 USE	COLUMN 2 REQUIRED NUMBER OF SPACES
<i>Multiple-Unit Dwelling, Townhouse Dwelling</i>	1 bedroom: 1 per <i>Dwelling Unit</i>
	2 or more bedrooms: 1.5 per <i>Dwelling Unit</i>
	Plus 1 per 5 <i>Dwelling Units</i> to be designated and signed for visitor parking

4. Section 10.11 (Low Density Residential (R-3-A)) 5.a) (height of principal building) of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860", as amended, is varied to allow for a four-storey, multiple-unit dwelling:

From:

- a) No *Principal Building* or *Structure* shall exceed a *Height* of 10.0 metres.

To:

- a) No *Principal Building* or *Structure* shall exceed a *Height* of 14.9 metres

5. The land described herein shall be developed strictly in accordance with terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part thereof.

6. The following plans and specifications are attached:

Schedule A – Building Location

Schedule B – Elevation Plans

7. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.503 of the *Local Government Act*, and upon such filing, the terms of this Permit (3090 20-04) or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
8. **THIS PERMIT IS NOT A BUILDING PERMIT.** No occupancy permit shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Corporate Officer.

AUTHORIZING RESOLUTION PASSED BY MUNICIPAL COUNCIL ON THE DAY OF 2020.

Mayor (A. Stone)

Corporate Officer (D. Smith)

I **HEREBY CERTIFY** that I have read the terms and conditions of the Development Variance Permit contained herein. I understand and agree that the Town of Ladysmith has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with **1223434 B.C. LTD., INC. NO. BC1223434** other than those contained in this permit.

Signed

Witness

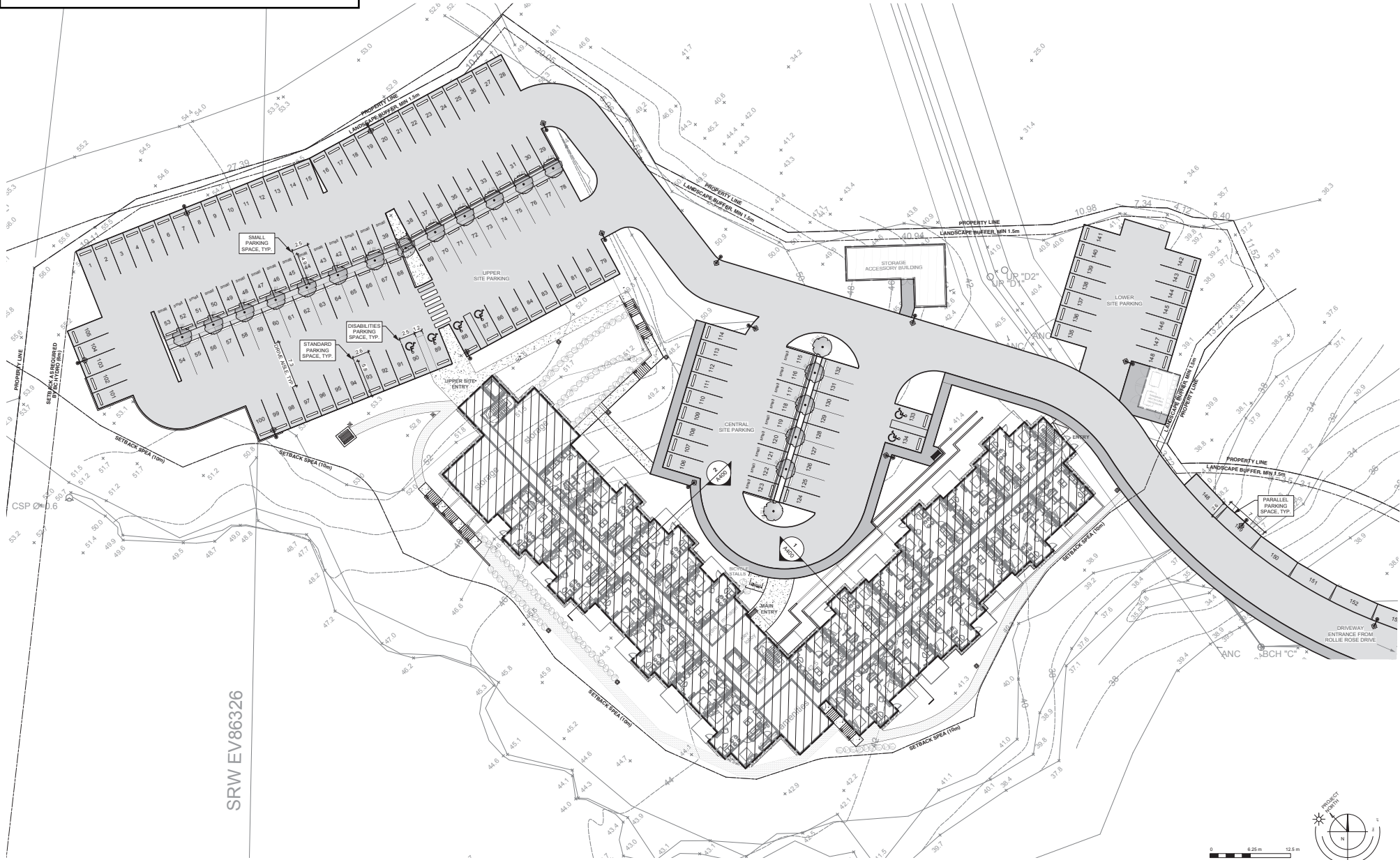
Title

Occupation

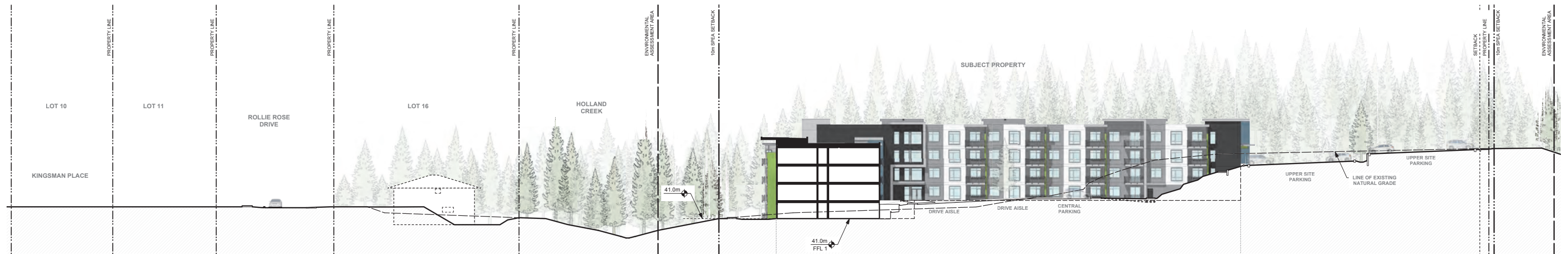
Date

Date

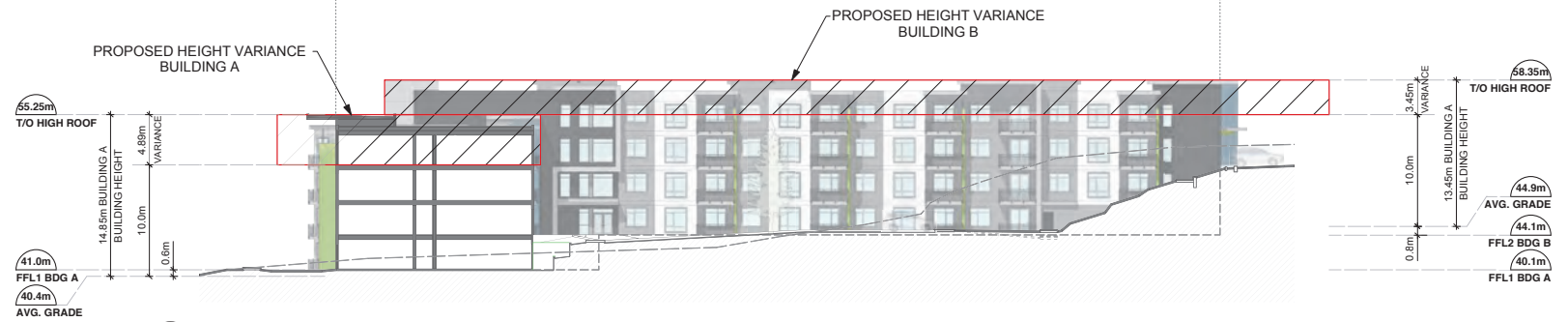
Schedule A - Building Location
DVP 3090-20-04
107 Rollie Rose Drive



Note: Schedule A is only intended to show building location.



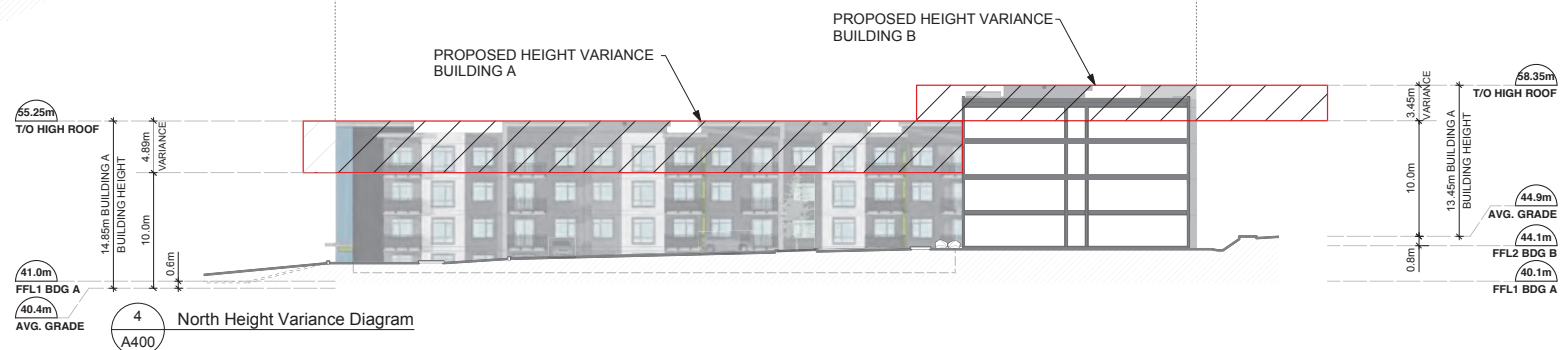
1 East SITESCAPE
A400



2 East Height Variance Diagram
A400



3 North SITESCAPE
A400



4 North Height Variance Diagram
A400

Schedule B - Elevation Plans
DVP 3090-20-04
107 Rollie Rose Drive



Received August 7, 2020

Within Circulation Area

Hi Christina and Julie,

I just have a few questions about the proposal and the building itself. We own 133 Rollie Rose, it was our understanding that behind our house is riparian area and therefore will always have trees. It appears that the upcoming building goes up the road further than we had thought. Will there be a tree corridor between the building and the current lots that are on rollie rose?

My other question is how does making the building taller reduce the number of parking spaces to 1.5 from 2? Will that mean that more people will need to park on the street, thereby clogging our road?

Thanks for your help,

Brandi

Received August 10, 2020

Within Circulation Area

From: Ken Chipeniuk

Sent: August 9, 2020 5:42 PM

Dear Ms. Hovey.

Thank you for your letter dropped on our doorsteps on Friday August 7. We appreciate receiving the notice about a development variance permit application in Holland Creek Development. However, we are significantly dismayed we have been granted only 11 days to prepare a response to the application for consideration by Council. We do have numerous questions including the following preliminary ones. Due to the time frame you have imposed, we must expect your responses to our questions by close of business August 10. Thank you.

1. Who are the proponents for the request? Who are the principals of the company? Are there any potential conflicts of interest with the Town staff or Councillors that you are aware of?
2. Please provide us a copy of the complete development proposal so we can understand the project better. For example, will this be a rental apartment or a condominium development or mixed?
3. Have the proponents given any rationale to support their request for variances? Have they provided any impact assessment?
4. Has your planning department conducted any impact analysis or study related to the requests? For example, will the top storey of the proposed building be visible from Rollie Rose Drive and adjacent properties, and Holland Creek Trail? Will the proposed top storey be looking into our houses and backyards?
5. Has the planning department prepared a recommendation to Council? If not yet, will a recommendation be made?
6. Is it possible for the public to view the permit issued by the province for the temporary bridge?
7. Why are there so many different map images in play for the subject property? The imagery you gave us is old and outdated imagery. The map you gave us is different than the map attached to the paperwork for Council.
8. Why have you drawn the Property Boundary you have drawn for the subject property Lot 13 about the rear boundary of our property? Is the riparian zone and the SPEA included in the boundaries of Lot 13?

9. What is the legal authority to grant variances from the zoning bylaw? What is the legal authority for appeals of decisions to grant variances?

10. Who determines when the request for variances will go before Council and is there discretion in the time frame to go forward? In an environment of transparency and accountability, it seems inappropriate to be rushing through the requests in the middle of summer with residents and property owners on vacations.

11. Has any consideration been given to the impact of the variances on the Holland Creek Trail and its users? It would seem there may be a broader impact than simply adjacent property owners to Lot 13.

12. Are there any precedents in Ladysmith for these variances?

13. Since your notices were simply dropped on the ground, are you undertaking any further efforts to ensure they were not simply blown away by the wind...or rained on.

14. What efforts are being undertaken to notify affected property owners who are not currently resident on their properties? We are doing our best to contact these individuals, however we feel this is your responsibility, not ours.

Best regards, thank you, and again, **we will expect your reply August 10, by close of business.**

Ken Chipeniuk
131 Rollie Rose Drive

Jim Tallman
137 Rollie Rose Drive

Received August 18, 2020

Within Circulation Area

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

From: Amanda Barker

Sent: August 18, 2020 1:39 PM

To: Town of Ladysmith <info@ladysmith.ca>

Subject: Re: Permit for 107 Rollie Rose Drive

NOTICE OF DEVELOPMENT VARIANCE PERMIT: DVP 3090-20-04 (107 Rollie Rose Drive) Lot 13, District Lot 103, Oyster District, Plan EPP75579 PID: 030-477-638 Our File: DVP 3090-20-04

To Whom it May Concern,

Regarding the above listed notice of development, I would like to express a concern with the proposed reduction in parking spaces for the residential unit.

Rollie Rose Drive is already a narrow roadway, and when vehicles are parked on either side of the roadway between Dogwood Drive and Kinsmen Place, there are concerns with larger vehicles (even standard sized pickup trucks) being able to easily pass by. This issue is compounded during weather events, which we experienced this past January. Reducing parking spaces for this proposed residential building will encourage occupants to park on Rollie Rose Drive and Kinsmen Place, which is already overcrowded most evenings and weekends.

I would like to suggest that 'no parking' signs are implemented on Rollie Rose Drive and Kinsmen Place, or permit parking for residents only is initiated.

Thank you for your consideration,

Kind regards,

Amanda Barker

126 Kinsmen Place

376 Dogwood Drive
Ladysmith, B.C
August 17, 2020

Within Circulation Area

Town of Ladysmith
PO Box 220
Ladysmith, B.C. V9G 1A2

Re: NOTICE OF DEVELOPMENT VARIANCE PERMIT: DVP 3090-20-04 (107 Rollie Rose Drive)

As an established resident backing onto the Holland Creek Development we are not happy about the proposed building due to the increased traffic but realize the original plan has already been approved. Increasing the maximum height of the building and reducing the number of parking spaces does not make any sense at all. Most families have 2 vehicles and the fact that Ladysmith does not have full transit services to neighbouring communities, that will not change. If you drive around the homes on Rollie Rose Drive and Kinsmen Place, there are always vehicles on the roadside. Homeowners who have recreational vehicles are using roadside parking for their personal vehicles.

We are not in favour of increasing the maximum height of the building from 10.0 metres to 14.85 metres and would rather see a smaller parking lot but that may cause more roadside congestion.

Regards,

The image shows two handwritten signatures in black ink. The top signature is cursive and appears to read 'John Halkett'. The bottom signature is also cursive and appears to read 'Lynn Halkett'.

John and Lynn Halkett

August 25, 2020



To: Mayor Aaron Stone, Councillor Amanda Jacobson, Councillor Rob Johnson,
Councillor Tricia McKay, Councillor Duck Paterson, Councillor Marsh Stevens,
Councillor Jeff Virtanen

RE: NOTICE OF DEVELOPMENT VARIANCE PERMIT
DVP 3090-20-04 (107 Rollie Rose Drive)
Lot 13, District Lot 103, Oyster District, Plan EPP75579
PID: 030-477-638

Dear Mayor Stone and Town Councillors,

We are writing today because we oppose the variances being requested for the above property, and request Council to reject the variances.

When we moved into our homes on Rollie Rose Drive, we knew that there would be a multi-unit project built on Lot 13. We acknowledge that. However, we feel that approving the requested variances would be a violation of the understandings under which we purchased our properties, including the Town Zoning Bylaw 2014, #1860.

Variance 1. Increase the maximum height of the building from 10.0 metres to 14.85 metres

- a. *Increase in Noise Levels:* The increase in building height will cause noise from the higher units to spread over the top of the trees buffering the lots on Rollie Rose Drive.
- b. *Privacy:* The additional height may mean that residents of the complex can peer into our yards.
- c. *Lighting:* Lights atop the building may shine into our yards.
- d. *Impact on visuals due to the higher building:* The top of the building may rise above the trees in the buffer zone.

Variance 2. Reduce the total number of parking spaces from requiring 2 spaces per two-bedroom unit to 1.5 spaces per two-bedroom unit. For the proposed building, this would reduce the total number of required parking spaces from 172 to 144.

Overflow Parking on Rollie Rose Drive and Kinsman Place: With a decrease in parking spaces for the residential building, we believe that parking will overflow onto Rollie Rose Drive and Kinsman Place. It's already narrow on Rollie Rose Drive at this point, which we agree is necessary for traffic calming, but when vehicles park there, the space for other vehicles, including emergency vehicles, to get through is compromised. We are concerned that additional cars from Lot 13 will make for a bottleneck at the driveway to Rollie Rose Drive, as well as requiring more cars to park further up the hill. This will spread out the congestion even further, and squeeze out the cars for visitors of houses up the hill. There are only limited pull outs on Rollie Rose Drive and they are further up the hill, and there are none in Kinsman Place.

We would make one additional observation. This really is not a 2.72 hectares property qualifying under the Town Zoning bylaw for development of upwards of 100 residential units. As stated by the applicant's architect, only 1.47 hectares can actually be developed since the balance of the land is protected riparian zone. A property of this size would qualify for only 60 units and would not require zoning variances. This brings us to wonder why the proposal is for 90 units on 1.47 hectares of developable land?

We respectfully ask that Council deny the variance requests for this property, or at the very least, require additional research before decision. The owners of Lot 13 knew the zoning for their property when they purchased the parcel.

Printed Name	Signature	Address
Jim Tallman		137 Rollie Rose Dr.
Patricia Tallman		137 "
Brandi Chesher		133 Rollie Rose Dr
Micah Chesher		133 Rollie Rose Dr

Printed Name	Signature	Address
Adam Grubert		108 Rollie Rose Dr. Ladysmith
Jodi Grubert		108 Rollie Rose Dr.
Jenny Barber		104 Rollie Rose Dr.
Don Barber		104 Rollie Rose Dr.
Janelle Williamson		110 Kinsmen Place
James Burke		110 Kinsmen Place
Lewis Vinnish		120 Kinsmen Place
Dandy Vinnish		120 Kinsmen Place
Barbara Mulla		118 Kinsmen Place
Ron Bergsma		116 Kinsmen Place
Barb Bergsma		116 Kinsmen Place
Shannon Fuzi		112 Kinsmen Pl.
Joshua Ruiz		112 Kinsmen Pl.
Grant Blanchette		124 Kinsmen Pl.
Amy Blanchette		124 Kinsmen Pl.
DEBRA GRAHAM		131 Rollie Rose Dr.
Ken Chipenink		131 Rollie Rose Dr.
Greg Pierce		145 Rollie Rose Dr.

Printed Name	Signature	Address
Heather Pierce		145 Rollie Rose
GRANT LOVE		135 ROLLIE ROSE DR.
KAREN LOVE		135 Rollie Rose Dr.
Jeremy Duenk		123 Rollie Rose Dr.
JACLYN RIVIERE		123 ROLLIE ROSE DR.
Adam Barker		126 Kinsmen Pl
Joanne Fehr		111 Rollie Rose Drive.
Mike Porto		111 Rollie Rose Dr.
John Hall		129 Rollie Rose Dr.
NAOMI Hall		129 Rollie Rose Dr.
Amanda Barker		126 Kinsmen Pl.

Received November 26, 2020

Within Circulation Area

131 Rollie Rose Drive
Ladysmith, BC
2020 November 25

(Sent by Email)

Mayor Stone
Councillor Jacobson
Councillor Johnson
Councillor McKay
Councillor Paterson
Councillor Stevens
Councillor Virtanen

Dear Mayor and Council of The Town of Ladysmith:

**Regarding: DEVELOPMENT PERMIT & DEVELOPMENT PERMIT VARIANCE
FOR MULTIFAMILY DEVELOPMENT AT 107 ROLLIE ROSE DRIVE
(LOT 13)
Your File Nos.: 3060-20-09 & 3090-20-04**

Thank you for the opportunity to share our concerns with you regarding the above noted proposed variances.

It has been a challenge for us to understand the complex legal environment for the variance and development applications being brought forward to you by the owners of the property at 107 Rollie Rose Drive (Lot 13) and the Town of Ladysmith planning department. Unfortunately, the only real guidance we found related to variances requested from a Board of Variance and the concept of "undue hardship." We appreciate that Town Council has a flexible and seemingly undefined authority to grant variances that exceed that of the Town's Board of Variance. The applicants for the variances and the development permit have obviously chosen to approach Council directly. We can only imagine what considerations Town Council may have beyond "undue hardship" since these certainly are not elaborated by the applicant's submissions nor the planning department's analysis and recommendations. Below we will explore how the applications fail the test of "undue hardship" and add broader comments related to the larger interests of our Town.

We have found that "undue hardship" for the applicant, is defined as undue hardship resulting from the site and/or building aspect as opposed to the applicant's personal circumstances. As an adjunct to this we have read that variances may not substantially affect the use and enjoyment of adjacent land and would not adversely affect the natural environment.

The Town of Ladysmith planning staff have stated the applicant's rationale for the variances as: "The Applicant's rationale for the increased height and reduced parking is based on achieving minimal site disturbance by reducing the footprint of the development." This rationale does not meet the test of undue hardship since the application is based solely on "personal

circumstances.” The applicant knew the zoning criteria and restrictions for building on this site when the land was purchased. Now the applicant requests that the town grant these variances, for no apparent reason other than to maximize size of the development for what could be perceived to be personal economic gain. The problem is not with the site nor Town bylaws, but simply on the building design and the personal interests of the applicant. Further indication that the unique building challenges were widely known to all, including to the owner, may be found in the property assessments published by BC Assessment: in July 2018, the property was assessed at a value of \$1,275,000. It was apparently purchased by the current owners on October 1, 2019 (the latest and only purchase listed) for \$750,000. Why would any seller sell a property at such a discount unless the challenges of development are known and acknowledged.

It is definitely the contention of adjacent residents that the development would have a deleterious effect on the use and enjoyment of their homes and properties. The applicant has submitted to Council a stylized diagram prepared by “The Planning Department” purporting to show a dense and impenetrable visual barrier of trees between the proposed development and the neighbouring lots. This cannot be considered as much more than graphic artistry. And indeed, contrarily, it actually demonstrates that the increased building height would enable view lines through the sparse upper reaches of the canopy, especially once proposed remedial action would be completed for a significantly reduced SPEA. It would seem like the artist has never been near enough to a forest to appreciate that you can see into and through a forest for some distance and hear through it as well. The best test would be to have some one holding a flag 40 meters tall along the proposed building site!

The applicant states that all residents and visitors will be parking on site in their assigned spaces or guest parking. This unsubstantiated claim cannot be viewed as much more than wishful thinking. And, contrary to the claims of the applicant, we cannot imagine how anyone can assert that a 16 per cent decrease in parking spaces is “slight.” The Town planning department has asserted that the requested reduction in parking spaces is reasonable, but without providing any rationale for this assertion. Contrarily, we feel that it is incumbent on Council to ensure that rental accommodations in Ladysmith shall have adequate parking meeting recognized standards. It must be appreciated that there will be no “spill over” parking opportunities for residents except for the pullouts on Rollie Rose Drive. In other (unrelated) conversations with Town Infrastructure staff, they have agreed that it shall soon be imperative to post “no parking” on Rollie Rose Drive to insure safe passage of traffic and health, fire and safety vehicles. While we want more rental housing in Ladysmith, we should not act in a manner that we will come to regret in future years.

We note the assertion of the Town planners that the proposed reduction in parking spaces is necessary to protect existing natural areas. Simultaneously, the planners are recommending a significant reduction (50 percent) to the SPEA and also an unsubstantiated minimal \$5,000 security against damage to the SPEA. What is the value of an 80-year-old tree? This will be a real test of the will power of Council to protect the natural spaces in Ladysmith.

It is irrational to presume that a 50 percent reduction in SPEA width shall not affect the natural environment. In fact, the Riparian Area Assessment Report actually specifically confirms and details that there shall be up to a not-inconsiderable “moderate level” risk impact.

To repeat, it is our contention that the applications do not meet the tests of undue hardship, negative impact on the use and enjoyment of adjacent properties, and protection of the natural environment in Ladysmith. Moreover, the applicant and the planning department have provided no additional compelling rationale to approve the variances that are being requested.

Moving forward, we recognize that the property will eventually be developed when more appropriate plans come forward. We recommend that several additional considerations should be part of the process.

1. A complete public assessment of the impact on traffic management into and out of Rollie Rose Drive and the remedial action will be necessary. As identified in Town studies, Dogwood Drive already sees over 7,000 vehicles each day on average. Consideration must be given for traffic lights or a traffic circle constructed at Rollie Rose Drive.
2. Ladysmith ideally needs an articulation of the vision for rental requirements, that is, unit nature, volumes and affordability to guide the development of apartment buildings. Many of us have the casual sense that there is a need for increased rental accommodation in Ladysmith. Unfortunately, the current application and existing information sheds little light and data regarding the housing need in Ladysmith. The current applications do not even attempt to address the need for affordable housing or housing for persons with disabilities. We need a housing strategy, and not haphazard development.
3. Why did it take three tries to prepare a Riparian Area Assessment Report acceptable to the provincial government? We would contend that even the current Report unfortunately remains inadequate. Construction on the site will impact not only the riparian zone on the adjacent southern boundary of the development site. There will also likely be an impact on the SPEA boundary with adjacent properties along Rollie Rose Drive. The removal of trees on the construction site, compounded by any reduction in SPEA width, will incrementally expose the SPEA shared with the neighbouring properties to the south to new wind patterns with increased velocities. There has been no assessment of this impact. Residents have identified that falling trees in the current SPEA by Rollie Rose Drive are not uncommon during wind storms.
4. Development proposals should always assess the Risk/Benefit of maintaining an unvaried SPEA width versus significantly reduced SPEAs proposed by developers. An 80 year-old tree will never be replaced in most of our lifetimes. And as identified by the Qualified Environment Professionals, substantial modification of the SPEA will be necessary. Unfortunately, the current report is simply targeted to justifying a significant reduction in SPEA width incurring up to a medium level of risk.
5. The Town of Ladysmith should always encourage an open dialogue between adjacent property owners and the applicants for variances so they may better share common interests. Regarding the current applications coming before Council, adjacent property owners did request that the applicants meet (electronically) with them to promote a better understanding of the project in a neighbourly manner. The applicant originally agreed, and subsequently, declined to meet with the neighbours. We do not believe this is the spirit of Ladysmith.
6. Council may consider postponing addressing applications for zoning bylaw variances until the review of the Town Official Community Plan is finished.

7. Developers of multi-unit housing must be encouraged to adhere to the design direction in the Ladysmith OCP: "...the aesthetic of the neo-traditional, Pacific Northwest, or eco-responsive themes." The design of the current proposal is uninspiring to say the least. Renters should feel proud about the architecture of their home.

We appreciate having the opportunity to share our perspectives with Mayor and Council of the Town of Ladysmith. In closing, however, we wish to point out that notice of the third variance requesting to significantly reduce the SPEA zone was not provided to the owners of adjacent properties. While there may not be a legal obligation to give this notice, we believe it is proper, in the interests of transparency, to give full disclosure.

Yours sincerely

Debbie Graham

Ken Chipeniuk

Proud Residents of The Town of Ladysmith

November 6, 2020

Mayor and Town Councillors
Town of Ladysmith

Mayor Aaron Stone, Councillor Amanda Jacobson, Councillor Rob Johnson, Councillor Tricia McKay,
Councillor Duck Paterson, Councillor Marsh Stevens, Councillor Jeff Virtanen

c/o Julie Thompson, Senior Active Planner
VIA Email: jthompson@ladysmith.ca

RE: Development Variance Permit

DVP 3090-20-04 (107 Rollie Rose Drive)
Lot 13, District Lot 103, Oyster District, Plan EPP75579
PID: 030-477-638

Dear Mayor Stone and Town Councillors,

My name is Chris Lundy and I am the owner and developer of the subject property. We have been in business for 30 years building and developing in the Mid-Island area and over the past 15 years have completed three subdivisions and 20 homes in the Town of Ladysmith. We are very excited about the latest housing project that is in the planning process with the Town as we believe there is great demand for new community housing in Ladysmith.

We have been working diligently with the Planning Department to address the requirements of a complicated site. We are working within the existing zoning of the property, and within the allowable density for the property. Our request for a height variance and a parking variance for the project is on the basis of very sound planning. We are proposing a smaller footprint for the building and a slightly lower parking requirement in an effort to prevent building structure and parking sprawl on this beautifully forested site. It is our goal to create a community surrounded by forest and water courses with significant land space for the enjoyment of the building's residents.

After providing notice of the Development Variance Permit, we have received some comments back from the surrounding neighbors and we would like to speak to a couple of points:

Variance 1: Increase the maximum height of the building from 10.0 meters to 14.85 meters.

There is a concern by the neighbors that there could be privacy issues, lighting issues and visual impact. The Planning Department has provided a drawing showing the actual height of the building and surrounding trees which indicates that the neighbors will completely retain their privacy due to the towering forest buffer within the SPEA. Simply put, our apartment building will not be seen by any of the neighbors and will be surrounded by Provincially protected forest.

Variance 2: Reduce the total number of parking spaces from 172 to 154.

We are requesting a slight reduction in required parking which is in keeping with the direction of the Planning Department. Contrary to the neighbors' parking concerns, all residents and visitors will be parking on site in their assigned spaces or guest parking.

We will be promoting a green recreational lifestyle for this community which includes an interior bike storage locker with multiple e-bike chargers. In addition, we will have 4 electrical vehicle charging stations with the ability to expand to 8. Furthermore, we will have a Statutory Right of Way over the property connecting the project to Rollie Rose Drive and the Holland Creek Trail.

In closing, Westmark is a highly experienced Developer that is committed to bringing a first-class project to the Town of Ladysmith. Holland Creek Apartments will add 100 rental housing opportunities in a community that has virtually no available rental space. We look forward to planning future rental projects in the Town of Ladysmith.

We are asking for your support on November 17th when our project comes before the Council for consideration.

Thank you,

Westmark Construction



Chris Lundy
President



TOWN OF LADYSMITH DEVELOPMENT PERMIT

(Section 489 *Local Government Act*)

FILE NO: 3060-20-09

DATE: December 1, 2020

Name of Owner(s) of Land (Permittee): 1223434 B.C. Ltd., Inc. No. BC1223434

Applicant: Jacquie Kinnersley (Westmark Construction Ltd.)

Subject Property (Civic Address): 107 Rollie Rose Drive

1. This Development Permit is subject to compliance with all of the bylaws of the Town of Ladysmith applicable thereto, except as specifically varied by this Permit.
2. This Permit applies to and only to those lands within the Town of Ladysmith described below, and any and all buildings structures and other development thereon:

LOT 13 DISTRICT LOT 103 OYSTER DISTRICT PLAN EPP75579

PID: 030-477-638

(referred to as the "Land")

3. This Permit has the effect of authorizing the alteration of land and construction of a multi-unit residential building and accessory buildings on the Land, located within:
 - (a) Development Permit Area 8 – Multi-Unit Residential ESA,
 - (b) Development Permit Area 7 – Hazard Lands, and
 - (c) Development Permit Area 6 – Riparianas designated within the Official Community Plan Bylaw 2003, No. 1488 under sections 488(1) (a), (b), (f), (h), (i) and (j) of the *Local Government Act*, in accordance with the plans and specifications attached to this Permit, and subject to the conditions, requirements and standards imposed and agreed to in this Permit and all applicable laws.
4. With respect to the Land, section 5.2.e) of Town of Ladysmith Zoning Bylaw 2014, No. 1860 are hereby varied to reduce the setback of a multi-unit residential building to a minimum of 10.5m from the high water mark of a watercourse, as shown in **Schedule B – SPEA Site Plan**.

5. This Permit does not have the effect of varying the use or density of the Land specified in Zoning Bylaw 2014, No. 1860.
6. The Permittee, as a condition of the issuance of this Permit, agrees:
 - (a) To develop the Land in accordance with **Schedule A – Site & Parking Plan, Schedule B – SPEA Site Plan, Schedule C – Landscape Plan, Schedule D – Multi-Unit Building Elevations, Schedule E – Accessory Building Design, Schedule F – Conceptual Design Renderings, and Schedule G – Building Materials & Colours** including the following:
 - i. All exterior lighting on the site, including parking lot lighting, shall be cast downward, away from neighbouring residential and park areas.
 - ii. The bicycle parking provided shall be in accordance with section 8.3 of Zoning Bylaw No. 1860, ‘Calculation and Design of Off-Street Bicycle Parking Spaces’.
 - iii. A minimum of one electric-bike charging stations per storey in the multi-unit residential building shall be provided.
 - iv. A minimum of four electric-vehicle charging stations shall be provided within the central parking area, as shown on **Schedule A – Site & Parking Plan**.
 - (b) To protect the 10m Streamside Protection and Enhancement Area (SPEA) shown in **Schedule B – SPEA Site Plan** by adhering to all the measures and recommendations in **Schedule H – Riparian Areas Protection Regulation Assessment Report** and its appendices, including the following:

PRIOR TO CONSTRUCTION AND CLEARING

- i. The SPEA boundary is to be located with stakes, flagging, rope line and snow fencing, identified with eye-level signage at 20m intervals, and noted on all construction plans.
- ii. The building construction envelope will be marked and isolated from the SPEA by surveyed stakes.
- iii. The Qualified Environmental Professional (QEP) will hold a job safety and environmental pre-work meeting with workers prior to any construction or land clearing, and will review the SPEA area, work boundaries and protection measures contained in **Schedule H** with workers and supervisors.
- iv. Tree protection fencing must be in place to ensure appropriate setbacks from tree root boles.
- v. An ocular survey will occur to identify an additional danger trees other than those identified in **Schedule H**. Appropriate treatment must be implemented prior to clearing and construction to ensure the site is safe.

DURING CONSTRUCTION

- i. The SPEA must not be encroached, altered, or impacted by construction in any way.

- ii. Disturbance of roots of trees within and on the edge of the SPEA must be minimized through measures identified in **Schedule H**, including:
 - a. a setback of at least 3m from the tree root bole is required (root zone).
 - b. setbacks will be marked and identified with fencing.
 - c. paving and parking on tree root zone is not permitted.
 - d. pollutants from construction are not permitted to enter the soil around trees.
 - e. ground level around trees may not be changed with any fill other than mulch.
 - f. Contractors using heavy equipment within 5m of a SPEA must apply a root protection layer of mulch or use membrane such as blast mats.
- iii. There shall be no disturbance to fish habitat or release of deleterious substances into the SPEA or watercourse.
- iv. Wet weather shutdown must occur during earthworks and other activities that could result in erosion or sediment runoff. The activity must be stopped and protective actions taken.
- v. All works will be monitored by the QEP during land clearing and construction in accordance with the recommendations of **Schedule H**.
- vi. Exposed soils will require erosion control measures at all times.
- vii. Erosion and sediment control is prescribed by a professional engineer in Appendix 4 – Erosion and Sediment Control Plan of **Schedule H**.
- viii. Runoff in the work site must be controlled and managed on site.
- ix. The contractor will have the following items on site at all times:
 - a. 50m of 20cm diameter oil containment boom
 - b. 200 x 2L absorbent pads
 - c. Straw bales and/or truck load bark mulch or clean gravel
 - d. 1000 ft² tarps or rolls of poly sheeting
 - e. One industrial spill kit on each piece of heavy equipment
 - f. Water pumps/hoses for water bypass and sump removal
- x. All areas disturbed during construction will be covered with hydroseed.
- xi. Spill kits must be located on each piece of heavy equipment.
- xii. Machinery must be stored and fueled away from the SPEA, preferably on gravel pads to avoid rutting.
- xiii. Stormwater management is prescribed by a professional engineer in Appendix 5 – Stormwater Management Plan of **Schedule H**. All stormwater management works will be inspected by a qualified Engineer and QEP to ensure they are installed and function to protect the SPEA. All stormwater management areas shall be located outside of the SPEA.

POST CONSTRUCTION & LONG TERM PROTECTION

- i. Prior to building permit occupancy, a 6 foot tall, permanent, solid, wood panel fence shall be constructed along the SPEA boundary for long term protection of the SPEA. Fence post holes shall be located in accordance with the 3m setback of the tree root bole for SPEA trees. Signage shall

be affixed to the fence, facing the building, at 10m intervals, which reads “Riparian Preserve Area – Do Not Enter”.

- ii. Infill planting of native species within the SPEA is required in accordance with the recommendations in **Schedule H**.
 - iii. Prior to building permit occupancy, the QEP shall submit to the Town a post-construction monitoring report which confirms that the requirements and measures to protect the SPEA were completed and that the SPEA was adequately protected.
 - iv. Installation of a permanent culvert over the watercourse must be carried out in accordance with Appendix 6 – Culvert Installation of **Schedule H**. All areas disturbed during culvert installation shall be covered, grass seed shall be applied, and no fertilizer may be used within 5m of any watercourse.
 - v. The SPEA must be kept in its natural state with the exception of the following:
 - a. Construction of an access and public trail from Rollie Rose Drive, as shown on **Schedule A** in accordance with all protective measures and recommendations in **Schedule H**.
 - b. Removal or treatment of danger trees, or treatment of trees for windfirmness, is permitted in accordance with the recommendations of **Schedule H**. Trees to be felled within the SPEA shall be retained in the SPEA as coarse woody debris. Trees that require removal should be cut at a high stump/trunk (5-10m) to remove the danger but preserve the tree. A qualified arborist is required for danger tree treatment or removal, or for windfirmness treatment.
 - c. Infill planting of native species in accordance with the recommendations in **Schedule H**.
 - d. Removal of invasive species.
- (c) To protect the Land from hazards, in accordance with the recommendations in Appendix 3 – Geotechnical Assessment in **Schedule H**, including the following:
- i. All civil works must be located behind a 30 degree reference line as depicted on the drawing cross sections in Appendix 3, and/or include mitigative works with direction from the Geotechnical Engineer.
 - ii. A minimum flood construction level (FCL) of 1.5m above the crown of road at the stream crossing, or a minimum of 1.5m above the high water mark as measured perpendicularly to the watercourse, whichever is greater, is required.
 - iii. The FCL is defined as the minimum elevation to the top of concrete slab for habitable buildings. The building design incorporates habitable areas below the FCL that range from 2.5m to 4.5m, which is allowable considering the building is at least 12m from the high water mark, incised into an impermeable stratum, and will include impermeable earthen berms and/or concrete walls up to FCL to prevent the ingress of water during a maximum 1 in 200 year storm event.

- iv. A watercourse setback of 10.0m, measured from the high water mark, is recommended.
 - v. Site conditions may be conducive to the installation of stormwater detention measures. The locations of any proposed detention measures shall be reviewed by the Geotechnical Engineer to determine if the design methods and/or locations pose a hazard to the Land or any adjacent or adjoining properties.
- 7. This Permit is issued on the condition that the Permittee has provided to the Town of Ladysmith security in the form of an irrevocable Letter of Credit to guarantee the performance of the conditions in section 6(a) of this Permit respecting landscaping, and conditions in section 6(b) of this Permit respecting infill planting within the SPEA. The Letter of Credit shall be for a period of two years, shall be automatically extended, and shall be in the amount of \$180,547. Request for release of the security shall be accompanied by a report from a Landscape Architect (for landscaping outside the SPEA) and a report from the QEP (for infill planting in the SPEA) confirming that all landscaping and SPEA plantings have been planted in accordance with **Schedule C** and **Schedule H**.
- 8. This Permit is issued on the condition that the Permittee has provided to the Town of Ladysmith security in the form of an irrevocable Letter of Credit to guarantee the performance of the conditions in section 6(b) of this Permit respecting measures to protect the SPEA from damage. The Letter of Credit shall be for a period of two years, shall be automatically extended, and shall be in the amount of \$5000. Request for release of the security shall be accompanied by a report from a QEP, confirming that the requirements and measures to protect the SPEA were completed and that the SPEA was adequately protected, in accordance with **Schedule H**.
- 9. Should the Permittee fail to satisfy the conditions referred to in this Permit, the Town of Ladysmith may undertake and complete the works required to satisfy the landscaping conditions and reclamation of the SPEA, at the cost of the Permittee, and may apply the security in payment of the cost of the work, with any excess to be returned to the Permittee.
- 10. The Permittee may, in lieu of a Letter of Credit, deposit with the Treasurer of the Town of Ladysmith the sum of the security in cash.
- 11. Should there be no default as herein provided, or where a Permit lapses, the Town of Ladysmith shall return any security provided to the Permittee.
- 12. If the Permittee does not substantially start any construction permitted by this Permit within **two years** of the date of this Permit as established by the authorizing resolution date, this Permit shall lapse.
- 13. The plans and specifications attached to this Permit are an integral part of this Permit.

14. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.503 of the *Local Government Act*, and upon such filing, the terms of this Permit (3060-20-09) or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
15. This Permit prevails over the provisions of the Bylaw in the event of conflict.
16. Despite issuance of this Permit, construction may not start without a Building Permit or other necessary permits.

**AUTHORIZING RESOLUTION PASSED BY THE COUNCIL OF THE TOWN OF LADYSMITH
ON THE ____ DAY OF _____ 202__.**

Mayor (A. Stone)

Corporate Officer (D. Smith)

I HEREBY CERTIFY that I have read the terms and conditions of the Development Permit contained herein. I understand and agree that the Town of Ladysmith has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with **1223434 B.C. Ltd., Inc. No. BC1223434** other than those contained in this Permit.

Signed

Witness

Title

Occupation

Date

Date

Schedule A - Site & Parking Plan
DP 3060-20-09
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434

Note: this plan is not intended to demonstrate landscaping plantings. See Schedule C - Landscaping Plan for landscaping requirements

2 Lower Site Plan: Parking
A101 Scale: 1:250

Green hatched area to remain free from development; trees and vegetation to be retained. No clearing permitted.

1 Upper Site Plan: Parking
A101 Scale: 1:250

[illegible]

NOTE: All dimensions are shown in meters.

GENERAL NOTES

Refer to A105 - A107 for Site Retaining Walls and Site Stair Conditions

Shown spot elevations are indicational, Please refer to Civil

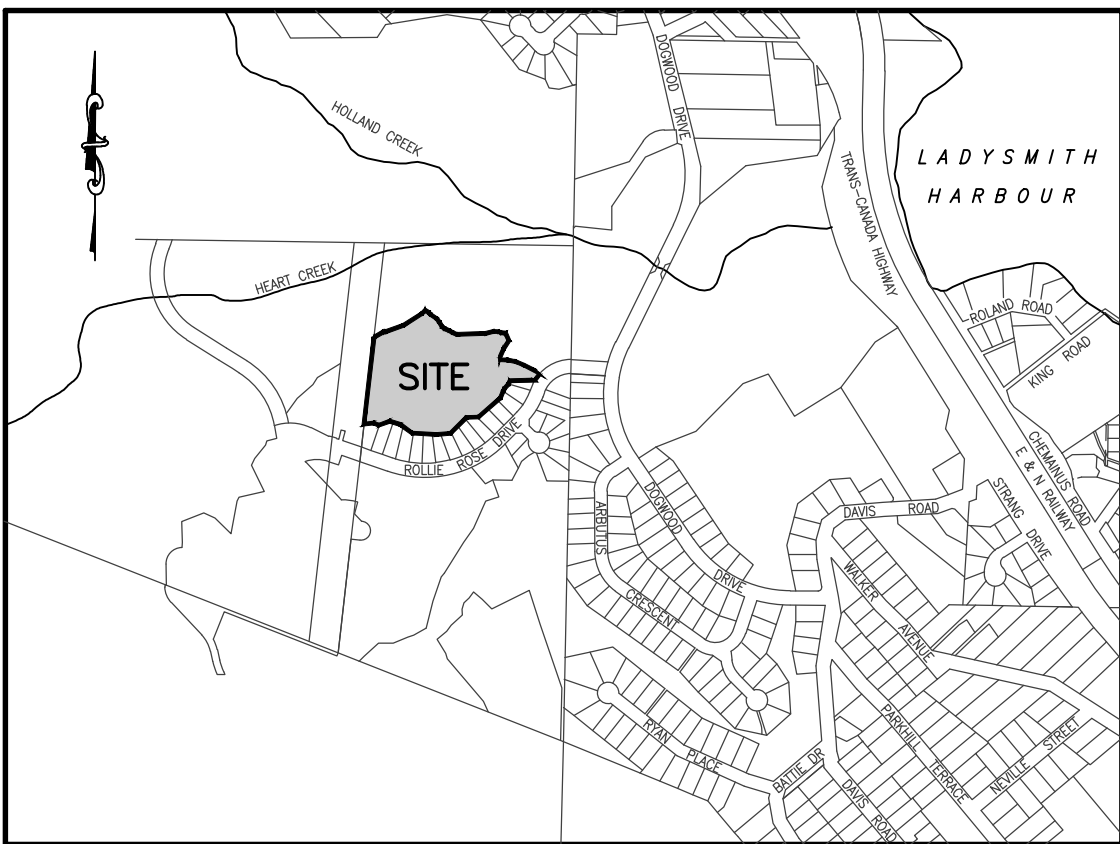
Schedule B - SPEA Site Plan
DP 3060-20-09
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434

Note: this plan is intended to show development areas and setbacks related to the creek and the SPEA. See setback legend.

SETBACK LEGEND

- CREEK
- HWM
- SHADE ZOS
- SPEA
- LWD ZOS
- LITTER ZOS
- RAA

SEPARATION BETWEEN THE LWD ZOS, LITTER ZOS AND SPEA LINE ARE EXAGGERATED FOR CLARITY.



LOCATION PLAN
N.T.S.

NOTES:

- ALL WORK AND MATERIALS ARE TO BE AS DESCRIBED IN THE LATEST EDITION OF THE TOWN OF LADYSMITH'S ENGINEERING STANDARDS AND SPECIFICATIONS OR AS OTHERWISE APPROVED BY THE TOWN OF LADYSMITH'S ENGINEERING SERVICE DIVISION.
- THE TOWN OF LADYSMITH'S CONSTRUCTION DIVISION SHALL BE NOTIFIED 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK ON-SITE.
- CONNECTION TO, OR ALTERATION OF EXISTING TOWN OWNED UTILITIES WILL BE UNDERTAKEN BY TOWN OF LADYSMITH FORCES ONLY, UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
- A "PERMIT TO INSTALL WORKS WITHIN TOWN STREETS, LANES, AND TOWN PROPERTY AREAS" WILL BE REQUIRED WHERE CONSTRUCTION IS TO BE UNDERTAKEN IN THESE AREAS.
- CONTRACTOR IS TO COMPLY WITH ALL APPLICABLE MINISTRY OF ENVIRONMENT AND FISHERIES & OCEANS CANADA REQUIREMENTS AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR TO CONFIRM THE LOCATION AND INVERT OF EXISTING UTILITIES AT ALL CROSSINGS AND CONNECTION POINTS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO CONFIRM THAT THE ELEVATION, LOCATION AND GRADIENT OF CURB AND GUTTER MATCH EXISTING PRIOR TO PLACEMENT OF CONCRETE.
- EXISTING EDGE OF PAVEMENT TO BE SAWCUT STRAIGHT BACK TO THE REQUIRED THICKNESS OF SOUND PAVEMENT TO ENSURE POSITIVE DRAINAGE TO PROPOSED GUTTER, OR AS DIRECTED BY THE TOWN OF LADYSMITH PUBLIC WORKS INSPECTOR.
- ALL WORK TO BE EXECUTED IN COMPLIANCE WITH WORKSAFE BC REQUIREMENTS, THE CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF AND ALL PERSONNEL INVOLVED IN THE PROJECT WITH THE MOST CURRENT VERSION OF THESE REQUIREMENTS AND ENSURING THAT THEY ARE ADHERED TO AT ALL TIMES.
- TO AVOID IMPACTS AND CONFLICT WITH SECTION 34 OF THE WILDLIFE ACT ALL LAND CLEARING ACTIVITIES SHOULD BE SCHEDULED TO OCCUR DURING THE AUGUST 1 - MARCH 1 PERIOD. ANY LAND CLEARING ACTIVITIES UNDERTAKEN DURING THE MARCH 1 - AUGUST 1 MUST BE PRECEDED BY A BIRD NEST SITE SURVEY. ACTIVE NEST SITES SHOULD BE IDENTIFIED AND FLAGGED SO THE THE NEST SITES CAN BE LEFT UNDISTURBED UNTIL THE YOUNG BIRDS HAVE FLEDGED AND LEFT THE NEST. SECTION 34(c) OF THE WILDLIFE ACT PROHIBITS THE DISTURBANCE OF A BIRD, EGG, OR NEST WHILE THE NEST IS OCCUPIED.

EROSION and SEDIMENT CONTROL:

- SEE PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS OF REQUIRED WORKS.
- EROSION AND SEDIMENT CONTROL FOR THIS PROJECT WILL BE AS OUTLINED IN THE FISHERIES AND OCEANS CANADA AND MINISTRY OF WATER, LANDS AND AIR PROTECTION HANDBOOK ENTITLED "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT" MAY 1992" AND BEST MANAGEMENT PRACTICES FOR URBAN AND RURAL LAND DEVELOPMENT IN BRITISH COLUMBIA, JUNE 2004" AND "EROSION & SEDIMENT CONTROL GUIDELINE" BY THE CITY OF NANAIMO. IT IS INCUMBENT UPON THE CONTRACTOR TO ACQUIRE THESE GUIDELINES AND FAMILIARIZE HIMSELF WITH THE REQUIREMENTS THEREIN.
- THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR DAMAGES RESULTING FROM IMPROPER EROSION AND SEDIMENT CONTROL MEASURES UNDERTAKEN BY THE CONTRACTOR.
- ANY DIRECTION GIVEN BY THE ENGINEER TO THE CONTRACTOR FOR EROSION AND SEDIMENT CONTROL NOT FOLLOWED BY THE CONTRACTOR WILL BE REPORTED TO THE TOWN OF LADYSMITH.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT 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 CONNECTED TO PUBLIC SYSTEMS. THE CONTRACTOR IS TO CLEAN ANY SUCH MATERIAL IMMEDIATELY. STREETS ARE TO BE SWEEPED WITH A VACUUM STREET SWEEPER AFTER WORK STOPPAGE EACH DAY.
- PRIOR TO CONSTRUCTION, INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT TO LIMIT TRACKING OF SITE SOILS ONTO OFF-SITE ROADWAYS. THE WIDTH OF THE PAD SHOULD NOT BE LESS THAN THE FULL WIDTH OF POINT OF INGRESS OF EGRESS AND IN ANY CASE SHOULD NOT BE LESS THAN 6m WIDE WITH A LENGTH OF NOT LESS THAN 20m. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 200mm OF COARSE GRANULAR MATERIAL, 75mm SHOT ROCK OR FRACTURED DRAIN ROCK UNDERLAIN WITH GEOTEXTILE FABRIC IS RECOMMENDED.
- SITE ENTRANCE IS TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. MAINTENANCE MAY INCLUDE THE PLACEMENT OF ADDITIONAL TOP DRESSING MATERIAL AS CONDITIONS DEMAND. A WHEEL WASH SHOULD BE INSTALLED IF REQUIRED. THE TEMPORARY SITE ACCESS PAD MAY BE REMOVED DURING PREPARATION FOR PAVING.
- PRIOR TO CONSTRUCTION, AREAS OF NO DISTURBANCE AND/OR VEGETATION TO BE RETAINED SHALL BE FENCED OFF AND/OR FLAGGED FOR PROTECTION. THESE MEASURES ARE TO REMAIN IN PLACE THROUGHOUT THE CONSTRUCTION PERIOD.
- CLEARING AND GRUBBING OF THE SITE SHALL BE COMPLETED IN STAGES IF POSSIBLE TO LIMIT THE DISTURBANCE AND POSSIBLE EROSION TO THE SITE.
- CONTRACTOR IS TO GRADE THE SITE AND INSTALL DRAINAGE CONTROL MEASURES TO DIRECT SURFACE RUN-OFF TO ON-SITE SEDIMENT CONTROL PONDS FOR DISPERSAL AND INFILTRATION.
- IF GRADED AREAS WITHIN THE PROJECT WILL NOT BE COMPLETED OUTSIDE OF THE WET SEASON (OCTOBER - APRIL), REVEGETATION OPERATIONS SHOULD BE CARRIED OUT WITHIN ONE WEEK OF GRADING COMPLETION OF NO LATER THAN SEPTEMBER 15th.
- SILT FENCING IS TO BE INSTALLED AROUND ALL STOCK/SPOIL PILES, OR PILES ARE TO BE OTHERWISE PROTECTED TO LIMIT EROSION AND SEDIMENT GENERATION.
- INSTALL SETTLEMENT PONDS EQUIPPED WITH EMERGENCY OVERFLOW, FOR RETENTION/INFILTRATION TREATMENT OF RUNOFF COLLECTED BY INTERCEPT SWALES AND/OR SILT BARRIERS. THE SETTLEMENT PONDS ARE TO HAVE A MINIMUM VOLUME TO CONTAIN FLOWS FROM A 10 YEAR RETURN PERIOD 24 HOUR RAINFALL EVENT. THE PONDS SHOULD BE USED AND MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD.
- THE CONTRACTOR IS TO CARRY OUT ROUTINE INSPECTIONS AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL SYSTEM COMPONENTS ON-SITE. AT A MINIMUM, THE CONTRACTOR SHALL INSPECT ALL BMP'S WEEKLY AND PROVIDE A REPORT TO THE CONSULTANT AND THE TOWN OF LADYSMITH FOR REVIEW.
- DURING AND/OR FOLLOWING EACH SIGNIFICANT STORM EVENT, THE CONTRACTOR SHOULD OBSERVE THE SETTLEMENT PONDS AND DOWNSTREAM STORM DRAINS TO CONFIRM THAT TURBID WATERS FROM SOURCES ASSOCIATED WITH CONSTRUCTION ARE NOT ENTERING THE STORM DRAINAGE SYSTEM. THE CONTRACTOR SHALL RECORD INSPECTION DATES c/w ANY SIGNIFICANT OBSERVATIONS AND ACTIONS TAKEN, AND THEN INFORM THE CONSULTANT AND TOWN OF LADYSMITH.

NOTE: ALL WORKS UNDERTAKEN WITHIN THE 10m SPEA SETBACK ARE TO BE MONITORED PERIODICALLY BY THE ENVIRONMENTAL CONSULTANT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO THE RECOMMENDATIONS OF THE ENVIRONMENTAL CONSULTANT AS WELL AS ALL APPLICABLE MINISTRY OF ENVIRONMENT AND FISHERIES & OCEANS CANADA REQUIREMENTS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO TAKE ANY ADDITIONAL MEASURES HE MAY DEEM NECESSARY TO PREVENT SILT LADEN OR POLLUTED RUN-OFF FROM ENTERING THE DOWNSTREAM

PRELIMINARY
NOT FOR CONSTRUCTION



Rev. No.	DATE	BY	REVISION DESCRIPTION	ENG
00	XX/XX/XX	dp	SUBMITTED TO TOWN OF LADYSMITH FOR REVIEW - NOT FOR CONSTRUCTION	DB

LEGEND			
PROP.	EXIST.	PROP.	EXIST.
WATERMAIN		HYDRANT	
STORM SEWER		ABOVE GROUND FLUSHOUT	
SANITARY SEWER		BELOW GROUND FLUSHOUT	
GAS MAIN		CATCHBASIN	
ELECTRICAL DUCT		DITCH INLET CB	
INLET/OUTLET HEADWALL		MANHOLE	
DITCH INLET/OUTLET		CLEANOUT	
SWALE		HYDRO POLE	
EDGE OF PAVEMENT		CAP	
VALVE BOX		STREETLIGHT	
LIMIT OF CONSTRUCTION		FENCE	

SITE LEGAL DESCRIPTION	
LOT 13, DISTRICT LOT 103, OYSTER DISTRICT PLAN EPP75579	
BENCHMARK DESCRIPTION	
ELEVATIONS ARE GEODETIC AND ARE REFERRED TO MONUMENT 87H3631 LOCATED ON DOGWOOD DRIVE ELEVATION = 34.356m	

ENGINEER'S SEAL	
DESIGN	DB
DRAWN	dp
CHECKED	
PLOT DATE	07-14-20
PRINT DATE	
HORIZONTAL SCALE	1:500
VERTICAL SCALE	

CLIENT NAME	
WESTMARK CONSTRUCTION INC.	
PROJECT NAME	
HOLLAND CREEK APARTMENTS 107 ROLLIE ROSE DRIVE	

DRAWING TITLE			
SITE PLAN			
PROJECT No.	DRAWING No.	REVISION No.	CITY PLAN FILE No.
0127-028	01	00	



GENERAL NOTES

1.

ALL CONSTRUCTION SHALL CONFORM TO LOCAL, PROVINCIAL AND FEDERAL CODES AND ORDINANCES.
2.

REFER TO ARCHITECTURAL PLANS PREPARED BY dHk ARCHITECTS INC. FOR SITE PLAN LAYOUT, PROPOSED FINISHED FLOOR ELEVATIONS AND SITE GRADING AND OTHER ARCHITECTURAL INFORMATION.
3.

REFER TO STRUCTURAL PLANS PREPARED BY HEROLD ENGINEERING LIMITED FOR ALL SITE RETAINING WALL DESIGN.
4.

EXISTING HAZARD TREE ASSESSMENT, TREE RETENTION FEASIBILITY, TREE REMOVAL AND PROTECTION SHALL BE AS RECOMMENDED BY THE PROJECT ARBORIST PRIOR TO ANY SITE DISTURBANCE.
5.

REFER TO THE ENVIRONMENTAL REPORT PREPARED BY D.R. CLOUGH CONSULTING FOR ALL ENVIRONMENTAL PROTECTION AND MONITORING REQUIREMENTS.
6.

REFER TO CIVIL PLANS PREPARED BY NEWCASTLE ENGINEERING LTD. FOR ALL SITE SERVICING, GRADING, DRAINAGE AND STORM WATER MANAGEMENT INFORMATION.
7.

REFER TO ELECTRICAL PLANS PREPARED BY RB ENGINEERING LTD. FOR SITE LIGHTING AND LOCATIONS.
8.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND TO PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN CIRCULATION DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
9.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND THE PROTECTION OF ALL EXISTING UTILITIES. DAMAGE CAUSED BY THE CONTRACTOR'S INSTALLATION SHALL BE REPAIRED TO THE SATISFACTION OF THE GOVERNING AGENCY AND/OR OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF SUCH REPAIRS.
10.

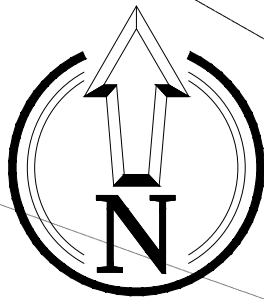
VERIFY CONDITIONS PRIOR TO COMMENCING WORK AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY SUBSTANTIAL DISCREPANCIES.

Schedule C - Landscaping Plan (7 pages)

DP 3060-20-09

107 Rollie Rose Drive

1223434 B.C. Ltd., Inc. No. BC1223434



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Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

LANDSCAPE ARCHITECTURE SITE PLAN NOTES

1.

ALL HARD AND SOFT LANDSCAPE MAINTENANCE SHALL MEET OR EXCEED THE MOST RECENT STANDARDS SET OUT BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) / CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD SECTION 1.4, TABLE T-1/4.2. MAINTENANCE LEVELS - LEVEL 2 GROOMED, REFER TO SPECIFICATIONS.
2.

WRITTEN DIMENSIONS SHALL TAKE PRECEDENT OVER SCALED DIMENSIONS. ALL FIELD ADJUSTMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3.

ALL TRADES SHALL COORDINATE WORK SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
4.

NEW HARDSCAPE INSTALLATIONS SHALL MEET GRADE OF EXISTING SURFACES.
5.

IRRIGATION SLEEVING SHALL BE INSTALLED PRIOR TO PLACING HARDSCAPE SURFACING AND POURING CONCRETE WALLS, REFER TO IRRIGATION AND CIVIL PLANS.
6.

REFER TO PROJECT DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7.

ALL MATERIALS AND FINISHES SHALL PER PER THE DRAWINGS, DETAILS AND SPECIFICATIONS. SOME MATERIALS MAY REQUIRE WEEKS FOR ORDER LEAD TIME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL ORDERING LEAD TIMES AND PROVIDING REQUIRED MATERIALS AT THE PROJECT SITE IN A TIMELY MANNER. NO UNAPPROVED SUBSTITUTIONS WILL BE ACCEPTED.
8.

THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:

A.

CONSTRUCTION START-UP MEETING.

B.

REVIEW OF ROUGH GRADES AND SUB BASE PREPARATION FOR EXTERIOR SURFACES AND PLANTING AREAS.

C.

MATERIALS REVIEW AND APPROVAL PRIOR TO PURCHASE (IE: INORGANIC LANDSCAPE MATERIALS).

D.

REVIEW OF SHOP DRAWINGS.

E.

REVIEW OF INSTALLED EXTERIOR SURFACES AND STRUCTURES.

Cast-in-place concrete retaining wall permitted as alternative to boulder wall

Cast-in-place concrete retaining wall permitted as alternative to boulder wall

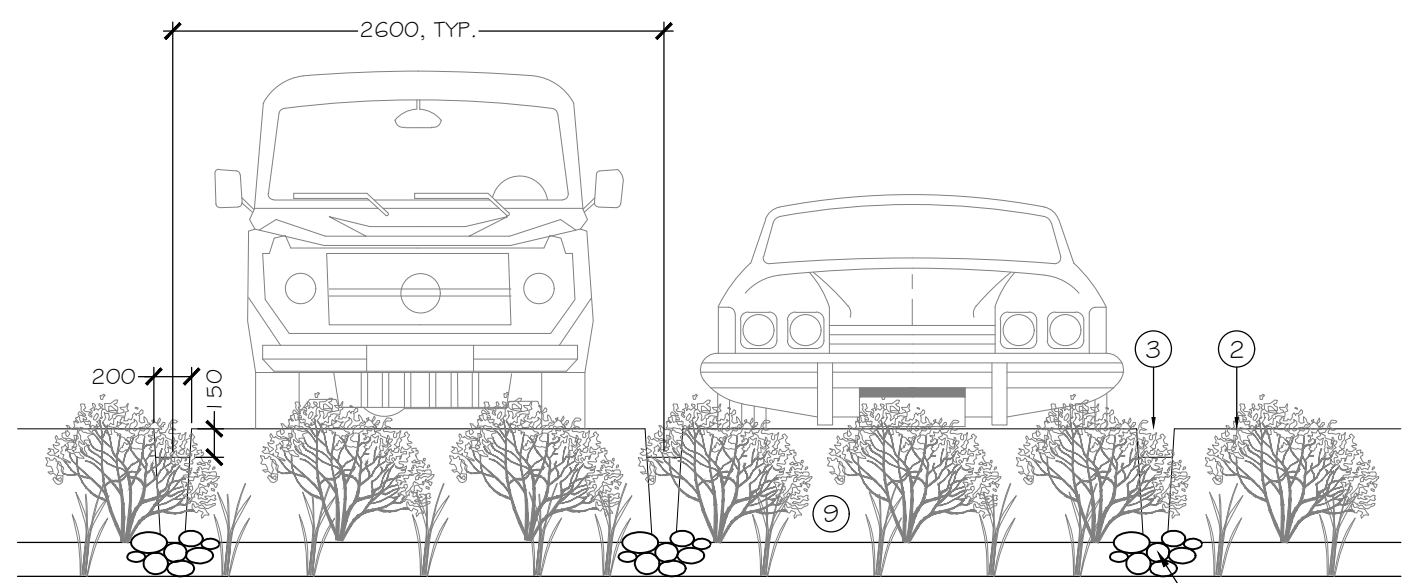
Cast-in-place concrete retaining wall permitted as alternative to boulder wall

LANDSCAPE ARCHITECTURE SITE PLAN

Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	1:250 metric
Project Number:	20-0259

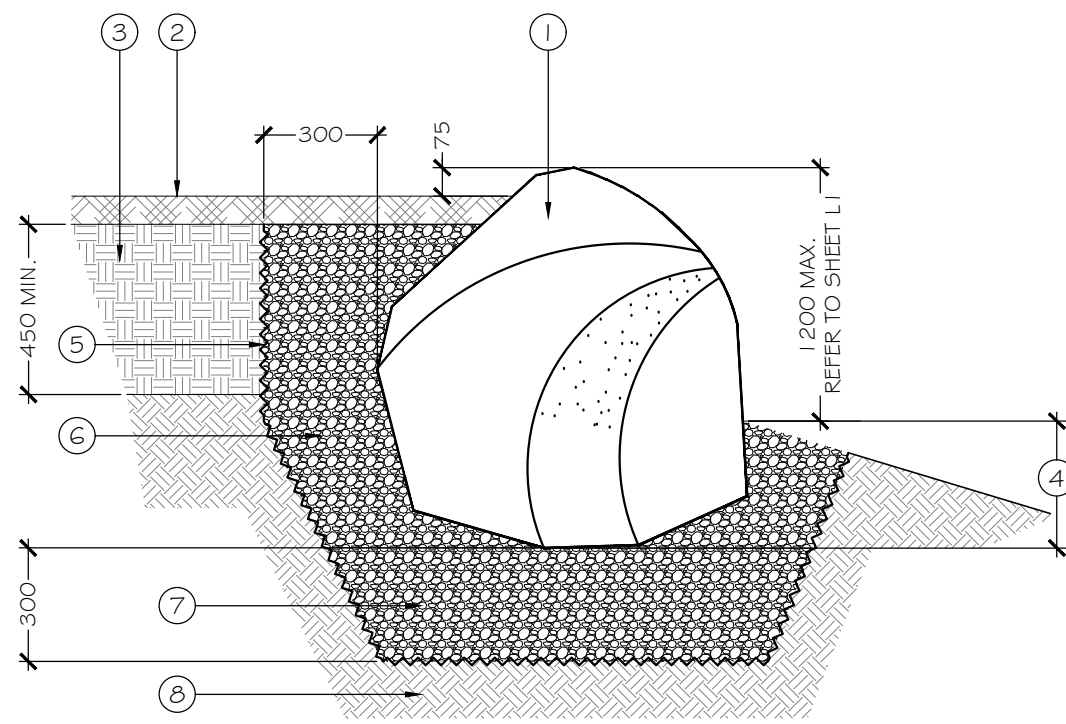
DRAWING NUMBER: L1 of 7

#	Date	NOTES
0	22APR2020	Site Plan/Grading Coordination
1	01MAY2020	DP Review
2	14JUL2020	Revised for DP/Issued for BP
3	28JUL2020	IFT Coordination
4	27AUG2020	IFC



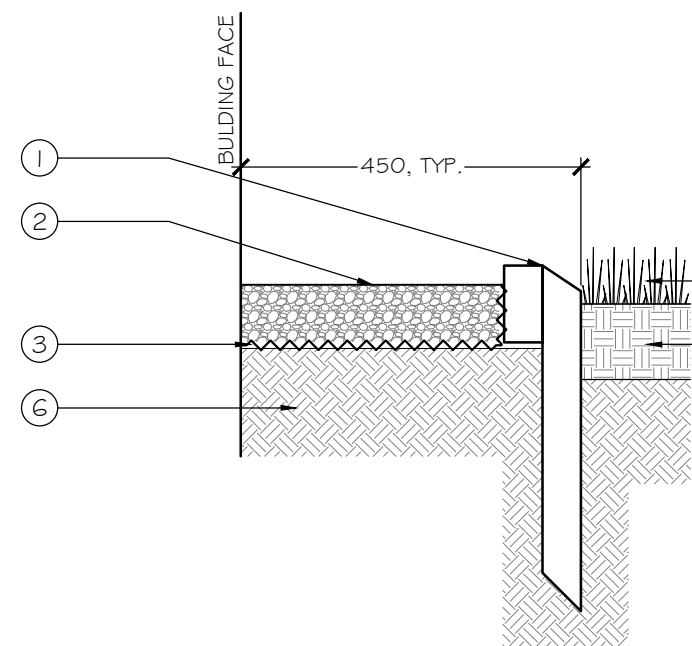
- 1 ASPHALT PARKING LOT
2 RETAINING WALL (STRUCTURAL DESIGN BY OTHERS)
3 FORMED CURB CUT-OUTS AND 'SCUPPERS' TO DIRECT DOWNWARD FLOW OF WATER TO RAIN GARDEN
4 450mm GROWING MEDIUM (ABSORBENT SOIL). REFER TO PLANTING NOTES.
5 100mm DEPTH OF SAND FILTER.
6 DRAIN ROCK RESERVOIR, WRAPPED IN FILTER FABRIC. REFER TO CIVIL PLANS FOR RESERVOIR DESIGN.
7 PERFORATED PVC DRAIN PIPE, REFER TO CIVIL PLANS.
8 CURB, REFER TO CIVIL PLANS.
9 RAIN GARDEN PLANTING, REFER TO PLANTING PLAN.
10 ARMOUR THE SPLASH ZONE OF 'SCUPPERS' WITH ROUND, WASHED RIVER ROCK.
- NOTES:
1. THIS DETAIL IS CONCEPTUAL IN NATURE AND SHALL BE REFERENCED IN CONJUNCTION WITH APPROPRIATE STRUCTURAL, CIVIL AND ARCHITECTURAL SCOPES OF WORK DURING CONSTRUCTION.

A Bioswale
Section/Elevation
1:40 metric



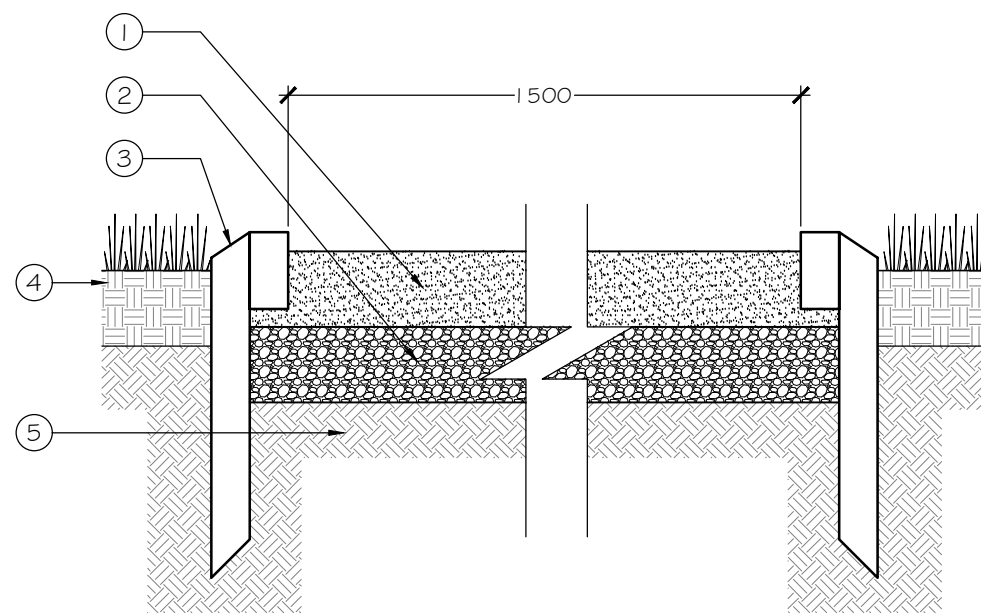
- 1 1.2m+/- DIA. LANDSCAPE BOULDER WALL
2 MULCH, REFER TO PLANTING NOTES
3 GROWING MEDIUM, REFER TO PLANTING NOTES
4 BURY 1/3 OF BOULDER DIAMETER
5 WRAP BACKFILL AND BASE IN GEOTEXTILE FILTER FABRIC
6 3/4" MINUS CLEAR CRUSHED STONE BACKFILL
7 3/4" MINUS COMPACTED CLEAR CRUSHED STONE BASE
8 COMPACTED NATIVE SOIL SUBGRADE
- NOTES:
1. BOULDER WALLS EXCEEDING 1.2m IN HEIGHT REQUIRE GEOTECHNICAL ENGINEERING DESIGN.
2. CONTRACTOR TO VERIFY SUITABILITY OF SUBGRADE PRIOR TO CONSTRUCTION
3. DO NOT LEAN, TILT OR FILE BOULDERS

B Boulder Planter Wall
Section
1:20 metric



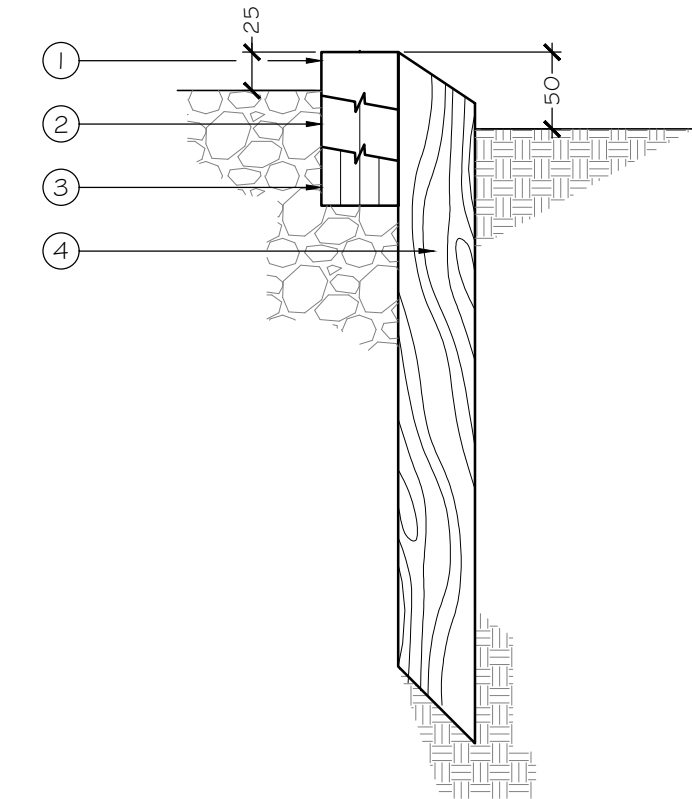
- 1 TIMBER EDGE, REFER TO DETAIL EL2
2 100mm DEPTH OF 75mm MINUS ROUND WASHED DRAIN ROCK. SUBMIT A SAMPLE OF MATERIAL FOR APPROVAL PRIOR TO PURCHASE
3 LANDSCAPE FILTER FABRIC, NON-WOVEN
4 ADJACENT PLANTING AREA
5 GROWING MEDIUM
6 NATIVE SOIL, TAMP UNDER DRAIN ROCK TO PROVIDE LEVEL SURFACE

C Leave Area
Section
1:10 metric



- 1 100mm DEPTH OF 9.5mm (3/8") MINUS COMPACTED CRUSHER FINES
2 100mm DEPTH MIN. OF 19mm (3/4") AGGREGATE BASE
3 TIMBER EDGE, REFER TO DETAIL EL2
4 ADJACENT PLANTING AREA OR BOULDER WALL, REFER TO SITE PLAN
5 COMPACTED SUBGRADE
- NOTES:
1. CROSS SLOPE PATH AT 2% TO DRAINAGE FACILITIES

D Crushed Aggregate Surface
Section
1:10 metric

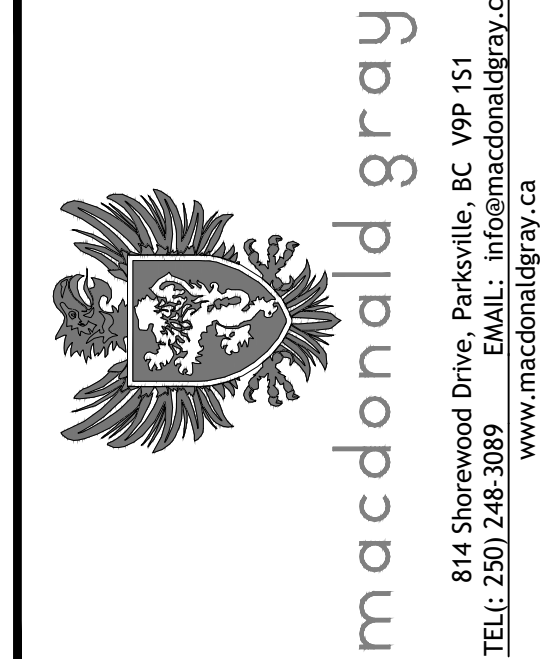
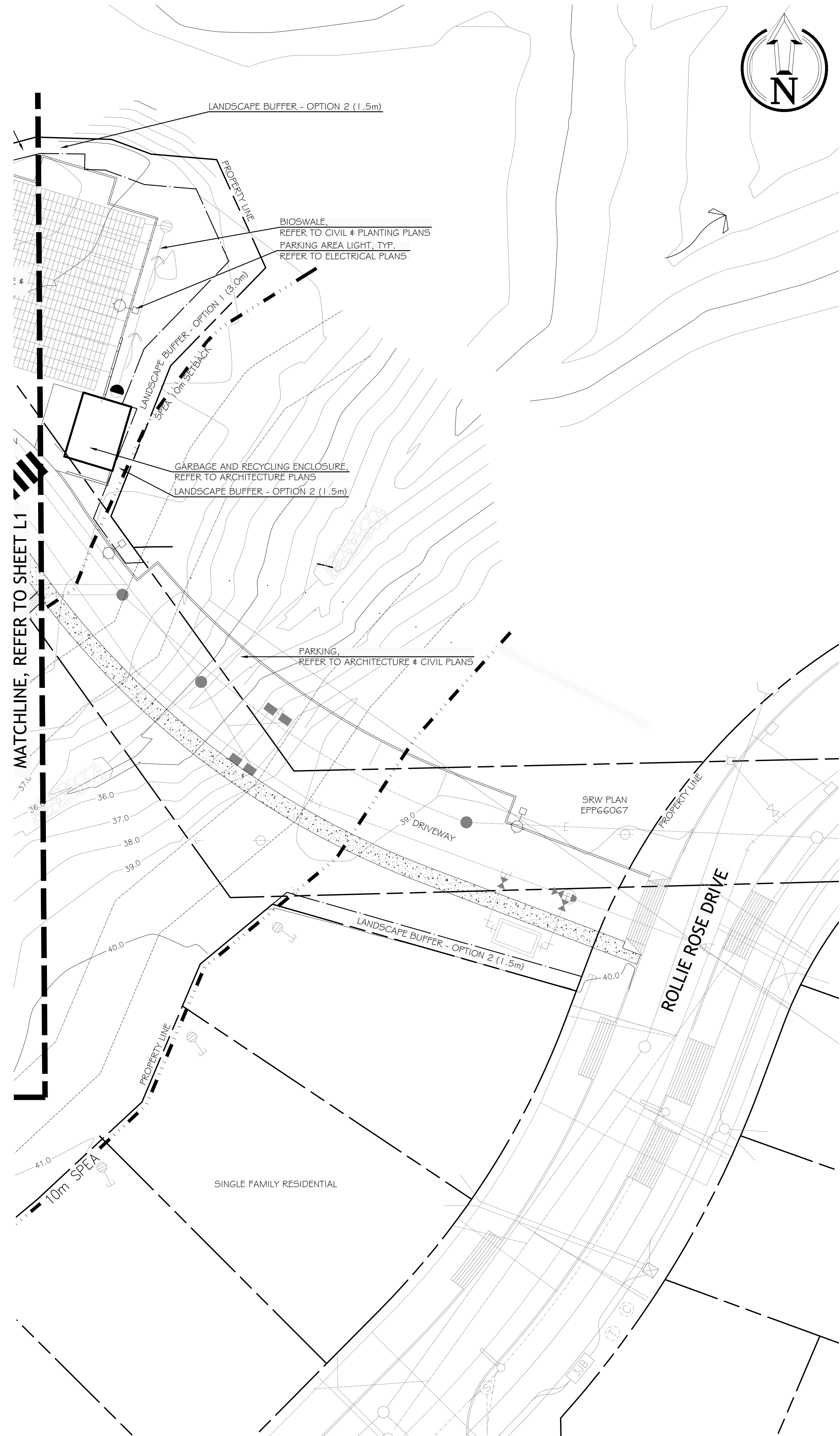


- 1 50mm X 100mm (2" X 4") FOR STRAIGHT RUNS
OR
2 (2) 25mm X 100mm (1" X 4")
OR
3 (4) 13mm X 100mm (1/2" X 4") AS REQUIRED BY TIGHT CURVES
4 50mm X 75mm X 450mm (2" X 3" X 18") PRESSURE TREATED DOUGLAS FIR STAKE, 1200mm O.C. MAX.
- NOTES:
1. NAILS AT STAKES SHALL BE 88.9mm (1 6D) GALV. COMMON, (2) PER STAKE MIN.
2. NAILS AT SPLICES SHALL BE 63.5mm (8D) GALV. COMMON, (2) PER STAKE MIN.

E Timber Edge
Section
1:5 metric

LAYOUT & GRADING LEGEND

ABBREVIATIONS	DESCRIPTION
(E)	EXISTING
TYP.	TYPICAL
PL	PROPERTY LINE
51.0	EXISTING 1.0m CONTOURS, REFER TO CIVIL PLANS
+ TW 10.00	TOP OF WALL
+ BW 10.00	BOTTOM OF WALL
1.2% MAX.	DRAINAGE DIRECTION & SLOPE
SYMBOL	DESCRIPTION
	BOULDER/ STACKED ROCK RETAINING WALL, 1.2m HEIGHT MAX. WALLS EXCEEDING 1.2m IN HEIGHT REQUIRE GEOTECHNICAL DESIGN.
	9.5mm (3/8") MINUS COMPACTED CRUSHED AGGREGATE SURFACE OVER LANDSCAPE FABRIC
	0.45m LEAVE STRIP: 75mm MINUS ROUND WASHED DRAIN ROCK OVER LANDSCAPE FABRIC
	PICNIC TABLES QTY: (2) REGULAR, (2) WHEELCHAIR ACCESSIBLE MANUFACTURER: WISHBONE SITE FURNISHINGS (PH: 800-626-0476) STYLE: RUTHERFORD PICNIC TABLE MODEL: RPT-6 & RPTWC-6 SLAT COLOUR: GREY FRAME COLOUR: VICTOR RIDGE II SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS
	BENCH QTY: 2 MANUFACTURER: WISHBONE SITE FURNISHINGS (PH: 800-626-0476) STYLE: RUTHERFORD PARK BENCH MODEL: RAL-5 SLAT COLOUR: GREY FRAME COLOUR: VICTOR RIDGE II SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS. MINIMUM PAD SIZE 1.8m X 1.2m.
	BIKE RACK QTY: 2 MANUFACTURER: CORA CANADA BIKE RACKS (PH: 800-739-4609) STYLE: EXPO SERIES MODEL: W75 I O COLOUR: MOON LIGHT SILVER SURFACE MOUNT ON 2.4m X 3.0m CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS



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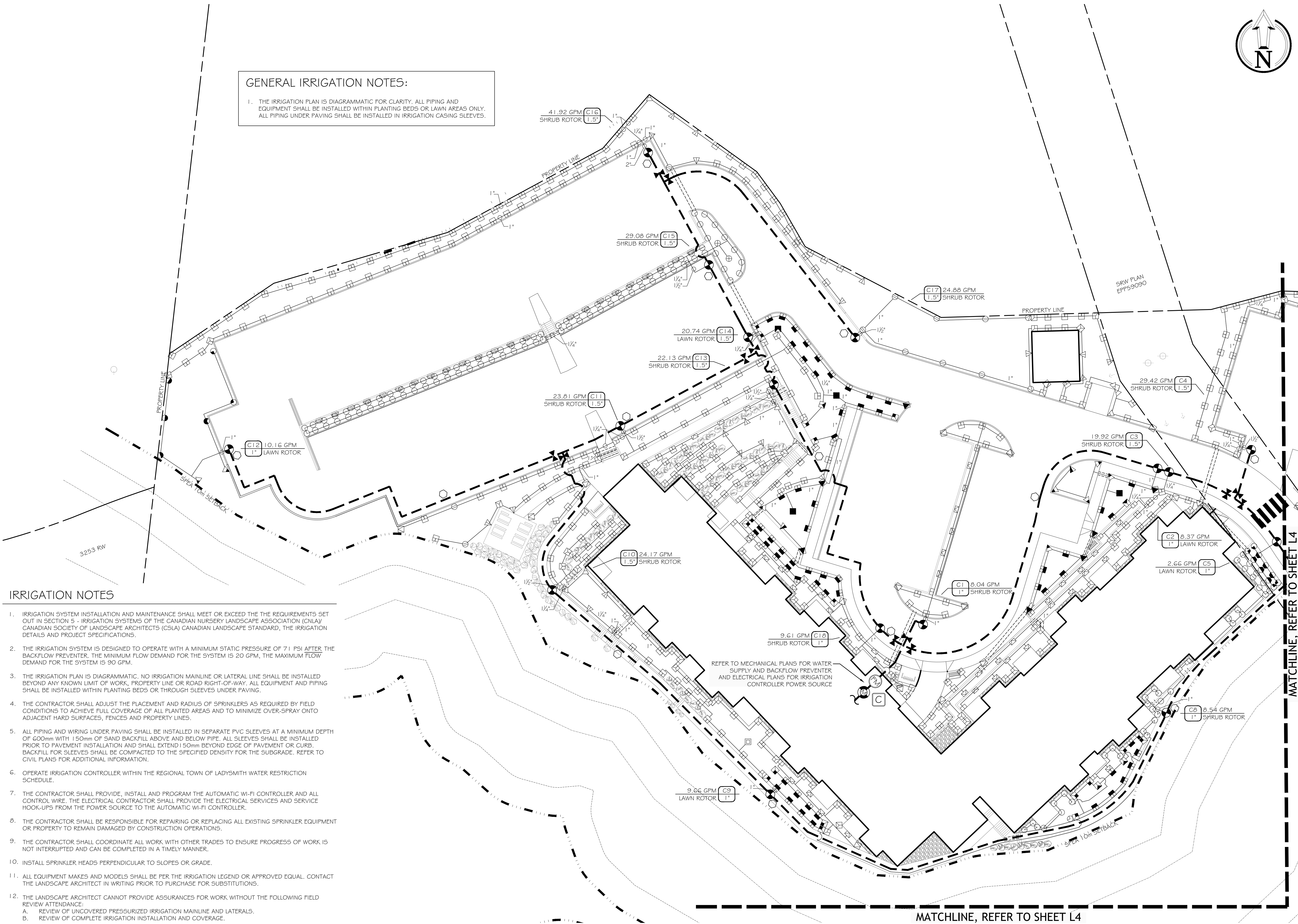
Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

LANDSCAPE ARCHITECTURE		SITE PLAN	
#	Date	NOTES	
0	22APR2020	Site Plan/Grading Coordination	
1	01MAY2020	DP Review	
2	14JUL2020	Revised for DP/Issued for BP	
3	28JUL2020	IFT Coordination	
4	27AUG2020	IFC	

REVISION SCHEDULE	NOTES
#	Date
0	22APR2020
1	01MAY2020
2	14JUL2020
3	28JUL2020
4	27AUG2020



GENERAL IRRIGATION NOTES:

1. THE IRRIGATION PLAN IS DIAGRAMMATIC FOR CLARITY. ALL PIPING AND EQUIPMENT SHALL BE INSTALLED WITHIN PLANTING BEDS OR LAWN AREAS ONLY. ALL PIPING UNDER PAVING SHALL BE INSTALLED IN IRRIGATION CASING SLEEVES.

IRRIGATION NOTES

1. IRRIGATION SYSTEM INSTALLATION AND MAINTENANCE SHALL MEET OR EXCEED THE THE REQUIREMENTS SET OUT IN SECTION 5 - IRRIGATION SYSTEMS OF THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD, THE IRRIGATION DETAILS AND PROJECT SPECIFICATIONS.
2. THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A MINIMUM STATIC PRESSURE OF 7.1 PSI AFTER THE BACKFLOW PREVENTER. THE MINIMUM FLOW DEMAND FOR THE SYSTEM IS 20 GPM, THE MAXIMUM FLOW DEMAND FOR THE SYSTEM IS 90 GPM.
3. THE IRRIGATION PLAN IS DIAGRAMMATIC. NO IRRIGATION MAINLINE OR LATERAL LINE SHALL BE INSTALLED BEYOND ANY KNOWN LIMIT OF WORK, PROPERTY LINE OR ROAD RIGHT-OF-WAY. ALL EQUIPMENT AND PIPING SHALL BE INSTALLED WITHIN PLANTING BEDS OR THROUGH SLEEVES UNDER PAVING.
4. THE CONTRACTOR SHALL ADJUST THE PLACEMENT AND RADIUS OF SPRINKLERS AS REQUIRED BY FIELD CONDITIONS TO ACHIEVE FULL COVERAGE OF ALL PLANTED AREAS AND TO MINIMIZE OVER-SPRAY ONTO ADJACENT HARD SURFACES, FENCES AND PROPERTY LINES.
5. ALL PIPING AND WIRING UNDER PAVING SHALL BE INSTALLED IN SEPARATE PVC SLEEVES AT A MINIMUM DEPTH OF 600mm WITH 150mm OF SAND BACKFILL ABOVE AND BELOW PIPE. ALL SLEEVES SHALL BE INSTALLED PRIOR TO PAVEMENT INSTALLATION AND SHALL EXTEND 150mm BEYOND EDGE OF PAVEMENT OR CURB. BACKFILL FOR SLEEVES SHALL BE COMPACTED TO THE SPECIFIED DENSITY FOR THE SUBGRADE. REFER TO CIVIL PLANS FOR ADDITIONAL INFORMATION.
6. OPERATE IRRIGATION CONTROLLER WITHIN THE REGIONAL TOWN OF LADYSMITH WATER RESTRICTION SCHEDULE.
7. THE CONTRACTOR SHALL PROVIDE, INSTALL AND PROGRAM THE AUTOMATIC WI-FI CONTROLLER AND ALL CONTROL WIRE. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE ELECTRICAL SERVICES AND SERVICE HOOK-UPS FROM THE POWER SOURCE TO THE AUTOMATIC WI-FI CONTROLLER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ALL EXISTING SPRINKLER EQUIPMENT OR PROPERTY TO REMAIN DAMAGED BY CONSTRUCTION OPERATIONS.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO ENSURE PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
10. INSTALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
11. ALL EQUIPMENT MAKES AND MODELS SHALL BE PER THE IRRIGATION LEGEND OR APPROVED EQUAL. CONTACT THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO PURCHASE FOR SUBSTITUTIONS.
12. THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:
 - A. REVIEW OF UNCOVERED PRESSURIZED IRRIGATION MAINLINE AND LATERALS.
 - B. REVIEW OF COMPLETE IRRIGATION INSTALLATION AND COVERAGE.



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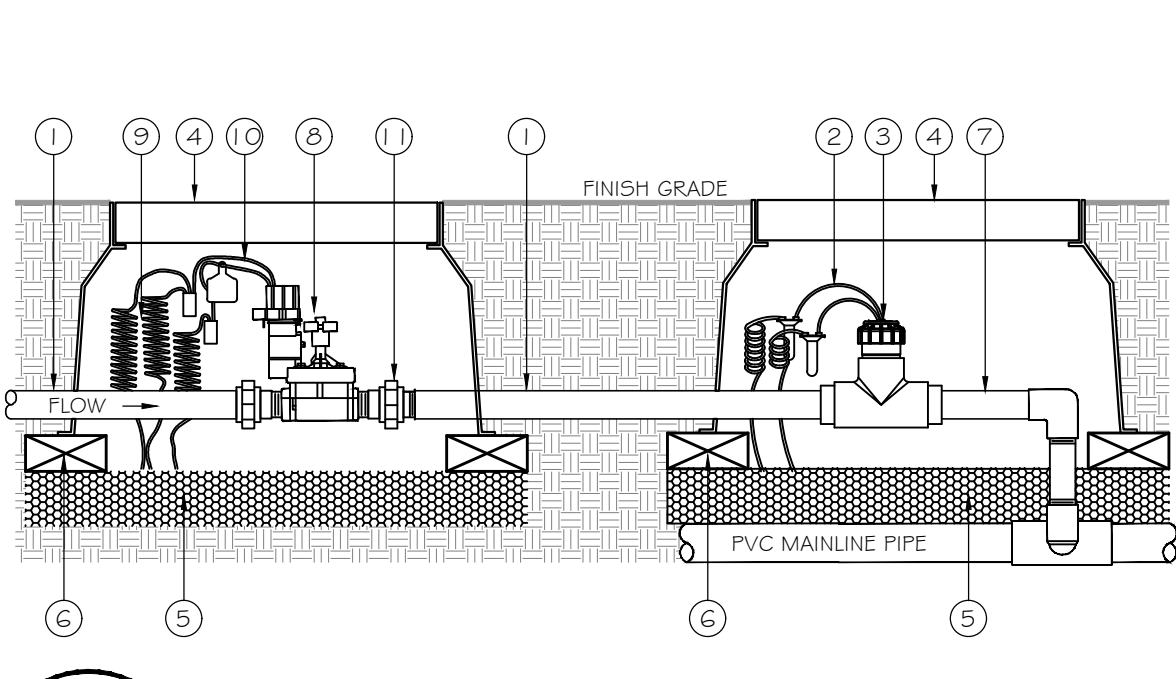
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Holland Creek Apartments
Westmark Construction Inc.
107 Rollie Rose Drive, Ladysmith, BC

IRRIGATION PLAN

Date: August 27, 2020
Drawn: CM
Checked: NG
Scale: 1:250 metric
Project Number: 20-0259
DRAWING NUMBER: L3 of 7

#	Date	NOTES
0	22APR2020	Site Plan/Grading Coordination
1	01MAY2020	DP Review
2	14JUL2020	Revised for DP/Issued for BP
3	28JUL2020	IFT Coordination
4	27AUG2020	IFC

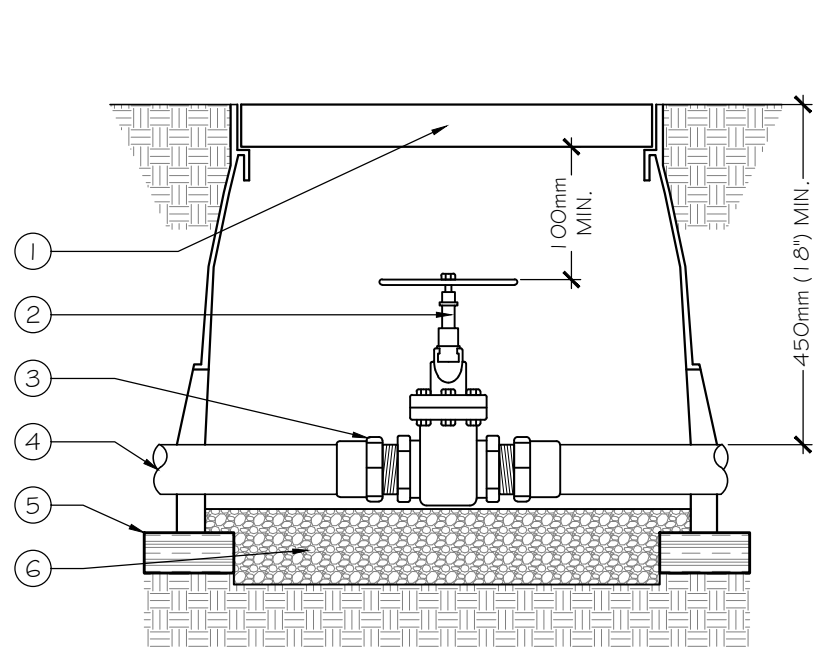


- MINIMUM 1/2" PIPE DIA. STRAIGHT, CLEAN RUN OF PIPE, NO FITTINGS OR TURNS BEFORE MASTER VALVE OR FLOW METER
- SENSOR AND COMMON WIRE TO INTERFACE PANEL. MAX. WIRE DISTANCE: 20 GAUGE - 75m (240') 18 GAUGE - 330m (1,000')
- IRRIGATION FLOW METER, REFER TO IRRIGATION LEGEND. INSTALL PER MANUFACTURER'S SPECIFICATIONS
- PLASTIC VALVE BOX WITH BOLT DOWN COVER
- 19mm (3/4") MINUS DRAIN ROCK.
- BRICK BLOCK, TYP. (2) PLACES PER VALVE BOX
- OUTLET PIPE. MINIMUM 5/8" PIPE DIA. OF STRAIGHT, CLEAN RUN OF PIPE, NO FITTINGS OR TURNS BETWEEN FLOW METER AND NEXT FITTING
- MASTER VALVE, REFER TO IRRIGATION LEGEND
- PIG TAIL EXPANSION LOOP, 18" (450mm) MIN.
- CONTROL AND COMMON WIRES
- SCH. 80 PVC FLANGES, TYP. OF (2) PLACES

A Master Valve & Flow Meter

Section

Not To Scale

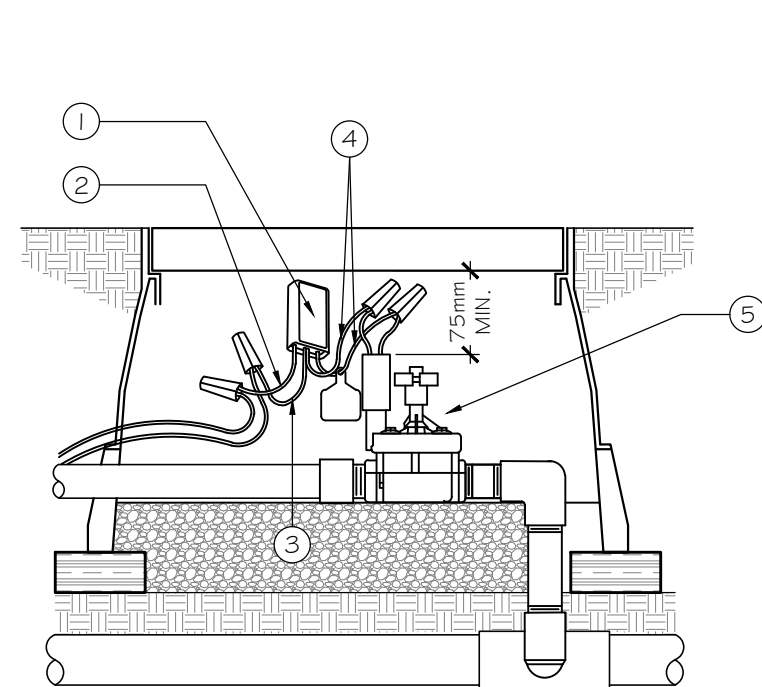


- VALVE BOX WITH BOLT DOWN COVER
 - LINE-SIZED GATE VALVE, REFER TO IRRIGATION LEGEND
 - SCH. 40 PVC MALE ADAPTOR TYP. OF (2) PLACES
 - PVC MAINLINE PIPE, REFER TO IRRIGATION PLAN
 - BRICK, (4) PLACES
 - 4" (100mm) MIN. DEPTH OF 3/4" (19mm) MINUS WASHED GRAVEL
- NOTES:
- USE TEFLON TAPE ON ALL THREADED FITTINGS
 - REFER TO IRRIGATION PLANS AND LEGEND FOR ADDITIONAL INFORMATION.

B Gate Valve

Section

Not to Scale

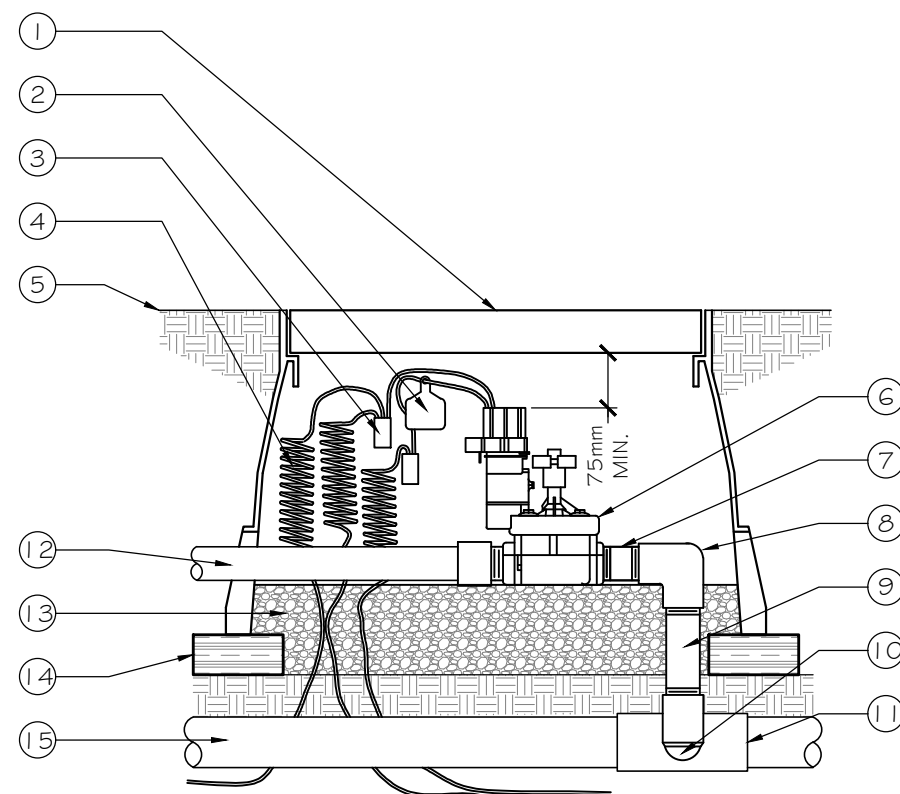


- DECODER, REFER TO IRRIGATION LEGEND
 - RED WIRE AT DECODER
 - BLUE WIRE AT DECODER
 - BLACK WIRES (2) AT DECODER TO SOLENOID CONTROL WIRES
 - REMOTE CONTROL VALVE, REFER TO IRRIGATION LEGENDS AND DETAIL E/L4
- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND PRODUCT INSTALLATION NOTES
 - CONTROLLER ACCEPTS 120 VOLTS A.C. OR 230 VOLTS A.C.
 - REFER TO IRRIGATION PLAN, LEGEND AND NOTES FOR ADDITIONAL INFORMATION.

C Decoder at Electric Remote Control Valve

Section

Not to Scale



- VALVE BOX WITH BOLT DOWN COVER
- ID TAG
- WATER PROOF CONNECTION, TYP. OF (4) PLACES
- 30" (0.75m) LINEAR LENGTH OF WIRE, COILED
- FINISH GRADE / TOP OF MULCH
- REMOTE CONTROL VALVE, SIZE AS INDICATED ON PLAN, REFER TO IRRIGATION LEGEND
- PVC SCH. 80 NIPPLE (CLOSED)
- PVC SCH. 40 ELL
- PVC SCH. 80 NIPPLE, LENGTH AS REQUIRED
- PVC SCH. 80 NIPPLE (2" (50mm) LENGTH, HIDDEN) AND SCH. 40 ELL
- PVC SCH. 40 TEE OR ELL
- PVC LATERAL PIPE
- 4" (100mm) MIN. DEPTH OF 3/4" (19mm) MINUS WASHED GRAVEL
- BRICK, TYP. OF (4) PLACES
- PVC MAINLINE PIPE, REFER TO IRRIGATION PLAN AND LEGEND

D Electric Remote Control Valve

Section

Not to Scale

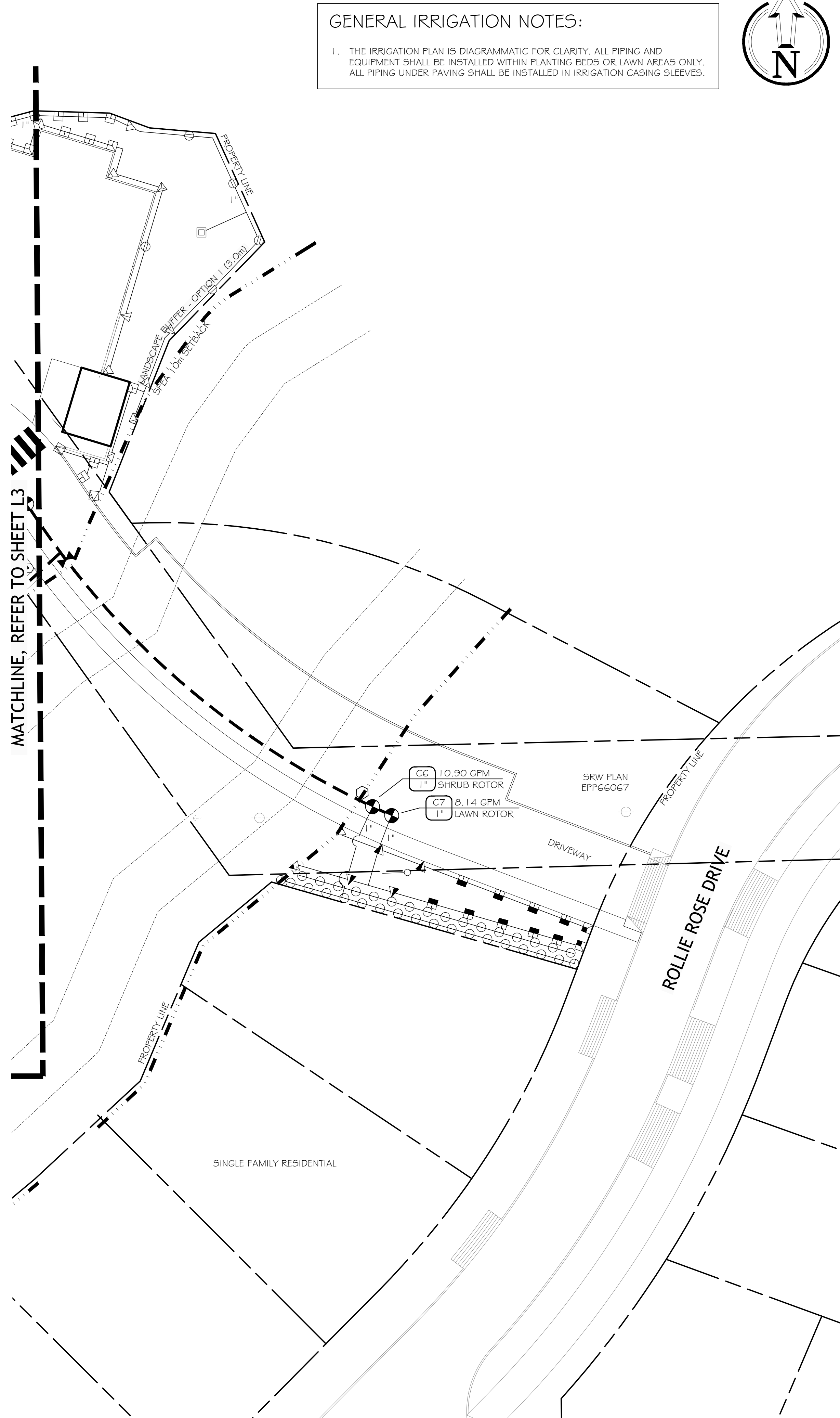
IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUFACTURER	MODEL	DESCRIPTION
	HUNTER	ICV-101G # 151G	ELECTRIC REMOTE CONTROL VALVE C/W SINGLE STATION DECODERS TO BE INSTALLED IN A MOULDED STRUCTURAL FOAM VALVE BOX WITH BOLT DOWN COVER PER DETAIL C & D/L4 AND MANUFACTURER'S RECOMMENDATIONS. SIZE PER PLAN.
	NIBCO	T113	LINE-SIZE BRONZE GATE VALVE IN VALVE BOX WITH WITH BOLT DOWN COVER, REFER TO DETAIL B/L4
	HUNTER	HQ5-RC	1" (25mm) QUICK COUPLING VALVE IN VALVE BOX WITH BOLT DOWN LID INSTALLED DIRECTLY OFF OF THE PRESSURE MAINLINE, REFER TO DETAIL D/L7
	HUNTER	HCC-800-PL-ICM-400-800 EZ-DM	20-STATION WI-FI CONTROLLER WITH DECODER OUTPUT MODULE IN STAINLESS STEEL WALL-MOUNTED CABINET. MOUNT IN ELECTRICAL /MECHANICAL ROOM PER MANUFACTURER'S RECOMMENDATIONS.
	HUNTER	ICV-151G	1.5" (38mm) MASTER VALVE TO BE INSTALLED DOWNSTREAM OF BACKFLOW PREVENTER PER MANUFACTURER'S RECOMMENDATIONS AND DETAIL A/L4
	HUNTER	HC-150-FLOW	1.5" (38mm) FLOW METER TO BE INSTALLED DOWNSTREAM OF MASTER VALVE PER DETAIL A/L4 AND MANUFACTURER'S RECOMMENDATIONS.
	HUNTER	CLASS 200	PVC LATERAL LINE, 3/4" (19mm) UNLESS NOTED OTHERWISE AT THE BEGINNING AND END OF EACH LENGTH OF PIPE, REFER TO DETAIL C/L7
	HUNTER	SCHEDULE 40	3" (75mm) PVC MAINLINE, REFER TO DETAIL C/L7
	HUNTER	SCHEDULE 40	PVC SLEEVES UNDER ALL PAVING MIN., TYP. MAINLINE & CONTROL WIRE: 150mm (6") LATERALS: 150mm (6") BURIAL DEPTH TO MATCH DEPTH OF CARRIED PIPE, REFER TO DETAIL C/L7

CT	10.0 GPM	VALVE NUMBER AND CONTROLLER DESIGNATION
2"	GALLONS PER MINUTE	
	LAWN SPRAY	ZONE DESCRIPTION
	VALVE SIZE	

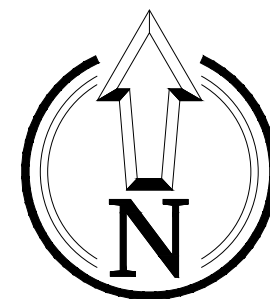
IRRIGATION SPRINKLER LEGEND - REFER TO DETAIL E/L7

SYMBOL	MFR	MODEL	PATTERN	RADIUS ft / m	FLOW RATE @ 30 PSI / 2.1 bar GPM (l/m)
SHRUBS					
	HUNTER	PRO5-04-PR530-CV-MPCORNER	45° - 105°	6-8 / 1.8-2.4	0.17-0.39 (0.64-1.5)
	HUNTER	PRO5-06-PR530-CV-MP8005R-90	90° - 210°	6-8 / 1.8-2.4	0.17-0.35 (0.64-1.3)
	HUNTER	PRO5-06-PR530-CV-MPL/RCS515	RECTANGLE	4x28 / 1.2x8.5	0.38 (1.4)
	HUNTER	PRO5-06-PR530-CV-MP55530	RECTANGLE	4x14 / 1.2x4.3	0.19 (0.7)
LAWN					
	HUNTER	PRO5-06-PR530-CV-MP8005R-90	90° - 210°	6-8 / 1.8-2.4	0.17-0.35 (0.64-1.3)
SHRUBS					
	HUNTER	PRO5-04-PR540-CV-MPCORNER	45° - 105°	8-14 / 2.4-4.3	0.19-0.45 (0.72-1.7)
	HUNTER	PRO5-06-PR540-CV-MP1000-90	90° - 210°	8-14 / 2.4-4.3	0.21-0.49 (0.79-1.9)
	HUNTER	PRO5-06-PR540-CV-MP1000-210	210° - 270°	8-14 / 2.4-4.3	0.49-0.63 (1.9-2.4)
	HUNTER	PRO5-06-PR540-CV-MP1000-360	360°	8-14 / 2.4-4.3	0.84 (3.18)
	HUNTER	PRO5-06-PR540-CV-MP2000-90	90° - 210°	13-20 / 4-6	0.43-0.86 (1.6-3.3)
	HUNTER	PRO5-06-PR540-CV-MP2000-210	210° - 270°	13-20 / 4-6	0.86-1.10 (3.3-4.2)
	HUNTER	PRO5-06-PR540-CV-MP3000-90	90° - 210°	22-30 / 6.7-9.1	0.86-2.12 (3.3-8.0)
	HUNTER	PRO5-06-PR540-CV-MPL/RCS515	RECTANGLE	5x30 / 1.5x15	0.22 (0.8)
	HUNTER	PRO5-06-PR540-CV-MP55530	RECTANGLE	5x15 / 1.5x4.5	0.44 (1.7)
LAWN					
	HUNTER	PRO5-04-PR540-CV-MPCORNER	45° - 105°	8-14 / 2.4-4.3	0.19-0.45 (0.72-1.7)
	HUNTER	PRO5-04-PR540-CV-MP1000-90	90° - 210°	8-14 / 2.4-4.3	0.21-0.49 (0.79-1.9)
	HUNTER	PRO5-04-PR540-CV-MP1000-210	210° - 270°	8-14 / 2.4-4.3	0.49-0.63 (1.9-2.4)
	HUNTER	PRO5-04-PR540-CV-MP1000-360	360°	8-14 / 2.4-4.3	0.84 (3.18)
	HUNTER	PRO5-04-PR540-CV-MP2000-90	90° - 210°	13-20 / 4-6	0.43-0.86 (1.6-3.3)
	HUNTER	PRO5-04-PR540-CV-MP3000-90	90° - 210°	22-30 / 6.7-9.1	0.86-2.12 (3.3-8.0)



GENERAL IRRIGATION NOTES:

- THE IRRIGATION PLAN IS DIAGRAMMATIC FOR CLARITY. ALL PIPING AND EQUIPMENT SHALL BE INSTALLED WITHIN PLANTING BEDS OR LAWN AREAS ONLY. ALL PIPING UNDER PAVING SHALL BE INSTALLED IN IRRIGATION CASING SLEEVES.



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Holland Creek Apartments

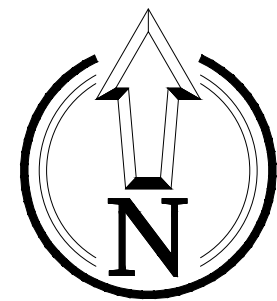
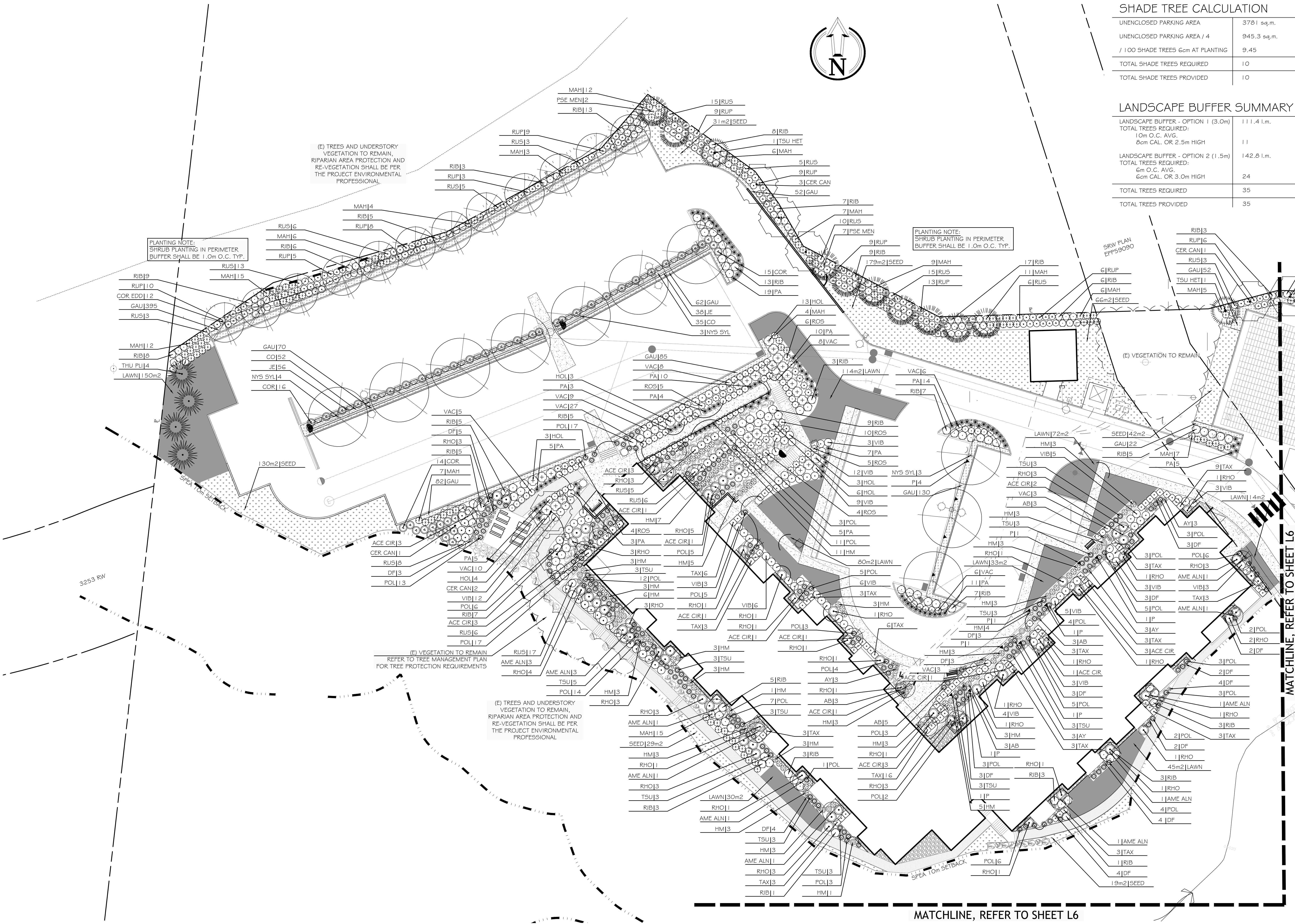
Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

IRRIGATION PLAN

Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	1:250 metric
Project Number:	20-0259
DRAWING NUMBER:	L4 of 7

#	REVISION SCHEDULE	NOTES
0	22APR2020	Site Plan/Grading Coordination
1	01MAY2020	DP Review
2	14JUL2020	Revised for DP/Issued for BP
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SHADE TREE CALCULATION	
UNENCLOSED PARKING AREA	3781 sq.m.
UNENCLOSED PARKING AREA / 4	945.3 sq.m.
/ 100 SHADE TREES 6cm AT PLANTING	9.45
TOTAL SHADE TREES REQUIRED	10
TOTAL SHADE TREES PROVIDED	10

LANDSCAPE BUFFER SUMMARY	
LANDSCAPE BUFFER - OPTION 1 (3.0m)	111.41m.
TOTAL TREES REQUIRED:	11
10m O.C. AVG.	
8cm CAL. OR 2.5m HIGH	
LANDSCAPE BUFFER - OPTION 2 (1.5m)	142.81m.
TOTAL TREES REQUIRED:	24
6m O.C. AVG.	
6cm CAL. OR 3.0m HIGH	
TOTAL TREES REQUIRED	35
TOTAL TREES PROVIDED	35

PLANTING NOTE:
SHRUB PLANTING IN PERIMETER
BUFFER SHALL BE 1.0m O.C. TYP.

PLANTING NOTE:
SHRUB PLANTING IN PERIMETER
BUFFER SHALL BE 1.0m O.C. TYP.

SRW PLAN
EPF59090

(E) VEGETATION TO REMAIN

(E) TREES AND UNDERSTORY
VEGETATION TO REMAIN,
RIPARIAN AREA PROTECTION AND
RE-VEGETATION SHALL BE PER
THE PROJECT ENVIRONMENTAL
PROFESSIONAL

(E) TREES AND UNDERSTORY
VEGETATION TO REMAIN,
RIPARIAN AREA PROTECTION AND
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THE PROJECT ENVIRONMENTAL
PROFESSIONAL

(E) VEGETATION TO REMAIN
REFER TO TREE MANAGEMENT PLAN
FOR TREE PROTECTION REQUIREMENTS

MATCHLINE, REFER TO SHEET L6

MATCHLINE, REFER TO SHEET L6



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Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

PLANTING PLAN

Date: August 27, 2020

Drawn: CM

Checked: NG

Scale: 1:250 metric

Project Number: 20-0259

DRAWING NUMBER: L5 of 7

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PLANTING NOTES

- ALL LANDSCAPE INSTALLATION AND MAINTENANCE SHALL MEET OR EXCEED THE MOST RECENT STANDARDS SET OUT BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD AND PROJECT SPECIFICATIONS.
- LANDSCAPE MAINTENANCE SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS SET OUT IN TABLE T-1 4.2. MAINTENANCE LEVELS - LEVEL 2 GROOMED OF THE CANADIAN LANDSCAPE STANDARD, REFER TO SPECIFICATIONS.
- ESTABLISHMENT MAINTENANCE SHALL MEET THE REQUIREMENTS SET OUT IN SECTION 1.3 ESTABLISHMENT MAINTENANCE OF THE CANADIAN LANDSCAPE STANDARD. ALL PROPOSED PLANT MATERIAL SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE ONE YEAR MAINTENANCE PERIOD FROM THE TIME OF SUBSTANTIAL COMPLETION TO ENSURE PLANT ESTABLISHMENT AND TO MAINTAIN PLANT VIGOR, REFER TO SPECIFICATIONS.
- THE IRRIGATION SYSTEM SHALL BE OPERATIONAL AND COVERAGE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
- PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY THE PLAN SHALL GOVERN.
- PROVIDE MINIMUM SLOPE OF 2% FOR DRAINAGE IN ALL PLANTED AREAS.
- THE FINISHED GRADE OF ALL PLANTERS SHALL BE 75mm BELOW THE TOP OF CURB OR ADJACENT HARDSCAPE.
- ALL PLANT MATERIAL SHALL MATCH SPECIES AS INDICATED ON THE PLANT LEGEND. PLANT MATERIAL QUALITY, TRANSPORT AND HANDLING SHALL COMPLY WITH CANADIAN STANDARDS FOR NURSERY STOCK.
- THE CONTRACTOR SHALL SECURE PLANT MATERIAL AS SPECIFIED AT LEAST 2 WEEKS PRIOR TO ANTICIPATED PLANTING TIME. CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL OF ANY SUBSTITUTIONS. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
- TREE LOCATIONS SHALL BE FIELD STAKED AND LOCATIONS APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT THE SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- CHECK FOR LOCATIONS OF WATER LINES AND OTHER UNDERGROUND SERVICES PRIOR TO DIGGING PLANTING PITS. EXCAVATED PLANT PITS SHALL HAVE POSITIVE DRAINAGE. PLANT PITS WHEN FULLY FLOODED WITH WATER SHALL DRAIN WITHIN ONE HOUR AFTER FILLING.
- INSPECT ALL ASSEMBLED PLANT MATERIAL AT THE NURSERY PRIOR TO SHIPPING. PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT ON-SITE PRIOR TO PLANTING. NO PLANTS REQUIRING PRUNING OF MAJOR BRANCHES DUE TO DISEASE, DAMAGE OR POOR FORM WILL BE ACCEPTED.
- ALL CALIFRE-STOCK TREES SHALL BE B & B IN WIRE BASKETS.
- REFER TO PLANT LEGEND, SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:
 - REVIEW OF SUBGRADE PRIOR TO GROWING MEDIUM INSTALLATION.
 - REVIEW OF TREE LOCATIONS (STAKED).
 - REVIEW OF PLANT MATERIAL PRIOR TO INSTALLATION.
 - REVIEW OF SOIL SAMPLE ANALYSIS.
 - REVIEW OF INSTALLED PLANT MATERIAL.

GROWING MEDIUM AND MULCH

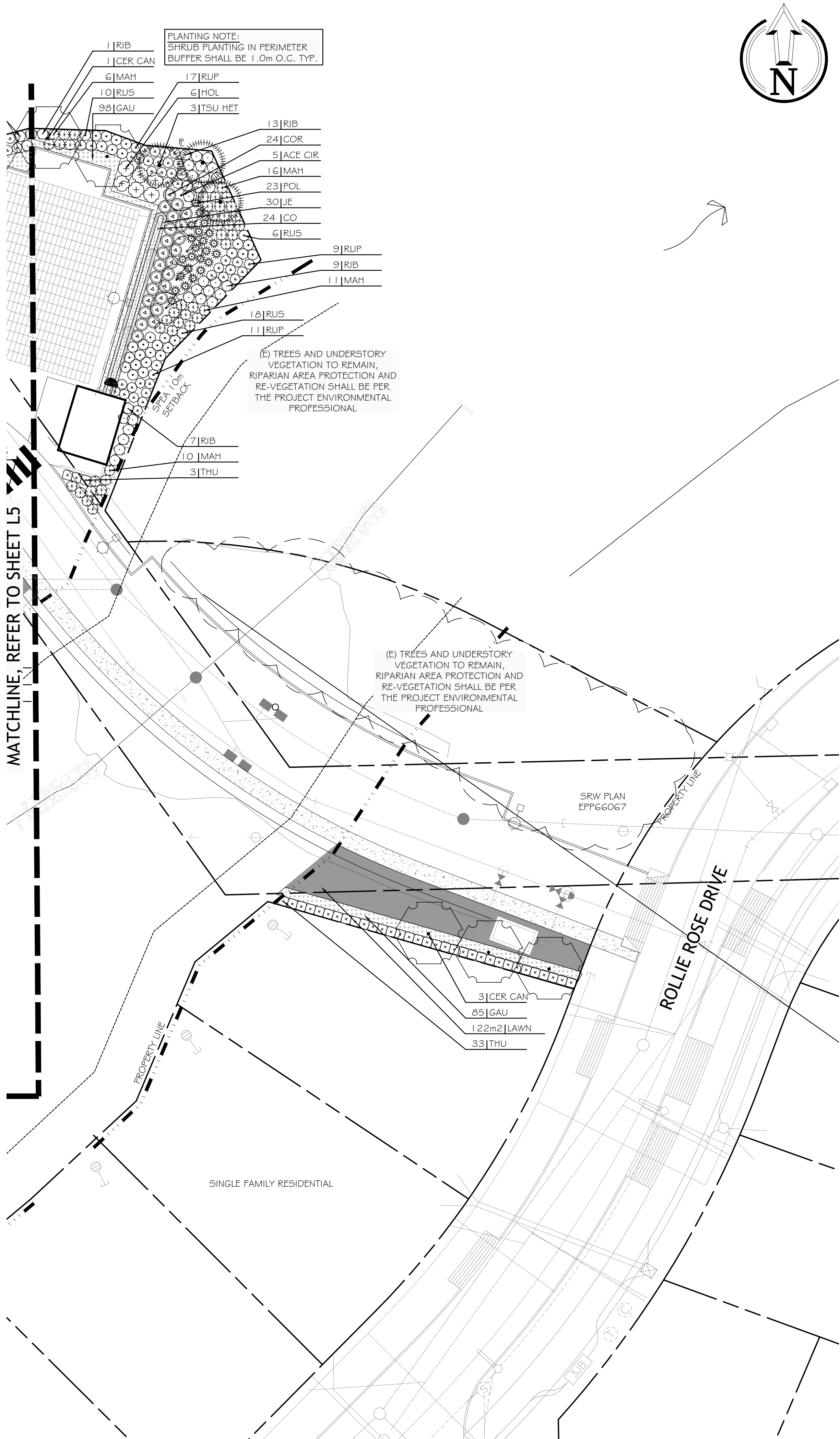
- PROPERTIES FOR GROWING MEDIUM SHALL MEET OR EXCEED SPECIFICATION SECTION 329 I 1.3 SOIL PREPARATION FOR:
 - LEVEL 2 'GROOMED' AREAS:
 - GROWING MEDIUM TYPES:
 - SOIL DEPTHS:
 - 2P (PLANTING AREAS)
 - TERRASEED - 50mm (2")
 - LAWN (SOD) - 100mm (4")
 - GROUND COVER - 300mm (12")
 - SHRUBS - 450mm (18")
 - TREES - 300mm (12") BELOW AND AROUND ROOTBALL
 - (6 cu.m. AVAILABLE PER TREE)
- ON-SITE TOPSOIL MAY BE STRIPPED, STOCKPILED AND AMENDED TO MEET THE STANDARDS ABOVE.
- SUBMIT A (4) LITRE SAMPLE OF SCREENED TOPSOIL PROPOSED FOR USE AS A BASIS FOR GROWING MEDIUM TO A SOIL ANALYSIS LAB APPROVED BY THE LANDSCAPE ARCHITECT. REFER TO SPECIFICATION SECTION 329 I 1.3. SOIL TESTING SHALL BE AT THE CONTRACTORS EXPENSE.
- INDICATE TO THE SOIL LAB THAT THE PURPOSE OF THE ANALYSIS AND AMENDMENT RECOMMENDATIONS IS FOR LEVEL 2P - PLANTING AREAS.
- AMENDMENT RECOMMENDATIONS BY THE SOIL ANALYSIS LAB SHALL BE THE BASIS FOR ACCEPTANCE OF THE GROWING MEDIUM. RETAIN EVIDENCE OF ALL AMENDMENTS ADDED TO THE TOPSOIL.
- MULCH SHALL BE COMPOST, REFER TO SPECIFICATIONS.
- MULCH DEPTH SHALL BE 75mm MINIMUM.

DEER BROWSE PROTECTION

- USE AN ENVIRONMENTALLY SAFE SPRAY-ON REPELLENT SUCH AS PLANTSKYDD ® OR EQUAL.
<http://www.plantskydd.com/application.html#professional>
- MIX AND APPLY PER THE MANUFACTURER'S RECOMMENDATIONS.
- EQUIVALENT PRODUCTS MUST BE LISTED BY THE ORGANIC MATERIALS REVIEW INSTITUTE (OMRI) AS SUITABLE FOR THE PRODUCTION OF ORGANIC FOOD AND FIBRE.
- APPLY AT TIME OF PLANTING AND REAPPLY EVERY (6) MONTHS IN THE WINTER AND (4) MONTHS DURING THE GROWING SEASON.
- DIP OR SPRAY THE PLANT FOLIAGE AND STEMS UNTIL WET BUT NOT DRIPPING.
- ALWAYS TREAT NEW GROWTH.
- APPLY AT ABOVE FREEZING TEMPERATURE.
- AVOID APPLICATION IN DIRECT SUNLIGHT. APPLY IN EARLY MORNING OR LATE AFTERNOON.
- ALLOW TO DRY 24 HOURS BEFORE FORECASTED RAINFALL.
- MIXED PRODUCT MUST BE USED WITHIN (3) DAYS.
- INSTALL CIRCULAR ENCLOSURE AROUND DRIP LINE OF ALL TREES.
- ENCLOSURE SHALL BE CONSTRUCTED OF 50mm X 100mm (2" X 4") PAGE WIRE AT A MINIMUM HEIGHT OF 1.5m (5').
- SUPPORT WIRE ENCLOSURE WITH (2) 75mm X 2.4m (3" x 8') ROUND MACHINE POINTED PRESSURE TREATED LANDSCAPE STAKES PER TREE. EMBED STAKES 765mm (30") MINIMUM.
- PRESSURE TREATMENT SHALL BE PER CSA STANDARD O80.5, URINS A WOOD PRESERVATIVE NON TOXIC TO SURROUNDING PLANT MATERIAL AND WILDLIFE.
- SECURE WIRE TO STAKES WITH (3) GALVANIZED STAPLES PER STAKE
- REMOVE ENCLOSURES IN (3) YEARS OR WHEN TREES HAVE REACHED 2.4m (8') IN HEIGHT.

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	QTY.	NOTES
TREES					
ACE CIR	ACER CIRCINATUM VINE MAPLE	2.0m	SEE PLAN	29	NATIVE SPECIES
AME ALN	AMELANCHIER ALNIFOLIA SASKATOON	2.0m	SEE PLAN	14	NATIVE SPECIES
CER CAN	CERCIS CANADENSIS EASTERN REDBUD	8cm CAL.	SEE PLAN	12	NATIVE CANADIAN SPECIES
COR EDD	CORNUS 'EDDIE'S WHITE WONDER' WHITE WONDER DOGWOOD	8cm CAL.	SEE PLAN	12	NATIVE CULTIVAR
NYS SYL	NYSSA SYLVATICA 'WILDFIRE' WILDFIRE TUPELO	6cm CAL.	10m O.C.	10	DROUGHT /WET TOLERANT SHADE TREE
PSE MEN	PSEUDOTSUGA MENZIESII DOUGLAS FIR	2.5m	SEE PLAN	9	NATIVE SPECIES
THU PLI	THUJA PLICATA WESTERN RED CEDAR	2.0m	4.5m O.C.	4	NATIVE SPECIES
TSU HET	TSUGA HETEROPHYLLA WESTERN HEMLOCK	2.5m	SEE PLAN	5	NATIVE SPECIES
SHRUBS					
COR	CORNUS SERICEA RED OSIER DOGWOOD	#2 POT	1.2m O.C.	69	NATIVE SPECIES
HOL	HOLODISCUS DISCOLOR OCEANSPRAY	#2 POT	1.5m O.C.	38	NATIVE SPECIES
MAH	MAHONIA AQUIFOLIUM OREGON GRAPE	#2 POT	1.0m O.C.	172	NATIVE SPECIES
POL	POLYSTICHUM MUNITUM SWORD FERN	#1 POT	1.0m O.C.	199	NATIVE SPECIES
RHO	RHODODENDRON SSP. MIX COLOUR AND BLOOM TIME	#5 POT	1.5m O.C.	66	DROUGHT TOLERANT
RIB	RIBES SANGUINEUM RED FLOWERING CURRANT	#2 POT	1.0m O.C. 1.2m O.C.	124 94	NATIVE SPECIES
ROS	ROSA NUTKANA NOOTKA ROSE	#2 POT	1.2m O.C.	34	NATIVE SPECIES
RUP	RUBUS PARVIFLORUS THIMBLEBERRY	#2 POT	1.0m O.C.	124	NATIVE SPECIES
RUS	RUBUS SPECTABILIS SALMONBERRY	#2 POT	1.0m O.C. 1.2m O.C.	118 42	NATIVE SPECIES
TAX	TAXUS X MEDIA 'H.M. EDDIE' H.M. EDDIE YEW	1.2m	0.9m O.C.	70	DROUGHT TOLERANT
THU	THUJA PLICATA 'EXCELSA' EXCELSA WESTERN RED CEDAR	1.0m	0.9m O.C.	36	NATIVE CULTIVAR
TSU	TSUGA CANADENSIS 'JEDDELOH' JEDDELOH DWARF HEMLOCK	#5 POT	0.9m O.C.	38	NATIVE CULTIVAR
VAC	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY	#3 POT	1.0m O.C.	86	NATIVE SPECIES
VIB	VIBURNUM DAVIDII DAVID'S VIBURNUM	#2 POT	1.2m O.C.	82	DROUGHT TOLERANT
GROUNDCOVERS & PERENNIALS					
AY AB	ASTILBE 'YONIQUE WHITE' & 'BURGUNDY RED' WHITE & RED ASTILBE	#1 POT	0.6m O.C.	14 15	DROUGHT TOLERANT
CO	CAREX OBNUPTA STIPITA SLOUGH/ SAWBEAK SEDGE	10cm POT	0.6m O.C.	111	NATIVE SPECIES
DF	DICENTRA FORMOSA WESTERN BLEEDING HEART	#1 POT	0.6m O.C.	48	NATIVE SPECIES
GS	GAULTHERIA SHALLON SALAL	10cm POT	0.45m O.C.	974	NATIVE SPECIES
HM	HAKONECHLOA MACRA JAPANESE FOREST GRASS	#2 POT	0.75m O.C.	94	SHADE TOLERANT
JE	JUNCUS EFFUSUS COMMON RUSH	10cm POT	0.6m O.C.	124	NATIVE SPECIES
PA	PENNISETUM ALOPECUROIDES 'HAEMEL' DWARF FOUNTAIN GRASS	#2 POT	0.75m O.C.	101	DROUGHT TOLERANT
VINE					
P	PARTHENOCISSUS TRICUSPIDATA BOSTON IVY	#1 POT	SEE PLAN	8	DROUGHT/SHADE TOLERANT
LAWNS & SEED					
LAWN	SOD - CANADA #2 STANDARD GRADE			660 sq.m.	
SEED	RESTORATION TERRASEED (SEED, SOIL, COMPOST) MIX SEED - COASTAL NATIVE MIX WITH FORBS & WILDFLOWERS: (SEED MIX TO BE APPROVED BY PROJECT RP, BIO.)		% BY WEIGHT	496 sq.m.	
	AGROSTIS SCABRA, TICKLEGRASS		2.25		
	DESCHAMPSIA CESPITOSA, TUFTED HAIRGRASS		7		
	FESTUCA IDAHOENSIS VAR ROEMERI, ROEMER'S FESCUE		30		
	FESTUCA OCCIDENTALIS, WESTERN FESCUE		5		
	FESTUCA RUBRA, NATIVE RED FESCUE		20		
	LOLIUM MULTIFLORUM, ANNUAL RYEGRASS (DIPLOID)		30		
	LUPINUS POLYPHYLLUS, BIG LEAF LUPINER'S FESCUE		0.5		
	POA PALUSTRIS, FOWL BLUEGRASS		4.65		
	SYMPHYOTRICHUM SUBSPICATUM, DOUGLAS ASTER		0.25		
	ANAPHALIS MARGARITACEA, PEARLY EVERLASTING		0.1		
	GRINDELIA INTEGRIFOLIA, GUMWEED		0.25		





macdonald gray

814 Shorewood Drive, Parksville, BC V9P 1S1
TEL: 250-248-3089 EMAIL: info@macdonaldgray.ca
www.macdonaldgray.ca

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Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

PLANTING PLAN, NOTES & LEGEND

Date: August 27, 2020

Drawn: CM

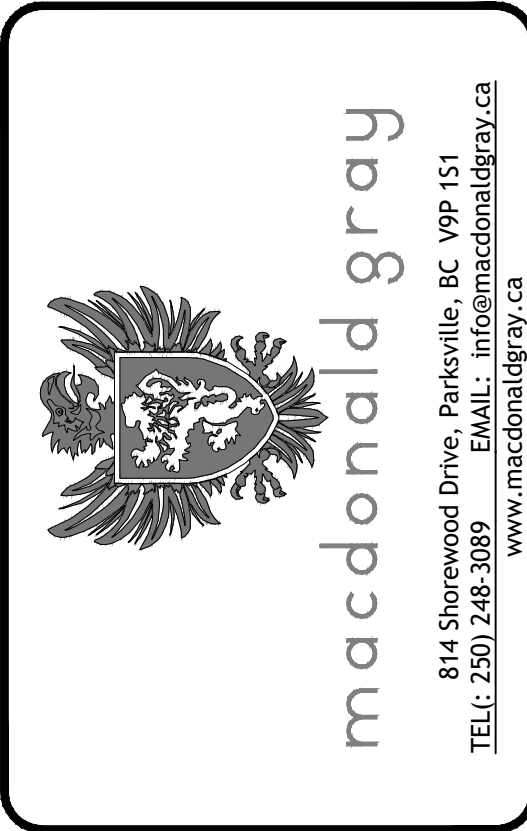
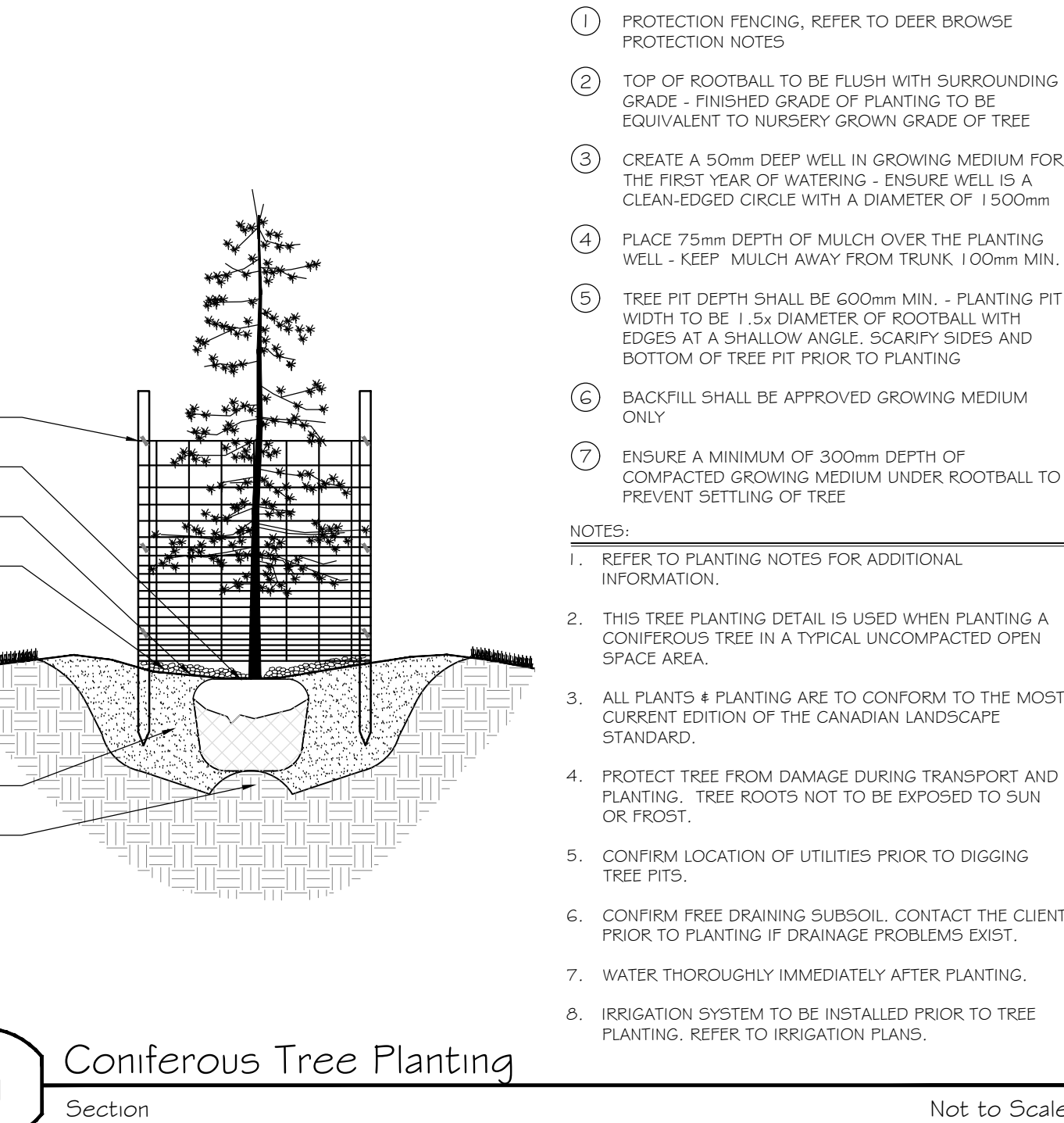
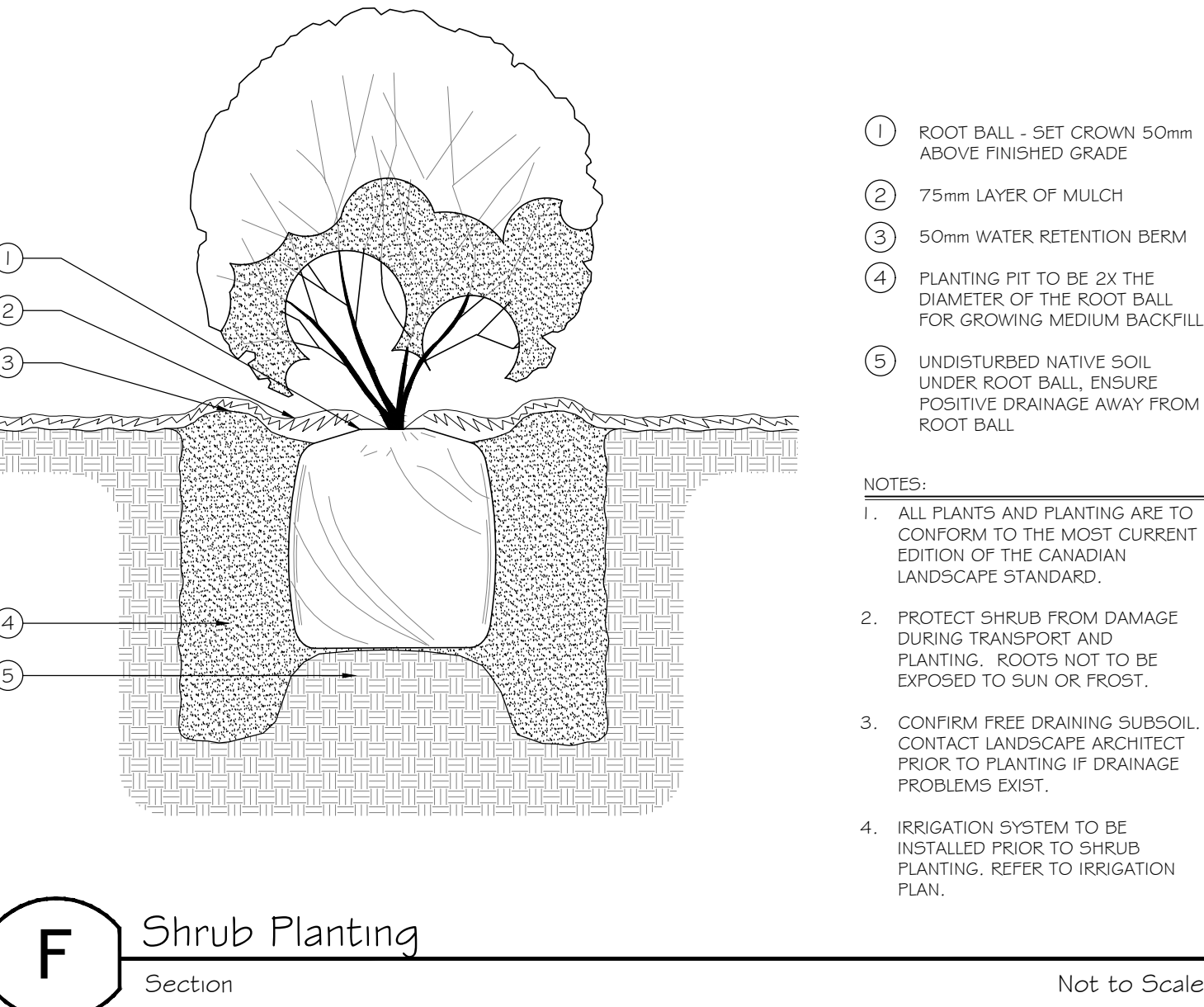
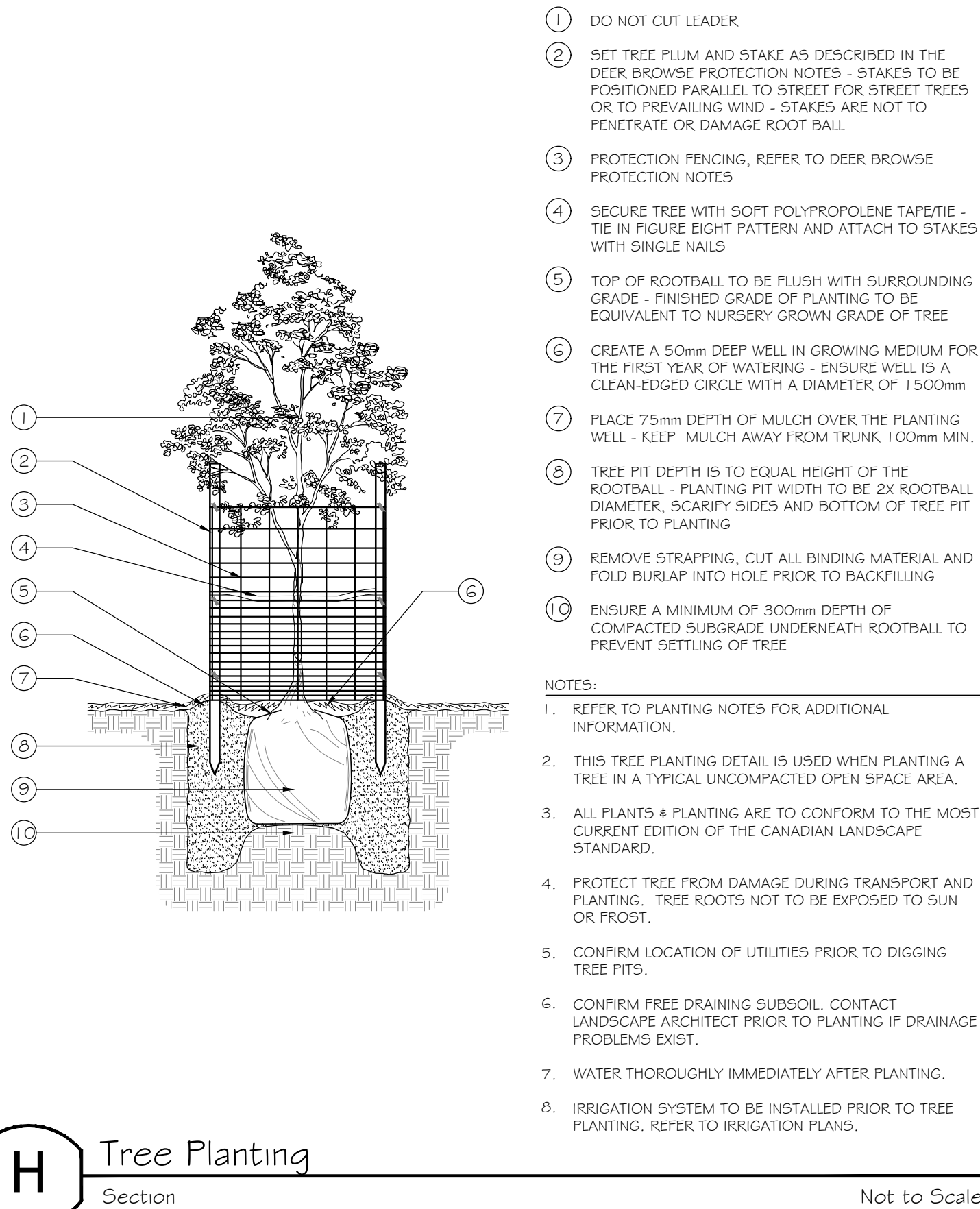
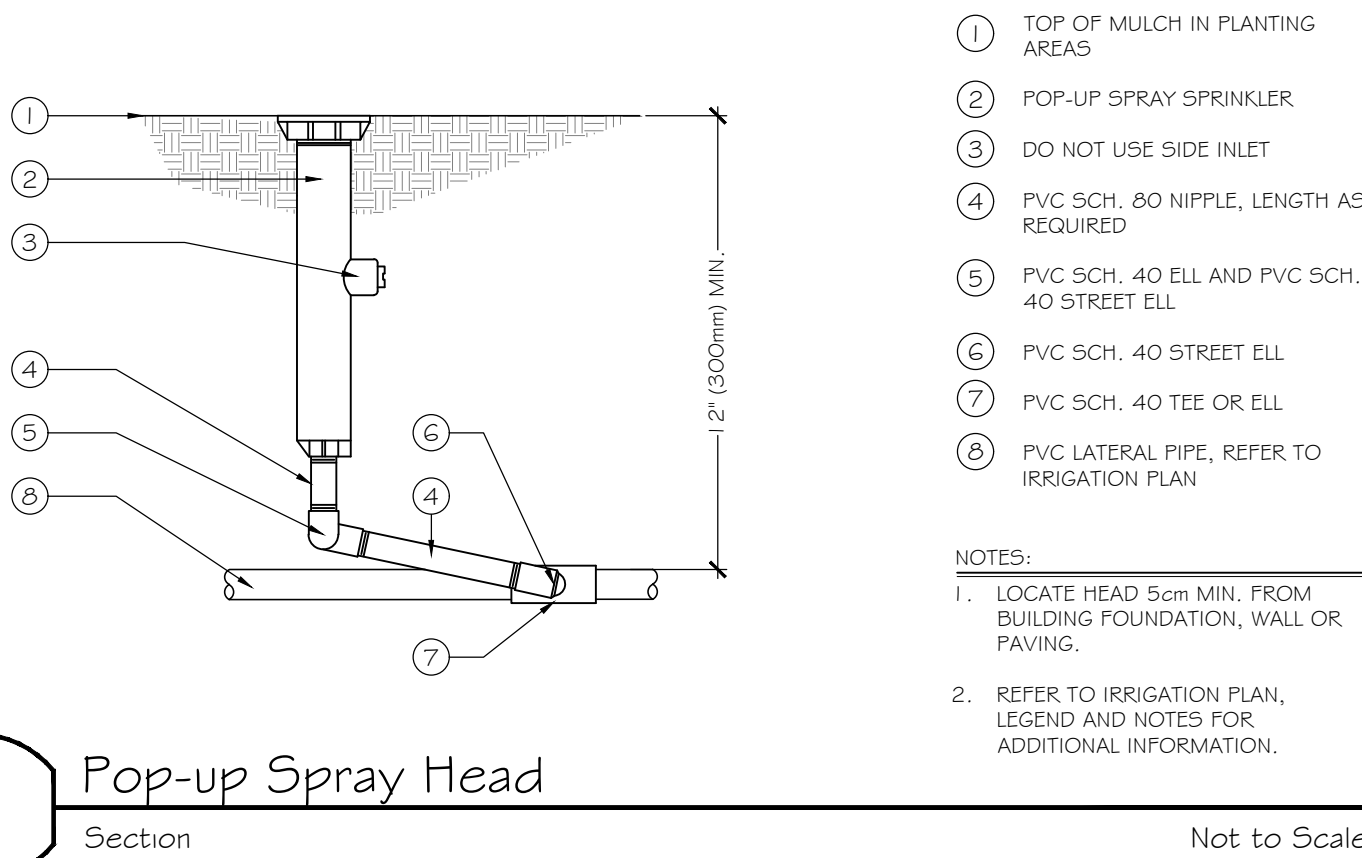
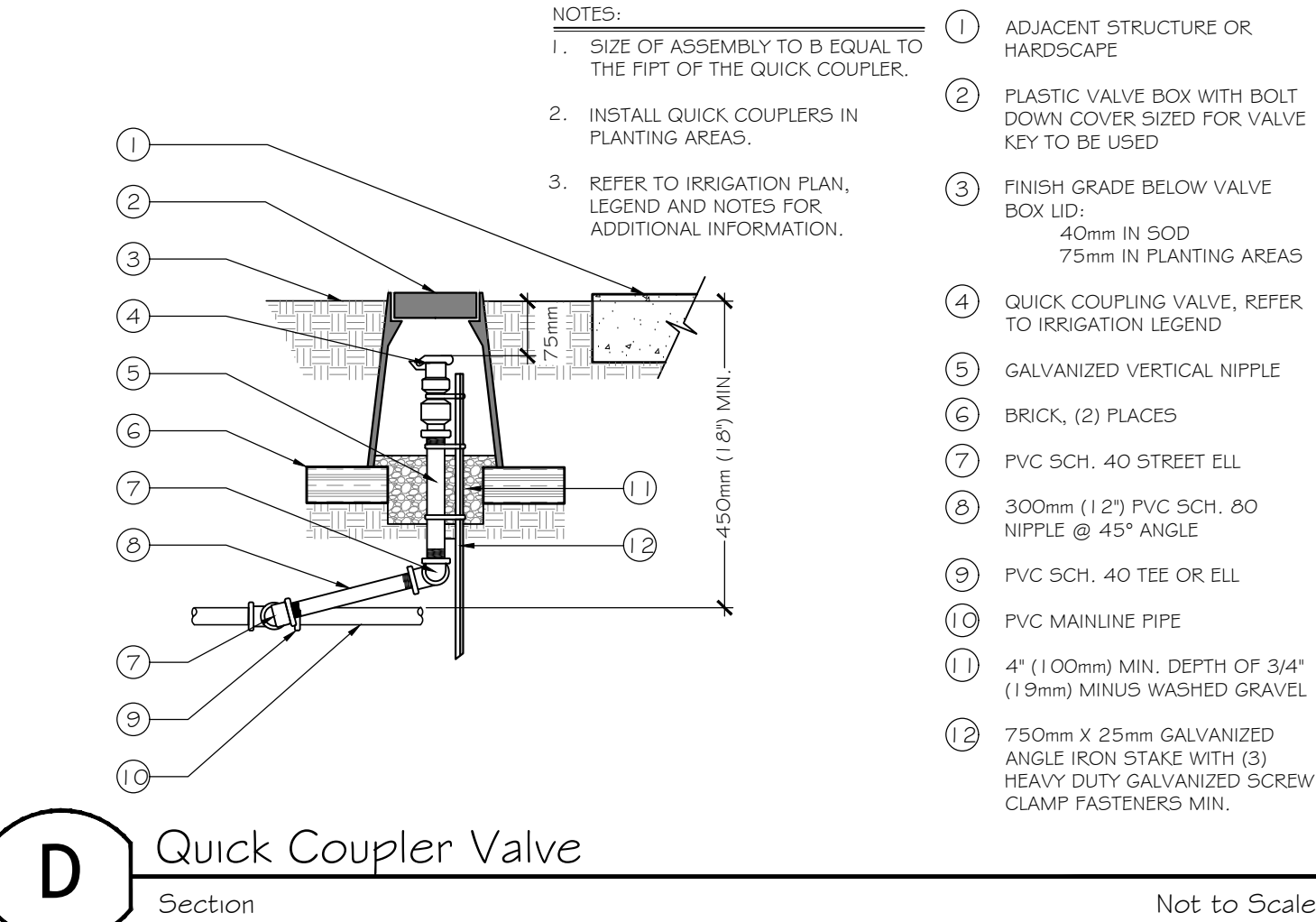
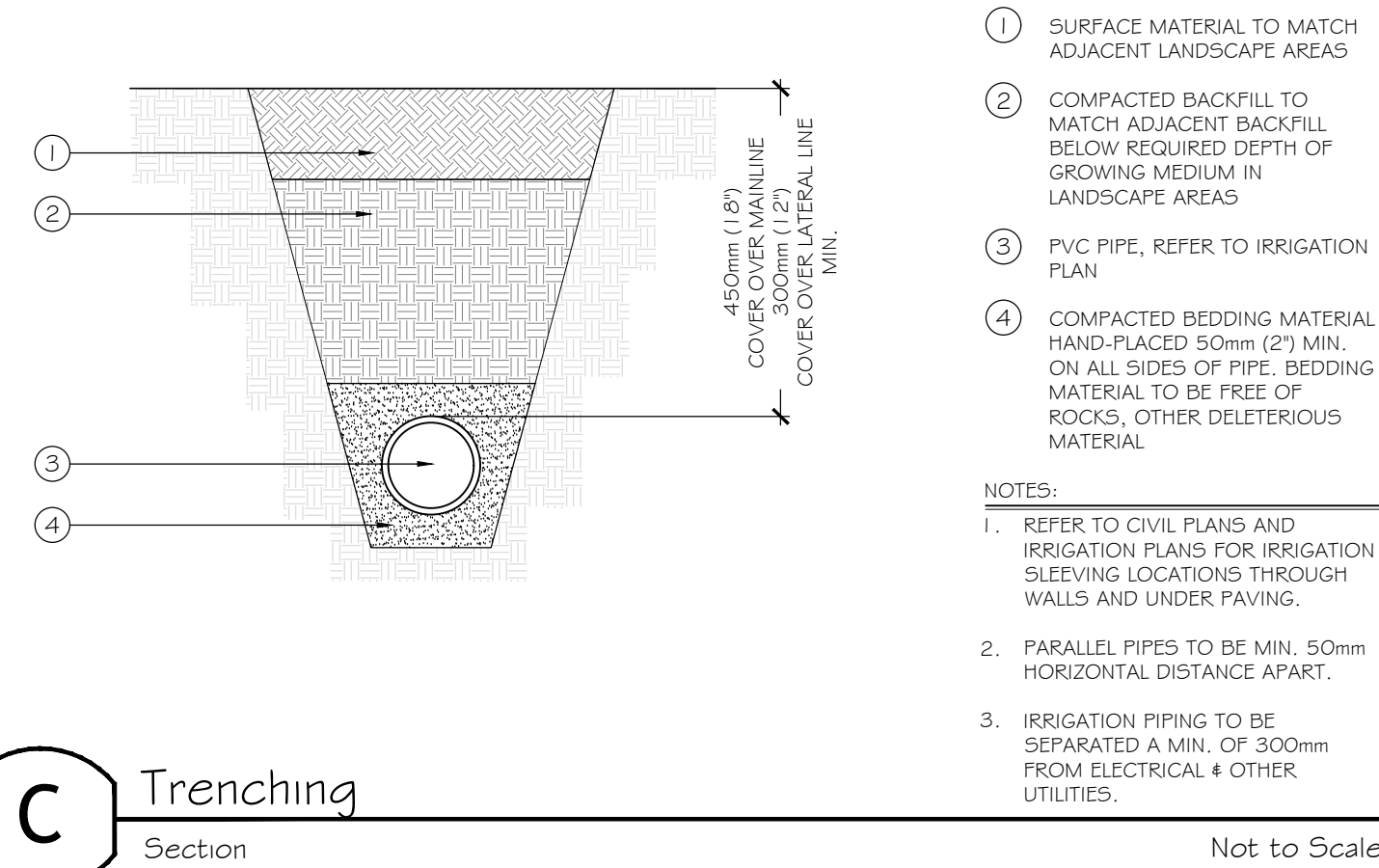
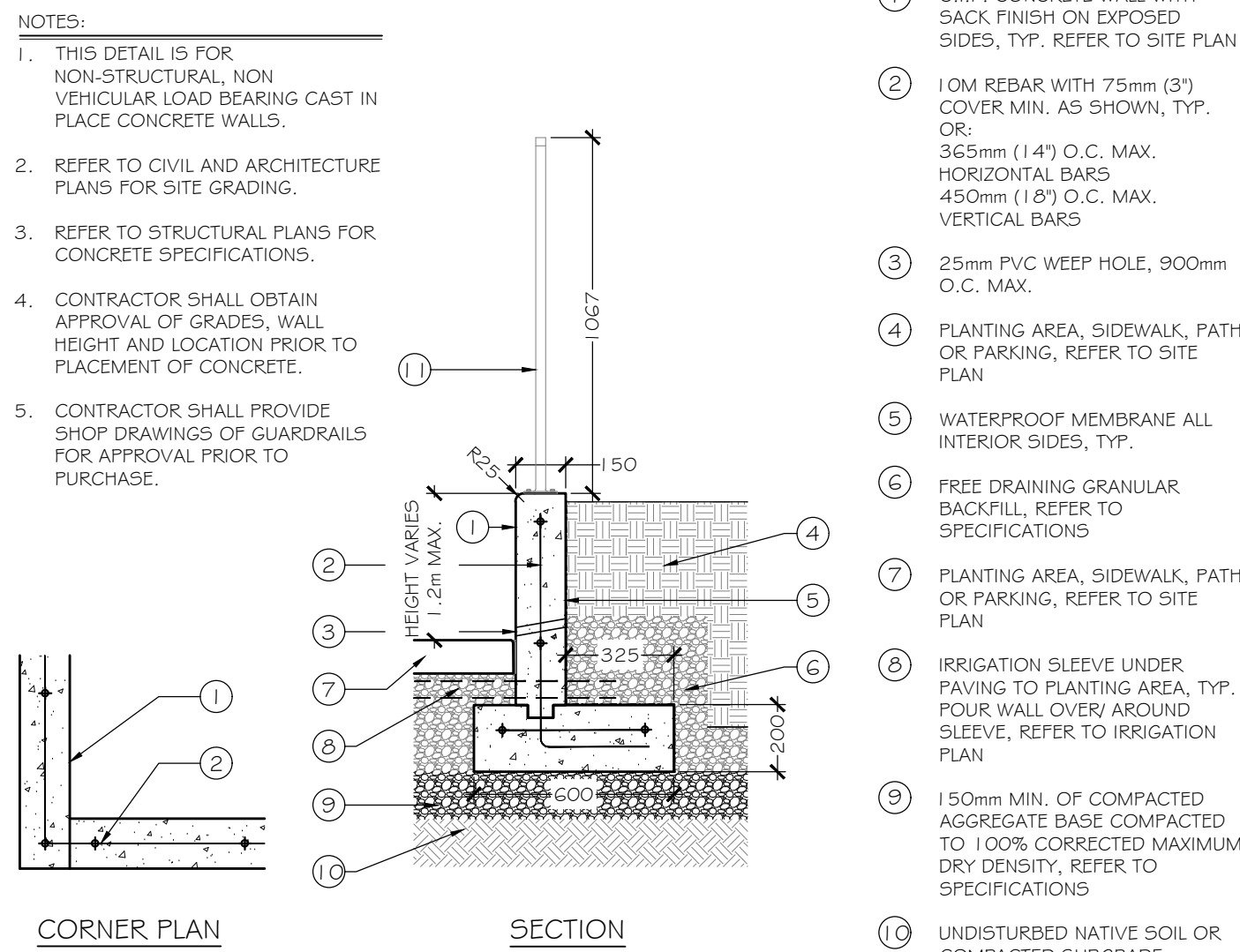
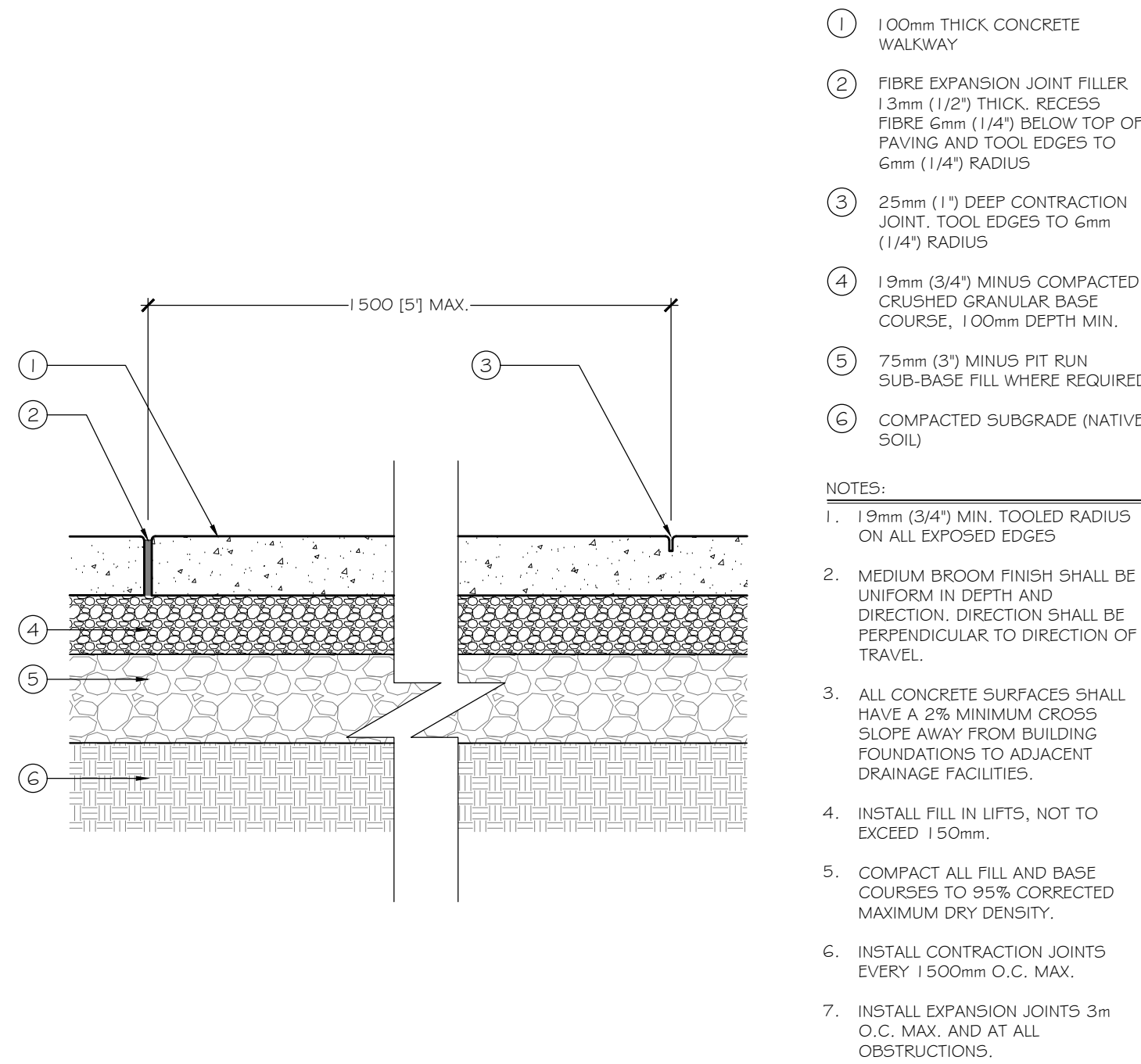
Checked: NG

Scale: 1:250 metric

Project Number: 20-0259

DRAWING NUMBER: L6 of 7

#	REVISION SCHEDULE	NOTES
0	22APR2020	Site Plan/Grading Coordination
1	01MAY2020	DP Review
2	14JUL2020	Revised for DP/Issued for BP
3	28JUL2020	IFT Coordination
4	27AUG2020	IFC



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Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

DETAILS

Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	AS NOTED
Project Number:	20-0259
DRAWING NUMBER:	L7 of 7

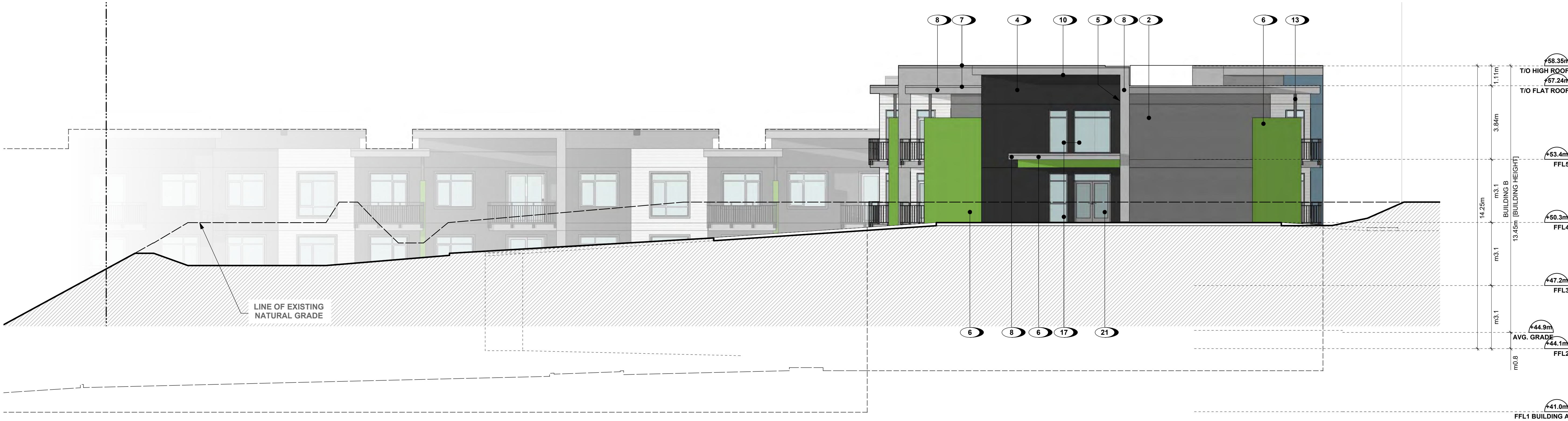
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1	01MAY2020	DP Review	
2	14JUL2020	Reissued for DP/Issued for BP	
3	28JUL2020	IFT Coordination	
4	27AUG2020	IFC	

MATERIAL PALETTE

- 1 FIBRE CEMENT PLANK LAP SIDING, COLOUR PLUS, WOOD GRAIN FINISH, IN 'ARCTIC WHITE';
- 2 FIBRE CEMENT PANEL, COLOUR PLUS, SMOOTH FINISH, 'IN GRAY SLATE', JAMES HARDIE
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- 13 STEEL HSS COLUMN, COLOUR TO MATCH GUARDRAILS

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- 16 ALUMINIUM GUARDRAILS, TOP RAIL AND FACE MOUNTED POSTS, IN 'WEATHERED ZINC' COLOUR (COLOUR MATCH TO CASCADIA METALS)
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- 22 STEEL DOOR, PAINTED



1 North Elevation - Upper Parking Lot Entrance
Scale: 1:100



2 North Courtyard Elevation
Scale: 1:100

Schedule D - Multi-Family Building Elevations (3 pages)
DP 3060-20-09
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434

MATERIAL PALETTE

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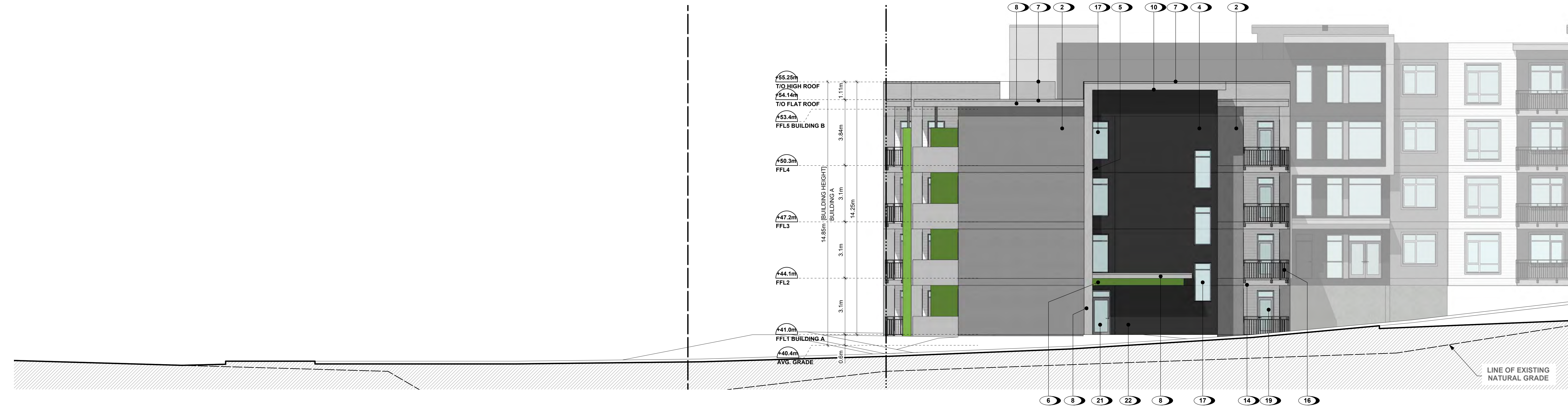


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1 East Elevation
Scale: 1:100



2 East Courtyard Elevation
Scale: 1:100

0 2500 5000mm
1:100

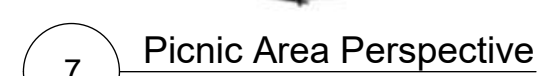
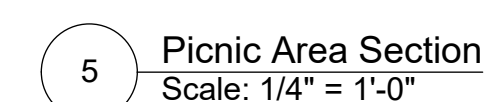
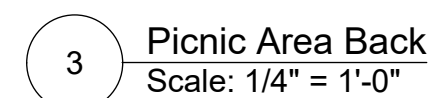
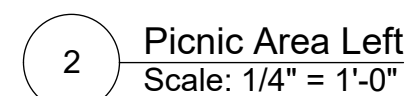
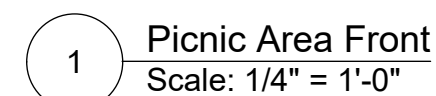
Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13
ISSUED FOR DEVELOPMENT PERMIT

East Elevations
A303
Scale 1:100

dHKarchitects





Date:	Date:	14 JUL 20	Description:	Issued for Building P
plan date:		14 JUL 20	drawing file:	N\932-3 Vastland A
drawn by:	ask		checked by:	
notes:	as noted		project no:	

NOTE: All dimensions are shown in feet and inches.

VICTORIA OFFICE 977 Fort Street Victoria BC V8J 3K3 T 1-250-658-3367	NANAIMO OFFICE 102-5190 DuRoiin Way Nanaimo BC V9T 2K8 T 1-250-258-9819
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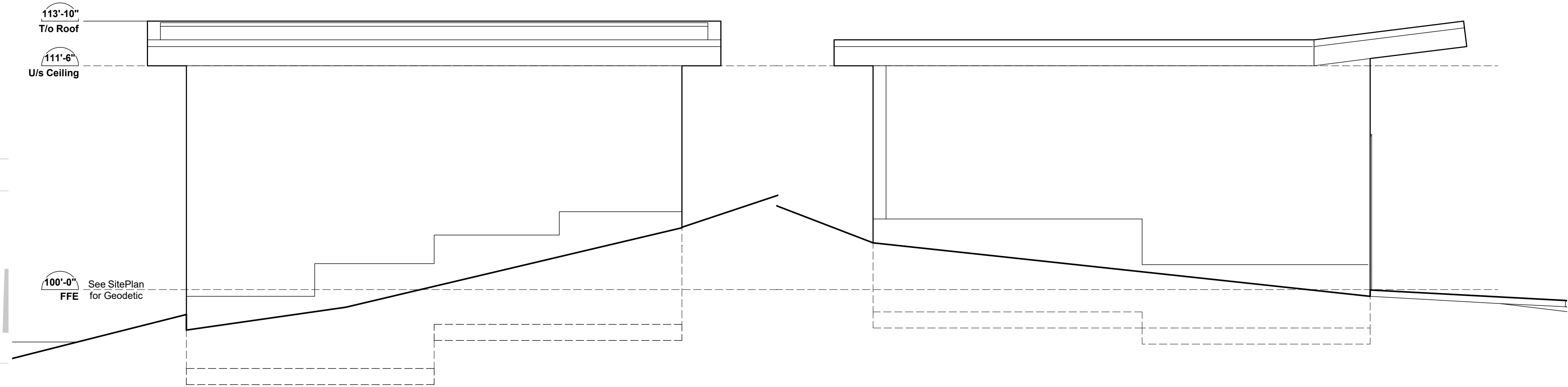
Holland Creek Apartments

107 Rollie Rose Drive
Ladysmith, BC

Picnic Area Accessory Building

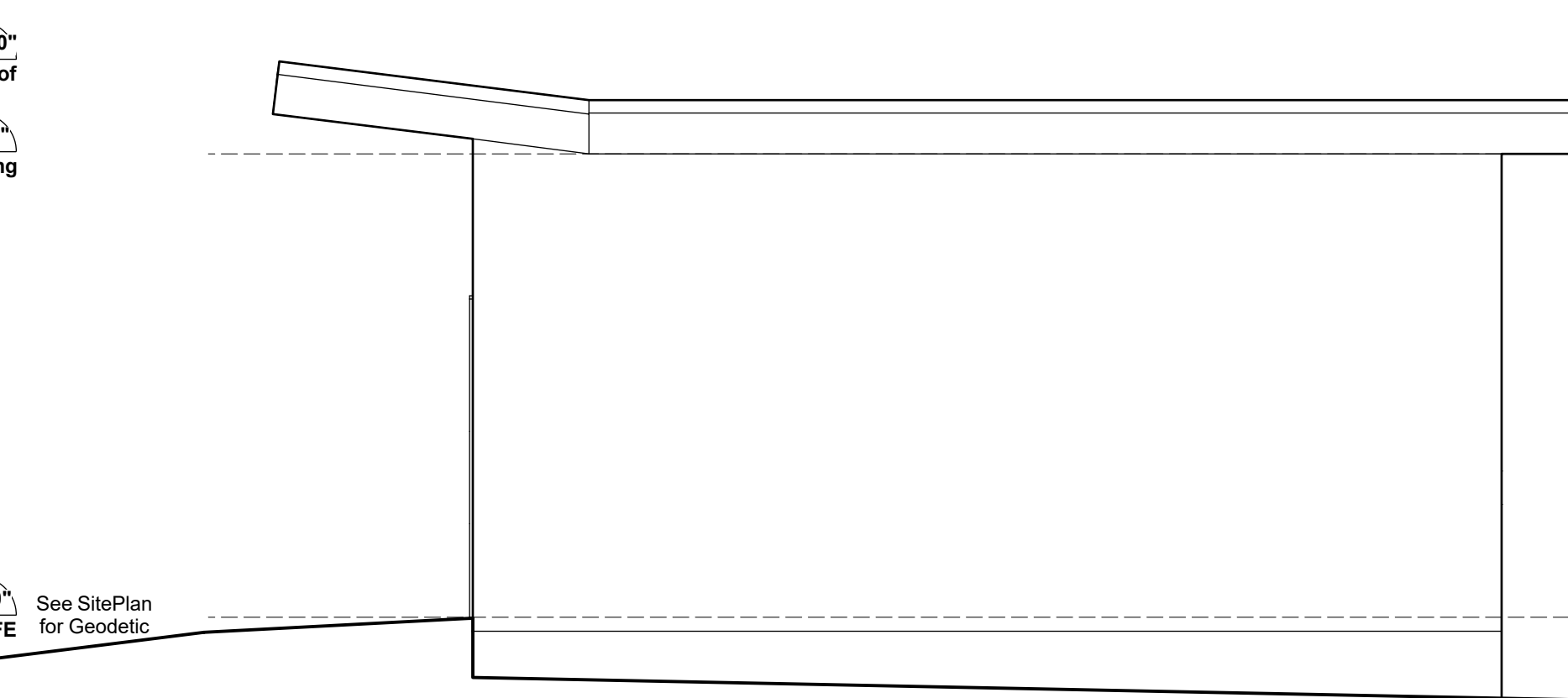
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THEY MAY BE REPRODUCED WITHOUT THE WRITTEN
CONSENT OF THE PROJECT DESIGNER.

drawing no:
A103
 revision no.:

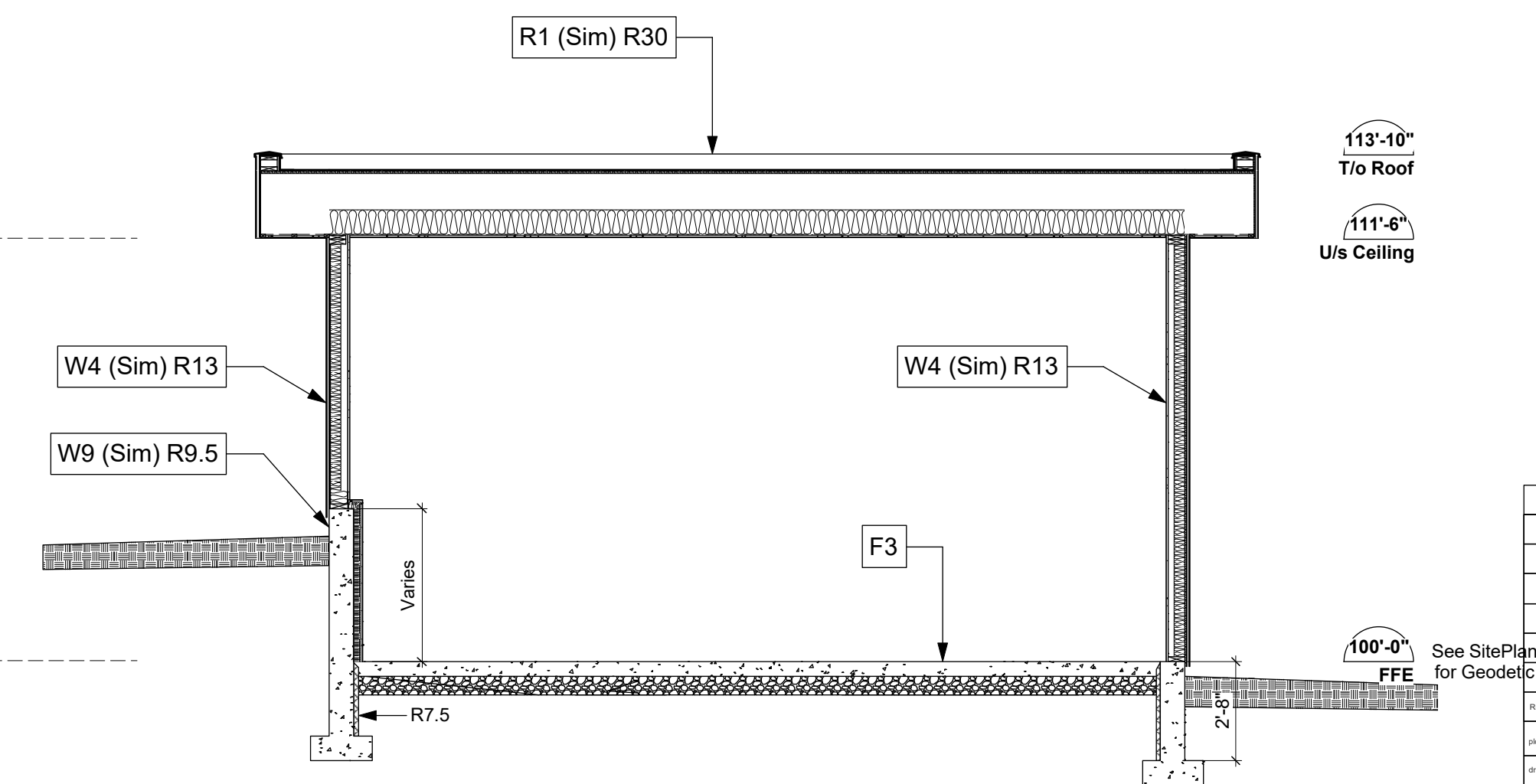


3 Accessory Storage Building North/East
Scale: 1/4" = 1'-0"

4 Accessory Storage Building North/West
Scale: 1/4" = 1'-0"



5 Accessory Storage Building Sout/West
Scale: 1/4" = 1'-0"



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

NOTE: All dimensions are shown in feet and inches.

2020-07-14

BRITISH COLUMBIA
VICTORIA

d-Ka
d-Ka

Victoria OFFICE
977 Fort Street
Victoria BC V8V 3K3
T 1-250-685-5867

d-Ka OFFICE
102-5190 Dublin Way
Nanaimo BC V9T 2S8
T 1-250-685-5810

project name
Holland Creek Apartments
107 Rollie Rose Drive
Ladysmith, BC

Accessories Building

CONSENTED FOR THESE PLANS AND
DESIGNS AND ALL THE TERMS BEHIND
THE PROJECT SHOWN ARE HEREBY
RENEWED BY THE BEST INTERESTS

A104

-









Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13

ISSUED FOR DEVELOPMENT Page 74 of 280

Vignette Views

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Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13

ISSUED FOR DEVELOPMENT *may* Vignette Views

Page 83 of 280

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Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13

ISSUED FOR DEVELOPMENT *may* Vignette Views

Page 84 of 280

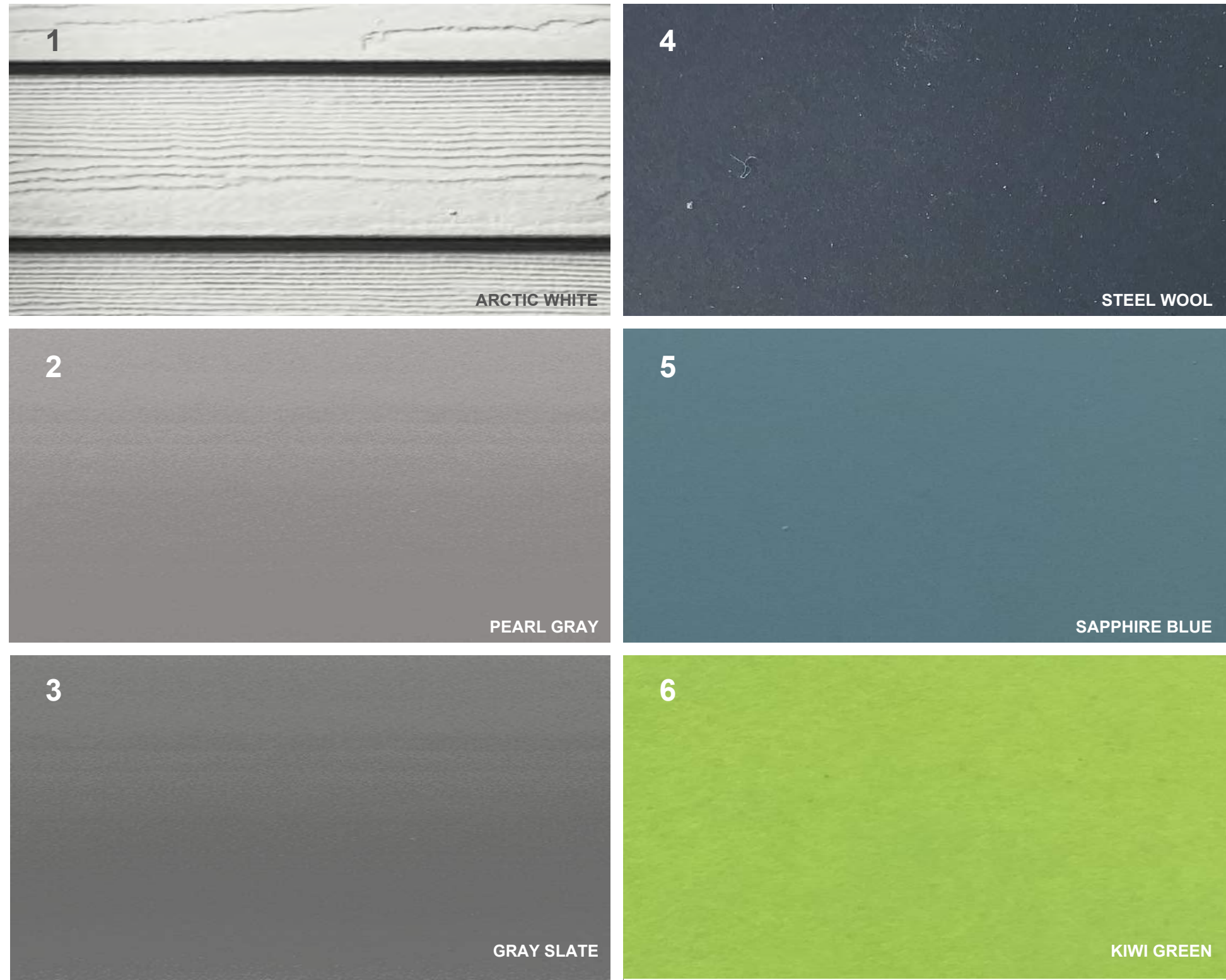
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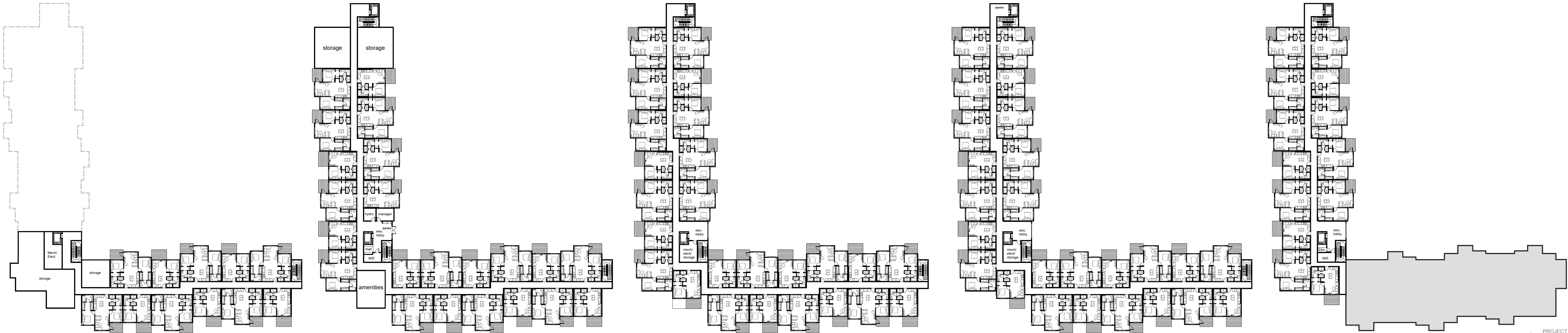
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KEYPLANS



1 Floor Plan: Level 1
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	5	-	5
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	11	-	11

2 Floor Plan: Level 2
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	3	9
1 BEDROOM +	-	1	1
2 BEDROOM	6	6	12
TOTAL	12	10	22

5 Floor Plan: Level 3
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	4	10
1 BEDROOM +	-	-	-
2 BEDROOM	6	9	15
TOTAL	12	13	25

6 Floor Plan: Level 4
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	-	6
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	12	-	12

7 Floor Plan: Level 5
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	-	6
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	12	-	12

Holland Creek Lot 13
ISSUED FOR DEVELOPMENT PERMIT

Material Palette

Schedule G - Building Materials and Colours
DP 3060-20-09
107 Rollie Rose Drive 1
223434 B.C. Ltd., Inc. No. BC1223434

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

Riparian Areas Protection Regulation: Assessment Report

Please refer to submission instructions and assessment report guidelines when completing this report.

Amended Date		Sep. 7 2020	
I. Primary QEP Information			
First Name	David	Middle Name	R
Last Name	Clough		
Designation	RPBio	Company D.R. Clough Consulting	
Registration #	815	Email drclough@shaw.ca	
Address	6966 Leland Road		
City	Lantzville	Postal/Zip	V0R2H0
Phone #	250-714-5416 cell		
Prov/state	BC	Country	Canada
Ph/Fax:	250-390-2901 desk		
II. Secondary QEP Information (see Form 2 below for other QEPs)			
First Name	Drew	Middle Name	
Last Name	Beiderwieden		
Designation	P.Eng.	Company Newcastle Engineering Ltd	
Registration #	42351	Email drew.beiderwieden@newcastleengineering.com	
Address	Suite 4-3179 Barons Road,		
City	Nanaimo,	Postal/Zip	V9T 5W5
Phone #	250-756-9553		
Prov/state	B.C.	Country	Canada
III. Developer Information			
First Name	Chris	Middle Name	
Last Name	Lundy (Company Director)		
Company	1223434 BC Ltd.		
Phone #	250-729-7540	Email Chris@westmarkconstruction.ca	
Address	1-2535 McCullough Road		
City	Nanaimo	Postal/Zip	V9S 4M8
Prov/state	BC	Country	Canada
IV. Development Information			
Development Type	Construction; medium density 16-35 units/ha		
Area of Development (ha)	2.1	Riparian Length (m)	475
Lot Area (ha)	2.7	Nature of Development	New
Proposed Start Date	2020-05-25	Proposed End Date	2021-10-31
V. Location of Proposed Development			
Street Address (or nearest town)	Lot 13 Rollie Rose Drive Ladysmith BC		
Local Government	Town of Ladysmith	City	Ladysmith
Stream Name	Un-named tributary to Holland Creek		
Legal Description (PID)	009474251	Region	Lot 13 District Lot 103, Oyster District,
Stream/River Type	Stream	DFO Area	17-7
Watershed Code	920-321500		
Latitude	48	58	49
Longitude	123	48	53

Completion of Database Information includes the Form 2 for the Additional QEPs, if needed. Insert that form immediately after this page.

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

II. Additional QEP Information						
First Name	Louis			Middle Name		
Last Name	Chapdelaine					
Designation	P.Geo			Company Lewkowich Engineering Associates Ltd		
Registration #	48335		Email lchapdelaine@lewkowich.com			
Address	1900 Boxwood Road					
City	Nanaimo	Postal	V9S 5Y2	Phone #	250-741-7662	
Prov/state	BC	Country	Canada			

II. Additional QEP Information						
First Name	Stuart			Middle Name		
Last Name	Crossfield					
Designation	P.Geo			Company Lewkowich Engineering Associates Ltd		
Registration #	39632		Email scrossfield@lewkowich.com			
Address	1900 Boxwood Road					
City	Nanaimo	Postal		Phone #	250-756-0355	
Prov/state	BC	Country	Canada			

II. Additional QEP Information						
First Name	Margaret			Middle Name		
Last Name	Symon					
Designation	RPF			Company Strathcona Forestry Consulting		
Registration #	1485		Email strathcona.fc@shaw.ca			
Address	PO Box 387 Stn. Mn.					
City	Duncan	Postal	V9L 3X5	Phone #	250-715-6983	
Prov/state	BC	Country	Canada			

Table of Contents for Assessment Report

	Page Number
1. Description of Development and Fisheries Values	4-7
2. Results of Riparian Assessment (SPEA width)	8-11
3. Site Plan with Riparian Assessment Results	12
4. Measures to Protect and Maintain the SPEA (detailed methodology only).	
1. Danger Trees.....	14
2. Windthrow.....	15
3. Slope Stability.....	16
4. Protection of Trees.....	16
5. Encroachment	17
6. Sediment and Erosion Control.....	18
7. Floodplain.....	19
8. Stormwater Management.....	20
5. Environmental Monitoring	21
6. Photos	23
7. Assessment Report Professional Opinion	24
8.) Appendices	25
1.) Construction Environmental Protection Plan, Westmark Construction by D.R. Clough Consulting, April 15, 2020	25
2.) Lot 13, Rollie Rose Place, Ladysmith, Windthrow and Hazard Tree Assessment, Strathcona Forestry Consulting. August 26, 2020	32
3.) Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103, by Lewkowich Engineering Associates Ltd. August 25, 2020.	61
4.) Lewkowich Engineering Associates Ltd Sediment and Erosion Control plan. August 25, 2020	83
5.) Stormwater Management Plan - Newcastle Engineering Ltd. Holland Creek Lot 13 Diagram 0127- 028-100 DP REV07 Aug 31, 2020.	84
6.) Culvert Installation - Construction Environmental Protection Plan and Water Act Notification Approval.	85

Section 1. Description of Fisheries Resources Values and a Description of the Development proposal

(Provide as a minimum: Species present, type of fish habitat present, description of current riparian vegetation condition, connectivity to downstream habitats, nature of development, specific activities proposed, timelines)

Description of the Development Proposal.

This is a multifamily residential development for two four storey buildings with a total of 95 units. It is being built on 2.7 ha of property on Lot 13, Rollie Rose Drive in Ladysmith. The riparian assessment area (Section 3 ,Fig1.) is situated along the south and east side of this development. The south and east sides of the building are in the Riparian Assessment Area. The adjacent stream (Tributary 2) has a 10m SPEA from the HWM.

The proposed development will not result in any intrusion within the SPEAs or HADD of fish habitat.

Below is the description of the developments on the property;

Holland Creek Apartments, located at 107 Rollie Rose Drive, in Ladysmith, is a multifamily residential building providing 39 one-bedroom suites and 57 two-bedroom suites for a total of 96 residential units. The multifamily building is accompanied on the site by three accessory buildings that aid in the function of the site and apartments. The property is a 6.67 acre parcel (26,987.8 sq.m.), of which the principal building is situated on 0.52 acres (2,109.3 sq.m.) providing a parcel coverage of 7.8% and a ratio of 0.32:1. The three accessory buildings are collectively situated on 0.04 acres (161 sq.m.) of the site, creating a total parcel coverage for all buildings on the property of 8.4% and a ratio of 0.326:1. The permitted coverage of this site is 33% and permitted floor space ratio is 0.66:1.

The BCBC 2018 classifies Holland Creek Apartments as being a building that is divided by a firewall into two portions, where each portion is considered as a separate building. Thus the proposal demonstrates two four-storey residential buildings functioning side by side, that work with the site grading. To collaborate with the beautiful nature of the site, the building has been recessed into the stepping contours and integrated into its surroundings. Likewise, the resident parking has been distributed into three areas: lower, central, and upper parking with vegetation interspersed into the layout. To reflect the distribution of the resident parking, the principal entry is located centrally at Level 2. Additional entry doors are also located at levels 1 and 4 to accommodate parking at the lower and upper sections of the site. These access doors also permit connection to the three accessory buildings that rest on the site. A recycling and garbage enclosure (31.5 sq.m.) is located across the drive aisle from the level 1 entry door and has been positioned to be easily accessible to residents. Just up the driveway, is an accessory storage building (53.8 sq.m.). This building has been created to provide individual storage space for the residents with larger outdoor items (other unit storage lockers are located within the main building). The third accessory building, located next to the level 4 entry, is a picnic shelter (37.2 sq.m.) which has been designed to provide the residents with an outdoor gathering space for family functions and visits.

Holland Creek Apartment building, accessory buildings and site landscaping components have been located on the site so as not to impose the resulting SPEA setback of 10 meters. A 1.5m minimum landscape buffer has also been provided along the sections of the site abutting on the property lines and SPEA.

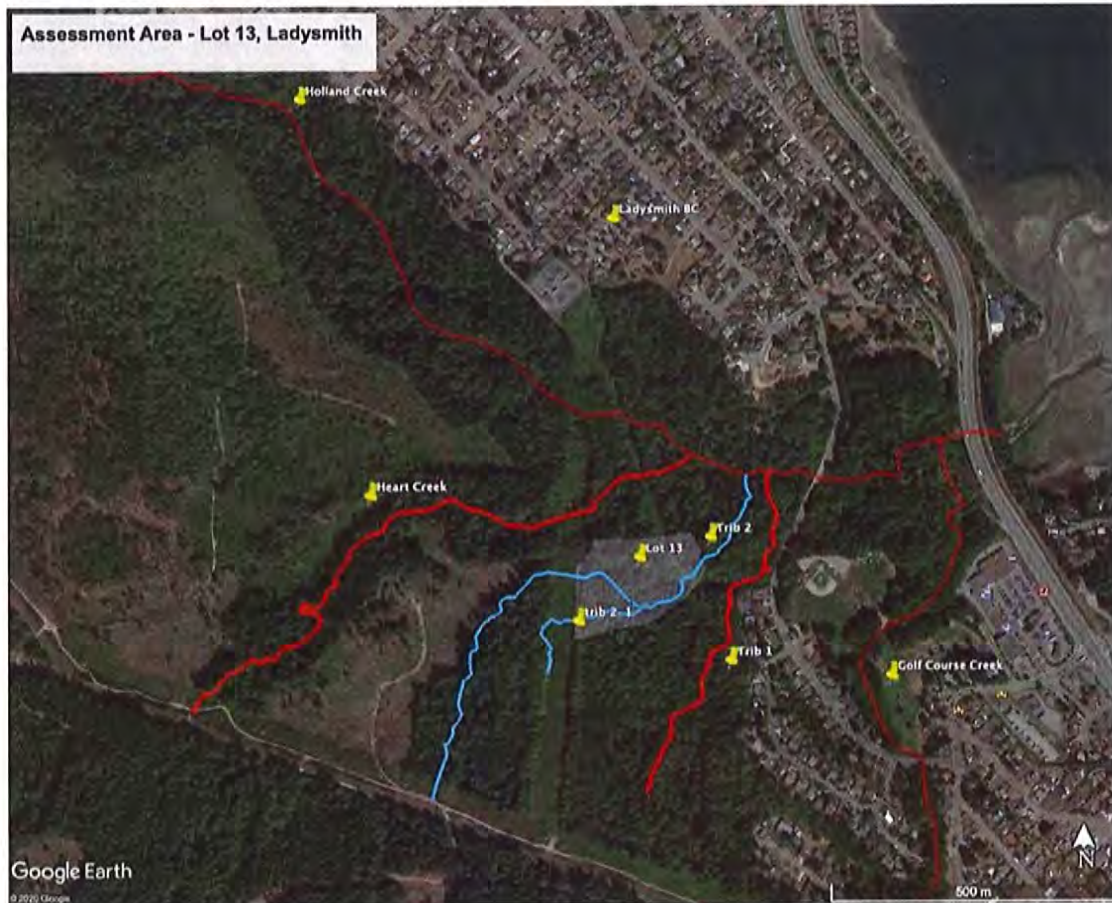
The development was designed by DHK Architects. The building services including stormwater designed by Newcastle Engineering and its geotechnical assessment and ESC developed by Lewkowich Engineering Associates. The Blowdown and Hazard Tree Management plan was provided by Strathcona Forestry Consulting. The RAPR report and environmental monitoring is being undertaken by D.R. Clough Consulting.

The development includes installation of a 1.5m diameter culvert over the Tributary 2 driveway access to the property. This culvert has been approved under the BC Water Act; Tracking Number 100317923 (Appendix 6).

Description of Fisheries Resources Value/Fish Assessment

Watershed:

The property is in the Holland Creek watershed. Holland Creek is located 250m north property and is the receiving body for drainages from Lot 13. The property is situated on the south sidewall of the Holland Creek valley. Within the Town of Ladysmith there are several tributaries that flow down the steep south valley sidewall into the Holland Mainstem. In Lot 13 there is one main Tributary 2 (T2) along the building south boundary. Tributary 2 has a fork; Tributary 2-1 (T2-1) draining from further south along the Rollie Rose Drive residences. Other nearby stream channels not in the RAA of the site but include Heart Creek to the northwest, Golf Course Creek and Tributary 1 on Rollie Rose Drive to the east. Holland Creek is the receiving waters of the property drainages. Holland Creek has a salmon and trout population. The property drainages (Tributary 2 and 2-1) do not have fish populations (as described below).



Historic Development

There is considerable historic disturbance and alteration of the channels. In the lower reaches where the road right of way is located, the channels were historically redirected for logging, service of the Hydro lines, abandoned water line corridor and garbage dump. The entire area has been historically logged. The regenerating riparian areas are approximately 20 to 80 years old. There are abandoned service and logging roads crossing the property and the stream channels. There are two BC Hydro transmission line corridors running through the centre of the property. A hydro line easement passes over the main stream (Tributary 2) at the location of the historic service road entrance. The lot 13 entrance route over Tributary 2 has been historically cleared of trees and has low growing shrubbery.

Plant Community

The property is located within the Coastal Douglas Fir Biogeoclimatic Zone, a Red Listed Plant Community. No specific Red or Blue listed plants other than the CDF Community are found in the B.C. Government Ecosystem Explorer for this site.

No old growth trees were observed in the riparian areas due to the historic logging and hydro line clearing. The riparian assessment area tree species are primarily Douglas Fir and Red Cedar with some Grand Fir, Broadleaf Maple and Red Alder. Where the Hydro Line crosses Tributary 2 at the lot entrance, the riparian area is cleared of trees to protect the power lines. The plants under the hydro line are a mix of invasive shrubs (patchy areas of Himalayan Blackberry, English Holly, Spurge Laurel), sapling trees (Red Alder, Broadleaf Maple).

Tributary 1 and 2 Riparian plant community is composed of the taller trees on the property; primarily Douglas Fir and Red Cedar with some Grand Fir, Broadleaf Maple and Red Alder. There are few understory shrubbery species and density from historic alteration. The attached Tree Windthrow and Hazard Tree assessment recommends understory fill planting in this south side of Tributary 2 along a 50m length. The plan recommends native planting of Indian Plum, Red Osier Dogwood, Red Huckleberry, Ninebark and western Red Cedar

Photo below: Looking from SPEA north to building site (beyond rope line)

**Fish populations and Habitat Description****Holland Creek;**

Holland Creek is the receiving waters of the property drainages. Holland Creek is located 250m to the north, of the property. Holland Creek has Coho, Chum and Cutthroat as the most common fish species. It is located in a confined valley with steep stable sidewalls. Salmon have access up the mainstem to Crystal Falls approximately 2.0 km upstream from the ocean and 1.5 km past the property outlet. This is a 10m wide perennial stream. Holland Creek is fed by a reservoir and small lake.

Property Drainages

The streams on the property are not fish bearing streams as there is a lack of perennial wetted habitat and permanent natural barriers from Holland Creek. Tributary 2 and 2-1 are described on the development property below.

Tributary 2:

This stream channel is located on the south side of the property (see map above) adjacent the building area. It has an average of 1.75m wide channel. The stream substrates are cobble, gravel and fines. On the property it is on a lower gradient 12% gradient bench of approximately 320m length. There are steep sections of more than 20% gradient above and below this middle reach. The channel is confined except in a few areas of old logging and hydro road disturbance where the floodplain was 2-3 m wide (but flooding over stable vegetated ground). The riparian area has been disturbed by three historic road crossings on the property.

There were no significant bank sloughs or erosion areas along the channel. The channel is in a stand of second growth trees that are stable with very few down trees from blowdown or rot. The adjacent riparian area lacks coarse woody debris (CWD). The stream lacks large woody debris (LWD) and deep pools. The historic logging and burning have removed the CWD and LWD. The lack of channel and bank erosion combined with healthy trees are all indicators the riparian area is recovering from historic logging.

The stream south bank has an existing 10m fenced SPEA from houses in the adjacent subdivision on Rollie Rose Drive. The subject development is along the north bank of Tributary 2.

Fish Habitat

There is no fish access or resident fish habitat on the property. Tributary 2 leaves the Lot 13 property and flows over barriers; including a steep drop reach (25% gradient) to a 6.0 m bedrock falls before entering Holland Creek. Observations in summer found the stream to have very shallow wetted areas with a lack of pools. No resident or migratory fish were observed or expected in Tributary 2. It lacks resident fish habitat with a short shallow and steep channel. There is no migratory fish access with its series of steep gradients and falls at the entrance to Holland Creek. In 2010 an electroshock survey was conducted by the author which confirmed the lack of fish. No fish were expected given the lack of habitat and barriers.

Tributary 2-1

Tributary 2-1 is a first order 1.0m wide channel on 13% gradient on the property. The substrates are an even mix of cobble, gravel and fines. The riparian canopy was historically logged and burned. The second growth trees have become well established along the channel. Tributary 2-1 originates upstream from hydro line service road ditches 75m west of the property. Its total length is approximately 200m. Tributary 2-1 enters at the south bank of Tributary 2 opposite of the development. There are no significant erosion areas; the channel has tree roots and vegetation growing along the bank. There were no observed bank failures along the channel. This channel is a shallow seepage in summer with no resident fish habitat and no access from below. It is connected to Tributary 2 which is also non fish accessible habitat. Tributary 2-1 has the Rollie Rose residential houses alongside its south bank with a permanent wooden fence along the 10m SPEA from that recent (2014) development. For this development a 10m SPEA will apply to the north bank of Trib 2-1.

Section 2. Results of Riparian Assessment (SPEA width)

2.1 Results of Detailed Riparian Assessment

Refer to Section 3 of Technical Manual

Date: Sep. 7 2020

Description of Water bodies involved (number, type)

Tributary 2 and 2-1, (2 Streams)

Stream	2
Wetland	
Lake	
Ditch	
Number of reaches	1
Reach #	1

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

Channel Width(m)		Gradient (%)	I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
starting point	1.60		
upstream	2.10	9	
	1.85		
	1.45		
	1.50		
downstream	1.70	15	
	1.20		
	1.90		
	2.00		
	2.4		
	2.0		
Total: minus high /low	13.85		
mean	1.73	12	
	R/P	C/P	S/P
Channel Type			x

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		x	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
Polygon No:			Method employed if other than TR
SPVT Type	LC	SH	

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No: 1 North side segment

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	5.2	South bank	Yes		No	X
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)					
Ditch Fish Bearing	Yes		No		If non-fish bearing insert no fish bearing status report	
SPEA maximum	10	(For ditch use table3-7)				

Segment No:	2	South Side segment If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	5.2	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
a)	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
b)	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
c)	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d)	In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

Tributary 2 is primarily a confined non fish bearing 320m long channel that is a summer water supply to Holland Creek. It does not have resident fish habitat or fish access due to a barrier (6m) falls at the mouth. The 1.73m wide channel falls on an average gradient of 12% through the property. The SPEA is 10m either side of the High Water Mark.

2.2 Results of Detailed Riparian Assessment

Refer to Section 3 of Technical Manual

Date: Sep. 7 2020

Description of Water bodies involved (number, type)

Tributary 2-1

Stream	X -2-1
Wetland	
Lake	
Ditch	
Number of reaches	1
Reach #	1

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

Channel Width(m)		Gradient (%)	I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (<i>name of developer</i>) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
starting point	1.20		
upstream	1.60	12	
	0.90		
	0.90		
	0.90		
downstream	1.40	14	
	0.80		
	1.00		
	0.70		
	1.00		
	1.10		
Total: minus high /low	7.9		
mean	1.01	13	
	R/P	C/P	
Channel Type		S/P	
		x	

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		x	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u> </u> (<i>name of developer</i>) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
Polygon No:			Method employed if other than TR
	LC	SH	
SPVT Type			x

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	North side Tributary 2-1 If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons
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FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	3.03	South bank	Yes		No	X
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)					
Ditch Fish Bearing	Yes		No		If non-fish bearing insert no fish bearing status report	
SPEA maximum	10	(For ditch use table3-7)				

Segment No:	2	South Side Tributary 2-1 If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	3.03	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

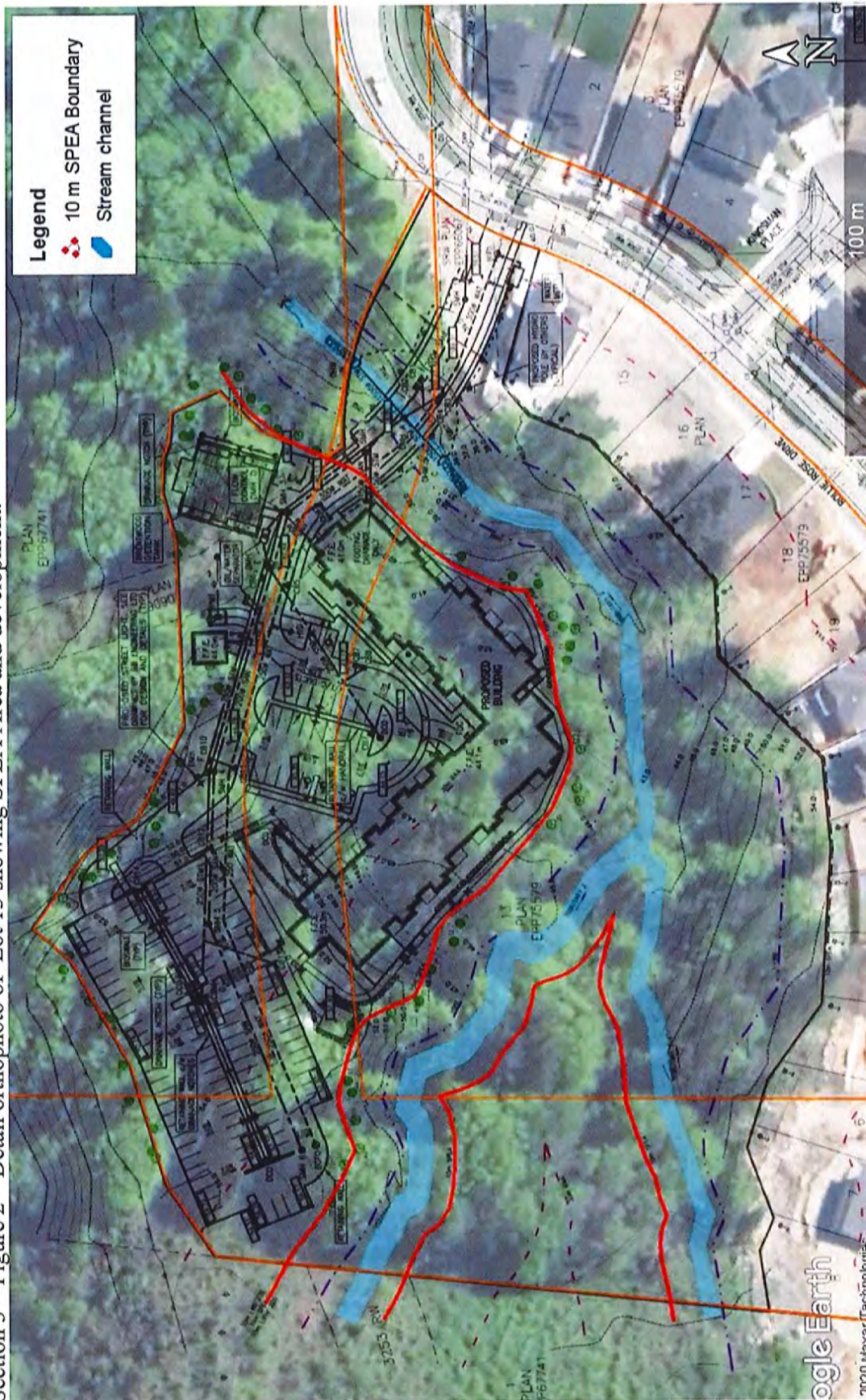
I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
e)	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
f)	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
g)	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
h)	In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

The 1.0 m wide channel falls on the property for an average gradient of 13% for 175m to enter Trib. 2. It is confined and collects water from weeping seepages on the sidewalls. The top end is fed by runoff from the Hydro line service road. It is a water supply to Holland Creek. This tributary has no fish. The SPEA is established at 10m on either side of the High Water Mark.



Section 3 – Figure 2 – Detail orthophoto of Lot 13 showing SPEA Area and development.



Section 4. Measures to Protect and Maintain the SPEA

This section is required for detailed assessments. Attach text or document files, as need, for each element discussed in Part 4 of the RAPR. It is suggested that documents be converted to PDF *before* inserting into the assessment report. Use your "return" button on your keyboard after each line. You must address and sign off each measure. If a specific measure is not being recommended a justification must be provided.

1. Danger Trees	<p>I Margaret Symon RPF, hereby certify that:</p> <p>a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i>;</p> <p>b) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd ;</p> <p>c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.</p> <p>The RAPR Guidebook section 3.7.1 on Danger Trees noted that the SPEA should be assessed by a QEP with appropriate training to determine if danger trees pose a risk to the adjacent development. As noted in the guidebook, these trees may include standing dead vertical trees or lean towards the work area, as well as some live trees with large dead branches or tops. The QEP will manage the Danger trees for retention as wildlife stumps or retain in the SPEA as coarse woody debris (CWD). The trees felled or replaced in the SPEA are to be replaced with tree planting that exceeds the BC Tree replacement criteria.</p> <p>The property was assessed for Danger Trees by Margaret Symon RPF (a qualified Danger Tree Assessor Certification W8668) in the attached report Lot 13 Rollie Rose Place, Ladysmith; Windthrow and Hazard Tree Assessment (Appendix 2). The assessment divided the development into a north non SPEA and south area adjacent a SPEA. This report included an assessment of all trees for hazards on the property not just including the SPEA.</p> <p>As part of the tree assessment, trees along the SPEA line and other significant areas along the property lines were located on the plan by land survey and numbered for reference. All trees close to the SPEA line and building areas were surveyed The tree map was used as part of the RPF report below.</p> <p>The assessment identifies measures to protect the integrity of the SPEA while protecting people from hazards. The protective measures include retaining coarse woody debris, removing invasive species, removing dead overhead limbs and restoration of the poor condition of the understory shrubbery with infill planting of native species.</p> <p>The RPF report found 8 trees amongst the SPEA areas that require treatment. These treatments follow the guidebook recommendations to treat to reduce the hazard but retain as best for the SPEA health. Trees to be felled will be retained as CWD. Some trees with dead branches will be recommended for spiral pruning. Several will be cut at a high stump/trunk (5-10m ht) to remove the danger but preserve the tree.</p> <p>This work will all be done by a qualified tree service company under the direction of the RPF.</p> <p>The RPF report identified measures to protect the SPEA trees during land clearing and falling outside the SPEA. It recommended a pre work meeting with the crews to identify the clearing boundaries, protection of root boles SPEA trees, supervision and monitoring during works with respect to tree protection.</p> <p>A pre-work inspection by the assessor will also be used to identify any changes that may have to be addressed in the hazards since the July 2020 hazard assessment.</p>
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2. Windthrow	
I, <u>Margaret Symon, RPF</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
a.	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
b.	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
c.	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.
<p>Windthrow assessment in this area was conducted as it was a treed site with the potential for wind damage to the SPEA.</p> <p>The property was assessed for Windthrow by a qualified assessor, Margaret Symon, RPF using the RAPR Guidebook methods in section 3.7.2 including the Windthrow Handbook for BC Forests. (Appendix 2).</p> <p>The protection for wind firmness methods for protection of the SPEA considered topping, top pruning, spiral pruning, edge feathering, coppicing and falling for CWD/Wildlife habitat. These methods are all discussed and identified for the SPEA and non SPEA areas.</p> <p>The site was assessed in two segments, north non RAA area and South side with a Riparian Area with a 10m SPEA. Specific trees in the SPEA area were surveyed and numbered for identification of any management action. The trees are shown in a map in the assessment report.</p> <p>The Windthrow assessment of the SPEA found the stand to be in a sheltered bowl/lower valley and resulted in low-moderate risk (intermediate to very wind sheltered). The trees were found to be acclimated to wind loading and other characteristics in Low -moderate results.</p> <p>The RPF noted the removal of trees outside the SPEA was not likely to impact the SPEA trees. The RPF did identify in a table individual trees that need to be treated for windthrow and hazard. The assessment found no identified Windthrow protection was required outside the SPEA. The building area outside the SPEA will be cleared following the clearing guidelines in the RPF report (Appendix 2) and in the Tree Protection Measures.</p> <p>The RPF guidelines include prior to clearing the SPEA tree protection areas will be identified and fenced. The works will be monitored by the RPF or QEP during clearing. Clearing operations will be managed to fall away and yard away from the SPEA areas. The cleared material will be removed from site. Erosion and sediment control measures such as rainfall shutdown and site drainage management from machinery ruts will be managed with coverings or tarps, compacted material or rock as required.</p> <p>A native species planting plan has also been recommended by the RPF for the SPEA area too replace trees cut but also to enhance the relatively vacant understory due to past logging and burning activities. The windthrow treatments have been identified to protect and enhance the SPEA for the characteristics of wind firmness, wildlife habitat and biodiversity of the stand.</p>	

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

3. Slope Stability

I, Stuart Crossfield, P.Geo Eng. L. (*name of qualified environmental professional*), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

The RAPR Guidebook mentions the slope stability indicators that may trigger a further assessment in section 3.7.3.

See attached Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103 Ladysmith BC by Lewkowich Engineering Associates Ltd (attached in Appendix 3).

The site has a steep north slope in a non RAA area and a moderate slope on the southwest RAA alongside Tributary 2. The assessment found no indicators of slope failure that could threaten the SPEA or other areas. They made recommendations of setbacks (generally 10m) for all of the property as depicted in design drawing cross sections.

The geotechnical construction measures include removal of unsuitable overburden (off site) to bearing material, installation of structural fill and installation of perimeter drainage and stormwater for impacts to slopes recommend identified distances keeping the development away from loading the banks. These activities have measures to protect identified in the project ESC (Appendix 4) and include removal of waste material, coverings and filtration.

The geotechnical assessment stated if the development follows their recommendations it will result in no significant surcharge loads. The engineering assessment stated no development or disturbance is being proposed on a slope face or within any SPEA.

4. Protection of Trees

I, David Clough, RP Bio (*name of qualified environmental professional*), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Tree Protection

All trees in the SPEA are to be protected from damage. The Windthrow and Hazard Tree report by Strathcona Forestry identified enhancement measures to be undertaken. These protective measures for the SPEA measures follow the Riparian Areas Guidebook section 3.7.4 recommendations include;

- do not trench through the root zone of a tree,
- establish tree setbacks; a minimum of 3.0 m from a tree root bole has been identified in the Windthrow and Hazard Tree report. This protected width will exceed the SPEA and these areas are marked and will have fencing during construction and mulch afterwards.
- Do not pave around trees
- No perimeter drainage or service pipes to encroach into the SPEA or damage tree roots
- Do not change ground level around trees with fill other than mulch
- Do not permit parking under trees
- Do not allow pollutants from construction such as concrete washings to enter the soil around trees
- Tree limb pruning must be with clean cuts
- Do remove invasive plants where found and dispose according to invasive plant protocols (i.e.

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bags)

- encourage native landscaping in all outer exposed areas
- Avoid SPEA fence post holes into tree roots
- Install protective fencing and signage along the SPEA
- Review the tree protection plan with all supervisors and ensure they pass along to all construction personnel.

Invasive plants in the area will be removed during the operation. They will be bagged, marked and delivered offsite to the district Waste handling facility. No construction is permitted in the SPEA and further measures will include protection of tree roots as specified in the RPF report. The SPEA boundary trees are located with stakes, flagging, rope line with snow fencing to be installed before construction. A tree protection fence will be constructed along the SPEA, it will be a solid wood panel fence it will be marked with signage to identify the SPEA area. The developer has also been informed in the RPF report of a list of activities that must not take place near SPEA trees.

An Environmental Monitor will be performing inspections to ensure the protection measures are followed.

On the north side away from riparian areas is a cluster of two Flowering Dogwoods growing on the edge of an old waterline trench near the proposed parking area. These trees were noted to be in poor condition by the RPF. Replacement planting in other areas is planned as an ecological feature. The RPF report includes recommendation for tree restoration and enhancement summarized below.

Tree Enhancement

As noted in the Tree Windthrow and Hazard report, all SPEA trees will be protected and enhanced. In addition; the RPF has recommended infill planting of a the southern side of the SPEA. The infill planting will primarily enhance the poorly recovered understory on approximately 50m length on the south exposure of the SPEA. This area was historically logged and burned. Restoration calls for approximately 170 native plants (including Flowering Dogwood, Indian Plum, Huckleberry, Red Osier Dogwood, Red Cedar) in the SPEA. The plant stocking will follow the BC tree replacement criteria. The planting will be monitored by the QEP to ensure they trees are selected and located in appropriate sites.

5. Encroachment

I, David Clough, RP Bio (*name of qualified environmental professional*), hereby certify that:

- a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- b. I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

During construction and after development will be designs to ensure encroachment in the SPEA does not occur. The SPEA area and waterway must have protective measures that last in perpetuity. As noted above, tree root bole protection during construction will extend at least 3m beyond the SPEA.

The building site is adjacent Tributary 2 and the SPEA around it are the sensitive areas that the Measures to protect are required. This includes the building construction envelope will be marked and isolated from the SPEA by surveyed stakes and survey posts. Construction snow fencing will be installed along the SPEA and before any work begins.

The snow fences and signage will be done prior to any work. At the beginning of construction, the QEP/Environmental Monitor will review the SPEA area and work boundaries with the workers and supervisors. The SPEA and drainages are marked on construction diagrams as well. During construction the building site will be identified and protected from encroachment with signage, site plans, snow fencing. The Erosion Sediment Control plan by LEA Ltd (Appendix 4) and Construction Environmental Protection Plan by D.R. Clough Consulting (Appendix 1) describe the above measures to protect from encroachment.

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These measures are discussed in Section 6 as well.

The RAPR guidebook section 3.7.5, the major cause of loss of riparian areas is encroachment by adjacent land owners. As the construction closes, the final landscaping (mulching, native plants) will be done on the property side of the SPEA edge. The RPF Windthrow and Hazard tree treatments to encourage retention of coarse woody debris in the SPEA that will form an additional line of protection if people get past the fence. A permanent solid wood 6 foot fence will be installed along the SPEA boundary. The fence panels will be affixed with a riparian area protection sign at 10 m intervals and at property corners where access from off property could occur. Signs will face the frontage of each building.

The fencing/encroachment plan is similar to that of the adjacent development over the last 2 years. An inspection of the riparian area along the SPEA side of that fence line shows how effective the measures are with no garbage, foot trails or damage to the SPEA.

6. Sediment and Erosion Control

I, Loius Chapdelaine P. Eng. GeoScientist (name of qualified environmental professional), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (name of developer) ;
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Sediment and erosion control are key factors to environmental protection on this project which will likely take a year to build. The site development will involve clearing trees, land to grade, building footing excavation, building construction, service installations and paving. The access involves installation of a culvert over Tributary 2. These are all activities that may harm the SPEA if measures are not taken to protect. This project has two key documents, a diagrammatic ESC as well as a listed Construction checklist

Lewkowich Engineering Associates Ltd has provided an Erosion Sediment Erosion Control Plan for this project in the Appendix. This is a construction diagram of the site with locations of the erosion and sediment control structures.

The Construction Environmental Protection Plan by D. R. Clough Consulting is a checklist of activities and materials required to be in compliance of the sediment and erosion plans. Both documents will be introduced to workers and supervisors prior to start up and used as reference documents

be reviewed with the builders and contractors (Appendix). Both documents will be used for construction Sediment and Erosion Control.

Starting off the project is the 1.5m diameter culvert being installed under an approved Water Act Notification BC Water Act; Tracking Number 100317923. The culvert was designed by Newcastle Engineering Ltd (Appendix 6). A construction environmental plan (Appendix 6 – Westmark Culvert CEMP) identified the measures to protect the waterway during construction. The measures to protect the stream include following timing windows, sediment control and supervision and monitoring.

Construction of the building, parking and driveway have measures to protect the SPEA and stream water quality . The plans cover the phases of construction from start up to final landscaping .

The measures to protect in the ESC show the location of sediment settling areas, heavy equipment access pads, spoil piles and their coverings, vegetation retention areas and sediment control fence designs. No portion of the ESC work will involve the SPEA areas. LEA Ltd. Engineers will be monitoring the site for compliance.

The RPBio QEP will monitor project for delivery of the ESC and CEMP. The monitor will review the operations with the construction personnel and supervisory staff and routinely be on site to inspect for

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compliance as well as during all milestones as noted in environmental monitoring section below.

The monitor will be on site routinely and will identify any deficiencies in operation of the ESC and CEMP and be empowered to stop work if necessary to address exceedances or deficiencies. The This project includes reporting milestones on the environmental protection on a monthly basis.

7. Stormwater Management

I, Drew Beiderwieden P.Eng. (*name of qualified environmental professional*), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Stormwater runoff from the site has potential to impact the downstream watershed with increased runoff and poor water quality from the roof tops, parking lots and developed areas if not mitigated.

This development includes a stormwater management system as well as a 1.5m culvert installation over Tributary 2.

Newcastle Engineering provided the Stormwater Management and Grading Plan (Appendix 5). The property is a 6.67 acre parcel (26,987.8 sq.m.), of which the development area is 12,520m² (includes all buildings and pavement). The RAR Guidebook 3.7.7. states that capturing the small storm runoff (less than 50% of the rainfall event that occurs once per year, on average). Using this target, the Stormwater plan meets the design for 50% annual rainfall retention as well as maintain pre-development flows up to the 10 year return period.

The measures to protect shown in the plan include; oil water separators, landscape soils, rock filled detention reservoirs below a detention tank, bioswales and infiltration.

These stormwater management areas are all located outside the SPEA areas.

All works will be inspected by the engineer and QEP monitor to ensure they are installed to function and protect the SPEA.

The Tributary 2 Culvert is being installed under an Environmental Protection Plan Lot 13 Permanent Access with the attached approved water act notification File1004801 Tracking Number 100317923 (Appendix 6.) As described in the report, the work will be done in the period of least risk June 15-Sep 15 following an environmental plan that will include removal of all temporary works and revegetate exposed soils along the stream banks to avoid sedimentation.

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8. Floodplain Concerns (highly mobile channel)	
<p>I, <u>Stuart Crossfield P.Geo. (name of qualified environmental professional)</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd (name of developer)</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.</p>	
<p>The assessment considers the flooding concerns from the SPEA such mentioned in the RAR guidebook section 3.7.8 such as the result of heavy rainfall , snow melt or jam.</p> <p>A Flood hazard was assessed in the south side adjacent the riparian area including the SPEA. The assessment identified the flood construction level (FCL). The Flood Hazard remediation has been incorporated into the design. Final design requires the engineers to inspect the bearing material during construction. The engineers assessment report is incorporating all works outside the SPEA and to result in no harm to the SPEA.</p> <p>Lewkowich Engineering Associates Ltd. assessed the floodplain in their Geotechnical report by (Appendix 3). The assessment report section 3.2 determined buildings and roadways are required to be 1.5m above HWM. The engineers note this follows the B.C. Flood Hazard Area Land Use Management Guidelines, The site may require impermeable berms and increased elevation of concrete walls but these are structures built in association with the building and outside of the SPEA.</p> <p>The results of the assessment showed Tributary 2 and 2-1 are small channels of less than 1.5m width, their banks showed no indicators of recent significant erosion or flooding.</p>	

Section 5. Environmental Monitoring

Attach text or document files explaining the monitoring regimen. Use your "return" button on your keyboard after each line. It is suggested that all documents be converted to PDF *before* inserting into the PDF version of the assessment report. Include actions required, monitoring schedule, communications plan, and requirement for a post development report.

The site has Tributary 2 and 2-1 along the south side. These streams have a 10m wide SPEA boundary above the 5 year HWM. The SPEA area trees, soil and water are to be protected from construction. A QEP will be retained as project environmental monitor (EM) by the developer. The QEP will be experienced in sediment and erosion control and will have the authority to stop work if measures in the plans are not being followed.

ESC/CEMP Documents

The ESC from LEA Engineering will provide the main drainage and sediment control structural measures expected of the builders. The Construction Environmental Management Plan prepared by D.R. Clough Consulting identifies the environmental values, and expectations of the contractors in preparation of the job. These plans follow the Develop With Care Environmental Guidelines for Urban Development 2014 and the Stream Stewardship – A guide for Planners and Developers. Land Development Guidelines 2001.

The contractors will be obligated to follow the requirements of environmental protection in a written document to be reviewed by the QEP for satisfaction it accommodates the Measures to Protect in every aspect.

Monitoring

The Environmental Monitoring will be carried out to ensure:

- All development activities remain outside the SPEA;
- All Tree Protection measures are being followed;
- Protective structures (i.e. fencing and silt barriers) are in good working order;
- Stormwater management structures are working.

The monitor will inspect and ensure these measures are being followed and the water quality is unchanged. The monitor will typically be equipped with sediment wedge, thermometer, pH kit and Conductivity/TDS meter to record site conditions.

Monitoring Visits

Besides routine inspections (daily to weekly depending on activity) the Environmental Monitor will also inspect the site during any high runoff events to ensure the structures are effective. Additional visits will occur depending on weather severity, work close to SPEA, work with pumps, work with toxic materials and any spill events as described in the Construction Management Plans.

Clearing

While clearing and grubbing is taking place the monitor will follow the guidance in the ESC, CEMP reports as well as the Tree Windthrow and Hazard Report to ensure the SPEA area, trees and water quality are protected. As described in the reports; the monitor will ensure the boundary of clearing is established as well as the machine free areas, spoil areas and erosion control structures follow the designs. The EM will identify any coarse woody debris sourced from clearing that will be available for enhancement of the SPEA as per the Tree Windthrow and Hazard Report recommendations.

Culvert Installation

The Tributary 2 culvert installation is across a low flow, non fish bearing channel that leads to Holland Creek. The CEMP for the culvert installation identifies the measures to protect the water quality and flow. The pipe will be installed with a pump bypass and use sediment control pumps and filters.

Excavation of building and services

The monitor will ensure the ESC is followed and trenches and open cuts are addressed as design.

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The use of pumps, tarps, rock as covers will be inspected for compliance and effectiveness. Any areas pumped will be dealt with on site and not into SPEA area and reviewed by the EM. During this period, local drainages, spoil piles, construction access routes all have to be maintained according to the ESC and reviewed by the EM.

After the building foundations are backfilled, inspection will be timed to key construction activities (i.e. landscape grading, paving) and based on weather conditions (i.e. more often during/after periods of high rainfall).

Landscaping and Riparian Restoration

Following the ESC and Tree reports, the EM will ensure the site is landscaped as soon as possible after completion of works (weather dependent). The riparian restoration of Coarse woody debris and native plantings identified in the Tree Windthrow and Hazard report will be done. This work will be monitored and directed by the Environmental Monitor.

Post Development

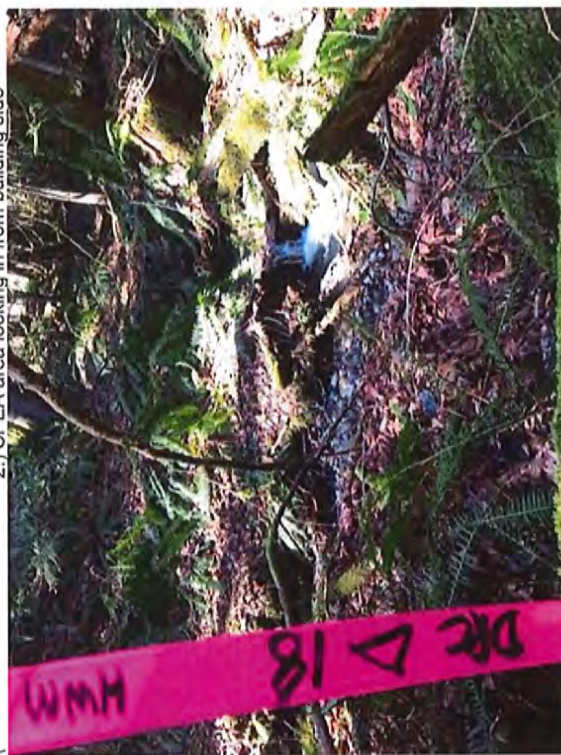
The developer has also been informed of their requirement to have a QEP complete and file a post-development report and arrangements have been made to ensure that this takes place. The post development report will report on the site whether or not the above measures were implemented, and how effective they were at protecting the integrity of the SPEA

Construction Environmental Protection Plan for Westmark Construction , Lot 13 (Appendix 1)

Section 6. Photos



1.) Stream 2 looking downstream along south east side of property
2.) SPEA area looking in from building side



3.) Stream 2-1 entering Stream 2 is located away from development area.



4.) Building area - has been historically logged and cleared for Hydro Line

Section 7. Professional Opinion

Qualified Environmental Professional opinion on the development proposal's riparian assessment.

Date | Sep. 7, 2020

1. I/We David Clough, RP Bio, Drew Beiderwieden P.Eng, Louis Chapdelaine, P. Geo, Margaret Symon RPF and Stuart Crossfield P.Geo

Please list name(s) of qualified environmental professional(s) and their professional designation that are involved in assessment.)

hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- b) I am/We are qualified to carry out the assessment of the proposal made by the developer 1223434 BC Ltd (name of developer), which proposal is described in section 3 of this Assessment Report (the "development proposal");
- c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
- d) In carrying out my/our assessment of the development proposal, I have/We have followed the specifications of the Riparian Areas Protection Regulation and assessment methodology set out in the minister's manual; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

- a) ☐ the site of the proposed development is subject to undue hardship, (if applicable, indicate N/A otherwise) and
- b) ☒ the proposed development will meet the **riparian protection standard** if the development proceeds as proposed in the report and complies with the measures, if any, recommended in the report.

[NOTE: "Qualified Environmental Professional" means an individual as described in section 21 of the Riparian Areas Protection Regulation.]

List of Appendices

- 1.) Construction Environmental Protection Plan, Westmark Construction by D.R. Clough Consulting, April 15, 2020
- 2.) Lot 13, Rollie Rose Place, Ladysmith, Windthrow and Hazard Tree Assessment, Strathcona Forestry Consulting. August 26, 2020
- 3.) Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103, by Lewkowich Engineering Associates Ltd. August 25, 2020.
- 4.) Lewkowich Engineering Associates Ltd Sediment and Erosion Control plan. August 25, 2020
- 5.) Stormwater Management Plan - Newcastle Engineering Ltd. Holland Creek Lot 13 Diagram 0127-028-100 DP REV07 Aug 31, 2020
- 6.) Culvert Installation - Construction Environmental Protection Plan and Water Act Notification Approval.

Appendix 1 - Construction Environmental Protection Plan, Westmark Construction by D.R. Clough Consulting, April 15, 2020

Construction Environmental Protection Plan

Prepared For:

**WESTMARK CONSTRUCTION LTD
LOT 13**

Prepared By:

D.R. Clough Consulting
6966 Leland Road
Lantzville, B.C. V0R 2H0
office 250-390-2901 mobile 250-714-5416

April 15, 2020

Westmark_Lot13_CEMP2020.docx

1

Introduction:

This document is a Construction Environmental Management Plan (CEMP) to protect the Riparian Areas identified in Lot 13. The CEMP identifies the ecological values of the site and instructs the owners on the expected protection measures.

The following plan must be adhered to as required to follow the *Bylaws of the Town of Ladysmith*, the *Riparian Areas Regulation*, the *Fish Protection Act* and the *Fisheries Act*. The CEMP has been developed by a qualified environmental professional (QEP) and the developer whom share the responsibility of monitoring the protection of the environment during development. There will be different contractors on the property as the site goes through the phases of development from clearing to completion. Every contractor involved in these phases must review and follow the CEMP. Contractors will be responsible for having their own environmental protection plans for their phases of work. Guidance on sediment and erosion control was taken from the BC Government publication; "*Develop With Care – Environmental Guidelines for Urban and Rural Land Development in B.C. Best Management*"¹.

Specific Environmental concerns are:

1. Introduction of silt and other deleterious substances into the sensitive off channels and the associated impacts on water quality and fish habitat downstream of the construction site.
2. Containment of a hydrocarbon spill (e.g., oil, fuel) n oil and/or fuel spill during construction.

A construction environmental completion report to RAR BC is required and will be completed by the QEP on behalf of developer after the building has been completed and the lot landscaped, to confirm there has been no impact in the riparian areas.

Environmental Protection Areas

The property is located on the south side of Holland Creek watershed situated directly upslope of Holland Creek Trail Park. The riparian areas near or in Lot 13;

- In Lot 13: Tributary 2 flows west to east along the south side of the property. It has no fish due to a water fall entry into Holland Creek as well as seasonal flow. This is the larger channel on the property and has a 10m SPEA.
- In Lot 13: Tributary 2C: This tributary is further west along Rollie Rose Drive originating in the Hydro Right of way. It joins Tributary 2 on Lot 13. It has a 10m SPEA.
- Heart Creek lies just north and west of Lot 13 development.
- Holland Creek is north of the property, It is the catchment for these tributaries. It has a year round salmon and trout population.

¹ <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-standards-and-guidance/best-management-practices/develop-with-care>

Project Contacts

Jacquie Kinnersley, Project Manager, Westmark Construction
250-713-6964 mobile, jacquie@westmarkconstruction.ca

David Clough RPBio, Environmental QEP: D.R. Clough Consulting,
mobile: 250-714-5416 drclough@shaw.ca

Drew Beiderwieden, P.Eng. Project Engineer, Newcastle Engineering Ltd.
Mobile (250) 616-8075
drew.beiderwieden@newcastleengineering.com

Construction Environmental Protection

There are legal requirements of the property owner to protect the Streamside Protection and Enhancement Area (SPEA) of the Riparian Area.

1. Boundary Signage

- 1.1 The SPEA signs will be installed as per Town of Ladysmith standards.
- 1.2 The Riparian Area boundary (SPEA) must be flagged, marked with survey stakes and noted on all construction plans. The signage will be hung at eye level along approximately 20m intervals.
- 1.3 The SPEA signs will be installed as per Town of Ladysmith standards.

2. Encroachment

- 2.1 The riparian areas (SPEA's) must not be encroached, altered or impacted by construction.
- 2.2 Construction locations within 5m of riparian areas must have snow fencing or sediment fencing installed along the riparian areas.
- 2.3 There will be no storage of materials, burning, garbage or trails in the riparian areas.

3. Construction Operations

- 3.1 The property owner must ensure that all contractors (e.g., heavy equipment operators, framers, roofers, painters, landscapers) working on the property must follow this protection plan.
- 3.2 A job safety and environmental pre-work meeting will be done to ensure that all workers understand the objectives and have clear written plans on their roles and responsibilities. Everyone will be made aware of the site environmental liabilities and rules. Environmentally sensitive areas must first be identified and flagged, fenced or noted to construction crew at each site. There will be no disturbance of fish habitat or addition of any deleterious substance into their habitat.
- 3.3 Monitoring – Site environmental monitoring at the site will be conducted to ensure important habitat is not disturbed. This is critical during the dewatering process and heavy rain events. The monitors' role will be to identify sensitive areas to construction crews, advise and record procedures. They will also be empowered to stop work procedures and direct environmental protection measures to the site contractors. All sensitive work will be directed by on-site professionals and qualified personnel.
- 3.4 The property owner and contractors must contain all works to the building area. They are not to use adjacent properties, roadways or public areas for construction material storage or sediment treatment.
- 3.5 Wet weather shutdown must occur during earthworks and other activities that could result in erosion or sediment runoff. The activity must be stopped, and protective actions taken.

- 3.6 The property owner and contractors must keep building site clean to avoid attracting wildlife or littering other areas.
- 3.7 Wildlife attractants (e.g., food waste) must be stored in closed bins and moved offsite as soon as possible.

4. Heavy Equipment Operation

- 4.1 Spill kits must be located on each piece of heavy equipment. Spills of any kind must be reported to the environmental monitor.
- 4.2 Machinery must be stored and fueled away from the riparian areas, preferably on gravel pads to avoid rutting.
- 4.3 Trees and tree roots within the riparian areas must not be damaged. Contractors using heavy equipment within 5m of riparian areas must apply a root protection layer of mulch or fill or use membrane such as blast mats.
- 4.4 Disturbance must be minimized by grooming and compacting rutted and exposed surfaces.

5. Erosion Control

- 5.1 Erosion control will be reviewed and prescribed by a professional engineer. Their plan will follow the protection of elements in this CEMP including:
- 5.2 Runoff in the work site must be controlled and managed on site.
- 5.3 Erosion control methods for site runoff may include
 - sediment fences
 - gravel swales
 - straw bales
 - mulch
 - soil pits
 - diversion and sump pumps
- 5.4 Special covers will be needed for any spoil piles such as poly sheeting or tarps.

6. Landscaping

- 6.1 The exposed soil areas of the lot will require erosion control at all times.
- 6.2 The final landscaping prescription is open to the property owners discretion as long as there is no sediment runoff.
- 6.3 We encourage low-water use designs incorporating native plants for final surfaces.

7. Reporting – There will be routine environmental monitoring reports as well as a RAR completion report. There may also be reports as requested by agencies on Water Act, Fisheries Act or Wildlife Act protective measures.

The contractor will have on-site at all time the following items to deal with activities on sensitive areas, erosion, sediment and drainage emergency situations that may arise during the course of construction. All materials should be scaled to scope of work anticipated, below are startup recommendations for each site, to be re-supplied as used up.

- 1. 50 m of 20 cm diameter oil containment boom
- 2. 200 x 2litre absorbent pads

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3. Straw bales and or truck load bark mulch or clean gravel
4. 1000 sq ft Tarps or rolls of poly sheeting
5. One industrial spill kit on each piece of heavy equipment
6. Water Pumps/hoses for water bypass and sump removal.

General:

1. Water quality adjacent and within the construction area will be maintained by installing mitigative measures identified in this document or those determined by the Environmental Monitor. Water turbidity will be measured routinely with environmental inspections by the monitor.
2. All areas disturbed during construction will be covered with hydroseed as per the contract documents.

Personnel:

All personnel (including sub-contractors) on the project will be made aware of the Sediment Control Plan and what is required with regards to compliance with the plan



David R. Clough, RPBio

Appendix 1 – Erosion and Sediment Control Procedures (BC Land development Guidelines)

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5

Erosion and Sediment Control

Refer to the Land Development Guidelines for more detail

Erosion and Sediment Control

Land development frequently creates increased soil erosion. Soil exposed during clearing, grading, and material stockpiling operations can be easily transported into streams, destroying their value as fish habitat. The objective of erosion and sediment control measures is to stabilize disturbed soils and manage surface runoff to intercept sediments before they leave the site.

Sediment Control During Site Development

During the construction process, it is necessary to plan, and implement, sediment control measures to ensure that any aquatic habitat which may be affected, onsite or downstream from development activities, is protected from sediment contamination.

Match existing site conditions.

- Design roads, utilities, and buildings to minimize site coverage

- Restrict excavation so that only areas directly affected by development activities are disrupted

- Consider soil conditions and topography in site design and layout

- Limit construction activities in areas of the site with difficult soil conditions.

Schedule earthworks to minimize erosion.

- Plan construction and site clearing activities during the dry months of the year

- Stage development to allow for revegetation to establish prior to the end of the growing season

- Halt earthworks and heavy construction during periods of heavy rainfall

- Restrict equipment access outside of work areas.



Revegetate disturbed slopes as soon as possible after construction to reduce soil loss and erosion.

Retain vegetation.

- Minimize clearing rights-of-way and stripping for building sites

- Avoid clearing and grubbing on steep slopes or erosive soils

- Consider vegetation replacement cost when setting clearing and grubbing limits

- Provide substantial protective fencing at limits of clearing and maintain it throughout the construction process



Impacts of Erosion on Aquatic Habitat



- Sediment settling on spawning areas smothers eggs and kills salmonid alevin.
- Sediment infills pools and riffles which reduces the availability of rearing habitat.
- Suspended sediment clogs and abrades fish gills.
- Sediment causes food shortages by smothering or displacing aquatic organisms.
- Sediment deposition results in the loss of productive habitat areas.

Revegetate disturbed soil.

- Seed and revegetate cut and fill slopes and disturbed natural slopes

- Use mulch and organic stabilizers to minimize erosion until vegetation is established

- Cover temporary soil stockpiles with polyethylene sheeting or tarps

Divert runoff away from exposed soils.

- Direct overland flows away from downslope development areas.

- Isolate cleared and grubbed areas with swales to redirect runoff.

- Retain natural vegetation as much as possible to act as buffers



Hydroseeding with mulch, tackifier and grass seed provides a quick cover to exposed soils. Plan work so that seed has time to germinate, and grow before the end of the growing season.

Erosion and Sediment Control
Refer to the Land Development Guidelines for more detail.



Long slopes or swales should be broken up with intermediate breaks to slow runoff and reduce erosive energy.

Minimize steepness of slopes.

- Plan to incorporate benches and breaks into the design of very long slopes.

Minimize runoff velocity.

- Minimize the gradient for swales and ditches to limit the erosive energy.
- Construct interceptor ditches with low gradients to minimize erosive energy.
- Line steep ditches with filter fabric, rip rap, or polyethylene.

Design for increased runoff.

- Design ditch for post-development flows.
- Construct non-erodible ditches, and inlet/outlet structures.



Silt fences are used to slow water movement and allow suspended sediment settle.

Sediment Control Facilities

Where site conditions make it difficult to control erosion completely, and where sediment will affect sensitive fish habitat, it will be necessary to construct and maintain sediment control structures. Such structures should be considered as a last line of defense, and consideration should be given to ensure that these facilities are well maintained, and functioning properly at all times.

Sediment control structures.

- Use sediment traps and silt fences as required to control transportation of sediment.
- Construct sediment control ponds to trap settled sediments while discharging water safely off the development site.

Inspect and maintain erosion and sediment control structures.

- Develop a maintenance inspection schedule as part of the site development plan.
- Stockpile sediment control materials onsite for quick access.



Sediment ponds with raised outflows trap sediment and discharge water safely offsite. The pond provides a convenient site to allow sediment removal during dry periods.



Interceptor ditches such as the ones shown in this photo redirect runoff off of steep slopes.



Sandbags have been placed to direct runoff into sediment ponds prior to entering the stormwater system.



This slope has been covered with plastic tarping and runoff is directed through intermediate ditches to reduce erosion during construction.

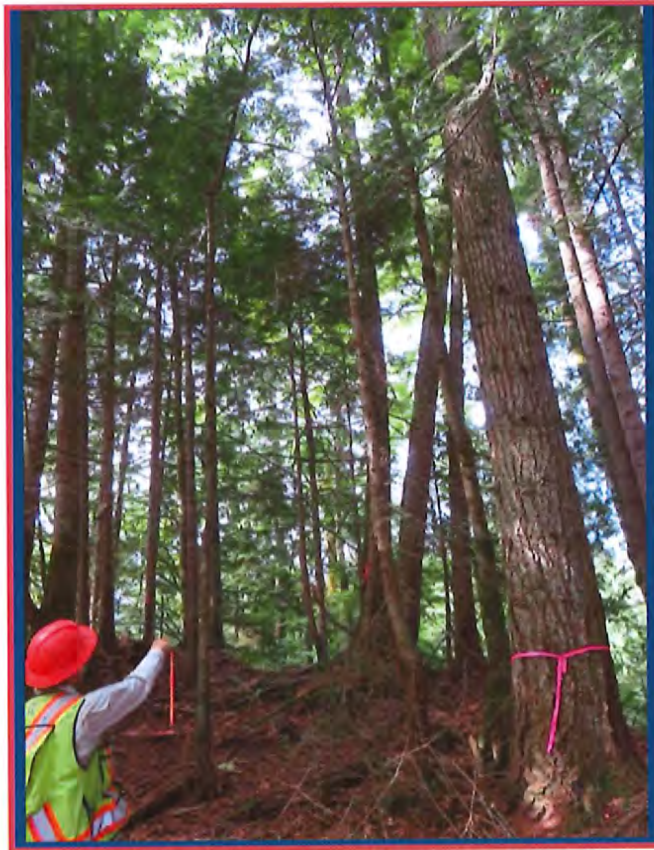


This drain outlet is lined with rip rap to provide erosion control during periods of high flow when the potential for erosion is greatest.

**Appendix 2.) Lot 13, Rollie Rose Place, Ladysmith, Windthrow and Hazard Tree
Assessment, Strathcona Forestry Consulting. August 26, 2020**



Strathcona Forestry Consulting



Lot 13 Rollie Rose Place, Ladysmith

Windthrow & Hazard Tree Assessment

Prepared for: Westmark Construction Ltd.
c/o Project Manager Jacquie Kinnersley
#1-2535 McCullough Rd
Nanaimo, BC V9S 4M9

Prepared by: Strathcona Forestry Consulting
PO Box 387 Stn Mn
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26 August 2020

Executive Summary

At the request of D.R. Clough Consulting, on behalf of the developer, Westmark Construction Ltd., Strathcona Forestry Consulting was retained to conduct a windthrow and hazard tree assessment at Holland Creek Lot 13 (Rollie Rose Place) in the Town of Ladysmith. The subject property, which borders the tributary system of Holland Creek, is being developed by Westmark Construction Ltd. for a multi-unit residence. A Riparian Area (RA) Assessment conducted by D.R. Clough Consulting established a 10 m SPEA at the southern portion of the lot. A Tree Management Plan in June 2020 provided an inventory of trees along the RA line and also along the lot perimeter. The purpose of this report is to determine whether there are windthrow concerns as a result of the proposed development, and, where necessary, to prescribe windthrow protection measures.

Two edge segments were assessed: the southern perimeter (including the SPEA boundary), and the northern perimeter (no SPEA on north side). Windthrow risk at both edge segments was rated LOW-MODERATE. Likelihood of windthrow was rated LOW-MODERATE at the two edge segments. Based on levels of windthrow risk, minor treatment levels are recommended, consisting of a combination of spiral pruning (to reduce heavy crowns which can increase susceptibility of trees to blowdown) and coppicing (to remove hazardous upper limbs while increasing low lateral branching) for selected trees, and felling of a small number of trees which pose a safety hazard (with options for high stumping and/or retention of coarse woody debris). High stumping retains perching and existing nesting sites, while also providing opportunities for installing nesting boxes for birds and bats.

Treatment to prevent windthrow should follow standard strategies to minimize disturbance to rooting layers during clearing and construction, including not creating windthrow, protecting trees in the SPEA (especially along the SPEA boundary), and retaining wildlife trees in the SPEA. Measures to avoid disturbance to existing trees will decrease potential for additional hazard trees, enhance biodiversity, and help to maintain a carbon sink.

If the measures identified in this report to protect the integrity of the SPEA and surrounding riparian habitat are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes downstream of the riparian assessment area. Recommended strategies will enhance local biodiversity of both riparian and upland areas. Additionally, if the recommendations contained in this report are followed during planning and construction, risks associated with windthrow and hazard trees can be mitigated to ensure the safety of the intended development.

Introduction

At the request D.R. Clough Consulting, on behalf of the developer, Westmark Construction Ltd., Strathcona Forestry Consulting was retained to conduct a windthrow and hazard tree assessment at Holland Creek Lot 13 (Rollie Rose Place) in the Town of Ladysmith. The subject property, which borders two tributaries of Holland Creek, is being developed by Westmark Construction Ltd. for a multi-unit residence. A Riparian Area (RA) Assessment conducted by D.R. Clough Consulting established a SPEA 10 metres (HD) Horizontal Distance from the 5 year HWM (High Water Mark) at the stream on the southern portion of the lot. This report was prepared to determine whether there are windthrow concerns as a result of the proposed development, and, where necessary, to prescribe windthrow protection measures. This report also discusses the results of tree risk assessment along the perimeter of the entire lot, and outlines an appropriate treatment plan. The intent is to maintain tree cover where safely possible in conjunction with the planned development.

Riparian Areas Regulation

The Riparian Areas Regulation (RAR) defines “stream” to encompass any watercourse – natural or human-made – that provides fish habitat, contains water on a perennial or seasonal basis, is scoured by water or contains observable deposits of mineral alluvium, and has a continuous channel bed, including a watercourse that is obscured by overhanging or bridging vegetation or soil mats. A watercourse may not itself be inhabited by fish, but may provide water, food and nutrients to streams that do support fish.

Under the Riparian Areas Regulation, a proponent must prepare a Riparian Assessment report in support of their application to local government for development approval if development is proposed within 30 m of a stream or the top of a ravine bank of a stream. The Assessment Report must be prepared by a Qualified Environmental Professional (or group of professionals) who understands the interaction of various features, functions, and conditions of riparian areas. The RAR Assessment Report prescribes the specific requirements of the SPEA (streamside protection and enhancement area) and ZOS (zone of sensitivity). The width of the SPEA, determined through appropriate methodology, outlines required measures to maintain the integrity

of the SPEA. The ZOS, determined through detailed assessment procedures under the RAR, identifies a zone of sensitivity adjacent to a waterbody within which disturbance is restricted, i.e., an undisturbed riparian buffer.

The effects of the biophysical processes through which riparian vegetation influences in stream conditions vary continuously with buffer width. Under the RAR, a fixed buffer width is generally selected in order to maintain in stream conditions similar to those found in undisturbed forests, and/or to target specific species such as salmonid fishes.

Specific experts (i.e., geotechnical advisors, windthrow specialists) may be called on to provide their relative expertise on site characteristics that may pose specific problems or concerns.

The Riparian Assessment report for the proposal must demonstrate appropriate assessment methods have been followed, and must certify:

- I. if the development is implemented as proposed there will be no harmful alteration, disruption, or destruction of natural features, functions, and conditions that support fish life processes in the riparian assessment area, or
- II. if the streamside protection and enhancement areas identified in the report are protected from the development and the measures identified in the report as necessary to protect the integrity of those areas from the effects of the development are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area

Local Watercourses

Stream 2-2 flows southeast along the southern portion of Lot 13 before joining Stream 2-1, which turns northeast into a ravine below the eastern portion of the lot, draining into Holland Creek approximately 200 m to the northeast. D.R. Clough Consulting determined the watercourse does not support fish, nor does it provide domestic water use.

Description of the Site

Lot 13 is located on the west side of Rollie Rose Place, approximately 1 km south of the centre of Ladysmith town centre, and 0.5 km west of the TransCanada Highway (Highway 1). The lot is bordered by a BC Hydro right-of-way on the northwest and new single family residential development to the south and west. Wooded municipal lands on the northeast slope down to Holland Creek and the Holland Creek Trail.

Previous human activities over the last century were evidenced by a network of old skid trails, a deeply excavated channel that once housed a water pipeline for a now defunct timber mill, an old curing rack for deer observed high in a tree, and the discovery of partially buried choker cables and an old telegraph pole.

Biogeoclimatic Classification

The subject site is classified in the Coastal Douglas-fir Moist Maritime Subzone (CDFmm). The CDFmm has warm dry summers and moist mild winters. Prevailing winds in winter are generally southwesterly (to southeasterly). Ecosystems in the assessed area were classified as CDFmm_04/01.

Vegetation

The lot is forested with a mix of second- and third-growth forest cover. Older age class trees with larger girths and taller heights are found in the southern portion of the lot, although there are scattered large trees throughout the property. Forest cover is predominately coniferous - mainly Douglas-fir (*Pseudotsuga heterophylla*) and western redcedar (*Thuja plicata*), with lesser amounts of grand fir (*Abies grandis*), western hemlock (*Tsuga heterophylla*), together with a smaller deciduous component - big leaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*), with scattered Pacific dogwood (*Cornus nuttallii*) and bushy clumps of wild cherry (*Prunus emarginata*).

The understorey is characterized by a fairly continuous shrub layer (salal, sword fern, red huckleberry) and a moderately continuous moss layer (*Hylocomium splendens*, *Kindbergia oregana*, *Rhytidiadelphus triquetus*).

Observations of historical blowdown indicate trees in the local area are fairly windfirm. One large, mature downed hemlock in the southwestern portion of the property likely blew down a few years ago due to shallow rooting.

As part of the new Holland Creek development, forest cover was removed along Rollie Rose Road within the last two years, exposing the northwestern portion of the property to winds. Field observation did not indicate an increase in wind damage and/or blowdown along the edges of Lot 13.

Soils in the area developed in deep, sandy gravelly fluvial, fluvioglacial and/or marine deposits. Soils are rapidly drained. Very gravelly to gravelly loamy sand is the usual texture in the upper horizons; subsoils consist of very gravelly loamy and or very gravelly sand. The coarse fragment content is at least 35% and usually exceeds 50% by volume. A weak to moderate cemented layer is generally present at depths between 50 and 90 cm; relatively unweathered parent material is encountered at depths between 1.5 and 2 m. The usual taxonomic classification is Orthic Dystric Brunisol; the lesser common soil is a Duric Dystric Brunisol (MoE Technical Report 17).



Soil Profile Lot 13. The site is characterized by well-drained gravelly sandy soils.

Proposed Development

Westmark Construction Ltd. is planning to develop the property with a multi-family L-shaped building closely aligning with the curvature of the stream systems along the southern boundary of Lot 13 (see Map Appendix1). The driveway access from Rollie Rose Place will wind around the northern portion of the lot to a parking lot on the northwestern side of the lot, adjacent to the hydro right-of-way.

A temporary bridge currently accessing the property is to be replaced during the fish window this year with a concrete culvert.

Site Visit

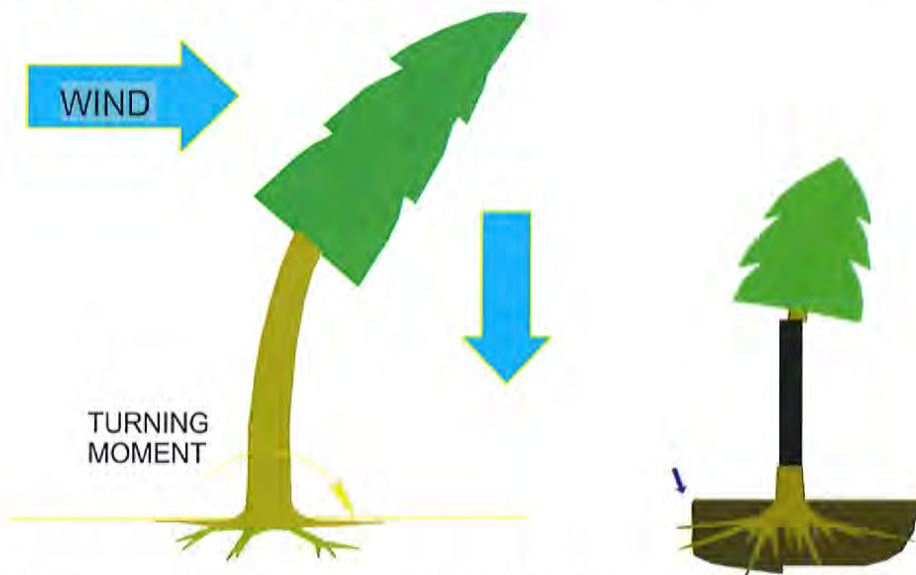
Field work took place on June 25, 2020 with Dave Clough. At the time of the assessment, the High Water Mark (HWM) of the watercourse(s) and SPEA were flagged. The building envelope of the proposed new multi-family residence was marked with survey sticks. The property boundary was marked with survey stakes and/or flagging. Assessed trees were flagged and numbered (see Site Plan map Appendix 1).

Windthrow – Background Discussion

Windthrow (Tree fall) – tree uprooting or stem breakage that results when wind loads exceed stem or anchorage strength.

The purpose of windthrow assessment is to determine whether there are windthrow concerns as a result of proposed development and prescribe windthrow protection measures outside of the SPEA.

In coastal BC, the most common cause of stand damaging winds is the western movement of extra-tropical low pressure systems from the Pacific Ocean. These storms produce counter-clockwise rotating regional-scale wind fields that interact with local geography and terrain. Pacific low pressure systems are strongest during the coolest months (i.e. October to April) when they are accompanied by gusty winds and high rainfall. The long duration of these storms and the high rainfall can be significant factors in windthrow risk because root-soil cohesion breaks down as trees rock back and forth in wet soil. In routine events, local geography and terrain produce predictable differences in local wind speeds. Catastrophic damage patterns during intense systems are less dependent on local terrain.



During strong Pacific low systems with wind and heavy rains, root-soil cohesion breaks down as trees rock back and forth in wet soil (left). Intense winds can cause boles to “snap” (right).

The other large scale weather systems which can cause stand damaging winds are arctic ridges of high pressure. These cold, dry systems occasionally move south over the interior of BC and outward toward the coast. Strong outflow winds through major valleys are associated with these winter systems, particularly when there is an offshore low pressure system and therefore a steep differential gradient in surface air pressure (high to low).

In the summer, local wind effects are created where strong differences in air temperature develop. On-shore winds develop in the afternoon as the land heats up relative to the ocean.

Windthrow Assessment

Windthrow hazard and likelihood assessment is conducted on those areas in the stand (edge segments) that have a risk to values or objectives as a result of windthrow.

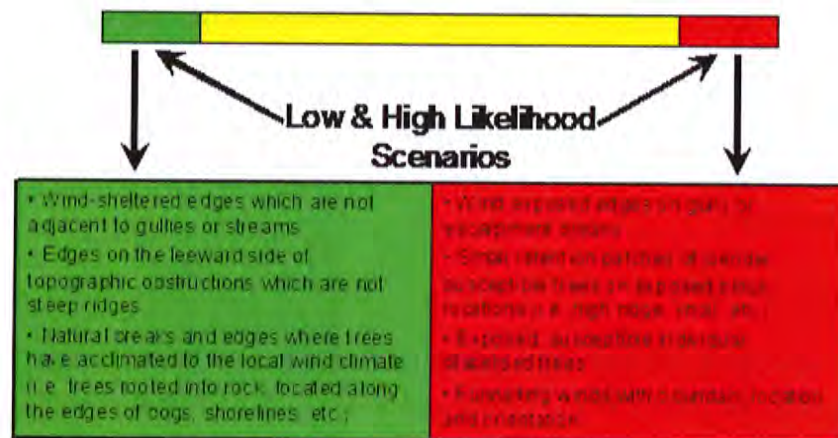
1. A set of diagnostic questions is used to assess various hazards for windthrow.
2. Three hazard components (topographic, stand and soil) are assessed and then brought together in a ranking table to provide an overall biophysical hazard for windthrow. The three components take into account location, and characteristics of the stand and soil median - all factors critical to assess the inherent hazard of the area for windthrow – i.e., the biophysical hazard.

Biophysical Hazard – the intrinsic stability of the stand in its pre-treatment condition. The inherent ability to resist wind damage is the cumulative result of topographic, soils and stand features interacting as the stand develops with endemic windloading.

3. The biophysical hazard is then used along with an estimate of treatment hazard (activity associated with development) to rank the likelihood of windthrow occurring on the edge segment.

Treatment Hazard – is the way in which a particular treatment increases or decreases the windloading or wind resistance of trees. A simple example of treatment hazard is the influence of land clearing to expose new edges. Treatment hazard can be reduced by further treatments such as pruning, or topping.

Treatment hazard ranges from low to high depending on how or where land clearing will be applied. The two working together give an indication of how likely windthrow will be on the edge or within a retained forest stand, (i.e., the likelihood of windthrow).



4. Once the likelihood of windthrow is determined, consequences are considered to provide an assessment of windthrow risk. Windthrow risk is the combination of the likelihood of windthrow and the potential consequences of that windthrow. Windthrow risk reflects the risk associated with the site plan, considering the likelihood of windthrow against limits (thresholds) that are set based on consequences.

Windthrow risk is not equal to the likelihood of windthrow. If considerable windthrow is expected, but there are no consequences, there is little risk.

Windthrow impact definitions

- *Windthrow Likelihood* - is the expected level of damage from endemic winds. It combines Biophysical Hazard and Treatment Hazard.
- *Windthrow Consequences* - is the probable level of impact on specific management objectives, or sensitivity of those objectives, if the expected level of windthrow occurs.
- *Windthrow Risk* - is the potential for a negative consequence from windthrow caused by endemic winds. It is the combination of Windthrow Likelihood and Consequence.

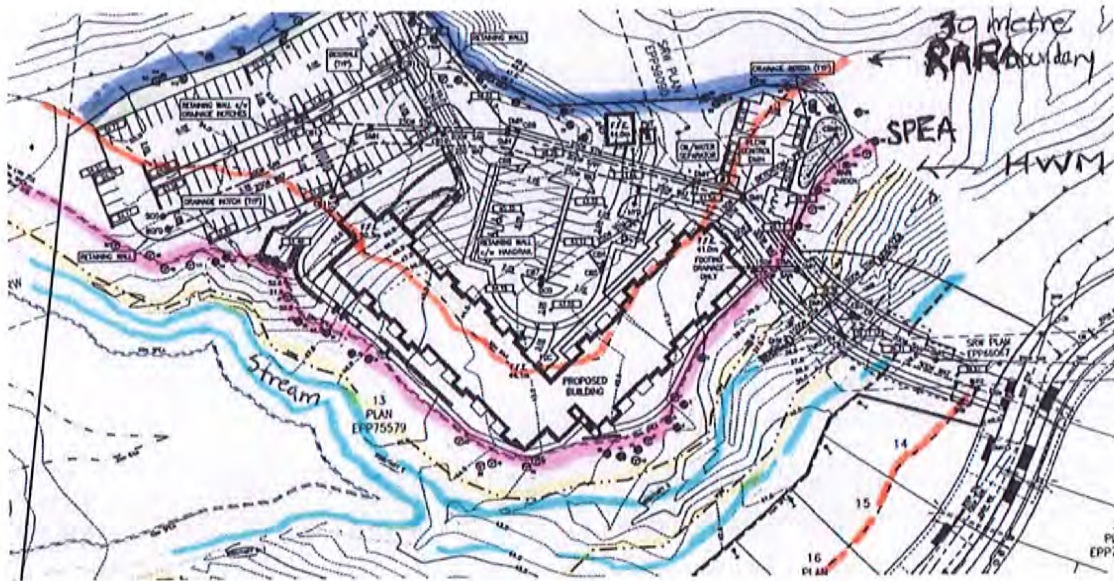
Windthrow treatment, when prescribed, is necessary to retain and/or enhance riparian habitat and reduce hazard (to workers, residents, visitors, structures).

FIELD ASSESSMENT

Two edge segments were examined at Lot 13:

- Edge segment #1 encompassed the southern perimeter of the lot, including the SPEA boundary
- Edge segment #2 incorporated the remaining perimeter.

1. Edge segment #1: southern perimeter (including SPEA boundary-outlined below in pink)



Wind force Indicators:

Biophysical Hazard -

Topographic Exposure: Is this a windy area?

Site occupies bowl / lower valley. Sheltering features of local topography (low hills to south and west) decrease windiness; the hills are sufficiently high to deflect the general wind profile

Topographic Hazard Class: Moderate (intermediate) to Low (very wind sheltered)

Stand stability: Are trees acclimated to wind loading?

Trees are generally acclimated to wind loading. While this edge segment is part of a natural stand edge (streams), land clearing over the last year to the south has exposed stand with minimal blowdown observed. Multi-layered stand has moderate density.

Tree-level indicators of acclimation: Dominants and codominants generally have thick stems with long live crowns; high degree of taper

Stand Hazard Class: Moderate (neutral) to Low (very stable)

Soil Anchorage: Is root anchoring restricted by an impeding layer, low strength soil, or poor drainage? Is this a closed-canopied stand? Is there evidence of blowdown?

Root anchorage not restricted by an impeding layer. Well-drained soils in the area have moderate to high soil strength. Multi-storied stand.

Soil Hazard Class: Moderate (neutral) to Low (unrestricted)

Treatment Hazard: Will the proposed disturbance substantially increase wind loading on trees along the stand edge or retained trees?

Boundary does not face directly toward winds. Boundary not exposed to multiple wind directions.

Treatment Hazard Class: Moderate (moderate increase)

WINDTHROW LIKELIHOOD EVALUATION						
Biophysical Hazard = Topographic, Stand and Soil Hazards						
Windthrow Likelihood = Biophysical Hazard + Treatment Hazard						
If Treatment Risk is 'None,' then Windthrow Likelihood is 'None.'						
	Very High	High	Moderate	Low	Very Low	None
Topographic Hazard		3	2	1	-	-
Stand Hazard		3	2	1	-	-
Soil Hazard		2	1	0	-	-
Biophysical Hazard	8	6-7	4-5	<4	-	-
Treatment Hazard		6	4	2	-	
Windthrow Likelihood	14	12-13	10-11	6-9	<6	

Windthrow Risk Category

What will be the consequences for safety and liabilities?

VERY HIGH – very negative consequences	HIGH – negative consequences
MODERATE – slightly negative consequences	LOW – minimal to no consequences

LIKELIHOOD of EXCEEDING WINDTHROW THRESHOLDS:	
Likelihood categories	
Nil –	Both assessed likelihood for penetration and amount are not close to thresholds
Low –	Assessed likelihood does not exceed either thresholds but may be close
Mod –	Assessed likelihood somewhat exceeds amount threshold, but does not seem to exceed penetration threshold (where applicable)
High – exceed	Assessed likelihood considerably exceeds amount threshold, and/or seems to exceed penetration thresholds by a small amount (if applicable)
Very High –	Assessed likelihood considerably exceeds penetration threshold, as well as amount threshold (if both apply)
Estimate likelihood of exceeding windthrow thresholds: Low-Mod	

WINDTHROW RISK ASSESSMENT
DIAGNOSTIC QUESTION: If the thresholds for windthrow are exceeded as expected,

what will be the consequences for development values, safety, liabilities and riparian management concerns?

Risk = ☐ Very High (very negative) ☐ High (negative) ☒ Moderate (slightly negative) ☒ Low (minimal to no consequences)

Generally, Very High, or High risk situations must be addressed to lower risk. A Moderate risk situation may also need to be addressed with mitigation measures, depending on consequences.

Hazard Tree Assessment:

Tree #	SPEA Tree	Species*	Description and Recommended Treatment
5	N	Mb	Maple with 3 stems (2 dead). Remove (hazard).
13	Y	Mb	Maple with split stem. Remove dead stem. Coppice live stem at 5-7 m to remove dead/dangerous high branches and to encourage low lateral branching for shading near stream (cut at 6 m height).
31, 32	Y	Cw	Both cedars > 100 cm dbh, inside RAR line. Retain. Spiral prune to reduce "sail" and remove dead branches.
33	Y on line	Cw	Class 3 snag. Retain – coppice at 5 m to retain "high" stump for wildlife purposes (i.e., cavity excavators)
38	N	Bg	Class 4 snag. Remove (hazard tree)
Beside 39	Y	Mb	Class 5 Maple snag beside #39 Mb. Coppice at approx. 10 m – high wildlife use (i.e., cavity nesters, sapsuckers)
41	Y	Mb	Leaning to creek. 35 m tall. Retain.
42	N	Cw	20 cm tree outside RAR line. Scheduled for removal in conjunction with development
46	Y		Class 5 snag. Retain
47	Y	Cw	Multiple tops, try to keep. Flag prior to clearing/construction
49	Y	Fd	Class 3 snag. On RAR line. Remove (hazard). Consider retaining CWD for salamanders.
51	N	Mb	Multi-stemmed. Coppice stems at 5 m to retain shading. This tree is at corner of property (adj. hydro right-of-way)

*see Tree Species abbreviation list Appendix 1

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches throughout the crown	13,32
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are cut to reduce height and branching; live stem is retained	13, 51
Remove / High stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	5, 33, 38, 39, 42, 49

2. Edge segment #2: Northern perimeters (no RAR on north side)



Northern perimeter of Lot 13 (boundary outlined in purple)
(N.B. North RAA line is off property)

Wind force Indicators:

Biophysical Hazard -

Topographic Exposure: Is this a windy area?

General site occupies bowl / lower valley. Sheltering features of local topography (low hills to south and west) decrease windiness; the hills are sufficiently high to deflect the general wind profile. Boundary occupies edge of clearing (Hydro RoW) to northwest, and TOB for remainder.

Topographic Hazard Class: Moderate (intermediate) to Low (very wind sheltered)

Stand stability: Are trees acclimated to wind loading?

Trees are generally acclimated to wind loading. This edge segment has been acclimated to wind loading through exposure from cleared Hydro RoW; remainder of boundary is acclimated to wind as a result of position at TOB. Multi-layered stand has moderate density.

Tree-level indicators of acclimation: Dominants and codominants generally have thick stems with long live crowns; high degree of taper

Stand Hazard Class: Moderate (neutral) to Low (very stable)

Soil Anchorage: Is root anchoring restricted by an impeding layer, low strength soil, or poor drainage? Is this a closed-canopied stand?

Root anchorage not restricted by an impeding layer. Well-drained soils in the area have moderate to high soil strength. Multi-storied stand.

Soil Hazard Class: Moderate (neutral) to Low (unrestricted)

Treatment Hazard: Will the proposed disturbance substantially increase wind loading on trees along the stand edge or retained trees?

Boundary does not face directly toward winds. Boundary not exposed to multiple wind directions.

Treatment Hazard Class: Moderate (moderate increase)

WINDTHROW LIKELIHOOD EVALUATION						
Biophysical Hazard = Topographic, Stand and Soil Hazards						
Windthrow Likelihood = Biophysical Hazard + Treatment Hazard						
If Treatment Risk is 'None,' then Windthrow Likelihood is 'None.'						
	Very High	High	Moderate	Low	Very Low	None
Topographic Hazard		3	2	1	-	-
Stand Hazard		3	2	1	-	-
Soil Hazard		2	1	0	-	-
Biophysical Hazard	8	6-7	4-5	<4	-	-
Treatment Hazard		6	4	2	-	-
Windthrow Likelihood	14	12-13	10-11	6-9	<6	-

Windthrow Risk Category

What will be the consequences for safety and liabilities?

VERY HIGH – very negative consequences	HIGH – negative consequences
MODERATE – slightly negative consequences	LOW – minimal to no consequences

LIKELIHOOD of EXCEEDING WINDTHROW THRESHOLDS:	
Likelihood categories	
Nil –	Both assessed likelihood for penetration and amount are not close to thresholds
Low –	Assessed likelihood does not exceed either thresholds but may be close
Mod –	Assessed likelihood somewhat exceeds amount threshold, but does not seem to exceed penetration threshold (where applicable)
High –	Assessed likelihood considerably exceeds amount threshold, and/or seems to exceed penetration thresholds by a small amount (if applicable)
Very High –	Assessed likelihood considerably exceeds penetration threshold, as well as amount threshold (if both apply)
Estimate likelihood of exceeding windthrow thresholds:	

WINDTHROW RISK ASSESSMENT				
DIAGNOSTIC QUESTION: If the thresholds for windthrow are exceeded as expected, what will be the consequences for development values, safety, liabilities and riparian management concerns?				
Risk =	<input type="checkbox"/> Very High (very negative)	<input type="checkbox"/> High (negative)	<input checked="" type="checkbox"/> Moderate (slightly negative)	<input checked="" type="checkbox"/> Low (minimal to no consequences)

Generally, Very High, or High risk situations must be addressed to lower risk. A Moderate risk situation may also need to be addressed with mitigation measures, depending on the consequences.

Hazard Tree Assessment:

Tree #	SPEA Tree	Species	Description and Recommended Treatment
57	N	Mb	Split trunk. 1 stem (with scar) leans toward parking lot. Remove dead stem. Coppice live stems at 5 m.
61, 62	N	Cw	in "clearing" close to line; Retain
63	N	Mb	Perimeter tree, slight lean away. Originally identified as a concern. Retain.
65	N	Dogwood	Forked. Outside property. Retain.
70	N	Fd	Class 5 snag at TOB. High stump to retain as short WT.
75	N	Fd	Large tree, leaning away. Retain. Avoid disturbance within rooting zone.
78	N	Fd	Large tree, hockey stick root(s). Slight lean. TOB and close to hydro lines. Remove.
205	N	Fd	110 cm dbh, 35 m tall. Healthy & straight. Try to retain.
300	N	Fd	90 cm dbh, 35 m tall. Likely will need to be removed as it will probably interfere with infrastructure (located next to parking stalls 8 m to west of Tree 104)

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches throughout the crown	
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are decreased in height to reduce top-heavy crowns, to remove hazardous upper branches, while retaining live stem, which will readily sprout to produce lateral branching	57
Remove / High stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	57, 70, 78, 300

Several scraggly Western Flowering Dogwood (*Cornus nuttallii*) are located along the northern edge of the property. Where possible, these trees will be retained; there are plans to plant dogwood at the site entrance. The Town of Ladysmith does not have a Tree Protection bylaw.

Assessment Results

Windthrow risk at two segments at the proposed Westmark development Lot 13 is rated Low-Moderate. Windthrow likelihood is Low-Moderate.

While the coast of British Columbia is subjected to severe storms in the fall/winter, the subject site appears to be generally protected from prevailing winds by local topographic features (low hills and sheltered, bowl-like location). Human disturbance activities (i.e., logging, land clearing) over the last century have altered some of the natural drainage patterns in the area (as evidenced by side channels beside historical skid roads), but appear to have had minimal impact on overall windfirmness of forest cover in the area. The area is characterized by well-drained soils, which provide increased stability during wind events. Recent clearing for another development along the southern edge of Lot 13 has resulted in minimal blowdown. The building opening itself appear to be having an insignificant impact of the windfirmness of the stand; during the assessment we observed no recent downed trees. Trees along the northern perimeter have acclimated to wind due to the presence of the hydro right-of-way. Further to the northeast, trees have acclimated to wind due to their location at top of bank.

Treatment to reduce potential windthrow is recommended for a small number of selected trees with characteristics that could predispose them to blowdown. Trees designated as hazard trees are also more prone to wind damage, and require treatment. Best management practices to manage windthrow risk and hazard trees at Lot 13 comprise a variety of treatments, including spiral pruning, coppicing (to remove dead/dying high branches and reduce height while encouraging lateral branching) and removal (with options for high stumping and / or retention of coarse woody debris). Nesting boxes for bats and birds could installed on high stumps.

Inspection of the proposed building location and SPEA location do not indicate any areas of encroachment.

Summary of Recommendations

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES at Lot 13

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches in the crown to reduce heavy weight of upper tree canopy, reducing potential for windthrow; spiral pruning retains height and integrity of the tree	13, 32 (both SPEA)
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are height trimmed to remove heavy windthrow-prone upper crowns and dangerous upper limbs; low lateral branching is encouraged; live stem is retained to readily re-sprout	13 (SPEA), 51, 57, (SPEA)
Fell – high stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	5, 33 (on line), 38, 39 (SPEA), 42, 49 (SPEA), 57, 70, 78, 300

General Guidelines:

- At pre-work meeting(s), review tree list and management priorities with workers. Tree protection fencing must be in place to ensure appropriate setbacks. (See Site Plan and tree list, Appendix 1)
- Prior to commencement of clearing/construction, an ocular survey should take place to identify any additional Danger Trees that may result from conditions occurring after this assessment took place. Appropriate treatment must be implemented prior to clearing/construction in order to ensure the site is safe for the uses intended.
- During site preparation and construction, monitor clearing and construction adjacent to the RAA (DR Clough Consulting).
- Use a qualified Arborist for the treatment work.

- Assign a qualified monitor to oversee tree retention and protection activities within the development area throughout the length of the project.
- Wherever safely possible, attempt to retain existing tree cover within the SPEA, in order to maintain bank stability.
- Minimize disturbance to roots of trees within and on edge of RAA. Limit ground disturbance within the drip line (at least 3 m from boles of trees) within the RAA.
- Promptly re-vegetate any areas disturbed within the RAA (including an approx. 50+m section along the stream, south of the proposed parking lot retaining wall – at the SW area of the property) with native trees and shrub species ecologically suited to the site (as per direction from DR Clough Consulting, and under direction of a qualified landscaper). Infill planting is recommended to improve the ecology of the site which has been impacted by historic logging. Numbers of plantings may need to be adjusted pending a post-clearing survey (DR Clough).

Recommended replacement plantings:

Plantings	Size	Spacing	Total Number* * assess after land clearing
Indian plum (<i>Osmaronia cerasiformis</i>)	2 or 5 gal. pots	1x1 m	30+
Red osier dogwood (<i>Cornus stolonifera</i>)	2 or 5 gal. pots	1x1 m	30+
Red huckleberry (<i>Vaccinium parvifolium</i>)	2 or 5 gal. pots	1.5 x 1.5 m	30+
Ninebark (<i>Physocarpus capitatus</i>)	2 or 5 gal. pots	1.5 x 1.5 m	30+
Western redcedar (<i>Thuja plicata</i>)	415 or 615 1-0 PSB	1.5 x 1.5 m	50+

- Coarse woody debris (CWD) to be added in the SPEA will use local trees treated from inside and outside the SPEA (approximately no more than 1 m of CWD per lineal m of SPEA).
- Remove invasive plant species from the RAA and surrounding area (i.e., holly, daphne, broom).
- In liaison with the R.P. Bio., under plant ecologically suitable, native shrubs along portions of the stream system that have had forest cover reduced as a result of development adjacent to Lot 13.

If the measures identified in this report to protect the integrity of the SPEA and surrounding riparian habitat are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in (and/or downstream of) the riparian assessment area. Strategies to sustain tree cover will help enhance local biodiversity of both riparian and upland habitats. Finally, if the recommendations contained in this report are followed during planning and construction, risk associated with windthrow and hazard trees can be mitigated to ensure the safety of the intended development.

PHOTOS



Hazardous unstable trees along southern perimeter (i.e., maple with dead stem, Class 3 grand fir snag, Class 3 Douglas-fir snag on SPEA line) are recommended for felling.



Multi-stemmed big leaf maple at southwest corner recommended for coppicing.



Large cedar with large crown on southern perimeter is recommended for spiral pruning



Multi-storied, second-growth stand along southern perimeter contains a number of large conifers and deciduous trees. Historical disturbance is evidenced by old skid roads, stream diversions, an old deer drying rack nailed to trees, and spring-board stumps. Last year, the adjacent stand to the south was cleared for a new subdivision.



Western Flowering Dogwood trees on the north boundary.



Multi-branched maple with a split stem along top of bank on northern perimeter. Recommended treatment includes removal of dead stem and coppicing of live stems.



Two large Douglas-fir trees at the northeast corner. One of the trees will likely interfere with the power lines for the new development, and will need to be felled. Efforts will be made to retain the other large fir.

Appendix 1

Site Map & Tree Inventory

(see next pg.)

PROPOSED DEVELOPMENT

LEGEND

- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING PARKING
- PROPOSED PARKING
- EXISTING LANDSCAPING
- PROPOSED LANDSCAPING
- EXISTING UTILITIES
- PROPOSED UTILITIES
- EXISTING STREETS
- PROPOSED STREETS

SCALE

1" = 100'

NORTH ARROW

PROPOSED DEVELOPMENT

10000 S. 10th St.

10000 S. 11th St.

10000 S. 12th St.

PROPOSED BUILDING

PROPOSED PARKING

PROPOSED LANDSCAPING

PROPOSED UTILITIES

PROPOSED STREETS

Tree Species Abbreviations, Common Names & Latin Names

Bg – Grand fir (*Abies grandis*)
 Cw – Western redcedar (*Thuja plicata*)
 Dr – Red alder (*Alnus rubra*)
 Fd – Douglas-fir (*Pseudotsuga menziesii*)
 Hw – Western hemlock (*Tsuga heterophylla*)
 Mb – Big leaf maple (*Acer macrophyllum*)
 Dogwood = Western flowering dogwood (*Cornus nuttallii*)

Update to Site Plan map: Tree 109 (Mb) outside SPEA, in RoW, to be removed (August 24, 2020)

LIMITATIONS

This report provides an assessment of windthrow/danger tree hazard and risk. Evaluation is based on professional judgment. The investigation involved a field observation. Recommended treatment pertains only to the particular site as disclosed at the time of inspection. The report was prepared considering site-specific circumstances and conditions. It is intended only for use by the client for the purpose for which it was commissioned and for use by local government regulating the activities to which it pertains.

Prepared by:

Margaret Symon, R.P.F. 1485 A.B.C.F.P.
Dangerous Tree Assessor Certification: W8668
Windthrow Assessor credentials: WFP Stillwater Division

**Appendix 3.) Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103,
by Lewkowich Engineering Associates Ltd. August 25, 2020.**

A photograph of a forest with large trees and ferns on the ground.

GEOTECHNICAL ASSESSMENT

Holland Creek Apartments
Lot 13, District Lot 103, Oyster District
Plan EPP75579.
Ladysmith, BC

Prepared For:

Westmark Construction Ltd.
Unit 1 – 2535 McCullough Road
Nanaimo, BC. V9S 4M9

Attention:

Ms. Jacquie Kinnersley

August 25, 2020

File No.: F8012.02

Revision No.: 03

Prepared by: Stuart Crossfield, P.Geo., Eng.L.

Reviewed by: Jeff Scott, P.Eng

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IOQM
CERTIFIED

DISCLAIMER

1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as "the Report," may be used by the Town of Ladysmith (ToL) as a precondition to the issuance of a development and/or building permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the Community Charter and registered against the title of the Property at the discretion of the ToL. This report supersedes all aspects of our original preliminary report (F8012.02 Dated April 23, 2020), as there have been significant design changes since it was published.
2. This report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Westmark Construction Ltd. We have not acted for or as an agent of the ToL in the preparation of this report.
3. The conclusions and recommendations submitted in this report are based upon information from relevant publications, a visual site-assessment of the property, anticipated and encountered subsurface soil conditions, current construction techniques, and generally accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structure becomes available, the recommendation may be altered or modified in writing by the undersigned.
4. The conclusions and recommendations issued in this report are valid for a maximum of two (2) years from the date of issue. The 2-year term may be reduced as a result of updated bylaws, policies, or requirements by the authority having jurisdiction, or by updates to the British Columbia Building Code. Updates to professional practice guidelines may also impact the 2-year term. If no application of the findings in this report have been made to the subject development, the conclusions issued in this report become void and re-assessment of the property will be required.
5. This report has been prepared by Mr. Stuart Crossfield, P.Geo., Eng.L., and reviewed by Mr. Jeff Scott, P.Eng., both adequately experienced and are also members in good standing with their association, the Engineers and Geoscientists of British Columbia (EGBC).

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the Property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, Holland Creek Apartments, Lot 13, District Lot 103, Oyster District Plan, Ladysmith, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the ToL. The proposed development for the Property at the time of this report consists of the construction of a multi-family residential development consisting of a four story main building, locker building, associated roadways (with creek crossing) and surface parking areas.
3. A hazard assessment was conducted to identify potential geotechnical hazards related to the subject Property. The following hazards were identified:
 - i. The steep slopes located along the northern Property boundary. (Steep Slope Hazard)
 - ii. A very small watercourse is located within the southern area of the Property. (Flood Hazard)
4. It has been determined that the proposed multi-family residential building is located a safe distance back (>30m) from the steeply dipping slopes to the north of the Property, and that the associated developments such as parking lots, access roads, ancillary buildings and civil works which have been located within a few meters of the crest, will not adversely impact the stability of the slope.
5. A minimum flood construction level of 1.5m above the crown of road at the stream crossing, or 1.5m above the natural boundary (highwater mark) of the stream, whichever is greater, has been recommended within this Report. Provided these recommendations are followed, and/or protective design features incorporated in lieu of, the development is considered safe as proposed.
6. Once the site access is available, a subsurface investigation will be required to confirm the findings within this Report. (Prior to BP Acceptance).

List of Abbreviations Used in the Report

Abbreviation	Title
ASTTBC	Applied Science Technologists and Technicians of British Columbia
BCBC	British Columbia Building Code
BP	Building Permit
EGBC	Engineers and Geoscientists of British Columbia
LEA	Lewkowich Engineering Associates Ltd.
NEL	Newcastle Engineering Ltd.
ToL	Town of Ladysmith

TABLE OF CONTENTS

DISCLAIMER.....	I
EXECUTIVE SUMMARY	II
TABLE OF CONTENTS.....	III
1.0 INTRODUCTION	1
1.1 General	1
1.2 Background	1
1.3 Assessment Methodology.....	2
2.0 SITE CONDITIONS.....	2
2.1 General	2
2.2 Terrain and Features.....	2
2.3 Regional Geology	3
2.4 Soil Conditions	4
2.5 Surface and Groundwater.....	4
3.0 DISCUSSIONS AND RECOMMENDATIONS.....	4
3.1 Steep Slopes and Site Grading	4
3.2 Watercourse Flood Construction Level (FCL).....	5
3.3 Watercourse Setback.....	6
3.4 Foundation Design and Construction	6
3.5 Seismic Site Classification	7
3.6 Stormwater Management	7
3.7 Foundation Drainage	7
4.0 CONSTRUCTION PHASE.....	8
4.1 General Excavation - Future Building Sites	8
4.2 Structural Fill	8
5.0 CONCLUSIONS	9
5.1 ACKNOWLEDGEMENTS	10
5.2 LIMITATIONS	10
6.0 CLOSURE	10
7.0 ATTACHMENTS	11
8.0 REFERENCES.....	11

1.0 INTRODUCTION

1.1 General

As requested by Westmark Construction Ltd., LEA has carried out a geotechnical assessment of site conditions at the above noted Property as they relate to the proposed multi-family development of Holland Creek Apartments. This report provides a summary of our findings, recommendations and conclusions

1.2 Background

- a. We understand the proposed development, "Holland Creek Apartments", will be a four (4) level, 94 Unit apartment complex in the Town of Ladysmith, complete with a manager's office and amenity room. Further to this, the development will include parking and driveway areas and associated underground civil works. Gross floor area is 87,789 sq.ft, with 19,101 sq.ft of limited common property as leasable area.
- b. The general site plan titled "Preliminary Site Servicing, Storm Water Management and Grading Plan (Drawing No. 100) June 24, 2020 by Newcastle Engineering has been included as an attachment to this report. The project location is shown in Figure 1 below.

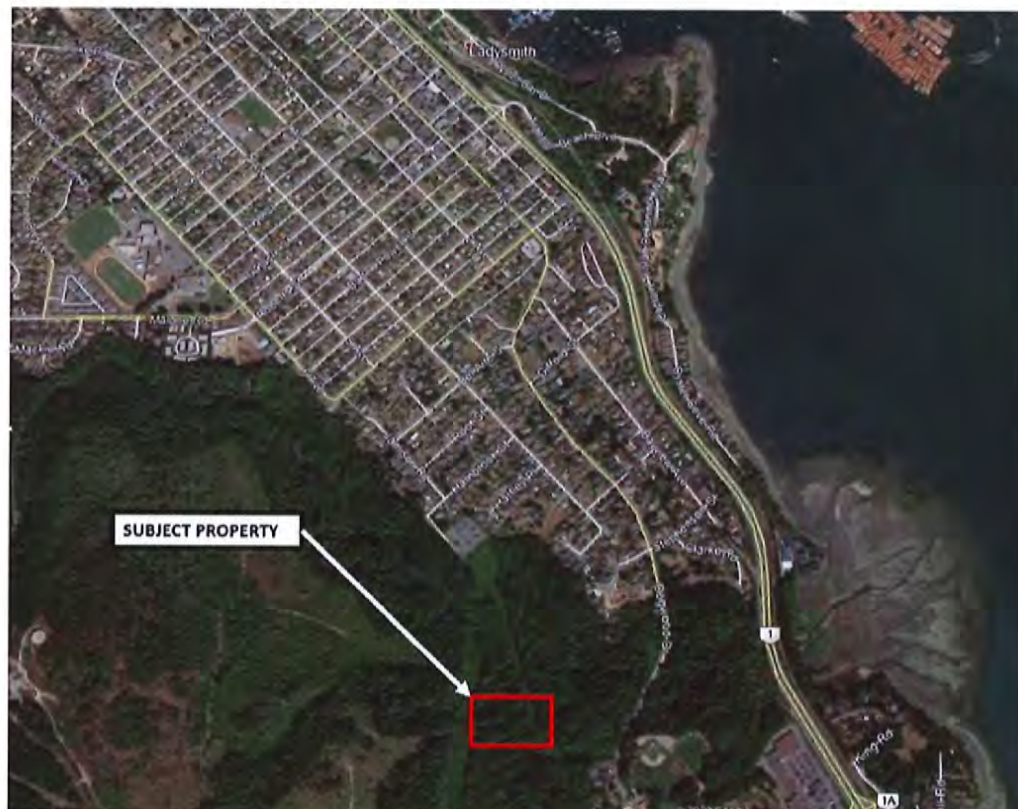


Figure 1 – Project Location

- c. LEA understands once the lot has been cleared and grubbed a subsurface investigation will be undertaken and a subsequent report revisions will be completed to include information confirming soil types for the detailed design stage of the proposed development. (Prior to BP Acceptance).

1.3 Assessment Methodology

- a. An initial field reconnaissance was conducted on March 31, 2020 in order to visually assess the local site conditions as they relate to the proposed development.
- b. A desktop study and literature review of the available background information including; surficial and bedrock geology maps, mining maps, soil survey reports, seismic hazard maps and previous geotechnical studies in the immediate area.

2.0 SITE CONDITIONS

2.1 General

- a. The subject property is located adjacent to Holland Creek in a new subdivision development off Dogwood Drive in the southern portion of the ToL, within the jurisdictional limits of the ToL.
- b. The property is a large irregular shaped lot which lies to the south of Holland Creek Park and to the north of new single family residential developments off Rollie Rose Drive.
- c. The property is located within Development Permit Area (DPA) 6 – Riparian and DPA 8 – Multi-Unit Residential ESA. This DPA has been addressed in concert with RAR assessment report submitted by D.R.Clough Consultants with respect to “Section 3.7.3 Slope stability”, “3.7.6 Sediment and Erosion control during Construction” and “3.7.8 Floodplain Concerns”⁷. For slope stability within the RAA, the only steep slopes are located at the western extent of the building (30 to 50%) and at the eastern extent of the building coincident with the entrance culvert (40 to 50%).

2.2 Terrain and Features

- a. The overall topography of the development area slopes down (20m) toward the northeast from nearby Stanton Peak (El 450m).
- b. The local terrain of the subject Property is complex, with varying slopes throughout including steep to very steeply dipping slopes down to the north and north east towards Heart Creek and Holland Creek. A relatively flat area exists in the central portion of the lot at roughly 45m geodetic, which will be utilized for the development of the apartment buildings.
- c. The northwest wing of the proposed building will be stepped into a 7m high minor slope, dipping at

approximately 25° to the southeast. On top of this slope to the north is a relatively flat area which has been proposed for the parking lot.

- d. Immediately adjacent to, and north of, the parking lot area are moderately steep (27-35°) to steeply (36-42°) dipping 25m high slopes (Photo 1), dipping to the north and northeast, and leading down to Heart Creek. Localized portions of these slopes were noted up to 65°. They are mostly well vegetated with mature second growth forest, with locally thinly vegetated and signs of surficial sloughing. Some trees were noted to be fallen over and others were pistol butted (bent). No evidence of large scale slope failure or tension cracks were noted along the crest.
- e. A trench feature was noted connecting the steep natural slopes in the north to the central interior portion of the site. The trench is linear in shape 4m deep by 4m wide with side slopes at approximately 50° inclination. The trench is obviously man-made and may have been excavated as part of older logging operations, as it is mostly grown over by natural vegetation.
- f. A small un-named creek runs through the southern portion of the property and intersects Heart Creek some distance to the northeast (Photo 2).
- g. Additional, very steep gully slopes (45°) were noted along the un-named creek up to 5m in height in the southeast corner of the property along the future access road. These slopes were limited to the southeast corner, were well vegetated and show no signs of instability. Old culverts which had been installed previously, are noted to have eroded over time (Photo 3).
- h. The above distances are estimates based on measurements taken in the field during our investigation, and a review of available satellite imagery and topographical information available on Google Earth®.
- i. Based on historic imagery, the property is within a previously logged area. At the time of our field review, vegetation within the property limits predominately consisted of mature secondary growth coastal forest of Fir, Cedar and Maple.

2.3 Regional Geology

- a. Surficial geology for the area³ is classified as having glaciofluvial sediments, comprised of sand and gravel deposits related to outwash from previous glaciations. Much of the low-lying coastal areas, including Ladysmith and Chemainus are draped by up to twelve metres of sandy diamicton (sdMb)³.
- b. Bedrock geology for the area⁴ is classified as undivided sedimentary rocks of the Upper Cretaceous, Nanaimo Group.

2.4 Soil Conditions

- a. Visual observations were carried out during the course of our site reconnaissance including within the historic trench which included exposed soils (Photo 4). In addition to our review of the exposed soils on site, we reviewed the test pit data collected from previous assessments in the area by LEA.
- b. Soil conditions within the trench area consist of a well graded silty sand, some gravel and cobbles and has been inferred to be very dense based on the age of the side slopes and steep inclination.
- c. Previous experience from other developments in this area indicates the soils will likely consist of a thin (less than 1.0m) cover of forest debris and brown silts, sands and gravel underlain by very dense silty sand with gravel and cobbles (Impermeable- Glacial Till) near surface.

2.5 Surface and Groundwater

- a. There were no groundwater seepage encountered during our field review of the slopes in the development area, however we note the presence of surface water within the property.
- b. Groundwater levels can be expected to fluctuate seasonally with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed within the test pits at the time of our assessment.
- c. The CVRD interactive web map identifies a watercourse located within the property. The unnamed watercourse was confirmed during the field review and included a 450mm diameter culvert which has been partially eroded. The watercourse is likely subject to seasonal drainage for the upland wooded area.

3.0 DISCUSSIONS AND RECOMMENDATIONS

3.1 Steep Slopes and Site Grading

- a. This geotechnical hazard assessment includes a preliminary qualitative analysis of the stability of slopes which could impact the proposed development based on a background review, a site reconnaissance and review of a number of cross sections.
- b. Typically a detailed slope stability analyses is required when a building development is proposed at the top of bedrock slopes steeper than 1 Horizontal to 1 Vertical (45°), or soil slopes steeper than (2H:1V / 27°), excluding circumstances where indicators of global instability are present.
- c. The location of the Holland Creek Apartment building has been proposed in an area which is mainly flat lying, where only a portion of the structure is located into a slope inclined 25° to the south. Based on the anticipated soil conditions, and the inclination of the south slope, LEA believes there is a low risk for slope

instability at the building location. No indications of significant slope movements were found on the property.

- d. Attached to the end of this report is a site plan, produced by LEA, of the proposed development (Drawing No. F8012-02) along with four cross-sections: A-A', B-B', C-C' and D-D' (Drawing No. F8012-03 to 04) which detail the parking lot and access roads with respect to the north slopes (note: outside the RAA).
- e. The development includes a large parking lot, access road, ancillary storage building and associated civil works, which are located on a flat, elevated area, adjacent to the crest of the moderately steep to steeply dipping north facing slope. The majority of the parking lot and access road is approximately 10m back from the crest of this slope, however, in a few locations it lies within a few meters.
- f. LEA believes these steeply dipping slopes to the north represent a moderate to high probability of slope instability in the form of seismic stability, resulting in surficial small scale failures which over time may result in oversteepening, regression of the crest and potentially larger scale failures, which would have an effect on the proposed parking lot, access road and ancillary storage building development. For this reason we recommend that all civil works be located behind a 30 degree reference line as depicted on the drawing cross sections and/or include mitigative works (retaining walls etc.) with direction from the Geotechnical Engineer.
- g. However, it is not anticipated that the parking lot, access roads, ancillary buildings and associated civil works will adversely impact slope stability, primarily by being at or below the existing grade i.e.; no significant surcharge loads. No development or disturbance is being proposed on the slope face or within any SPEA area. Furthermore, best practices should be implemented during construction and it is recommended that both a stormwater management plan and a well-defined construction management plan (ESCP) be required to mitigate any potential effects to the slope.

3.2 Watercourse Flood Construction Level (FCL)

- a. As detailed above, a very small watercourse was observed within the property limit which is a seasonal drainage course for the upland wooded area. There is no floodplain data associated with this watercourse. The existing site plan shows a streamside protection and enhancement area (SPEA) setback of 10m on either side.
- b. As per the "Flood Hazard Area Land Use Management Guidelines",⁶ we recommend a minimum flood construction level of 1.5m above the crown of road at the stream crossing, or a minimum of 1.5m above the natural boundary (highwater mark) as measured perpendicularly to the watercourse, whichever is greater. Based on the topography of the site and stream corridor, we expect the FCL will gradually increase from the road crossing to the west. Should the 1500mm diameter storm culvert under the

crossing become blocked, the flood waters will be able to drain overtop of the low point in the road without the stream exceeding the noted highwater mark (HWM) or the FCL of the northeast wing which has an elevation of 41.0m.

- c. The FCL is defined as the minimum elevation of the top of concrete slab for habitable buildings. The topographic review indicates that the building design incorporates habitable areas below the FCL that range from 2.5m to 4.5m (FFE 44.1m). This is allowable, considering the building is at least 12m from the HWM, incised into an impermeable stratum, and will include impermeable earthen berms and/or concrete walls up to the FCL level to prevent the ingress of water during a maximum 1 in 200 year storm event.
- d. The FCL shall be determined and surveyed in the field by qualified survey personnel.

3.3 Watercourse Setback

- a. Floodplain setbacks are generally established to keep development away from areas of potential erosion and to avoid restricting the floodway.
- b. As per the "Flood Hazard Area Land Use Management Guidelines"⁶, for this very small stream we recommend a watercourse setback of 10.0m, as measured from the natural boundary (high water mark).

3.4 Foundation Design and Construction

- a. Prior to construction, the building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.
- b. Foundation loads should be supported on natural undisturbed material approved for use as a bearing stratum by our office or structural fill and may be designed using the following values.
 - i. For foundations constructed on structural fill, as outlined in Section 4.2 of this report an SLS bearing pressure of 150 kPa, and a ULS bearing pressure of 200 kPa may be used for design purposes.
 - ii. For foundations constructed on glacial till, an SLS bearing pressure of 200 kPa, and a ULS bearing pressure of 265 kPa may be used for design purposes.
- c. As the elevation of the glacial till is expected to vary throughout the building area, we recommend the Structural Engineer for the project use the design values for structural fill provided above. This will prevent conflict where the glacial till soils are not present at a "practical" building elevation. The design values provided above for structural fill can be achieved through the conventional placement and compaction of engineered fill over an approved naturally deposited subgrade.
- d. Exterior footings should be provided with a minimum 0.45m depth of ground cover for frost protection purposes.
- e. The design values provided above for structural fill can be achieved through the conventional placement

and compaction of engineered fill over an approved naturally deposited subgrade.

- f. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during the course of construction should be removed, or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has suitable moisture content and if there is access to heavy compaction equipment. If no structural fill is placed, a smooth-bladed clean up bucket should be used to finish the excavation.

3.5 Seismic Site Classification

Based on the 2018 British Columbia Building Code, Division B, Part 4, Table 4.1.8.4.A, "Site Classification for Seismic Site Response," the soils and strata encountered during our involvement to date within the property would be "Site Class C" (very dense soil and soft rock).

3.6 Stormwater Management

- a. The development should be in conformance with the Holland Creek Local Area Plan, Schedule C of Bylaw 1488, section 10.1.3 which states "Provide storm water management which prevents flooding and erosion, and mitigates negative impacts on the natural environment and riparian areas".
- b. Stormwater management will be a critical component in mitigating and preventing slope instabilities by controlling the runoff and preventing discharges on the slope and increasing erosion potential.
- c. As part of the geotechnical investigation, field observations of the subgrade soil conditions with respect to the on-site infiltration and disposal of stormwater were carried out.
- d. Based on the subgrade soil conditions encountered during the investigation, it is the opinion of LEA that site conditions (glacial till) are not conducive to the installation of an on-site stormwater infiltration medium.
- e. Site conditions may be conducive to the installation of storm water detention measures. The location(s) of any proposed detention measures shall be reviewed by the Geotechnical Engineer to determine if the design method(s) and/or location(s) pose a hazard to the subject Properties or any adjacent or adjoining properties.

3.7 Foundation Drainage

- a. Conventional requirements of the 2018 British Columbia Building Code pertaining to building drainage are considered suitable at this site as well as the following:
 - i. 150mm diameter rigid PVC, on clean bottom and 150mm layer of clean drain rock capped with a non-woven geotextile.
 - ii. Cleanouts for inspection and maintenance.

- iii. Drainage to follow major corners only and should not include small alcoves.
- iv. Grade of 0.25%, connected to supplied 150mm diameter civil connection at southeast corner.

4.0 CONSTRUCTION PHASE

4.1 General Excavation - Future Building Sites

- a. All unsuitable overburden materials should be removed to provide a suitable base of support. Unsuitable materials include any non-mineral material such as vegetation, topsoil, peat, fill or other materials containing organic matter, as well as any soft, loose, or disturbed soils.
- b. Unsuitable materials, including topsoil and existing fill soils, were observed throughout the Property and may exist up to a few metres from surface, but are generally considered near surface and shallow.
- c. Fine-grained soils and to a lesser extent glacial tills, are particularly moisture sensitive. Extended periods of saturated soil conditions can make these soils unsuitable for bearing purposes, where they could be suitable bearing surfaces when moist or damp. Exposure of these soils to water after excavation (rain or snow) can also make these soils unsuitable for bearing purposes. Therefore, weather conditions dictate whether these soils are suitable for bearing purposes at the time of construction. LEA recommends contingency plans for over excavation when weather or seasonal conditions could make these soils unsuitable for bearing at the time of construction.
- d. Groundwater ingressing into any excavations should be controlled with a perimeter ditch located just outside of the building areas, connected to positive drainage.
- e. The Geotechnical Engineer is to confirm the removal of unsuitable materials and approve the exposed competent inorganic subgrade.

4.2 Structural Fill

- f. Where fill is required to raise areas that will support buildings, slabs, or pavements, structural fill should be used. The Geotechnical Engineer should first approve the exposed subgrade in fill areas, to confirm the removal of all unsuitable materials.
- g. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.
- h. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557) in foundation and floor slab areas, as well as in paved roadway and parking areas.
- i. Structural fills under foundations, roadways, and pavements should include the zone defined by a plane

extending down and outward a minimum 0.5m from the outer edge of the foundation at an angle of 45 degrees from horizontal to ensure adequate subjacent support. Refer to Figure 4.2 below.

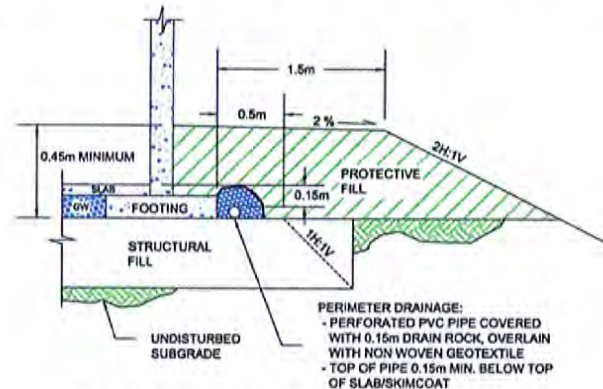


Figure 4.2 – Typical Section, Structural Fill

- j. Compaction of fill should include moisture conditioning as needed to bring the soils to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.
- k. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.
- l. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fills be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

5.0 CONCLUSIONS

From a geotechnical point of view, and provided the recommendations in this report are followed, the land is considered safe for the use intended (defined for the purposes of this report as a proposed multi-family 4 storey Apartment Building), with the probability of a geotechnical failure resulting in property damage of less than:

- i. 2% in 50 years for geotechnical hazards due to seismic events, including slope stability; and,
- ii. 1 in 200 year storm event for the flooding hazard and,
- iii. 10% in 50 years for all other geotechnical hazards.

5.1 ACKNOWLEDGEMENTS

Lewkowich Engineering Associates Ltd. acknowledges that the Approving Officers and Building Officials may rely on this report when making a decision on application for development of the land. We acknowledge that this report has been prepared solely for, and at the expense of Westmark Construction Ltd. We have not acted for or as an agent of the ToL in the preparation of this report.

5.2 LIMITATIONS

The conclusions and recommendations submitted in this report are based upon the information available at the time of this assessment. The recommendations given are based on the observed and anticipated subsurface conditions, current construction techniques, and generally accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structures becomes available, the recommendations may be altered or modified in writing by the undersigned.

6.0 CLOSURE

Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or additional requirements at this time, please contact us at your convenience.

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.

Reviewed By:

Text

Stuart Crossfield, P.Geo., Eng.L.
Engineering Geologist

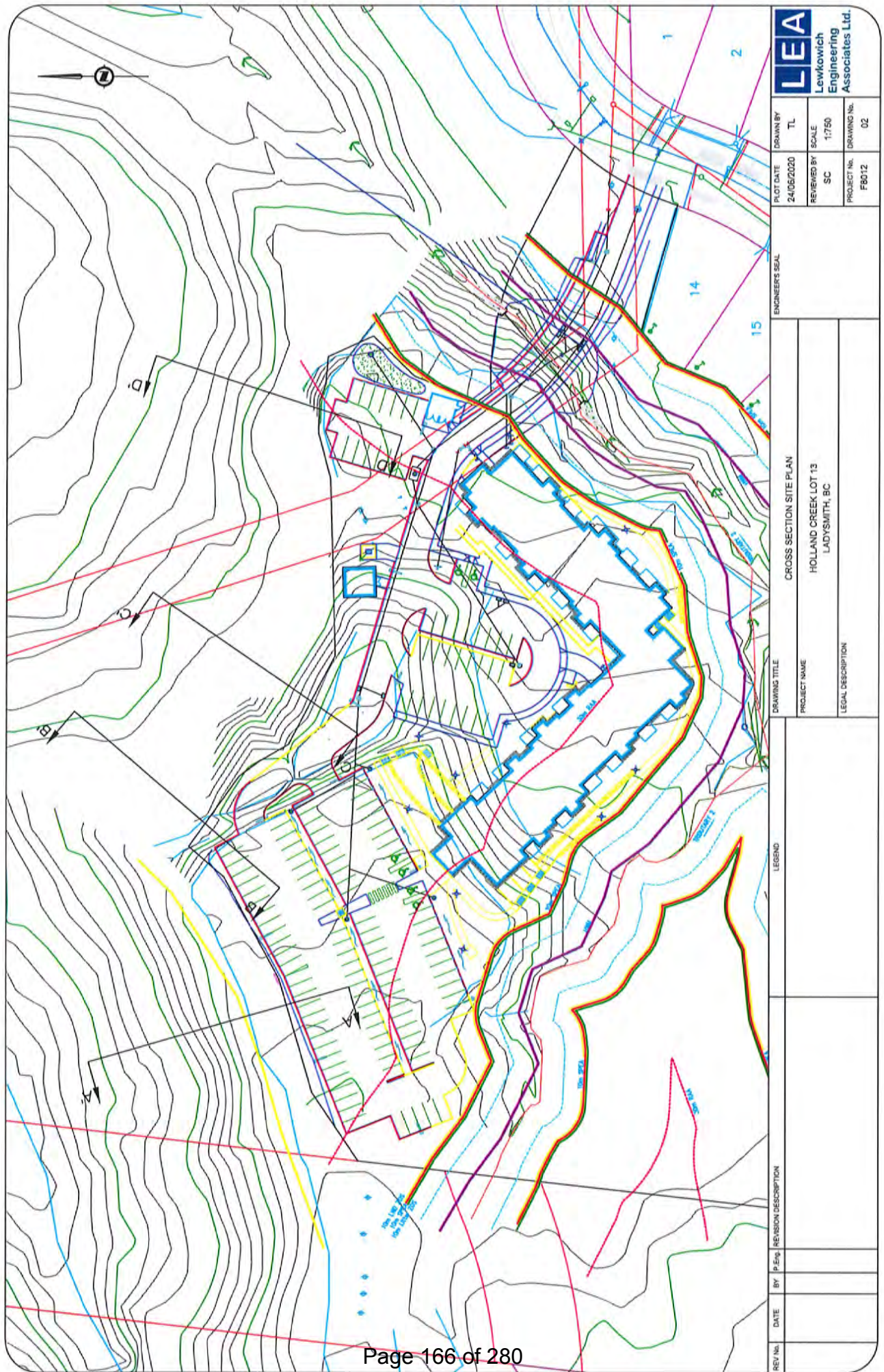
Jeff Scott, P.Eng
Geotechnical Engineer

7.0 ATTACHMENTS

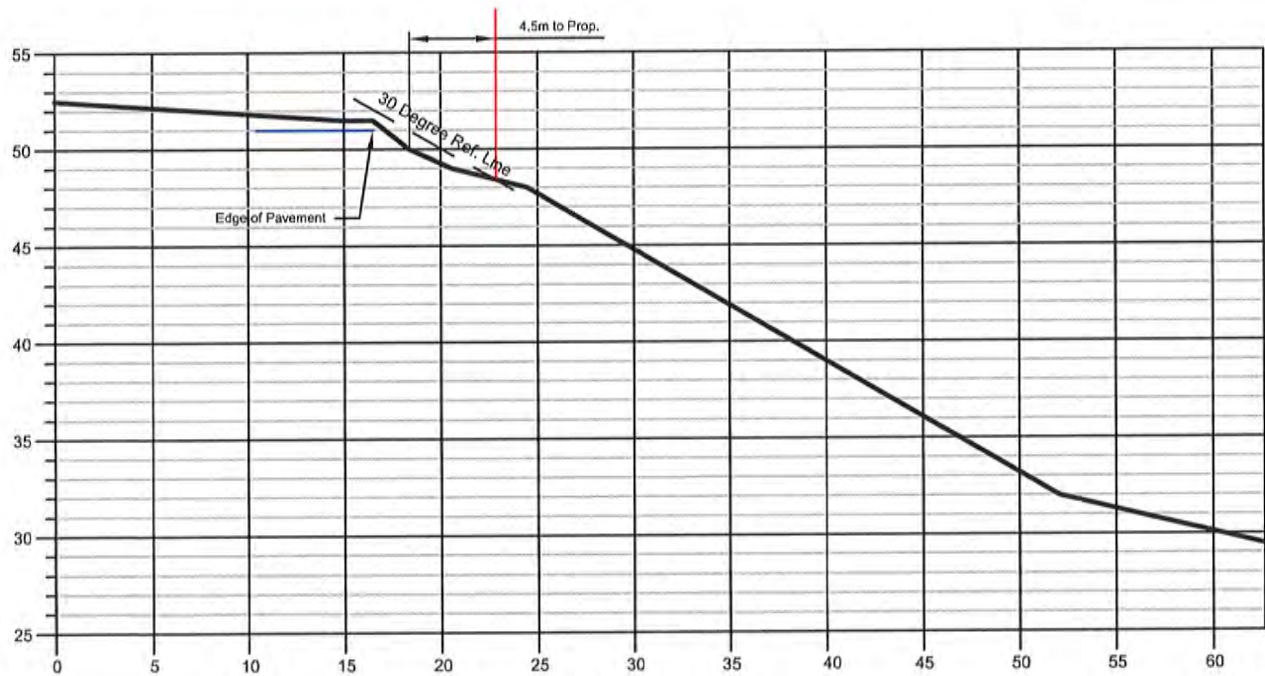
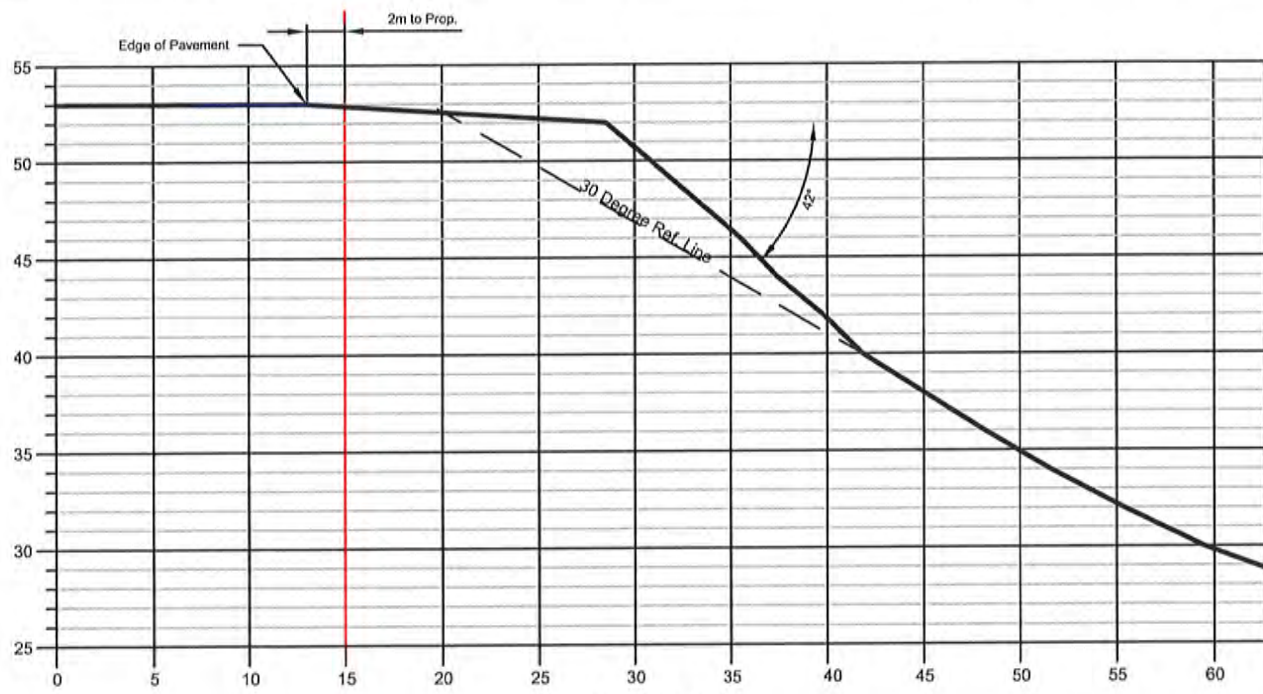
1. Newcastle Engineering Ltd. drawing titled "Preliminary Site Servicing, Storm Water Management and Grading Plan," Drawing No. 100, Dated 06/24/2020.
2. Lewkowich Engineering Associates drawing titled "Cross Section Site Plan", Drawing No. F8012-02, Dated 06/24/2020.
3. Lewkowich Engineering Associates drawing titled "Cross Section A-A', B-B', C-C', D-D'" Drawing No. F8012-03 and F8012-04
4. Site Photos 1 - 4

8.0 REFERENCES

1. Town of Ladysmith map titled "*Official Community Plan, Map 1, Land Use*," Dated September 18, 2018.
2. Town of Ladysmith map titled "*Official Community Plan, Map 2, Development Permit Areas*," Dated September 18, 2018.
3. Town of Ladysmith "*Holland Creek Local Area Plan*" Schedule C of the Town of Ladysmith Official Community Plan Dated September 18, 2018.
4. Ministry of Environment Mapping, Produced by R.H. Guthrie and C.R. Penner, titled "*Vancouver Island Geology*."
5. Geoscience BC map titled "Map 2013-NVI-1-1, Geology, Northern Vancouver Island Project," Dated January 2013.
6. "Flood Hazard Area Land Use Management Guidelines" May 2004; Ministry of Water, Land and Air Protection, Province of British Columbia. Amended by: Ministry of Forests, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
7. Riparian area Regulation Section 3.7.3 to 3.8.2



REV No.	DATE	BY	P.Eng	REVISION DESCRIPTION	LEGEND	DRAWING TITLE	ENGINEER'S SEAL	PROJECT No.	PROJECT NAME	LEGAL DESCRIPTION	ENGINEER'S SEAL	PLANT DATE	REVIEWED BY	SCALE	PROJECT No.	DRAWING No.	LEA
						CROSS SECTION SITE PLAN			HOLLAND CREEK LOT 13			24/06/2020	SC	1:750	FB012	02	Lewkowich Engineering Associates Ltd.



REV No.	DATE	BY	P.Eng.	REVISION DESCRIPTION
01	20-08-04	JH	SC	Add Details

DRAWING TITLE
CROSS SECTIONS A A' & B B'

PROJECT NAME
HOLLAND CREEK LOT 13
LADYSMITH, BC

LEGAL DESCRIPTION

ENGINEER'S SEAL

PLOT DATE
24/06/2020

DRAWN BY
TL

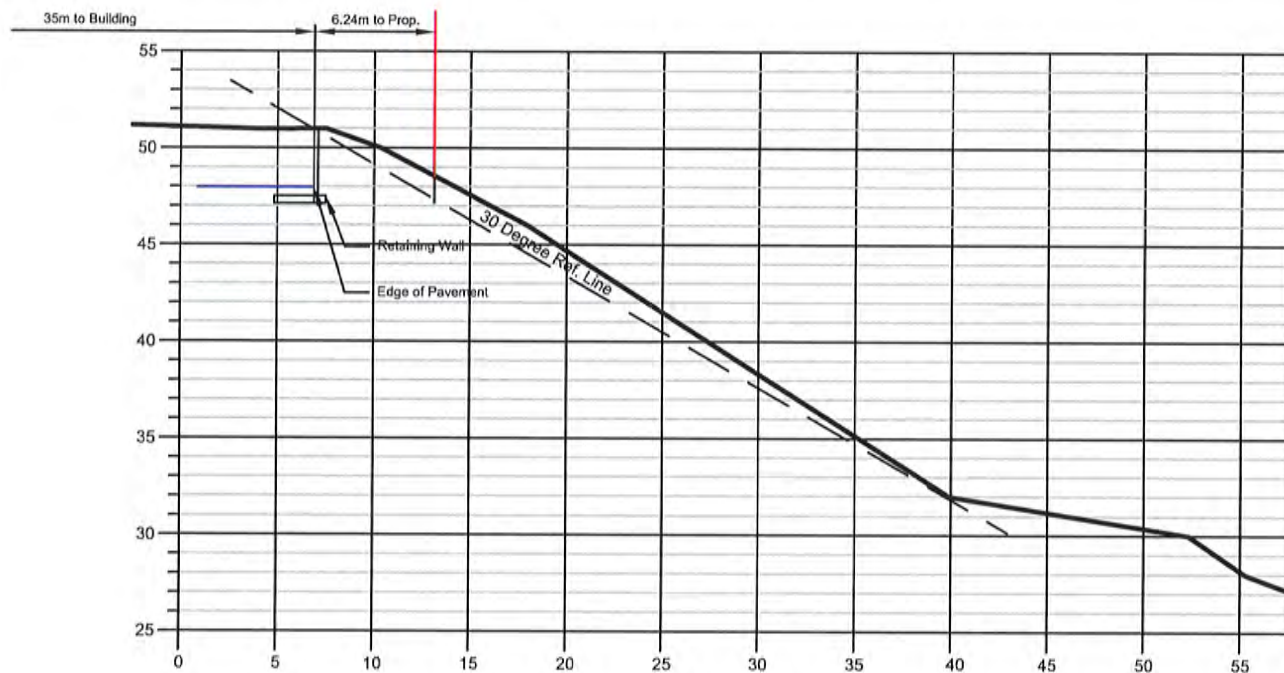
REVIEWED BY
SC

SCALE
NTS

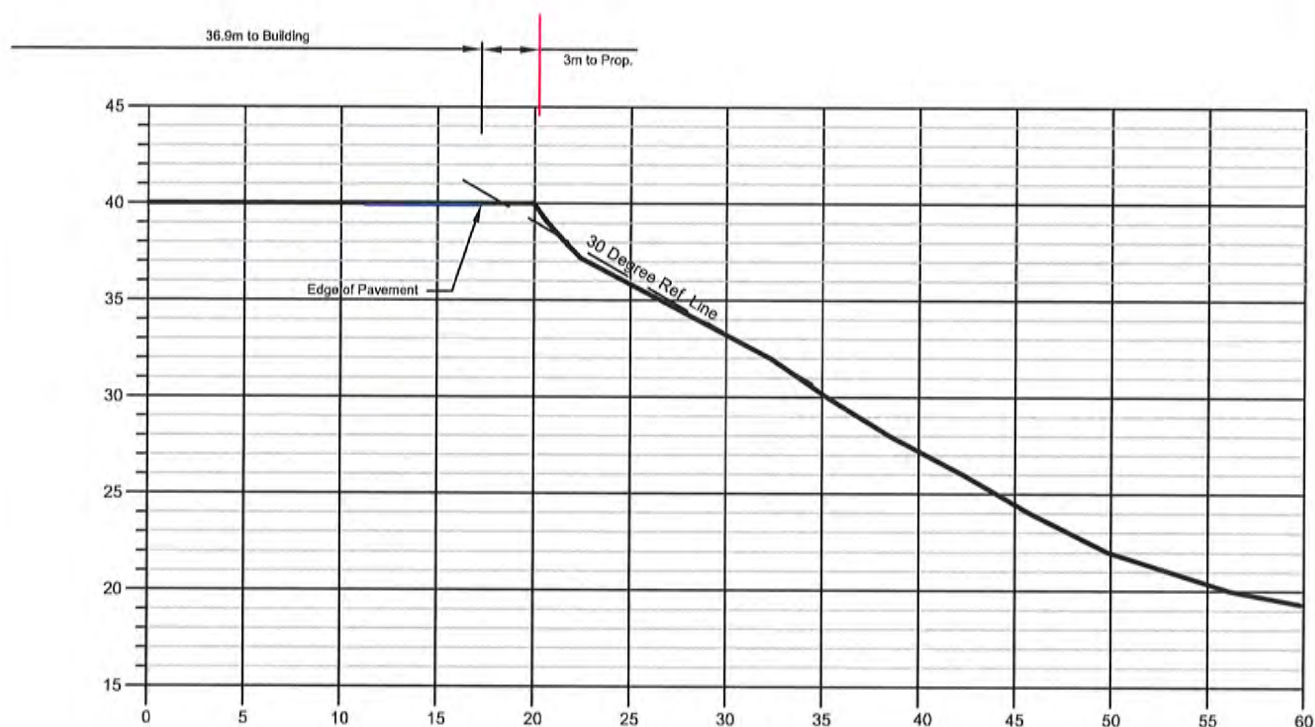
PROJECT No.
F8012

DRAWING No.
F8012-03

LEA
Lewkowich
Engineering
Associates Ltd.



Section C C'



Section D D'

REV No.	DATE	BY	P.Eng.	REVISION DESCRIPTION
01	20-08-04	JH	SC	Add Details

DRAWING TITLE	CROSS SECTIONS C C' & D D'	ENGINEER'S SEAL	PLOT DATE	24/06/2020	DRAWN BY	TL
PROJECT NAME	HOLLAND CREEK LOT 13 LADYSMITH, BC		REVIEWED BY	SC	SCALE	NTS
LEGAL DESCRIPTION			PROJECT No.	F8012	DRAWING No.	F8012-04

LEA
Lewkowich
Engineering
Associates Ltd.

PROJECT: Holland Creek Lot 13, Ladysmith, BC
FILE NO.: F8012.02r1
DATE: June 26, 2020
SUBJECT: Site Photographs



Photo 1: North Facing Slope



Photo 2: Watercourse Through Forest.

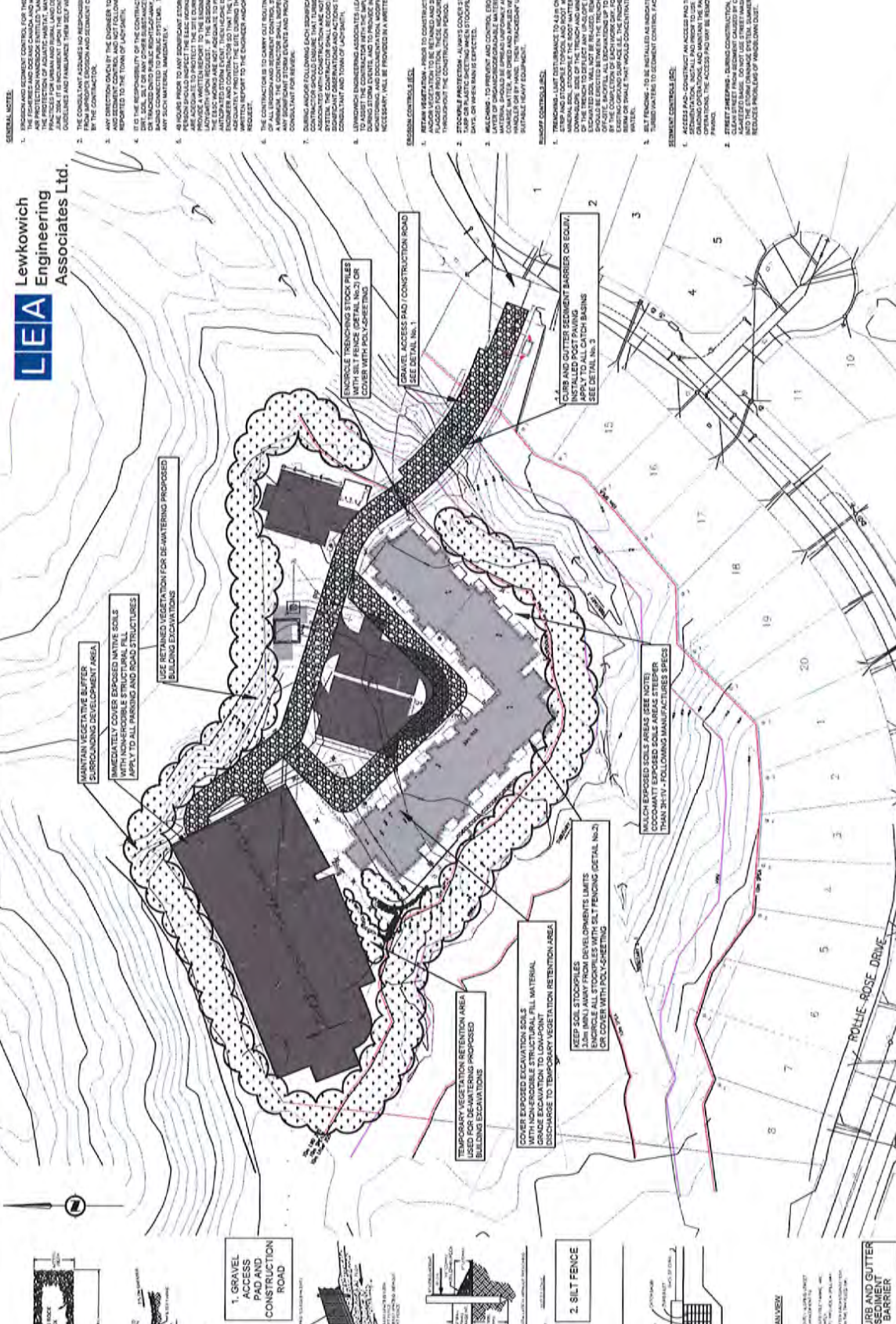


Photo 3: Eroded Culvert



Photo 4: Soil Conditions in Trench

**Appendix 4.) Lewkowich Engineering Associates Ltd Sediment and Erosion Control plan.
August 25, 2020**



Page 172 of 280

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

**Appendix 5.) Stormwater Management Plan - Newcastle Engineering Ltd. Holland Creek
Lot 13 Diagram 0127-028-100 DP REV07 Aug 31, 2020**

Appendix 6.) Culvert Installation - Construction Environmental Protection Plan and Water Act Notification Approval.

Environmental Protection Plan

for

LOT 13 Permanent Access

Westmark Construction Inc

Prepared By:
D.R. Clough Consulting
6966 Leland Road
Lantzville, B.C. V0R 2H0
250-390-2901

May 14, 2020
Revised
November 16, 2020

<i>Prepared for</i> Westmark Construction Inc	<i>Prepared By</i> D.R. Clough Consulting	Page 1 of 7
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Introduction:

This report is an Environmental Protection Plan to address environmental values during the installation of an 1500mm diameter concrete culvert at Lot 13 Rollie Rose Drive in Holland Creek Estates. The plan was developed by D.R. Clough Consulting staff, in consultation with Newcastle Engineering whom completed the design. An environmental monitor will be required to be on site to ensure safe practices are conducted with regard to work in and around water. Specific environmental concerns are:

1. Introduction of silt and debris into the stream and the associated impacts on water quality and fish habitat downstream of the construction site.
2. Containment of a hydrocarbon spill (e.g., oil, fuel) during construction.
3. Mitigate disturbed habitats upon completion (e.g., substrates).

Project environmental description and location:

Tributary 2 is a 1.7m wide non fish channel that leads 100m over a 5m water fall to Holland Creek, it is an important summer water supply to fish. Construction will include a water bypass and sediment management plan (on plan attached).

Schedule of Work

The work is scheduled from August 17 to September 15, 2020. The contractors must be prepared for the environmental limitations and risks associated with this time of year and location. For instance;

- Work preparations must assume rain events may occur and be working within their capabilities to protect the site environment by having covers ready for exposed erodible areas.
- They must also have sediment control and stream flow bypass arranged before they start work.

Construction Environmental Management Plan Check List

1. Pre-Work – A job safety and environmental pre-work meeting will be done to ensure that all workers understand the objectives and have clear written plans on their roles and responsibilities. Everyone must be aware of the site environmental liabilities and rules. Environmentally sensitive areas must be identified (e.g., flagging, fencing) and noted to construction crews at the site. There must be no disturbance outside the identified work boundaries of fish habitat or addition of any deleterious substance into their habitat.
2. Monitoring – Site monitoring will be conducted to ensure fish habitat outside of the project footprint is not disturbed. The monitors will identify sensitive areas to construction crews, advise and record procedures. They will also be empowered to stop work and direct environmental protection measures to be employed by the site contractors. The monitors will be there during sensitive work activities, such as the culvert installation. This work will primarily be undertaken by D.R. Clough Consulting and Newcastle Engineering Staff but may involve other qualified personnel.

<i>Prepared for</i> Westmark Construction Inc	<i>Prepared By</i> D.R. Clough Consulting	Page 2 of 7
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3. Spill Kits/ Erosion Control – All environmental safety material must be readily available including spill kits with booms, pads and floc powder as well as erosion control coverings such as plastic, water bypass pumps, tarps and straw bales (specifications below).
4. Removal – The temporary bridge section and surface materials will be removed with care. There shall be no loss of material into the stream habitat. Any native vegetation disturbance is to be minimized. Removed erodible material must be stored away from the wetted area.
5. Installation – Installation of a water bypass and sediment control first. Then culvert bedding preparation should be careful to control loss of material downstream. Clean materials only for construction (rip rap). Grouting sawing and grinding must be isolated from the wetted perimeter habitat. Concrete or grout works require isolation for until cured with no release of material (typically 48hours).
6. Erosion/Drainage – Drainage and ditches at the work site require installation of turnouts, sumps and swales to reduce site water entry directly to fish habitat. Installation of guard rails, geotextile, rock armour, hay, plastic and grass seed must be applied as required to address runoff and protect fish habitat from deleterious substances (i.e., sediment laden water).
7. Reporting – A completion memo that will include milestones will be conducted by the site monitors if requested by agencies.

Environmental Equipment

The contractor must have adequate protective materials and equipment on-site at all times during construction. The following items are necessary mitigation and contingency measures to address on-site erosion and sediment sources and environmental incidents that may arise during the course of construction. All materials should be scaled to the scope of work anticipated. Below are minimum startup recommendations for the site, to be increased in number and type depending on hazards and work scope.

1. 30 m of 20 cm diameter oil containment boom
2. 200 x 2litre absorbent pads
3. Six straw bales
4. 1000 sq ft tarps or rolls of poly sheeting
5. One industrial spill kit on each piece of heavy equipment
6. Water bypass (2 inch or larger) pump and 200 ft hose (to go around work site)
7. Waste water (2 inch or larger) pump and 200 ft hose.(to reach permeable ground)
8. Fire tools as per MOF/local FD requirements

General:

1. Water quality adjacent and within the construction area will be maintained by installing mitigative measures identified in this document or those determined by the Environmental Monitor.
2. All areas disturbed during construction will be covered.
3. Fertilizer must not be used within 5m of any stream.

Prepared for Westmark Construction Inc	Prepared By D.R. Clough Consulting	Page 3 of 7
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4. Grass seed shall be applied at a rate of 40 kg per hectare on exposed surfaces.
5. Seeding and fertilizing should closely follow the final landscaping, weather permitting.

Personnel:

All personnel on the project will be made aware of the Sediment Control Plan and what is required with regards to compliance with the plan.

Permits/Planning:

A BC Government Section 11 *Water Act* Notification was prepared Tracking Number: 100317923. A copy of this work must be onsite at all times for Habitat staff inspections.

<i>Prepared for</i> Westmark Construction Inc	<i>Prepared By</i> D.R. Clough Consulting	Page 4 of 7
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Figure 1. 2020 Worksite

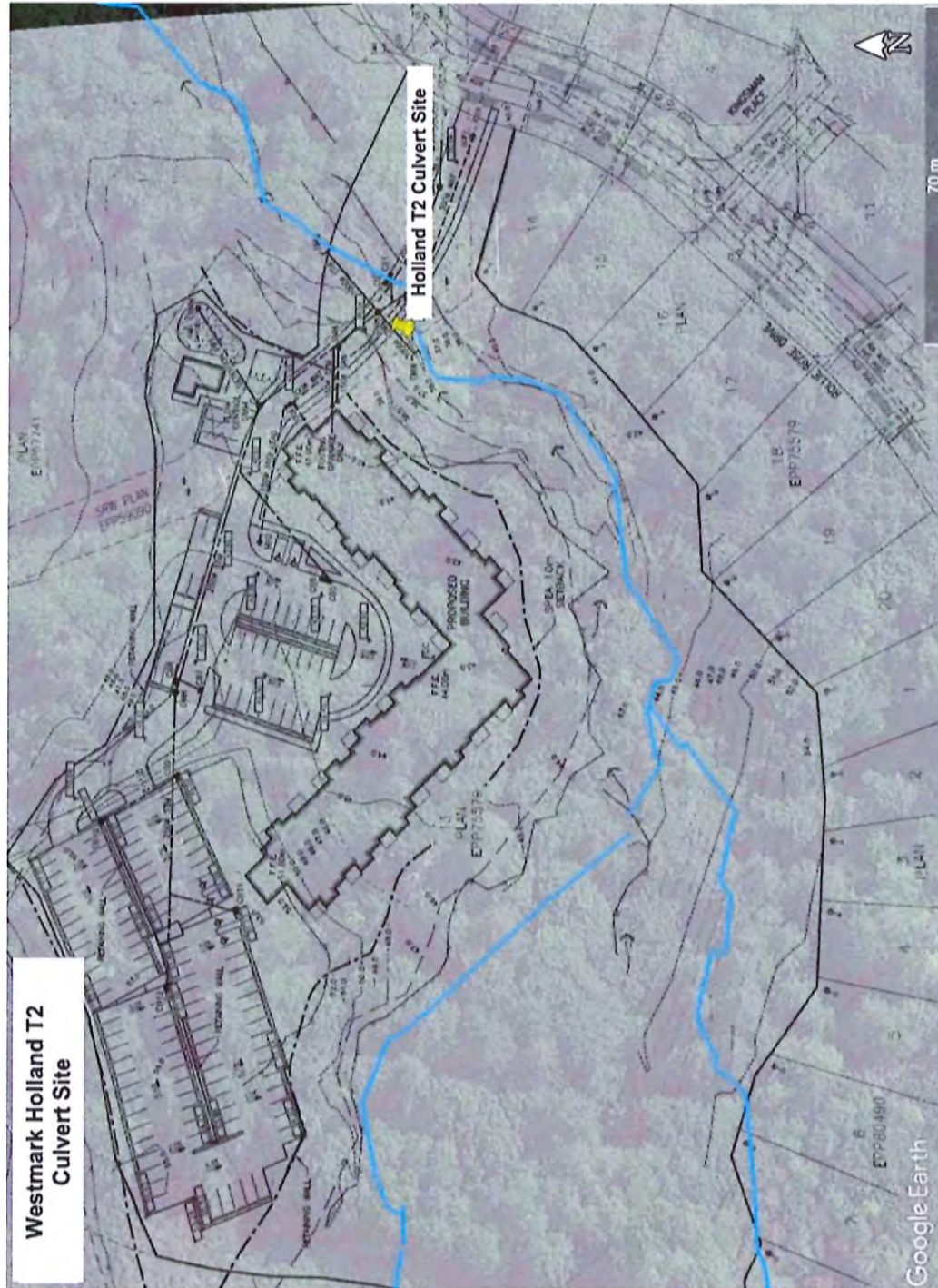


Figure 2: Site Photos

Holland Creek Trib 2 – proposed Culvert Site Photos – at Lot 13, Rollie Rose Drive, Ladysmith B.C.



1.) Looking over channel from Rollie Rose Dr.

2.) Typical channel in April located 30m below culvert site



3.) Brushed over channel was an old logging/hydro road

4.) Looking at town side of bank – brushed in old road.

Prepared for Westmark Construction Inc	Prepared By D.R. Clough Consulting	Page 6 of 7
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[illegible]



Note: The tracking number assigned to your Notification Form is: 100317923 , Date Received on : May 14, 2020 12:04:17 PM

Please maintain a record of this tracking number for reference in any future correspondence about your proposal and any related follow-up.

Re: Notice to Habitat Officer / Changes in and about a Stream under Part 3 Water Sustainability Regulation

Your Notification to a Habitat Officer Ministry of Forests, Lands, Natural Resource Operations and Rural Development under the Water Regulation (Part 3 of the regulation) regarding your proposal to make changes in and about a stream of the kind described in section 39 of the regulation, has been received.

Please Note: Only changes in and about a stream of the kind listed in the Water Sustainability Regulation (Part 3 "Changes in and About a Stream") can proceed on notification and in accordance with requirements of the regulation including any terms and conditions specified by a Habitat Officer. An approval under the Water Sustainability Act for the change is otherwise required if the change proposed is not of the kind listed in section 39 of the regulation.

Under the provisions of the regulation, the Habitat Officer has 45 days following receipt by the Ministry of this notification to request additional information from you and to specify additional terms and conditions specific to your proposal, if warranted. A person making a change in and about a stream under this regulation, other than under section 39(1)(o) to (s) or 39(2) or 39(5), must then make that change in accordance with the regulation and any terms and conditions specified by the Habitat Officer (*including those further described in #1-17 below or as specified subsequently within 45 days of Habitat Officer receipt of this notice*).

Therefore, if you have *not* heard back from the Habitat Officer *within 45 days* of our receipt of your notice providing you with a statement of any additional terms and conditions specified by the Habitat Officer with respect to your proposal, you may proceed with the proposed changes in and about a stream but must satisfy the requirements of Part 3 of the regulation and also comply with the following terms and conditions in making those changes:

- 1. Any work associated with the proposed changes in and about a stream must not cause stream channel instability or increase the risk of sedimentation into the stream.*
- 2. During work onsite, erosion and sediment control materials must be available onsite at all times and must be installed if sedimentation is likely to occur into the stream. A contingency plan must be developed outlining the measures to be taken by workers when carrying out any work to control erosion and sediment.*
- 3. Soil disturbance must not occur in heavy rain conditions and any soil removed must be placed in a location that ensures that sediment or debris does not enter the stream.*
- 4. Within a work area, water that contains sediment must be pumped to a vegetated area away from the stream where it can seep into the ground, or to a settling pond that is sufficiently far from the stream to allow sediment to settle out before the water returns to the stream.*
- 5. The disturbance of stream bank vegetation must not occur or be minimized as much as possible.*

6. Any areas that are disturbed during the work (such as exposed soil) must be promptly restored at a minimum to the pre-disturbance condition.

Note: Guidance is provided in the Enhancement Section of the Best Management Practices Instream Works

7. If possible, work must be conducted on, and equipment located and operated from, dry land (no water present) and the worksite must be isolated from flowing water.

8. Any equipment used in conducting work must be in good mechanical condition and, when operating in close proximity to the wetted perimeter of a stream, the operator must prevent entry of any substance, sediment, debris or material (e.g., hydrocarbons, silt) into the stream so as to prevent harm to fish, wildlife or the aquatic ecosystem of a stream. Note that Section 46 of the Water Sustainability Act prohibits the introduction of foreign matter into a stream. Failure to comply may result in a remediation order and it is also an offence to do so.

9. The original rate of water flow in the stream (existing prior to commencing work) must be maintained upstream and downstream of the worksite during all phases of instream activity associated with the work.

10. When work requires de-watering or isolation of the worksite in the stream, a permit for the salvage of fish and wildlife must be obtained prior to commencing work. All required salvage permits must be obtained from FrontCounter BC : <http://www.frontcounterbc.gov.bc.ca/>. Any salvage must be carried out by a qualified environmental professional (such as an R.P.Bio.).

11. Following de-watering or isolation of the worksite, stream flow must be returned gradually to the de-watered or isolated area within the stream and not in a single sudden rush so as to avoid erosion of the stream channel and sediment delivery to the stream.

12. The stream channel width must not change as a result of the work.

13. Any materials, such as riprap or gabion rock, placed within the stream must be clean and not contain substances that could be harmful to fish, wildlife or the aquatic ecosystem of the stream.

14. Any areas disturbed as part of the work must be restored as close as possible to their pre-disturbance condition. Any soil exposed at the worksite must be promptly re-vegetated.

15. Subject to section 16 and 17 below, the work must be completed during the timing window for the stream in respect of which the changes are proposed. The applicable timing window (by region and/or by stream) are specified in the following links (see below) and are designed to protect fish, wildlife or the aquatic ecosystem of a stream. To determine the timing window, please select the relevant region from the map:

<http://www.frontcounterbc.ca/pdf/RegionMap.pdf>

and then determine the applicable timing window: *Regional Timing Windows:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water/regional-terms-conditions-timing-windows>

<for that region and for the stream where the proposed changes will be made.

For projects proposed to take place outside these timing windows, please see section 16 and 17 below

16. In addition to the timing windows specified in section 15 above, work may be carried out during the following times provided these requirements are met when the changes are carried out:

i. If the stream channel is naturally dry (no flow) or frozen to the bottom at the worksite and the instream work / activity associated with the proposed change will not adversely impact fish, wildlife or the aquatic ecosystem of the stream (e.g. not result in any substance,

sediment, debris or other material entering or leaching into the stream that would adversely affect fish, wildlife or the aquatic ecosystem),

ii. In the construction of a winter crossing, the stream channel is frozen to the bottom at the worksite and related work does not adversely impact the stream channel (including stream bed and banks), or fish, wildlife or the aquatic ecosystem of the stream, or impede their passage (in both directions) in the stream.

17. If your work is proposed outside of the timing window (as described in section 15 above), you must retain a qualified environmental professional (such as an R.P. Bio.). The professional will be responsible for providing a written technical rational that assesses and addresses the risks of the proposed changes in and about a stream, including proposing site specific mitigation (e.g. an Erosion Control Plan that identifies contingency measures and emergency procedures related to the proposal) and onsite monitoring of their implementation. This document must be submitted to the Habitat Officer via Front Counter B.C. with reference to your file number (shown on top of this document).

In proceeding outside the timing window in accordance with recommendations by your qualified environmental professional, you must comply with any measures specified by that professional to prevent impacts on the stream channel (including stream bed and banks) or fish, wildlife or the aquatic ecosystem of the stream, as well as any Habitat Officer terms and conditions specified in the confirmation of receipt of your original Notice.

In summary, you must meet the terms and conditions described above, as well as any additional terms and conditions specified by the Habitat Officer in respect of your proposal within 45 days of the Ministry's receipt of your notice, if any were specified. In addition, you must also meet any other requirements of the regulation, as are described in Part 3 of the Water Sustainability Regulation found at <http://www.bclaws.ca/>

Also, for assistance to the public, the Province has developed clear guidance/practices, also referred to as best management practices, for working around water and for designing and implementing different types of changes in and about a stream, particularly in respect of instream works. This information in combination with the terms and conditions described above, including any additional Habitat Officer terms and conditions specified, if all followed, will help ensure that your changes in and about a stream will be compliant with the regulation and related legislation, as well as minimizing impacts on the environment (including related fish, wildlife and the aquatic ecosystem) in the stream and stream channel.

Follow the links and website directions (see below) to review the provincial guidance/practices provided for your proposed works. Please be advised that these documents may contain information which may be the subject of change due to amendments to the federal Fisheries Act and/or to related processes by Fisheries and Oceans Canada (DFO). Current up-to-date information on DFO process and legislation can be found at : <http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>

Province of BC Guidance / Practices:

Best Management Practices (BMP's) for Instream Works. When using this guide go to the list of "Guidebook Chapters" and select the appropriated chapters to match the specific activities relevant to your proposal for changes in and about a stream.

*Region specific BMP's for Instream Works links directly to other specific BMP pages for particular streams and regions (e.g. Shuswap and Mara foreshore guidelines): <http://www.env.gov.bc.ca/wld/instreamworks/index.htm> * Standards and Best Management Practices for Instream

Works: http://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-rights/standards_bp_instream_work.pdf *

Instream works: <http://www.env.gov.bc.ca/wld/instreamworks/index.htm>

*User's Guide to Working In and Around Water : http://www.env.gov.bc.ca/wsd/water_rights/cabinet/working_around_water.pdf

* Water Licences and Approvals:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water> << * Apply for a Change Approval or Submit Notification of Instream work:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/water-licences-approvals/apply-for-a-change-approval-or-submit-notification-of-instream-work> << *Exemption from approval or notification:

Final Note: It is the responsibility of persons intending to carry out changes in and about a stream, as described under Part 3 of the Water Sustainability Regulation:

- * To ensure that all sections of the Notice form are properly completed;
- * To comply with federal, provincial and municipal enactments, including but not limited to the Water Sustainability Act (and its regulations), *Fisheries Act* (Canada), *Wildlife Act* (BC) or the *Navigation Protection Act* (Canada), as well as local government bylaws and regulations, as may be applicable to proposed changes and related works or activities; and
- * To obtain the approval of the landowner for proposed changes and related works or activities intended to take place on private land or premises or to use any privately owner works, before proceeding.

Please be advised that, in the event of non-compliance with the requirements of the regulation (including habitat officer terms and conditions), it is the responsibility of persons carrying out changes in and about a stream:

- * To report non-compliance with the regulation within 72 hours and then to take measures to remedy the non-compliance, as may be specified by a Water Sustainability Act Engineer, as well as to comply with any additional terms and conditions specified by the Habitat Officer; and
- * To report damage to an aquatic ecosystem within 72 hours to a Habitat Officer and then to restore and repair the habitat to the state that existed before the damage was caused or as directed by the Habitat Officer.

For information, the Ministry may undertake review and inspection of specific changes in and about a stream and related works and activities to confirm compliance with:

- * The requirements of the regulation
- * Habitat Officer terms and conditions, including those listed in this document or any later specified by the Habitat Officer,
- * Any site specific measures and mitigations specified by a qualified environmental professional for in-stream projects carried out outside accepted timing windows, and
- * Any other applicable enactments

In cases of demonstrated non-compliance with legal requirements, compliance and enforcement actions may subsequently be undertaken by the Ministry where circumstances warrant.

For further information, please consult the Ministry websites listed above, as well as:
<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water>

Please contact FrontCounter B.C. with any questions regarding these requirements

Protection of Privacy: The collection, use and disclosure of personal information by the provincial government is governed by the Freedom of Information and Protection of Privacy Act. Additional authorities are provided in the Water Sustainability Act. Note that, in providing this Notice to the Ministry, you are consenting to the collection, use and disclosure of any personal information provided by you in the Notice. See Sections 12 and 38 (3) of the Water Sustainability Regulation. Note: Under Section 44(1) of the regulation, "timing window", in relation to a stream, means a period of the calendar year, specified by a habitat officer, during which changes in and about a stream can be made without causing a significant harm to fish, wildlife or the aquatic ecosystem of the stream. These were previously known as "least risk"

timing windows. As noted above, please
select the relevant region from this map (first link below) and then determine
the applicable timing window for that region using the second link for Regional
Timing Windows:

<http://www.frontcounterbc.ca/pdf/RegionMap.pdf>

*Regional Timing Window:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water/regional-terms-conditions-timing-windows><<

Thank You

Ron Diederichs, Habitat Officer West Coast Region

Kristina Robbins, Habitat Officer South Coast Region

Lora Nield, Habitat Officer Thompson Okanagan Region

Mike Knapik, Habitat Officer Kootenay Boundary Region

Robbin Hoffos, Habitat Officer Cariboo Region

Jocelyn Campbell, Habitat Officer Skeena Region

James Jacklin, Habitat Officer Omineca Region

Joelle Scheck, Habitat Officer North East Region

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Thompson, Acting Senior Planner
 Jake Belobaba, Director of Development Services

Meeting Date: December 1, 2020

File No: 3360-19-02

RE: OCP & ZONING BYLAW AMENDMENT APPLICATION – Lot 20
 Trans-Canada Highway & 670 Farrell Road

RECOMMENDATION:

That Council:

- 1) Direct the applicant to continue working with staff on Zoning Bylaw and Official Community Plan Amendment Application No. 3360-19-02.
- 2) If desired by Council, review the site plan attached as Attachment A to the staff report dated December 1, 2020 and provide further clarification or conditions relating to layout, community amenity contributions, and parks made in Council Resolutions CS2020-071, and CS2020-073.
- 3) Specify any further conditions that Council wishes to impose prior to *further* consideration of the application by Council.
- 4) Specify any further conditions that Council wishes to impose prior to *final* consideration of the application by Council.

EXECUTIVE SUMMARY:

The applicant has requested that Council consider their application to amend the Official Community Plan (OCP) and Zoning Bylaw at 670 Farrell Road to allow a mix of single-family and multi-family residential uses. The application was initially considered at the February 18, 2020 Council meeting. The applicant feels that all existing conditions of Council have been met and that the application is ready for Council consideration (see Attachment B). Staff's review of this application is not complete and staff's decision to bring this application forward without a complete review has been made in light of the applicant's request, to ensure compliance with Section 460(2)(a) of the *Local Government Act*. (See 'Legal Implications'.)

PREVIOUS COUNCIL DIRECTION:

Resolution Number	Resolution Date	Resolution
CS 2020-071	Feb. 18, 2020	<p>That Council:</p> <ol style="list-style-type: none"> 1. Consider the application (3360-19-02) to amend the Official Community Plan (OCP) and Zoning Bylaw to allow for a mix of single family and multi-family residential at Lot 20 Trans-Canada Highway and 670 Farrell Road. 2. Direct staff to: <ol style="list-style-type: none"> a. Refer application 3360-19-02 to the Community Planning Advisory Committee. b. Refer application 3360-19-02 to the Stz'uminus First Nation, pursuant to the Memorandum of Understanding between the Stz'uminus First Nation and the Town of Ladysmith. c. Work with the applicant regarding the proposed community amenity contribution and report back to Council. 3. Direct the applicant to:

		<ul style="list-style-type: none"> a. Provide a report from a geotechnical engineer assessing application 3360-19-02 in accordance with the Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC. b. Provide a transportation impact study, prepared by a professional engineer, assessing the anticipated traffic patterns, traffic volumes and impacts of application 3360-19-02. c. Provide a road layout and feasibility plan for the extension of Farrell Road through the subject property.
CS 2020-072		<p>That resolution CS 2020-071 be amended and renumbered to include the following:</p> <p>That Council direct staff to:</p> <p>2. a) Require that the applicant hold a second neighbourhood information meeting prior to referring application 3360-19-02 to the Community Planning Advisory Committee.</p>
CS 2020-073		<p>That Council direct staff to work with the applicant regarding neighbourhood layouts and park considerations that are more reflective of neighbouring residential areas.</p>

INTRODUCTION/BACKGROUND:

Subject Property

The subject property includes three parcels shown in Figure 1 (PIDs: 006-356-362; 023-896-710; 003-568-971). The subject property is located off Farrell Road on the west side of the Trans-Canada Highway approximately 1.75 km south of Coronation

Mall. It is approximately 4.8 ha in size, forested with mature trees and sloped towards Farrell Road.

The smallest parcel (PID 003-568-971), is owned by the Town and the Town has agreed to sell the property to the applicant. Council's decision must not be influenced by the potential sale.

Application

The latest concept was received November 19, 2020 (Attachment A). Staff note that the concept shows a townhouse and apartment building configuration that does not comply with the density provisions of the requested zoning. Additionally, the site layout is non-binding in relation to Council's February 18, 2020 resolutions related to neighbourhood layout and amenity contributions—i.e. submitting the concept at the rezoning stage does not require the applicant to adhere to it later if Council approves the rezoning. Council can impose conditions that would require future development to be consistent with the proposed site layout, such as covenants, phased development agreements and similar instruments.

Figure 1: Subject Property



Applicant's Concerns

The applicant's email requesting consideration at the December 1, 2020 meeting of Council is included in Attachment B. Staff note that portions of email conversations attached to the applicant's email were omitted. Specifically the October 21, 2020 and the August 7, 2020 emails which both contained responses to the applicant's questions. The applicant also submitted an excerpt of the February 18, 2020 Council meeting minutes, with highlights and handwritten checkmarks, to the Mayor at his place of business. This was forwarded directly to Development Services on November 23, 2020 (Attachment C). Staff have had insufficient time to investigate the applicant's concerns addressed in the latest email (Attachment B), however, this process has begun.

ANALYSIS:

The latest submittals were received 2.5 business days before the report deadline for the December 1st Council meeting; therefore, staff are unable to provide a full review of the application for Council, including any alternatives that may be considered.

The required amendment bylaws for the proposed layout in Attachment A cannot be prepared at this time because staff have yet to determine if the above-noted non-conforming multifamily design prevents Council from advancing the proposal for further consideration. However, staff may be able to provide a verbal update at the December 1, 2020 meeting of Council, if Council so chooses. Ensuring that conditions related to neighbourhood layout and amenity contributions have been met cannot be confirmed by staff at this time.

Should Council direct that Application No. 3360-19-02 be given further review, staff will provide a more complete analysis of the proposal and the applicant's concerns for Council's consideration.

ALTERNATIVES:

1. Deny OCP and Zoning Bylaw Amendment Application No. 3360-19-02.
2. Rescind Resolutions CS2020-071, CS2020-072 or CS2020-073 and provide different direction to staff and the applicant.
3. Provide clarification on the direction provided in resolution CS2020-071, CS2020-072 or CS2020-073 about Council's expectation regarding lot layout, parks and amenity contributions.
4. Defer consideration of Application No. 3360-19-02 to a future meeting of Council and direct that staff provide a complete review of the proposed application at a specified meeting of Council.

FINANCIAL IMPLICATIONS:

None.

LEGAL IMPLICATIONS:

The applicant is entitled to consideration, but not approval, of their application under section 460(2)(a) of the *Local Government Act*. Council may also impose additional conditions. As noted elsewhere in this report, Council's decision must not be influenced by the potential sale of the Town-owned lot.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

The applicant hosted two neighbourhood information meetings, the application has been considered by the Community Planning Advisory Committee and a public hearing is required pursuant to section 464(1) of the *Local Government Act* should future amendment bylaws receive readings of Council. Staff note there has been neighbourhood feedback pertaining to tree protection, parkland, and the overall density of the development. A full review of all public feedback in the context of the proposed development will be provided to Council if the application proceeds for further consideration by Council.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Feedback from other departments has yet to be compiled, reviewed and formalized. This will occur if the application proceeds for further consideration by Council.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

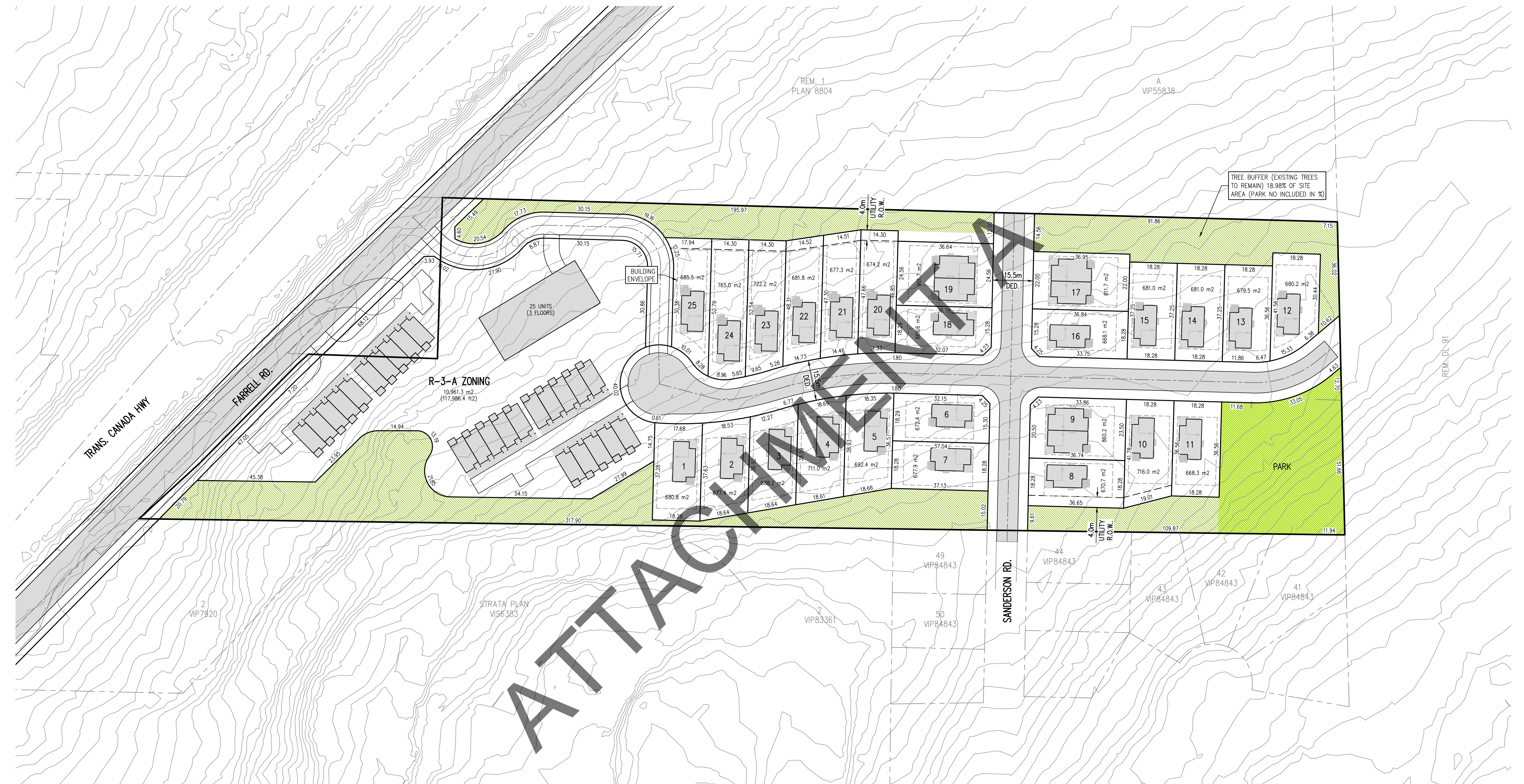
- | | |
|---|--|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input checked="" type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENTS:

- Attachment A: Most Recent Site Plan
- Attachment B: Applicant's request for Council Consideration
- Attachment C: Additional Applicant Submittal.



SCALE: 1:750

Page 192 of 280

From: [Robyn Kelln](#)
To: [Jake Belobaba](#); [Julie Thompson](#); [Allison McCarrick](#)
Cc: [Sean Carroll](#)
Subject: Fw: Ladysmith Revised Layout
Date: November 19, 2020 9:21:46 PM
Attachments: [2009-01-Keyplan.pdf](#)
[PLANNER JAN 28.pdf](#)
[PLANNER JUNE 16.pdf](#)
[PLANNER AUG 7.pdf](#)
[BELOBABA OCT 21.pdf](#)
[BELOBABA NOV 19.pdf](#)

To: Jake, Julie and Allison,

Please find enclosed our latest revised layout for the Farrell Rd properties and our rationale letter to go with our layout to Council on Dec 1st, 2020.

Please be so kind to confirm you have received this email,

Much appreciated,

Robyn Kelln

Nov 19, 2020

LADYSMITH TOWN COUNCIL,

Please accept this letter as our Rationale to our delegation request to speak to Council Dec 1, 2020.

When our project first went to council in FEB 2020 they gave a list of tasks for the staff to complete and for the applicant to complete prior to coming back to council to discuss.

Applicant needed to provide geotechnical report, provide a transportation impact study and provide a feasibility review of an extension of Farrell road through the subject property and to hold a 2nd neighborhood meeting. We completed this by the end of August.

We were disappointed that during a zoom meeting it was discovered that the feasibility of a direct route from Sanderson to Farrell is not possible while adhering to the engineering standards of Ladysmith and that the emergency lane was the only viable option. We were then asked to provide additional design for the ultimate extension of Farrell Road past our site.

Despite numerous requests by us the planning department would not support our project go back to council for discussion even though our interpretation was that council asked us to come back.

We are enclosing the attachments below where we were told by planning staff to expect dates and timelines.

Planner Jan 28

Planner June 16

Planner Aug 7

Jake Belobaba Oct 21

Jake Belobaba Nov 19

And we still have no confirmation, in over 8 months, that we can come back before Council.

During the last few months we have had numerous requests for revised lot layouts which we accepted and provided including changes to the road pattern/ revised lot configurations / revised zoning / . These requests seem to completely disregard previous comments received from the planning department. In one email we were asked to ensure all pan handle lots were a minimum 6 meters wide while a later email stated pan handle lots are not accepted. We would like to note there have been 5 Ladysmith planners on this project in the last 2 years ,all who seem to be of different opinions and seem on different pages.

Our current layout includes the dedication of approximately 20% of our site for tree retention. This is above the 5% park dedication for anyone keeping count. We understand this land has been requested by the planner and will be dedicated to Ladysmith which will require long term maintenance and liability. Is the Town even wanting to take on that risk? We really felt that this was not what we heard at our initial council meeting and once again tried to be able to get in front of council to discuss. Staff refused our request stating that everything had to be completely determined prior to meeting with council. We should state that staff did decide to exchange the community amenity contribution for the land being dedicated rather than have it be used for other possibly better suited options.

The latest plan that planning has directed us to provide had shown tree retention in areas where it doesn't appear to have any trees. For example the triangle lot located in the northwest side which we are under contract to purchase from the Town. Which now seems silly that we would purchase, do approx. \$350,000 in road improvements on the frontage, and then give close to 90% of the property for tree retention to the Town , considering there are no to little trees on the property and leave us with 10% usable land.

We just seem to be running in a butter bowl going nowhere .

We have now submitted another plan, our current plan, for Staff and Council consideration, this being #25.

We just thought that we should seek some direction from Council as we have received conflicting information and comments over that last 2 years. We don't have

to have 1st reading Dec 1st , would be nice if possible, or we just want to talk and get Council's feedback on a clear and transparent path to move forward.

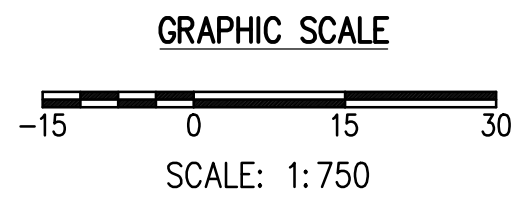
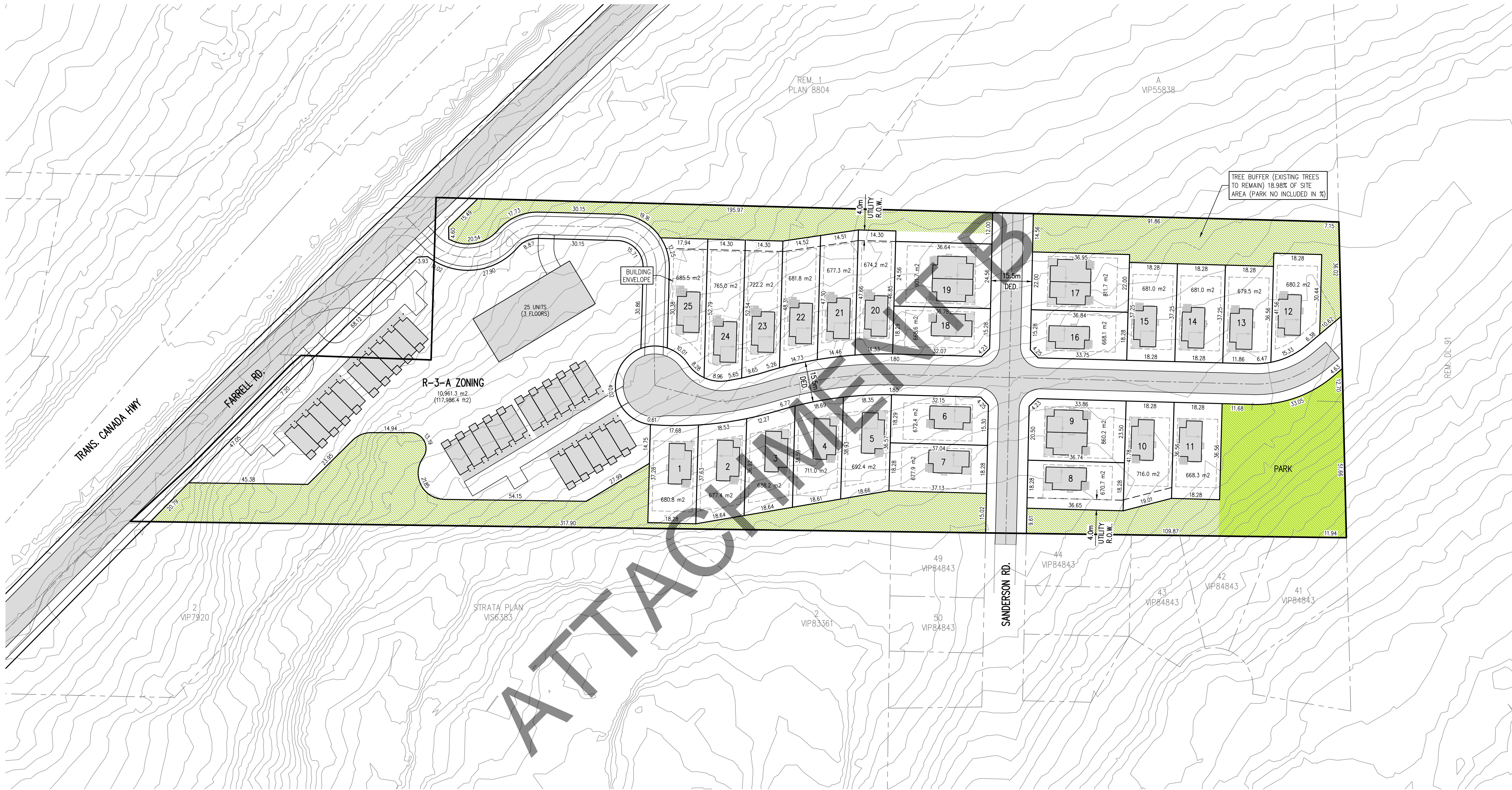
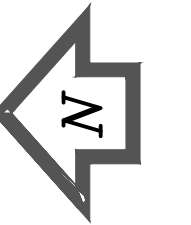
We trust that Council will see the merit in our frustrations and agree that this project has enormous benefits for the community and help to get this back on track.

We look forward to working with you,

Cheers,

Robyn Kelln

ATTACHMENT B



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RE: Farrell Properties RE-ZONING and TIMING

From: Christina Hovey (chovey@ladysmith.ca)

To: robynkelln

Date: Tuesday, January 28, 2020, 8:43 AM PST

Hi Robyn,

Here is an approximate timeline for the next steps, if everything goes smoothly and Council allows your application to proceed through all the steps:

- Council Consideration – we are still targeting Feb 18th
- Community Planning Advisory Committee – target March 4th
- Intergovernmental referrals – approx. 4 weeks (April)
- Bylaws 1st & 2nd Reading: April-May
- Public Hearing & 3rd Reading: May
- MoTI approval & Final Approval: June

As I'm sure you know from your previous projects, it is very difficult to complete a rezoning in less than 6-8 months and can often take much longer (2+ years). I know those timeframes can be frustrating for everyone involved.

Hope this helps,

Christina

TOWN OF LADYSMITH

Christina Hovey, RPP, MCIP

Senior Planner

Development Services Department

Phone: 250.245.6410

132C Roberts St MAIL PO Box 220 Ladysmith, BC V9G 1A2

Celebrate our Present. Embrace our Future. Honour our Past.

RE: NIM during COVID

From: Christina Hovey (chovey@ladysmith.ca)

To: SCarroll@coregroupconsultants.com

Cc: robynkelln

Date: Tuesday, June 16, 2020, 12:40 PM PDT

Hi Sean,

I'm not sure when Frank Jamieson will start booking again. But the Eagle's Hall is a great choice, it's a nice big venue, we often hold Public Hearings there.

You might want to consider a different day of the week for your meeting. July 14 is Committee of the Whole (COW) meeting, so Town Councilors would be less likely to be available to attend (that's fine, but I know you wanted to make sure they were up to date at this time). Council meets the 1st and 3rd Tuesday of the month and COW meets the 2nd Tuesday of the month. If you want to invite them to your meeting and/or send them the information package you are preparing, the best way to reach Council directly is via email at towncouncil@ladysmith.ca (the address forwards directly to the mayor and all councilors).

If you have your NIM in mid-July then I can bring your file to the community planning advisory committee (CPAC) for the August meeting which will be August 5th, 2020. After that we should be able to bring the file back to Council. They meet every two weeks and the agenda cycle (e.g. to get reports prepared and approved) is approximately 1.5-2 weeks – so it would be feasible to bring the file back to Council in September.

I need to look back on the Council Minutes to see if there is anything else we need to work through before we bring the file back to Council. Can we set up a time for a call early next week? That will give me enough time to refresh my memory and follow up internally if I need to talk to other departments. I have a meeting at 3pm on Monday, but otherwise my schedule looks open if you want to suggest a time.

Please see below for my notes on the NIM proposal – but it generally seems reasonable.

Thanks,

Christina

RE: Ladysmith Town Council meetings

From: Christina Hovey (chovey@ladysmith.ca)

To: robynkelln

Cc: scarroll@coregroupconsultants.com

Date: Friday, August 7, 2020, 5:22 PM PDT

Hi Robyn & Sean,

Robyn, it was nice to see you in person this week as well!

Here are my notes regarding your next steps for the rezoning file. I also wanted to flag for you some discussions that have come up regarding the overall proposed density in the context of the current road layout proposal as well as some of the comments back from the neighbourhood meeting.

Would you and Sean have time next week for a quick zoom call? Then we can go over this together (this ended up being a long e-mail!) and I can introduce you to Julie. She was at the meeting on Wednesday, but I don't think I had a chance to introduce you. Wednesday August 12 is a good day for both of us, or feel free to suggest a time that works for you.

Timeline:

- Council meets the 1st and 3rd Tuesday of every month, with about a week to a week and a half for the agenda schedule. https://www.ladysmith.ca/docs/default-source/news-documents/2020-ad-meeting-schedule-council_web66808dfa7dca559d9d49ff0000e75dbc.pdf?sfvrsn=7ca5e8db_4
- Your timeline sounds about right (see below – I added some notes in black) except that:
 - o It is unlikely that we would be able to get a public hearing scheduled for the next Council meeting because of the required public notification it would likely be the meeting after (e.g. 4-5 weeks after 1st & 2nd reading rather than 2-3 weeks).
 - o After the Public Hearing:
 - § The ZBL would need to be approved by the Ministry of Transportation – this takes **at least** two weeks, and can take longer if they have questions or concerns (if we can send them the traffic impact assessment in advance that can help).
 - § You will need to fulfil any conditions of approval – so for example preparing covenants, amenity contributions, etc. The timeline for this will largely be in your hands. You should have a pretty clear understanding of the conditions at the time of 1st & 2nd Reading and so you can get started or wait until after 3rd reading.
- In terms of the actual date that we can go to Council for 1st & 2nd reading, we should review what we still need to do prior to returning to Council:
 - o We need to ensure all the Council requirements from the Feb. 18 meeting have been addressed (minutes are attached).

RE: FARRELL RD PROPERTIES/RE-ZONING

From: Jake Belobaba (jbelobaba@ladysmith.ca)

To: robynkellin@

Cc: scarroll@coregroupconsultants.com; dsmith@ladysmith.ca; AMcCarrick@ladysmith.ca; RBouma@ladysmith.ca; jthompson@ladysmith.ca; ahainrich@ladysmith.ca

Date: Wednesday, October 21, 2020, 1:50 PM PDT

Hello Robyn

We've reviewed the request you've made in your email below. As I mentioned in our last meeting, staff have an obligation to make informed recommendations and thorough analyses when demonstrating to Council that a rezoning application should be approved. Our efforts and requests to date have been intended to reach a point where this application can move forward with a positive recommendation from staff. If you wish to have the application considered by Council in its present state we can accommodate this; however, absent outstanding information and further review and comment by staff, staff will have no choice but to recommend to Council that the application be denied.

I have discussed this with the CAO and Manager of Corporate Services and the process for asking Council to give further consideration to your application is as follows:

1. You must provide me with a signed letter, clearly stating that you wish to have your application considered as is and requesting that it be brought forward to the next available Council meeting for formal consideration.
2. The report deadline for the November 3rd meeting has already passed. We'll need to receive the letter by noon on November 3rd for the request to be eligible for the November 17th agenda (any eligible applications that are ahead of this one in the queue must still be given priority). The same deadline applies for any additional information you wish to provide under #5 below.
3. Staff will prepare a report for Council and provide Council with the items we've received to date. As noted above, staff's recommendation will be to deny the application. A rationale will be provided.
4. Council will consider the application and either direct staff to prepare the required zoning amendment bylaws, or accept staff's recommendation to deny the application.
5. If you wish to attend the meeting, the chair may give you an opportunity to speak to Council or refer questions of Council to you. This is entirely at the chair's discretion, so I would recommend that any additional comments that you wish to provide Council be made in writing so they can be included with the agenda package. If the application proceeds to a public hearing, you will have the opportunity to speak to Council at the hearing.

We'll assume you want to proceed as outlined above and wait for the letter. If you decide otherwise,

RE: Ladysmith Revised Layout

From: Jake Belobaba (jbelobaba@ladysmith.ca)

To: robynkellni jthompson@ladysmith.ca; amccarrick@ladysmith.ca;
scarroll@coregroupconsultants.com; bcarnahan@coregroupconsultants.com

Date: Thursday, November 19, 2020, 4:12 PM PST

Hello Robyn

Our deadline for submittals for the Dec 1 application meeting has passed. We will attempt to get this on the Dec 1st meeting but will not be able to confirm until the middle of next week.

Also, one of the attachments in your previous email (see attached) is a blank page. If you meant to send something else please send as soon as possible.

Thank you,

TOWN OF LADYSMITH

Jake Belobaba, RPP, MCIP

Director of Development Services

Development Services Department

Phone: 250.245.6405

Cell: 250.616.3755

132C Roberts St MAIL PO Box 220 Ladysmith, BC V9G 1A2
Celebrate our Present. Embrace our Future. Honour our Past

Development Services is now open in a limited capacity to the public with new COVID-19 protocols in place. We are responding to all email and phone enquiries and accepting applications electronically. The public can access resources, building information and commonly requested forms through the Business & Development section of our website: <https://www.ladysmith.ca/business-development/application-forms>. To provide the best service possible, we recommend contacting us by phone or email to determine if a visit to our office is necessary.

2. Direct the Corporate Officer to deposit a plan for the road dedication with the land title office.

Motion Carried

**9.4 Development Variance Permit 3090-19-11, 312 Roland Road
CS 2020-070**

That Council:

1. Issue Development Variance Permit 3090-19-11 at 312 Roland Road to allow for alterations to the roofline of an existing dwelling that is located within the required setback from the sea.
2. Authorize the Mayor and Corporate Officer to sign Development Variance Permit 3090-19-11.

Motion Carried

**9.5 Official Community Plan & Zoning Bylaw Amendment Application –
Lot 20 Trans-Canada Highway & 670 Farrell Road
CS 2020-071**

That Council:

1. Consider the application (3360-19-02) to amend the Official Community Plan (OCP) and Zoning Bylaw to allow for a mix of single-family and multi-family residential at Lot 20 Trans-Canada Highway and 670 Farrell Road.
2. Direct staff to:
 - a. Refer application 3360-19-02 to the Community Planning Advisory Committee.
 - b. Refer application 3360-19-02 to the Stz'uminus First Nation, pursuant to the Memorandum of Understanding between the Stz'uminus First Nation and the Town of Ladysmith.
 - c. Work with the applicant regarding the proposed community amenity contribution and report back to Council.
3. Direct the applicant to:
 - a. Provide a report from a geotechnical engineer assessing application 3360-19-02 in accordance with the Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC. ✓
 - b. Provide a transportation impact study, prepared by a professional engineer, assessing the anticipated traffic patterns, traffic volumes and impacts of application 3360-19-02. ✓
 - c. Provide a road layout and feasibility plan for the extension of Farrell Road through the subject property. ✓

AMENDMENT

CS 2020-072

That resolution CS 2020-071 be amended and renumbered to include the following:

That Council direct staff to:

2. a) Require that the applicant hold a second neighbourhood information meeting prior to referring application 3360-19-02 to the Community Planning Advisory Committee.

Amending Motion Carried

OPPOSED: Councilors McKay and Paterson

Main Motion, as Amended, Carried

CS 2020-073

That Council direct staff to work with the applicant regarding neighbourhood layouts and park considerations that are more reflective of neighbouring residential areas.

Motion Carried

10. REPORTS

10.1 Adjustments to Water Billing Accounts

CS 2020-074

That Council approve adjusting the water billing due to leaks for the property account #0246000 for \$6,155.06.

Motion Carried

11. CORRESPONDENCE

11.1 Quentin Goodbody, President of the Ladysmith and District Historical Society: Request for a Service Provider Agreement

CS 2020-075

That Council:

1. Authorize the execution of a Service Provider Agreement between the Town of Ladysmith and the Ladysmith and District Historical Society for the provision of promotional services and managing the Ladysmith Museum and Archives; and

Committee of the Whole Recommendations to Council December 1, 2020

At its November 10, 2020 meeting, the Committee of the Whole recommended:

1. That Council direct staff to prepare a report regarding bans on single use plastics.



MINUTES OF A MEETING OF THE COMMITTEE OF THE WHOLE

Tuesday, November 10, 2020
6:30 P.M.

This meeting was held electronically as per Ministerial Order No. M192

Council Members Present:

Councillor Tricia McKay, Chair
Mayor Aaron Stone
Councillor Amanda Jacobson
Councillor Rob Johnson

Councillor Duck Paterson
Councillor Marsh Stevens
Councillor Jeff Virtanen

Staff Present:

Allison McCarrick
Erin Anderson
Chris Barfoot
Jake Belobaba
Geoff Goodall

Donna Smith
Chris Geiger
Ryan Bouma
Mike Gregory
Sue Bouma

1. CALL TO ORDER

Councillor McKay called this Committee of the Whole meeting to order at 6:34 p.m., noting that technical difficulties had interfered with live streaming, but that the video would be uploaded to the Town's website following the meeting.

Councillor McKay acknowledged that this meeting was being held on the traditional unceded territory of the Stz'uminus First Nation and expressed gratitude to be here.

2. AGENDA APPROVAL

CW 2020-052

That the agenda for this November 10, 2020 Committee of the Whole meeting be approved.

Motion Carried

3. MINUTES

3.1 Minutes of the Committee of the Whole Meeting held September 8, 2020

CW 2020-053

That the minutes of the Committee of the Whole meeting held September 8, 2020 be approved as amended to note Councillor Stevens' opposition to resolution CW 2020-041.

Motion Carried

3.2 Minutes of the Special Committee of the Whole Meeting held October 27, 2020

CW 2020-054

That the minutes of the Special Committee of the Whole meeting held October 27, 2020 be approved.

Motion Carried

4. GIS PRESENTATION

Infrastructure Services staff provided a demonstration of the Town's GIS system, describing it as a quick reference tool for investigating anything from approximate property size, to tree ownership and utilities, as well as for planning data, such as zoning information and permits.

Staff indicated that at present GIS is being used by Infrastructure Services and Development Services staff, however future plans include developing a tablet platform for Public Works staff to easily access while investigating issues, adding more comprehensive property and utility information, and creating a public version that could be launched from the Town's website.

Staff responded to Council's questions.

5. REPORTS

5.1 2020 Q3 (July– September) Financial Update

Staff responded to Council's questions regarding the quarterly financial update.

CW 2020-055

That the Committee receive the July to September 2020 Financial Update report from the Director of Financial Services.

Motion Carried

5.2 Building Inspector's Report for July to September 2020

CW 2020-056

That the Committee receive the Building Inspector's Report for the months July to September 2020.

Motion Carried

5.3 Ladysmith Fire/Rescue Reports for July to October 2020

CW 2020-057

That the Committee receive the Ladysmith Fire/Rescue Reports for the months July to October 2020.

Motion Carried

5.4 Coastal Animal Control Services Reports for May to July 2020

CW 2020-058

That the Committee receive the Coastal Animal Control Services Reports for the months May to July 2020.

Motion Carried

5.5 RCMP Reports for Quarters 1 to 3, 2020

CW 2020-059

That the Committee receive the RCMP Reports for the first three quarters of 2020.

Motion Carried

5.6 Bylaw Compliance Statistics for January to June 2020

CW 2020-060

That the Committee receive the Bylaw compliance statistics for the period of January to June, 2020.

Motion Carried

6. COUNCIL SUBMISSIONS

6.1 Single Use Plastic Items

CW 2020-061

That the Committee recommend that Council direct staff to prepare a report regarding bans on single use plastics.

Motion Carried

OPPOSED: Councillor Johnson

7. ADJOURNMENT

CW 2020-062

That this meeting of the Committee of the Whole be adjourned at 7:37 p.m.

Motion Carried

Chair (Councillor T. McKay)

Corporate Officer (D. Smith)

INFORMATION REPORT TO COUNCIL

Report Prepared By: Sue Glenn, Community Programs & Services Supervisor
Meeting Date: December 1, 2020
File No:
Re: Poverty Reduction Plan Update

RECOMMENDATION:

That Council receive for information the report dated December 1, 2020 regarding the Poverty Reduction Plan Update.

EXECUTIVE SUMMARY:

In September 2020, a working group was established with representatives from a wide variety of stakeholders to represent the diversity of Ladysmith and Stz'uminus First Nation. The Poverty Reduction Plan Working Group held its inaugural meeting in September 2020.

The project "**commUNITY – Together to End Poverty**" will:

- Support public engagement on poverty education.
- Identify peers, people in the community with diverse, lived experience of poverty.
- Engage local leaders and community members to participate in one or more of the following 3 poverty challenges:
 - Food allowance challenge: each participant would receive a food allowance budget based on social assistance for three days;
 - Public/active transportation challenge: each person would be required to use public or active transportation for three days;
 - 12 hour "nowhere to go" challenge: each person would be challenged to spend 12 hours with nowhere to go.
- Research and review the Town of Ladysmith's plans and other applicable policies to incorporate a poverty lens and recommend specific actions that will support lifting residents out of poverty.
- Present the Poverty Reduction Strategy draft to Town of Ladysmith Council and Stz'uminus Chief and Council for final edits before the submission deadline of May 14, 2021 to UBCM.

The overarching goal of the **commUNITY – Together to End Poverty** project is to formulate a list of actions and recommended solutions specific to Ladysmith and Stz'uminus area residents, developed through a comprehensive community engagement process that broadly includes all sectors of the community and ultimately has Councils' and community buy-in and support.

PREVIOUS COUNCIL DIRECTION – March 3, 2020:

CS 2020-087	<p>That Council:</p> <ol style="list-style-type: none">1. Direct staff to submit an application to the UBCM Poverty Reduction Planning & Action Program Funding Stream 1 for up to \$25,000;2. Confirm its willingness to provide overall grant management; and3. Waive the purchasing policy in order to contract with Social Planning Cowichan to conduct the work, should the grant application be successful.
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DISCUSSION:

In March 2019, the Province of BC released their poverty reduction strategy: [TogetherBC: British Columbia's Poverty Reduction Strategy](#). Mandated through the Poverty Reduction Strategy Act, the strategy set targets to reduce the overall poverty rate in British Columbia by at least 25%, and the child poverty rate by at least 50%, by 2024. The Province has provided \$5 million over three years to support local governments in reducing poverty through the Poverty Reduction Planning & Action program administered by the Union of BC Municipalities (UBCM).

In February 2020, the Ladysmith Interagency Committee identified the top three issues related to poverty challenges as:

1. Transportation - access to medical appointments in Nanaimo and/or Duncan.
2. Food security – decreasing access to healthy food; especially with children in school with continuing demand at the food bank.
3. Housing - increasing rental prices (\$1200-\$1400 for a single bedroom is now more commonly the norm) with a general lack of supply.

The Ladysmith Poverty Reduction Planning proposal identified all six-priority action areas from the TogetherBC as important as they are interrelated. These are:

- Housing
- Families, children and youth
- Education and training
- Employment
- Income supports
- Social supports

Additional factors include; mental health and addictions, food security, transportation, access to health care and climate change. The Working Group also acknowledge that the biggest hurdle to reducing poverty is to address the stigma around it. These challenges have been complicated further by the COVID-19 pandemic.

In March 2020, Council directed staff to apply for funding under the UBCM Poverty Reduction Planning & Action Program Funding Stream 1 for up to \$25,000 (see previous staff report, Attachment A) and in May 2020, the Town received \$25,000 funding under this program. This funding provides the opportunity, through partnerships and collaboration, to develop a plan that both sets priority actions on poverty reduction and identifies actions specific to the needs

of Ladysmith and Stz'uminus residents. Completing this work will provide the ability to apply for *Stream 2: Poverty Reduction Action* funds of up to \$50,000 towards an action/project that will directly benefit residents of Ladysmith and Stz'uminus and work towards the goals of poverty reduction.

In September, 2020, a working group was established with representatives from a wide variety of stakeholders to represent the diversity of Ladysmith and Stz'uminus.

The Working Group members include:

- Rosalie Sawrie; Social Planning Cowichan
- Sandra Thomson; Social Planning Cowichan
- Jennifer Jones; Stz'uminus First Nation
- Lesley Lorenz; Stz'uminus Elementary School
- Alexis Stuart; First Nation Health Authority
- Jade Yehia; Vancouver Island Health Authority
- Cindy Lise; Our Cowichan Health Network
- Melissa Bond; Ladysmith Resources Centre Association
- Karen Love; Boys & Girls Clubs of Central Vancouver Island
- Bernadette French; Nanaimo Ladysmith Public Schools (SD68)
- Sue Glenn; TOL PR&C, Community Programs & Services Supervisor
- Shannon Wilson; TOL PR&C, Recreation & Culture Coordinator

Project - commUNITY – Together to End Poverty

The working group has identified key areas of focus. The following actions will be used to develop a Poverty Reduction Strategy for Ladysmith:

- **Support public engagement** on poverty education, demonstrating the impacts, using local story sharing and educational visuals to discuss the barriers of stigma and discrimination and begin to identify solutions. This will include a questionnaire delivered 1:1, through print copies and available online through survey method and PlaceSpeak.
- **Identify at least six peers**, people in the community with diverse, lived experience of poverty to:
 - Receive training to help facilitate a series of community sessions and activities, in line with COVID-19 protocols;
 - Work with Social Planning Cowichan/Working Group to promote the project and recruit engagement in the questionnaire and poverty challenges;
 - Be available to interview 10 other people with lived experience;
 - Assist with facilitation of group discussions during Poverty Challenge debrief event, in line with COVID-19 protocols;
 - Support the implementation of actions following the development of the Poverty Reduction Plan (Stream 2 through UBCM).

- **Engage local leaders and community members to participate in one or more of the following 3 poverty challenges:**
 - Food allowance challenge: each participant would receive a food allowance budget based on social assistance for three days;
 - Public/active transportation challenge: each person would be required to use public or active transportation for three days;
 - 12 hour "nowhere to go" challenge: each person would be challenged to spend 12 hours with nowhere to go;
 - Participants would be invited for a community breakfast or online forum (COVID-19) with small break out debrief discussions facilitated by trained peers to share experiences and identify poverty reduction actions and solutions.
- Research and review the Town of Ladysmith's Official Community Plan, Zoning Bylaw, emergency response and support service plans, food security and food systems planning and other policies to **incorporate a poverty lens and recommend specific actions** that will support lifting residents out of poverty.
- **Present the Poverty Reduction Strategy draft to Town of Ladysmith Council and Stz'uminus Chief and Council** for final edits before the submission deadline of May 14, 2021 to UBCM.

Intended Outcomes

The overarching goal of the **commUNITY – Together to End Poverty** project is to formulate a list of actions and recommendations specific to Ladysmith & Stz'uminus area residents, developed through a comprehensive community engagement process that broadly includes all sectors of the community and ultimately has Council's and community support. Community engagement will include:

- Community building and education around poverty related issues and impacts.
- A reduction in stigma around poverty and discrimination.
- Relationship building among peers, with the peers and community and among Indigenous and non-indigenous residents.
- Participation by existing community service organizations that will benefit by sharing and further understanding community needs, identifying gaps and opportunities for expanding services to support those needs.

The Ladysmith & Stz'uminus Poverty Reduction Strategy will be developed to support the application for the next round of funding necessary to continue the work of addressing poverty in our partnering communities into the future.

Key Dates

Working Group Engagement	September; ongoing
Identifying Peers and Key Audiences	October; ongoing
Community Engagement	Week of November 30 *tentative
Education / Awareness Campaign	December; ongoing
Questionnaire; 1:1, online, print	December; ongoing

Poverty Challenges	Late January 2021 *tentative
Review & Analyze Data	February; ongoing
Draft reports for community feedback	Mid-March; ongoing
Presentations to Town of Ladysmith Council and Stz'uminus Council	End of April – Early May, 2021
Final Edits to Poverty Reduction Plan	Early May, 2021
Final Report Due to UBCM	May 14, 2021

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- Attachment A – Staff Report – Poverty Reduction in Ladysmith March 2020

ATTACHMENT A**STAFF REPORT TO COUNCIL**

Report Prepared By: Sue Glenn, Parks, Recreation and Culture
Meeting Date: February 27, 2020
File No:
RE: Staff Report - Poverty Reduction in Ladysmith March 2020.docx

RECOMMENDATION:

That Council:

1. Direct staff to submit an application to the UBCM Poverty Reduction Planning & Action Program Funding Stream 1 for up to \$25, 000;
2. Confirm its willingness to provide overall grant management; and
3. Waive the purchasing policy in order to contract with Social Planning Cowichan to conduct the work, should the grant application be successful.

EXECUTIVE SUMMARY:

The intent of the Poverty Reduction Planning & Action funding program is to support local governments in reducing poverty at the local level and to support the Province's poverty reduction strategy.

Social Planning Cowichan has approached the Town about this grant funding opportunity. Social Planning Cowichan will write the grant application and, if successful, will conduct the work with some support from Town staff. The Town is required to administer the grant funds, as this is a program for local governments through the Union of BC Municipalities.

PREVIOUS COUNCIL DIRECTION

N/A

INTRODUCTION/BACKGROUND:

In March 2019, the Province of BC released their poverty reduction strategy: TogetherBC: British Columbia's Poverty Reduction Strategy. Mandated through the Poverty Reduction Strategy Act, the strategy set targets to reduce the overall poverty rate in British Columbia by at least 25%,

and the child poverty rate by at least 50%, by 2024. TogetherBC is based on four principles: affordability, opportunity, reconciliation, and social inclusion. These principles guided the priority action areas that form the core of the strategy.

Local governments have long-advocated for a provincial poverty reduction strategy and are crucial partners in this work. They are at the front-line of seeing the impacts of poverty in their communities and play a central role in developing local solutions with community partners and other levels of government.

In British Columbia, 1 in 5 children live in poverty. In the Cowichan Region, that number is 1 in 4. For children in lone parent families the poverty rate spikes to 58%. This amounts to approximately 4,040 children living in our neighbourhoods who don't have access to regular healthy food which can lead to physical, emotional and mental developmental delays. They may also have a higher chance of experiencing chronic illnesses and are more likely to drop out of school and/or not have access to a post-secondary education leading to low paying employment and continuing the poverty cycle.

The Ladysmith breakdown, according to the Island Health Local Health West Area Profile

- *Percent of Population with Low Income in 2015 based on after-tax low-income measure (2016 Census):*
 - *Low Income Children (<6 years): 14.3%*
 - *Low Income Children and Youth (<18): 14.9%*
 - *Low Income Adults (18 to 64): 11.3%*
 - *Low Income Seniors (65+): 11.6%*
- *Population Aged 25 to 64 with Post-Secondary Certificate, Diploma or Degree is 61.4%, approx. 2% below the BC and Island Health average (63.9% and 63.7% respectively)*
- *40.4% of rental households are spending more than 30% on housing*
 - *Owned households is 15.8%*
- *8.3% of the population aged 15 and over are unemployed*

In addition, at the latest Ladysmith Interagency Committee, the following top three issues related to poverty challenges were identified:

1. *Transportation - access to medical appointments in Nanaimo and/or Duncan identified as one of the biggest challenges.*
2. *Food security – decreasing access to healthy food especially with children in school. There is a continuing demand for the food bank. Monday evening has been added at the LRCA for families to have easier access. Stz'uminus also has trouble accessing healthy food and are working with the LRCA to access the food bank more easily.*
3. *Housing - increasing rental prices (\$1200-\$1400 for 1 bedroom is more commonly the norm) with a general lack of supply.*

The first step to accessing funding for addressing poverty in our communities is by creating a plan.

If successful, the Town will work with Social Planning Cowichan (SPC) in the creation of the poverty reduction plan.

ALTERNATIVES:

Council can choose not to apply for UBCM Poverty Reduction Planning & Action Program Funding.

FINANCIAL IMPLICATIONS:

This grant program is 100% funded up to \$25,000.

LEGAL IMPLICATIONS:

There are no legal implications identified that would limit this application.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

N/A

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The project would require assistance from Financial Services.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|---|
| <input type="checkbox"/> Complete Community Land Use | <input checked="" type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input checked="" type="checkbox"/> Local Food Systems |
| <input checked="" type="checkbox"/> Healthy Community | <input checked="" type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Guillermo Ferrero, Chief Administrative Officer

ATTACHMENT(S):

Eliminating Poverty in the Cowichan Region - Ladysmith Background (Social Planning Cowichan Partnership Request Letter)

UBCM Poverty Reduction Planning & Action Program

INFORMATION REPORT TO COUNCIL

Report Prepared By: Chris Barfoot, Director of Parks, Recreation and Culture
Meeting Date: December 1, 2020
File No:
Re: COVID-19 Parks, Recreation & Culture Program Rate Adjustment

RECOMMENDATION:

That Council receive for information the staff report dated December 1, 2020, regarding COVID-19 Parks, Recreation & Culture Program Rate Adjustments.

EXECUTIVE SUMMARY:

At the November 17, 2020 Regular Council Meeting, Council received a late report from staff requesting authorization to immediately resume offering Parks, Recreation and Culture services using the established admission fees and passes according to Schedule A of "Town of Ladysmith Community Centre and Facilities Fees and Charges 2018, No. 1968".

Council passed a resolution to that effect (see CS 2020-336 below), including that revenue shortfalls will be offset using funds received through the Provincial COVID-19 Safe Restart Grant for Local Governments. At that meeting, staff committed to bring a formal report for the December 1st Council meeting, in order to provide more detailed background information to Council and the public.

PREVIOUS COUNCIL DIRECTION

Resolution	Meeting Date	Resolution Details
CS 2020-336	11/17/2020	That Council: 1. Authorize staff to resume offering Parks, Recreation and Culture services using the established admission fees and passes according to "Town of Ladysmith Community Centre and Facilities Fees and Charges Bylaw 2018, No. 1968"; and 2. Offset revenue shortfalls by authorizing the use of funds received through the Provincial COVID-19 Safe Restart Grant for Local Governments.
CS 2020-293	10/06/2020	That Council direct staff to: 1. Reopen the 25m pool and the therapy teach pool at the Frank Jameson Community Centre on November 2nd with limited programming as presented by the Director of Parks, Recreation and Culture; and 2. Phase in the opening of the other pool amenities when permitted by the Provincial Health Officer and other regulatory agencies.

INTRODUCTION/BACKGROUND:

In March 2020, all recreation facilities and services including recreational passes were suspended in response to the COVID-19 Pandemic including orders and restrictions from the Provincial Health Officer (PHO).

In June 2020, under strict reopening plans adhering to current orders and restrictions from the PHO, the Town recreation services resumed, although limited and by way of registration only. Under these limited capacities and strict guidelines, any programs and services that resumed, utilized a program cost recovery model with applicable program fees.

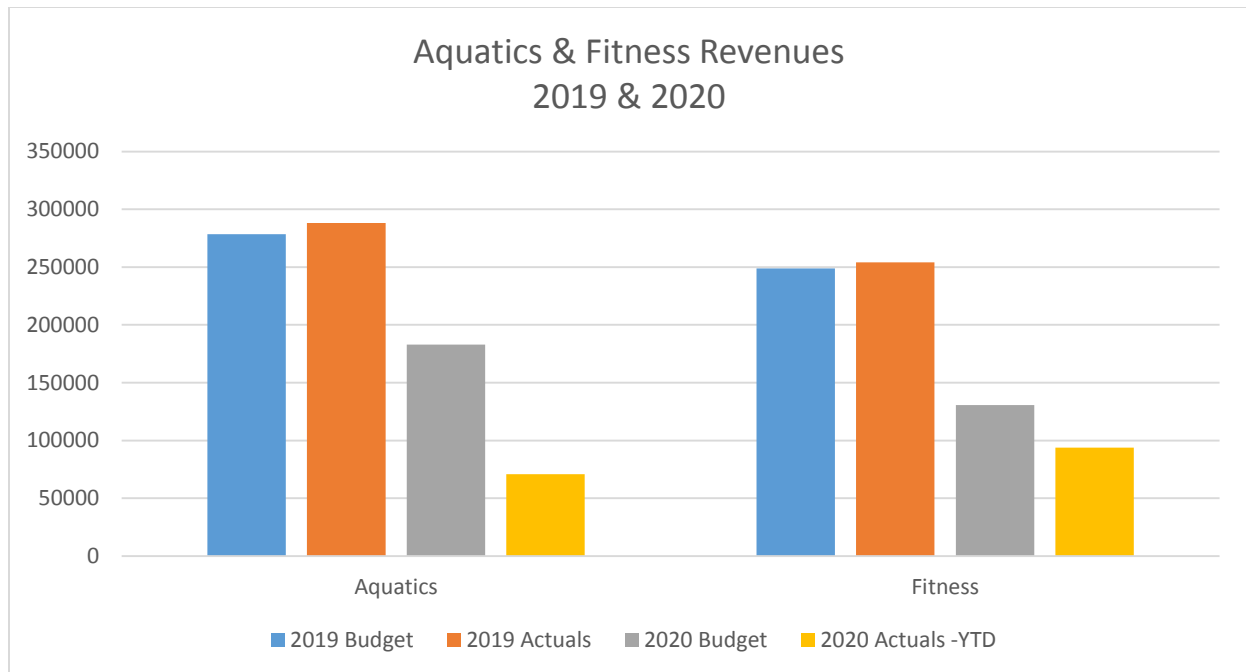
On October 6, 2020, Council endorsed reopening the pool using this similar cost recovery model with a registration program fee of \$6.50. This calculation considers the higher costs to operate the pool under the strict guidelines and limitations on the number of patrons permitted to participate in each program. The pre-registered program fees for all aquatic programs were set at \$6.50 per individual and \$4.25 for individuals using the fitness centre. Due to the inability to offer drop in programs at a maximum capacity (up to 40 participants) and utilize the regular drop in admissions, all passes based on date of activation and not just based on per use are temporarily suspended. A summary of the Town of Ladysmith recreation passes and the number of customers who have purchased these prior to the COVID-19 pandemic is shown in Attachment A – TOL Recreation Passes Summary.

This has been an effective method to operate while under the strict COVID-19 restrictions; however, it is inconsistent from the regular admissions set in Bylaw No. 1968 and was not intended to be a long-term solution. Feedback received from the public has been both positive and constructive. Some have expressed how excited they were to regain access to the facility and resume recreation services; however, we were also hearing that the program cost recovery model was not seen as a fair and equitable distribution of the fees amongst the different age demographics.

FINANCIAL IMPLICATIONS:

Revenue shortfalls will be offset by authorizing the use of funds received through the Provincial COVID-19 Safe Restart Grant for Local Governments. With the evolving Provincial Health Order restrictions, the impact of COVID-19 on recreation revenues for 2020 and 2021 is difficult to accurately determine.

January to September revenues for admissions, passes and programs has dropped \$270,000 in 2020 over 2019 values. The approved 2020 budget anticipated some decreases in revenues, though it was expected that the facilities would be fully operational by the end of 2020. As the facilities have not returned to full operations, a deficit is projected in the area.



Aquatic revenues could see a larger decrease with the majority of participants during morning Aqua-Fit classes being seniors or individuals who hold an 80 plus pass (\$0 – currently 17 participants hold an 80 plus pass), as well as the decreased available participant spaces for each class.

LEGAL IMPLICATIONS:

N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

The regular fee structure will provide the public recreational services based on regular admission rates charged prior to the pandemic.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

N/A

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input checked="" type="checkbox"/> Healthy Community | <input checked="" type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- Attachment A – TOL Recreation Passes Summary
- Attachment B – TOL Fees and Charges Bylaw 2019 NO. 1968 (Schedule A – Admissions and Passes)

Attachment A

TOL RECREATION PASSES SUMMARY

“ACTIVE” PASSES - (these passes do not expire so they were never frozen)

Name of Pass	# of active passes	Explanation
TOL 10-VISIT PASS	1318	Pass does not expire, these patrons may have anywhere from 10 to 1 pass remaining
TOL 30-VISIT PASS	1834	Pass does not expire, these patrons may have anywhere from 30 to 1 pass remaining
TOL 80+ PASS	17	set up as an unlimited pass
<i>TOL AQUATIC CONVERSION</i>	4	these patrons have converted old passes to COVID passes that can be used for Aquatic (Registered Drop-In) programs such as lane swimming
TOL FAMILY 10-VISIT PASS	11	One visit on this pass would include the entire immediate family
TOL FAMILY 30-VISIT PASS	13	One visit on this pass would include the entire immediate family
<i>TOL FITNESS CONVERSION</i>	2	these patrons have converted old passes to COVID passes that can be used for Fitness Centre visits

“FROZEN” Passes - (these passes do expire so are currently frozen)

Name of Pass	# of active passes	Explanation
TOL 12-MONTH PASS	33	These 12 month memberships have been paid in full
TOL 12-MONTH PASS (MONTHLY PYMT)	56	These patrons are charged equal payments monthly, but these payments have also been frozen
TOL 1-MONTH PASS	100	
TOL FAMILY 12-MONTH PASS	2	These 12 month memberships have been paid in full
TOL FAMILY 1-MONTH PASS	2	
TOL FEBRUARY PROMO FAMILY PASS	132	February promo - buy a 1-month family membership, receive 1 month free.
TOL PHYSICAL PRESCRIPTION PASS	9	3 month pass

numbers current as of 11/17/2020

Attachment B**Bylaw No. 1968 - Schedule A Recreation Facility Admission Fees****Admission Fees 2018-2021 (GST NOT INCLUDED)**

Single Admissions				1-Month Pass			
Type	2018/19	2019/20	2020/21	Type	2018/19	2019/20	2020/21
Child 0-3 yrs	FREE			Child 0-3 yrs	FREE		
Child 3-12 yrs	2.90	2.96	3.02	Child 3-12 yrs	N/A		
Youth 13-18 yrs	3.96	4.04	4.12	Youth 13-18 yrs	40.14	40.94	41.76
Adult 19-59 yrs	5.68	5.80	5.91	Adult 19-59 yrs	50.22	51.23	52.25
Senior 60-79 yrs	3.96	4.04	4.12	Senior 60-79 yrs	40.14	40.94	41.76
Senior 80 & up	FREE			Senior 80 & up	FREE		
Family*	11.14	11.14	11.14	Family	98.48	98.48	98.48
10 X Pass				12-Month Pass			
Type	2018/19	2019/20	2020/21	Type	2018/19	2019/20	2020/21
Child 0-3 yrs	FREE			Child 0-3 yrs	FREE		
Child 3-12 yrs	24.57	25.06	25.56	Child 3-12 yrs	N/A		
Youth 13-18 yrs	33.89	34.57	35.26	Youth 13-18 yrs	388.82	396.60	404.53
Adult 19-59 yrs	48.00	48.95	49.93	Adult 19-59 yrs	487.49	497.24	507.19
Senior 60-79 yrs	33.89	34.57	35.26	Senior 60-79 yrs	388.82	396.60	404.53
Senior 80 & up	FREE			Senior 80 & up	FREE		
Family	94.11	94.11	94.11	Family	955.87	955.87	955.87
30 X Pass							
Type	2018/19	2019/20	2020/21				
Child 0-3 yrs	FREE						
Child 3-12 yrs	58.98	60.16	61.36				
Youth 13-18 yrs	89.92	91.72	93.55				
Adult 19-59 yrs	126.66	129.19	131.77				
Senior 60-79 yrs	89.94	91.74	93.57				
Senior 80 & up	FREE						
Family	248.34	248.34	248.34				

STAFF REPORT TO COUNCIL

Report Prepared By: Chris Barfoot, Director of Parks, Recreation & Culture
Jake Belobaba, Director of Development Services
Meeting Date: December 1, 2020
File No: 6520-20
Re: **Machine Shop and Arts & Heritage Hub: Direction on Next Steps**

RECOMMENDATION:

That Council:

1. Endorse the final version of the Arts & Heritage Hub Concept Report prepared by Hotson Architecture attached as Appendix A to the December 1, 2020 staff report;
2. Direct staff to allocate up to \$75,000 from the Waterfront Projects allocation to proceed with obtaining construction drawings and cost estimates for Phase 1 elements of the Arts & Heritage Hub that are ineligible for ICIP and ICET grant funding and report back to Council once design and costing are complete;
3. Endorse the Terms of Reference for the Arts & Heritage Hub Steering Committee attached as Appendix B to the December 1, 2020 staff report; and
4. Direct that staff and the chosen design firm for Phase 1 of the Arts & Heritage Hub work collaboratively with local First Nation artists on the design of the proposed artist studio building.

EXECUTIVE SUMMARY:

This report seeks direction from Council on items necessary to move forward with “Phase 1” of the Arts & Heritage Hub. Specifically this report seeks acceptance of the Arts & Heritage Hub Concept Report as the overarching concept plan for the Arts & Heritage Hub, direction on how to proceed with elements of Phase 1 that are not eligible for grant funding, and endorsement of a stakeholder engagement structure to steer the design process for Phase 1 and completion of the Machine Shop.

PREVIOUS COUNCIL DIRECTION:

See Appendix C

INTRODUCTION/BACKGROUND:

In January 2018, the Town received \$1,752,553 in funding from the UBCM Federal Gas Tax Strategic Priorities Fund to restore the Machine Shop. In November of 2018, Council passed resolution CS 2018-452, directing staff to proceed with restoration of the Machine Shop “focusing on identified structural and code improvements”. In February of 2018 Council Directed Staff to apply for funding from the Island Coastal Economic Trust (ICET) for “up to \$400,000 to support the development of an Arts & Heritage Hub in the vicinity of the Machine Shop on the Ladysmith Waterfront” (see resolution CS 2018-045).

In September 2018, a new federal infrastructure funding program, the Investing in Canada’s Infrastructure Program (ICIP), was announced. The Town decided to seek funding under this program

and hired Hotson Architecture to develop a design concept on which to base an application. Hotson facilitated several workshops and meetings with stakeholders and a user needs survey was also distributed.

On January 21, 2019 Council directed staff to submit an application for ICIP funding for “Phase 1” of the “Arts & Heritage Hub Concept Plan” (See resolution CS 2019-019). A draft of Hotson’s report, titled the “Arts & Heritage Hub Concept Design Report” was included in the staff report, along with a list of recommended changes. However, resolution CS 2019-019 did not endorse the concept report per se, and the final version never returned to Council.

The January 21, 2019 staff report contained a list of items that staff were recommending seeking funding (e.g. studios, boardwalk, etc.) and shortly after, Hotson submitted their final version of the concept report and applications for ICIP and ICET funding were submitted in accordance with Council’s previous direction to apply.

The ICIP and ICET applications sought funding for the proposed studio building, the boardwalk, the café/gift shop, parking, landscaping and minor renovations. The total cost of Phase 1 is estimated at \$4.3 million. The Town sought \$3.7 million from ICIP and \$400,000 from ICET.

Shortly after the ICET application was submitted, the Town was advised to revise the application to lower the requested amount to \$299,000. Similarly, in the spring of 2020 staff were informed that the Town would only be eligible for \$3.3 million of the requested \$3.7 million in ICIP funding. Portions of the project, specifically the café/gift shop and the portion of the boardwalk that does not front the proposed studio building were deemed ineligible for funding.

As these elements are now outside the scope of ICIP-funded projects, the Town has the option of not proceeding with these components of the Hub, funding them independently or seeking funding for them from elsewhere.

In late June of 2020, the Federal Government announced that the Town had received \$3.3 million in ICIP funding. The Town’s ICET application has not yet been approved. A “stage two” ICET application, with a detailed design, “Class B” construction cost estimate, and operational details is still required.

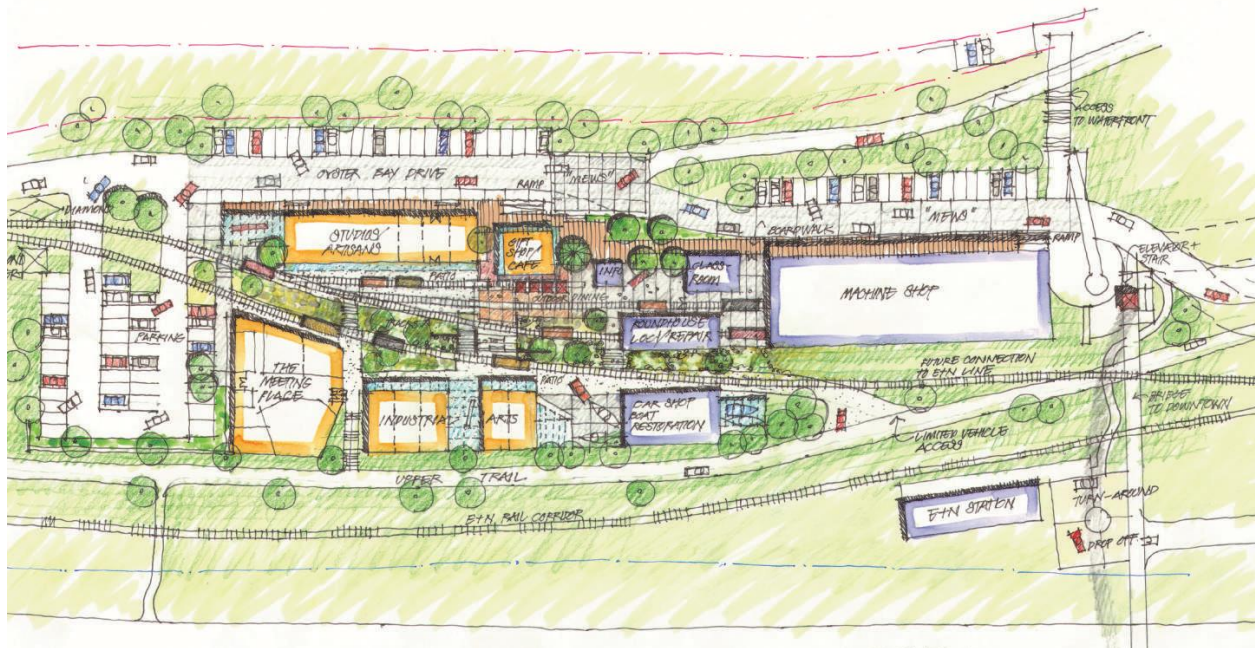
On September 30, 2020, staff issued an RFP¹ for design services for Phase 1 of the Arts & Heritage Hub. The RFP included the final version of the Arts & Heritage Hub Concept Design Report and stated that the successful proponent would be required to prepare detailed design drawings based on the concept report. The RFP process is now closed and proposals are under evaluation. Proponents were asked to submit proposals that included the unfunded elements of Phase 1, giving the Town the option of excluding them from the contract with the successful firm or covering the design costs of these elements with Town funds.

Detailed design work for Phase 1 will commence in early 2021, with construction likely commencing in mid-late 2021. Given the status of the project, external funding and the Arts & Heritage Hub Concept report, it is necessary for Council to solidify the scope of the project moving forward.

¹ ICIP requires open bidding processes for major project components

1. Endorse the final version of the Arts & Heritage Hub Concept Report

Figure 1: Site Plan from the Arts & Heritage Hub Concept Report



Without ICIP (and likely ICET funding) for Phase 1 elements like the café/gift shop and portions of the boardwalk, the Town must cover their cost (approximately \$360,000-\$650,000). Staff are recommending that Council endorse detailed design and costing of these elements to make them truly “shovel ready”. Council can make a decision to proceed with construction at a later date, and external funding sources may emerge for these items in the meantime. The Town will have to cover the cost of designing and costing these elements, but these costs represent a fraction of the total construction cost.

The funding for these drawings would come from the Waterfront Projects allocation which are already proposed within the 2021-2025 Financial Plan.

3. Endorse the Terms of Reference for the Arts and Heritage Hub Steering Committee

Staff are requesting Council's endorsement of the Terms of Reference for the Arts and Heritage Hub Steering Committee, a small Town-appointed group similar to the stakeholder group that worked on the Arts & Heritage Hub Concept. The proposed Terms of Reference include representation from existing and prospective tenants, user groups and First Nations. This group would steer the design of new Arts & Heritage Hub elements as well as the completion of the Machine Shop. The Steering Committee Terms of Reference require the committee to operate within the scope of the Waterfront Area Plan, the Arts & Heritage Hub Concept Report and any other design documents related to the Hub approved by Council. The proposed Terms of Reference are attached as Appendix B.

4. Direct that staff and the chosen design firm for Phase 1 of the Arts & Heritage Hub work collaboratively with local First Nation artists on the design of the proposed artist studio building.

Staff note that under the concept report, the new artist studio building is to incorporate strong First Nation themes in the design and create a greater indigenous presence on the site. Subsequently, staff are recommending that collaboration related to the design of the studio building be with local First Nation artists. Staff see this approach as necessary to emphasize the importance of an indigenous focus in the design.

ALTERNATIVES:

Council may:

1. Resolve to pursue a design concept for the Arts & Heritage Hub that differs from Hotson's concept report and direct staff accordingly, noting a change of scope application for the grant funding will be required and as a result, the funding may be denied.
2. Direct staff to abandon one or more of the "unfunded" components of Phase 1 of the Arts & Heritage Hub.
3. Endorse alternate stakeholder engagement arrangements and direct staff accordingly.
4. Defer one or more of the recommendations in this report to a future meeting of Council.
5. Any combination of Alternatives 1-4.

FINANCIAL IMPLICATIONS:

The Town is in the midst of one stage of building the Arts & Heritage Hub (i.e., the Machine Shop restoration) and about to start a second (i.e. the studio, boardwalk, etc.). Funding obligations define timeframe and design parameters for completion of these projects. The key decisions outlined in this report are needed to ensure these projects are completed on time, cost overruns are mitigated and funding is not jeopardized.

LEGAL IMPLICATIONS:

The Town entered into a funding contract with the Provincial and Federal Governments when it accepted ICIP funding. The contract has a number of obligations related to design, scope of work, open procurement and similar areas. The recommendations in this report are consistent with the above-noted legal obligations.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Developing clearly defined processes and a project scope will ensure development of the Arts & Heritage Hub proceeds with valuable, constructive input from stakeholders through the proposed Steering Committee.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Parks, Recreation & Culture oversees the management of existing facilities (e.g. the Machine Shop) while Development Services is responsible for implementing the Waterfront Area Plan and Arts & Heritage Hub plan. These departments are coordinating efforts jointly on these projects and have jointly authored this report.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input checked="" type="checkbox"/> Green Buildings | <input checked="" type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input checked="" type="checkbox"/> Healthy Community | <input checked="" type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Infrastructure | <input checked="" type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input checked="" type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- Appendix A: Arts & Heritage Hub Concept Report
- Appendix B: Steering Committee Terms of Reference
- Appendix C: Previous Council Direction

Appendix A

ARTS AND HERITAGE HUB

CONCEPT DESIGN REPORT



Town of Ladysmith

January 2019

HOTSON

P+A Landscape Architecture
Site Planning



ARTS AND HERITAGE HUB CONCEPT DESIGN REPORT

Prepared for:
THE TOWN OF LADYSMITH
January 2019

By:
HOTSON Architecture Inc.
Perry and Associates Landscape Architects

CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	CREATING A VISION	3
3.0	PROGRAM NEEDS	7
4.0	THE DESIGN CONCEPTS	9
5.0	PROJECT BUDGET	31
6.0	IMPLEMENTATION	33
7.0	APPENDIX	35

1.0 Executive Summary

The Arts and Heritage Hub is the first piece of a rejuvenated Waterfront for the Town of Ladysmith. The rationale in starting here as an early phase of development lies with the fact that there is already considerable momentum in this part of the overall plan. Through the efforts of a number of dedicated tenants, currently occupying space in a grouping of significant, older industrial buildings, the precinct is evolving in a creative manner.

Detailed design has been taking place for several months on the Machine Shop, the building seen as the anchor to the Hub. It was determined that a broader study was necessary to determine the overall opportunities for the Hub and the make-up of tenants that would energize the place.

All great places are founded on a Big Idea.

The Hub will be a meeting place for the people of Ladysmith, for tourists, and for those who work on the site. Here, arts and heritage activities in the community come together in a vibrant, interactive and creative place. It will be interesting; it will spawn curiosity; and, it will be fun for all.

This report contains the program, the concept plan and the design details that can result in “creative place-making”. The uses proposed in the plan comprise approximately 45,000 square feet of space arranged in five heritage buildings and five new buildings. No one group will dominate the make-up of the precinct as it will thrive on its diversity.

The precinct will be consolidated through a well-designed and active public realm, able to support a variety of outdoor functions and events.

But what will it all cost? A preliminary, Class D level cost estimate, suggests that the build-out of the Hub will be in the range of twenty-five million dollars (\$25,000,000) to complete. It is assumed that the project will be phased over time with the development of bite-sized chunks as funding permits.

2.0 CREATING A VISION

Waterfront Area Plan

In 2017 the Waterfront Area Plan, forming Schedule B of the Town of Ladysmith Official Community Plan, was created through a collaborative process led by DIALOG. This document sets out the planning parameters for a “Cultural Hub” as a sub-area of the plan. The identity, character, and existing conditions are enhanced in this key area to further define it as a creative arts, cultural, and heritage hub. The Machine Shop is maintained as an anchor, building on its current activities. An early implementation of the Hub was recommended as there is already high energy to this part of the site thanks to several committed tenants who occupy both building and outdoor spaces with arts and heritage activities.

Machine Shop Study

Starting in 2018, HOTSON architecture completed a study of the 1943 Comox Logging Machine Shop which houses several of these tenants and is in need of upgrading. Following this work the Town realized that a broader view of the sub-area was necessary to scope out the full opportunity for the use and activity and, ultimately, the tenanting of both indoor and outdoor spaces.

Stakeholder Workshop on 23 November 2018

A day-long workshop was organized by the Town, attended by the key interest groups currently occupying space on the site. The primary outcome of this process was an invigorated will amongst the participants to work together, and to share space in the project, in order to realize the full potential of the Hub. The full outcome of the Workshop can be found in the Appendix of this report.

Ten Principles

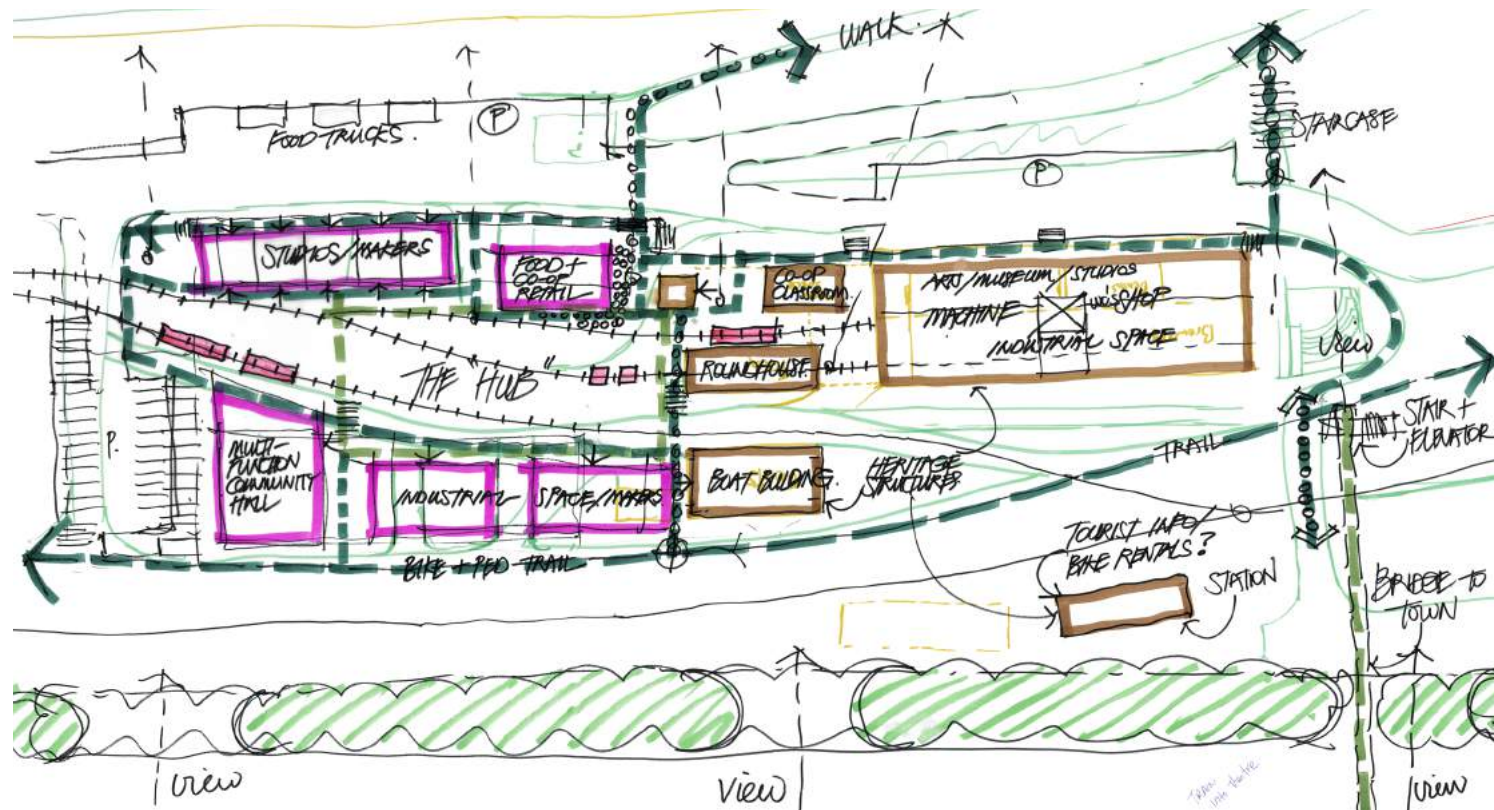
Ten “guiding principles” emerged from the findings of the day:

- 1 The principal uses in the Hub should focus on the arts, making and repairing things, and the interesting history of the site.
- 2 The project should demonstrate, through tangible elements, the working relationship between the Town of Ladysmith and the Stz’uminus First Nation.
- 3 By encouraging a diversity of activities on the site it will be more attractive to both locals and visitors to Ladysmith.
- 4 In representing history, authenticity and interaction are of paramount importance, rather than simply static displays.
- 5 Spaces in the project should be flexible, supporting a multitude of activities, and shared by the various users and tenants on site.
- 6 The project must be well-connected to both the downtown and the waterfront, for walking, biking and driving (parking), ensuring people have convenient access to the place.
- 7 Architectural design should respect the historic character of the site while clearly articulating new from old.
- 8 A well-conceived, public realm design should be built in tandem with building upgrades and new construction to ensure that the site is accessible, active, inviting, safe and secure.
- 9 The project should be planned for incremental development over time where spaces are left for future buildings or open spaces.
- 10 The design and construction of the project may be of modest proportions to stretch the availability of funding. Good design does not have to be expensive.

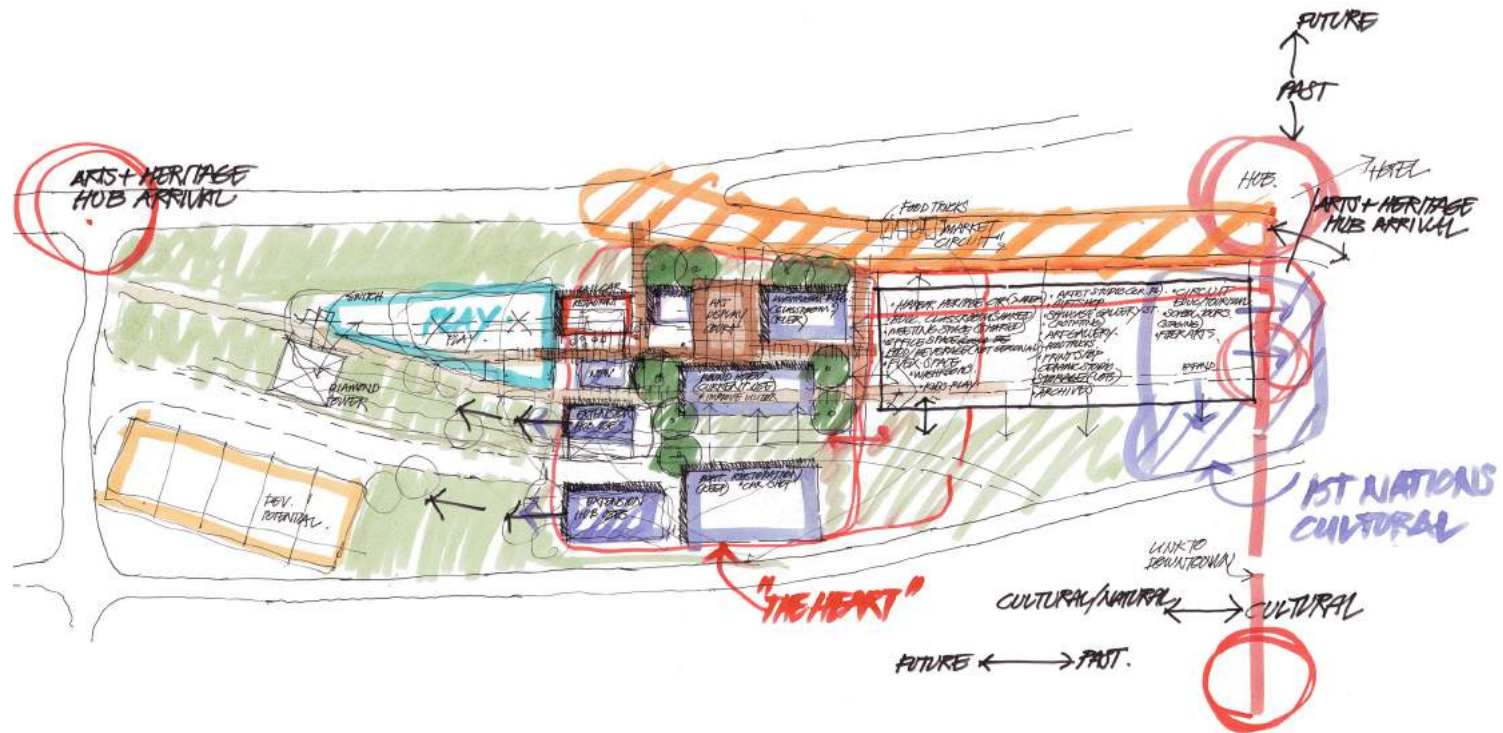
Stakeholder Concepts

The group split into two teams to develop sketch concepts for the Hub. Several of the ideas expressed by the teams were similar while others varied. Following are the two concepts:

Group 1 - Concept



Group 2 - Concept



3.0 PROGRAM NEEDS

Several tenants currently occupy space on the site, utilizing buildings and open spaces. The groups represented have prepared an analysis of their long term needs. This consultant has extrapolated the information and filled in blanks for floor areas where none existed. As well, other spaces are suggested to round out the activities of the Hub. The following table is a synopsis of the suggested floor areas to be included in the Hub. The table is a preliminary suggestion of space allocation based on the long term needs of existing users. Further consultation, review, and approval is required. The allocation is provided to show one possible outcome utilizing the space available.

GROUP	INDOOR AREA	OUTDOOR
Arts Council of Ladysmith		
Gallery	1,200	
Kitchen/bathroom	400	
Studio/office	1,000	
2 art classrooms	1,000	
Fabric classroom	700	
Printmaking shop	700	
Pottery studio	1,000	
Framing shop	500	
Photo darkroom	200	
Support space	500	garden
Sub-total	7,000 sf	
Ladysmith Maritime Society		
Harbour Heritage Centre/archive	950	
Archive	150	
Administration	1,000	
Multi-function room	1,000	
Storage	700	
Car Shop boat restoration	3,000	access/loading
Multimedia theatre	700	
Support space	500	
Sub-total	8,000 sf	varies

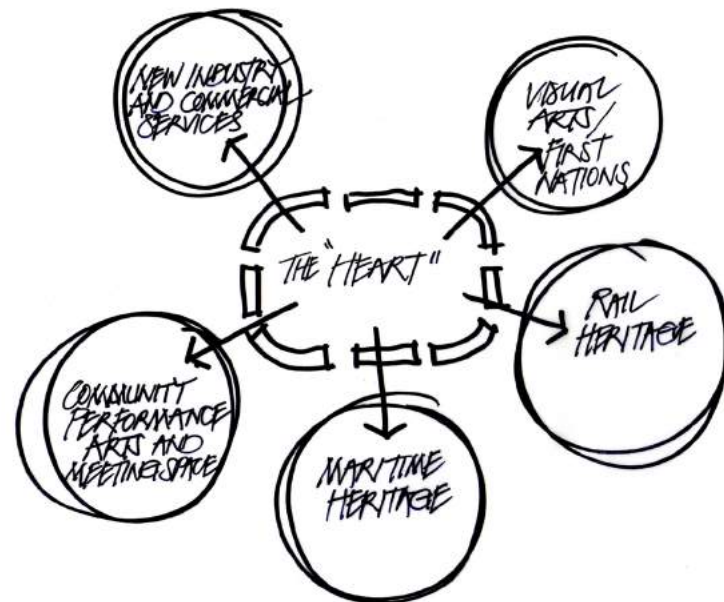
Ladysmith and District Historical Society		
Locomotive shop	1,560	
First aid building	240	
Loci /artifact display	1,500	
Compound display	700	1,900
Trackage artifact storage		varies
Sub-total	4,000 sf	1,900 sf
John Marston artist		
Carving studio	2,000	
Covered area		1,000
Sub-total	2,000	1,000 sf
Dennis Brown artist		
Studio	700	
Sub-total	700 sf	none
Other program components		
Shared classroom	1,000	
Gift shop	750	
Café	750	patio
Artist studios	4,500	work/display
Community meeting place	10,000	patio
Industrial arts	5,000	work/display
Public/staff washrooms	1,000	
Sub-total	23,000 sf	varies
<hr/>		
TOTAL HUB PROGRAM	44,700 SF	VARIES

In the short term, the specific tenants listed above can be accommodated in existing space located on the site.

4.0 DESIGN CONCEPT

The “Big Idea”

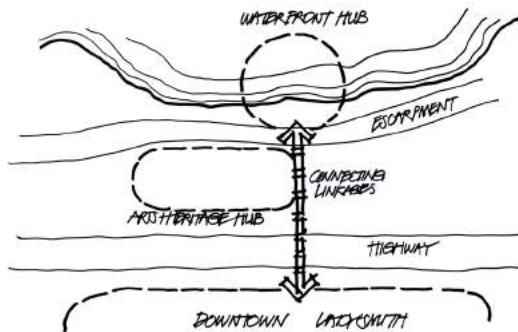
All great places are founded on a Big Idea. The Hub will be a meeting place for the people of Ladysmith, for tourists, and for those who work on the site. Here, arts and heritage activities of the community come together in a vibrant, interactive and creative place. The Waterfront Area Plan references a “vision of One Heart + One Mind”: Itst uw’hw-nuts’ ul-wum (we are working as one) to create a waterfront for now and for future generations. The Hub will support this vision.



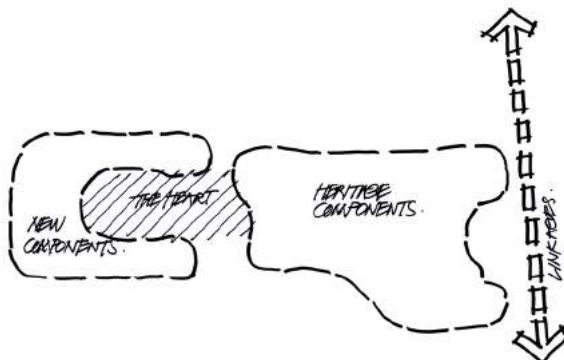
Planning Concepts

Several planning concepts inform the new plan for the Hub.

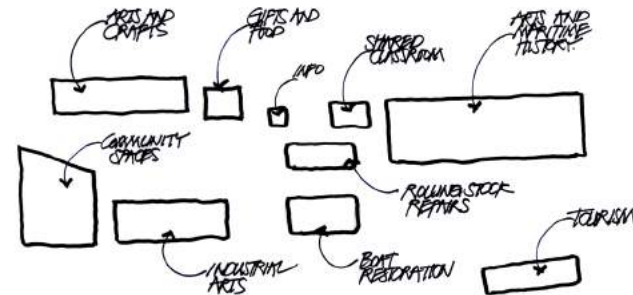
- 1 The Arts and Heritage Hub is a major component of the Waterfront Plan and serves as the connecting link between downtown and activities on the waterfront.



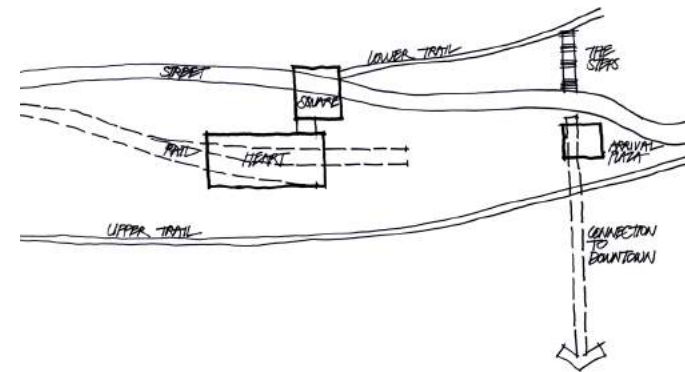
- 2 The existing heritage buildings are complimented by new buildings to form an open space at the centre of the site that will support a variety of outdoor activities and become the "heart" of the Hub.



- 3 A diversity of arts and heritage activities contribute to the cultural goals of the project.



- 4 The existing movement corridors on the site, as well as new connecting pieces, form the basis of the new open space framework.



The Preferred Plan

The two concepts generated during the stakeholder workshop become the groundwork for a preferred plan for the site. The goal has been to produce a development strategy for the Arts and Heritage Hub that:

- 1 identifies and locates the preferred land uses and tenant types;
- 2 suggests the location and scale of buildings; and;
- 3 develops an exciting approach for the design of the public realm.

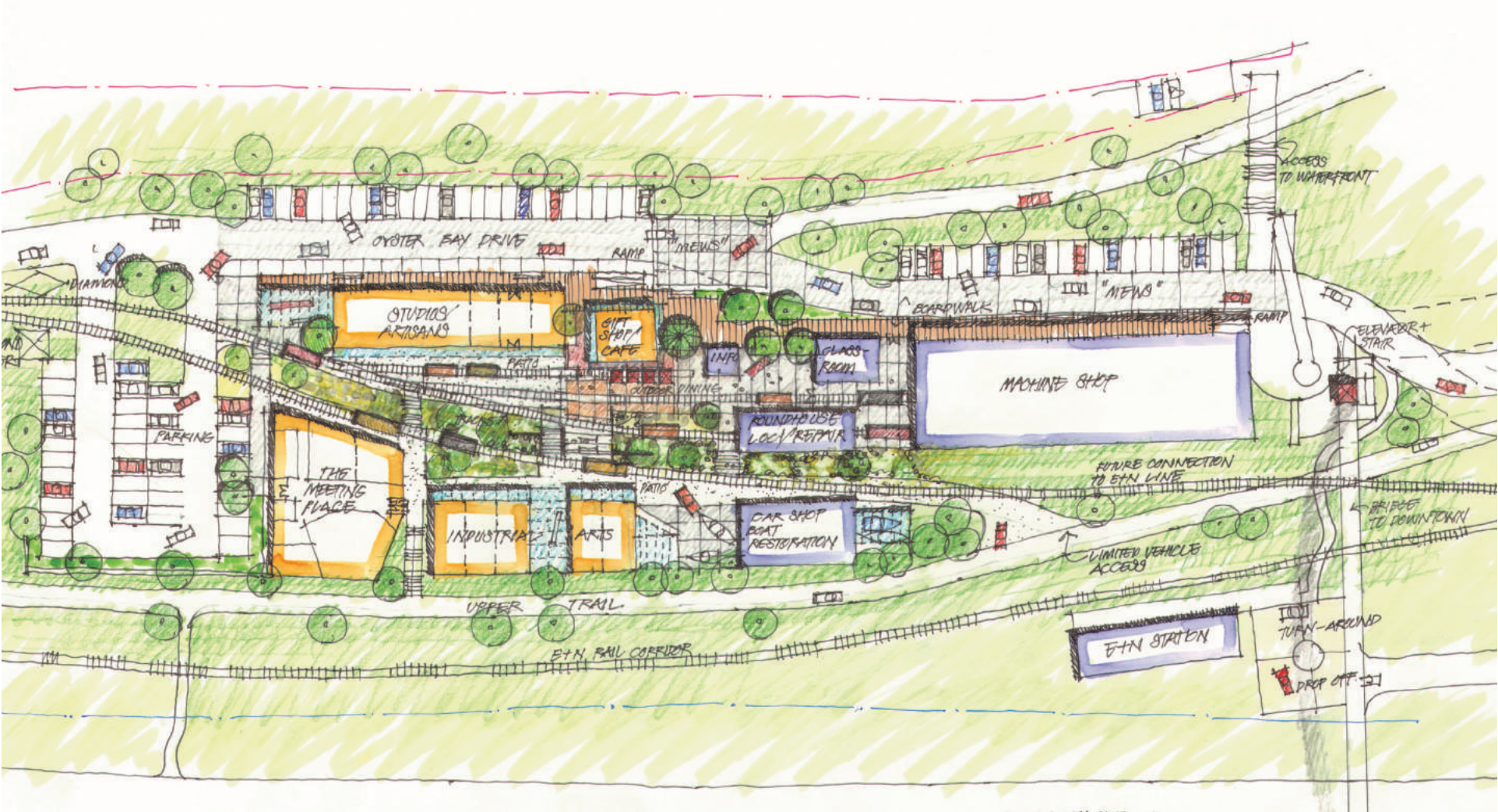
The site plan represents a diverse, collaborative and exciting approach to developing a cultural precinct in Ladysmith. It brings together in one place the combined interests of the visual arts, railway and maritime heritage, and first nations art. Most importantly, it is done in a manner that results in “creative placemaking”. For those visiting the site there will be places for socializing, with the attraction and comfort of food and beverage, indoor and outdoor seating, and public washrooms.

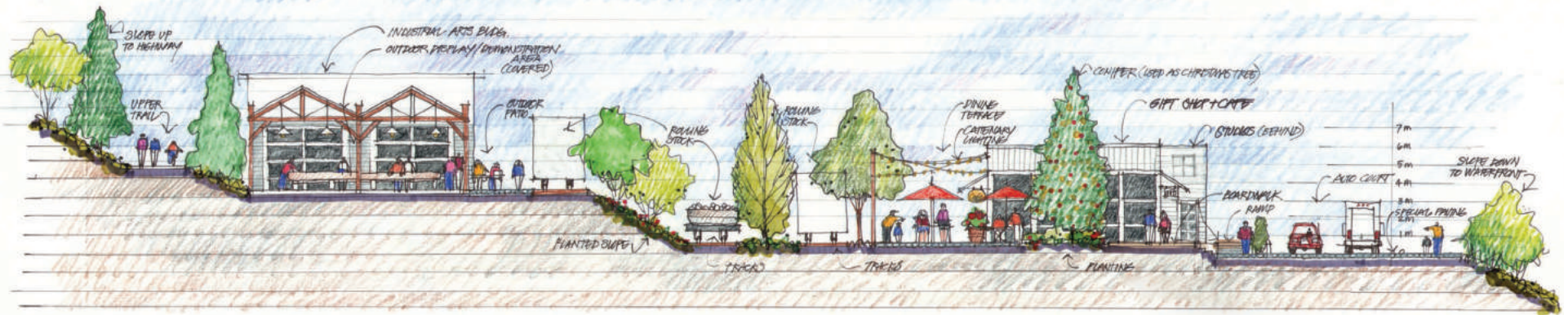
The key concept in the plan is to create a “heart” for the Hub located in the historic railyard of the Comox Logging and Railway Company. This central space will be used for a multiplicity of activities, including rail artifact repair and display, public gatherings, small concerts, patio seating with food and beverage, art display, and many others.

Surrounding the heart, and creating well-defined edges to the central space, will be the full range of historic and cultural uses contained in the program.

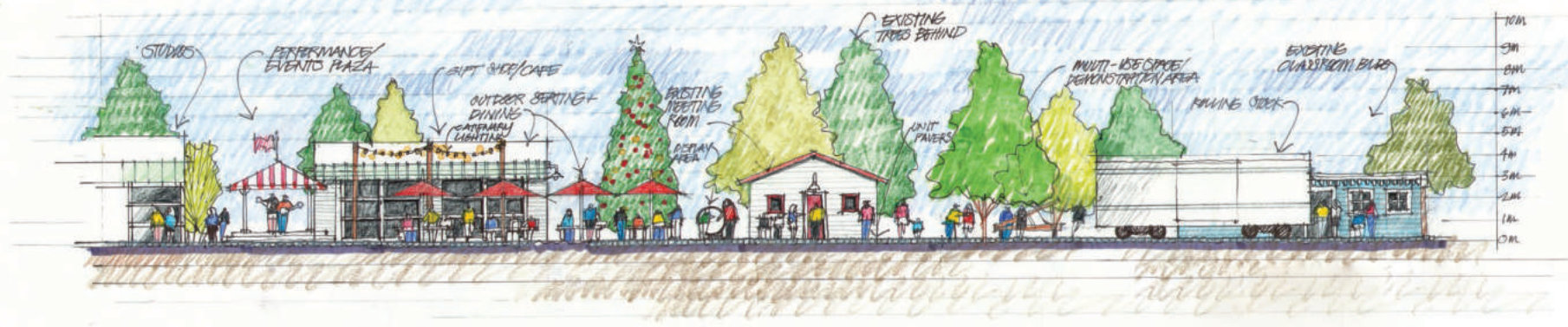
A major consideration of the plan has been to ensure its connectivity to downtown and the waterfront. Existing pathways are respected and new ones added. Truck service and emergency access is provided. Oyster Bay Road is reimagined as a “mews” with character paving and landscaping. Parking is provided along streets and in new lots. And, provision is made in the plan for a new pedestrian overpass from the Machine Shop to the historic museum building on the north side of Gatacre Street. The place will not survive if people cannot get there by foot, by bike and by car.

Concept Plan





East-West section through the site looking North



North-South section through the site looking East

The Architecture

The plan builds on the character of the existing precinct. Old buildings will be renovated to express their historic qualities, materials and colours. New buildings will be modern but done in a way that is fully compatible and complimentary with the old. Defining features will include the use of heavy timber and engineered timber structures, multi-paned windows, large opening doorways, metal cladding, and flat or gently-sloped roofs. Large overhangs will provide rain protection above outdoor walkways and patios. Colour and signage will bring life to the precinct.

Historic Buildings in the Plan

1943 Machine Shop – 27,000 square feet (sf)

The Machine Shop will be renovated to achieve seismic and code upgrades, energy and envelope improvements, and a new roof. The building will accommodate The Arts Council, Ladysmith Maritime Society, Ladysmith and District Historical Society, and artists.



Roundhouse - 1,560 sf

The Roundhouse will be renovated to accommodate ongoing use for the repair of railway rolling stock.



Lunch Room/Washroom – 1,120 sf

The Lunchroom will receive similar upgrades and will become a classroom to be shared by all tenants.



First Aid - 225 sf

The First Aid Building will receive similar upgrades and become a location for disseminating information and interpreting the rich history of the site.



Car Shop - 3,000 sf

The car shop will be renovated to continue to be used for boat restoration.



CPR Station - 2,400 sf

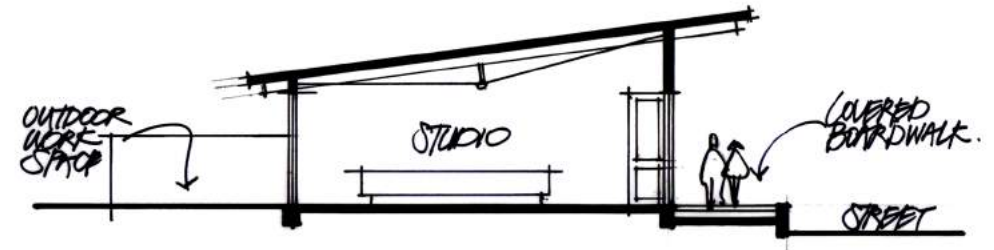
Further analysis is warranted to determine the future use of this building. Site works would be required to accommodate vehicular access for drop-off and parking.



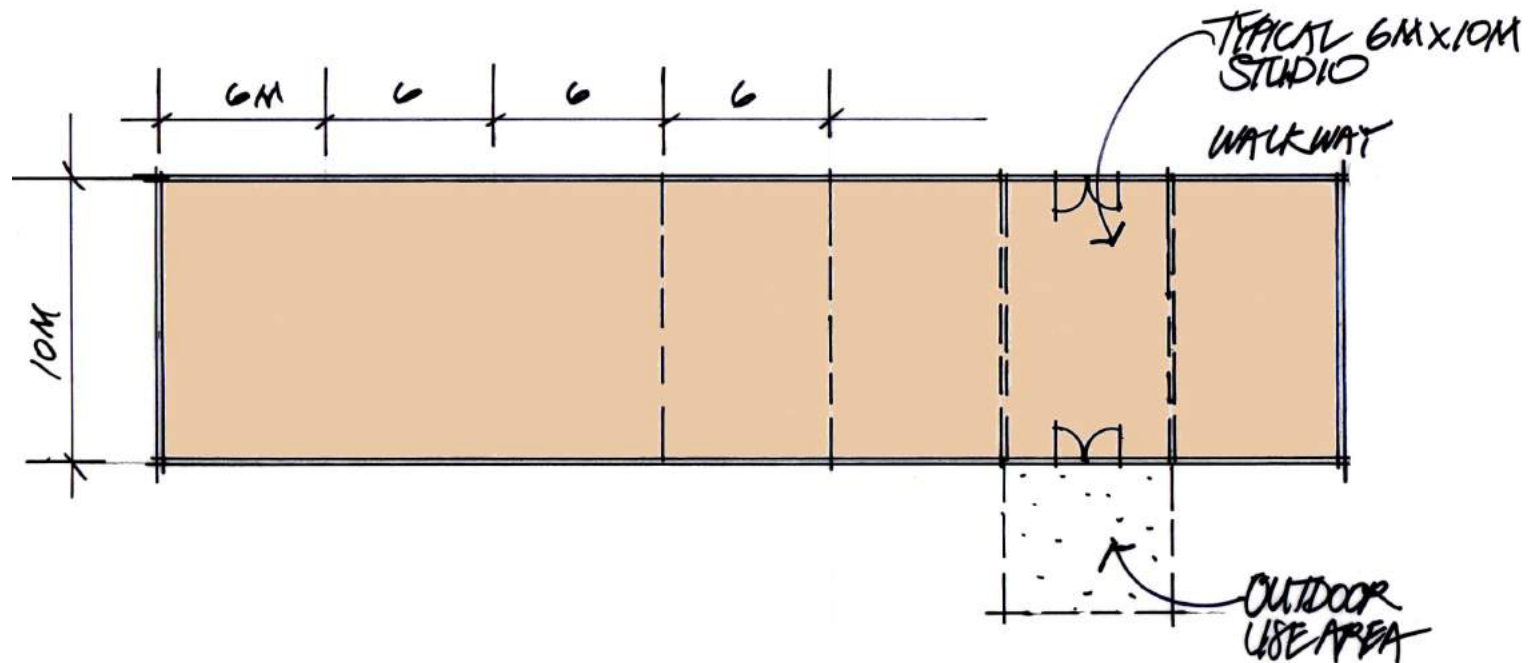
New Buildings in the Plan

Studio Building – 4,500 sf

The Studio Building is designed to house Stz'minus First Nation carvers and other artists. The intent is to showcase modern, indigenous design through the architecture and the arts and crafts produced within this building.



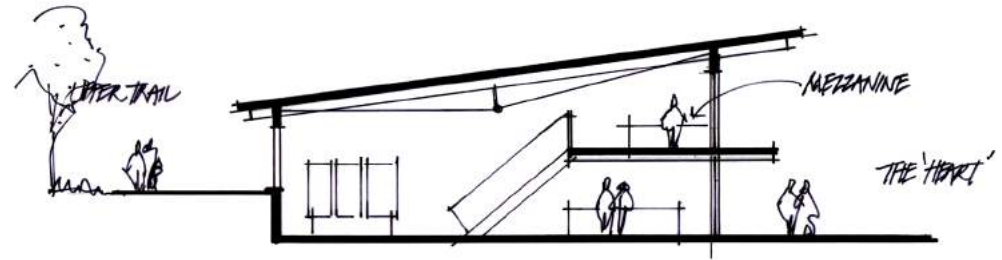
Cross Section



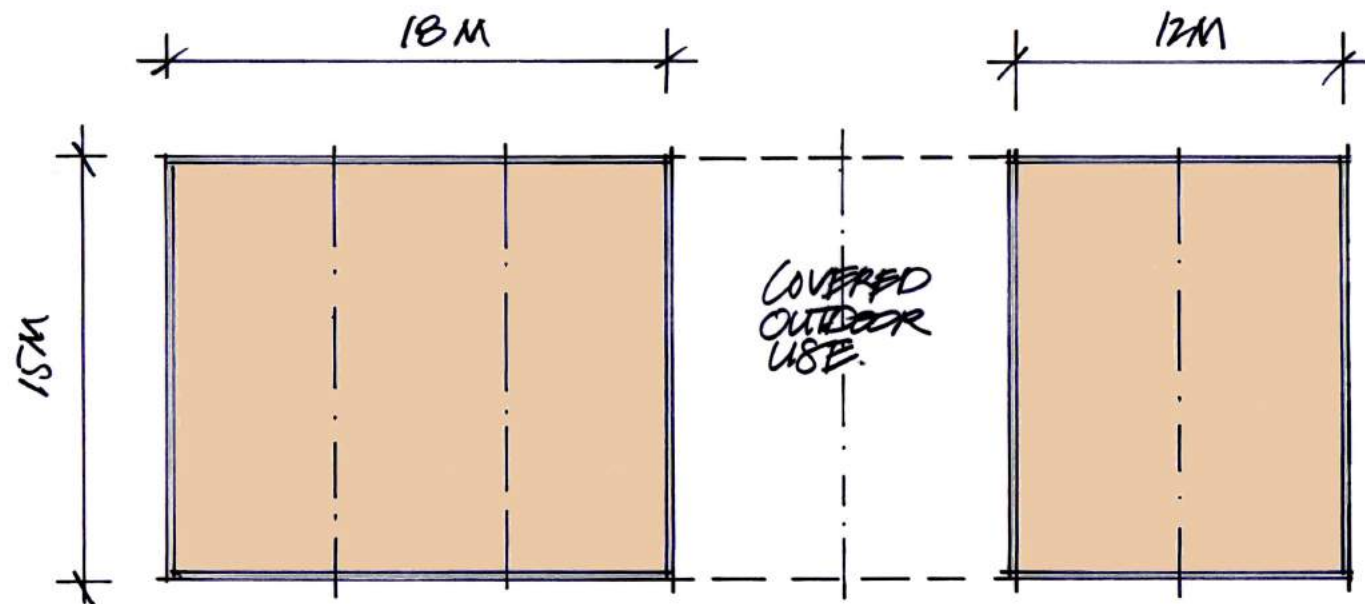
Plan

Industrial Arts – 4,800 sf

The Industrial Arts Building is an industrial space to be used for light industrial and cottage industry and crafts tenants.



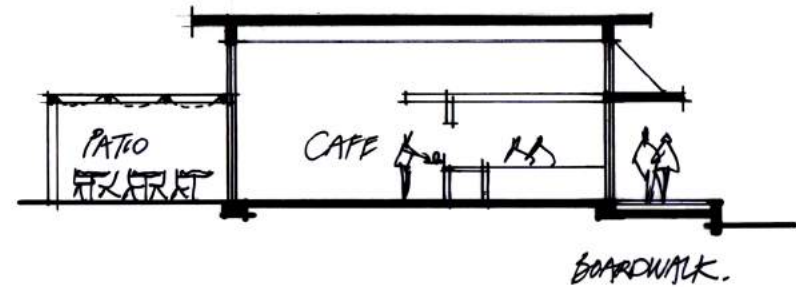
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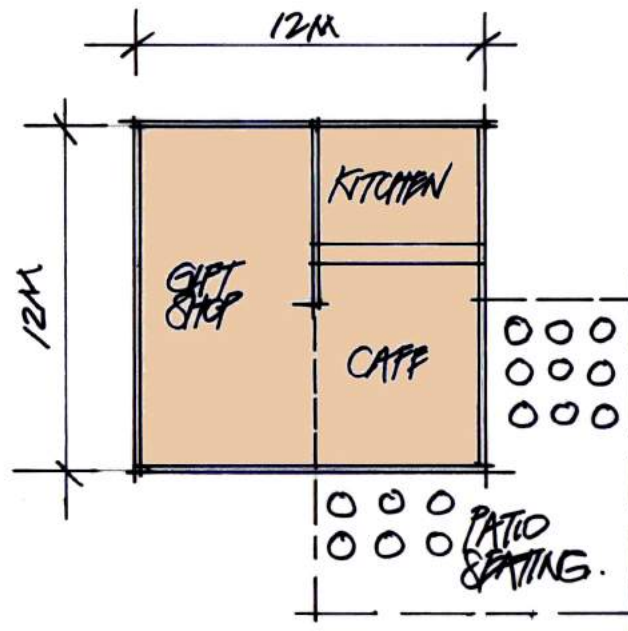
Plan

Café/Gift Shop – 1,500 sf

This new building will house a shared gift shop and a commercial café serving light food and drinks. It will be the social heart of the Hub.



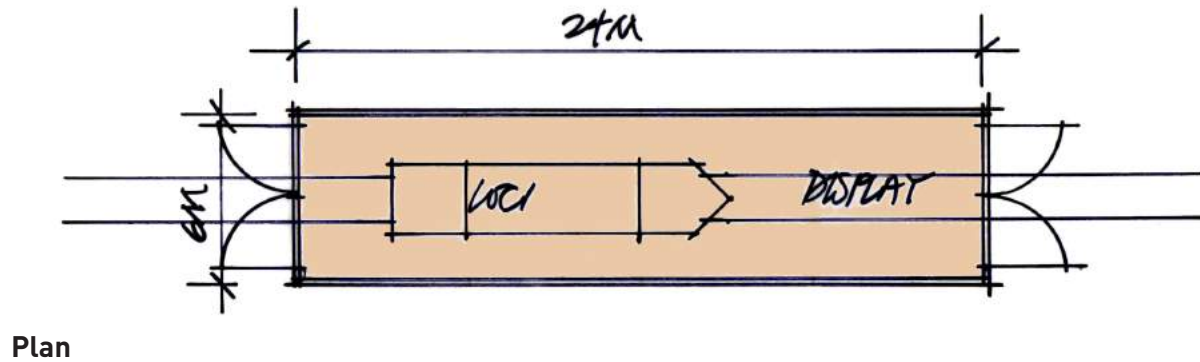
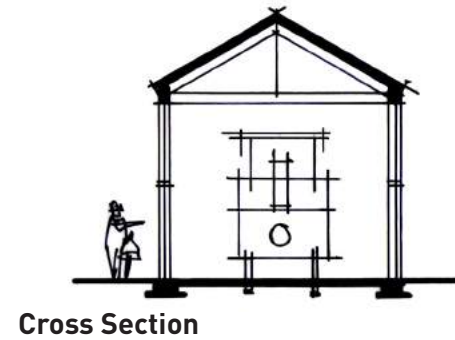
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Plan

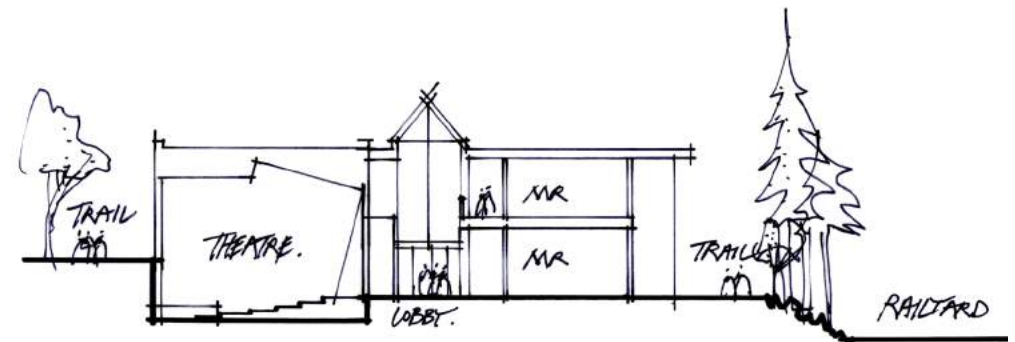
Rolling Stock Display Shed – 1,500 sf

This open air building would serve as a permanent display space for rolling stock offering protection from the elements.

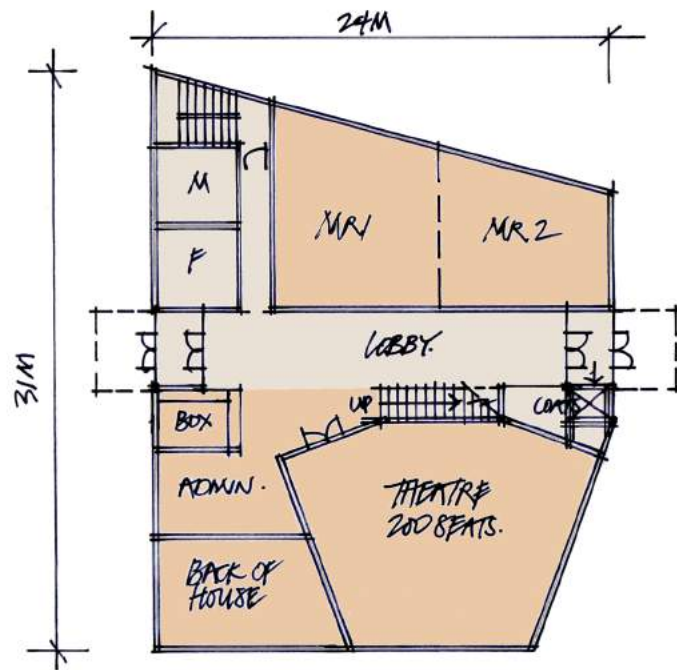


Community Meeting Place – 10,000 sf

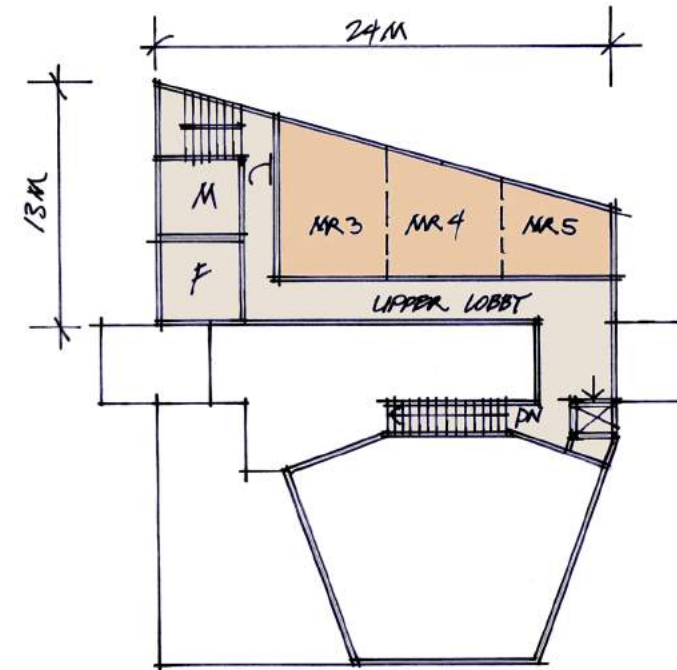
The concept for this building is to provide new space for the broader community of Ladysmith to accommodate performance, in an intimate “black box” theatre, meetings and conferences, and social gatherings. The building can also be used by tenants on the site requiring flexible, meeting space.



Cross Section



Main Floor Plan



Second Floor Plan

The Public Realm

The public realm of the Arts and Heritage Hub plays an important role in supporting the project's "guiding principles"; most notably, by providing places for social interaction, authentic interpretation of history, diversity of activities, flexibility of uses, and expressing the relationship between the Town of Ladysmith and the Stz'uminus First Nation. These objectives can be fulfilled by carefully designing and positioning the buildings to form dynamic spaces and by strengthening the relationship between indoor and outdoor activities. The intent is to create a place that fits its setting. Rather than highly-refined, urban treatments, it is more appropriate to design spaces that are robust and slightly "gritty", suited to the historic character.

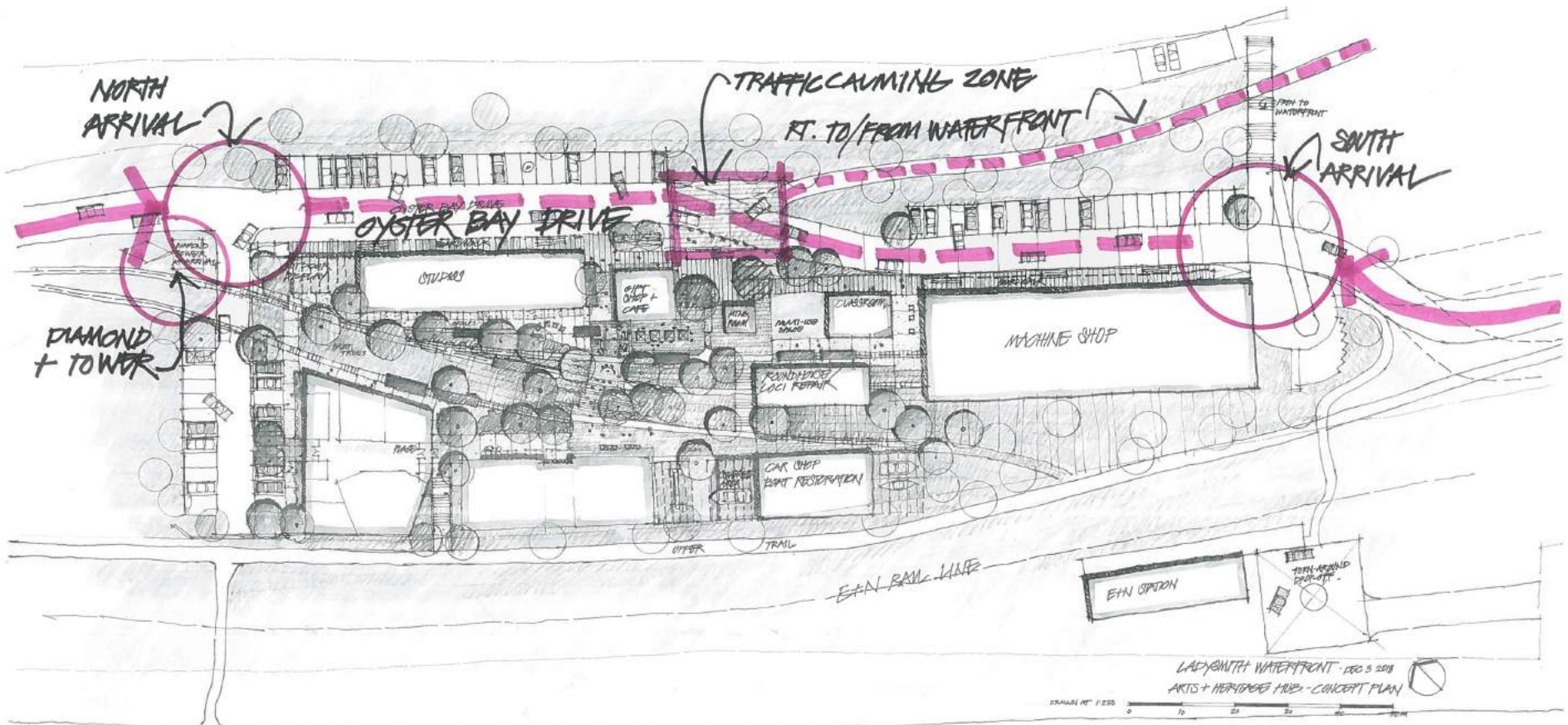
The streets, trails, walkways and open spaces of the precinct comprise the public realm. One of the drivers of the concept design is to make a great place for both the people who work there and for those who visit. The public realm consists of the following key design elements:

- 1 Streets
- 2 The Plinth
- 3 The Heart
- 4 Patios
- 5 Walkways
- 6 Parking Areas
- 7 Slopes and Natural Areas
- 8 Connections

1 Streets

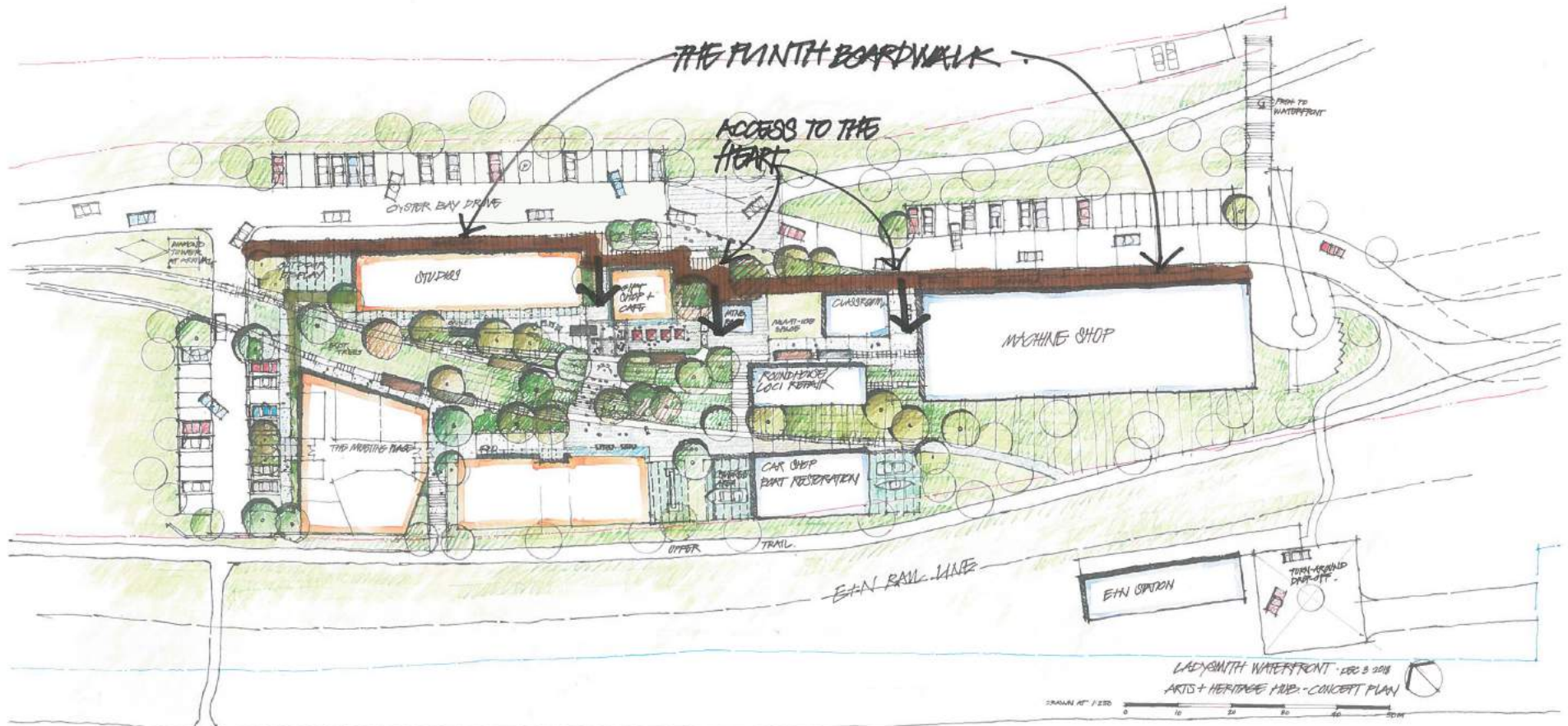
Oyster Bay Drive provides the primary vehicular access to the site from the north and south. The intent is to design this corridor as part of the Hub, rather than a road that passes beside it. This is accomplished by introducing higher quality, textured paving in certain areas. It is also possible to “bump up” the road elevation by a few inches to provide a safe-crossing zone for pedestrians. Special treatments, including the “Diamond and

Diamond Tower” at the arrival point from the north, and the new overpass, stair and elevator at the south end of the precinct will help to identify the Hub as a special place along the corridor. The small-scale roadway that leads down to the waterfront can either continue to be used as a vehicular link or become a route used exclusively by pedestrians and bicyclists.



2 The Plinth

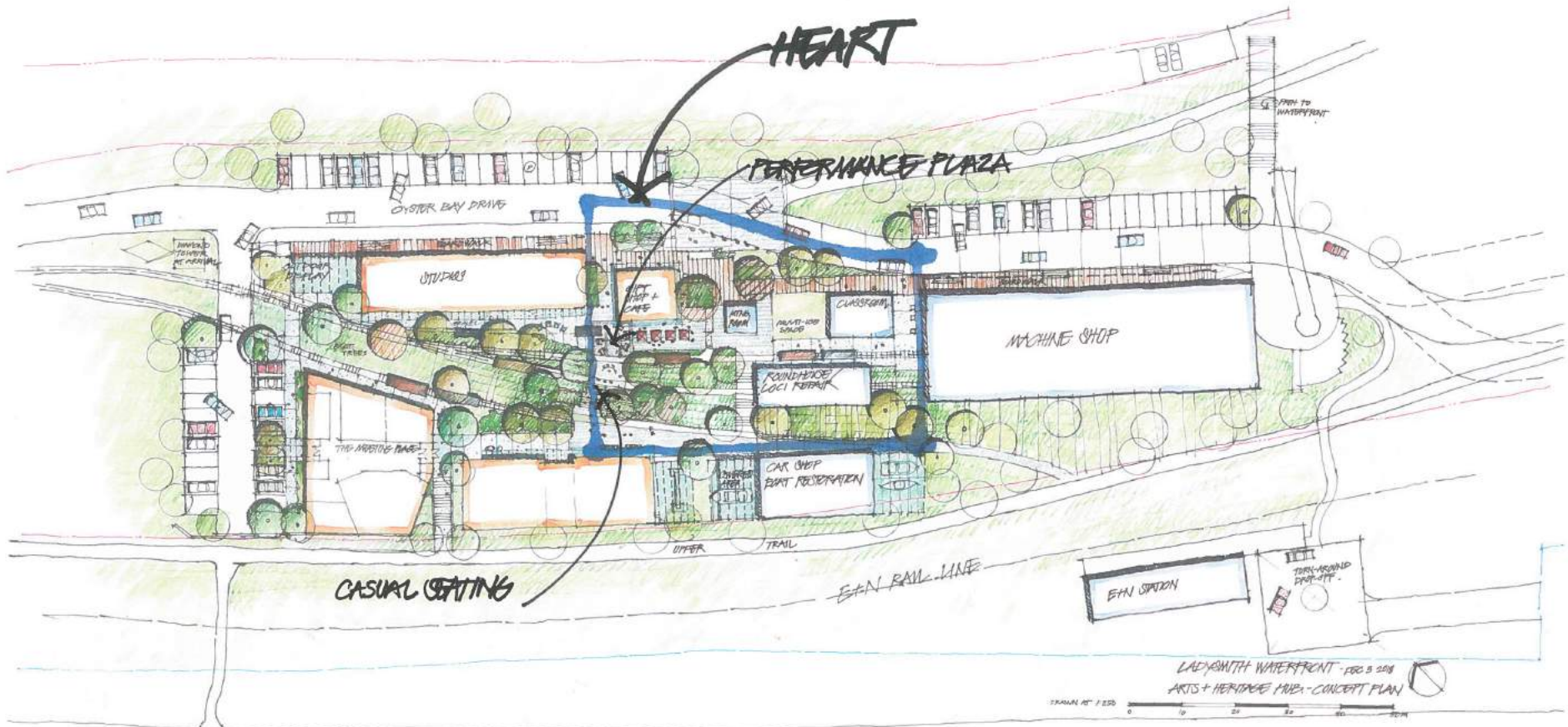
A boardwalk is proposed along the edge of Oyster Bay Drive the full length of the Hub, linking the Machine Shop with new buildings to the north. This element is a direct result of the site being slightly elevated above grade. It will replace the existing red paver walkway and will serve to unify the prominent edge that faces Oyster Bay Drive, symbolically linking past, present and future. It will also act as a threshold through which one passes to arrive at the heart of the project.



3 The Heart

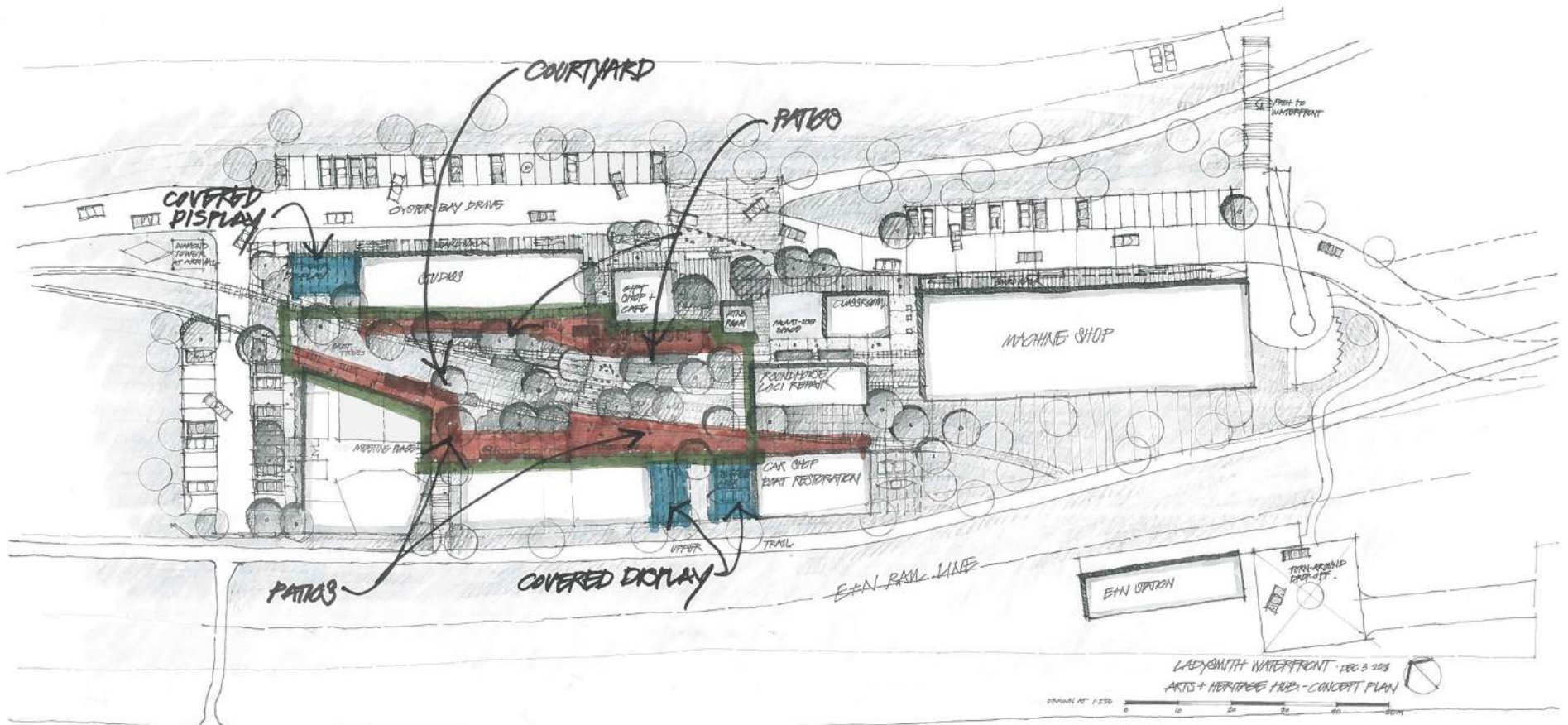
A central space, extending from the north edge of the existing Machine Shop to the new Studios building has been identified as “The Heart”. This space is the historic railyard and is to become the special place within the Hub and would include outdoor dining patios, a performance area with terraced seating, casual/moveable seating, and display areas for temporary art exhibitions. The Heart would have a higher level of furnishings, finishes and potentially catenary lighting. Two

or three existing trees would be protected and saved. All of the rail lines located in the Hub will be retained and restored with the exception of the spur that lies closest to Oyster Bay Road, the site of the new Studio Building. The upper rail line will also be extended to its original connection with the E & N rail line to the south. This will all allow for the movement of rolling stock in and out of the site, and the potential use of “speeders” for tour rides.



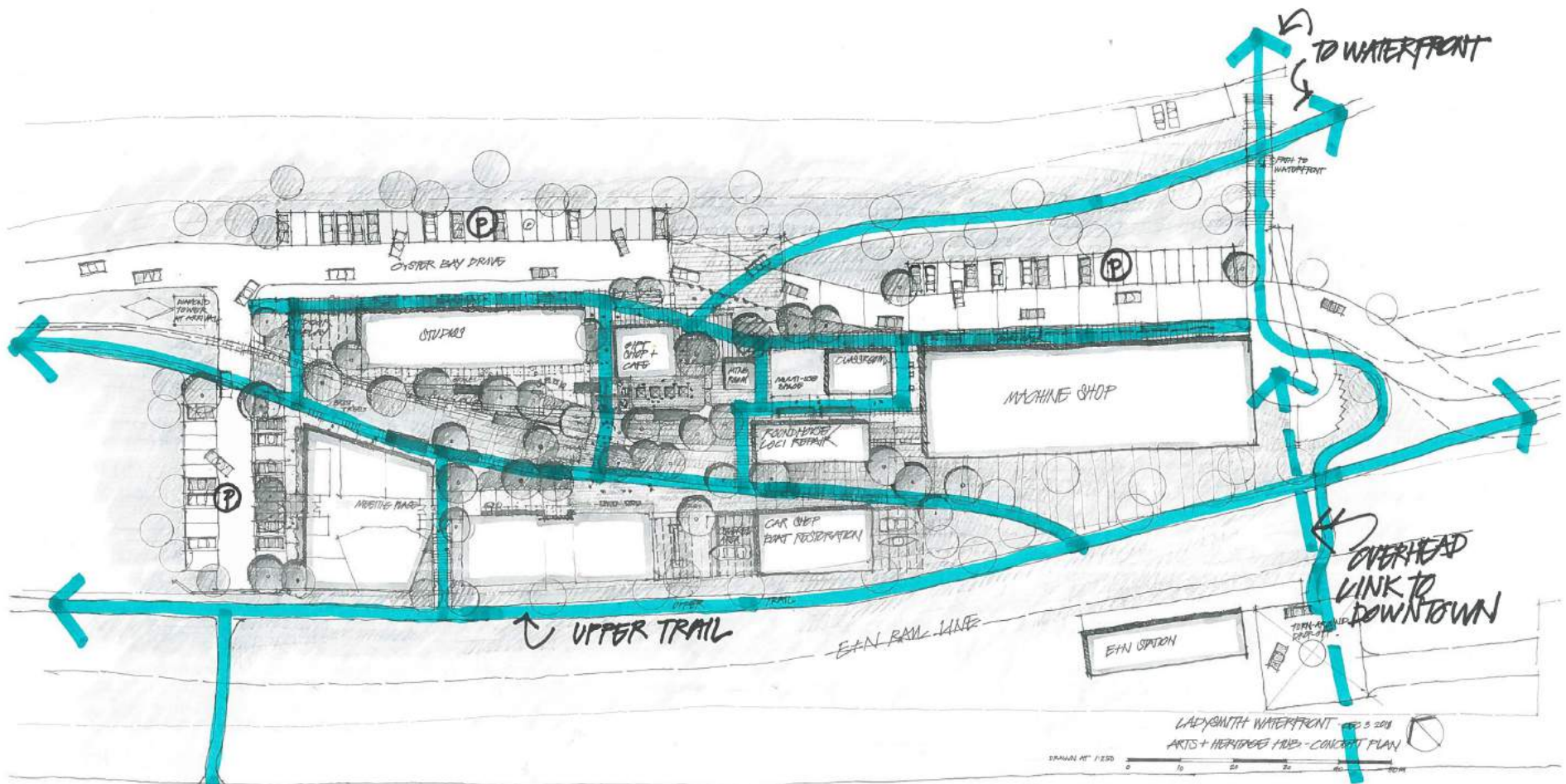
4 Patios

Positioning of new buildings in relation to existing buildings, allows for the creation of a central public open space with internally-oriented perimeter patios. These patios can have multiple uses including art display, interactive exhibits, performances and special events. They can also be used for casual seating. Adjacent to these patios, there is potential to provide covered demonstration areas where visitors can observe artisans carrying out their work.



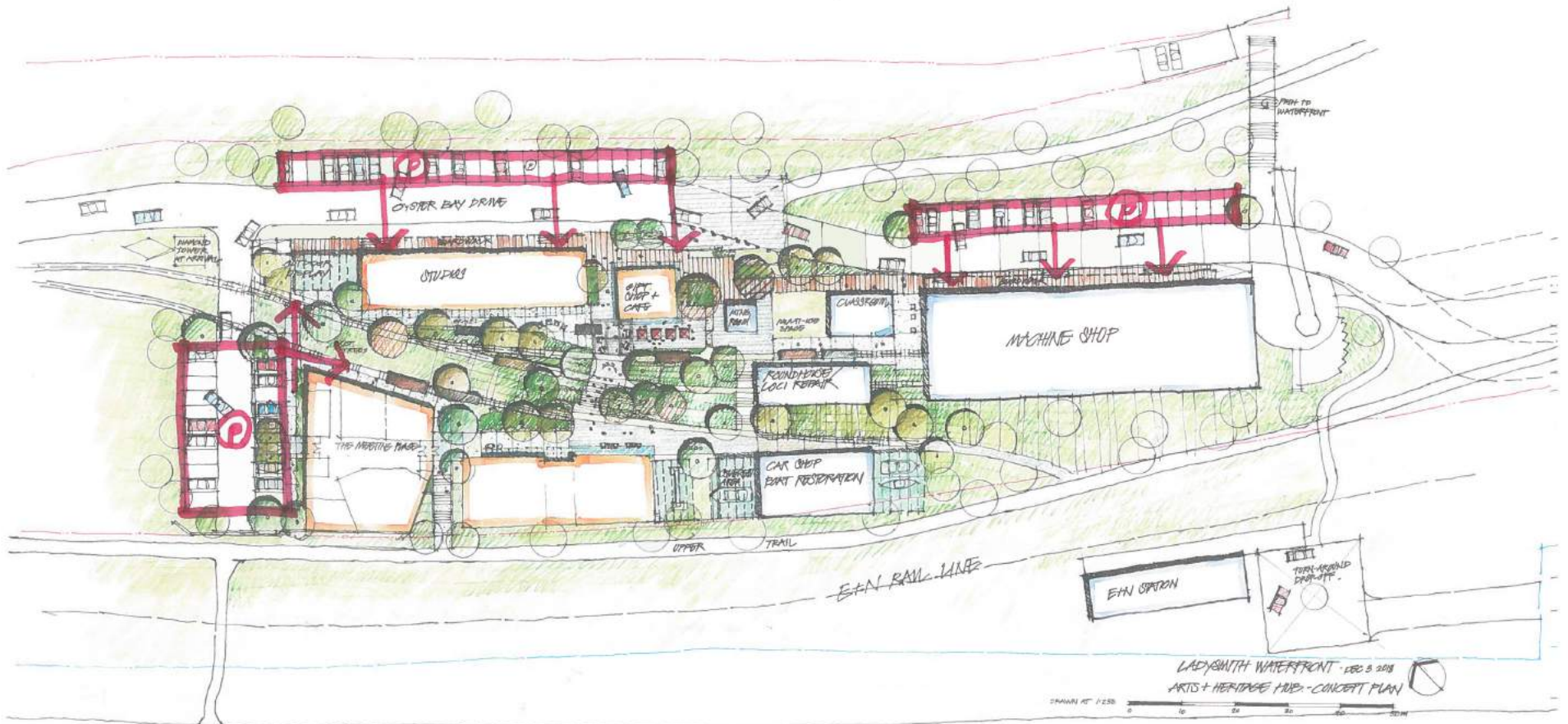
The public realm concept for the Hub is “pedestrians-first”. It is recognized that many visitors will arrive by car but the intent is for the vehicles to be parked and the amenities enjoyed on foot. The site occupies one of a series of terraces stepping from the downtown to The Hub, to the waterfront. A trail system linking these places together is an important objective to achieve over time. The upper level trail, located on an old rail

line provides another access point to the site. Stair access to the courtyard space from this trail should be provided.



6 Parking Areas

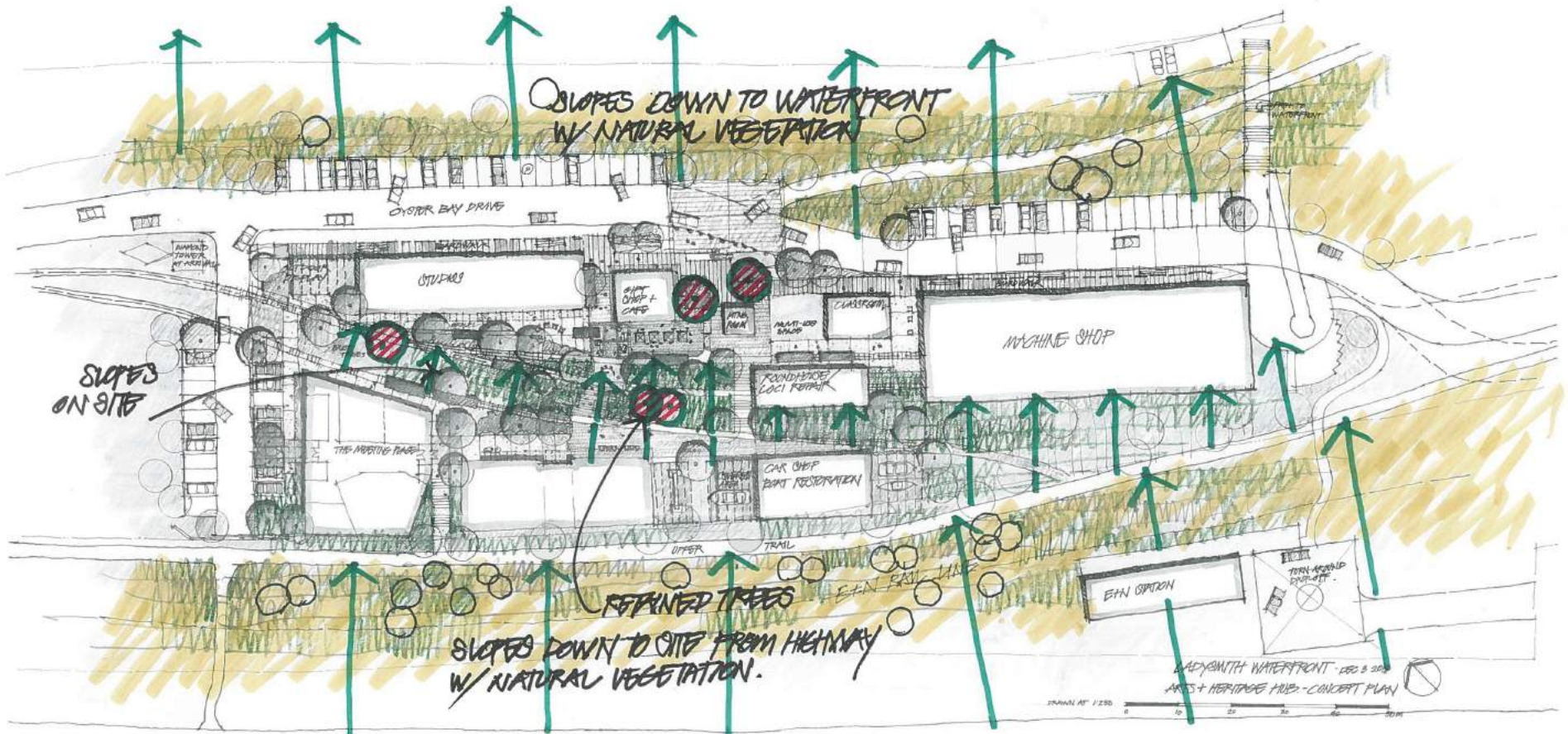
Parking is proposed along the east edge of Oyster Bay Drive and also in a formalized lot to the north of The Hub. All parking spaces are to be arranged at 90 degrees to maximize their number and to provide access for vehicles traveling from both directions. Due to grade changes, it is anticipated that retaining walls may be required in certain areas.



7 Slopes and Natural Areas

The Hub site occupies one of a series of terraces that cascade down from the upper community to the waterfront. Within this terrace, a series of smaller grade changes exist between four, short rail spur lines. These level changes will be incorporated into the design of the spaces in the form of courts, patios and seating for performances. Stairs will connect the different levels. Barrier free routes will also exist as the grades level out toward the north end of the

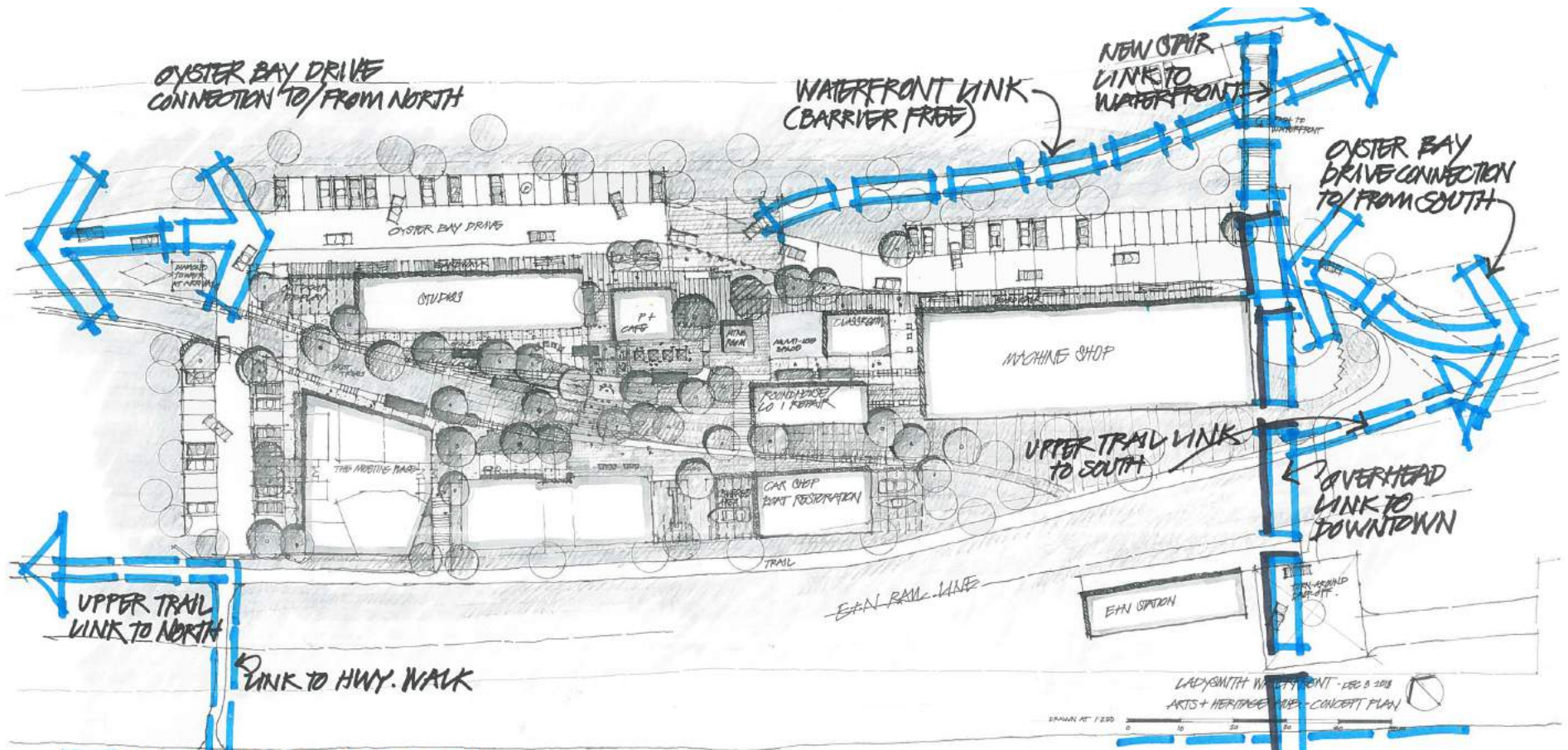
courtyard. Where possible, existing trees and natural areas will be retained and left undisturbed. The rail spurs are to remain as an important historical reference and as a means for bringing rolling stock into and out of the courtyard. One of these lines extends through the Roundhouse and Machine Shop as an important component of the project. It is recognized that there will need to be service and emergency vehicle access provided to all facilities on the site.



8 Connections

It is important that the Arts and Heritage Hub is well-integrated into the Waterfront Plan area and the larger community by all modes of transportation, including vehicles, cyclists and pedestrians. Vehicular access is via Oyster Bay Drive from the north and south. There is also potential to provide an east/west pedestrian link that fully connects the downtown area to the waterfront. This link can be accomplished by introducing an elevated bridge structure from the

downtown, over the highway and the E&N rail corridor, and arriving at the plaza at the south end of the Machine Shop. The trail would then continue down a new stair from Oyster Bay Drive to the waterfront. Barrier-free access can be provided utilizing the existing roadway that currently connects to the harbour.



5.0 Project Budget

To ensure that the financial impacts of the plan are fully understood a construction cost estimate has been prepared for the Hub by the cost consulting firm, BTY Group. The estimate breaks down the project cost into its constituent parts to form a grocery list of construction items. This approach allows for the logical phasing of construction works as funding becomes available.

The following is a cost summary; the full estimate can be found in the appendix of this report.

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1
January 14, 2019



APP I: Project Cost Summary

		Estimated Cost
A. LAND COST	<i>excluded</i>	\$0
A1	Land	0
A2	Legal Fees	0
B. CONSTRUCTION		\$21,414,000
B1	Site Development	1,996,200
B2	Existing Buildings	6,532,200
B3	New Buildings	9,205,600
B4	Contingencies	3,680,000
C. INFRASTRUCTURE / OFF SITE WORKS - ALLOWANCE		\$750,000
C1	Roadwork and utilities outside the property lines	750,000
D. PROFESSIONAL FEES	15.0%	\$3,212,100
D1	Programming	incl.
D2	Architectural	incl.
D3	Structural	incl.
D4	Mechanical	incl.
D5	Electrical	incl.
D6	Quantity Surveying	incl.
D7	Acoustic	incl.
D8	Equipment Consultant	incl.
D9	Code Consultant	incl.
D10	Other Consultants and Disbursements	incl.
E. CONNECTION FEES & PERMITS	<i>excluded</i>	\$0
E1	Rezoning Cost	0
E2	DCC & Building Permits	0
F. MANAGEMENT & OVERHEAD	<i>excluded</i>	\$0
F1	Project Management Fee	0
F2	Owners Planning and Administrative Cost	0
F3	Project Insurance	0
F4	Project Commissioning, Move-In	0
G. FURNISHINGS, FITTINGS & EQUIPMENT	<i>excluded</i>	\$0
H. GOODS & SERVICES TAX (GST)	<i>excluded</i>	\$0
TOTAL PROJECT COST (2019 Dollars)		\$25,376,100
J. ESCALATION	<i>excluded</i>	\$0
J1	Escalation Reserve	0
J2	FF & E Escalation	0
ESCALATED PROJECT COST (2019 Dollars)		\$25,376,100

Notes: Where zero dollar values are stated, BTY has excluded these costs and the values should be carried in a separate budget (if applicable).

6.0 IMPLEMENTATION

Critical Mass

Of importance, is the concept of critical mass. For a place to be successful it is best to develop the most important, character-defining elements as a single phase of construction. This approach allows the project to gain momentum, with enough to do on-site that people will be attracted to visit and enjoy the place. However, the plan has been set up as a framework, where holes are intentionally left for future development as funding becomes available.

Phasing Strategy

Project phasing will likely be a prerequisite of the Hub simply due to the availability of funding. The initial phase(s) of work should focus on the areas of critical need. In this case, it is the repair of the site's most important asset, the 1943 Machine Shop. Future phases can then fill in the spaces that are required to achieve the critical mass for success.

A preliminary assessment suggests six phases, as follows:

- 1 The Machine Shop seismic, code upgrade and new roof;
- 2 Oyster Bay frontage development and parking areas, the plinth and boardwalk, the Studios, the Gift Shop/Café building, and minor renovations to the Roundhouse, Lunchroom, and Car Shop;
- 3 The Machine Shop architectural, mechanical, electrical and interiors upgrade;
- 4 Renovation of the historic buildings, including the Lunchroom, First Aid, Roundhouse and Car Shop, and construction of the "heart" space, and adjacent open areas;
- 5 Construction of the Industrial Arts buildings and site walkways;
- 6 Construction of the Community Meeting Place and north parking lot.

phases of the project.

Recommendations

As a result of this study, and to advance the project, it is recommended that:

- 1 Council receive and approve this Concept Design Report for the Arts and Heritage Hub and authorize staff to proceed to the next steps in the implementation process;
- 2 The existing tenants and stakeholders, the SFN, and the broader public be informed of the concepts and recommendations of this report;
- 3 A detailed location/leasing plan be prepared for all tenant spaces, and leases be formalized with existing tenants;
- 4 The funding process be determined and initiated to allow the first phases of the project to proceed
- 5 A parking management plan be prepared to rationalize the number, location, use and operation of parking spaces serving this area. For example, allocating dedicated parking for marina users; staff parking; and, short-term public parking located along Oyster Bay Road in front of the Hub; and,
- 6 The next stages of consultant services be contracted to finalize project design, costing, and the implementation of the first

7.0 APPENDIX

7.1 *Stakeholder Workshop*

DATE:	23 November 2018
LOCATION:	The Machine Shop, Ladysmith, BC
PARTICIPANTS:	Arts Council of Ladysmith The Ladysmith Maritime Society The Ladysmith and District Historical Society John Marston, Stz'uminus artist Dennis Brown, artist, represented by his wife
CONSULTANTS:	Norm Hotson of Hotson Architecture Inc. Kim Perry of Perry and Associates, Landscape Architects
TOWN STAFF:	Kim Fowler Clayton Postings Julie Tierney

EXERCISE 1:

WHAT ARE THE KEY WORDS THAT DESCRIBE THE IDEA OF AN ARTS AND HERITAGE HUB?

QUALITIES OF THE PLACE

- Intercultural and intergenerational experiences and learning
- Year round, day and evening, programs
- Linking past, present and future - history of the harbour – first nations, town development, industry, environmental degradation, future vision
- Integration of economic, socio/cultural and environmental
- Honouring Stz'uminus history and culture
- Joint programming of the arts, education and history
- Balancing community needs and desires with tourism
- Building on existing strengths and successes
- Shared / communal use
- Mixed use that manages compatibility of interests
- Arts and creativity central to all elements
- Safe and secure
- Diverse
- Engaging
- Active

THE PROCESS FOR ACHIEVING SUCCESS

- Cooperation
- Communication
- Unity amongst all users
- Room for everyone
- Public interaction
- Identification of all stages of development
- Strength in equal and diverse partnerships
- Relate all users to a common vision
- Understanding the meaning of “heritage”
- Sharing volunteers
- Using technology to advantage

PROPOSED USE OF THE SITE

- Showcase past industry – coal, lumber, oysters, fishing
- Education
- Art
- Heritage preservation
- Public art that shares stories of the place
- Lots to do - activities and facilities
- Heritage boat restoration/repair – open door for public viewing
- Family boat building
- Connection to waterfront – education, multi-media, interactive
- Commercial uses tied to the marina
- Travelling exhibits
- Tourism and recreation
- Eco tourism – multi-media theatre, real time participation

SITE PLANNING CONSIDERATIONS

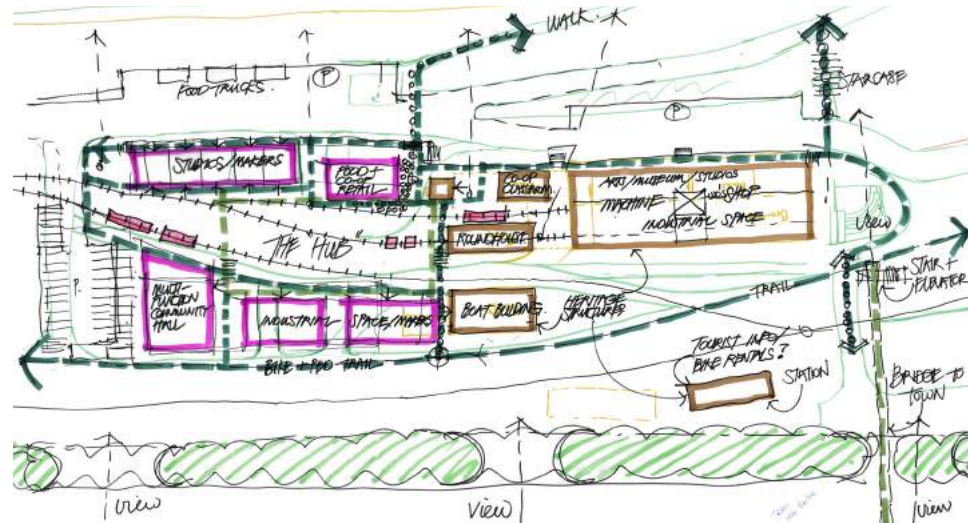
- Information and directional signage
- Ease of accessibility
- Visible connection to the waterfront
- Community gathering areas
- Landscaping
- Lighting and security
- Parking
- Identification of future development sites
- Existing amphitheatre for common programming
- Create a “heart”
- Connections to downtown and waterfront
- Pathways for pedestrians, bikes, scooters, prams
- A village concept
- Places to sit with water view

SPECIFIC SPACES AND PROGRAMS FOR THE SITE

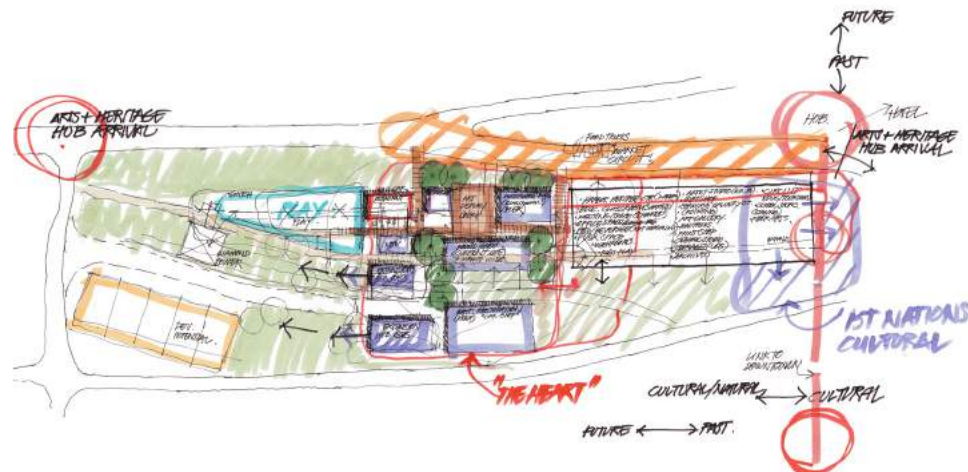
Flexible and shared spaces
Art studios
Classrooms
Working rail equipment
Community space / meeting rooms - rentals
Community art gallery
Gift shop – shared
Public / staff washrooms
First nations carving studio / shed
Passenger rail tours – using speeders
Museum and archives located uptown, not here.

EXERCISE 2:

WHAT ARE YOUR SPECIFIC IDEAS FOR THE PLANNING AND DESIGN OF THE SITE?



Group 1 - Concept Plan



Group 2 - Concept Plan

CONSULTANT SUMMARY OF THE THEMES THAT EMERGED FROM THE DAY'S DISCUSSION

1 – The principal uses in the Hub should focus on the arts, making and repairing things, and the interesting history of the site.

2 – The project should demonstrate, through tangible elements, the strong partnership between the Town of Ladysmith and the Stz'uminus First Nation.

3 – By encouraging a diversity of activities on the site it will be more attractive to both locals and visitors to Ladysmith.

4 – In representing history, authenticity and interaction are of paramount importance, rather than simply static displays.

5 – Spaces in the project should be flexible, supporting a multitude of activities, and shared by the various users and tenants on site.

6 – The project must be well-connected to both the downtown and the waterfront, for walking, biking and driving (parking), ensuring people have convenient access to the place.

7 – Architectural design should respect the historic character of the site while clearly articulating new from old.

8 – A well-conceived, public realm design should be built in tandem with building upgrades and new construction to ensure that the site is accessible, active, inviting, safe and secure.

9 – The project should be planned for incremental development over time where spaces are left for future buildings or open spaces.

10 – The design and construction of the project may be of modest proportions to stretch the availability of funding. Good design does not have to be expensive.

These themes and observations can form the basis of a set of “guiding principles” for the make-up and design of the Arts and Heritage Hub project.

7.2 BTY Group Cost Report

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1
January 14, 2019



Ladysmith Arts + Heritage Hub Study
Class D Estimate #1

January 14, 2019

APP I: Project Cost Summary

	Estimated Cost
A. LAND COST	excluded \$0
A1 Land	0
A2 Legal Fees	0
B. CONSTRUCTION	\$21,414,000
B1 Site Development	1,996,200
B2 Existing Buildings	6,532,200
B3 New Buildings	9,205,600
B4 Contingencies	3,680,000
C. INFRASTRUCTURE / OFF SITE WORKS - ALLOWANCE	\$750,000
C1 Roadwork and utilities outside the property lines	750,000
D. PROFESSIONAL FEES	15.0% \$3,212,100
D1 Programming	incl.
D2 Architectural	incl.
D3 Structural	incl.
D4 Mechanical	incl.
D5 Electrical	incl.
D6 Quantity Surveying	incl.
D7 Acoustic	incl.
D8 Equipment Consultant	incl.
D9 Code Consultant	incl.
D10 Other Consultants and Disbursements	incl.
E. CONNECTION FEES & PERMITS	excluded \$0
E1 Rezoning Cost	0
E2 DCC & Building Permits	0
F. MANAGEMENT & OVERHEAD	excluded \$0
F1 Project Management Fee	0
F2 Owners Planning and Administrative Cost	0
F3 Project Insurance	0
F4 Project Commissioning, Move-In	0
G. FURNISHINGS, FITTINGS & EQUIPMENT	excluded \$0
H. GOODS & SERVICES TAX (GST)	excluded \$0
TOTAL PROJECT COST (2019 Dollars)	\$25,376,100
J. ESCALATION	excluded \$0
J1 Escalation Reserve	0
J2 FF & E Escalation	0
ESCALATED PROJECT COST (2019 Dollars)	\$25,376,100

Notes: Where zero dollar values are stated, BTY has excluded these costs and the values should be carried in a separate budget (if applicable).

Description	Quantity	Unit	Rate	Amount
B1 Site Development				
Demolition allowance related to site development	1	sum	150,000.00	150,000
Allowance for site regrade & upgrading the existing site utilities within the property lines to accommodate the new development	1	sum	700,000.00	700,000
Allowance for modification to existing roadwork	1	sum	200,000.00	200,000
On-Site Landscape Cost - provided by Perry and Associates				
A Parking Stalls & New Road				
New gravel parking	1,841	m ²	40.00	73,600
Vehicular rated special unit paving (incl. edger)	306	m ²	120.00	36,700
Grading & preparation	2,147	m ²	10.00	21,500
B Paths				
Concrete or unit paving	777	m ²	90.00	69,900
CIP concrete stairs	149	m ²	400.00	59,400
Grading & preparation	925	m ²	10.00	9,300
Railings	113	m	120.00	13,500
C Wood Boardwalk				
Boardwalk	689	m ²	250.00	172,300
Bull rail	191	m	40.00	7,600
Demolition of retaining walls	9	m ³	60.00	500
D Amenity Plaza Area				
Special unit paving (incl. edger)	519	m ²	120.00	62,300
E Pavilions				
Concrete or unit paving	404	m ²	90.00	36,400
Weather protection structures (see Arch.)				
F Rough Grass				
Rough grass incl. topsoil	2,706	m ²	5.00	13,500
Grading & preparation	2,706	m ²	10.00	27,100
G Planting (Assume 50% New Planting)				
Trees	55	no	400.00	22,000
Indigenous planting incl. topsoil	1,245	m ²	70.00	87,200
Grading & preparation	1,245	m ²	10.00	12,500
Irrigation	1,245	m ²	20.00	24,900
H Site Furnishings & Features				
Benches	12	no	1,500.00	18,000
Bike racks	3	no	1,000.00	3,000
Bollards	20	no	750.00	15,000
Trash cans	5	no	1,000.00	5,000
Performance tents	1	sum	20,000.00	20,000
Signs / wayfinding & directional	1	sum	25,000.00	25,000
Interpretative structures	1	sum	20,000.00	20,000
Miscellaneous	1	sum	40,000.00	40,000
Site lighting	1	sum	50,000.00	50,000

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1

January 14, 2019

Description	Quantity	Unit	Rate	Amount
B2 Existing Buildings				
<u>Renovation of the existing Machine Shop:</u> Cost according to BTY's Class D Estimate dated May 8, 2018 Building upgrades & retrofit for new function program Renovation to the back shop area into Brewpub Renovation to the north half of the back shop into community meeting place Retain LMS Marine Heritage at street level and repurpose other spaces into small, independent artist studios Anticipated works include interior retrofit, structural reconfiguration for new exit. M&E associated retrofit works	1	sum	3,312,200	3,312,200
Extra over for seismic upgrade - provided by engineer	1	sum	1,300,000	1,300,000
<u>Renovation of the existing Lunchroom / Washroom:</u> Wood framed structure New perimeter foundation walls Demolition to interior partitions New interior finishes New roofing Restore / replace exterior windows & doors Patch & paint exterior walls New heating & electrical systems No plumbing required	1	sum	300,000	300,000
<u>Renovation of the existing First Aid Building:</u> Wood framed structure, same scope as above	1	sum	200,000	200,000
<u>Renovation of the existing Roundhouse Building:</u> Wood framed structure, same scope as above	1	sum	420,000	420,000
<u>Renovation of the existing Car Shop Building:</u> Wood framed structure, same scope as above	1	sum	600,000	600,000
Extra over for reconstruct perimeter foundation walls to existing buildings	1	sum	400,000.00	400,000

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1

January 14, 2019

Description	Quantity	Unit	Rate	Amount
B3 New Buildings				
<u>New Building - Café w/ Kitchen & Gift Shop</u> Foundation excavation w/ engineering fills Standard concrete foundations w/ SOG Timber framed exterior/interior walls & flat roof Aluminum storefronts w/ double doors to 2 sides Aluminum framed fix windows w/ openers Corrugated steel to exterior claddings w/ insulations 2-Ply SBS membrane roofing w/ insulations Aluminum framed glazed entrance canopies Floor tiles to all interior floor area Painted drywalls to all interior walls & furring Suspended ceiling tiles to all ceiling area Misc. metals Millworks incl. bar counter, cabinets, shelves, & etc. Exterior/interior signages Complete mechanical system w/ heating & cooling Complete electrical system	144	m²	4,200.00	604,800
Extra over for Café kitchen equipment	1	sum	25,000.00	25,000
Extra over for exterior wood patio seating area w/ canopy and lightings to BLDG 6	108	m²	600.00	64,800
<u>New Building - Art Studios</u> Foundation excavation w/ engineering fills Standard concrete foundations w/ SOG Timber framed exterior/interior walls & sloped roof Aluminum storefronts w/ double doors to 2 long sides Aluminum framed fix windows w/ openers Corrugated steel to exterior claddings w/ insulations 2-Ply SBS membrane roofing w/ insulations Wood soffits to exterior roof overhangs Movable partitions w/ supporting structure between studios Concrete sealer flooring to all interior floor area Painted drywalls to all interior walls & furring Exposed ceiling w/o paint Misc. metals Millworks incl. work tables, cabinets, shelves, & etc. Exterior/interior signages Complete mechanical system w/ heating & cooling Complete electrical system	420	m²	3,600.00	1,512,000

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1

January 14, 2019

Description	Quantity	Unit	Rate	Amount
B3 New Buildings				
<u>New Building - Industrial Arts Buildings</u>	450	m²	4,000.00	1,800,000
Foundation excavation w/ engineering fills				
Standard concrete foundations w/ SOG & retaining walls				
Timber framed mezzanines & balconies w/ concrete toppings				
Metal stairs w/ glazed guardrails				
Timber framed exterior/interior walls & sloped roof				
Aluminum storefronts w/ double doors to 2 long sides				
Aluminum framed fix windows w/ openers				
Corrugated steel to exterior claddings w/ insulations				
2-Ply SBS membrane roofing w/ insulations				
Wood soffits to exterior roof overhangs				
Concrete sealer flooring to all interior floor area				
Painted drywalls to all interior walls & furring				
Exposed ceiling w/o paint				
Misc. metals				
Millworks incl. cabinets, display shelves, & etc.				
Exterior/interior signages				
Complete mechanical system w/ heating & cooling				
Complete electrical system				
Extra over for exterior canopy and lightings to covered outdoor use between BLDG 8	180	m²	1,500.00	270,000
<u>New Building - The Meeting Place</u>	920	m²	4,800.00	4,416,000
Foundation excavation w/ engineering fills				
Standard concrete foundations w/ SOG & retaining walls				
Timber framed upper floors w/ concrete toppings				
Metal stairs w/ glazed guardrails				
Timber framed exterior/interior walls & flat roof				
Aluminum storefronts w/ double doors to entrances				
Aluminum framed fix windows w/ openers				
Aluminum framed window wall				
Corrugated steel to exterior claddings w/ insulations				
2-Ply SBS membrane roofing w/ insulations				
Aluminum framed sloped skylights on top of lobby area				
Aluminum framed glazed entrance canopies				
Wood soffits to exterior roof overhangs				
Movable partitions w/ supporting structure between MRs				
Floor tiles to all washrooms floor & BOH				
Carpet to all other areas				
Painted drywalls to all interior walls & furring				
Wall tiling to washrooms & BOH				
Suspended ceiling tiles to all other ceiling area				
Suspended drywall ceiling to washrooms & BOH				
Misc. metals				
Millworks incl. box counters, cabinets, display shelves, & etc.				
Misc. specialties				
Exterior/interior signages				
BOH equipment				
Hydraulic elevator				
Complete mechanical system w/ heating & cooling				
Complete electrical system				

A1-4

Ladysmith Arts + Heritage Hub Study
Class D Estimate #1

January 14, 2019

Description	Quantity	Unit	Rate	Amount
B3 New Buildings				
<u>New Building - The Meeting Place (cont.)</u>				
Extra over for theatre area incl. finishes, seating, lightings, AV systems, & etc. in BLDG 9	150	m²	1,500.00	225,000
<u>New Building - Rolling Stock Display Building</u>	144	m²	2,000.00	288,000
Foundation excavation w/ engineering fills				
Standard concrete foundations w/ SOG				
Wood framed exterior walls & sloped roof				
Open structure				
Asphalt shingle roofing w/o insulations				
Concrete sealer flooring to all interior floor area				
Exposed ceiling w/o paint				
Misc. metals				
Exterior/interior signages				
Minimum electrical system & lighting				
B4 Contingencies				
Design Contingency		15%		2,660,000
Construction Contingency		5%		1,020,000
Escalation Contingency		excluded		
Total Construction Cost				\$21,414,000

BTY GROUP

A1-5

Appendix B

ARTS & HERITAGE HUB DESIGN STEERING COMMITTEE

Type

☒ Council Committee

☐ Task Force

Mandate

The Arts & Heritage Hub Design Steering Committee is a Select Committee of Council pursuant to section 142 of the *Community Charter*. The mandate of the Steering Committee is to support the implementation of the Waterfront Area Plan by providing design guidance for the Arts and Heritage Hub. The Steering Committee shall provide this advice to staff, design professionals and Council. The Steering Committee's recommendations shall be consistent with the Waterfront Area Plan, the Arts & Heritage Hub Concept report and any other reports or design documents for the Arts & Heritage Hub formally endorsed by Council.

The proposed artist studio building of the Arts & Heritage Hub will include collaborative design input from local First Nation artists.

Membership

The Committee will be comprised of the following members:

Voting Members (9)

- Up to three members representing the Stz'uminus First Nation or local indigenous artists, appointed by Council;
- One member representing the Arts Council of Ladysmith and District, appointed by Council;
- One member representing the Ladysmith and District Historical Society, appointed by Council;
- One member representing the Ladysmith Maritime Society, appointed by Council; and
- Up to three members representing existing and prospective tenants of the Arts & Heritage Hub, appointed by Council.

Non-Voting Members (3)

- One member of Council;
- Director of Development Services; and
- Director of Parks, Recreation and Culture.

Nominations

The Director of Development Services shall seek nominations from the organizations and individuals listed above and Council shall consider the nominations in accordance with the requirements and regulations of the *Community Charter*. The nomination process shall be as follows:

- For the Arts Council of Ladysmith and District, representative, the Arts Council shall submit at least two nominees, from which Council will select one to sit on the Steering Committee.
- For the Ladysmith and District Historical Society representative, the Society shall submit two nominees, from which Council will select one to sit on the Steering Committee.
- For the Ladysmith Maritime Society representative, the Society shall submit two nominees, from which Council will select one to sit on the Steering Committee.

- For the Stz'uminus First Nation/local indigenous artist representatives the Director of Development Services shall seek nominations, with no limit or requirement on the number of nominations, and Council will appoint up to three representatives to sit on the Steering Committee.
- For all other member positions, a written letter from the nominee or from an organization to which the nominee belongs shall suffice for a nomination.

Term

The term of each member shall be one year from the date of appointment by Council. Committee members may serve multiple and consecutive terms, if reappointed by Council.

Membership Requirements and Expectations

The Steering Committee will operate under the following principles:

- **Respect and Integrity:** Members shall treat stakeholders, fellow committee members, Council, consultants, members of the public and staff with courtesy and respect at all times. Codes of conduct that apply to staff and members of Council also apply to members of the committee.
- **Accountability:** Members shall strive to attend meetings, read meeting materials in advance and participate in stakeholder engagement activities where necessary.
- **Collaboration:** Members shall at all times strive to support the successful implementation of the Waterfront Area Plan and subsequent design guidelines approved by Council and shall work together to carry out this objective. Members shall be open to alternatives and work to reconcile differing views in a professional and constructive manner.

These expectations apply to Committee members while attending Committee meetings, representing the Town or the Committee, and participating in OCP events and forums. Where a member breaks any of the principles, Council may revoke the membership of the Committee member.

Reporting

Committee minutes will be provided to Council on a regular basis.

Meetings*Chair and Vice Chair*

- The Chair and Vice Chair will be elected at the first meeting of the Steering Committee and as needed should the Chair or Vice Chair be unable to fulfill their respective duties.
- If the Chair is unable to attend a meeting, the Vice Chair shall chair the meeting.
- A non-voting member may not serve as Chair or Vice Chair of the Committee.

Meetings Schedule and Procedures

- Meetings will be on an as-needed basis, but shall not be more than twice per month.
- Meetings may take place in any suitable venue or electronically.
- The Council Procedure Bylaw of the Town applies to meetings of the Steering Committee.
- A quorum is required.
- Meetings of the Committee will be open meetings pursuant to section 89 of the *Community Charter*.

Agendas and Minutes

- The Director of Development Services will prepare meeting agendas and distribute the meeting agenda to the members of the Committee at least one week prior to the meeting date.
- Minutes of meetings will be kept.
- Draft minutes of the previous meeting will be distributed with the meeting agenda package.

- Minutes of the Steering Committee meetings will be posted on the Town of Ladysmith website and included in Council agenda packages.

DRAFT

Appendix C: Previous Council Direction

Resolution	Date	Resolution
CS 2015-144	20-Apr-15	FINAL RESOLUTION (AS AMENDED BY CS 2015-145) That Council approve a plan by the Industrial Heritage Preservation Committee to move Locomotive #11 and the Humdergin into the Machine Shop in order to prevent further deterioration and vandalism with the approval of the Machine Shop Advisory Group, and invite a representative of the Industrial Heritage Preservation Committee to join the Machine Shop Advisory Group.
CS 2017-140	01-May-17	That Council direct staff to make a funding application to the Federal Gas Tax Fund Strategic Priorities Fund – Capital Infrastructure Project Stream for the Machine Shop Restoration for up to \$2.25 million dollars in grant funding, and support the Town administration with overseeing the management of this grant if successful.
CS 2018-045	13-Feb-18	That Council authorize an application to the Island Coastal Economic Trust for up to \$400,000 to support the development of an Arts and Heritage Hub in the vicinity of the Machine Shop on the Ladysmith Waterfront.
CS 2018-344	17-Sep-18	That Council receive for information the Arts and Heritage Hub Concept Planning report.
CS 2018-452	19-Nov-18	That Council: <ol style="list-style-type: none"> 1. Receive the Machine Shop Pre-Design Report drafted by Hotson Architecture; 2. Receive the Machine Shop Structural Report drafted by Herold Engineering; 3. Direct staff to commence the next phases of the Machine Shop Restoration Project relating to design and construction, focusing on identified structural and code improvements; 4. Direct staff to contract with Hotson Architecture to continue as project lead for the Machine Shop Restoration Project, specific to implementation phases (design, securing contractor and construction) at a cost up to \$250,000 and waive the Purchasing Policy accordingly; and 5. Continue to include the Machine Shop Users Advisory Group and tenants in project updates.
CS 2018-453	19-Nov-18	That, having considered the applicability of both the Lot 108/Forrest Field Expansion and the Waterfront Arts and Heritage Hub initiatives, Council direct staff to proceed with an infrastructure funding application to implement the Arts and Heritage Hub Concept Plan under the Investing in Canada Program.

CS 2019-019	21-Jan-19	<p>That Council:</p> <ol style="list-style-type: none"> 1. Direct staff to submit an application for grant funding for the Arts & Heritage Hub Concept Plan Phase I through the Investing in Canada Infrastructure Program—Rural and Northern Communities; and 2. Support the project and commit to its share (\$430,500) of the project, with the funds to come from reserves."
CS 2019-147	15-Apr-19	<p>That Council:</p> <ol style="list-style-type: none"> 1. Direct staff to proceed with the preparation of bylaws to amend the: <ol style="list-style-type: none"> a. Zoning Bylaw to support the proposed uses in the Arts and Heritage Hub Concept Plan, and b. Institutional (Arts and Heritage Hub) land use policies in the Waterfront Area Plan to recognize the potential for additional revenue generating uses within the Arts and Heritage Hub area. 2. Direct that the Town's community and stakeholder consultation undertaken as part of the development of the Arts and Heritage Hub Concept Design Report be considered as the early and on-going consultation during the development of the OCP amendment, pursuant to s. 475 of the Local Government Act.
CS 2020-290	06-Oct-20	<p>That Council:</p> <ol style="list-style-type: none"> 1. Direct staff to submit an application for grant funding for the MachineShop Rehabilitation Phase 2 for \$3,114,611 through the Investing in Canada Infrastructure Program – Community, Culture and Recreation; 2. Support the project and commit to its share (\$1,132,779) of the project with the funds to come from the Real Property Reserve and General Government Reserves; and Direct staff to amend the 2020-2024 Financial Plan accordingly.
CE 2020-158	17-Nov-20	<p>That Council direct staff to bring forward, for Council's formal consideration in an open meeting:</p> <ol style="list-style-type: none"> a) The final version of the Arts & Heritage Hub Concept Report (Appendix C, page 12) prepared by Hotson Architecture; and b) A report on the portions of phase one of the Arts & Heritage Hub that are ineligible for ICIP and ICET funding and must either be paid for by the Town or postponed.

STAFF REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services
Meeting Date: December 1, 2020
File No:
Re: **2021 Revenue Anticipation Bylaw**

RECOMMENDATION:

That Council give first three readings to Town of Ladysmith “2021 Revenue Anticipation Borrowing Bylaw 2020, No. 2057”.

EXECUTIVE SUMMARY:

Each year, Council may grant approval to borrow money to meet budgeted financial obligations prior to the property tax due date in early July. Some of these obligations occur prior to the annual property tax levy. This bylaw allows for short-term borrowing up to 75% of the 2020 property tax levy.

PREVIOUS COUNCIL DIRECTION:

This bylaw must be approved by Council on an annual basis.

INTRODUCTION/BACKGROUND:

A revenue anticipation bylaw is prepared in advance of the annual property tax levy. This borrowing is permitted in the *Community Charter* under s.177, Revenue Anticipation Borrowing. This borrowing differs from regular borrowing as electoral assent is not required.

The Town has not executed any of the previous revenue anticipation bylaws, though it is wise financial management to have this bylaw in place in case of an emergency.

ALTERNATIVES:

Council can choose not to approve the bylaw.

FINANCIAL IMPLICATIONS:

The purpose of this bylaw is to ensure adequate cash flows are available in case of an emergency. Until the bylaw is executed, there are no financial implications.

LEGAL IMPLICATIONS:

The bylaw is permitted under s.177 of the *Community Charter*.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

N/A

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

N/A

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input checked="" type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

Attachment:

- Bylaw No. 2057

TOWN OF LADYSMITH

BYLAW NO. 2057

A Bylaw to Provide for the Borrowing of Money in Anticipation of Revenue

WHEREAS the Town of Ladysmith does not have sufficient money on hand to meet the current lawful expenditures of the municipality;

AND WHEREAS it is provided by Section 177 of the *Community Charter* that Council may, without the assent of the electors or the approval of the Inspector of Municipalities, provide for the borrowing of such sums of money as may be necessary to meet the current lawful expenditures of the municipality provided that the total of the outstanding liabilities does not exceed the sum of:

The whole amount remaining unpaid of the taxes for all purposes levied during the current year, provided that prior to the adoption of the annual property tax bylaw in any year, the amount of the taxes during the current year for this purpose shall be deemed to be 75% of the taxes levied for all purposes in the immediately preceding year.

AND WHEREAS the total amount of liability that Council may incur is six million and eight hundred thousand dollars (\$6,800,000);

AND WHEREAS there are no liabilities outstanding under Section 177;

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

1. The Council shall be and is hereby empowered and authorized to borrow upon the credit of the Town of Ladysmith an amount or amounts not exceeding the sum of six million and eight hundred thousand dollars (\$6,800,000).
2. The form of obligation to be given as acknowledgement of the liability shall be a promissory note or notes bearing the corporate seal and signed by the Mayor and the officer assigned the responsibility of financial administration of the municipality.
3. All unpaid taxes and the taxes of the current year when levied or so much thereof as may be necessary shall, when collected, be used to repay the money so borrowed.

EFFECTIVE DATE

4. This bylaw comes into effect January 1, 2021.

CITATION

5. This bylaw may be cited as Town of Ladysmith "2021 Revenue Anticipation Borrowing Bylaw 2020, No. 2057".

READ A FIRST TIME on the day of ,

READ A SECOND TIME on the day of ,

READ A THIRD TIME on the day of ,

ADOPTED on the day of ,

Mayor (A. Stone)

Corporate Officer (D. Smith)

INFORMATION REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services
Meeting Date: December 1, 2020
File No:
Re: Waterworks Amendment Bylaw for 2021

RECOMMENDATION:

That Council give first three readings to Town of Ladysmith “Waterworks Rates and Regulations Bylaw 1999, No. 1298, Amendment Bylaw 2020, No. 2058”.

EXECUTIVE SUMMARY:

The proposed waterworks amendment bylaw is to increase the water utility rates by 3% to each step amount.

PREVIOUS COUNCIL DIRECTION:

CS 2020-331

That Council:

1. Direct staff to prepare an amendment to the Water Rates and Regulations Bylaw 1999, No.1298 to increase each consumption rate by 3%, effective January 1, 2021;
2. Confirm the Sewer Rates remain the same;
3. Direct staff to prepare the 2021 Sewer Parcel Tax Bylaw at \$350; and
4. Direct staff to prepare the 2021 Water Parcel Tax Bylaw at \$459.

DISCUSSION:

The 2021 Financial Plan discussions began in early November. This waterworks amendment bylaw formalizes the discussion. There is a proposed 3% increase to the water rates which amounts to \$3.66 increase per quarter for a single family dwelling using 90 cubic meters in a quarter, effective January 1, 2021.

There are no changes to the sewer rates.

The water and sewer parcel tax bylaws will be presented in April of 2021 along with the 2021-2025 Financial Plan bylaw and 2021 tax rates bylaw.

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

TOWN OF LADYSMITH

BYLAW NO. 2058

A Bylaw to amend the Waterworks Regulations Bylaw 1999, No. 1298

WHEREAS pursuant to the *Community Charter*, the Municipal Council may, by bylaw, regulate, prohibit and impose requirements in relation to municipal services:

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

1. Schedule 'A' of "Waterworks Regulations Bylaw 1999, No. 1298" including all previous amendments, is hereby replaced with the attached Schedule 'A'.
2. The provisions of this bylaw shall become effective and be in force as of January 1, 2021.

Citation

3. This bylaw may be cited as Town of Ladysmith "Waterworks Regulations Bylaw 1999, No. 1298, Amendment Bylaw 2020, No. 2058".

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

READ A SECOND TIME on the _____ day of _____,

READ A THIRD TIME on the _____ day of _____, 20____.

ADOPTED on the _____ day of _____, 20____.

Mayor (A. Stone)

Corporate Officer (D. Smith)

SCHEDULE "A"

TOWN OF LADYSMITH

"Waterworks Regulations Bylaw 1999, No. 1298, Amendment Bylaw 2020, No. 2058"

1. METERED SINGLE UNIT DWELLING

Per billing period:

Base Rate, including consumption to 25 m ³	\$ 52.66	
Next 26 m ³ to 50 m ³	\$ 0.9581	per m ³
Next 51 m ³ to 75 m ³	\$ 1.1322	per m ³
Next 76 m ³ to 100 m ³	\$ 1.3933	per m ³
Next 101 m ³ to 125 m ³	\$ 1.8289	per m ³
Over 125 m ³	\$ 2.4385	per m ³

2. METERED SERVICE - all other users

Per billing period:

Base Rate, including consumption to 25 m ³	\$ 52.66	
Over 25 m ³	\$ 0.8709	per m ³

3. NON-METER SERVICE

Per billing period:	\$ 76.35	per unit
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4. BULK WATER RATE

\$ 2.19	per m ³
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5. WATER SERVICE CONNECTION RATES

Where a service connection has not been previously provided to a parcel but where the Public Waterworks system front or abuts the parcel:

(A) Up to a 25mm (4") service connection including meter, meter box, meter setter, check valves, shut-off valves and other related appurtenances:	\$3,000 per connection
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(B) Larger than 25mm (4") shall be:	At cost but no less than \$3,000 per connection
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SCHEDULE "A"

"Waterworks Regulations Bylaw 1999, No. 1298, Amendment Bylaw 2020, No. 2058"

Page 2

Where a service connection has been previously provided to a parcel:

- (C) Service connection including meter, meter box, meter setter, check valves, shut-off valves and other related appurtenances and is the requested size: \$100 per connection
- (D) Owner requested service modification including installation of a water meter, meter box, meter setter, check valves, shut-off valve and any other related appurtenances shall be: At cost, but no less than \$3,000 per connection

6. FINES

Every person who violates any provision of this bylaw shall be guilty of an offence punishable on summary conviction and shall be liable to a fine or to imprisonment for not more than 6 months, or both.

Each day that a violation of the provisions of this bylaw occurs, exist or is permitted to occur or exists, shall constitute a separate offense. \$2,000 per offence