Our file: 2020-04330
Your file: RZ 1S 20 - 0947204 BC LTD. (ADAMA)
Date: September 11, 2020

BRITISH COLUMBIA | Ministry of Transportation and Infrastructure

Strathcona Regional District
990 Cedar Street
Campbell River, BC V9W 7Z8

Attn: John Neill, Planner

The Ministry of Transportation and Infrastructure has received and reviewed your referral of September 4, 2020 to amend the Village of Sayward Zoning Bylaw No. 309 to permit the development of a 20-lot serviced residential subdivision plus a 33-pad serviced Recreational Vehicle campground on an approx. 9-hectare portion of Lot 304 at Kelsey Bay, Sayward. The property does not fall within Section 52 of the Transportation Act and will not require Ministry of Transportation and Infrastructure formal approval.

The Ministry has no objections to the proposed rezoning.

Thank you for the opportunity to comment. If you or the proponent has any questions, please contact Jennifer Dyer at 778-576-1109.

Sincerely,

Jennifer Dyer, Development Services Officer
Vancouver Island District – Courtenay

Our File: 2221-49305

TECHNICAL MEMO

To	From
Mike Adama, Owner	John Sorenson, Division Manager Campbell River Branch
Re	**Date**
Kelsey Bay Multi-Phase Development	June 12, 2020

McElhanney Ltd. has been retained by Mike Adama to complete a preliminary servicing review of the water, sanitary, and storm systems with respect to the proposed multi-phase single-family strata and campground development located near Kelsey Bay in Sayward BC. The intent of this design review is to confirm the capacity within the existing systems and make recommendations as to required upgrades to accommodate the proposed subdivision.

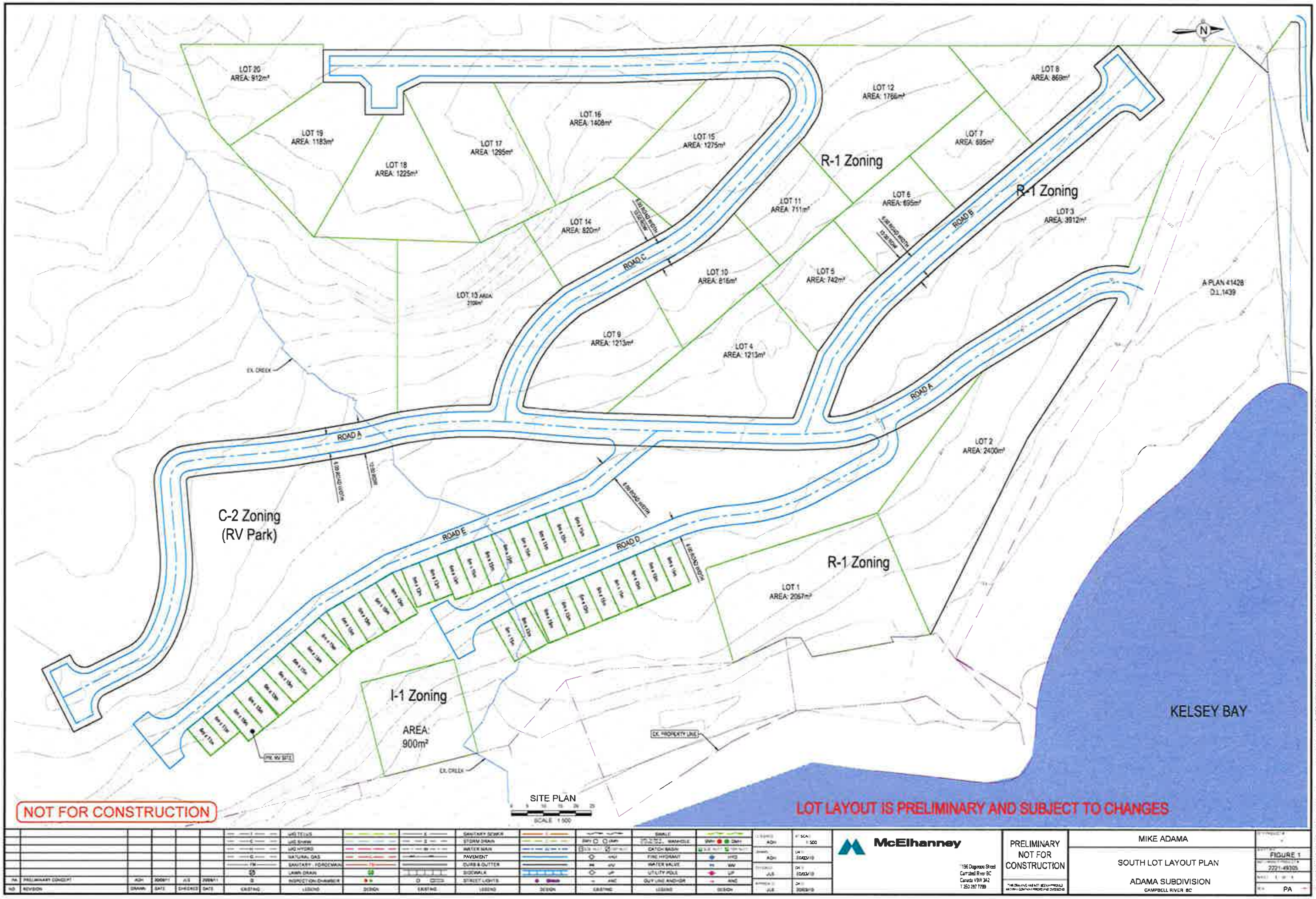
A preliminary layout of the subdivision is provided in **Figures 1 and 2** overleaf. Please note that the layout is preliminary and may be subject to revisions moving forward. As such, the analyses within are based on a preliminary subdivision layout and may need to be revised should the layout change.

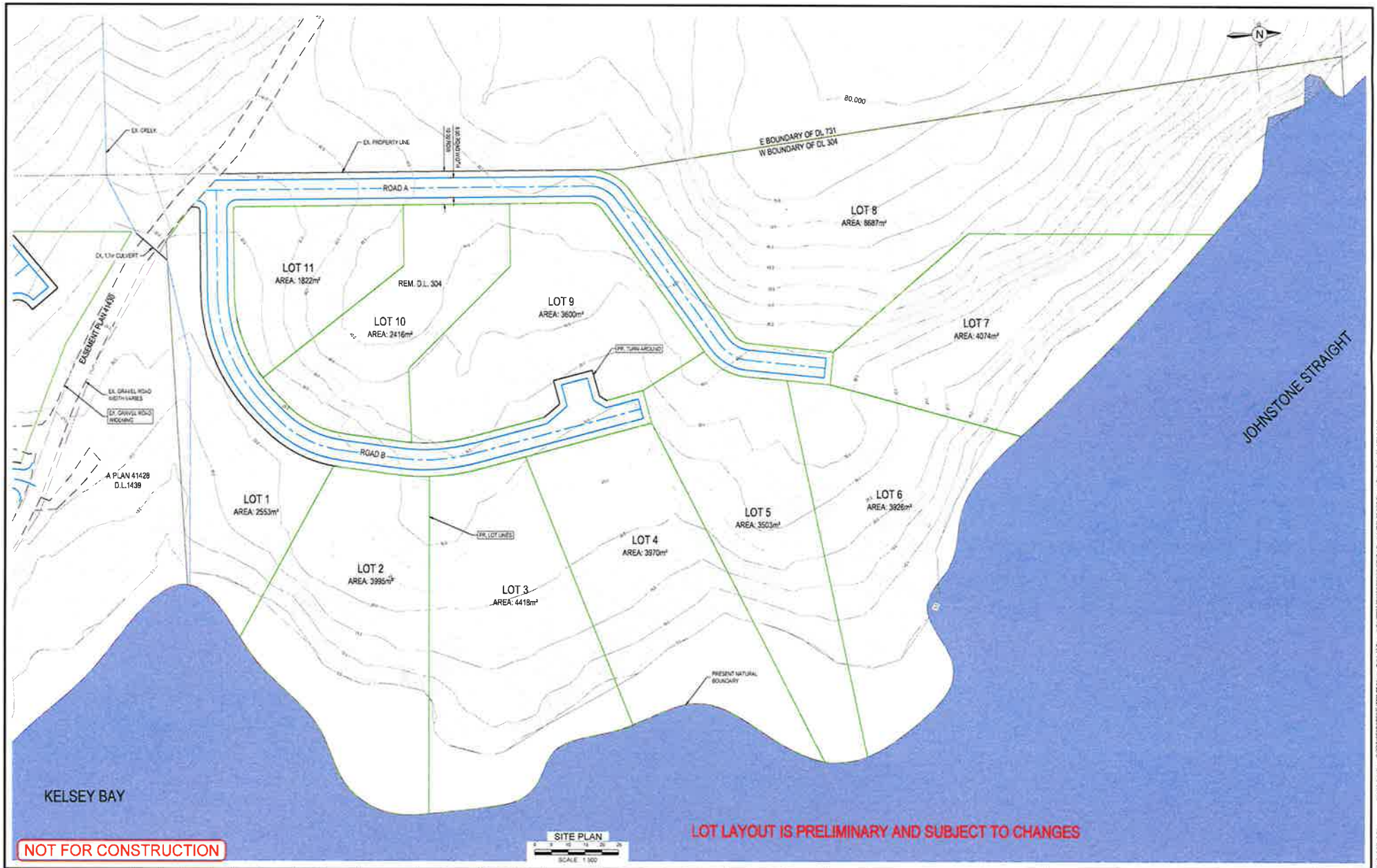
This technical memorandum summarizes the results of the waterworks, sanitary and stormwater systems and are highlighted below.

1. Waterworks

The existing water distribution system consists of a reservoir located south of the village with the terminal end and low point at the Port of Kelsey Bay as shown on **Figure 3** below. Please note that the diameters and lengths of the water piping was based on available record drawings as well as follow up discussions with the Town's Operations Staff.

The system was modeled to confirm the existing capacity and to determine if there is adequate capacity to accommodate the estimated domestic and fire flows associated with the proposed multi-phase development.


LOT 20
AREA: 912m²
LOT 19
AREA: 1183m²
LOT 18
AREA: 1225m²
LOT 17
AREA: 1295m²
LOT 16
AREA: 1408m²
LOT 15
AREA: 1275m²
LOT 14
AREA: 820m²
LOT 13 AREA: 2106m²
LOT 12
AREA: 1766m²
LOT 11
AREA: 711m²
LOT 10
AREA: 816m²
LOT 9
AREA: 1213m²
LOT 8
AREA: 869m²
LOT 7
AREA: 895m²
LOT 6
AREA: 695m²
LOT 5
AREA: 742m²
LOT 4
AREA: 1213m²
LOT 3
AREA: 3912m²
LOT 2
AREA: 2400m²
LOT 1
AREA: 2057m²
R-1 Zoning
R-1 Zoning
R-1 Zoning
C-2 Zoning
(RV Park)
I-1 Zoning
AREA:
900m²
ROAD A
ROAD A
ROAD B
ROAD C
ROAD D
ROAD E
A PLAN 41428
D.L.1439
KELSEY BAY
EX. CREEK
EX. CREEK
EX. PROPERTY LINE
SITE PLAN
SCALE 1:500
NOT FOR CONSTRUCTION
LOT LAYOUT IS PRELIMINARY AND SUBJECT TO CHANGES
McElhanney
PRELIMINARY
NOT FOR
CONSTRUCTION
MIKE ADAMA
SOUTH LOT LAYOUT PLAN
ADAMA SUBDIVISION
CAMPBELL RIVER BC
FIGURE 1
2221-49305
PA



NO.	REVISION	DRAWN	DATE	CHECKED	DATE
R5	PRELIMINARY CONCEPT	ADH	2020/07	JLS	2020/07
R4	PRELIMINARY CONCEPT	ADH	2020/06	JLS	2020/06

EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN
UG TELUS			SANITARY SEWER			SMH MANHOLE		SMH DMH
UG SHAW			STORM DRAIN			CATCH BASIN		
UG HYDRO			WATER MAIN			FIRE HYDRANT		HYD
NATURAL GAS			PAVEMENT			WATER VALVE	WV	WV
SANITARY - TONGEMAN			CURB & GUTTER			UTILITY POLE	UP	UP
LAWN DRAIN	LD		SIDEWALK			GUY LINE ANCHOR		ANC
INSPECTION CHAMBER	IC		STREET LIGHTS					

DESIGN	ADH
DRAWN	ADH
CHECKED	JLS
APPROVED	JLS
SCALE	1:500
DATE	2020/10
DATE	2020/10
DATE	2020/10

McElhanney
1196 Dogwood Street
Campbell River BC
Canada V9W 5A2
T 250 287 7768

PRELIMINARY
NOT FOR
CONSTRUCTION

THE DRAWING HAS NOT BEEN APPROVED AND MAY NOT MEET MUNICIPAL REQUIREMENTS

MIKE ADAMA

NORTH LOT LAYOUT PLAN

ADAMA SUBDIVISION
CAMPBELL RIVER, BC

FIGURE 2

2221-49305

PB

Figure 3: Existing Sayward Water System

1.1. DOMESTIC AND INDUSTRIAL DEMANDS

The existing and proposed average Annual Daily Demand (ADD), Maximum Day Demand (MDD), and Peak Hour Demand (PHD) for Sayward were estimated based on the demands outlined in the MMCD Design Guidelines. These MMCD demands are shown according to the land use type in **Table 1** below. It should be noted that MMCD does not provide design ADD and PHD flow rates for non-residential properties.

Table 1: MMCD Water Demand Design Rates

Land Use Type	Annual Daily Demand (ADD)	Maximum Day Demand (MDD)	Peak Hour Demand (PHD)
Residential	450 litres/capita/day	900 litres/capita/day	1350 litres/capita/day
Commercial or Institutional*	NA	22,500 litres/hectare/day	NA
Industrial*	NA	10,000 – 100,000 litres/hectare/day	NA

**MMCD Non- Residential design flow rates only provided for Maximum Day Demand*

Given the above per capita/area demand rates, the estimated results for the Village's existing and proposed demands are summarized in **Table 2** below. Note that for the Island Timberlands log sort facility, an estimated per hectare flow rate of 50,000 litres/hectare/day was assumed. This was based on the fact that they are a moderately heavy water user in the Town.

Table 2: Sayward Estimated Existing and Proposed Water System Domestic Demands

Land Use Type	Dwellings / Area	ADD (L/s)	MDD (L/s)	PHD (L/s)
Residential Dwellings	167 Dwellings	1.54	3.08	4.62
Non-Residential Sites	23.73 ha	NA	10.86	NA
Proposed North & South Dwellings and Campsites	64	0.83	1.67	2.50

1.2. FIRE FLOW

As per the MMCD design criteria, the system must have the capacity to provide the peak hour demands with a residual pressure of between 300 to 850 kPa while providing the required fire flow with max day demands and a pressure of 150 kPa.

A summary of the required fire flows as per the MMCD are summarized in **Table 3** below.

Table 3: MMCD Minimum Fire Flow Requirements

Developments	Minimum Fire Flow (L/s)
Single Family Residential	60
Apartments / Townhouses	90
Commercial	150
Institutional	150
Industrial	225

As this proposed development is a single-family development, a fire flow of 60 litres/second was required while maintaining a minimum residual pressure target of 150 psi under maximum day demand.

To verify the available fire flow and residual pressures in the existing system, a hydrant flow test was conducted by Sayward Public Works staff in late May 2020. An average flow of **61.4 litres/second (974 gal/min)** was reported at the hydrant adjacent to the Kelsey Bay Government Marina, and a residual pressure of **552 kPa (80psi)** was measured in the system at the upstream hydrant across the 40 Sayward Road.

The hydrant flow and pressure test results were used as means of model verification, which are discussed in the subsequent section.

Please note that prior to construction, an additional flow test should be performed to verify the results provided by the Village.

1.3. WATER MODEL VERIFICATION

Record drawings, field data, and flow & pressure test results, provided by Sayward Public Works staff, were used to develop, and verify the *WaterCAD* computer model. According to the Public Works department, the Village's water tank reservoir typically remains at 90% full. Given the tank is approximately 11m deep with a base elevation at 69.3m, the water surface elevation at 90% full is estimated at **79.2m**. This water surface elevation was entered into the model to set the static head in the system.

To verify the model, the reported hydrant flow and the estimated existing demands were assigned to their respective nodes and a steady state simulation was ran. The result was an estimated residual pressure of **529 kPa (77 psi)** at the hydrant near 40 Sayward Road. The percent difference comparing the measured and estimated pressures is 4.3% which is acceptable and will result in the model estimates being slightly conservative. **Table 4** highlights the model verification results.

Table 4: Model Verification with Residual Pressures at Hydrant Adjacent to 40 Sayward Road

	Measured	Model Result	Percent Difference
Residual Pressure	552kPa	529 kPa	4.3%

1.4. WATER MODELING RESULTS

Available topographical data was used to establish a preliminary design and layout for the on-site water system. This data was entered into the computer model. The computer water model was then used to confirm the available flows for the proposed development and establish which of the proposed lots could be serviced by the existing Village reservoir.

Based on a cursory review of the elevations of the proposed development, it was established that the lower portions of the development could be serviced by the existing reservoir while upper portions of the development would require the addition of a private booster pump to ensure adequate fire flows.

As a result, it was established that with the installation of a 50m section of 200mm diameter watermain in Sayward Road as well as a proposed 200mm diameter watermain on-site and 3 proposed hydrants, 10 of the proposed lots of the southern parcel and 5 of the proposed lots of the northern parcel could be serviced without an additional booster pump. Essentially, lots with fire protection provided by a hydrant installed at a maximum elevation of 35m can be serviced by the reservoir. The proposed lots (shown with white hatching) and hydrants are illustrated in **Figures 4 & 5**. The red circles around the hydrants represent the 75m radius coverage as required in the MMCD.

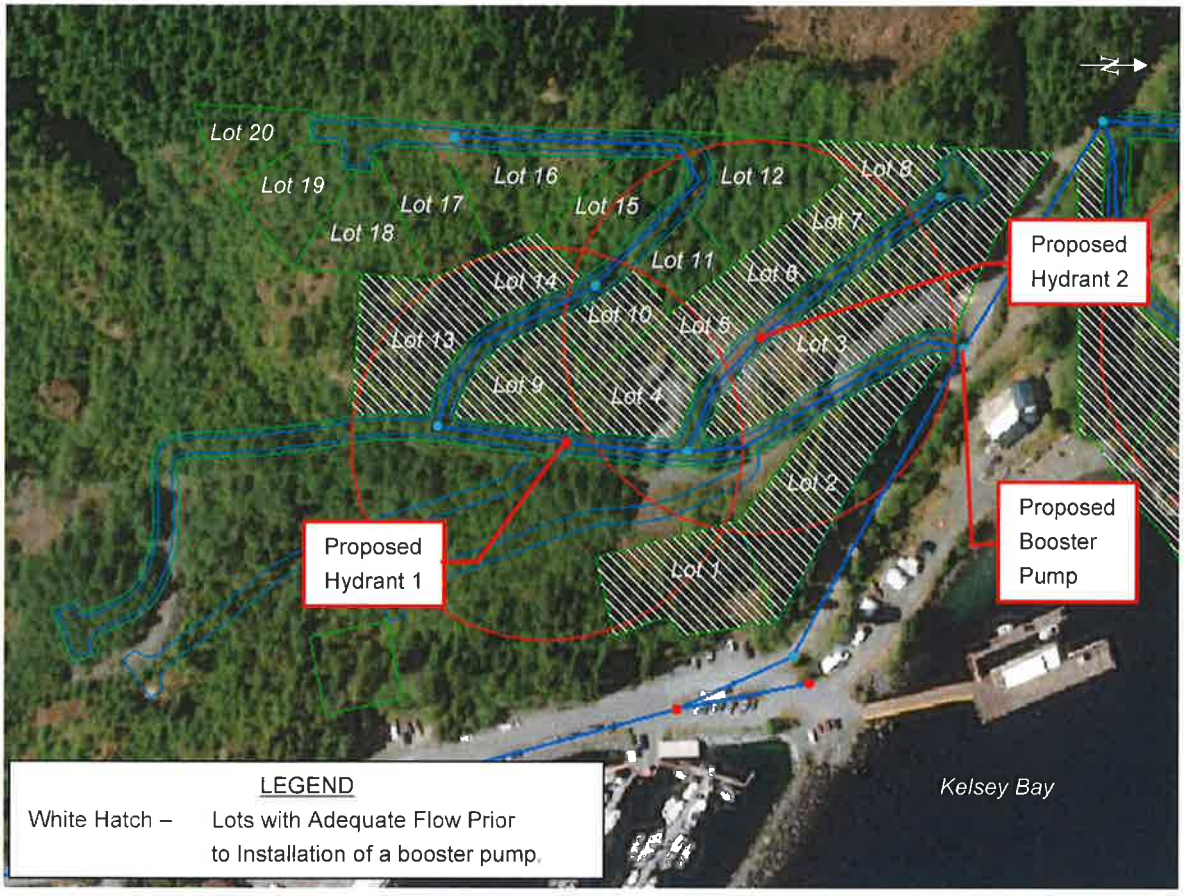


Figure 4: Southern Development Proposed Servicing Without Booster Pumps

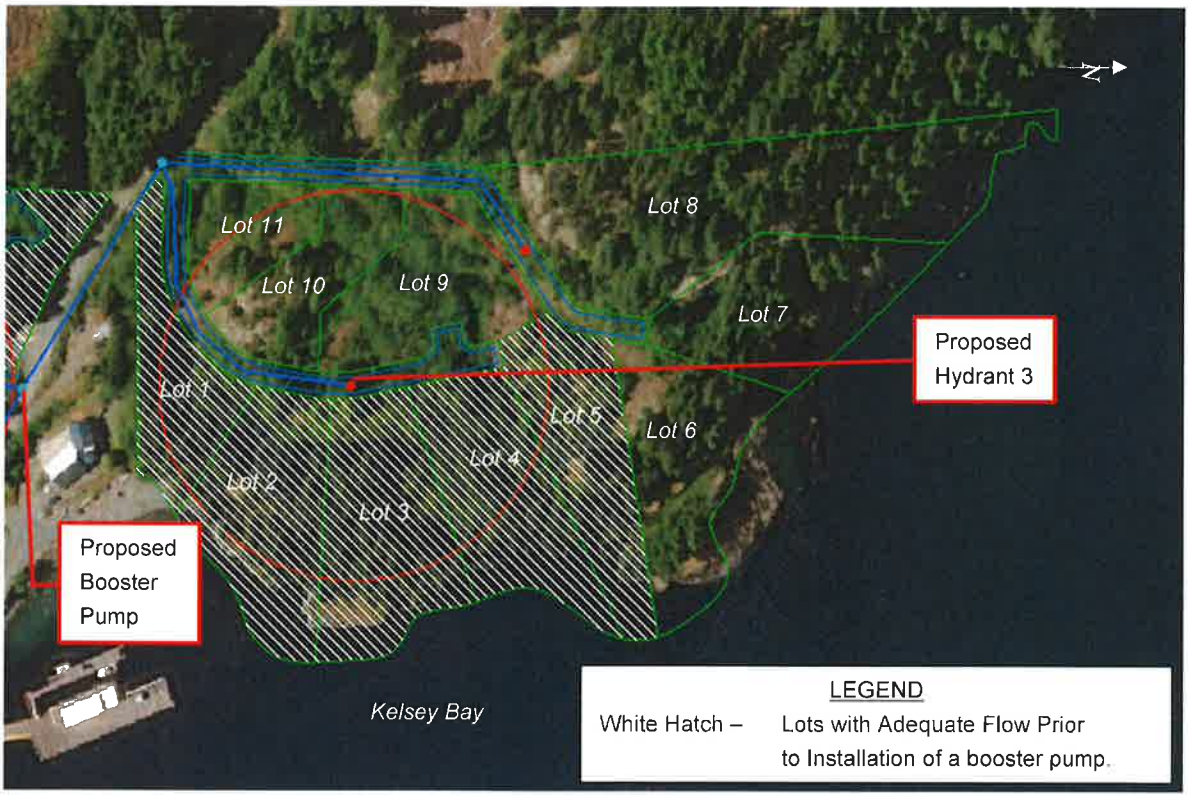


Figure 5: Northern Development Proposed Servicing Without Booster Pumps

To service the remaining proposed lots on the north and south parcels, booster pumps will need to be installed to ensure adequate fire and domestic flows are provided. The location of the potential booster pump is illustrated on **Figures 4 & 5**. Pump options will be explored at the detailed design stage.

2. Sanitary Analysis

The existing sanitary system was analyzed to establish if there is capacity to handle the additional flows from the proposed development. The HDPE force main system, as shown on the **Figure 6** below, consists of two lift stations. Lift Station 1 is located along Sayward Road at Kelsey Lane and services 3 existing residential properties on the lane. Lift Station 2 is located on the east side of Sayward Road near the government marina and services the primarily non-residential properties north from 40 Sayward Road including the marina, RV campsites and the Port of Kelsey Bay Dock.

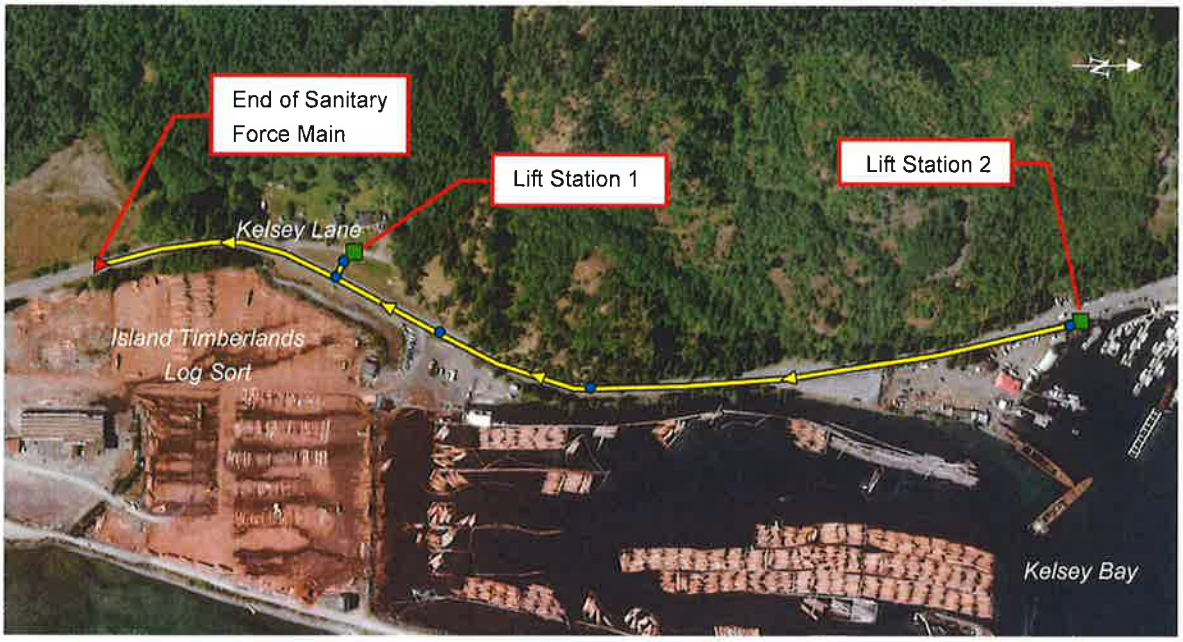


Figure 6: Existing Sanitary Force Main System

2.1. SANITARY DESIGN FLOWS

The existing and proposed estimated sanitary design flow rates were based on MMCD design guidelines. The estimated Peak Wet Weather Flows are used for design purposes. The estimated existing sanitary flows coming into Lift Station 1 are outlined in **Table 5**.

Table 5: Lift Station 1 Estimated Existing Sanitary Flow Rates

Parameter	Value
Total Residential Area	0.78 ha
Dwellings	3
People per Dwelling*	1.8
Dry Weather Demand**	350 litres/capita/day
Average Dry Weather Flow	0.022 litres/second
Peaking Factor**	3.2
Peak Dry Weather Flow	0.070 litres/second
Inflow and Infiltration Allowance**	0.12 litres/second/hectare
Wet Weather Flow	0.094 litres/second
Peak Wet Weather Flow	**0.16 litres/second**

**Based on the 2016 Canada Census Profile for Sayward*
***Based on MMCD Design Guidelines 2014*

The existing non-residential sanitary demands, factors, and calculated flows contributing to Lift Station 2 are listed in **Table 6**.

Table 6: Lift Station 2 Existing Sanitary Flow Rates

Parameter	Value
Total Non-Residential Area	5.88 ha
Dry Weather Demand*	25000 litres/ha/day
Average Dry Weather Flow	1.7 litres/second
Peaking Factor*	3.2
Peak Dry Weather Flow	5.4 litres/second
Inflow and Infiltration Allowance*	0.12 litres/second/hectare
Wet Weather Flow	0.71 litres/second
Peak Wet Weather Flow	**6.2 litres/second**

**Based on MMCD Design Guidelines 2014*

The additional flows from all phases of the development were estimate and the results are shown in **Table 7**.

Table 7: Lift Station 2 Proposed Sanitary Flow Rates

Parameter	Value
Development Area	7.3 ha
Dwellings	56
People per Dwelling	2.5
Dry Weather Demand	350 litres/capita/day
Average Dry Weather Flow	0.57 litres/second
Peaking Factor	3.2
Peak Dry Weather Flow	1.81 litres/second
Inflow and Infiltration Allowance	0.12 litres/second/hectare
Wet Weather Flow	0.88 litres/second
Peak Wet Weather Flow	**2.7 litres/second**

Therefore, combining the existing and proposed estimated flows, the total design sanitary flow for Lift Station 2 is **8.8 litres/second**.

2.2. SANITARY LIFT STATION AND FORCE MAIN MODELING

Analyzing a force main system with multiple lift stations is relatively complicated, and as such, *PCSMM* computer modelling software was utilized. Record drawings, manufacturer supplied pump information, and field data were used to create the model. The design flows were inputted, and a steady state simulation was ran.

Figure 7 below shows the pumping capacity of lift station 2. As noted, the pump station starts with an initial pumping rate of **9.5 litres/second** which decreases to **9.0 litres/second** as the level in the wet well drops.

The reduced pumping rates which range between **8.4 to 9.3 litres/second** are shown as small dips in the curve and coincide with lift station 1 & 2 pumping simultaneously.

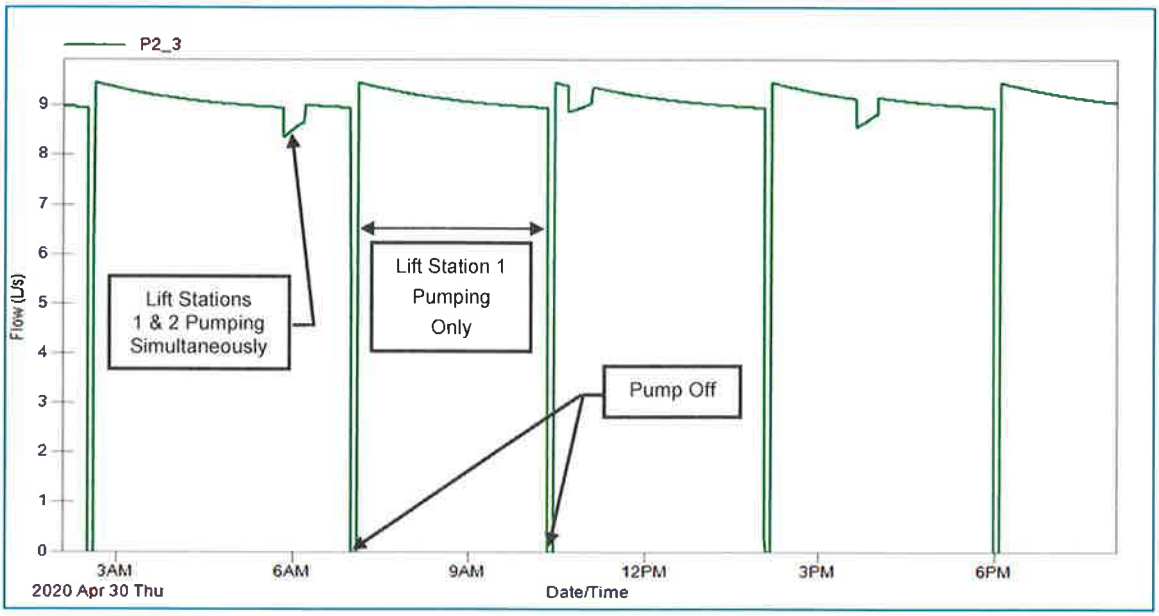


Figure 7: Lift Station 2 Flow vs Time Graph

It should be noted that a steady state analysis assumes a constant peak inflow which is very conservative compared to the more realistic variable rates of a diurnal demand curve. Given real world conditions, the pump-off periods would have a much greater duration. Based on this, it is safe to say the existing system has ample capacity to handle the additional flows from the proposed development.

2.3. FORCE MAIN MODEL VERIFICATION

To ensure the model was producing accurate estimates, an analysis of Lift Station 2 operating independently of Lift Station 1 was performed manually. The Hazen-Williams equation was used in the manual calculation to confirm the model results.

The model reports a peak pumping rate at Lift Station 2 of 9.5 litres/second with a total dynamic head (TDH) head of 20.4m. When the flow rate of 9.5 litres/second is entered into the Hazen-Williams analysis, the resulting TDH is estimated at 21.0m. The percent difference between the TDH of the model and *the* Hazen-Williams Equation is 2.9% which is acceptable and verifies that the model is operating correctly.

Table 8: Sanitary Model Verification Results

	Excel Result	Model Result	Percent Difference
System Head at 9.5 L/s	21.0 m	20.4 m	2.9%

3. Stormwater Management

Due to the fact that the site has a direct discharge to the ocean, the site is rocky and does not promote infiltration, we are proposing that targets related to on-site detention be exempted. This said, due to the proximity to the ocean, we would recommend that targets pertaining to water quality be implemented.

As there is no formal stormwater conveyance system in the area, stormwater will be discharged to the Kelsey Bay marine environment. As such, permitting and approvals will be acquired based on a subsequent environmental assessment as part of the detailed design.

4. Conclusion and Recommendations

Based on the established fire flows and domestic demands, the existing water system (without the addition of a booster pump) has adequate capacity to provide fire protection to lots within 75m of the proposed hydrants shown on **Figures 4 & 5**. Additionally, 3 proposed hydrants will be required. For the higher elevations of the development, booster pumps will be needed to provide the necessary fire flows.

A review of sanitary lift stations and the force main determined the peak inflow including the proposed development is 8.8 litres/second and the capacity of existing Lift Station 1, near the marina, ranges from 9.0 to 9.5 litres/second. When Lift Station 2, near Kelsey Lane, is pumping concurrently, pumping rates are reduced to 8.4 litres/second, but these are relatively short durations which do not limit the overall system capacity. Therefore, there is adequate capacity to handle the additional demands from the proposed development.

The stormwater system will be designed to MMCD Standards and adhere to best management practices pertaining to water quality. Given the necessary permits and approvals, runoff will be safely conveyed and ultimately, discharged via an ocean outfall into Kelsey Bay.

As this is based on a preliminary lot layout, the number and location of the lots are subject to change. Therefore, we confirm that the municipal system can handle an additional 5 lots, above what is currently proposed. Should the number of lots increase by greater than 5, further analysis will be required to confirm if there is adequate capacity. We trust that this meets the Village's requirements. Please contact the undersigned if you have any questions.

Sincerely, McElhanney Ltd.

Prepared by

Dwayne Cybak, EIT
Project Engineer

Reviewed by

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
SORENSON
45120

June 15, 2020

John Sorenson, P.Eng.
Division Manager

Strathcona
REGIONAL DISTRICT

DEVELOPMENT PROPOSAL – REFERRAL FORM
FILE: RZ 1S 20 - 0947204 BC LTD. (ADAMA)
District Lot 304, Sayward District, Except Plan 41428 (PID 000-568-309)

Please comment on the attached development proposal for potential effect on your agency's interests. We would appreciate your response by **October 2, 2020**. Complete the response summary on the form enclosed. If your agency's interests are unaffected, please indicate this on the form - no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy that would affect our consideration of this proposal.

PURPOSE OF PROPOSAL:	To amend the Village of Sayward Zoning Bylaw to rezone an approx. 9-ha. portion of Lot 304, Sayward District, Except Plan 41428 (18 Sayward Road) from Rural One (RU-1) to Residential One (R-1) and Commercial Two (C-2) to permit the development of a residential subdivision and RV campground / tourist accommodation on the land.
APPLICANT:	0947204 BC Ltd. (Mike Adama)
AGENT:	Kevin Brooks, McElhanney Ltd.
LEGAL DESCRIPTION:	That part of Lot 304, Sayward District, lying N of a boundary parallel to S boundary of said lot and extending from point on the W boundary of said lot distant 1600 feet from SW corner of said lot, except that Part in Plan 41428 and Plan EPP90265
OFFICIAL COMMUNITY PLAN:	Bylaw 308, Village of Sayward Official Community Plan Bylaw, 2000
EXISTING DESIGNATION:	Comprehensive Development Area 2 (CDA-2)
ZONING BYLAW:	Bylaw 309, Village of Sayward Zoning Bylaw, 2000
EXISTING ZONING:	Rural One (RU-1)
PROPOSED ZONING:	Residential One (R-1) and Commercial Two (C-2)

PROPOSAL DETAILS:
An application has been received to consider amending the Village of Sayward Zoning Bylaw to rezone an approximate 9-hectare portion of a 24.53-hectare parcel situated at Kelsey Bay, Sayward, from Rural One (RU-1) to Residential One (R-1) and Commercial Two (C-2) to allow the development of 20 residential serviced lots ranging in size from 695 square metres to 3912 square metres plus a 33-pad serviced Recreational Vehicle campground. The proposed development will be accessed via a network of 6-metre wide roads terminating in cul-de-sacs and, as per the attached Preliminary Servicing Report, the existing community water supply, fire protection (with the addition of a booster pump) and sanitary servicing are all adequate to accommodate the additional lots. Stormwater runoff will be collected on site and discharged via an ocean outfall to Kelsey Bay.

John Neill

John W. Neill MCIP MRTPI
Planner

#301 – 990 Cedar Street, Campbell River, BC V9W 7Z8
Tel: 250-830-6700 Fax: 250-830-6710
Toll free: 1-877-830-2990 www.strathconard.ca

Consultation has occurred with the following First Nations marked with an ☒:

	Ahousaht First Nation		Maa-nulth First Nations
	Cowichan Tribes		Mamalilikulla-Qwe'Qwa'Sot'Em First Nations
	Ehattesaht First Nation		Mowachaht/Muchalaht First Nation
	Halalt First Nation	X	Nanwakolas Council
	Homalco First Nation		Naut'sa mawt Tribal Council
	Hul'qumi'num Treaty Group		Nuchatlaht First Nation
	Hupacasath First Nation		Nuu-chah-nulth Tribal Council
	Ka:'yu:'k't'h / Che:K:tles7et'h' First Nation		Penelakut Tribe
	Klahoose First Nation (Cortes)		Qualicum First Nation
X	K'omoks First Nation		Tla'amin First Nation
	Kwiakah Band Office		Stz'uminus First Nation
	Laich-Kwil-Tach Treaty Society (formerly Hamatla)		Tlowitsis First Nation
	Lake Cowichan First Nation	X	We Wai Kai (Cape Mudge Band)
	Lyackson First Nation	X	We Wai Kum (Campbell River Band)

This referral has been sent to the following agencies marked with an ☒:

	Agricultural Land Commission (ALC)		Ministry of Energy, Mines and Natural Gas
	Advisory Planning Commission (APC): Area ___	X	Ministry of Environment
X	BC Assessment Authority	X	Ministry of Forests, Lands & Natural Resource Operations & Rural Development (Archaeology)
	BC Ferries Corporation		Ministry of Forests, Lands & Natural Resource Operations & Rural Development (Aquaculture Licensing & Regulation)
	BC Parks	X	Ministry of Forests, Lands & Natural Resource Operations & Rural Development (Forestry)
	City of Campbell River (CCR)		Ministry of Forests, Lands & Natural Resource Operations & Rural Development (Land Tenures Branch)
	Comox Valley Regional District (CVRD)		Ministry of Jobs, Tourism & Skills Training (Labour)
	Fisheries and Oceans Canada (General)	X	Ministry of Transportation and Infrastructure (MoTI)
	Fisheries and Oceans Canada (Aquaculture)		Mount Waddington Regional District (MWRD)
	Environment Canada		Private Managed Forest Land Council
X	Coastal Fire		qathet Regional District (qRD)
	Ministry of Aboriginal Relations and Reconciliation	X	School District No. 72 (Campbell River)
	Ministry of Agriculture		Transport Canada
	Ministry of Community, Sport & Cultural Development	X	Island Health

RESPONSE SUMMARY

DEVELOPMENT PROPOSAL REFERRAL FORM
FILE: RZ 1S 20 – Adama

Part District Lot 304, Sayward District, Except Plan 41428

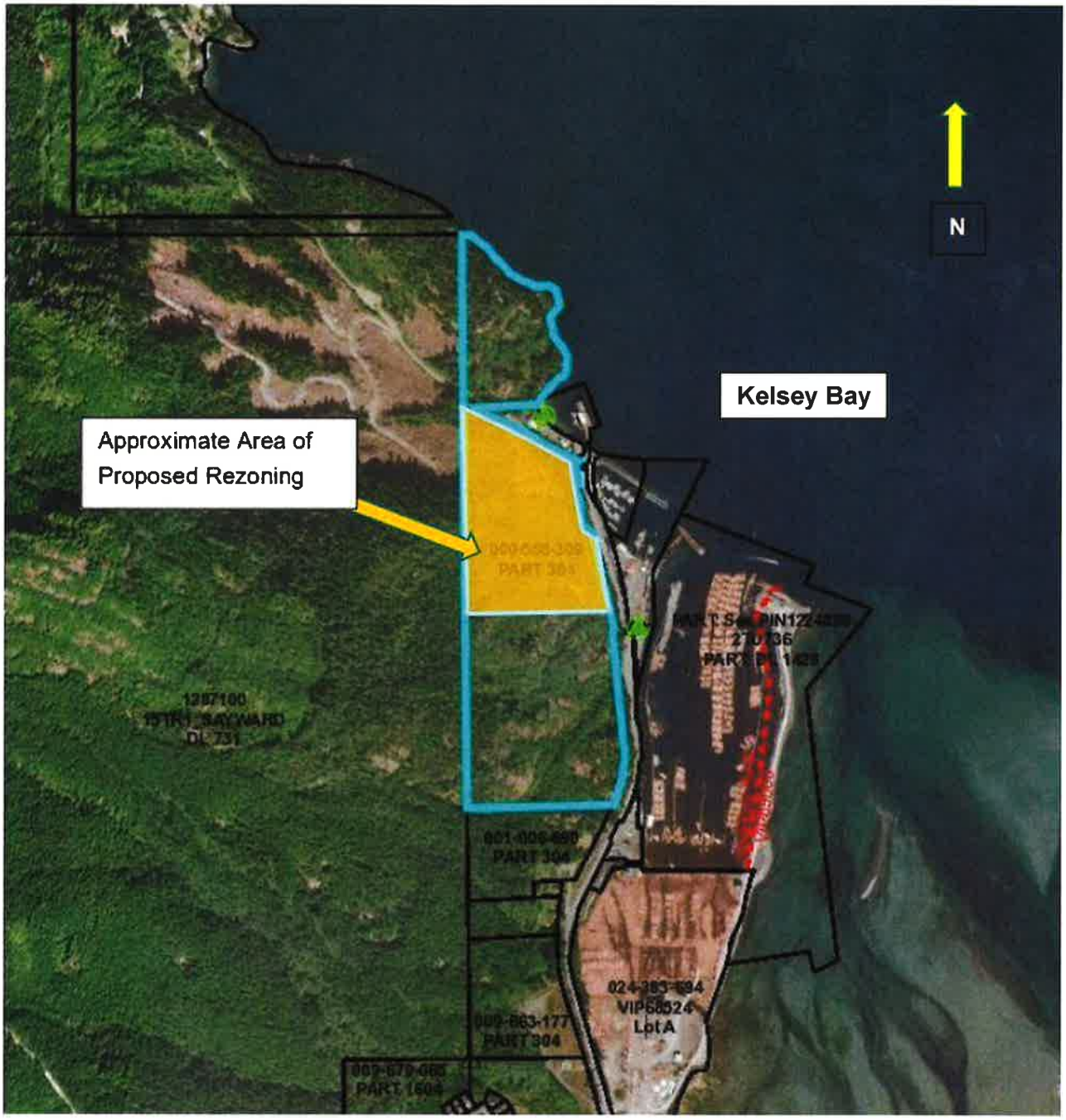
(John W. Neill, Planner)

- ☐ Approval recommended for reasons outlined below
- ☐ Interests unaffected by development proposal
- ☐ Approval recommended subject to conditions below
- ☐ Approval NOT recommended due to reasons outlined below

SIGNED BY: _____ TITLE: _____

FIRST NATION OR AGENCY: _____ DATE: _____

Strathcona Regional District



Location Map

Strathcona Regional District

Proposed zoning map

Strathcona Regional District

OFFICIAL COMMUNITY PLAN

The subject property is designated as Comprehensive Development Area 2 (CDA-2). The intent for the CDA-2 designation is to provide for mixed density residential uses and tourist accommodation such as RV parks. The OCP states (Pg. 10):

> *"Three Comprehensive Development Areas have been specifically established to provide for flexible land use planning, to take advantage of future opportunities in tourism, marine services, residential, industrial, and commercial ventures. The village seeks to attract responsible, sustainable, development to build on the considerable assets currently in place."*

Further, the OCP CDA-2 specific policy support the proposal:

1. *Development in the CDA-2 is intended to provide for mixed density residential, and tourist accommodation services.*
2. *Permitted uses in the CDA-2 may include mixed density residential development, senior's housing, and tourism accommodation, including RV parks.*
3. *The CDA-2 designation provides unique vistas across the Salmon Bay and Johnstone Strait; development should be oriented toward these views.*

The proposed single detached residential subdivision and recreational vehicle campground was designed to meeting the CDA-2 policies and justifications listed above.

ZONING

The current zoning on the property is Rural One (RU-1). To enable the proposed development, the land needs to be rezoned to the following zones:

- Residential One (R-1)
- Commercial Two (C-2)

Residential One (R-1)

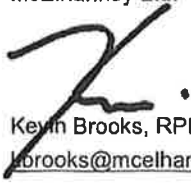
Residential One is a single-family dwelling zone. The minimum lot size is 668 m^2 with a lot coverage of 70%. This proposed zone is consistent with the Official Community Plan CDA-2 land use designation.

Commercial Two (C-2)

The Commercial Two zone is a mixed commercial zone with limited retail commercial with a focus on service commercial such as restaurants, pubs and tourist accommodation. This proposed zone is consistent with the Official Community Plan CDA-2 land use designation.

We look forward to working with you on this project. If you have any questions, please contact the undersigned.

Sincerely,
McElhanney Ltd.



Kevin Brooks, RPP, MPlan
kbrooks@mcelhanney.com | 778-560-2371

Applicant's Statement

PART FOUR COMPREHENSIVE DEVELOPMENT AREAS

Three Comprehensive Development Areas have been specifically established to provide for flexible land use planning, to take advantage of future opportunities in tourism, marine services, residential, industrial, and commercial ventures. The village seeks to attract responsible, sustainable, development to build on the considerable assets currently in place.

4.1 Comprehensive Development Area 1 (CDA-1) Tourism/Marine

Objectives and Justification

1) The CDA-1 designation includes land in the waterfront area as indicated on Schedule B.

2) Development in the CDA-1 is intended to provide for tourism, recreation, commercial and industrial marine services, aquaculture and related services, and recreational access.

3) Permitted uses in the CDA-1 designation may include but are not limited to businesses catering to the needs of commercial and industrial watercraft users and the vacationing public such as fuel services, wharfage, boat launches, restaurants, cafes, shops, and marinas.

4) The CDA-1 designation is an access point to the community from the water and shall present a welcoming and interesting gateway to visitors.

5) A feasibility study in the CDA-1 area to determine the safest, highest and best use and design of the waterfront area shall be supported.

6) The CDA-1 designation is a Development Approval Information Area, which allows the village an opportunity to work with the landowner to realize proposed uses and to minimize environmental impacts.

4.2 Comprehensive Development Area 2 (CDA-2) Tourist/Residential

Objectives and Justification

1) The CDA-2 designation includes land in the area west of Sayward Road as indicated on Schedule B.

2) Development in the CDA-2 is intended to provide for mixed density residential, and tourist accommodation services.

3) Permitted uses in the CDA-2 may include mixed density residential development, senior's housing, and tourism accommodation, including RV parks.

4) The CDA-2 designation provides unique vistas across the Salmon Bay and Johnstone Strait; development should be oriented toward these views.

5) The CDA-2 designation is a Development Approval Information Area, which allows the village an opportunity to work with the landowner to realize proposed uses and mitigate environmental impacts.

604 RURAL ONE (RU-1)

1. PERMITTED PRINCIPAL USES

On any lot:

a) Dwellings, one single-family;
b) Silviculture;
c) Forestry;
d) Garden nurseries;
e) Animal care;
f) Golf course;
g) Agriculture;

h) On any lot greater than 2.0ha (4.9ac):

Two single family dwellings or one duplex may be permitted on a lot, provided that all other requirements of this Bylaw are complied with. Additional dwelling units(s) may be permitted on the lot for each additional 1.0ha (2.5ac) to a maximum of 4 dwelling units.

2. PERMITTED SECONDARY USES

a) Home based business;
b) Secondary suites;
c) Buildings and structures accessory to the uses permitted.

3. LOT SIZE

The minimum site area required for subdivision is 1.0 hectares (2.5 acres).

4. LOT COVERAGE

Buildings, and structures shall not cover more than 35% of the lot area except in the cases of greenhouses.

5. Siting of Structures
Except where otherwise specified in this Bylaw, no building or structure shall be located within:

a) 4.5m (14.8ft) of a front, side or rear lot line.

b) Structures for the accommodation of livestock shall be located not less than 6.0m (19.6ft) from the side lot lines nor less than 7.5m (24.6ft) from any dwelling unit.

End - RU-1

PART 600 ZONES

601 RESIDENTIAL ONE (R-1)

1) PERMITTED PRINCIPAL USES

On any lot:

a) One single family dwelling.

2) PERMITTED ACCESSORY USES

a) Home-based business;
b) Bed & Breakfast;
c) Boarding;
d) Buildings, accessory;
e) Secondary suites.

3) LOT SIZE

The minimum lot area for subdivision is 668m² (7200 ft²).

4) LOT COVERAGE

Buildings and structures shall not cover more than 70% of the lot area.

5) SITING OF STRUCTURES

Except where otherwise specified in this Bylaw, no building or structure shall be located within:

a) 6.0m (19.6ft) of front and rear lot lines;

b) 1.5m (4.9ft) of side lot line on a lot;

c) 3.0m (9.8ft) of side lot line abutting a public road right-of-way;

d) No accessory structure shall be located within 1.0m (3.3ft) of a rear or side lot line.

6) WIDTH OF BUILDINGS

No building or structure other than accessory buildings or structures shall be less than 7.0m (22.9ft) in width.

End - R-1

607 COMMERCIAL TWO (C-2)

1. PERMITTED PRINCIPAL USES

On any lot:

a) Retail;
b) Offices;
b) Marina (including fuel sales ancillary to the use)
d) Restaurant;
e) Neighbourhood pubs;
f) Tourist Accommodation.

2. PERMITTED SECONDARY USES

a) Residential use;
b) Buildings and structures accessory to the uses permitted.

3. LOT AREA

The minimum lot area required for subdivision is 740m² (8,000ft².)

4. LOT COVERAGE

Buildings and structures shall not cover more than 60% of the lot area.

5. SITING OF STRUCTURES

Except where otherwise specified in this Bylaw, no building or structure shall be located within:

a) 3.0m (11.5ft) of front and rear lot lines;

b) 1.5m (4.9ft) of any side lot line;

c) Accessory buildings shall not be located within 1.0m (3.3ft) of a rear or side lot line.

6. COMBINED COMMERCIAL AND RESIDENTIAL USE

Where a parcel is used for combined commercial and residential use, the residential use shall;

a) be contained in the same building;

b) be located over the principal use;

c) have a separate entrance from outside; and

d) not exceed the gross floor area used for commercial purposes.

End – C-2