VILLAGE OF HARRISON HOT SPRINGS
NOTICE OF MEETING AND AGENDA

REGULAR COUNCIL MEETING

Date: **Monday, August 12, 2019**
Time: **7:00 p.m.**
Location: **Council Chambers, 495 Hot Springs Road**
Harrison Hot Springs, British Columbia

1. CALL TO ORDER		
Meeting called to order by Mayor Facio.		
2. INTRODUCTION OF LATE ITEMS		
3. APPROVAL OF AGENDA		
4. ADOPTION OF COUNCIL MINUTES		
(a) THAT the Regular Council Meeting Minutes of July 8, 2019 be adopted.		**Item 4(a) Page 1**
5. BUSINESS ARISING FROM THE MINUTES		
6. CONSENT AGENDA		
i. Bylaws	(a) Bylaw Notice Enforcement Amendment Bylaw No. 1141, 2019	**Item 6.i.(a) Page 9**
ii. Agreements		
iii. Committee/ Commission Minutes		
iv.Correspondence	(a) Letter dated July 18, 2019 from the Agassiz-Harrison Museum regarding Village of Harrison Hot Springs Funding for the Agassiz-Harrison Museum	**Item 6.iv.(a) Page 17**
7. DELEGATIONS/PETITIONS		
(a) Dementia-Friendly Communities, Alzheimer Society of B.C. – Heather Cowie		**Item 7(a) Page 43**
8. CORRESPONDENCE		
9. BUSINESS ARISING FROM CORRESPONDENCE		
10. REPORTS OF COUNCILLORS, COMMITTEES, COMMITTEE OF THE WHOLE AND COMMISSIONS		

11. REPORTS FROM MAYOR

12. REPORTS FROM STAFF

(a) Report of the Infrastructure Manager
Re: Road, Bridge, and Active Transportation Master Plan

Item 12(a)
Page 45

Recommendation

THAT Council receive the Road, Bridge and Active Transportation Master Plan.

(b) Report of the Financial Officer – August 6, 2019
Re: Utility Billing

Item 12(b)
Page 141

Recommendation

THAT Council authorizes staff to move forward with annual utility billing starting in 2020.

AND THAT the Village no-longer accept post-dated cheques for utility and property tax payments.

(c) Report of the Deputy Chief Administrative Officer/Corporate Officer – July 18, 2019
Re: Application for a Structural Change for Liquor Licence – Milos Greek Taverna – Request for Liquor Primary Licence for both floors

Item 12(c)
Page 143

Recommendation

THAT a Liquor Primary Licence be recommended for approval for both floors for the Milos Greek Tavern; and

THAT public input not be required as the proposed change to the Liquor Primary Licence will have no net impact on the community with respect to any additional noise or other inconvenience to nearby residents or the general public.

(d) Report of the Chief Administrative Officer – August 12, 2019
Re: For Late Distribution – Boat Launch Parking Lot Paving Tender Award

Item 12(d)
Page 153

(e) Report of the Community Services Coordinator – August 7, 2019
Re: Synthetic Outdoor Rink Purchase

Item 12(e)
Page 155

Recommendation

THAT an expenditure of up to $130,000 from the Resort Municipality Initiative funds for the purchase of a synthetic outdoor rink from Xtraice be approved.

AND THAT an expenditure of up to $40,000 from the Resort Municipality Initiative funds for installation, additional panels, maintenance and rental shop accessories be approved.

AND THAT staff be authorized to develop signage and policies for the use of the rink.

(f) Report of the Planning Consultant – August 8, 2019
Re: To issue a Development Variance Permit (DVP) – 844 Angus Place

Item 12(f)
Page 157

Recommendation

THAT Development Variance Permit DVP 04/19 be issued to Jessie Nicole Evelyn Ramsay for the property located at 844 Angus Place, Harrison Hot Springs for land legally described as:

Lot 67 Section 12 Township 4 Range 29 West of the Sixth Meridian New Westminster District Plan 52361

(g) Report of the Planning Consultant – July 22, 2019
Re: To start the rezoning process (410 Echo Avenue)

Item 12(g)
Page 165

Recommendation

THAT staff be authorized to work on application 3360-20-Z01/19 for land legally described as: Lot 32, Section 13 Township 4 Range 29 West of the Sixth Meridian New Westminster District Plan 27133, located at 410 Echo Avenue.

(h) Report of the Chief Administrative Officer – August 2, 2019
Re: Sale of Surplus Lots Adjacent to Village Office

Item 12(h)
Page 169

13. BYLAWS

(a) Report of the Planning Consultant – August 8, 2019
Re: Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw 1143, 2019

Item 13(a)
Page 171

Recommendation

THAT Official Community Plan Amendment Bylaw 1142, 2019 be given first and second reading; and

THAT Zoning Amendment Bylaw No. 1143, 2019 be given first and second reading; and

THAT Official Community Plan Amendment Bylaw 1142, 2019 be referred to the Fraser Valley Regional District (FVRD) to ensure that this bylaw conforms to the FVRD Regional Growth Strategy; and

THAT Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw No. 1143, 2019 be referred to the Advisory Planning Commission for their comment; and

THAT staff be authorized to set up a public hearing for Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw No. 1143, 2019.

14. QUESTIONS FROM THE PUBLIC (pertaining to agenda items only)

15. ADJOURNMENT

4(a)

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE REGULAR MEETING OF COUNCIL

DATE: Monday, July 8, 2019
TIME: 7:00 p.m.
PLACE: Council Chambers
495 Hot Springs Road, Harrison Hot Springs, BC

IN ATTENDANCE: Mayor Leo Facio
Councillor Samantha Piper
Councillor Ray Hooper
Councillor Gerry Palmer
Councillor Michie Vidal

Chief Administrative Officer, Madeline McDonald
Deputy Chief Administrative Officer/Corporate Officer, Debra Key
Infrastructure Manager, Troy Davis
Community Services Coordinator, Rhonda Schell
Planning Consultant, Ken Cossey

ABSENT:

Recording Secretary: Jaclyn Bhatti

1. CALL TO ORDER

Mayor Facio called the meeting to order at 7:00 p.m.

2. INTRODUCTION OF LATE ITEMS

None

3. APPROVAL OF AGENDA

Moved by Councillor Piper
Seconded by Councillor Vidal

THAT the agenda be approved.

CARRIED UNANIMOUSLY
RC-2019-07-01

4. ADOPTION OF COUNCIL MINUTES

Moved by Councillor Palmer
Seconded by Councillor Piper

THAT the Regular Council Meeting Minutes of June 17, 2019 be adopted.

CARRIED UNANIMOUSLY
RC-2019-07-02

5. BUSINESS ARISING FROM THE MINUTES

None

6. CONSENT AGENDA

None

7. DELEGATIONS/PETITIONS

None

8. CORRESPONDENCE

None

9. BUSINESS ARISING FROM CORRESPONDENCE

None

10. REPORTS OF COUNCILLORS, COMMITTEES, COMMITTEE OF THE WHOLE AND COMMISSIONS

Councillor Palmer

- Attended the Community to Community Forum
- Attended the Fraser Valley Regional Library Board meeting

Councillor Piper

- Attended a welcome ceremony at Kwìkwèxwelhp Healing Village for National Aboriginal Day on June 24, 2019
- Attended the Canada Day planning meeting on June 22, 2019
- Attended the Agassiz-Harrison Community Services Open House on June 26, 2019
- Attended the Canada Day Opening Ceremony and participated in the parade. Thanked staff, Tourism Harrison, Harrison Hot Springs Fire Department, the RCMP and all volunteers.
- Attended the Community to Community Forum Meeting on July 3, 2019

Councillor Vidal

- Attended the Community Open House for the Agassiz Harrison Museum on June 22, 2019
- Attended the Agassiz Harrison Community Services Open House on June 26, 2019
- Attended the Canada Celebration on July 1, 2019
- Attended the Community to Community Forum Meeting on July 3, 2019

Councillor Hooper

- Attended the Fraser Health/Agassiz Harrison Healthy Communities FLOH Youth Group presentation from Drug War Survivors.
- Was elected to the Board of Directors of the Abbotsford Foundry for FLOH
- Attended a webinar on Ending Loneliness and Social Isolation on June 19, 2019
- Attended the June 20, 2019 Agassiz-Harrison Healthy Communities meeting
- Attended a webinar on housing on June 20, 2019
- Attended the Fraser Health Municipal Regional Meeting on June 21, 2019
- Attended the Agassiz-Harrison Historical Society on June 22, 2019

- Attended an Innovation from the Middle Space of Community Change webinar on June 25, 2019
- Attended the Agassiz-Harrison Community Services Open House on June 26, 2019
- Attended the Fraser Health/Agassiz-Harrison Healthy Communities FLOH Panel on the Foster System
- Attended the Canada Day Parade and opening ceremony
- Attended the Community to Community Forum on July 3, 2019
- Attended a webinar on ending chronic homelessness on July 4
- Attended the Fraser Health/Agassiz Harrison Healthy Communities FLOH on Life Promotion on July 4, 2019

11. MAYOR'S REPORT

- Attended the Canada Day Celebration on July 1, 2019

Moved by Mayor Facio
Seconded by Councillor Palmer

THAT Councillor Vidal be appointed as liaison to the Agassiz Harrison Healthy Communities.

CARRIED
UNANIMOUSLY
RC-2019-07-03

- Reported on an article by CBC titled "8 artist residencies to make you seriously regret your summer plans" that included the Kent Harrison Arts Council
- Received an invitation for Council to attend the opening reception for the 2019 Festival of the Arts on July 11, 2019
- Attended the July 3, 2019 Community to Community Forum
- Reported on The Spin Magazine which is the quarterly magazine of Spinal Cord Injury BC
- Reported that Kent-Harrison Emergency Support Services Coordinator, Pierre Groenenboom was presented with a plaque from Emergency Management B.C. for its hard working during the wildfire season of 2017
- Attended the Agassiz Harrison Community Services Open House on June 26, 2019

12. REPORTS FROM STAFF

(a) Report of the Deputy Chief Administrative Officer/Corporate Officer – June 20, 2019
Re: Proposed Alternative Approval Process – Medical Clinic

Moved by Councillor Vidal
Seconded by Councillor Hooper

THAT August 19, 2019 at 4:00 p.m. be set as the deadline for receipt of elector responses by the Corporate Officer with respect to the Alternative Approval Process; and

THAT the attached form be the approved form for Elector Responses; and

FURTHER THAT 125 elector responses be required to demonstrate community opposition to the use of property taxes to help fund a local medical clinic.

MOTION FAILED

Moved by Councillor Vidal
Seconded by Councillor Hooper

THAT September 16, 2019 at 4:00 p.m. be set as the deadline for receipt of elector responses by the Corporate Officer with respect to the Alternative Approval Process; and

THAT the attached form be the approved form for Elector Responses; and

FURTHER THAT 125 elector responses be required to demonstrate community opposition to the use of property taxes to help fund a local medical clinic.

CARRIED
UNANIMOUSLY
RC-2019-07-04

(b) Report of the Community Services Coordinator – June 27, 2019
Re: Single-use Plastics Ban Bylaw

Moved by Councillor Piper
Seconded by Councillor Palmer

THAT staff be authorized to draft a Single-use Plastics Bylaw;

AND THAT staff conduct a public consultation process with affected businesses.

CARRIED
UNANIMOUSLY
RC-2019-07-05

(c) Report of the Community Services Coordinator – June 27, 2019
Re: Water Bottle Refilling Stations

Moved by Councillor Vidal
Seconded by Councillor Piper

THAT staff be authorized to include $18,000 for the purchase of water bottle refilling stations in the 2020 Financial Plan to be funded from taxation.

MOTION FAILED

Moved by Councillor Palmer
Seconded by Councillor Vidal

THAT the water bottle refilling station report be deferred to the financial planning meeting.

CARRIED
UNANIMOUSLY
RC-2019-07-06

(d) Report of the Infrastructure Manager – July 8, 2019
Re: Infrastructure Planning Grant application

Moved by Councillor Palmer
Seconded by Councillor Piper

THAT staff be authorized to apply for a Provincial Infrastructure Planning Grant in the amount of five-thousand ($5000.00) to assess the viability of installing solar photovoltaic panels on Village-owned buildings and structures.

CARRIED
UNANIMOUSLY
RC-2019-07-07

(e) Report of the Infrastructure Manager – July 2, 2019
Re: Street Lighting Upgrade Contract

Moved by Councillor Palmer
Seconded by Councillor Vidal

THAT motion RC-2019-06-18, "THAT Moonlite Electric Inc. be awarded the contract for the supply and installation of 44 LED lights at a total cost of $186,258 including taxes" be rescinded; and

THAT Moonlite Electric Inc. be awarded the contract for the supply and installation of 44 LED lights, four davit poles and LED luminaires for a cost of up to $186,000 including taxes.

CARRIED
UNANIMOUSLY
RC-2019-07-08

5

(f) Report of the Planning Consultant – June 24, 2019
Re: Panhandle Lot Policy

Moved by Councillor Piper
Seconded by Councillor Hooper

THAT the draft Panhandle Lot Considerations policy be referred to the Advisory Planning Commission, for their consideration and comment.

CARRIED
UNANIMOUSLY
RC-2019-07-09

(g) Report of the Planning Consultant – June 26, 2019
Re: To start the Development Variance Permit Process (844 Angus Place)

Moved by Councillor Piper
Seconded by Councillor Hooper

THAT staff be authorized to start work on application 3090-20-DVP04/19 for land legally described as:

Lot 67, Sec 12, Twp 4, Rg 29, W6M, New Westminster District Plan 52361.

CARRIED
UNANIMOUSLY
RC-2019-07-10

13. BYLAWS

(a) Report of the Deputy Chief Administrative Officer/Corporate Officer – June 19, 2019
Re: Amendments to the Bylaw Notice Enforcement Bylaw No. 855, 2006

Moved by Councillor Palmer
Seconded by Councillor Piper

THAT Bylaw Notice Enforcement Amendment Bylaw No. 1141, 2019 be given first, second and third reading.

CARRIED
UNANIMOUSLY
RC-2019-07-11

14. QUESTIONS FROM THE PUBLIC (pertaining to agenda items only)

Questions from the public were entertained.

15. ADJOURNMENT

Moved by Councillor Palmer
Seconded by Councillor Vidal

THAT the meeting be adjourned at 8:31 p.m.

CARRIED
UNANIMOUSLY
RC-2019-07-12

Leo Facio
Mayor

Debra Key
Corporate Officer

HARRISON HOT SPRINGS
Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS

BYLAW NO. 1141

A bylaw to amend the Bylaw Notice Enforcement Bylaw No. 855

WHEREAS the Village of Harrison Hot Springs has deemed it advisable to amend Bylaw Notice Enforcement Bylaw No. 855 by replacing the Schedule of Designated Bylaw Contraventions and Penalties;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

1. **CITATION**

   This Bylaw may be cited for all purposes as the "Village of Harrison Hot Springs Bylaw Notice Enforcement Amendment Bylaw No. 1141, 2019".

2. The Schedule of Designated Bylaw Contraventions and Penalties is attached hereto as Schedule "A" and forms part of this bylaw.

3. **REPEAL**

   That the Schedule of Designated Bylaw Contraventions and Penalties attached as Schedule "A" to the Village of Harrison Hot Springs Bylaw Notice Enforcement Bylaw No. 855 is hereby repealed in its entirety.

READ A FIRST TIME 8th DAY OF JULY, 2019

READ A SECOND TIME THIS 8th DAY OF JULY, 2019

READ A THIRD TIME THIS 8th DAY OF JULY, 2019

ADOPTED THIS DAY OF , 2019

Mayor

Corporate Officer

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
Business Licence and Regulation Bylaw No. 1128	2.1(a)	Carry on business without a licence	200.00	190.00	210.00
	2.1(b)	Fail to obtain separate licence for each business	200.00	190.00	210.00
	2.3(d)	Fail to renew business licence that continues to operate	200.00	190.00	210.00
	3.1(a)	Operate prohibited business	500.00	490.00	510.00
Fireworks Regulation Bylaw No. 871	1.2.1	Possess fireworks without permit	100.00	90.00	110.00
	1.2.2	Ignite, explode, set off or detonate fireworks in such a manner as may endanger or create a nuisance	100.00	90.00	110.00
Abatement and Control of Noise Bylaw No. 474	*4(a)*	*Disturb the peace with radio noise, stereo noise, sound device or other amplified noise*	*200.00*	*190.00*	*210.00*
	4(b)	*Disturb the peace with bird or animal noise*	*100.00*	*90.00*	*110.00*
	4(c)	*Operate power lawnmower or power saw between the hours of 10:00 p.m. and 8:00 a.m.*	*500.00*	*490.00*	*510.00*
	4(d)	*Discharge vehicle or engine exhaust that causes excessive noise*	*100.00*	*90.00*	*110.00*
	4(g)	*Unload or load material from any vehicle that disturbs*	*500.00*	*490.00*	*510.00*
	4(h)	*Continuous running of stationary motor vehicle which disturbs*	*100.00*	*90.00*	*110.00*
	4(i)	*Erect, demolish, construct, alter or repair any building or structure or excavate any street in any zone on Sunday*	*500.00*	*490.00*	*510.00*
	4(i)	*Erect, demolish, construct, alter or repair any building or structure or excavate any street in any zone weekdays including Saturday, between the hours of 10:00 p.m. and 8:00 a.m.*	*500.00*	*490.00*	*510.00*
Highway and Traffic Bylaw No. 974	16(d)	Interfere with any traffic control device	210.00	190.00	210.00
	16(e)	Fail to comply with any lawful direction, command or order of a Bylaw Enforcement Officer, Peace Officer or a member of the Fire Department	100.00	90.00	110.00
	16(f)	Commercial vehicles in excess of 5500 kg (tare weight) on residential street	300.00	290.00	310.00
	27(b)	Fail to park in designated parking between lines or markings	*100.00*	*90.00*	*110.00*
	27(c)	Park in loading zone and beyond maximum of 30 minutes	*100.00*	*90.00*	*110.00*
	27(d)	Park in bus zone	*100.00*	*90.00*	*110.00*
	27(e)	Park in designated physically disabled motorist stall without valid placard	*100.00*	*90.00*	*110.00*
	27(f)	Park on sidewalk or boulevard	*100.00*	*90.00*	*110.00*
	27(g)	Park in front of a public or private driveway	*100.00*	*90.00*	*110.00*
	27(h)	Park within 5 meters of a hydrant	*100.00*	*90.00*	*110.00*
	27(i)	Park on crosswalk or within 5 meters of the approach side of a crosswalk	*100.00*	*90.00*	*110.00*
	27(j)	Park within 6 meters of either side of an entrance to or exit from public meeting place, fire hall or playground	*100.00*	*90.00*	*110.00*
	27(k)	Obstruct traffic alongside or opposite of highway excavation or obstruction	*100.00*	*90.00*	*110.00*
	27(l)	Park on highway side of a motor vehicle stopped or parked parallel to the curb side of a highway	*100.00*	*90.00*	*110.00*

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
	27(m)	Park on a bridge or other elevated structure on a highway	*100.00*	*90.00*	*110.00*
	27(n)	Park which obstructs the visibility of traffic or a traffic control device	*100.00*	*90.00*	*110.00*
	27(o)	Park on cycle path on any portion of a highway for a longer period of time than indicated on the traffic control device	*100.00*	*90.00*	*110.00*
	27(p)	Park on a highway for a continuous period exceeding 48 hours without movement	*100.00*	*90.00*	*110.00*
	27(q)	Commercial vehicle parked longer than 24 hours in a given area	100.00	90.00	110.00
	27(r)	Park adjacent to a yellow curb	*100.00*	*90.00*	*110.00*
	27(s)	Face wrong direction from the normal flow of traffic on the highway	*100.00*	*90.00*	*110.00*
	27(t)	Park where prohibited	*100.00*	*90.00*	*110.00*
	27(u)	Park in lane less than 3.5 meters of the travelled portion of the lane for other vehicle	*100.00*	*90.00*	*110.00*
	27(v)	Park in boat launch area without permit	*100.00*	*90.00*	*110.00*
	27(w)	Park in close proximity to other vehicle to obstruct or unduly restrict movement	*100.00*	*90.00*	*110.00*
	29(a)ii	Exceed total weight of the vehicle and/or trailer in excess of 5500 kg and is in a residential zone between the hours of 7:00 p.m. and 7:00 a.m.	100.00	90.00	110.00
	29(b)	Recreational vehicle parked on any street in excess of 8 hours regardless if it is moved or not to another location	100.00	90.00	110.00
	29(c)	Park unattached utility, boat or RV trailer on any street	*100.00*	*90.00*	*110.00*
	31(a)	Park a vehicle in a stall for a period of time greater than the time indicated by the traffic control device	*100.00*	*90.00*	*110.00*
Nuisance, Noxious or Offensive Trades, Health and Safety Bylaw No. 829	3	Disconnect meter	500.00	490.00	510.00
	5	Divert or install exhaust fans	500.00	490.00	510.00
	6	Store or use dangerous goods	500.00	490.00	510.00
	7	Construct or install trap	500.00	490.00	510.00
	8	Construct or install obstruction to an exit	500.00	490.00	510.00
	10(1)	Interfere or obstruct inspector	500.00	490.00	510.00
	10(2)	Remove, alter, mutilate posted notice	500.00	490.00	510.00
	11	Allow growth of mold or fungus	500.00	490.00	510.00
	12(1)	Cause or permit a nuisance	500.00	490.00	510.00
	12(2)	Cause or permit water, rubbish or unsightly matter to accumulate	500.00	490.00	510.00
	13	Cause or permit a noxious or offensive trade	500.00	490.00	510.00
	16(1)	Fail to inspect residential premises subject to Tenancy Agreement	500.00	490.00	510.00
	16(2)(a)	Failure to give written notice of contravention	500.00	490.00	510.00
	16(2)(b)	Failure to comply with notice	500.00	490.00	510.00
Open Burning and Outdoor Fire Regulation	3.1	Set, start or kindle fire or permit open burning of wood, wood pellets, rubbish, refuse, tires, oil, plastics, synthetics, asphalt shingles, battery boxes, or construction material or waste of any kind	500.00	490.00	510.00
	3.1.2	Light or burn a tiki torch	100.00	90.00	110.00

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
Bylaw No. 1110	3.1.3	Use or fly a sky lantern	100.00	90.00	110.00
	3.1.4	Use fireworks without display permit	100.00	90.00	110.00
	3.1.5	Use BBQ, hibachi using wood or charcoal briquettes on public property	100.00	90.00	110.00
	5.7	Communal Campfire exceeding allowable size	100.00	90.00	110.00
	5.8	Communal Campfire within 10 meters of building or property line	100.00	90.00	110.00
	5.10	Communal Campfire within 20 meters of municipal road	100.00	90.00	110.00
	5.11	Communal Campfire during high winds	200.00	190.00	210.00
	5.12	Communal Campfire to spread	200.00	190.00	210.00
	5.13	Leave Communal Campfire unattended	200.00	190.00	210.00
	5.14	Fail to extinguish Communal Campfire	100.00	90.00	110.00
Littering and Dumping and Snow Bylaw No. 870	2, 9, 11	Dispose or deposit garbage or rubbish in a public place	50.00	40.00	60.00
	2(c)	Deface, damage any property owned by or in care of the Village	100.00	90.00	110.00
	3	Damage or kill a tree, shrub, turf, and flower in a public place	100.00	90.00	110.00
	4(b)	Fail to remove snow, ice and littler from any sidewalk in front of or adjacent property no later than 4:00 p.m.	100.00	90.00	110.00
	7	Deface, destroy any building, structure, facility, fence, sign, seat or bench or ornament on public property	100.00	90.00	110.00
Waste Collection and Disposal Bylaw No. 1100	3(b)	Dump or dispose of any waste	100.00	90.00	110.00
	3(c)	Deposit or use waste for lot filling or levelling purposes.	100.00	90.00	110.00
	3(d)	Allow waste of any kind whatsoever to leak, spill, blow, drop from any vehicle or container onto any street within the Village	100.00	90.00	110.00
	3(e)	Place or cause to be placed any waste upon any street or public land other than in accordance with the Residential Waste Collection Service conditions	100.00	90.00	110.00
	3(f)	Dispose of waste into a container belonging to another person unless given the authority to do so by the owner or occupier of the premises	100.00	90.00	110.00
	3(g)	Open Container, add, disturb, tamper , handle, interfere with Container placed for collection	100.00	90.00	110.00
	4(f)(v)	Place any other Waste other than Domestic Waste, recyclable or organics/green waste into Container	100.00	90.00	110.00
Park Regulation Bylaw No. 915	3	Enter public beach or park after curfew	100.00	90.00	110.00
	4	Set up or occupy shelter in park, on street or public property	100.00	90.00	110.00
	5	Carry in or set up camping equipment	100.00	90.00	110.00
	6	Park, store, place or abandon any unlicenced or licenced boat, golf cart, motor vehicle, motorcycle, off-road vehicle, trailer or other matter on any public land, unless expressly permitted	100.00	90.00	110.00
Park Regulation Amendment Bylaw No. 1040	*7*	Remove gravel, sand or earth from beach or shore	100.00	90.00	110.00
	8	Litter on beach or in water	100.00	90.00	110.00
	9	Move or remove buoys, rafts, signs from any beach or from water	100.00	90.00	110.00

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
Park Regulation Amendment Bylaw No. 1060	10	Kindle, build, light, maintain any fire, barbeque, hibachi or any other form of cooking apparatus that uses wood, charcoal, briquettes or any other form of natural burning product on any beach or park	100.00	90.00	110.00
	11	Operate water vehicle inside buoyed areas	100.00	90.00	110.00
	11	Operate water vehicle in excess of buoyed signs	100.00	90.00	110.00
Park Regulation Amendment Bylaw No. 1106	13	Occupy roof of building in park	50.00	40.00	60.00
	14	Occupy building, swimming pool, tennis court or other structure in park outside posted hours	100.00	90.00	110.00
	15	Break, injure or damage locks, gates, bolts, fences, seats, benches, buildings, structures or other property in public areas on beaches, boulevards or in parks or grounds	100.00	90.00	110.00
	16	Willfully destroy, mutilate, efface, deface or remove posted sign	100.00	90.00	110.00
Park Regulation Amendment Bylaw No. 1130	17	Bark, break, peel, cut, deface, remove, injure, root up or otherwise damage trees, shrubs, flowers, roots or grass planted or growing in public areas, beaches, boulevards or in parks or grounds	100.00	90.00	110.00
	17(a)	Smoke any tobacco, cannabis, electronic cigarette, cigar, cigarillo, pipe or any substance that replicates smoking in buildings, structure, park or public space where prohibited	100.00	90.00	110.00
	17(b)	Possess open liquor in park	100.00	90.00	110.00
	18	Play or practice golf in public park	50.00	40.00	60.00
	19	Cause, allow or permit dogs in prohibited area	100.00	90.00	110.00
	20	Ride or drive any horse in, upon or through public areas, parks, boulevards or beaches	100.00	90.00	110.00
	21	Ride or drive any carriage, wagon, bicycle, motorcycle, scooter, rollerblades, skateboards, automobile, sleigh, snowmobile, all-terrain vehicle or other vehicle in public areas, parks or grounds	100.00	90.00	110.00
	22	Break, injure, dig or destroy any tree, sod, grass of any boulevard or any box, stake or guard which protects	100.00	90.00	110.00
	23	Park unhitched trailers, boats, RV's or any other equipment at any boat launch ramp or designated parking area within the Village	100.00	90.00	110.00
	24	No person shall intentionally feed or attempt to feed, or otherwise use any attractant to encourage the feeding of any wild animal or bird, including a Canada Goose	100.00	90.00	110.00
Tree Management and Preservation Bylaw No. 1015	6(a)	Remove tree without permit	200.00	190.00	210.00
	3(a)	Place graffiti on building, wall, fence sign or other structure	500.00	490.00	510.00

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
Property Maintenance Bylaw No. 1072	3(b)i	Throw, deposit, leave or place rubbish in or upon any public space or private property	500.00	490.00	510.00
	3(b)ii	Allow accumulation of noxious weed or invasive plant or other material on public or private property that could cause infestation	200.00	190.00	210.00
	3(b)iii	Abandon vehicle, household appliance or furniture on any highway, sidewalk, ditch, parking lot, waterway, park or other public place or private property	500.00	490.00	510.00
	3(c)i	Cause or allow property or premises to become unsightly	500.00	490.00	510.00
	3(c)ii – a,b,c,d,e&f	Cause or permit accumulation of rubbish, broken or dilapidated furniture or bedding or appliances, vehicle parts or equipment, unused wood or wood products, construction materials or equipment, standing water where unsanitary conditions could develop or remain	500.00	490.00	510.00
	4(a)	Fail to brush vegetation and weed, remove invasive species	200.00	190.00	210.00
Sign Bylaw No. 1126	2.1a)	Erect, place, construct or alter a sign without permit	500.00	490.00	510.00
	2.1b)	Maintain or allow sign to remain, be affixed to lands or building without a permit	500.00	490.00	510.00
	2.1e)	Sign located, erected or lighted that interferes with visibility of traffic control device or access/egress to highway	300.00	290.00	310.00
	2.1f)	Sign affixed to fence where not permitted	100.00	90.00	110.00
	2.1h)	Sign which obstructs doorway, window or sidewalk where prohibited	300.00	290.00	310.00
	2.1j)	Sign within 100 metres of prohibited area	500.00	490.00	510.00
	2.1k)	Sign left abandoned more than 30 days	50.00	60.00	40.00
	2.1l)	Sign attached to tree, light pole, provincial highway or utility pole	100.00	90.00	110.00
	2.1m)	Sign which contains holographic image or projection of image	100.00	90.00	110.00
	3a)	Erect, construct, place, alter or maintain sign where prohibited	500.00	490.00	510.00
	5.12a)i)	Fail to remove sign within specified time period of 7 days	200.00	190.00	210.00
	5.12a)ii)	Sign which interferes pedestrian movement or visibility of any Traffic Control Device	200.00	190.00	210.00
Municipal Docks Bylaw No. 991	11	Possess an open container of liquor on a dock	100.00	90.00	110.00
	15	Deposit or leave garbage, refuse, bottles, cans, paper, animal excrement or other waste material on a dock or in the water surrounding a dock	100.00	90.00	110.00
	18	Cause a vessel, watercraft or seaplane to remain moored in a posted loading zone for a period in excess of 60 minutes unless otherwise authorized by the Village	100.00	90.00	110.00
Municipal Docks Bylaw Amendment No. 1008	21(1)(a)(b)	Moor a vessel, watercraft or seaplane at a dock for a period in excess of 12 hours and moored overnight unless approved by special permit issued by the Village	500.00	490.00	510.00

SCHEDULE "A" TO BYLAW NO. 1141
SCHEDULE OF DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES

BYLAW	SECTION	DESCRIPTION	A1 Penalty	A2 Early Payment	A3 Late Payment
Boat Launch and Regulation Bylaw No. 1075	12	Fail to properly display vehicle hanger	50.00	40.00	60.00
	14	Leave boat, tow vehicle, boat trailer or vehicle unattended at boat launch or on wharf	50.00	40.00	60.00
	15	Moor boat in excess of 15 minutes	40.00	30.00	50.00
	16	Accelerate boat motor while loading or unloading a boat on or off a trailer	200.00	190.00	210.00
Zoning Bylaw No. 1115	3.3a)	Keep or permit on any lot in any zone, object or chattel which is unsafe, unsightly, or adversely affects zone	500.00	490.00	510.00
	3.3b), c)	Use prohibited in Zone	500.00	490.00	510.00
	3.3d)	Land use that produces malodorous, toxic or noxious matter or generates vibrations, heat, glare or radiation discernible beyond boundaries of lot	200.00	190.00	210.00
	3.3e)	Tourist accommodation in residential zone	500.00	490.00	510.00
	3.3f)	Operation of gaming and gambling establishments in any zone	500.00	490.00	510.00
	3.5b)	Use prohibited unless approved by Agricultural Land Commission or subject to Agricultural Land Commission Act	500.00	490.00	510.00
	3.6b)	Non-compliance of required setback and siting requirements	500.00	490.00	510.00
	3.7a)	Building or structure placed, constructed, sunk into, erected, moved, sited, altered or enlarged that exceeds height	200.00	190.00	210.00
	3.8a)	Sight line requirements at intersection exceeds height	100.00	90.00	110.00
	4.1a)	Use of Marihuana Facility and Marihuana Operation in any zone where prohibited	500.00	490.00	510.00
	4.1b)	Use of Medical Marihuana Production Facility in any zone where prohibited, except where authorized	500.00	490.00	510.00
	4.4c)	Use of barbed wire, razor wire, electric current or hazardous material where prohibited	200.00	190.00	210.00
	4.4d)	Retaining wall exceeds height	50.00	40.00	60.00
	4.5b)	Home Occupation that discharges or emits	100.00	90.00	110.00
	4.6	Temporary Building or structure that exceeds duration	50.00	40.00	60.00
	4.7b)i)	Intermodal storage container exceeds permitted number	50.00	40.00	60.00
	4.7b)ii)	Intermodal storage container in prohibited area	100.00	90.00	110.00
	4.7c)	Accessory storage building or structure not permitted	500.00	490.00	510.00
	6.7a)	Exceed number and type of motor vehicles permitted in residential zone	500.00	490.00	510.00

AGASSIZ-HARRISON
MUSEUM

July 18, 2019

Debra Key
Deputy Chief Administrative Officer/Corporate Officer
Village of Harrison Hot Springs
P.O. Box 160
Harrison Hot Springs, BC
V0M 1K0
info@harrisonhotsprings.ca

Re: Village of Harrison Hot Springs Funding for the Agassiz-Harrison Museum (File: 0230-20-12)

Dear Debra,

As per the correspondence dated January 23, 2019, enclosed, please find the Agassiz-Harrison Historical Society's 2018-2019 Fiscal Year Annual Report. Our fiscal year is March 1 to February 28, and as such, we have just completed our annual report. Of particular interest is Appendix D (p. 18), our 2018-2019 financial actuals, and Appendix E (p. 21) our approved projected budget for the 2019-2020 fiscal year.

If you require any additional information or documentation, please do not hesitate to contact me at your earliest convenience.

Sincerely,

Lindsay Foreman

Lindsay Foreman
Manager and Curator
Agassiz-Harrison Historical Society
T: 604 796 3545
E: lindsay@agassizharrisonmuseum.org

AGASSIZ-HARRISON
MUSEUM

Agassiz-Harrison Historical Society
2018/2019 Fiscal Year Annual Report
July 2019

Incorporation Number S0015636

WHERE HISTORY PRESERVES COMMUNITY

AGASSIZ-HARRISON MUSEUM

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AGASSIZ-HARRISON MUSEUM

President's Report

Thank you to all members, volunteers and staff who participated in another busy season.

We were pleased to announce our new Manager/Curator, Lindsay Foreman, who joined us just in time for the summer rush; talk about a steep "learning curve". Lindsay came through magnificently and in a short period of time she has proven to be a wonderful asset to our organization. Lindsay has shown us that the Museum that we have known and loved for so many years is indeed capable of changing with the times and adapting to modern technology. Our Open House was held in the summer and many guests viewed the exhibits and used the facilities (the new bathrooms provided with the grant from the Kent Harrison Foundation in early 2019).

The spring "Pub-Night", the July 1st festivities, as well as co-sponsored activities with both the Library and the District of Kent recreational department were well attended. The Museum was opened for the first time during the Agassiz Fall Fair as well as for the Christmas Train arrival.

The 6th Annual Dickens' Christmas Tea was another "Sold Out" event. In February 2019, we celebrated National Heritage Week with a day of fun for both children and their caregivers. Two evenings of information and sharing were enjoyed by both members and non-members during our first ever Speakers Series.

Lindsay has been a driving force with our Society's involvement with the local governments and First Nations. A very successful partnership with Tourism Harrison, the District of Kent and the Village of Harrison Hot Springs has provided the Museum with sustainable funding for the next few years. What a relief!

The 2018/2019 year has seen AHHS reaching out to all members of the community and showing that we are indeed an integral part our society.

Congratulations Lindsay and staff!
Congratulations Volunteers!
Congratulations Members!

It has been my pleasure serving our community with all of you. Thank you.

Gina Reimer

AGASSIZ-HARRISON MUSEUM

Treasurer's Report

Bank Statement

Account	March 1, 2018 Balance	February 28, 2019 Balance
Chequing	$60,740.03	$22,086.38
Gaming	$7,380.64	$12,959.79
Savings	$7.66	$40,145.30
Shares	$61.00	$62.00
Total	$68,189.33	$75,253.47

Increase **$7,064.14**

Income Statement (March 1, 2018 to February 28, 2019)

Income	**$89,144.04**
Expenses	**$83,132.92**
Net Gain	**$6,011.12**

AGASSIZ-HARRISON MUSEUM

Income

Source	Amount
Tourism Harrison Fee-for-Service	$10,000.00
District of Kent Fee-for-Service	$12,005.00
Total Fee-for-Service	**$22,005.00**
District of Kent Grant-in-Aid	$25,000.00
Kent-Harrison Foundation	$1,250.00
BC Community Gaming Grant	$7,000.00
Village of Harrison Hot Springs Grant to Groups	$1,250.00
BCMA Family Day Grant	$500.00
Virtual Museum of Canada Community Stories	$4,000.00
Young Canada Works in Heritage Organizations	$3,430.47
Canada Summer Jobs	$6,650.00
Total Grants	**$49,080.47**
AHHS Donations	**$8,268.13**
Pub Night	$3,549.00
Dickens Tea	$3,075.00
Other Fundraising	$152.00
Total Fundraising	**$6,776.00**
Gift Shop	**$2,300.00**
Membership	**$600.00**
Interest	**$94.44**
Research Donation	**$20.00**
Total Income	**$89,144.04**

AGASSIZ-HARRISON MUSEUM

Expenses

Source	Amount
CPP	$2,208.61
EI	$1,155.41
WCB	$112.41
Employee Benefits	$700.00
Employee Wages	$49,844.15
Employee Travel and Training	$184.06
Total Employee Expenses	**$54,204.64**
New Horizons for Seniors Grant Reminisce Kits	**$4,635.51**
Virtual Museum of Canada Grant	**$3,304.50**
BCMA Family Day Grant	**$327.51**
Kent Harrison Grant	**$823.87**
Total Grant Expenses	**$9,091.39**
Fundraising	**$1,409.20**
Gift Shop Purchases	**$1,140.35**
Accounting and Legal	**$1,188.00**
Advertising and Promotions	**$824.12**
Business Fees and Licenses	**$15.00**
Building Insurance	**$3,210.41**
Insurance, Directors and Officers	**$225.00**
Interest and Bank Charges	**$62.92**
Building Maintenance	**$1,444.12**
Organization Dues and Memberships	**$645.00**
Exhibits	**$2,653.47**
Museum Expenses	**$1,994.48**
Office Supplies	**$2,776.63**
Shaw Internet and Phone	**$1,068.73**
Tourism Expenses	***$756.24***
Website Hosting	**$130.53**
Volunteer Training and Recognition	**$302.44**
Total Expenses	**$83,132.92**

Allan Bell

AGASSIZ-HARRISON
MUSEUM

Gift Shop Manager's Report

As another year has ended, I am pleased to report that we have been successful in selling many products for our consignees. Our sales were lower than last year, but we still did well. Again jam was again our best selling product. When all consignees and expenses were paid out, we were able to hand over $2,300.00 to the Society.

We also did well at the Christmas Craft Fair with sales of $452.10.

Thank you so much to all the consignees who share their talents with us and to the many volunteers who keep the place running smoothly. I look forward to working with you again during this new season.

Kay Olson

AGASSIZ-HARRISON MUSEUM

Membership Liaison's Report

Our membership year is January 1 to December 31 of each year.

As of December 31, 2018, our membership consisted of:

Membership Category	Number of Members
Life	20
Members paid as of January	38
February	3
March	3
April	5
May	6
June	1
July	5
August	2
September	1
October	1
Total Number of Members	85

Members prepaid to 2019	5
Members prepaid to 2020	2
Members prepaid to 2022	1

Remembering our Members

This past year, four of our long time members passed away. They included: Marjorie Dyer, Earle Dyer, Margery Carson, and Howard Whelpton.

We thank them for their decades of support.

Barbara Key

AGASSIZ-HARRISON MUSEUM

Fundraising Liaison's Report

During 2018, we held two successful fundraisers: our Pub Night and our Dickens Tea.

Pub Night

Our Pub Night was held at the Sasquatch Inn in Harrison Mills on April 13. All 100 tickets were sold and 96 people attended. We raised close to last year's amount of $2802.00.

Ticket Sales	$1,500.00
Card Game	$165.00
50/50 Draw (1)	$325.00
50/50 Draw (2)	$160.00
Toonie Toss	$65.00
Silent Auction	$1,334.00
Total Intake	**$3549.00**
Total Expenses	**$868.00**
Tip to Staff	$100.00
Cheque to Sasquatch	$768.00
Profit	**$2,681.00**

Dickens Tea

The Dickens Tea was held at Cheam Village in Agassiz on December 1. We sold 113 tickets and approximately 100 people attended.

Ticket Sales	$2,825.00
50/50	$250.00
Total Intake	**$3,075.00**
Total Expenses	**$541.20**
Profit	**$2,533.80**

Joanne Veltkamp

AGASSIZ-HARRISON
MUSEUM

Grant Liaison's Report

We received the following Grants in 2018:

New Horizons for Seniors – Federal Government	$25,000.00
Virtual Museum of Canada – Canadian Museum of History	$4,000.00
Canada Summer Jobs – Federal Grant	1 student – 16 weeks
Young Canada Works – Canadian Museums Assoc.	2 students – total 24 weeks
Community Gaming Grant – BC Government	$7,000.00
BC Museums Association – Community Grant	$500.00
Kent Foundation – Agassiz Harrison Community Grant	$1,250.00
Tourism/Visitor Centre – District of Kent	$12,005.00
Grant in Aid – Village of Harrison Hot Springs	$1,250.00
Tourism Grant – Tourism Harrison	$10,000.00
Grant in Aid – District of Kent	$25,000.00

Our new Manager/Curator, Lindsay Foreman, is an accomplished grant writer and is a tenacious grant/funding researcher. She searches out and finds many viable funding and grant sources which support us in our programming and ongoing museum work.

Bev Kennedy

AGASSIZ-HARRISON
MUSEUM

Maintenance Liaison's Report

The construction of new floor to near ceiling in height, cupboards was an extensive undertaking. Planning, gathering of materials, finishing and construction of same took twenty-five hours. Construction of additional shelves in the Museum, planning, gathering of materials, and finishing of same took five hours. Maintenance of front sidewalk, including power washing in the spring and fall, as well as applying a protective sealer took four hours. Looking for the best prices on the purchase of new toilets, purchasing same, installation and the discussion/planning for them, took eight hours. The purchase and looking for the replacement of new furnace filters, which are of an odd size, took some significant searching, finally locating a close fit, from a supplier in Ontario took several hours, including removing and replacing of the old one, in the crawl space.

General maintenance of the building including removal of old pieces of furniture and display structures and relocating them in the Chilliwack land fill, took eight hours. The removal of wood covering from a former internal window and the new construction of same took six hours. Shopping for, purchase of transportation to and from the purchase location of required tables for displays took three hours, including installation of same. Estimated maintenance and all that goes with it was approximately fifty hours.

Douglas Platt

AGASSIZ-HARRISON MUSEUM

Manager/Curator's Report

Over the past year I have overseen the day-to-day operations of the museum and visitor information centre and provided guidance and training for three students and both visitor information centre and museum volunteers. In addition, I have filled-in visitor information centre shifts, worked with community partners to execute events, responded to visitor and community member information and research requests, completed the Agassiz-Harrison Historical Society's (AHHS) ongoing research projects (i.e., Reminisce Kits), and developed and delivered three new exhibits.

Exhibits

Two new exhibits were launched on Saturday September 15, 2018 in conjunction with the Agassiz Fall Fair Open House. *A History of the Agassiz CPR Station*, situated in the lobby, demonstrates the importance of the railroad and the 1893 CPR Station building to the communities of Agassiz and Harrison Hot Springs. It illustrates the movement of the building within Agassiz and the development of its use as a community museum. This exhibit identifies the significance of the station as a landmark heritage structure that has been part of the community for 125 years.

Remembering the Fraser River Flood of 1948, located in the main gallery, commemorates 70 years of survival and solidarity within and between the communities of Agassiz, Harrison Mills, and Harrison Hot Springs. Historic images, newspaper clippings, and reminiscences enable the visitor to experience the spring and summer of 1948, as if it were today. Step into a period of our history that distinctly demonstrates the collaborative nature of our three close-knit communities.

On Wednesday February 6, 2019, we launched our bilingual Virtual Museum of Canada Community Stories online exhibit *Knee High by the First of July: Celebrating the Legacy of Corn in the District of Kent, British Columbia.*

http://www.virtualmuseum.ca/community-stories_histoires-de-chez-nous/knee-high-1st-july_hauteur-genou-1-juillet/

This exhibition traces the development of the relationship between corn and cows in this small, yet strong farming community. It describes the influence of the establishment of the 1889 Dominion Experimental Farm, which continues to operate today as part of Agriculture and Agri-Food Canada, on the agricultural success and longevity of Agassiz and the District of Kent.

AGASSIZ-HARRISON MUSEUM

Facility Renovations

During the winter and spring of 2019, we undertook renovations of our lobby, gallery, and washroom spaces to improve the accessibility of, and streamline the services we offer, to our community and visitors.

Washrooms: Our two washrooms are now gender-neutral, and accessible to everyone to reduce wait times. Each room received a fresh coat of paint to brighten it up, and a 2019 grant from the Kent-Harrison Foundation enabled us to update the toilets and purchase and install a baby/toddler changing table.

Lobby/Visitor Information Centre: All of the museum/society objects were removed from this space. The walls received a fresh coat of paint and new topographic maps of the surrounding area were installed. A new shelving unit was built in the hallway to the washrooms in order to maximize the presentation and storage space of brochures. We have refined the geographic area to cover the Lower Mainland through to Vernon, BC. Emphasis has been placed on stocking brochures for events and activities within the Fraser River Valley. The TV monitor provides an up-to-date listing of activities within our community for visitors and residents alike.

Galleries: All three of our galleries were reorganized to improve visitor accessibility and visibility of collection items. Our main gallery was repainted and the exhibits on transportation, hotels and recreation in the Agassiz-Harrison Valley were refreshed. The Agassiz-Harrison Military History exhibit was remounted along the south wall to open up the central portion of the gallery for public programming and hands-on activities. An "Interaction Station" with 24 items related to local businesses and households provides a multigenerational learning experience. A table with family history/genealogy worksheets provides visitors with the opportunity to start researching their own heritage as they reminisce in our galleries. A final table showcases our *Reminisce Kits*, which are available for use in the museum or through a facilitator outside the museum within the community.

Please see https://www.agassizharrisonobserver.com/community/agassiz-harrison-museum-showcases-refreshed-galleries-exhibits/ for images and additional details.

Community Outreach

I have been working closely with a number of community organizations and individuals to develop and grow relationships and realize collaborative opportunities over the past year. These

AGASSIZ-HARRISON MUSEUM

efforts have resulted in the development of a more consistent oral history program for recording our community member stories and experiences.

I also communicate with our community regularly through our website and social media channels, in addition to my monthly column in the Agassiz-Harrison Observer "Historic Snapshots of Your Community" (published in print the first Thursday of each month and online the first Saturday of each month).

http://agassizharrisonmuseum.org/about-us/in-the-news/

One of our organization's successes this year was the completion and launching of our four community-specific ***Reminisce Kits***. These kits result from the efforts of many of our society members between February 2018 and February 2019. This project was graciously funded by a New Horizons for Seniors Program grant awarded to the Agassiz-Harrison Historical Society.

Each kit is equipped with a combination of archival images, archival newspaper and/or magazine articles and advertisements, collection object images, a discussion plan for a facilitator, and index cards with questions for discussion participants. Kit topics include:

- Transportation in the Agassiz-Harrison Valley
- Remembering the 1948 Fraser River Flood
- Food Production and Preparation in the Agassiz-Harrison Valley
- Life Made Simple: Changes in Domestic Technology

Please see our poster in Appendix F for more details.

We have a number of events and initiatives planned for the rest of this season. I look forward to seeing you in the museum or out in the community!

Lindsay Foreman

AGASSIZ-HARRISON MUSEUM

Appendix A: Agassiz-Harrison Historical Society Board of Directors and Staff 2018/2019

President: Georgina Reimer
Vice-President: Joan Vogstad
Treasurer: Allan Bell
Secretary: Heather Doerksen/Kay Olson
Fundraising Liaison: Joanne Veltkamp
Gift Shop Manager: Kay Olson
Grant Liaison: Beverly Kennedy
Member Liaison: Barbara Key
Maintenance Liaison: Doug Platt
Volunteer Liaison: Valerie Richards/Sam Nelson
Member at Large: Sam Nelson

Non-Voting Members
District of Kent Councillor: Kerstin Schwichtenberg
District of Kent Staff Liaison: Jennifer Thornton
Village of Harrison Hot Springs Councillor: Ray Hooper
Tourism Harrison Representative: Robert Reyerse

Staff
Manager/Curator: Lindsay Foreman
YCW Assistant Curator: Alexandra Defazio, Jessica Leins
CSJ Education Assistant: Kimberly House

AGASSIZ-HARRISON MUSEUM

Appendix B: Agassiz-Harrison Historical Society Volunteers 2018/2019

Thirty volunteers assisted with the visitor information centre and 18 volunteers assisted with museum services during the operating season.

Visitor Information Centre	Museum Services
Barbara Beck	Barbara Beck
Donna Bell	Edith Berger
Shelley Derksen	Keith Butterley
Heather Doerksen	Claudia Fisher
Helen Eddy	Mark Fisher
Claudia Fisher	Dennis Hill
Matthew Fisher	Noela Kerr
Pat Frey	Barbara Key
Dennis Hill	Bob Loat
Kim House	Sam Nelson
Noela Kerr	Jane Norwood
Barbara Key	Kay Olson
Bob Loat	Doug Platt
Bunk Mackay	Georgina Reimer
John McElroy	Valerie Richards
Sam Nelson	Wayne Richards
Jane Norwood	Marielle van Haaren
Kay Olson	Joan Vogstad
Davina Osmond	
Valerie Richards	
Wayne Richards	
Marlene Sand	
Gary Smele	
Shirley Tyfting	
Joanne Veltkamp	
Joan Vogstad	
Sharon Weeks	
Maureen Wendt	
Leo Wenk	
Joanne Wilhelm	

Overall, volunteers provided over 3,100 hours of community service to our organization.

AGASSIZ-HARRISON MUSEUM

Appendix C: Agassiz-Harrison Historical Society Events 2018/2019

Event	Date	Attendance
Agassiz Farms Cycle Tour and Agassiz-Harrison Museum Community Open House	Saturday July 21, 2018, 9 am to 4 pm	400
Agassiz Fall Fair and Corn Festival Open House	Saturday September 15 and Sunday September 16, 2018 10 am to 4 pm; 1 pm to 4 pm	100
CPR Holiday Train	Monday December 17, 2018, 3 pm to 7 pm	200
Fun Family Heritage Day	Monday February 18, 2019, 10 am to 4 pm	85
Family History Q and A	Wednesday February 20, 2019, 7 to 9 pm	30
Heritage Speaker Night	Wednesday March 6, 2019, 7 to 9 pm	60

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Appendix D: Agassiz-Harrison Historical Society 2018/2019 Financial Actuals

REVENUE	BUDGET	ACTUAL
Grants		
Canada Summer Jobs (Employee Payroll)	$9,000.00	$6,650.00
Young Canada Works in Heritage Organizations (Employee Payroll)	$6,000.00	$3,430.47
Direct Access Gaming	$7,000.00	$7,000.00
Harrison Hot Springs Grants to Groups	$10,000.00	$1,250.00
Kent Harrison Foundation	$1,250.00	$1,250.00
District of Kent Grant-in-Aid	$25,000.00	$25,000.00
Virtual Museum of Canada Community Stories	$6,000.00	$4,000.00
BCMA Family Day	$270.00	$500.00
Total	$64,520.00	$49,080.47
Contracts		
Tourism Harrison	$10,000.00	$10,000.00
District of Kent Tourism Information Centre	$15,000.00	$12,005.00
Total	$25,000.00	$22,005.00
Fundraising		
Pub Night	$1,500.00	$3,549.00
Dickens Tea	$3,000.00	$3,075.00
Other	$200.00	$152.00
Total	$3,200.00	$6,776.00
Memberships	$500.00	$600.00
Donations	$3,000.00	$8,268.13
Gift Shop	$4,000.00	$2,300.00
Research	$600.00	$20.00
Interest	$50.00	$94.44
TOTAL REVENUE	**$100,870.00**	**$89,144.04**

AGASSIZ-HARRISON
MUSEUM

EXPENSES	BUDGET	ACTUAL
Accounting and Legal	$1,000.00	$1,188.00
Advertising and Promotions	$800.00	$824.12
Business Fees and Licenses	$100.00	$15.00
Building Insurance	$4,000.00	$3,210.41
Insurance, Directors and Officers	$225.00	$225.00
Interest and Bank Charges	$100.00	$62.92
Building Maintenance	$2,700.00	$1,444.12
Conservation Supplies	$800.00	0
Courier and Postage	$500.00	0
Organization Dues and Memberships	$3,600.00	$645.00
Exhibits	$4,500.00	$2,653.47
Gift Shop Consignment	$100.00	0
Gift Shop Purchases	$200.00	$1,140.35
Museum Expenses	$2,000.00	$1,994.48
Office Supplies	$900.00	$2,776.63
Shaw Internet and Phone	$1,370.00	$1,068.73
Tourism Expenses	$1,000.00	$756.24
Website Hosting	$250.00	$130.53
CPP	$200.00	$2,208.61
EI	$1,500.00	$1,155.41
WCB	$100.00	$112.41
Employee Benefits	$3,500.00	$700.00
Employee Wages	$45,000.00	$49,844.15
Employee Travel and Training	$450.00	$184.06
Volunteer Training and Recognition	$300.00	$302.44
Fundraising	$700.00	$1,399.45
New Horizons for Seniors Grant Reminisce Kits	$25,000.00	$4,635.51
Virtual Museum of Canada Grant	$6,000.00	$3,304.50
BCMA Family Day Grant	$500.00	$327.51
Kent Harrison Grant	$1,250.00	$823.87
TOTAL EXPENSES	**$108,645.00**	**$83,132.92**

AGASSIZ-HARRISON
MUSEUM

IN-KIND CONTRIBUTIONS		
Property Taxes	$9,000.00	District of Kent
Rent	$1.00	District of Kent
Natural Gas	$1,200.00	District of Kent
Grounds Maintenance	$9,000.00	District of Kent
Hydro	$1,700.00	District of Kent
Water/Sewer	$1,000.00	District of Kent
Janitorial	$2,500.00	District of Kent
Labour (Maintenance, curatorial, archival)	$29,286.30	Volunteers
TOTAL IN-KIND	**$53,687.30**	

EXCESS OF REVENUE OVER EXPENDITURES (DEFICIENCY)	**N/A**

AGASSIZ-HARRISON MUSEUM

Appendix E: Agassiz-Harrison Historical Society 2019/2020 Projected Budget

REVENUE		BUDGET
Grants		
Canada Summer Jobs		$4,411.00
Young Canada Works in Heritage Organizations		$7,712.25
New Horizons for Seniors		$25,000.00
Direct Access Gaming (unconfirmed)		$7,000.00
Harrison Hot Springs Grants to Groups (unconfirmed)		$10,000.00
Kent Harrison Foundation		$1,250.00
District of Kent Grant in Aid (unconfirmed)		$25,000.00
Virtual Museum of Canada		$2,000.00
	Total	**$82,373.25**
Contracts		
Tourism Harrison		$10,000.00
District of Kent Tourism Information Centre		$15,000.00
	Total	**$25,000.00**
Fundraising		
Dickens Tea		$3,000.00
Raffles		$1,000.00
	Total	**$4,000.00**
Memberships		**$600.00**
Donations		**$6,000.00**
Gift Shop		**$2,500.00**
Interest		**$90.00**
	TOTAL REVENUE	**$120,563.25**

AGASSIZ-HARRISON MUSEUM

EXPENSES

Accounting and Legal	$4,000.00
Advertising and Promotions	$800.00
Business Fees and Licences	$100.00
Building Insurance	$4,000.00
Insurance, Directors and Officers	$225.00
Interest and Bank Charges	$100.00
Building Maintenance	$1,500.00
Cleaning Supplies and Consumables	$500.00
Conservation Supplies	$500.00
Courier and Postage	$200.00
Organization Dues and Memberships	$1,000.00
Exhibits	$3,000.00
Gift Shop Consignment	$100.00
Gift Shop Purchases	$1,000.00
Museum Expenses	$2,000.00
Office Supplies	$3,000.00
Office Furniture and Computer Equipment	$2,500.00
Tourism Expenses	$1,000.00
Internet and Phone	$1,500.00
Website Hosting	$250.00
CPP	$2,200.00
EI	$1,500.00
WCB	$100.00
Employee Benefits	$3,500.00
Employee Wages	$55,000.00
Employee Travel and Training	$450.00
Volunteer Training and Recognition	$300.00
Fundraising	$1,000.00
New Horizons for Seniors Grant Heritage Project	$25,000.00
Kent Harrison Grant	$1,250.00
TOTAL EXPENSES	**$117,575.00**

AGASSIZ-HARRISON
MUSEUM

IN-KIND CONTRIBUTIONS

Property tax exemption (District of Kent)	$9,000.00
Natural Gas (District of Kent)	$1,200.00
Grounds maintenance (District of Kent)	$9,000.00
Hydro (District of Kent)	$1,700.00
Water/Sewer (District of Kent)	$1,000.00
Janitorial (District of Kent)	$3,000.00
Rent (District of Kent)	$1.00
Volunteer labour (building maintenance, janitorial, curatorial, archival, visitor services)	$35,000.00
TOTAL IN-KIND	**$59,901.00**

AGASSIZ-HARRISON MUSEUM

Appendix F: Agassiz-Harrison Museum Reminisce Kit Poster

AGASSIZ-HARRISON MUSEUM

Reminisce KITS

Use these tools to explore our Community's unique past.

EACH KIT INCLUDES:

Archival images from our collection

Archival newspaper/magazine articles and advertisements

Collection object images

Discussion plan for facilitator

Index cards with questions for participants

Contact us to book your "History in a Box" today

(604) 796-3545
agassizharrisonmuseum@shawbiz.ca
agassizharrisonmuseum.org

RECEIVED
JUL 17 2019
BY VILLAGE OF HARRISON HOT SPRINGS

HARRISON HOT SPRINGS
Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS

Request to Appear as a Delegation

In order to make a presentation to Council at a Council Meeting, you are required to submit a written request to the Corporate Administration Department no later than 12:00 p.m. on the Wednesday before the regular meeting. The request can either be a copy of this completed form or a separate letter that you have written which contains the information requested on this form. All requests must be accompanied with background information which will be included in the agenda package. You can submit your request in person, by mail at PO Box 160 Harrison Hot Springs, BC V0M 1K0, fax at 604-796-2192 or e-mail at admin@harrisonhotsprings.ca.

The Corporate Administration Department will advise you when you are scheduled to appear before Council. Council meetings commence at 7:00 p.m. in the Village Council Chambers at 495 Hot Springs Road, Harrison Hot Springs, BC.

You are limited to a maximum of 10 minutes to present your material, regardless of the number of presenters in your delegation.

Date: July 16, 2019 Requested Meeting Date: August 12, 2019

Organization Name (if applicable): Alzheimer Society of B.C.

Name of Presenter: Heather Cowie

Name of Applicant if Other than Above: _____

Contact Phone Number & E-Mail: 604-742-4441, hcowie@alzheimerbc.org

Mailing Address with Postal Code: 300-828 West 8th Ave., Vancouver, V5Z 1E2

Audio/Visual requirements: PowerPoint (computer & projector)

Topic: Dementia-Friendly Communities

Action you wish Council to take: To consider partnering with the Alzheimer Society of B.C. to develop a dementia-friendly action plan.

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: Mayor and Council **DATE:** August 7, 2019

FROM: Troy Davis, Infrastructure Manager **FILE:** 5400-01-01

SUBJECT: Road, Bridge, and Active Transportation Master Plan

ISSUE: Receipt of the Road, Bridge, and Active Transportation Master Plan.

BACKGROUND:

In 2018 Council approved the development of a Transportation Master Plan to allow for informed decision making when planning road surface renewals, major infrastructure projects, and active transportation infrastructure. CTQ Consultants was awarded the contract at the August 13, 2018 Council meeting.

One of the requirements of the project was to provide two public consultation sessions for the active transportation portion of the master plan. CTQ attended two open houses on December 12, 2018, and April 24, 2019, and provided both an online and paper survey for residents to provide feedback.

The road and bridge portion of the Master Plan provides the Village with a geographic inventory and condition assessment of the roads, bridges, and culverts, as well as an inventory of the visible storm drainage infrastructure. All of this information will be used to inform the Village Asset Management Plan.

The Active Transportation portion of the Master Plan provides near, short, and long term projects that are designed to improve the active transportation system throughout the Village. The Plan also suggests changes to Village signage to improve safety, and ensure that signage standards are met, and provides a priority matrix for the renewal of Village roads.

RECOMMENDATION:

THAT Council receive the Road, Bridge and Active Transportation Master Plan.

Respectfully submitted;

Troy Davis
Troy Davis
Infrastructure Manager

REVIEWED BY:

Madeline McDonald
Madeline McDonald
Chief Administrative Officer

Village of Harrison Hot Springs

ROAD, BRIDGE, AND ACTIVE TRANSPORTATION MASTER PLAN

CTQ

ENGINEERING PLANNING URBAN DESIGN

JULY 2019

HARRISON HOT SPRINGS

Naturally Refreshed

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STATEMENT OF QUALIFICATIONS & LIMITATIONS

The Road and Bridge Master Plan Report (the "Report") contained herein has been prepared by CTQ Consultants Ltd. (CTQ) for the benefit of The Village of Harrison Hot Springs (VHHS) in accordance with the agreement between CTQ and VHHS, including the scope of work detailed therein (the "Agreement").

The information used to prepare the decision matrix, work plan, recommendations, and this Report was obtained from record information provided by VHHS, site reconnaissance by CTQ, CWMM, and Star Tech.

The Report has been prepared to assist the VHHS to understand the existing condition of the overall transportation system and to plan for future growth within the community. Possible growth patterns were provided to CTQ by VHHS.

The information contained herein is to be read as a whole and such sections should not be extracted and read out of context.

As the Report is based on possible future population and development growth patterns, trigger points for capital and operational improvements have been identified and should be updated periodically to reflect actual conditions.

Unless expressly stated to the contrary in the Report or the Agreement, CTQ:

- shall not be responsible for any events or circumstances that may have occurred since the date on which the Report was prepared
- shall not be responsible for any inaccuracies contained in information that was provided to CTQ by other firms or agencies
- agrees that the Report represents professional judgment for the specific purpose described in the Report and the Agreement, but CTQ makes no other representations with respect to the Report or any part thereof

The Report is to be treated as confidential and may not be used or relied upon by third parties, except:

- as agreed, in writing, by CTQ and VHHS
- as required by law
- for use by governmental reviewing agencies

Any use of this Report is subject to this Statement of Qualifications and Limitations. Any damages arising from improper use of the Report or parts thereof shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report.

LETTER OF SUBMISSION

Project No.: 12004-37

26 July 2019

Village of Harrison Hot Springs
495 Hot Springs Road
Harrison Hot Springs, BC V0M 1K0

Attention: Mr. Troy Davis, Infrastructure Manager

Dear Troy:

Re: Village of Harrison Hot Springs Road and Bridge Master Plan

Please find attached the Road and Bridge Master Plan. Do not hesitate to contact the undersigned at any time regarding this report.

Yours truly,
CTQ CONSULTANTS LTD.
Per:

Matt Cameron P.Eng., FEC
Managing Partner
mcameron@ctqconsultants.ca

SIGNATURES

Report Prepared By:

Justin VannPashak, E.I.T.
Municipal Projects Engineer
CTQ Consultants Ltd.

Report Reviewed By:

Dave Cullen, P. Eng.
Transportation Engineer/Principal
CTQ Consultants Ltd.

ACKNOWLEDGEMENTS

As a Resort Municipality, VHHS faces the difficulty of constructing and maintaining infrastructure sufficient to serve a large number of day trip and short-term visitors sustained by a relatively small tax base. Funding provided through UBCM for the completion of the Transportation Utility Master Plan is gratefully acknowledged.

The VHHS operations personnel were invaluable in finding archived data, responding to inquiries, and providing context. Thanks to:

Troy Davis, Infrastructure Manager
Tyler Simmonds, Chief Utilities Operator
Todd Kafi, Public Works Foreman

This report could not have been completed without the contributions of the CWMM Consulting Engineers Ltd. team, who provided the structural expertise required to assess the condition of the VHHS bridges and make recommendations for the maintenance of these assets. Thanks to:

Don Bergman, P. Eng.
Peter Ackerman, P. Eng.

EXECUTIVE SUMMARY

The Harrison Hot Springs transportation network moves people and goods to and through the Village of Harrison Hot Springs (VHHS). Over the past decade, upgrades have been undertaken to ensure the efficient movement of residents and visitors continues to be available for a growing population. The system currently includes an arterial highway right-of-way under the jurisdiction of MoTI and a network of collectors, local roads, and lanes.

The transportation network infrastructure is approximately 12.3 km total in length including 6 bridges; however, there is very little active transportation and micro-mobility infrastructure other than a discontinuous gravel path system which includes 3 pedestrian bridges and an informal single-track trail system.

VHHS recognizes the infrastructure is not complete, and commissioned CTQ Consultants Ltd. (CTQ) to generate a comprehensive Road and Bridge Master Plan to address current issues and to provide a roadmap for the integrated transportation network, including active transportation, over the coming years.

The purpose of any master plan is to establish a strategy for providing the required levels of service to the taxpayers of the community both now and into the future. It is very difficult to forecast future needs in a resort-based community like VHHS as the permanent population is substantially less that the Visitor population that is seasonal. As such CTQ reviewed several options for projections and based the report on lifecycle project events rather than timelines based on traditional population growth models. The population of the VHHS is not of sufficient size to use a capacity or Level of Service (LOS) based analysis. Roadway conditions will govern over capacity in this network since congestion is rare and confined to the highway right-of-ways under MoTI jurisdiction when large volumes of tourists enter the Village.

The existing system infrastructure was reviewed, input into a GIS database, and work plans were generated to accommodate various budgetary scenarios using historical data and field inspections. Scenarios were created to determine necessary improvements as the population changes and budgets change. The impact of adding all the existing lots and then combining the various growth scenarios was investigated and found to have negligible effect on system-wide LOS.

Active Transportation and micro-mobility recommendations focused on best practices associated with second-generation micro-mobility infrastructure.

Since the improvement plan is lifecycle based as opposed to capacity driven, the projects identified by the Road and Bridge Master Plan were itemized as Capital Projects. These projects were reviewed based on a "Triple Bottom Line" (Social, Environmental and Economic) assessment. As there is a function development plays in the increased demand on the infrastructure there could be a portion of the improvements attributed to the DCC program.

This Road and Bridge Master Plan is to be read in conjunction with the Figures and Tables found in the appendices and includes recommendations based on CTQ's knowledge and expertise in transportation systems. It is very much a living document and needs to be revisited from time to time to confirm the outcomes, based on the increased future demands.

ABBREVIATIONS

AV	Autonomous Vehicle
DTAM	Daily Trips by Active Mode
FVRD	Fraser Valley Regional District
HRS	Harrison Hot Springs Resort & Spa
HSR	Hot Springs Road. Under MoTI jurisdiction
ITN	Integrate Transportation Network
LOS	Level of Service
LAE	Lillooet Avenue East. The portion of Lillooet Avenue under MoTI jurisdiction
MMCD	Master Municipal Construction Documents. Documents created by MMCD Association - a non-profit society supported by BC municipalities to create improved construction documents for roads, sidewalks, sewers, transportation, traffic signals and street lighting
MoTI	Ministry of Transportation and Infrastructure
OCP	Village of Harrison Hot Springs Official Community Plan. Bylaw 864 March 2007
VHHS	Village of Harrison Hot Springs

1. Introduction

1.1 Transportation System Background

A reliable and efficient transportation system is essential to the environmental, economic and social wellbeing of any community. The function of a safe and dependable transportation system extends beyond the significant social requirements of basic health and wealth. A public transportation system also contributes to the local economy by providing capacity for commercial enterprises, and, through efficiency, aesthetic design, and sustainability, enhances the environment surrounding businesses, homes, and public spaces. In doing all of this, the system must also be financially sustainable while meeting stringent government standards.

The Harrison Hot Springs Integrated Transportation Network (ITN) supplies transportation for the VHHS. Over the past decade, upgrades have been undertaken to ensure safe transportation continues to be available for a growing population of residents and visitors. The system now includes traffic calming, intersection upgrades, and a modernized Subdivision and Development Servicing Bylaw that specifies updated road cross-sections (pending approval).

VHHS is a destination community with a small full-time population. During the summer months, demands on infrastructure increase significantly with seasonal residents and tourist visits. This fluctuation puts immense pressure on the transportation network. A sharp increase or decrease in the number of overnight tourist visits, could greatly impact the system requirements.

VHHS recognizes the challenges ahead, and commissioned CTQ Consultants to generate a comprehensive Road and Bridge Master Plan to review the system in its entirety and provide a roadmap for the ITN over the coming years.

1.2 Purpose of this Master Plan

The purpose of any master plan is to establish a comprehensive strategy for the proposed infrastructure. In the absence of a crystal ball, certain assumptions must be made to predict the future so that the infrastructure is able to respond to the actual needs of the community. This includes long term planning, required levels of service and identifying the most cost-effective means of delivering the current and future service.

The creation of this Road and Bridge Master Plan is the first step towards cohesive, long term planning for VHHS utilities. It is important that the transportation network not be looked at in isolation, that master planning documents for sanitary sewer, drainage, and water be incorporated as they become available. It is recommended that an overall Asset Management Program be developed for VHHS. The objectives of this Plan are to:

- Review existing and forecast future transportation demands
- Identify threats to transportation network efficiency and safety
- Review existing infrastructure and identify current deficiencies
- Recommend infrastructure improvements to meet future demand and renew infrastructure at the end of its lifecycle
- Estimate costs of future works

2. Existing System (2019)

2.1 Process Overview

The Village has a total of 12.3 km of paved roads, with the Ministry controlled roadways totaling an additional 4.6 km. The Village also has bridges and culverts as part of the municipal infrastructure.

The Existing Transportation Network is illustrated on **FIGURE 1**.

1. Vehicles enter and exit the VHHS system through a Hot Springs Road (HSR, Highway 9), an arterial roadway under Ministry of Transportation and Infrastructure (MoTI) jurisdiction which extends just over one kilometer north into the VHHS where it becomes Lillooet Avenue and moves traffic northeast of the Village.
2. Two Collector class roads diffuse traffic further, McPherson Road brings drivers to the McCombs Road/Eagle Drive Collector.
3. A network of local roads and lanes connects the remaining lots to the transportation network.

The **TABLE 2.1** lists the length of each roadway in the network.

TABLE 2.1 Road Segment Lengths

STREETNAME	ROADCLASS	LENGTH (m)
Alder Ave	LOCAL	202.8
Angus Pl	LOCAL	68.64
Balsam Ave (Chestnut to Clover)	LOCAL	134.38
Balsam Ave (Clover to Miami River)	LOCAL	135.05
Balsam Ave (Hot Springs to Chestnut)	LOCAL	65.25
Bear Ave	LOCAL	83.34
Cedar Ave (Hot Springs to Maple)	LOCAL	183.81
Cedar Ave (West of Hot Springs)	LOCAL	232.05
Chehalis St	LOCAL	73.48
Chestnut Ave	LOCAL	500.52
Clover Pl	LOCAL	68.03
Cottonwood Ave	LOCAL	320.93
Cottonwood Pl	LOCAL	69.56
Diamond St	LOCAL	156.79
Driftwood Ave	LOCAL	300.3
Eagle St (Bear to Echo)	COLLECTOR	122.46
Eagle St (Cottonwood to Naismith)	COLLECTOR	84.85

Eagle St (Driftwood to Cottonwood)	COLLECTOR	85.42
Eagle St (Echo to Naismith)	COLLECTOR	111.27
Eagle St (Lillooet to Bear)	COLLECTOR	86.26
Eagle St (Miami River to Naismith)	COLLECTOR	147.54
Eagle St (Naismith to Driftwood)	COLLECTOR	105.83
Echo Ave (East of Eagle)	LOCAL	348.71
Echo Ave (West of Eagle)	LOCAL	107.84
Emerald Ave	LOCAL	196.96
Esplanade Ave (Chehalis to Spruce)	COLLECTOR	227.2
Esplanade Ave (Hot Springs to Maple)	COLLECTOR	175.44
Esplanade Ave (Maple to Chehalis)	COLLECTOR	225.93
Esplanade Ave (Saint Alice to Hot Springs)	LOCAL	191.07
Fern Pl	LOCAL	67.94
Hadway Dr N	LOCAL	121.54
Hadway Dr S	LOCAL	49.57
Hope Pl	LOCAL	159.51
Hot Springs Rd (Alder to Pine)	ARTERIAL	301.47
Hot Springs Rd (Balsam to Walnut)	ARTERIAL	260.9
Hot Springs Rd (Cedar to Lillooet)	ARTERIAL	79.42
Hot Springs Rd (Emerald to Alder)	ARTERIAL	369.06
Hot Springs Rd (Lillooet to Esplanade)	COLLECTOR	94.09
Hot Springs Rd (McPherson to Ramona)	ARTERIAL	714.55
Hot Springs Rd (Miami River to Cedar)	ARTERIAL	183.63
Hot Springs Rd (Pine to Balsam)	ARTERIAL	330.69
Hot Springs Rd (Ramona to Emerald)	ARTERIAL	171.8
Hot Springs Rd (South of McPherson)	ARTERIAL	92.54
Hot Springs Rd (Walnut to Miami River)	ARTERIAL	161.99
Juniper Pl	LOCAL	56.72
Lakberg Cres	LOCAL	58.9
Lillooet Ave (East of Chehalis)	ARTERIAL	547.43
Lillooet Ave (Hot Springs to Maple)	ARTERIAL	177.36
Lillooet Ave (Maple to Chehalis)	ARTERIAL	224.16
Lillooet Ave (Saint Alice to Hot Springs)	LOCAL	204.86
Maple St (Cedar to Lillooet)	LOCAL	72.81
Maple St (Lillooet to Esplanade)	LOCAL	68.95
McCombs Dr (Alder to Pine)	COLLECTOR	301.25
McCombs Dr (Chestnut to Miami River Dr)	COLLECTOR	113.43
McCombs Dr (Emerald to Alder)	COLLECTOR	363.81
McCombs Dr (Hadway S to Emerald)	COLLECTOR	197.8
McCombs Dr (McPherson to Hadway S)	COLLECTOR	652.66
McCombs Dr (Pine to Chestnut)	COLLECTOR	147.91
McPherson Rd (to Eagle	COLLECTOR	400.09

Miami River Dr (Balsam to Juniper)	LOCAL	90.76
Miami River Dr (Fern to Balsam)	LOCAL	110.7
Miami River Dr (Hot Springs to Poplar)	LOCAL	104.28
Miami River Dr (Juniper to McCombs)	LOCAL	93.34
Miami River Dr (Loop)	LOCAL	128.89
Miami River Dr (Poplar to Walnut)	LOCAL	536.81
Miami River Dr (Walnut to Fern)	LOCAL	92.8
Mount St	LOCAL	110.47
Myng Cres (Hadway S to Hadway N)	LOCAL	57.38
Myng Cres (Hope to Hadway S)	LOCAL	202.82
Myng Cres (North of Hadway N)	LOCAL	44.8
Naismith Ave (East of Eagle)	LOCAL	337.91
Naismith Ave (West of Eagle)	LOCAL	430.12
Pine Ave (Hot Springs to Lakberg)	LOCAL	258.61
Pine Ave (Lakberg to Eagle)	LOCAL	77.48
Poplar St	LOCAL	198.81
Ramona Pl (Hot Springs to Hadway)	LOCAL	80.41
Ramona Pl (North of Hadway)	LOCAL	100.03
Rockwell	ARTERIAL	1100
Schooner Pl	LOCAL	228.13
Spruce St (Esplanade to Lillooet)	COLLECTOR	73.36
Spruce St (Lillooet to Echo)	LOCAL	144.32
St Alice St N	LOCAL	108.16
St Alice St S	LOCAL	64.32
Walnut Ave (Hot Springs to Poplar)	LOCAL	115.45
Walnut Ave (Poplar to Eagle)	LOCAL	178.01

2.2 System Capacity for Various Modes

Infrastructure that prioritizes automobiles dominates the transportation network. All modes share space that is designed for the movement of automobiles on these routes.

The Active Transportation network includes recreational paths, with a gravel multi-use trail on the Miami River Banks and another along the Harrison Lakefront. Several informal single-track trails meander through the forest in the East Sector and West of HSR. These trails are also illustrated on **FIGURE 3**.

There is no electrified micromobility infrastructure, although many of these modes can share space dedicated to automobiles due to their mechanized acceleration and higher travel speeds. Electrical Charging stations are located along Esplanade Avenue and the tourist Information Parking Lot.

2.3 Permeability and Connectivity

There are 754 properties in VHHS serviced by the VHHS Integrated Transportation Network. Although the network has a high degree of Permeability and Connectivity for automobiles, the active transportation network is not well-connected or permeable. **FIGURE 1** illustrates the transportation network for all VHHS properties.

2.4 System Age

The Village's transportation network consists of roadways of different ages. Of the entire integrated road network owned by the Village, 21% of roads will need major maintenance in the next 10 years, another 63% will need preservation in the following 10 years. Much of the MoTI owned roadways are nearing the end of their lifecycles as well and will need to be rehabilitated. The mean surface layer age of the Village's transportation infrastructure is 12 years old; the median age is 15 years. The mean base layer age of the Village's transportation infrastructure is 37 years old; the median age is 36 years. The overall system age is neither young, nor old suggesting that maintenance investment can be distributed evenly.

2.5 Bridges

The Village owns two highway bridges that cross the Miami River at two locations along McCombs Drive. The Village also owns and maintains two pedestrian bridges that cross the Miami River. Along HSR, the MoTI owns and maintains two more bridges.

Pedestrian Bridge 1 is a single 20m span bridge with a 1.8m wide pathway that crosses the Miami River. The bridge consists of two aluminum trusses spanning the full length. Each aluminum truss also serves as a 1.1m high guardrail. The truss consists of 100x100mm square tube webs, a 150Vx100Hmm rectangular tube (orientated on edge) bottom chord, and a 100Vx150Hmm rectangular tube (flat oriented) top chord. The pathway consists of 300mm wide x 50mm deep perforated C-shaped panels tight to each other and spanning in the longitudinal direction over top of 100x100mm rectangular tube floor beams spaced at 600mm on centre and spanning between trusses. Each end of the aluminum trusses bears on a bearing pad which in turn bears on top of a concrete abutment. The concrete abutment appears to be a large concrete block that extends below the grade and that matches the width of the bridge superstructure. Wooden guard rail members are fastened with screws to the aluminum truss webs and top chord.

Pedestrian Bridge 2 is 40m long, three span bridge with a 1.8m wide pathway that crosses the Miami River. The end spans are both 9m long with a 22m intermediate span. The superstructure frame and abutments are nearly identical to the pedestrian bridge #1 with the exception of intermediate bearing supports at the two piers. Each pier consists of a built-up steel plate cap beam spanning between two 250mm diameter steel columns which in turn are supported on a combined concrete footing. A traction mat has been fastened to the bridge pathway along the entire length of the bridge.

The McCombs Drive North Bridge is a 10.0m long x 9.6m wide single span bridge that carries two vehicle lanes and one sidewalk over the Miami River). The bridge superstructure consists of 8-400mm deep pre-cast concrete stringers supported at each end by a 600mm deep cast-in-place concrete cap beam which is in turn supported on 4-610mm diameter steel pipe piles. The bridge deck consists of an asphalt wearing surface placed on top of the stringers over the extent of the road lanes and a jointed concrete layer at the sidewalk. A concrete curb divides the road section from the sidewalk. This bridge was constructed in 2011 over an existing timber bridge structure which still remains in place to this date with the timber bridge being relied upon to retain backfill materials. An approximate 150mm gap exists between the underside of the new concrete stringers and top surface of the existing timber superstructure.

The superstructure of the existing timber bridge consists of cross ties supported on stringers which are spanning between abutments. The abutments consist of a cap beam supported on timber piles. Ballast logs are located behind the piles and retain backfill materials. The wingwalls consist of timber piles and ballast logs. Timber piles at the abutment are treated while the timber piles at the wingwalls are untreated.

The barriers along each side of the bridge consist of a three beam with a steel pipe bicycle guardrail mounted on top. The total height of these barriers is 1.3m. The barriers along the edges of the approaches consist of Jersey style concrete barriers with the barriers along the south/west bridge approach being mounted with a steel pipe bicycle guardrail.

The McCombs Drive South Bridge is a skewed 10.0m long x 9.6m wide single span bridge that carries two vehicle lanes and one sidewalk over the Miami River and is very similar to the McCombs Road North Bridge. The bridge consists of 8-400mm deep pre-cast concrete stringers supported at each end by a 600mm deep cast-in-place concrete cap beam which is in tum supported on 4-610mm diameter steel pipe piles. The bridge deck consists of an asphalt wearing surface placed on top of the stringers over the extent of the road lanes and a jointed concrete layer at the sidewalk. A concrete curb divides the road section from the sidewalk. This bridge was constructed in 2011 over an existing timber bridge that remains in place to this date with the timber bridge being relied upon to retain backfill materials. An approximate 150mm gap exists between the undersides of the new concrete stringers and top surface of the existing timber superstructure.

The superstructure of the existing timber bridge consists of cross ties supported on stringers which are spanning between abutments. The abutments consist of a cap beam supported on timber piles. Ballast boards are fastened to the backside of the piles and retain backfill materials. The wingwalls consist of timber piles and ballast boards.

The barriers along each side of the bridge consist of a three beam with a steel pipe bicycle guardrail mounted on top. The total height of these barriers is 1.3m. The barriers along the edges of the approaches consist of Jersey style concrete barriers. A chain link fence is located on the north/east bridge approach along the sidewalk.

A Note Regarding MoTI Infrastructure

Hot Springs Road and Lillooet Avenue East are not owned by the VHHS. They are under the jurisdiction of MoTI and designated as Highway 9. As the major transportation route to and through the Village, these components are of vital importance to the ITN and this Road and Bridge Master Plan.

On December 13, 2018 Village, CTQ, and MoTI Staff convened to discuss MoTI infrastructure in the Village. Hot Springs Road and Lillooet Avenue are MoTI assets and have been identified as infrastructure needing improvement due to cross-section inconsistencies, deteriorating road structures, and safety. It was vital to have MoTI engaged early in the process of developing the Village's framework for future transportation investment. MoTI representatives demonstrated a willingness to consider proposed cross-sections for these roads. After the meeting, MoTI representatives sent example plans from a similar revitalization project in Mission, BC to CTQ. CTQ has prepared drawings for MoTI review, comment, and future acceptance. The drawings will propose solutions intended to increase public safety, asset value, and parking in a more consistent, urban form.

Discussions are underway for the urbanization of these roads that combine urban and rural road cross-sections. Drainage systems used are inconsistent and do not conform to current best practices for drainage. Recently updated segments of HSR use catch basins with standard curb and gutter edge treatments while older segments use ditches to convey stormwater. These roads do not include active transportation infrastructure and most crossings do not conform to best practices for crossing as identified in the Pedestrian Crossing Control Manual for British Columbia.

3. Integrated Transportation Network: Automobility, Micromobility, and Active Transportation

The Village of Harrison is ideally situated on the shores of Harrison Lake with access to the eponymous and famous Hot Springs. The Village is the destination at the apparent end of BC Highway 9. It is a community that demonstrates compact land use, where amenities are easily accessible from any part of the Village using any mode. It also experiences a moderate climate.

The combination of these characteristics perfectly positions the Village to sustain a robust, connected, and permeable transportation network. A large proportion of human-powered movement is sustainable in the Village which is fortunate that only minor changes to existing infrastructure are needed to multiply the people-moving performance of its existing transportation network.

Today's transportation networks must serve some traditional transportation modes like driving, walking, and cycling while also accommodating emerging technologies like e-bikes, e-scooters, e-skateboards, narrow track electric vehicles, and "hover boards." This is what is meant by an integrated transportation network; not only does an integrated transportation network accommodate as many of today's transportation modes as possible, but a good integrated transportation system is also notably adaptable to new technologies we may not consider today but will emerge in the near future. This is applicable to municipalities of all sizes.

3.1 Automobility

In the Village of Harrison Hot Springs, the transportation network has sufficient capacity for the volume of automobiles that use it. With nearly constant free flow conditions in the VHHS, a high Level of Service (LOS), capacity is not a system-wide deficiency. Commuter traffic is also very low. The evolution of automobility in the near future will consist of the automation of driving. Level 2 AVs are already on the road along with Level 3 AVs in some jurisdictions and many experts predict further automation soon. Automation will require some adaptation of the Village's automobile-focused infrastructure.

The potential to have the full spectrum (Level 0 to Level 5) of autonomous vehicles sharing the road further increases the complexity facing urban transportation networks. Level 5 AV's may eliminate or dramatically reduce parking needs and will certainly reduce car ownership.

Recommendations

- Update this plan in 2022 to adapt to changes in Autonomous Vehicle technology and best practices for design.

3.2 Micromobility

Micromobility refers to any mode of transportation with a small footprint that typically moves up to two people. Electrified micromobility in the form of e-bikes, e-skateboards, and e-scooters presents a complex challenge since these vehicles often travel faster than human-powered bicycles and pedestrians, but slower than automobiles. Electrified micro-mobility is a growing trend. Unfortunately, there is not much available data regarding just how fast it is growing. In most cases, despite the faster speeds, electrified micromobility can share space with non-mechanized bicycles and, given enough space and appropriate engineering, can share space

with pedestrians. Second Generation active transportation infrastructure can accommodate electrified micromobility; therefore, the terms active transportation and micromobility are practically synonymous.

An interesting aspect of the growing electrified micromobility trend is the way that the ages split. Baby Boomers, those born between 1946 and 1964, make up the majority of e-bike users in Canada. When surveyed, baby boomer respondents identified the following motivations:

- 35% for recreation and exercise;
- 20% for commuting; and
- 9% for trail/mountain biking.

Based both on the demographics and the recreational motivation, the VHHS should expect to see growing numbers of electrified modes, particularly e-bikes, on it's streets in the near future.

3.3 Active Transportation

Canadian municipalities are moving away from first-generation active transportation infrastructure and towards more complete solutions. First generation active transportation infrastructure was built for either recreational users on separate trails or very experienced vehicular cyclists in close proximity to automobiles. First-generation infrastructure includes shoulder enhancements (paint-line bike lanes) and separated multi-use trails. Technology and shifting demographics are driving change in the way active transportation infrastructure is integrated into urban and suburban streetscapes.

Active transportation is about space efficiency, moving the most people using the least land. When engineered properly, this fundamental and natural form of transportation is comfortable, safe, convenient, accessible, and easily shared with mechanized modes of all sizes. Micro-mobility shares the same space-saving goals offering liberated path choice, range, and speeds to users. Since electrified micro-mobility modes are currently restricted and regulated to move at the same speed and use the same space as cyclists, the use of the term micro-mobility here encompasses all active transportation modes as well as all electrified small vehicles like e-bikes, e-scooters, e-skateboards, hoverboards, and segways. Each micro-mobility mode offers varying degrees of activity to the person who chooses it, from fully human-powered or motor-assisted to fully motor-powered.

Prioritizing micro-mobility has tremendous potential to lower noise, light, and air pollution while promoting more efficient land use. Walking, cycling, and electrified micro-mobility decreases resource-intensive and land-intensive car traffic, reduces taxpayer burden, helps alleviate parking demand, saves energy, uses land and road space efficiently, provides mobility, saves money, improves health and fitness, and improves accessibility to people of all abilities. Finally, these modes are quick, simple, and fun, but only if the network is designed properly with widespread connectivity and permeability that gets people to where they want to go.

Recommendations

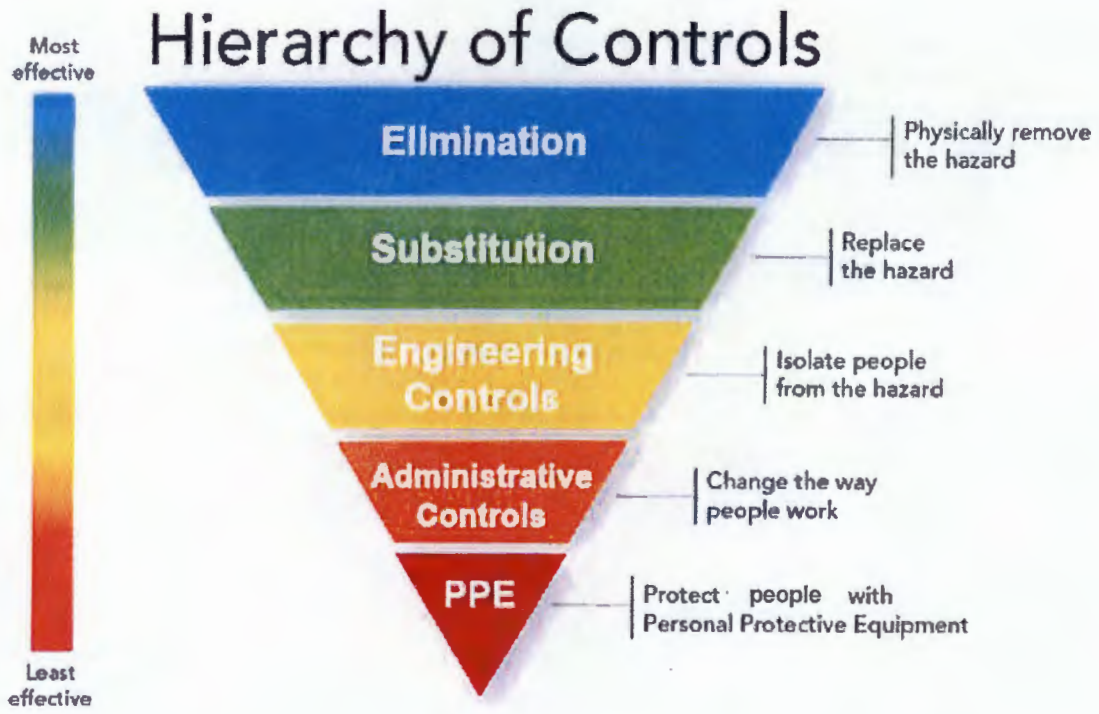
- Transportation networks should be built under the principles of 8 – 80 Cities. Cities that efficiently, easily, and safely move 8-year-olds and 80-year-olds are successful for everyone, encourage ageing-in-place, and attract families. These networks are safe and enjoyable for all, fostering widespread prosperity.
- Revisit the data regarding electrified micro-mobility in 2022.
- Focus on active transportation solutions that also accommodate electrified micro-mobility, they share many of the same constraints. This includes Complete Streets and Shared Streets.

3.4 Threats to Transportation Quality

3.4.1 Safety

Safety remains the major threat to transportation networks. Transportation engineers and planners use the "Hierarchy of Controls" when solving safety problems in the transportation network. The hierarchy separates different safety strategies on the basis of approach and effectiveness.

The Hierarchy of Controls for Safety



Many municipalities in the past focused on the types of controls with the lowest return on investment, Administrative Controls (Enforcement) and Personal Protective Equipment. Good money goes after bad and measurable improvements in safety are negligible. PPE puts the burden of safety on the user in an attempt to absolve engineers and planners from responsibility for the safety of those who use the infrastructure they design.

While many Administrative and PPE solutions have merit and deserve consideration at the individual, micro level, they should not be relied upon by administrators, planners, and engineers that should take a systemic, macro approach to transportation. Administrative controls are a failure of engineering controls, the space and environment have been incorrectly designed for their intended use. Relying on PPE is negligent design and planning of the transportation network.

The risk posed to human life on streets in urban contexts are well-documented, but elimination or substitution are only practicable in the rarest of situations. The initial costs are simply too high, the change in paradigm too drastic. It is for this reason that we recommend focused investment in Engineering Control solutions. We recommend that the Village commit to the design of transportation elements that isolate people from hazards and consider behavioural science in the application of transportation solutions. Many forms that subscribe to this strategy are discussed below.

Recommendations

- Use the Hierarchy of Controls in solving transportation safety problems
- Prioritize Engineering Controls. Substitution and Elimination are too difficult and costly; Administrative Controls and PPE are too ineffective.
- Momentum based design, if the momentum difference between two mods is over a threshold the two modes should be separated.
- Decrease speeds and volumes.
- Separation is essential for high level of subjective safety.
- Protected or separate cycle paths significantly increase levels of subjective safety, but must be built to a suitable standard, a minimum 2.5m width is recommended for one-way lanes, 4m width is recommended for two-way lanes.
- Paths for pedestrians are separate from faster modes or pedestrians are encouraged to face oncoming cyclists, meaning pedestrians walk on the left side of the multi-use path. This applies the same principles as when pedestrians walk on highways without sidewalks.
- No blind corners
- Well-lit, human scale lighting
- Wide cycle paths
- Clear zone between path and nearest visual obstruction
- Clear, litter free, and graffiti-free
- Good maintenance of nearby landscaping
- Adopt Vision Zero

3.4.2 A Fragmented Demand

The challenges of balancing the few modes of urban transportation in the 20th Century are nothing compared to the complexity of managing the further fragmentation of urban mode-shares today and into the near future. Electrified micromobility in the form of e-bikes, e-

skateboards, and e-scooters presents a complex challenge since these vehicles often travel faster than human-powered bicycles and pedestrians, but slower than automobiles. These technologies are bringing more ages into active transportation than ever before. The potential to have the full spectrum (Level 0 to Level 5) of autonomous vehicles sharing the road further increases the complexity facing urban transportation networks. Adding even more traffic signs and pavement markings is unfeasible; more robust solutions are needed.

Recommendation

- Network must be robust and resilient in the face of shifting patterns.
- Complete solutions are necessary, segments of the network need to accommodate a wide range of modes, select Complete Street and Share Street designs whenever possible.

3.4.3 Land Use

The primary challenge of any integrated land use and transportation plan is to balance the livability of the local community while accommodating transportation demand. Livability is focused on balancing vehicular service requirements with local business, neighbourhood and pedestrian needs. There is a fundamental interrelationship between land use and transportation planning.

There are three major factors that shape travel activity:

- Transportation demand—the characteristics, the needs, and the determinants of travel behaviour and desires of individuals;
- Transportation supply—the infrastructure, vehicles, and services that people use to travel; and
- Land use—the location of homes, workplaces, schools, and other places that people travel to and from.

These three components are tightly linked. Any change in one can lead to a change in the others. In combination, these components determine whether, why, when, where and how people make trips.

Recommendation

- Ensure VHHS is identified as a stakeholder for projects and activities within the FVRD transportation network.

3.4.4 Maintenance (Snow Clearing, Sweeping)

As protected active transportation infrastructure becomes the new standard, municipalities face new challenges in maintaining these spaces. Snow clearing and debris removal in these spaces is difficult using older road clearing equipment. New equipment will be necessary to remove snow and debris in protected active transportation infrastructure.

Recommendation

- Consider purchasing sweeping and clearing equipment that can be used on protected active transportation infrastructure.

4. Transportation Capital Plan – Setting Priorities

The most quantifiable metric of transportation infrastructure performance is infrastructure age and observed condition. This is the metric used to set the project plan baseline. Using a customized Microsoft Excel™ spreadsheet, current condition, drainage, traffic volume, budget, and infrastructure age data were input and used to generate a Dynamic Priority Matrix.

The Dynamic Priority Matrix was based on VHHS asset management data provided by VHHS operations personnel. CTQ allocated two experienced staff, for a period of approximately 3 days, to conduct a visual assessment of the pavement condition and stormwater systems for the entire Village paved road inventory. The Ministry Roads (Hot Springs Drive and Lillooet Ave) are the responsibility of the province, but inclusion within the Village condition assessment will support any request for upgrades and or identify maintenance deficiencies. Existing road widths, pavement and gravel shoulders, are included. Pavement markings were also reviewed and included in the assessment. Daily traffic volumes have been estimated for each section of road. This data has been aggregated to build a picture of pavement lifespan and usage.

The road and bridge information has been compiled into an Asset Management Plan spread sheet in the format required by the Village. The Plan conforms to the format currently used by the Village which consists of the costs and useful lives values of Village infrastructure. CTQ has reviewed the costs and useful lives values currently used in Village records and has made recommendations on modifications to these data. CTQ has also provided recommended increases to the annual costs.

The raw data collected has been coupled with the GIS information for other utilities and factored by the approximate traffic volumes and expected traffic growth volumes within the Village. This information was used to form a matrix of priority for road and infrastructure works. The matrix differentiates between 'preventative maintenance works' or 'preservation', which will be required to extend the life of the roads and storm systems, and 'full replacement works' or 'rehabilitation.' The matrix offers a 'priority' ranking identifying in which order the works for each segment of road should be undertaken based on the condition and age of the pavement and utilities within the right of way. The priority matrix is adjusted beyond expected service life data by traffic volumes, visual inspection scores, and finally by budgetary constraints to establish what year the already ranked segments are recommended to be undertaken.

Using this information and process, CTQ leveraged the capabilities of software to develop a dynamic transportation infrastructure management program. This program strategically balances multiple criteria to objectively determine infrastructure improvement and maintenance priorities, scheduling, and budgets. It responds dynamically to the Village's fluctuating parameters and constraints, which the Village can adjust over time to generate a new maintenance schedule. The analytical components of this program adjust to changing budgets,

public opinion, traffic, environmental conditions, and expected service life of infrastructure. CTQ's work will give the Village a dynamic tool that will provide value to the Village's budgeting, planning, and infrastructure efforts over the long term. The tool is dynamic and can adjust to shifting priorities, funding, and demographics in the Village. The recommendations in this report are static and give a snapshot of a point in time. The analytical tools add longevity to the plan, by applying the fundamental rationale behind these recommendations to changing budgetary constraints.

5. 2019 System Deficiencies

5.1 Ageing Assets

The Village of Harrison Hot Springs, like many municipalities across Canada, is responsible for many roads that are nearing the end of their service life. These roads must be repaired or replaced at significant expense. It will be challenging to fund new road improvements when significant resources will be required to maintain and rebuild the existing network. The transportation network has developed over a long period of time and requires continual maintenance and eventually complete reconstruction. **Appendix A** lists the age and condition related maintenance schedule. It also shows the capital costs of the works by year. These are a guideline; the schedule can be altered in response to funding constraints and road conditions that are better than extended. In some cases, crack sealing may be used to prolong the life of roadways by up to 10%, but conditions for this kind on performance must ideal.

The Dynamic Priority Matrix accounts for age, traffic, current condition, and budget. It is independent of any new construction projects and only accounts for maintenance related deficiencies which are weighted towards theoretical life expectancy. According to the VHHS listing of Tangible Capital Assets, the oldest top layers were installed in 1998 and therefore all surface courses within the VHHS have been in service for 21 years or less. The oldest base layers were installed in 1949 and therefore all base courses within the VHHS have been in service for 70 years or less, suggesting the approaching need for rehabilitation work. Arterial and collector roads have a theoretical design life span of 75 years until rehabilitation and require preservation re-surfacing at 25-year intervals. For local roads and lanes, the theoretical design life span is 75 years with preservation every 20 years.

One of the weaknesses of the VHHS transportation system is the lack of readily available information with respect to record drawing and construction conditions. Because VHHS has not yet adopted development guidelines which include design and installation policies, there has been some inconsistency in the requirements for the design and construction of municipal infrastructure. Other road work within the Village has also revealed installation practices which could adversely impact the service life of underground assets including missing or thin base and sub-base materials or thin asphaltic concrete pavement courses. To address these concerns in the future, it is strongly recommended that strict requirements be adopted in the new development guidelines.

Recommendations

- Adopt Best Practice Design guidelines, with modifications as necessary, for all construction of Municipal Works and Development projects within VHHS

5.2 Safety

Safety continues to be major focus of transportation network design. Many opportunities to improve the safety of VHHS roads exist.

5.2.1 Required Traffic Calming and Unsafe Local Road Intersections

Effective traffic calming can do more than simply slow automobiles. The best solutions slow automobiles, while also increasing the potential uses of streetscapes, fostering serendipitous community interactions, reducing carbon and toxin emissions. There are traffic calming solutions that only slow drivers down. Other traffic calming solutions, particularly those that re-engineer the street environment can increase micromobility and active transportation, increase accessibility, encourage community interactions, and expand capacity for trees and other plants, all while reducing the average roadway momentums and vehicles speeds.

Not surprisingly, almost 80% of all road user casualties are motor vehicle occupants. The safety of all users improves as transportation engineers and planners bring calm to roads and streets. Traffic calming and micromobility are fundamentally linked. What calms automobiles benefits all other road users. Most, if not all, active transportation solutions will help calm traffic. Shared Space, traffic path management, protected bike lanes, and better intersections will all help slow traffic.

Traffic calming starts with the design and engineering of space. Signs, paint lines, and vertical deflections are not enough. The most effective way to ensure high compliance with speed limits is design the spaces to be used at the intended speed.

No matter the mode, designing safe and efficient transportation networks starts with the design of intersections. The segments of road between intersections often receive most of the attention and investment despite the fact that they are the least dangerous parts of the transportation network.

TABLE 5.1 Roads Encouraging Non-Compliant Speeds

Road Name	Narrow Road / Tight Radius Corners	Vertical Deflections	Horizontal Deflections	Vehicle Path Management	Intersection Treatment
Alder Avenue	NO	NO	NO	NO	Yes
McPherson Road	NO	NO	NO	NO	NO
Hadway Drive	Yes	NO	NO	NO	NO

McCombs Drive	NO	SOME	NO	NO	SOME
Eagle Street	NO	NO	NO	NO	NO

MoTI Road Name	Narrow / Tight Radius Corners	Vertical Deflections	Horizontal Deflections	Vehicle Path Management	Intersection Treatment
Hot Springs Road	NO	NO	NO	NO	NO
Lillooet Avenue E	NO	NO	NO	NO	NO

Straight, wide, and flat roads facilitate "rat racing." Introducing complexity by bringing other modes safely into the streetscape help to keep speeds low. Intersections remain the most dangerous parts of the road. Signs and lines are often not enough to influence driver behaviours and enforcement shows diminishing returns with high costs. Careful engineering of the environment will result in safer outcomes and high return on investment.

Investments in linear infrastructure whether it is just shoulder enhancements and paint lines or if it is completely separate infrastructure will not generate maximum returns without first designing safe and efficient intersections that suit the demands of various modes. Cyclists are safer if they are moving. Pedestrians are safer if they are given refuge and provided optimum routes through intersections. Automobiles are quite flexible to various intersection configurations.

Recommendations

- Village-Wide Speed limit reduction to 40 km/h on Local Roads and Collectors
- Formalize the use of other modes on streets, narrowing perceived road width
- Vehicle path management at trouble intersections
- Increase space available to Active and Micro modes of transportation (Road Diet)
- Vehicle path management

5.2.2 Protected and Separate Active Transportation Infrastructure

While the existing active transportation network is separate from automobile traffic, it achieves this by sacrificing permeability, connectivity, and coverage. In other words, it does not bring people to where they are going, it is simply a destination for those seeking recreation. In order to increase the efficiency and use of the Village's active transportation network, it will have to share some of the right-of-way's currently devoted to automobile traffic. First generation active transportation infrastructure like shoulder enhancements, often referred to as "bike lanes," are not safe enough to draw cautious, but willing participants onto roadways. Second generation solutions have emerged over the past 20 years to address these concerns. These solutions offer protection or separation for vulnerable road users on Arterial and Collector roads. In the VHHS, there are no protected bike lanes that share road right-of-way's with automobiles.

Recommendations

- Install protected active transportation infrastructure on Arterial and Collector roads

5.2.3 Crossing Safety

The VHHS has several unsafe pedestrian crossings. The highest risk crossings are the long crossings on the MoTI owned LAE. According to the manual, high volume crossings or crossings that serve a large elderly population require overhead signage at the minimum. Unsafe crossings are listed in **TABLE 5.2.**

TABLE 5.2 Unsafe Crossing Locations

Major Road	Minor Road	Overhead Sign	Pedestrian Refuge/Median	Advance Stop Line
LAE	Midblock W	**No**	**No**	**No**
LAE	Midblock E	**No**	**No**	**No**
LAE	Eagle Drive	**No**	**No**	**No**
HSR	Miami River Drive	**No**	**No**	**No**
HSR	Poplar Avenue	**No**	**No**	**No**
HSR	Chestnut Avenue	**No**	**No**	**No**
HSR	Pine Avenue	**No**	**No**	**No**

Recommendations

- A "Road Diet" on Lillooet Avenue East that sees the narrowing of driving lanes by installing protected active transportation infrastructure, a median that can act as a pedestrian refuge, and a new parking configuration
- Overhead pedestrian crossing signage at all identified crossings
- Protected active transportation infrastructure on HSR
- Urbanization of HSR with grade-separated delineation of pedestrian spaces
- Advance stop lines at all midblock pedestrian crossings

5.3 Micromobility/Transportation Use Choice/Active Transportation

Fully integrated transportation network that offer a wealth of mode choice to residents and visitors achieve optimum levels of social, environmental, and economic sustainability. These networks are safer by design and indirectly safer due to the mixing of uses. At present, the Village's transportation network is divided into areas that heavily favour a single use over another. Re-configuring existing infrastructure is the most cost-effective way to encourage different modes to use the same spaces and same corridors.

Active modes are growing in popularity. Cycling numbers are on the rise in Canada. The statistics from Stats Canada represented in Figure 11 do not have the required fine-grained detail to directly relate to the situation in the VHHS. Stats Canada presents a snapshot of the circumstances in Canada's large and medium Census Metropolitan Areas (CMA's). This data focuses on commuters, not those simply looking for a form of recreation and exercise. For active commuters, micromobility including and active transportation is integrated into their

everyday lives. The proportion of overall commuters in Canada's CMAs has grown by 35.6% over the 20 years between 1996 and 2016 while the proportion of people commuting by bicycle or public transit has out paced this growth substantially. Bicycle commuter numbers are up 87.9% over the same period, public transit numbers are up 58.7%.

Again, these data were collected in Canada's medium to large metropolitan populations, the data is not directly applicable to the Village, but it is reasonable to assume that the majority of tourists visiting the Village and part time residents living in the Village are coming from one of these larger CMAs or similar cities world-wide and may enjoy the types of infrastructure that their communities have embraced. In fact, Canada's large CMA – what Stats Canada classifies in the category "Largest CMA" - with the highest proportion of active commuters is also the one closest to the Village. Vancouver, BC has a population of over 1.1 million commuters, 9.7% of which commute by active mode.

A local metric that applies at the municipal level and is easy to track is Daily Trips by Active Mode (DTAM). Nearby municipalities are currently achieving around 10% trips by bicycle or walking with targets of between 15% and 25% of trips using these modes by 2030. Setting a DTAM goal of 15% is feasible for the VHHS. A rudimentary process for achieving this goal is to re-configure the transportation network so that 30% (twice the DTAM goal) of linear assets are dedicated to active modes and electrified micromobility, by length, conforming to best practices for protected infrastructure on arterial and collector roads and shared spaces on local roads and lanes. Permeability and connectivity are much more important drivers of demand for active modes than overall infrastructure share but measuring the percentage of infrastructure allocated to active modes is more easily quantifiable. Some solutions will be more effective than others in inducing demand for active transportation, **TABLE 5.3** is a decision matrix for active transportation/micromobility projects on the basis of cost-to-benefit.

TABLE 5.3 Achieving Active Transportation Goals

Project	Infrastructure Type	Route Volume	Easy Construction	Length	Percentage of Network
McCombs Drive	Separate Two-Way Bike Lane	High	Yes	1777m	15%
Eagle Drive	Protected Two-Way Bike Lane	High	No	744m	6%
Miami River Drive	Protected Two-Way Bike Lane	Moderate	No	1158m	10%
Hadway Avenue	Vehicle Single - Laning, Over Sized Shoulder Bike Lanes	Low	Yes	252m	2%
McPherson Drive	Protected Two-Way Bike Lane	Miami River Drive	Yes	400m	3%
			Total:	4331m	36%

Recommendations

- Goal: 15% of daily trips by active mode or electrified micromobility by 2030, 30% of linear assets devoted to active modes
- Use Momentum Based Design for safer shared spaces
- Provide protected active transportation infrastructure on high-speed, high-volume roads
- Construct a fully permeable, wide-reaching, and connected active transportation network
- Modify existing infrastructure rather than building new
- Conduct a Household Travel Survey to measure the effectiveness of investments in Active Transportation

5.4 Bridges

5.4.1 Pedestrian Bridge 1

This bridge generally appeared to be in good condition. Some light honeycombing was noted at the concrete abutment on the west end of the bridge It should be noted that erosion was observed below the front face of each abutment (facing river). Current conditions are not of concern; however, CWMM recommends this erosion be monitored on an annual basis. It was noted that paint for wooden railing members was only fully applied along the interior face.

Recommendation

- CWMM recommends applying paint on all exposed faces to prolong the life span of these wooden members

5.4.2 Pedestrian Bridge 2

The bridge appears to be generally in good condition. It was noted that the protective coating at the pier columns has corroded exposing bare steel for the lower 600mm of the column. The remaining protective coating at steel members is starting to deteriorate. Current corrosion of steel columns is considered to be light with no section loss of steel members being observed. At the bridge deck it was noted that several caps for the C-shaped panels are missing, puddle weld connecting panel members are cracked, fasteners used to secure the traction mat to panels are corroding, and occasional attachment of traction mat is loose. All these items are not of structural concern.

Recommendation

- CWMM recommends that lost protective coating be re-instated to prevent further corrosion of steel components and thus prolong the lifespan of the bridge substructure

5.4.3 McCombs Drive – North Bridge

In general, the newer concrete bridge structure appeared to be in good condition as there were no obvious signs of distress or deterioration. In general, the existing timber substructure appeared to be in poor to very poor condition with movement being evident. Localized settlement was noted at the approach at the north/east corner of the bridge (App. E – Photo 3). Barriers along the north east section are leaning and are only partially bearing.

The condition of the treated timber piles of the abutments appeared to be good while the condition of the untreated timber piles of the wing walls varied between fair to very poor as some of these piles were observed being severely worn, weathered, leaning, and/or have partially failed (App. E – Photo 5). The cap beams on both abutments were observed to be in poor condition as they were heavily deteriorated and not sitting level on top of the piles and are leaning in the opposite direction of the piles (App. E – Photo 6 and 7). The timber ballast boards of the abutment appeared to be in fair condition while the timber ballast boards of the wingwall appeared to be in poor condition as they were heavily deteriorated. Plywood sheets have been added to the logs behind the piles near the upper portion of the abutment wall assembly to close gaps within the wall, likely an attempt to mitigate sloughing soil.

Overall the timbers in the abutments and wingwalls exhibit severe decay, stress, and vulnerability to ongoing movement. It is the opinion of CWMM that the primary evidence of movement to be seen has already occurred during the construction phase of the new bridge, likely during compaction of the new approach fill material. Some ongoing movement since construction of the new bridge is evident at the road surface through localized settlement of the asphalt at the north/east bridge corner. The existing timber bridge structure is unstable and will continue to exhibit ongoing movement. Such movement will likely result in the need for ongoing maintenance requirements at the road surface of the bridge approach. The timber structure is expected to fail, though failure will likely occur slowly through continued deterioration and movement of timber members, as has been the case since the construction of the new bridge. As the new bridge structure is supported on steel piles, a failure of the timber bridge structure will not impose an immediate stability risk to the new bridge structure. Instead, a failure of the timber bridge structure would result in backfill materials to spill into the creek and an accelerated erosion of approach fill materials causing settlement of the approach roadway.

The expected eventual failure of the timber bridge structure will need to be addressed in the not too distant future. The difficulty of removing the existing timber bridge structure and providing support for the bridge approach has been significantly magnified with the new bridge being constructed while leaving the existing timber bridge structure in place. There is no easy solution to remediate this issue. A workable solution to this problem will require input including but not limited to structural, hydrological, geotechnical, and environmental expertise.

Recommendation

- CWMM recommends inspecting the timber substructure on an annual basis for ongoing deterioration and movement

5.4.4 McCombs Drive – South Bridge

The timber of the abutment piles appears to be in poor to very poor condition while the piles along the wingwalls appear to be in good to fair condition. The timber piles at the abutments are severely leaning, split or cracked (App. F – Photo 4 and 5). The cap beams on both abutments were observed to be in poor to very poor condition. They are not sitting level on top of the piles and are leaning in the opposite direction of the piles (App. F – Photo 2). In addition, the cap beams toward the west half of the north and south abutment are no longer bearing on top of the piles and are severely split (App. F – Photo 5 and 6). The ballast boards behind the piles at the abutments are separating and partially caving as piles have moved and no longer provide support for the ballast boards.

Overall the timbers in the abutments exhibit severe decay, stress, and vulnerability to ongoing movement. It is the opinion of CWMM that the primary evidence of movement to be seen has

already occurred during the construction phase of the new bridge, likely during compaction of the new approach fill material. Some ongoing movement since construction of the new bridge is evident at the road surface through localized settlement of the asphalt at the north/east bridge corner and at the north approach to bride deck interface. The predominant movement is evident along the abutments while some minor movement is occurring along the wingwalls.

The existing timber bridge structure is unstable and will continue to exhibit ongoing movement.

The condition of the timber bride structure is similar to that of the timber structure at McCombs Road North bridge, although deterioration of the timber abutment has comparatively progressed further, and failure has already partially occurred. Although failure of timber abutments has started, the backfill materials are still being restrained by the timber structure and thus movement of the approach roadway is minor. The failure of the timber structure is expected to continue to slowly progress through continued deterioration and movement of timber members, as appears to have been the case since the construction of the new bridge to this date. As the new bridge structure is supported on steel piles, a failure of the timber abutments will not impose an immediate stability risk to the new bridge structure. Instead, a failure of the timber bridge structure would result in backfill materials to spill into the creek and an accelerated erosion of approach fill materials causing settlement of the approach roadway.

The expected eventual failure of the timber bridge structure will need to be addressed in the not too distant future. The difficulty of removing the existing timber bridge structure and providing support for the bridge approach has been significantly magnified with the new bridge being constructed while leaving the existing timber bridge structure in place. There is no easy solution to remediate this issue. A workable solution to this problem will require input including but not limited to structure, hydrological, geotechnical, and environmental expertise.

Recommendation

- CWMM recommends inspecting the timber substructure on an annual basis for ongoing deterioration and movement.

5.5 School Safety

A method of getting adults to consider their transportation choices is to have their own children explain the benefits of alternative travel modes. School travel plans (STP) identify real and perceived barriers to students walking and cycling and then develop a plan to address these over time.

Activities identified in STPs to increase the number of students walking or cycling to school can include:

- Parent education about parking congestion at student drop-off and afternoon pick-up
- School newsletters and school websites
- Community outreach and social media
- "Walking school bus" program (a volunteer walks a specified route at a specified time to and from school, meeting students along the way to avoid students walking alone)
- Re-visiting schools to assess programs over time

- Implementing road safety programs such as the Pace Car Program (aims to reduce vehicle speeds around schools)
- Annual pedestrian, cycling safety education, and skills programs
- Upgrades to crosswalks and signage
- The construction of missing sections of sidewalk and cycling facilities
- Implementation of the provincial Right to Bike Courses with the teachers previously trained in cycling skills
- Challenges and competitions
- Poster contests for Clean Air Day and Earth Day
- Promoting and supporting Earth Day, Bike to School and Work Week; and
- International Walk to School Day events

Recommendation

- Have students work with parents to develop School Travel Plans

5.6 Emergency Egress

The VHHS has only one point of ingress and egress. In the case of emergencies that necessitate evacuation, this could pose a serious risk.

Recommendation

- Ensure VHHS is identified as a stakeholder for projects and activities within the FVRD transportation network.

5.7 Parking Capacity

The north end of the Village contains several streets that could be better utilized to provide the public with close convenient parking while at the same time increasing their aesthetic value.

One new parking lot is being considered for east end of Lillooet Avenue. This will contribute up to 30 new parking stalls.

Parking facilities today are about more than predicting demand and providing spaces; today's parking facilities must support a wider range of municipal pursuits. The placement, size, cost, and type of parking options available will significantly impact land use, nearby and further afield. Managing the parking assets and selecting new additions must be done in a cost-effective manner that considers the long-term impacts of today's decisions.

Effective parking strategy balances the use, supply, and pricing of parking assets, no single objective governs. Revenue cannot be the sole objective; it will dampen development activity and push parking to other areas. Congestion caused by parking facilities and occupancy controls negatively affect economic activity. In other cases, providing large quantities of cheap parking may stimulate economic development, but it will not cover the operating and maintenance costs while negatively influencing the liveability of the community. A balanced parking strategy is one that has policies and pricing that drive economic development while generating the revenue needed to support the infrastructure.

In general, on-street parking is an asset in downtown environments, as it buffers pedestrians from vehicle traffic and adds a sense of activity and vibrancy to the streetscape. However, on-street parking requires valuable real estate that could be used for other purposes, for example, bike lanes, bioswales, or wider sidewalks.

The decision of whether on-street parking is appropriate in any given location depends on a variety of factors including the availability of other parking, competition for right-of-way by other modes, and the perceived ease of access to street front businesses. Users will tend to consistently select on-street parking spaces over off-street surface lots. The on-street spaces will experience the most use and the highest turnover when compared to off-street lots. In the Village, an abundance of wide, unused road right-of-way's provides ample opportunity for a variety of on-street parking options as well as room for active transportation and pedestrian friendly options.

Improvements in the north end can range from simple bump outs with space for parking to a full redesign with landscaping, seating, and parking options. On top of the on-street parking options, the village has several location options for new/improved off-street parking areas. Starting with upgrading and improving a few of the existing and unofficial parking areas would greatly improve the efficiency of these options.

Lillooet Avenue has a wide 30m road right-of-way that currently has a mix of angled and parallel parking options. Where these options are not present, the side of the road is still heavily but inefficiently used for parallel parking. Maximizing the use of the right-of-way will provide convenient parking options and ease of access to commercial and beachfront activities. Use of well-designed streetscapes will increase the visual appeal of the street while at the same time provide shade and rest areas for pedestrians. With the increased parking and landscaping, vehicular traffic will naturally slow which will in turn boost safety along the street.

Echo street would benefit from on-street parking due to its proximity to the downtown and waterfront. An opportunity also exists to connect the east end of Echo with the east end of Lillooet with a parking lot/parkway. This new connection would add valuable parking options as well as provide new access to the downtown/waterfront. A new parking area located at the west end of Lillooet would provide access to existing trails and park areas. Parking areas like this one will become increasingly important as the Village expands its active transportation network.

Increasing parking is a top priority for the Village. Two options were explored for increasing the Village's parking capacity; they both involve parking expansions on publicly owned land in the possession of the VHHS. These efforts are focused on areas north of the Miami River since this is the most highly trafficked area of the Village due to concentration of accommodations, commerce, and the beach.

Many of the Village road right-of-ways extend much beyond the extents of the paved portions of roadways. In these circumstances, widening of the roadway could provide additional parallel parking. Widening efforts can be undertaken in many ways. Varying levels of pavement and concrete works could achieve substantial increases to parking capacity in the Village. Any such treatments would lead to improved drainage. Some examples are presented below.
Roads that have the necessary ROW widths:

- Maple Street

- Echo Street
- Cedar Avenue
- Bear Avenue

Types of widening:

- Gravel Shoulders

The most cost-effective alternative for increasing parking on these roadways involves widening the roadway with gravel shoulders. Such shoulders would need to be a minimum of 2.5m wide.

- Pavement
- A simple pavement widening
- Parking Bays

Parking Bays offer the highest aesthetic value of any of the parking capacity increase strategies. Parking bays also act as traffic calming mechanisms. They can be used for parallel or angle parking.

Recommendations

- Allocate funds for an engineering study and cost estimate to determine how to increase parking at Mount Street Parking lot and along Maple Street, Echo Street, Cedar Avenue, and Bear Avenue.

5.8 Formal Service Request Process

Feedback from residents regarding elements of the transportation network typically come in the form of Service Requests. To date, the VHHS does not have a formal process for transportation network service requests. In order to efficiently and effectively act on resident service requests, a formalized Service Request process is recommended.

The simplest implementation of a Service Request Process would be the provision of Service Request Forms available to residents online and in hard copy format. Forms should collect the resident's name, address, and contact information. Requests should be sorted into the following categories:

- Maintenance: General, Boulevard, Bus Stops, Facility Damage, Garbage, Line Painting, Potholes, Sidewalks, Stair Maintenance, Snow Clearing
- Noise
- Drainage
- Signage
- Traffic Calming
- Active Transportation
- Parking
- Crossings / Intersections
- Speed Zone Reductions

The forms will need to collect the service location and a description of the issue. Residents should be provided the opportunity to include a photograph as well.

Review of Service Requests should escalate through the following steps as necessary:

- Formal response confirming receipt of request
- Review by public relations staff, immediate resolution if possible

- Review current projects and relevant Master Plans
- Review by Senior Staff
- Review by Operations Staff
- Review by Engineering Service provider or relevant professional
- Recommend action
- Perform action
- Confirm with resident that action has been taken

Requests should only escalate through the review sequence if immediate, trivial solutions are not possible and the request is reasonable. Requests for services not offered by the VHHS or not under the jurisdiction of the VHHS should be redirected to appropriate authorities. For instance, speed enforcement concerns should be redirected to the RCMP.

If a person should not want to use the official form, contact information for submission by phone or in person should be provided. Provision of an email address is not recommended; this will likely result in very high volumes of requests of widely varying formats.

Finally, residents will need to know how their personal information is handled. It is recommended that the VHHS handle the personal information collected through Service Request Forms in accordance with British Columbia's Freedom of Information and Protection of Privacy Act. A contact for residents who have questions about privacy should be provided.

Recommendations

- Formalize the Transportation Service Request process by providing Service Request Forms to residents
- Formalize the request review process to control time and expense
- Make phone or in-person submissions available, but avoid free-form email submissions
- Conform to British Columbia's Freedom of Information and Protection of Privacy Act

6. Future Development & Demand

6.1 Pedestrian Profile and Population Projection

Population growth is challenging to predict for a community such as Harrison Hot Springs. VHHS is heavily tourism-dependent, with a high percentage of seasonal residents. The lack of industry, combined with the single sector job opportunities, aging demographic, and relatively small population within the community mean that typical population growth models cannot be applied.

TABLE 6.1 compares Statistics Canada population and age data for VHHS.

TABLE 6.1 Census data

	1991	1996	2001	2006	2011	2016	Average Annual Growth Rate
Village of Harrison Hot Springs (VHHS)	655	898	1,343	1,573	1,468	1,242	3.2% (1991-2011)

Between 1991 and 2016, the population of VHHS increased an average of 3.2% per year. During the five-year interval between 2011 and 2016, the population **decreased** by 15.4%. Between 1991 and 2016, the population of the Village increased an average of 4.2% per year. During the five-year interval between 2006 and 2011, the population decreased by 6.7%.

Age	Total	Male	Female
0 to 14 years	9.7 %	10 %	10.2 %
15 to 64 years	54 %	52.2 %	55.5 %
65 years and over	36.3%	38.3 %	34.4 %
85 years and over	1.6 %	1.7 %	1.6 %
Average age of the population	52.4	53.2	51.5

The largest age range of the population is 65 and over (36%), with the average age for the Village being 52 (see chart below).

The profile of the VHHS population is distinct from the Fraser Valley Regional District **(FVRD)** and indeed from the province of BC, projecting that population 25, 50 or even 10 years into the future is challenging. **FIGURE 7** illustrates several different population projections for VHHS. The 1991-2016 census data is a heavy, bright green line, with the most recent census population (1,242) noted at year 2016. Statistical analysis of the census data results in a linear regression illustrated by the black dotted line, with a population forecast in the year 2036 of 2,100.

The blue dashed line, which is based on 3.87% cumulative annual growth (based on the VHHS census data between 1991 and 2016), results in a population in the year 2036 which is also out of line with the current declining population.

For resort focused communities, the disposable income of people both within and outside the province has a large impact on population growth and is strongly connected to the economy. when only the data within recent years between 1996 and 2016 is examined, the 2036 population is estimated at **2,100**. (black line).

So where does that leave the VHHS population projection over the next two decades? In the absence of a crystal ball, and with the development community subject to highs and lows similar to those experienced over the past 25 years, it is estimated that the 2036 population will be about 2,100 people. It will be important to re-evaluate this projection when the next census becomes available in 2021. A single large development, or sharp increase or decrease in the number of overnight tourist visits, could greatly impact the projected numbers.

Commuter Profiles for the Village show that of the 340 residents that reported commuting to work, 9% commute within the census subdivision, 14% commute to a different census subdivision but stay within their census division, and 5% commute to a different census division within the province. Many of those who commute drive themselves (270), 10 were passengers, 10 reported taking transit, 90 Walk, and 20 biked to work. Most commuters have a commute time of fewer than 15 minutes. The next largest group has a commute time of between 30 to 44 minutes.

Recommendation

- Re-evaluate population projections when then the next census data becomes available

6.2 Development Projections:

In 2016, a detailed study was conducted by the VHHS Department of Development and Community Services which projects ultimate buildout densities for all land within the Village. A copy of this report is included as **APPENDIX F**.

Based on OCP land use designations, except where zoning has been amended to a Comprehensive Development Zone, maximum future development is predicted to be comprised of 15,976m^2 commercial area, 1,240 potential new redevelopment units, and 45 units of residential infill (construction on vacant lots).

FIGURE 6 shows the Development Projection areas, as well as a breakdown of the type of development anticipated in each area.

Recommendations

- Re-evaluate population growth rate assumptions when the 2016 census data becomes available
- Establish a plan to increase portion of transportation network devoted to micromobility and active transportation within VHHS within 10 or 25 years
- Allocate funds for a minor Road and Bridge Master Plan update in 2022 to incorporate 2021 census data and re-evaluate multi-modal demand

6.3 Impact of Incremental Development:

TABLE 6.2 has been developed to "put numbers" to the impact that specific future development projects could have on the transportation system. The concept of Single-Family Equivalent (SFE) has been used, allowing for a direct comparison of residential and commercial units for demand and storage requirements. It can be seen from the table that a 40-unit condo development has less of an impact on the system than 40 detached housing lots (single family subdivision).

Table 6.2 illustrates that commercial development of the size likely to occur in VHHS will have minimal impact on the system. Residential development in the form of single or multi-family developments will have more impact, but in all cases population growth will not result in significant changes to LOS values in the Village.

TABLE 6.2 SFE Demands - Future Development

	Number Units	SFE	Automobiles
Single Family Subdivision	40	40	80
Multi Family	40	26.7	21
Campground Site	40	26.7	26
Commercial (C-4) 300 m^2	N/A	0.9	1
Commercial (C-5) 300 m^2	N/A	1	1
Commercial (Other) 300 m^2	N/A	2	2

7. Capital Works Plan and Cost Estimates

7.1 Improvements

TABLE 7.1 identifies and quantifies the capital improvements for each year of the 25 Year Capital Plan identified as part of this Road and Bridge Master Plan. Pricing and timing will depend on preliminary design and the ability to secure funding. Refer to the relevant sections for discussion and recommendations.

TABLE 7.1 Maintenance Plan and Capital Improvements (by Year of 25 Year Capital Plan)

Road Name	Road Type	Years	Purpose	Cost
Echo	Ave	2020-2037	Rehabilitation	$ 624,750
Alder	Ave	2021	Rehabilitation	$ 276,500
McPherson	Rd	2022	Rehabilitation	$ 807,250
Esplanade	Ave	2023-2027	Rehabilitation	$1,656,000
Lillooet	Ave	2025	Rehabilitation	$ 414,000
Cedar	Ave	2028-2029	Rehabilitation	$ 569,750
Spruce	St	2030-2031	Rehabilitation	$ 185,250
Chehalis	St	2031	Rehabilitation	$ 100,000
St Alice	St	2031-2037	Preservation	$ 100,000
McCombs	Dr	2032-2035	Preservation	$1,506,250
Maple	St	2035-2036	Rehabilitation	$ 195,000
Bear	Ave	2036	Rehabilitation	$ 48,750
Naismith	Ave	2036-2038	Preservation	$ 439,750
Miami	Dr	2038-2041	Preservation	$ 663,250
Eagle	St	2039-2040	Preservation	$ 631,500
Balsam	Ave	2040-2041	Preservation	$ 192,500
Lakberg	Cres	2041	Preservation	$ 34,250
Chestnut	Ave	2042	Preservation	$ 286,250
Cottonwood	Ave	2043-2044	Preservation	$ 224,250
Driftwood	Ave	2043	Preservation	$ 171,750
Walnut	Ave	2043-2044	Preservation	$ 168,250
Clover	Pl	2044	Preservation	$ 39,000
Fern	Pl	2044	Preservation	$ 39,000
Juniper	Pl	2044	Preservation	$ 33,000
Mount	St	2044	Preservation	$ 63,500
Poplar	St	2044	Preservation	$ 114,500
Emerald	Ave	2045	Preservation	$ 113,250
Pine	Ave	2045	Preservation	$ 191,500
Ramona	Pl	2045-2047	Preservation	$ 102,500
Diamond	St	2046	Preservation	$ 90,250
Hope	Pl	2046	Preservation	$ 91,500
Myng	Cres	2046-2047	Preservation	$ 174,500
Schooner	Pl	2046	Preservation	$ 131,500
Angus	Pl	2047	Preservation	$ 40,250
Hadway	Dr	2047	Preservation	$ 98,750

Utility revenue sources available to VHHS include:

- Developer Funding
- Grants
- Taxes
- Public Private Partnerships (P3)
- Tolls

It is important to examine each capital project in terms of the applicable revenue source(s). For a municipality such as VHHS, where there is no industrial base and costs are shouldered by a relatively small commercial and residential population, identifying and pursuing grant funding from higher levels of govemment is a necessity.

The VHHS transportation network has undergone numerous improvements over the past 5 years, including repaving on Myng Crescent, Hadway Drive, Ramona Place, Angus Place, Hope Place, Emerald Avenue, Diamond Street, Pine Avenue, and Lakburg Crescent. Funds should be placed in reserves annually for eventual replacement of these newer components, over the next 25 years capital asset renewal of other roadways will be the main focus.

7.2 Cost Estimates

Detailed project cost estimates are presented in **APPENDIX C**.

8. Recommendations

Recommendations are summarized in the Figures and Appendices.

9. Figures

Figures 1 through 2 are included in Appendix A – Maintenance Schedule and Capital Plan.
Figures 3 through 6 are included in Appendix B – Active Transportation.
Figure 7 is included in Appendix H – Population Projections.
Figure 8 is included in Appendix L – Stormwater Surface Structures

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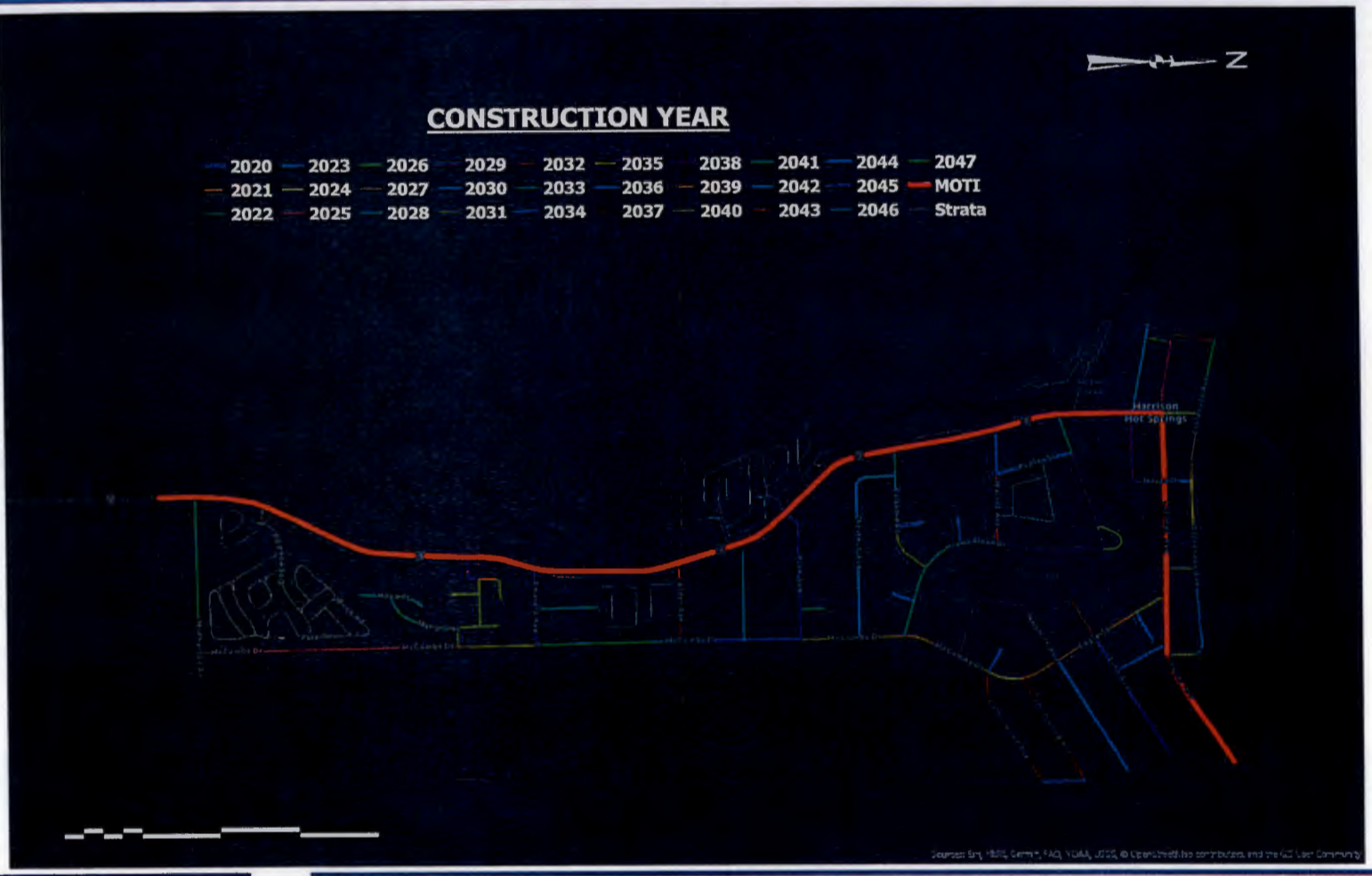
Appendix A – Maintenance Schedule and Capital Plan

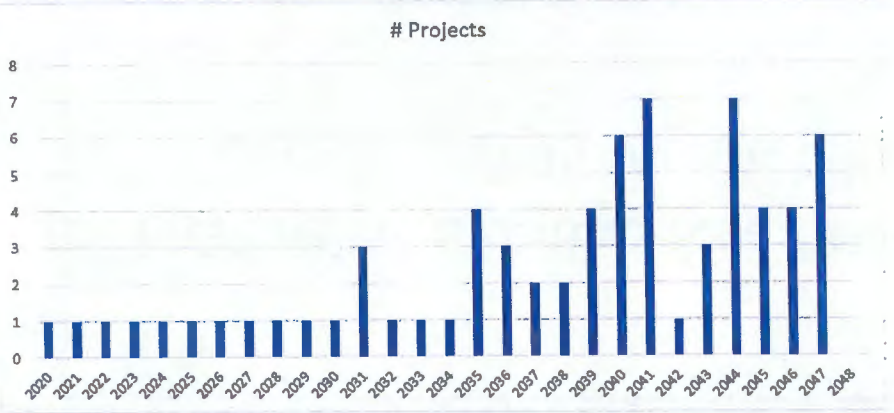
1. VHHS INFRASTRUCTURE
2. MOTI INFRASTRUCTURE

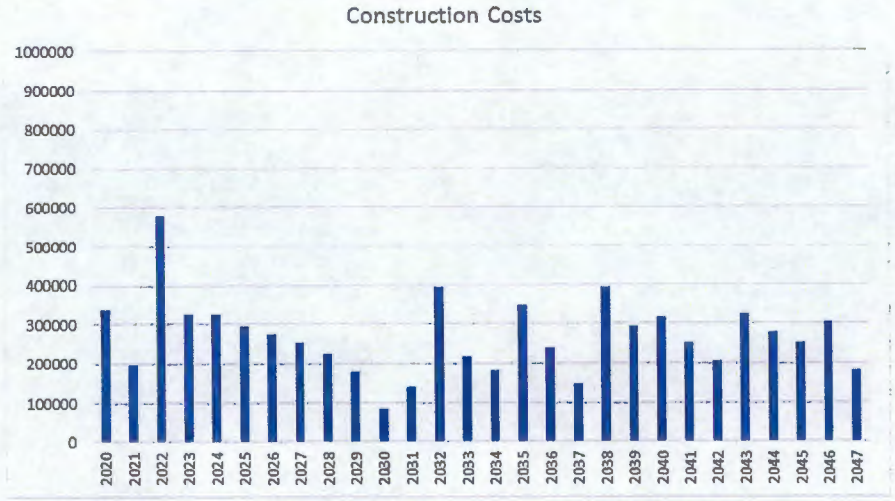


HARRISON HOT SPRINGS
Naturally Refreshed

CTQ

FIGURE 1: Existing Road Network and Next Maintenance Year





HARRISON HOT SPRINGS
Naturally Refreshed

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FIGURE 2: Maintenance Budget Plan

Project Name	Description	Year	Drainage	Sanitary	Water	Construction Cost	Engineering and C.A.	Class C Contingency (25%)	Total Cost
Echo Ave (East of Eagle)	Rehabilitation	2020	Yes			$ 341,000	$ 51,000	$ 85,250.00	$ 477,250
Alder Ave	Rehabilitation	2021				$ 198,000	$ 29,000	$ 49,500.00	$ 276,500
McPherson Rd (to Eagle	Rehabilitation	2022	Yes			$ 577,000	$ 86,000	$ 144,250.00	$ 807,250
Esplanade Ave (Chehalis to Spruce)	Rehabilitation	2023				$ 328,000	$ 49,000	$ 82,000.00	$ 459,000
Esplanade Ave (Maple to Chehalis)	Rehabilitation	2024				$ 326,000	$ 48,000	$ 81,500.00	$ 455,500
Lillooet Ave (Saint Alice to Hot Springs)	Rehabilitation	2025	Yes			$ 296,000	$ 44,000	$ 74,000.00	$ 414,000
Esplanade Ave (Saint Alice to Hot Springs)	Rehabilitation	2026				$ 276,000	$ 41,000	$ 69,000.00	$ 386,000
Esplanade Ave (Hot Springs to Maple)	Rehabilitation	2027				$ 254,000	$ 38,000	$ 63,500.00	$ 355,500
Cedar Ave (West of Hot Springs)	Rehabilitation	2028	Yes		Yes	$ 227,000	$ 34,000	$ 56,750.00	$ 317,750
Cedar Ave (Hot Springs to Maple)	Rehabilitation	2029	Yes			$ 180,000	$ 27,000	$ 45,000.00	$ 252,000
Spruce St (Lillooet to Echo)	Rehabilitation	2030				$ 88,000	$ 13,000	$ 22,000.00	$ 123,000
Chehalis St	Rehabilitation	2031				$ 72,000	$ 10,000	$ 18,000.00	$ 100,000
Spruce St (Esplanade to Lillooet)	Rehabilitation	2031				$ 45,000	$ 6,000	$ 11,250.00	$ 62,250
St Alice St S	Preservation	2031				$ 27,000	$ 4,000	$ 6,750.00	$ 37,750
McCombs Dr (McPherson to Hadway S)	Preservation	2032	Yes			$ 395,000	$ 59,000	$ 98,750.00	$ 552,750
McCombs Dr (Emerald to Alder)	Preservation	2033	Yes			$ 220,000	$ 33,000	$ 55,000.00	$ 308,000
McCombs Dr (Alder to Pine)	Preservation	2034	Yes			$ 183,000	$ 27,000	$ 45,750.00	$ 255,750
McCombs Dr (Hadway S to Emerald)	Preservation	2035	Yes			$ 120,000	$ 18,000	$ 30,000.00	$ 168,000
McCombs Dr (Pine to Chestnut)	Preservation	2035	Yes			$ 90,000	$ 13,000	$ 22,500.00	$ 125,500
Maple St (Cedar to Lillooet)	Rehabilitation	2035				$ 72,000	$ 10,000	$ 18,000.00	$ 100,000
McCombs Dr (Chestnut to Miami River Dr)	Preservation	2035		Yes		$ 69,000	$ 10,000	$ 17,250.00	$ 96,250
Maple St (Lillooet to Esplanade)	Rehabilitation	2036				$ 68,000	$ 10,000	$ 17,000.00	$ 95,000
Bear Ave	Rehabilitation	2036	Yes		Yes	$ 35,000	$ 5,000	$ 8,750.00	$ 48,750
Naismith Ave (East of Eagle)	Preservation	2036	Yes		Yes	$ 139,000	$ 20,000	$ 34,750.00	$ 193,750
Echo Ave (West of Eagle)	Rehabilitation	2037	Yes			$ 106,000	$ 15,000	$ 26,500.00	$ 147,500
St Alice St N	Preservation	2037				$ 45,000	$ 6,000	$ 11,250.00	$ 62,250
Miami River Dr (Poplar to Walnut)	Preservation	2038				$ 220,000	$ 33,000	$ 55,000.00	$ 308,000
Naismith Ave (West of Eagle)	Preservation	2038				$ 176,000	$ 26,000	$ 44,000.00	$ 246,000
Eagle St (Miami River to Naismith)	Preservation	2039				$ 90,000	$ 13,000	$ 22,500.00	$ 125,500
Eagle St (Bear to Echo)	Preservation	2039				$ 75,000	$ 11,000	$ 18,750.00	$ 104,750
Eagle St (Echo to Naismith)	Preservation	2039				$ 68,000	$ 10,000	$ 17,000.00	$ 95,000
Eagle St (Naismith to Driftwood)	Preservation	2039				$ 64,000	$ 9,000	$ 16,000.00	$ 89,000
Balsam Ave (Clover to Miami River)	Preservation	2040	Yes			$ 56,000	$ 8,000	$ 14,000.00	$ 78,000
Balsam Ave (Chestnut to Clover)	Preservation	2040	Yes			$ 55,000	$ 8,000	$ 13,750.00	$ 76,750
Miami River Dr (Loop)	Preservation	2040				$ 53,000	$ 7,000	$ 13,250.00	$ 73,250
Eagle St (Lillooet to Bear)	Preservation	2040				$ 53,000	$ 7,000	$ 13,250.00	$ 73,250
Eagle St (Driftwood to Cottonwood)	Preservation	2040				$ 52,000	$ 7,000	$ 13,000.00	$ 72,000
Eagle St (Cottonwood to Naismith)	Preservation	2040				$ 52,000	$ 7,000	$ 13,000.00	$ 72,000
Miami River Dr (Fern to Balsam)	Preservation	2041		Yes		$ 46,000	$ 6,000	$ 11,500.00	$ 63,500
Miami River Dr (Hot Springs to Poplar)	Preservation	2041	Yes	Yes		$ 43,000	$ 6,000	$ 10,750.00	$ 59,750
Miami River Dr (Juniper to McCombs)	Preservation	2041		Yes		$ 39,000	$ 5,000	$ 9,750.00	$ 53,750
Miami River Dr (Walnut to Fern)	Preservation	2041		Yes		$ 38,000	$ 5,000	$ 9,500.00	$ 52,500
Miami River Dr (Balsam to Juniper)	Preservation	2041		Yes		$ 38,000	$ 5,000	$ 9,500.00	$ 52,500
Balsam Ave (Hot Springs to Chestnut)	Preservation	2041				$ 27,000	$ 4,000	$ 6,750.00	$ 37,750
Lakberg Cres	Preservation	2041				$ 25,000	$ 3,000	$ 6,250.00	$ 34,250
Chestnut Ave	Preservation	2042				$ 205,000	$ 30,000	$ 51,250.00	$ 286,250
Cottonwood Ave	Preservation	2043				$ 132,000	$ 19,000	$ 33,000.00	$ 184,000
Driftwood Ave	Preservation	2043				$ 123,000	$ 18,000	$ 30,750.00	$ 171,750
Walnut Ave (Poplar to Eagle)	Preservation	2043				$ 73,000	$ 10,000	$ 18,250.00	$ 101,250
Walnut Ave (Hot Springs to Poplar)	Preservation	2044				$ 48,000	$ 7,000	$ 12,000.00	$ 67,000
Mount St	Preservation	2044				$ 46,000	$ 6,000	$ 11,500.00	$ 63,500
Cottonwood Pl	Preservation	2044				$ 29,000	$ 4,000	$ 7,250.00	$ 40,250
Clover Pl	Preservation	2044				$ 28,000	$ 4,000	$ 7,000.00	$ 39,000
Poplar St	Preservation	2044				$ 82,000	$ 12,000	$ 20,500.00	$ 114,500
Fern Pl	Preservation	2044				$ 28,000	$ 4,000	$ 7,000.00	$ 39,000
Juniper Pl	Preservation	2044				$ 24,000	$ 3,000	$ 6,000.00	$ 33,000
Pine Ave (Hot Springs to Lakberg)	Preservation	2045				$ 106,000	$ 15,000	$ 26,500.00	$ 147,500
Emerald Ave	Preservation	2045				$ 81,000	$ 12,000	$ 20,250.00	$ 113,250
Ramona Pl (Hot Springs to Hadway)	Preservation	2045				$ 33,000	$ 4,000	$ 8,250.00	$ 45,250
Pine Ave (Lakberg to Eagle)	Preservation	2045				$ 32,000	$ 4,000	$ 8,000.00	$ 44,000
Schooner Pl	Preservation	2046				$ 94,000	$ 14,000	$ 23,500.00	$ 131,500
Myng Cres (Hope to Hadway S)	Preservation	2046				$ 83,000	$ 12,000	$ 20,750.00	$ 115,750
Hope Pl	Preservation	2046				$ 66,000	$ 9,000	$ 16,500.00	$ 91,500
Diamond St	Preservation	2046				$ 65,000	$ 9,000	$ 16,250.00	$ 90,250
Hadway Dr N	Preservation	2047				$ 50,000	$ 7,000	$ 12,500.00	$ 69,500
Ramona Pl (North of Hadway)	Preservation	2047				$ 41,000	$ 6,000	$ 10,250.00	$ 57,250
Angus Pl	Preservation	2047				$ 29,000	$ 4,000	$ 7,250.00	$ 40,250
Myng Cres (Hadway S to Hadway N)	Preservation	2047				$ 24,000	$ 3,000	$ 6,000.00	$ 33,000
Hadway Dr S	Preservation	2047				$ 21,000	$ 3,000	$ 5,250.00	$ 29,250
Myng Cres (North of Hadway N)	Preservation	2047				$ 19,000	$ 2,000	$ 4,750.00	$ 25,750

Project Name	Description	Year	Drainage	Sanitary	Water	Construction Cost	Engineering and C.A.	Class C Contingency (25%)	Total Cost
Lillooet Ave (Maple to Chehalis)	Rehabilitatior	2020		Yes		$ 323,259	$ 48,000	$ 80,814.73	$ 452,074
Lillooet Ave (East of Chehalis)	Rehabilitatior	2023	Yes		Yes	$ 789,443	$ 118,000	$ 197,360.83	$ 1,104,804
Lillooet Ave (Hot Springs to Maple)	Rehabilitatior	2023				$ 255,769	$ 38,000	$ 63,942.28	$ 357,711
Hot Springs Rd (McPherson to Ramona)	Preservation	2032	Yes			$ 773,107	$ 115,000	$ 193,276.85	$ 1,081,384
Hot Springs Rd (Emerald to Alder)	Preservation	2032	Yes			$ 399,305	$ 59,000	$ 99,826.13	$ 558,131
Hot Springs Rd (Pine to Balsam)	Preservation	2032	Yes			$ 357,790	$ 53,000	$ 89,447.50	$ 500,238
Hot Springs Rd (Alder to Pine)	Preservation	2032	Yes			$ 326,176	$ 48,000	$ 81,543.88	$ 455,719
Hot Springs Rd (Balsam to Walnut)	Preservation	2032	Yes			$ 282,281	$ 42,000	$ 70,570.20	$ 394,851
Hot Springs Rd (Miami River to Cedar)	Preservation	2032	Yes			$ 198,679	$ 29,000	$ 49,669.63	$ 277,348
Hot Springs Rd (Ramona to Emerald)	Preservation	2032	Yes			$ 185,879	$ 27,000	$ 46,469.75	$ 259,349
Hot Springs Rd (Walnut to Miami River)	Preservation	2032	Yes			$ 175,265	$ 26,000	$ 43,816.28	$ 245,081
Hot Springs Rd (Lillooet to Esplanade)	Preservation	2032	Yes			$ 101,801	$ 15,000	$ 25,450.18	$ 142,251
Hot Springs Rd (South of McPherson)	Preservation	2032	Yes			$ 100,124	$ 15,000	$ 25,030.93	$ 140,155
Hot Springs Rd (Cedar to Lillooet)	Preservation	2032	Yes			$ 85,929	$ 12,000	$ 21,482.13	$ 119,411

Active Transportation								
Timeline	Project	Description	Next Maintenance	Construction Cost	Contingency (10%)	Engineering and CA	Total Cost	DCC Eligible
Near-Term	McCombs Drive	Separate/Protected Bike Lane	2033-2036	$ 166,257	$ 16,626	$ 24,939	$ 207,830	No
	McPherson Drive	Separate/Protected Bike Lane	2022	$ 62,556	$ 6,256	$ 9,383	$ 78,200	No
	Alder Avenue	Vehicle Path Management Shared Street / Single Laning	2021	$ 10,150	$ 1,015	$ 1,523	$ 12,690	No
	North Miami River Drive	Protected Two-Way Bike Lane	2042	$ 118,440	$ 11,844.0	$ 17,766	$ 148,050	No
Short-Term	Hadway-Ramona	Vehicle Path Management / Shared Street / Single Laning	2048	$ 12,650	$ 1,265	$ 1,898	$ 15,820	No
	Eagle Drive	Protected Two-Way Bike Lane	2040	$ 93,444	$ 9,344	$ 14,017	$ 116,810	No
	Miami River	Multi-Use Trail Upgrade	-	$ 34,545	$ 3,455	$ 5,182	$ 43,190	
	Spruce Street	Parking Protected Bike Lane (not including widening)	2032	$ 10,950	$ 1,095	$ 1,643	$ 13,690	No
Long-Term	Miami River Drive South	Vehicle Path Management / Shared Street / Single Laning	2042	$ 46,300	$ 4,630	$ 6,945	$ 57,880	No
	Echo Avenue	Parking Protected Bike Lane (not including widening)	2020	$ 22,850	$ 2,285	$ 3,428	$ 28,570	No
	Maple Street	Pedestrian Bridge (25%)	-	$ 1,500,000	$ 375,000	$ 112,500	$ 1,987,500	No

Parking								
Timeline	Project	Description	Next Maintenance	Construction Cost	Contingency (10%)	Engineering and CA	Total Cost	DCC Eligible
Near-Term	Mount Street	Parking Lot	2020	$ 75,000	$ 7,500	$ 3,750	$ 86,250	No
	Echo Avenue	Widening / Draiange / Neck Downs	2020	-	-	-	(Included in Maintenance Plan)	Partial
	Maple Street / Cedar Avenue	Widening / Draiange / Neck Downs	2027	-	-	-	(Included in Maintenance Plan)	Partial
Short-Term	Spruce Street	Widening / Draiange / Neck Downs	2031	-	-	-	(Included in Maintenance Plan)	Partial
Long-Term	Bear Avenue	Widening / Draiange / Neck Downs	2036	-	-	-	(Included in Maintenance Plan)	Partial

Crossings								
Timeline	Project	Description	Next Maintenance	Construction Cost	Contingency (10%)	Engineering and CA	Total Cost	DCC Eligible
Near-Term	Hadway-Ramona	Vertical Deflection	-	$ 1,500	$ 150	$ -	$ 1,650	No
Near-Term	Alder Avenue	Active Transportation Intersection / Vehicle Path Management	-	$ 7,500	$ 750	$ 2,000	$ 10,250	No
Short-Term	Hadway-Ramona	Active Transportation Intersection / Vehicle Path Management	-	$ 7,500	$ 750	$ 2,000	$ 10,250	No
Long-Term	Miami River Drive South	Active Transportation Intersection / Vehicle Path Management	-	$ 7,500	$ 750	$ 2,000	$ 10,250	No
	Eagle Drive Echo Avenue	Active Transportation Intersection / Vehicle Path Management	-	$ 7,500	$ 750	$ 2,000	$ 10,250	No

Additional Traffic Calming - Active Transportation, Crossings will Calm Traffic								
Timeline	Project	Description	Next Maintenance	Construction Cost	Contingency (10%)	Engineering and CA	Total Cost	DCC Eligible
Near-Term	Speed Limit Reduction	Village-Wide Reduction of Speed Limits	-	$ 15,000	$ 1,500	$ 1,200	$ 17,700	No
Short-Term	McCombs Drive	Vehicle Path Management	2033-2036	$ 56,550	$ 5,655.0	$ 8,482.50	$ 70,690	No
Long-Term	Eagle Drive	Vehicle Path Management	2040	$ 29,950	$ 2,995	$ 4,493	$ 37,440	No

Active transportation doesn't need to be installed at the same time as maintenance works, but some cost savings might be available if they happen in concert. The crossings projects listed should coincide with adjacent active transportation works.

Active Transportation									
Timeline	**Project**	**Description**	**Next Maintenance**	**Length**	**Construction Cost**	**Contingency (15%)**	**Engineering and CA**	**Total Cost**	**DCC Eligible**
MoTI	Lillooet Avenue	Protected Bike Lane / Median / Road Diet	2020	978	$ 337,410	$ 50,612	$ 50,612	$ 438,633	No
	Hot Springs Road	Separate/Protected Bike Lane	2032	2214	$ 110,700	$ 16,605	$ 16,605	$ 143,910	No
Parking									
Timeline	**Project**	**Description**	**Next Maintenance**		**Construction Cost**	**Contingency (15%)**	**Engineering and CA**	**Total Cost**	**DCC Eligible**
MoTI	Lillooet Avenue	Parking Lot / Angle or Parallel Parking Conversion	2020					(Included Above)	No
Crossings									
Timeline	**Project**	**Description**	**Next Maintenance**		**Construction Cost**	**Contingency (15%)**	**Engineering and CA**	**Total Cost**	**DCC Eligible**
MoTI	Lillooet Avenue Maple Street	Overhead Signs / Extend Neck Downs	2020		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Lillooet Avenue Maple Street	Overhead Signs / Advance Stop Lines / Neck Downs	2020		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Lillooet Avenue Spruce Street	Overhead Signs / Advance Stop Lines / Neck Downs	2020		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Lillooet Avenue Mount Street	Overhead Signs / Advance Stop Lines	2020		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Aspen Lane	Overhead Signs / Advance Stop Lines	2032		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Balsam Avenue	Overhead Signs / Advance Stop Lines	2032		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Walnut Avenue	Overhead Signs / Advance Stop Lines	2032		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Walnut Avenue	Overhead Signs / Advance Stop Lines	2032		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Miami River Drive	Overhead Signs / Advance Stop Lines	2032		$ 25,000	$ 3,750	-	$ 28,750	No
MoTI	Hot Springs Road Lillooet Avenue	Green Scramble for Pedestrians and Micromobility	2032		$ 25,000	$ 3,750	-	$ 28,750	No

Appendix D – Signage and Pavement Marking Plan

In accordance with MoTI recommended methodology, the following detailed Signage and Paint Marking recommendations are proposed:

Location: Driftwood Ave.

- Sign Type: PLAYGROUND AHEAD (SP-3)
- PLAYGROUND AHEAD signs are placed throughout the Village, even where there are no playgrounds.

Recommendation:
With the recommended speed limit change to 40km/h, these PLAYGROUND AHEAD signs will no longer be required. These signs should only be placed where there are playgrounds.

Chapter 5, Page 2

Location: Lakberg Cres.

- Sign Type: Unknown
- The 'No Parking – Snow Removal' sign is not recognized in MOT's 'Manual of Standard Traffic Signs & Pavement Markings' and is used inconsistently throughout the Village.

Recommendation:
This sign is not required. If the Village wishes to continue using this sign, all cul-de-sacs should have it for consistency.

Location: Pine Ave.

- Sign Type: Unknown
- This sign is not consistent with any other sign in the Village, nor is it recognized in MoTI's 'Manual of Standard Traffic Signs & Pavement Markings'.

Recommendation:
With the recommended speed limit change to 40km/h, this sign will no longer be required. Sign removal is advised.

Location: Pine Ave.

- Sign Type: BUMP
- Longitudinal sign placement varies throughout the Village. On some speed bumps, the sign is located right at the bump and on others it is located anywhere from 10m to 50m before.

Recommendation:
Consistency with sign location is ideal wherever possible. As a guide moving forward, have all BUMP signs at the speed bump.

Chapter 3 page 22

Location: Pine Ave. & McCombs Dr.

- Sign Type: STOP (R-1)
- The STOP sign is too close to the edge of pavement.

Recommendation:
Move STOP sign so that there is a minimum of 0.3m separation from pavement edge to the outermost side of sign. Please refer to Figure 1.1 (Chapter 1, Page 13) of the MOT's 'Manual of Standard Traffic Signs & Pavement Markings'.

Chapter 3 page 22

Location: McCombs Dr.

- Sign Type: SLOW (W-21)
- The SLOW sign is not useful as a speed bump should prompt cars to decelerate already.

Recommendation:
It is not necessary to remove these signs but moving forward, further usage is not warranted.

Chapter 3 page 9

Location: Lillooet Rd.

- Sign Type: CYCLIST CROSSING (W-129)
- There is no real indication of this cyclist crossing anywhere along this road.

Recommendation:
Either remove sign or identify crossing so that it is more apparent where bikes will be crossing Lillooet Road.

Chapter 3 page 26

Location: Alder Ave. & McCombs Dr.

- Sign Type: STOP (R-1) and BUMP
- Bump sign is not permitted on the same post as a stop sign; as well, the BUMP sign is redundant in this scenario.

Recommendation:
Remove BUMP sign.

Chapter 3 page 9

Location: Echo Ave. & Eagle St.

- Sign Type: NO THROUGH ROAD
- There are both NO THROUGH ROAD signs and NO EXIT signs in the village.

Recommendation:
Either use the NO THROUGH ROAD sign or the NO EXIT sign. Consistency in signage selection is recommended.

Chapter 3 page 28

Location: Eagle St. near Driftwood Ave.

- Sign Type: MAXIMUM SPEED LIMIT (R-4)
- MAXIMUM SPEED LIMIT is too low to the ground.

Recommendation:
Remove PLAYGROUND AHEAD sign and raise the MAXIMUM SPEED LIMIT sign so that the sign bottom is 1.5m from the ground.

Chapter 2 page 7

Location: Hadway Dr. & Myng Cres.

- Sign Type: STOP (R-1)
- STOP sign does not have its own post, it is grouped with a Block Watch sign, and would be better positioned closer to the back of curb.

Recommendation:
Put the STOP sign on its own post separate from the Block Watch sign. Move STOP sign closer to the curb so that it is more visible and matches the other stop signs lateral positioning in the Village.

Chapter 1 page 13

Location: Hot Springs Rd. & Walnut Ave.

- Sign Type: PEDSETRIAN CROSSWALK (SP-5)
- PEDSETRIAN CROSSWALK sign is visually obstructed by the power pole.

Recommendation:
Put the SP-5L sign on a new post where it will not be obstructed by the power pole. Leave the southbound SP-5R sign as is.

Chapter 5 page 3

Location: Hot Springs Rd. & Cedar Ave.

- Sign Type: BICYCLE (G-125)
- BICYCLE lane starts without signage.

Recommendation:
Have a "Bike Lane Begins" sign to indicate the start of the bike lane.

Chapter 4 page 16

Location: Lillooet Rd. &Hot Springs Rd

- Sign Type: BICYCLE (G-125)
- No signage at beginning of bicycle lane.

Recommendation:
Have a "Bike Lane Begins" sign to indicate the start of the bike lane.

Chapter 4 page 16

Location: Angus Dr. & Hadway Dr.

- Sign Type: STOP (R-1)
- STOP sign does not have its own post and would be better positioned closer to the back of curb. The stop bar is also missing at this intersection.

Recommendation:
All STOP signs should have their own post and should not be put on a light pole or hydro pole. Stop bars are also required at all STOP signs.

Chapter 1 page 13, Figure 7.2

Location: Angus Dr. & Hadway Dr.

- Sign Type: STOP (R-1)

Recommendation:
Relocate STREET NAME signs to proposed STOP signpost mentioned in previous example.

Location: McCombs Dr.

- Stop bar is not need here anymore.

Recommendation:
Stop bar to be removed

Location: Lillooet Rd. &Hot Springs Rd

- Bicycle pavement markings required on all bike lanes.

Recommendation:

[This came up during public feedback sessions.]

Appendix G – Proposed MoTI Cross Sections

Appendix H – Population Projections

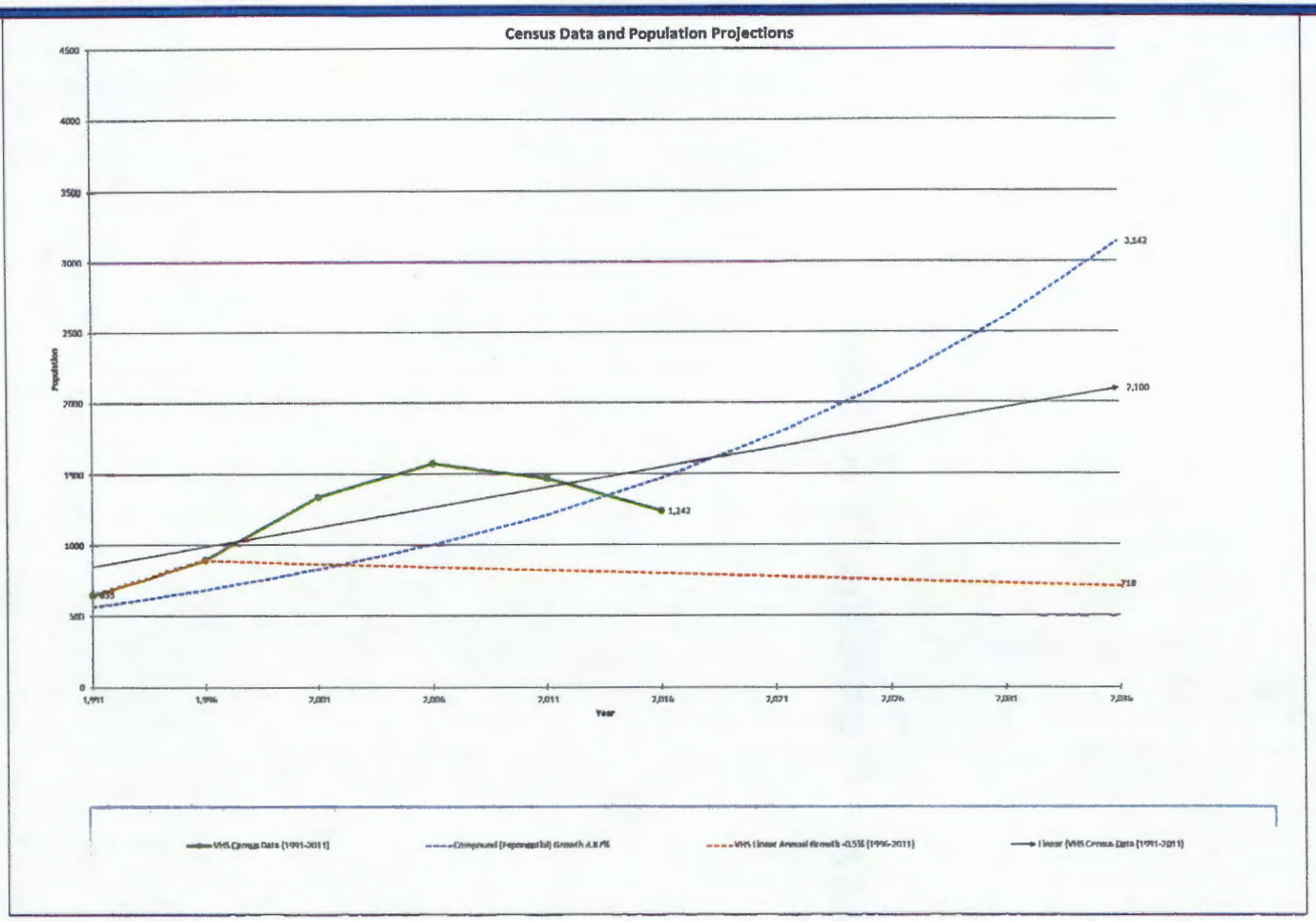

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FIGURE 7: Population Projections

Appendix I – Design Guidelines

1. VISION ZERO
2. MOMENTUM BASED DESIGN
3. ADVANCED STOP LINES

1. Vision Zero

How many traffic fatalities are acceptable? Zero. That's the motivation behind vision zero. Municipalities that have committed to vision zero have been driving the development of best practices for engineering safer roads. If humans don't use a technology as intended, then that technology is improperly engineered. The returns on trying to force behaviour on the population through enforcement are losses. Vision Zero reconciles the disparity between human behaviour and intended use through behaviour-focused engineering that is process driven. The criteria and guidelines are clear and provide the framework for design that reflects zero tolerance for traffic fatalities. A large number of pioneering municipalities have already set the bar and continue to move it further.

Vision Zero is a commitment that municipalities have made to target zero traffic fatalities per year. It sounds redundant to some, but the argument of these communities is that the design standards of the last century knowingly result in traffic deaths and that traffic fatalities are an accepted trade-off for maintaining higher speeds. From speeds that are too high to poorly designed crossings, many of the minimum road design standards are failing people in Canada. The Vision Zero concept doesn't necessarily present design standards, but commitment to the concept has driven the development of engineering standards in municipalities across the world. New York City (NYC) was one of the first large municipalities in North America to commit to Vision Zero and that city has developed some design standards motivated by their commitment. Vision Zero Street reduce automobile traffic, increase accessibility, and protect the most vulnerable street users. To qualify as a Vision Zero Street in NYC, a design must meet 3 core criteria:

1. Discourage speeding by design rather than by signage or pavement marking;
2. Encourage walking, biking, electrified micro-mobility use, and/or public transit use; and
3. Provide simple accessibility to all, regardless of age or physical ability.

Most collisions on urban streets are preventable and in cases where they are not, actions can be taken to ensure that they are not fatal whether between two automobiles or an automobile and a vulnerable road user.

From the NYC DOT:

> The Vision Zero Street Design Standard is a guide to planning, designing and building streets that can save lives. By showing how streets can be re-engineered to prevent dangerous driving and encourage multi-modal usage, it paves a practical way toward creating a city where crashes are preventable and deaths and serious injuries can be eliminated. These street design protocols were developed with the expertise of traffic engineers and urban planners, and are based on solutions already available in the New York City Department of Transportation's Street Design Manual.

Safety must be engineered into the fabric of the street itself. When this happens, behaviour is forced to change. In the best of cases, the change in driver behaviour happens subconsciously. Without major changes in street design, no city will eliminate deaths and serious injuries on its roads. Traditional roads, from the first century of the automobile, encourage speeding, limit space for unprotected humans, treat all unmotorized users as second-class citizens, and force cyclists into the most vulnerable position on the road. These roads will not reach zero. These flaws in design can all be fixed. Luckily for the Village, other municipalities have trodden much new ground in solving these problems.
The ranking of priorities for NYC Vision Zero is as follows:

This conforms nicely to the principles of 8-80 Cities discussed earlier. It also helps the Village achieve goals of environmental, social, and economic sustainability. It's less land intensive than

traditional roadways as well. There are many potential benefits, although, in the Village's case, some modifications would be needed to suit the Village's unique requirements.
A Vision Zero street according to NYC DOT, the North American Pioneers of Vision Zero, there are 10 elements that make up a Vision Zero street:

1. American Disabilities Act (Canada doesn't have a Disabilities Act) Compliance – Pedestrian access for people of all abilities
2. Public Amenities – wayfinding, benches, shelters, greenery, and other enhancements to public realm
3. Protected Bike Lanes – Protected by parked cars, barriers, greenery, or other infrastructure
4. Narrow Vehicle Lanes - reduce car lanes by 150mm or more to accommodate protected infrastructure
5. Pedestrian Islands – On all wide roads
6. Wide Sidewalks – A minimum of 2.5m wide
7. Dedicated Mass Transit Facilities – Tour bus shelters, etc.
8. Signal-Protected Pedestrian Crossings – Exclusive crossing time for pedestrians in all directions. Can be shared with other active modes. Green Scrambles, etc.
9. Dedicated Unloading Zone – for commercial traffic
10. Signal Retiming (not relevant to the Village)

We recommend the use of the NYC Vision Zero street design standards for the Village, particularly in discussions regarding MoTI jurisdiction on Hot Springs Road and Lillooet Avenue.

Appendix B – Active Transportation

1. NEAR-TERM ACTIVE TRANSPORTATION AND MICROMOBILITY INVESTMENTS
2. SHORT-TERM ACTIVE TRANSPORTATION AND MICROMOBILITY INVESTMENTS
3. LONG-TERM ACTIVE TRANSPORTATION AND MICROMOBILITY INVESTMENTS

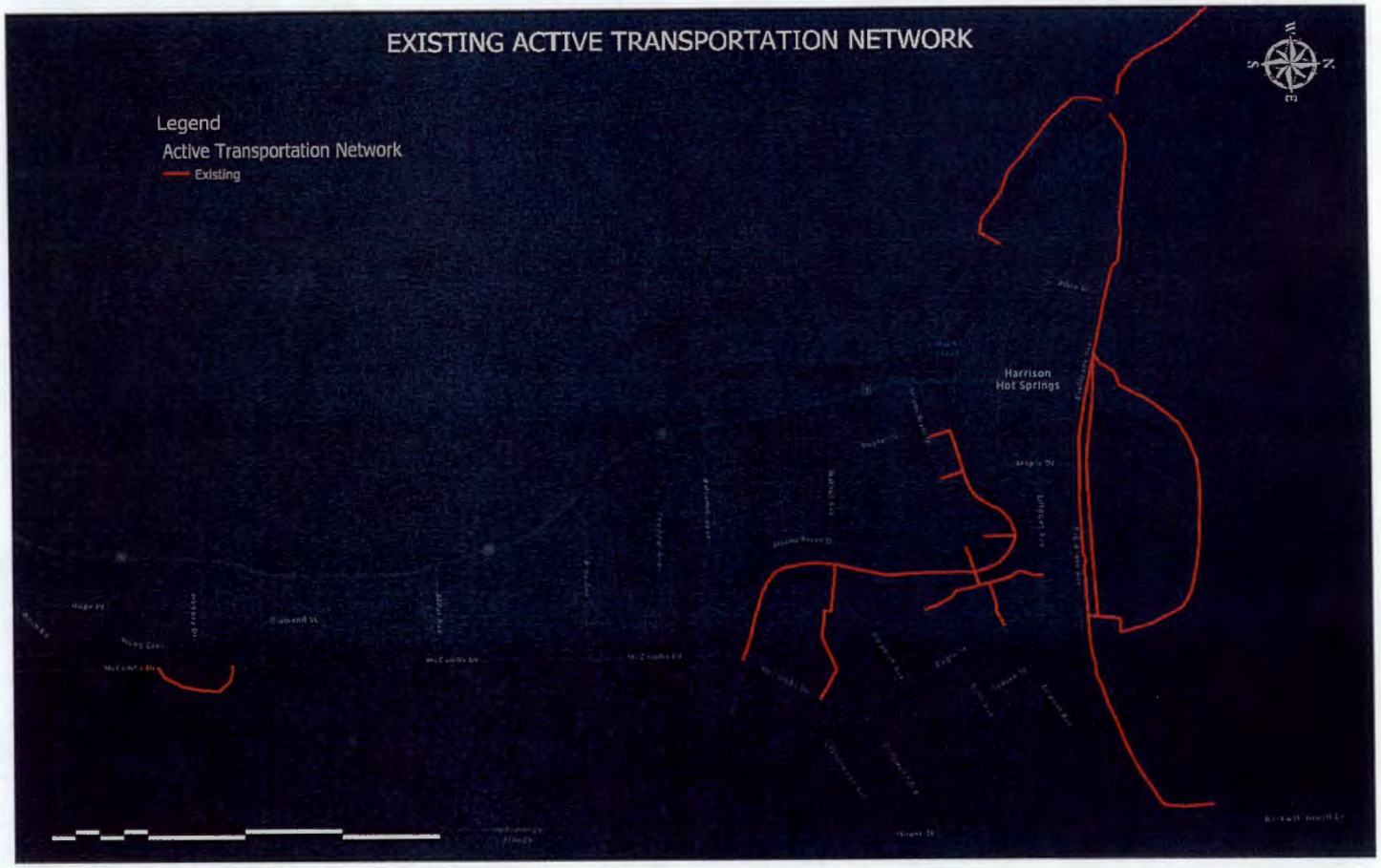

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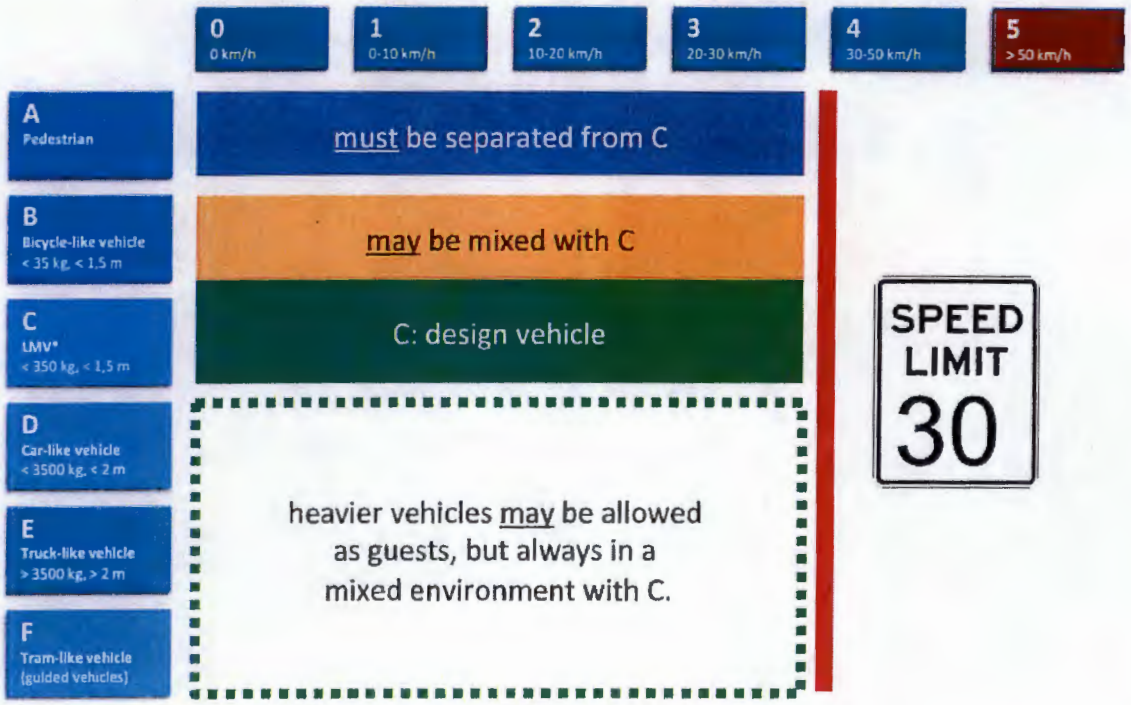
FIGURE 3: Existing Active Transportation

2. Momentum-Based Design

A solution that achieves both traffic calming goals while increasing micromobility and active transportation usage is to re-engineer roads classified as local roads or lanes for mixed use. To suit that aim, the Village will design these spaces for momentum, offering a slight shift in perspective from speed-based design. In this way, these environments will not exclude heavy modes of transportation, but the environment can be designed for pedestrians and wheelchairs as the primary user of the space.

Rather than dividing traffic into speed groups, modes are grouped into "momentum classes." The mass of every mode is a constant and speed is treated as a design variable. Momentum combines speed and mass. Designing by speed and separating modes by momentum relates each mode to the environment and forms the basis for the recommended classification. The momentum classification for each environment will inform decisions on which modes can mix and which cannot. Consider the following example illustrated by **Figure 17:**



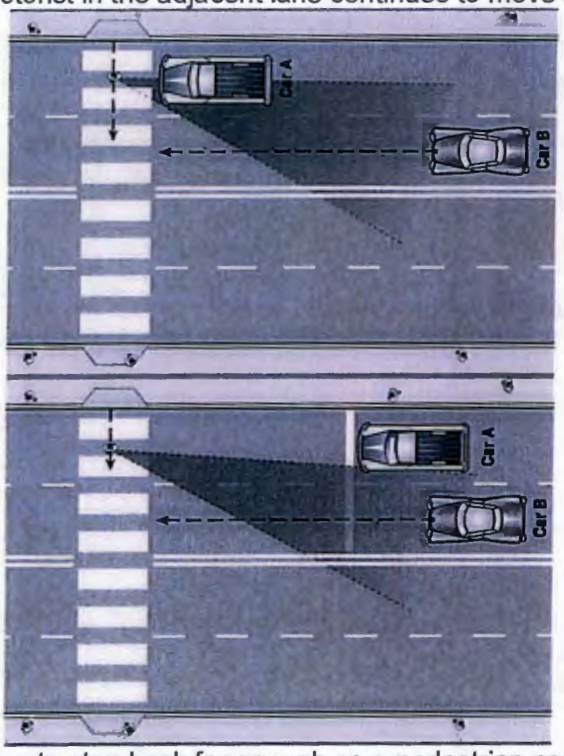
In the example: the environment has been designed for a 30 km/h speed for Light Motor Vehicles like mopeds and scooters. Pedestrians are too light to mix with the design vehicle at the design speed, but bicycles and e-bikes can achieve similar speeds and therefore are at less risk if mixed. Heavier vehicles must travel at the design speed to reduce the risk to the design vehicle and the environment must be designed for mixing at this speed.

Applying the same concepts with a pedestrian design "vehicle" with a design speed of 5 km/h, the space is shared by all users and designed to keep all users at 5 km/h. On the flip side, using automobiles at their optimum highway speed of 100 km/h means that no other modes can share the same space as the design vehicle since no other modes come close to this momentum. Momentum based design is necessary for Shared Streets, but has applications to other types of transportation infrastructure as well. These methods can integrate electrified micromobility more readily than traditional mode-based divisions of the space. Additionally, momentum-based analysis provides a clearer definition of what exactly pedestrian or cycling infrastructure should look like, avoiding tokenized marginalization to the periphery of the street.

Momentum-based design lets the space guide the speed of traffic. It uses Engineering Controls as discussed in the Hierarchy of Controls to guide driver behaviour.

3. ADVANCED STOP LINES

An advance stop or yield line placed 10 to 20 metres ahead of the crosswalk can greatly reduce the likelihood of a multiple-threat crash at unsignalized midblock crossings. A multiple-threat collision is a pedestrian crash that occurs when pedestrians must cross more than one lane in each direction. A motor vehicle in one lane stops and provides a visual screen to the motorist in the adjacent lane. The motorist in the adjacent lane continues to move and hits the pedestrian.



The line encourages drivers to stop back far enough so a pedestrian can see if a second motor vehicle is not stopping and, if necessary, be able to take evasive action. A setback of 10 metres for the line has been found to be a good distance for most purposes. Also, parking should be restricted between the stop or yield line and the crosswalk to allow for better visibility.

The advance stop or yield line should be supplemented with "Stop (or Yield) Here for Pedestrians" signs (R1-5, R1-5a, R1-5b, or R1-5c) to alert drivers where to stop to let a pedestrian cross. In the United States, one study found that use of a "sign alone reduced conflicts between drivers and pedestrians by 67 percent, and with the addition of an advanced stop or yield line, this type of conflict was reduced by 90 percent compared to baseline levels" (Van Houten & Malenfant, 1992).

R1-5

R1-5a

R1-5b

R1-5c

Studies have found that advance yield markings at midblock crossings can be particularly useful when combined with signs and beacons, such as the Pedestrian Hybrid Beacon or rectangular rapid flash beacon (RRFB).

Appendix J – Assessment Results

Road Segment	Traffic Level	Direction	EOP Width	Length	Lane 1 (L1)	Lane 2 (L2)	L1 Parking	L2 Parking	L1 Drainage	L2 Drainage
Esplanade Ave (Saint Alice to Hot Springs)	High	W	10.6		WBL	N/A - One Way	Reverse Angle	N/A - One Way	Sidewalk Barrier Curb	N/A - One Way
Esplanade Ave (Hot Springs to Maple)	High	E	10.6		EBL	N/A - One Way	Reverse Angle	N/A - One Way	Sidewalk Barrier Curb	N/A - One Way
Esplanade Ave (Maple to Chehalis)	High	E	15.6		EBL	N/A - One Way	Reverse Angle	N/A - One Way	Sidewalk Barrier Curb	N/A - One Way
Esplanade Ave (Chehalis to Spruce)	High	E	15.6		EBL	N/A - One Way	Reverse Angle	N/A - One Way	Ditch	N/A - One Way
St Alice St N	High	NS	11.3		NBL	SBL	Angle	Angle	Barrier Curb	Sidewalk Barrier Curb
St Alice St S	High	NS	11.3		NBL	SBL	Bus - Parallel	Angle	Barrier Curb	Sidewalk Barrier Curb
Cedar Ave (West of Hot Springs)	High	EW	14.45		EBL	WBL	Angle	Angle	Sidewalk Barrier Curb	Barrier Curb
Cedar Ave (Hot Springs to Maple)	High	EW	3.25; 11; 7.9		EBL	WBL	Angle	Angle	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Maple St (Cedar to Lillooet)	Moderate	NS	7.2		NBL	SBL	Angle	None	No Curb, no Sidewalk, no Ditch	Sidewalk Barrier Curb
Maple St (Lillooet to Esplanade)	Moderate	NS	7.2		NBL	SBL	Angle	None	No Curb, no Sidewalk, no Ditch	Sidewalk Barrier Curb
Chehalis St	High	NS	13.3		NBL	SBL	Angle	Angle	Barrier Curve - Boulevard - Sidewalk	Barrier Curve - Boulevard - Sidewalk
Spruce St (Lillooet to Echo)	High	NS	11.8		NBL	SBL	Parallel	None	No Curb, no Sidewalk, no Ditch	Ditch
Spruce St (Esplanade to Lillooet)	High	NS	11.8		NBL	SBL	Reverse Angle	Parallel	Barrier Curb	Barrier Curb
Echo Ave (West of Eagle)	Low	EW	6		EBL	WBL	Parallel	Parallel	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Echo Ave (East of Eagle)	Low	EW	6		EBL	WBL	Parallel	Parallel	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Cottonwood Pl	Low	EW	10.6		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Cottonwood Ave	Low	EW	8.2		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
McCombs Dr (McPherson to Hadway S)	High	NS	7.3		NBL	SBL	None	None	Ditch	Ditch
McCombs Dr (Hadway S to Emerald)	High	NS	7.3		NBL	SBL	None	None	Ditch	Ditch
McCombs Dr (Emerald to Alder)	High	NS	7.3		NBL	SBL	None	None	Ditch	Barrier Curb
McCombs Dr (Alder to Pine)	High	NS	7.8		NBL	SBL	None	None	Ditch	No Curb, no Sidewalk, no Ditch
McCombs Dr (Pine to Chestnut)	High	NS	8		NBL	SBL	None	None	Ditch	Rollober Curb
McCombs Dr (Chestnut to Miami River Dr)	High	NS	7.5		NBL	SBL	None	None	Ditch	Rollober Curb
Lillooet Ave (Saint Alice to Hot Springs)	High	EW	18.3		EBL	WBL	Parallel	Perpendicular	Barrier Curb	Sidewalk Barrier Curb
Lillooet Ave (Hot Springs to Maple)	High	EW	17.6		EBL	WBL	Parallel	Parallel	Barrier Curb	Sidewalk Barrier Curb
Lillooet Ave (Maple to Chehalis)	High	EW	13.9		EBL	WBL	Reverse Angle	Parallel	Sidewalk Barrier Curb	Sidewalk Barrier Curb
Lillooet Ave (East of Chehalis)	High	EW	11		EBL	WBL	Parallel	Parallel	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Pine Ave (Hot Springs to Lakberg)	Moderate	EW	7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Pine Ave (Lakberg to Eagle)	Moderate	EW	7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Lakberg Cres	Low	NS	7		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Poplar St	Moderate	NS	10.7		NBL	SBL	Parallel	Parallel	Sidewalk Rollover Curb	Rollober Curb
Walnut Ave (Hot Springs to Poplar)	Low	EW	10.7		EBL	WBL	Parallel	Perpendicular	Sidewalk Rollover Curb	Rollober Curb
Walnut Ave (Poplar to Eagle)	Low	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Fern Pl	Low	EW	8.8		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Balsam Ave (Hot Springs to Chestnut)	Moderate	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Balsam Ave (Chestnut to Clover)	Moderate	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Balsam Ave (Clover to Miami River)	Moderate	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Clover Pl	Low	NS	8.9		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Juniper Pl	Low	NS			NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Chestnut Ave	Low	EW	10.6		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Schooner Pl	Low	EW	8.9		EBL	WBL	Parallel	Parallel	Rollober Curb	Sidewalk Rollover Curb
Alder Ave	Moderate	EW	7.3;8.7		EBL	WBL	Parallel	Parallel	Barrier Curb	Barrier Curb
Emerald Ave	Moderate	EW	9		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Diamond St	Low	NS	9		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Hadway Dr N	Low	EW	9		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Hadway Dr S	Low	EW	6.9		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Myng Cres (Hope to Hadway S)	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Myng Cres (Hadway S to Hadway N)	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Myng Cres (North of Hadway N)	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Angus Pl	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Hope Pl	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Ramona Pl (Hot Springs to Hadway)	Moderate	NS			NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Ramona Pl (North of Hadway)	Low	NS	6.5		NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb
McPherson Rd (to Eagle	High	EW			EBL	WBL	Parallel	Parallel	Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Miami River to Naismith)	High	NS	10.7		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Cottonwood to Naismith)	High	NS	10.7		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Driftwood to Cottonwood)	High	NS	10.4		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Naismith to Driftwood)	High	NS	10.4		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Echo to Naismith)	High	NS	10.9		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Bear to Echo)	High	NS	10.9		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Eagle St (Lillooet to Bear)	High	NS	10.9		NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Bear Ave	Moderate	EW			EBL	WBL	Parallel	Parallel	Ditch	No Curb, no Sidewalk, no Ditch
Naismith Ave (West of Eagle)	Low	EW			EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Naismith Ave (East of Eagle)	Low	EW			EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Cottonwood Pl	Low	EW			EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Cottonwood Ave	Low	EW			EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Hot Springs to Poplar)	High	EW	10.8		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Poplar to Walnut)	High	EW	10.8		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Loop)	High	EW	10.8		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Walnut to Fern)	High	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Fern to Balsam)	High	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Balsam to Juniper)	High	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Miami River Dr (Juniper to McCombs)	High	EW	10.7		EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Hot Springs Rd (South of McPherson)	High	NS			NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (McPherson to Ramona)	High	NS			NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Ramona to Emerald)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Emerald to Alder)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Alder to Pine)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Pine to Balsam)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Balsam to Walnut)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Walnut to Miami River)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Miami River to Cedar)	High	NS			NBL	SBL	None	None	Sidewalk Barrier Curb	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Cedar to Lillooet)	High	NS			NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Hot Springs Rd (Lillooet to Esplanade)	High	NS			NBL	SBL	None	None	No Curb, no Sidewalk, no Ditch	No Curb, no Sidewalk, no Ditch
Driftwood Ave	Low	EW			EBL	WBL	Parallel	Parallel	Rollober Curb	Rollober Curb
Mount St	Low	NS			NBL	SBL	Parallel	Parallel	Rollober Curb	Rollober Curb

Road Segment	L1 Alligator Crack Severity	L1 Transverse Crack Severity	L1 Longitudinal Crack Severity	L1 Edge Breakdown Severity	L2 Alligator Crack Severity	L2 Transverse Crack Severity	L2 Longitudinal Crack Severity	L2 Edge Breakdown Severity
Esplanade Ave (Saint Alice to Hot Springs)	None	None	None	None	None	None	None	None
Esplanade Ave (Hot Springs to Maple)	None	None	None	None	None	None	None	None
Esplanade Ave (Maple to Chehalis)	None	Moderate	Moderate	None	None	None	None	None
Esplanade Ave (Chehalis to Spruce)	None	None	None	None	None	None	None	None
St Alice St N	None	None	None	None	None	None	None	None
St Alice St S	None	None	None	None	None	None	None	None
Cedar Ave (West of Hot Springs)	Severe	Severe	Severe	None	Severe	Severe	Severe	None
Cedar Ave (Hot Springs to Maple)	None	None	None	None	None	None	None	None
Maple St (Cedar to Lillooet)	None	None	None	None	None	None	None	None
Maple St (Lillooet to Esplanade)	None	None	None	None	None	None	None	None
Chehalis St	None	None	Minimal	None	None	None	None	None
Spruce St (Lillooet to Echo)	None	Minimal	Minimal	None	None	Minimal	Minimal	None
Spruce St (Esplanade to Lillooet)	None	Minimal	Minimal	None	None	Minimal	Minimal	None
Echo Ave (West of Eagle)	Severe	Moderate	None	None	Severe	Moderate	Moderate	None
Echo Ave (East of Eagle)	Moderate	None	Minimal	None	Severe	Minimal	Moderate	None
Cottonwood Pl	None	Minimal	Moderate	None	None	Minimal	Moderate	None
Cottonwood Ave	None	None	None	None	None	Minimal	Severe	None
McCombs Dr (McPherson to Hadway S)	Moderate	None	None	Moderate	Moderate	None	None	Moderate
McCombs Dr (Hadway S to Emerald)	Moderate	None	None	None	Moderate	None	None	Moderate
McCombs Dr (Emerald to Alder)	Moderate	None	None	None	None	None	None	None
McCombs Dr (Alder to Pine)	Moderate	None	None	None	None	None	None	None
McCombs Dr (Pine to Chestnut)	None	None	None	None	Moderate	None	None	None
McCombs Dr (Chestnut to Miami River Dr)	None	None	None	None	Moderate	None	None	None
Lillooet Ave (Saint Alice to Hot Springs)	Minimal	None	Moderate	None	Severe	None	None	None
Lillooet Ave (Hot Springs to Maple)	None	Moderate	None	None	Severe	None	Moderate	None
Lillooet Ave (Maple to Chehalis)	Moderate	Minimal	Minimal	None	Moderate	Minimal	None	None
Lillooet Ave (East of Chehalis)	Moderate	Minimal	Minimal	Severe	Moderate	None	Minimal	Severe
Pine Ave (Hot Springs to Lakberg)	None	None	None	None	None	None	None	None
Pine Ave (Lakberg to Eagle)	None	None	None	None	None	None	None	None
Lakberg Cres	None	None	None	None	None	None	None	None
Poplar St	None	None	Moderate	None	None	Minimal	Minimal	None
Walnut Ave (Hot Springs to Poplar)	Minimal	None	Minimal	None	Severe	Moderate	Severe	None
Walnut Ave (Poplar to Eagle)	None	None	None	None	Minimal	Moderate	None	None
Fern Pl	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	None	None
Balsam Ave (Hot Springs to Chestnut)	None	Minimal	Minimal	None	None	None	Minimal	None
Balsam Ave (Chestnut to Clover)	Moderate	None	Minimal	None	Moderate	Moderate	Minimal	None
[illegible]am Ave (Clover to Miami River)	Severe	Severe	Minimal	None	Severe	Severe	Minimal	None
[illegible]r Pl	Severe	Moderate	Minimal	Minimal	Severe	Moderate	None	None
[illegible]per Pl	Minimal	Moderate	None	None	Severe	Moderate	Minimal	None
[illegible]estnut Ave	Moderate	Minimal	Moderate	None	None	Moderate	Moderate	None
Schooner Pl	None	None	None	None	None	None	None	None
Alder Ave	Minimal	Moderate	Minimal	None	Minimal	Moderate	Minimal	None
Emerald Ave	None	None	None	None	None	None	None	None
Diamond St	None	None	None	None	None	None	None	None
Hadway Dr N	None	None	None	None	None	None	None	None
Hadway Dr S	None	None	None	None	None	None	None	None
Myng Cres (Hope to Hadway S)	None	None	None	None	None	None	None	None
Myng Cres (Hadway S to Hadway N)	None	None	None	None	None	None	None	None
Myng Cres (North of Hadway N)	None	None	None	None	None	None	None	None
Angus Pl	None	None	None	None	None	None	None	None
Hope Pl	None	None	None	None	None	None	None	None
Ramona Pl (Hot Springs to Hadway)	None	None	None	None	None	None	None	None
Ramona Pl (North of Hadway)	None	None	None	None	None	None	None	None
McPherson Rd (to Eagle	Severe	None	None	None	Severe	None	None	None
Eagle St (Miami River to Naismith)	None	None	None	None	None	None	None	None
Eagle St (Cottonwood to Naismith)	None	None	None	None	None	None	None	None
Eagle St (Driftwood to Cottonwood)	None	None	None	None	None	None	Severe	None
Eagle St (Naismith to Driftwood)	None	None	Moderate	None	Minimal	None	Severe	None
Eagle St (Echo to Naismith)	None	Minimal	None	None	None	None	Severe	None
Eagle St (Bear to Echo)	None	None	None	None	None	Moderate	Severe	None
Eagle St (Lillooet to Bear)	None	None	Minimal	None	None	None	None	None
Bear Ave	Severe	Severe	Severe	None	Severe	Severe	Severe	None
Naismith Ave (West of Eagle)	Severe	Severe	Severe	Moderate	Severe	Severe	Severe	Moderate
Naismith Ave (East of Eagle)	None	None	Minimal	None	None	None	None	None
Cottonwood Pl	None	Severe	Minimal	None	None	Severe	None	None
Cottonwood Ave	None	Minimal	Moderate	None	None	None	None	None
Miami River Dr (Hot Springs to Poplar)	None	None	None	None	None	None	None	None
Miami River Dr (Poplar to Walnut)	Moderate	None	Moderate	None	None	Minimal	Moderate	None
Miami River Dr (Loop)	None	None	None	None	None	None	None	None
Miami River Dr (Walnut to Fern)	None	Severe	Moderate	None	Moderate	None	None	None
Miami River Dr (Fern to Balsam)	None	Moderate	None	None	Severe	None	Moderate	None
Miami River Dr (Balsam to Juniper)	None	Moderate	Moderate	None	Moderate	Moderate	Severe	None
Miami River Dr (Juniper to McCombs)	None	None	None	None	None	None	None	None
Hot Springs Rd (South of McPherson)	None	None	None	None	None	None	None	None
Hot Springs Rd (McPherson to Ramona)	None	Moderate	Moderate	None	None	None	None	None
Hot Springs Rd (Ramona to Emerald)	None	None	Severe	None	None	None	None	None
Hot Springs Rd (Emerald to Alder)	None	Moderate	Severe	None	None	None	None	None
Hot Springs Rd (Alder to Pine)	None	Severe	Moderate	None	None	None	None	None
Hot Springs Rd (Pine to Balsam)	None	Minimal	None	None	None	None	None	None
Hot Springs Rd (Balsam to Walnut)	Moderate	Severe	Severe	None	None	None	None	None
Hot Springs Rd (Walnut to Miami River)	None	Minimal	Severe	None	None	None	None	None
Hot Springs Rd (Miami River to Cedar)	None	None	Severe	None	None	None	None	None
[illegible] Springs Rd (Cedar to Lillooet)	None	None	None	None	None	None	None	None
[illegible] Springs Rd (Lillooet to Esplanade)	None	None	None	None	None	None	None	None
[illegible]wood Ave	None	Minimal	Minimal	None	Minimal	Minimal	Moderate	None
[illegible]ant St	None	None	Minimal	None	None	Minimal	None	None

Road Segment	L1 Comments	L2 Comments
Esplanade Ave (Saint Alice to Hot		
Esplanade Ave (Hot Springs to M		
Esplanade Ave (Maple to Chehali		
Esplanade Ave (Chehalis to Spruc		
St Alice St N		
St Alice St S		
Cedar Ave (West of Hot Springs)		
Cedar Ave (Hot Springs to Maple		
Maple St (Cedar to Lillooet)		
Maple St (Lillooet to Esplanade)		
Chehalis St	Apparent patch joint, full length; recommend crack sealing	Under Construction during assessment, visually matches other lane
Spruce St (Lillooet to Echo)	Sealed Cracks; sealant in good condition; Good general condition; long. Cracking about 1.5m off EOP	Worn, but in good condition
Spruce St (Esplanade to Lillooet)		
Echo Ave (West of Eagle)	Some Crack Sealing, Not Effective; Sub-Surface Failure	Gravel Shoulder placed by residents
Echo Ave (East of Eagle)		
Cottonwood Pl	Crack Sealing degrading, recommend new crack seal; patch at address 5000, in good condition	Grass growing in gutter/EOP line
Cottonwood Ave		Patches around valves and MHs
McCombs Dr (McPherson to Had		
McCombs Dr (Hadway S to Emer		
McCombs Dr (Emerald to Alder)		
McCombs Dr (Alder to Pine)		
McCombs Dr (Pine to Chestnut)		
McCombs Dr (Chestnut to Miami		
Lillooet Ave (Saint Alice to Hot St	Utility trenches and many patches; new pavement at HSR intersection; settlement at valves	Utility trenches and many patches; new pavement at HSR intersection; settlement at valves
Lillooet Ave (Hot Springs to Mapl	Utility trenches and many patches; new pavement at HSR intersection; settlement at valves	Utility trenches and many patches; new pavement at HSR intersection; settlement at valves
Lillooet Ave (Maple to Chehalis)	Utility trenches and many patches; settlement at valves	Utility trenches and many patches; settlement at valves
Lillooet Ave (East of Chehalis)	severe structure failure	severe structure failure
Pine Ave (Hot Springs to Lakberg		
Pine Ave (Lakberg to Eagle)		
Lakberg Cres		
Poplar St		
Walnut Ave (Hot Springs to Popl		Longitudinal patch in good condition; Transverse patch in good condition
Walnut Ave (Poplar to Eagle)		
Fern Pl		
Balsam Ave (Hot Springs to Ches		Paver join crack; Trench settlement is moderate to severe, whole length
Balsam Ave (Chestnut to Clover)		
Balsam Ave (Clover to Miami Riv		
Clover Pl	Patches are still good	
Juniper Pl	Valve patch in poor condition	
Chestnut Ave	EBL showing some fatigure, worse condition than WBL	
Schooner Pl		
Alder Ave	Short Sidewalk at HSR	
Emerald Ave		
Diamond St		
Hadway Dr N	Parking Bays Beyond RC	
Hadway Dr S		
Myng Cres (Hope to Hadway S)	Parking Bays Beyond RC	
Myng Cres (Hadway S to Hadway	Parking Bays Beyond RC	
Myng Cres (North of Hadway N)	Parking Bays Beyond RC	
Angus Pl	Parking Bays Beyond RC	
Hope Pl	Parking Bays Beyond RC	
Ramona Pl (Hot Springs to Hadw		
Ramona Pl (North of Hadway)	Parking Bays Beyond RC	
McPherson Rd (to Eagle	Potholes throughout, some new, patches failing	Utility trench full length, differential settlement and wear; severe transverse trench settlement multiple locations
Eagle St (Miami River to Naismit	Root damage	
Eagle St (Cottonwood to Naismi		
Eagle St (Driftwood to Cottonwo		
Eagle St (Naismith to Driftwood)		Alligator cracking 1m off EOP
Eagle St (Echo to Naismith)		
Eagle St (Bear to Echo)		
Eagle St (Lillooet to Bear)		
Bear Ave		
Naismith Ave (West of Eagle)		
Naismith Ave (East of Eagle)		MH settlement; Grass between EOP and gutter
Cottonwood Pl		
Cottonwood Ave		
Miami River Dr (Hot Springs to Pc		
Miami River Dr (Poplar to Walnu		
Miami River Dr (Loop)		
Miami River Dr (Walnut to Fern)	Utility Crossing, Settlement	
Miami River Dr (Fern to Bals.		Aligtor Cracking around path at Fern
Miami River Dr (Balsam to Junipe		
Miami River Dr (Juniper to McCo		Aligator Cracking around valves at Juniper
Hot Springs Rd (South of McPher		
Hot Springs Rd (McPherson to Ra	New Pavement North of Miami River	
Hot Springs Rd (Ramona to Emer		
Hot Springs Rd (Emerald to Alder		
Hot Springs Rd (Alder to Pine)	Trench Patch Settlement	
Hot Springs Rd (Pine to Balsam)	Trench Patch Settlement	
Hot Springs Rd (Balsam to Walnu	Intersection patch in good condition at Balsam; Pavement Failure in front of Fire hall	
Hot Springs Rd (Walnut to Miami		
Hot Springs Rd (Miami River to C		
Hot Springs Rd (Cedar to Lillooet	Paver joint about to need crack sealing	
Hot Springs Rd (Lillooet to Esplar		
Driftwood Ave		
Mount St		

Road Segment	General Comments
Esplanade Ave (Saint Alice to Hot Springs)	
Esplanade Ave (Hot Springs to Maple)	
Esplanade Ave (Maple to Chehalis)	
Esplanade Ave (Chehalis to Spruce)	
St Alice St N	Pavement in Good Condition; Curb and Gutter in Good Condition
St Alice St S	
Cedar Ave (West of Hot Springs)	Trench settlement, multiple locations; severe surface wear; structural failure; recommend reabilitation
Cedar Ave (Hot Springs to Maple)	
Maple St (Cedar to Lillooet)	
Maple St (Lillooet to Esplanade)	
Chehalis St	
Spruce St (Lillooet to Echo)	
Spruce St (Esplanade to Lillooet)	
Echo Ave (West of Eagle)	Some trenches and patches, no settlement
Echo Ave (East of Eagle)	
Cottonwood Pl	Cracks have extended beyond crack sealing/patches, recommend re-sealing
Cottonwood Ave	Cracks have extended beyond crack sealing/patches, recommend re-sealing
McCombs Dr (McPherson to Hadway S)	Edge breakdown, unsuitable pavement structure, 0.75m off of EOP
McCombs Dr (Hadway S to Emerald)	Edge breakdown, unsuitable pavement structure, 0.75m off of EOP
McCombs Dr (Emerald to Alder)	
McCombs Dr (Alder to Pine)	
McCombs Dr (Pine to Chestnut)	
McCombs Dr (Chestnut to Miami River Dr)	
Lillooet Ave (Saint Alice to Hot Springs)	Trench settlement, multiple locations; severe surface wear; structural failure; recommend reabilitation
Lillooet Ave (Hot Springs to Maple)	
Lillooet Ave (Maple to Chehalis)	Drainage from 50mm pipe directly to Miami River
Lillooet Ave (East of Chehalis)	Sidewalk Replacement necessary
Pine Ave (Hot Springs to Lakberg)	Paved 2018
Pine Ave (Lakberg to Eagle)	Paved 2018
Lakberg Cres	Paved 2018
Poplar St	Sidewalk does not connect to Miami River Drive
Walnut Ave (Hot Springs to Poplar)	Grass between EOP and Gutter; Some crack sealing, recommend re-sealing
Walnut Ave (Poplar to Eagle)	Grass between EOP and Gutter; Some crack sealing, recommend re-sealing
Fern Pl	Grass between EOP and Gutter; Some crack sealing, recommend re-sealing; pavement failure approximately 1 m from curb
Balsam Ave (Hot Springs to Chestnut)	Grass between EOP and Gutter; Recommend new crack sealing
Balsam Ave (Chestnut to Clover)	Grass between EOP and Gutter; Recommend new crack sealing
Balsam Ave (Clover to Miami River)	Grass between EOP and Gutter; Recommend new crack sealing
[illegible]er Pl	Recommend new crack-sealing; Grass growin in cracks
[illegible]er Pl	Recommend new crack-sealing; Grass growin in cracks; CB lead trench settlement
[illegible]tnut Ave	Recomemend new crack-sealing
[illegible]ooner Pl	New pavement; waiting for top lift; Home construction 50% complete; re-assess after top lift
Alder Ave	New pavement from HSR 100m west; trench settlement throughout east section
Emerald Ave	New Pavement, curb, and gutter (2018)
Diamond St	New Pavement, curb, and gutter (2018)
Hadway Dr N	New Pavement, curb, and gutter (2018)
Hadway Dr S	New Pavement (2018); No Parking Bay
Myng Cres (Hope to Hadway S)	New Pavement, curb, and gutter (2018)
Myng Cres (Hadway S to Hadway N)	New Pavement, curb, and gutter (2018)
Myng Cres (North of Hadway N)	New Pavement, curb, and gutter (2018)
Angus Pl	New Pavement, curb, and gutter (2018)
Hope Pl	New Pavement, curb, and gutter (2018)
Ramona Pl (Hot Springs to Hadway)	New Pavement, curb, and gutter (2018)
Ramona Pl (North of Hadway)	New Pavement, curb, and gutter (2018)
McPherson Rd (to Eagle	Structural and surface failures; recommend rehabilitation
Eagle St (Miami River to Naismith)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Cottonwood to Naismith)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Driftwood to Cottonwood)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Naismith to Driftwood)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Echo to Naismith)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Bear to Echo)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Eagle St (Lillooet to Bear)	Some large patches in good condition; settlement and cracking around MHs; Previous crack sealing is wearing, recommend new crack sealing
Bear Ave	
Naismith Ave (West of Eagle)	Pavement Fatigue
Naismith Ave (East of Eagle)	Ditches come and go, many filled; severe alligator cracking
Cottonwood Pl	Crack sealing in good condition; recommend localised preservation work, stay ahead of problems
Cottonwood Ave	Crack sealing in good condition; recommend localised preservation work, stay ahead of problems
Miami River Dr (Hot Springs to Poplar)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Poplar to Walnut)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Loop)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Walnut to Fern)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Fern to Balsam)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Balsam to Juniper)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Miami River Dr (Juniper to McCombs)	Small Amount of Crack Sealing, Grass between EOC and Gutter; Longitudinal and Transverse cracks starting to form; Trench Settlement Throughout; Evidence of compaction problems
Hot Springs Rd (South of McPherson)	
Hot Springs Rd (McPherson to Ramona)	
Hot Springs Rd (Ramona to Emerald)	
Hot Springs Rd (Emerald to Alder)	
Hot Springs Rd (Alder to Pine)	
Hot Springs Rd (Pine to Balsam)	
Hot Springs Rd (Balsam to Walnut)	
Hot Springs Rd (Walnut to Miami River)	
Hot Springs Rd (Miami River to Cedar)	
Hot Springs Rd (Cedar to Lillooet)	
Hot Springs Rd (Lillooet to Esplanade)	
[illegible]riftwood Ave	
[illegible]ant St	

Appendix K – Bridge Photo Inventory

1. PEDESTRIAN BRIDGE 1
2. PEDESTRIAN BRIDGE 2
3. McCOMBS DRIVE NORTH BRIDGE
4. McCOMBS DRIVE SOUTH BRIDGE

1, PEDESTRIAN BRIDGE 1

Photo 1: Side view of bridge

Photo 2: Approach view of bridge

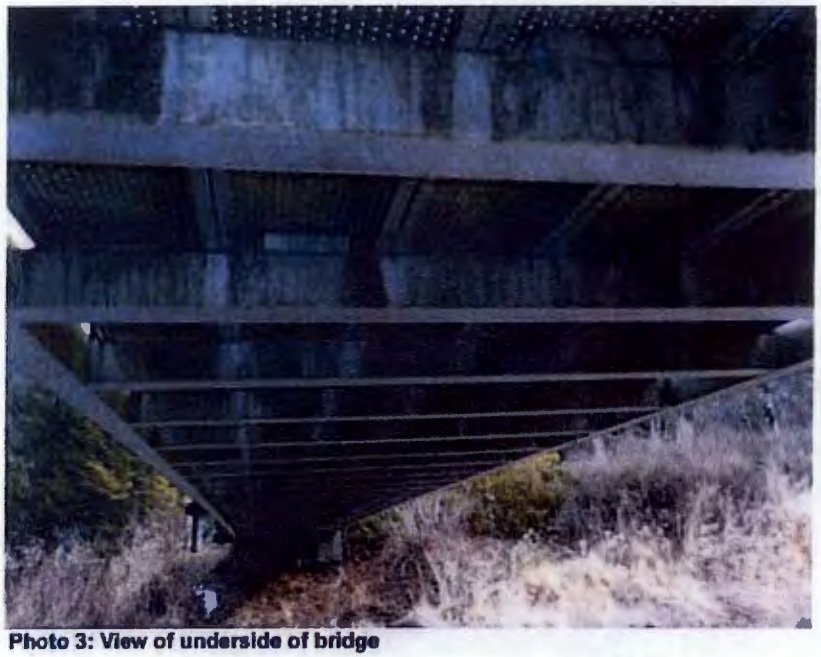


Photo 3: View of underside of bridge

Photo 4: View of concrete abutment at west end. Light honeycombing at bottom left corner

Photo 5: View of concrete abutment at east end. Erosion of abutment should be monitored.

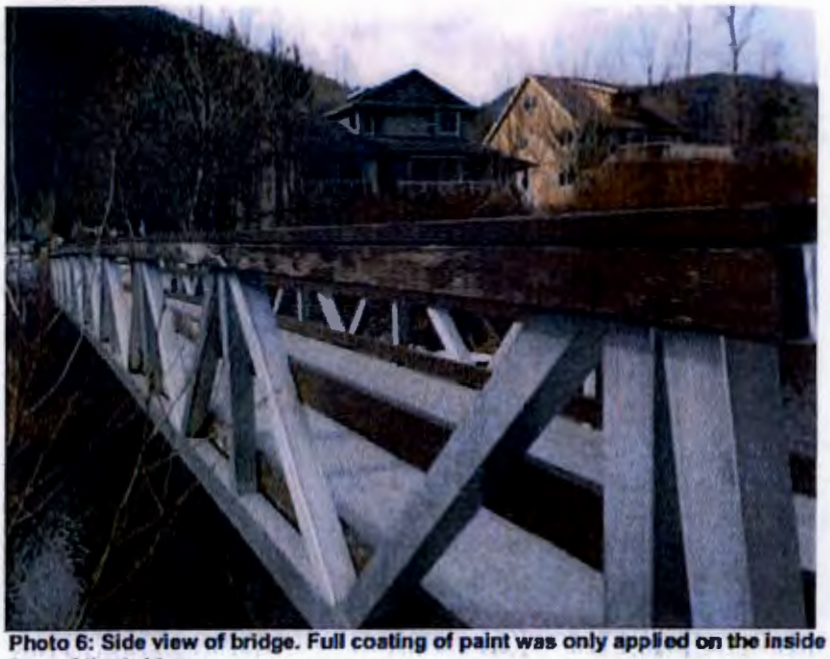


Photo 6: Side view of bridge. Full coating of paint was only applied on the inside face of the bridge.

2. PEDESTRIAN BRIDGE 2

Photo 1: Side view of bridge

Photo 2: Approach view of bridge

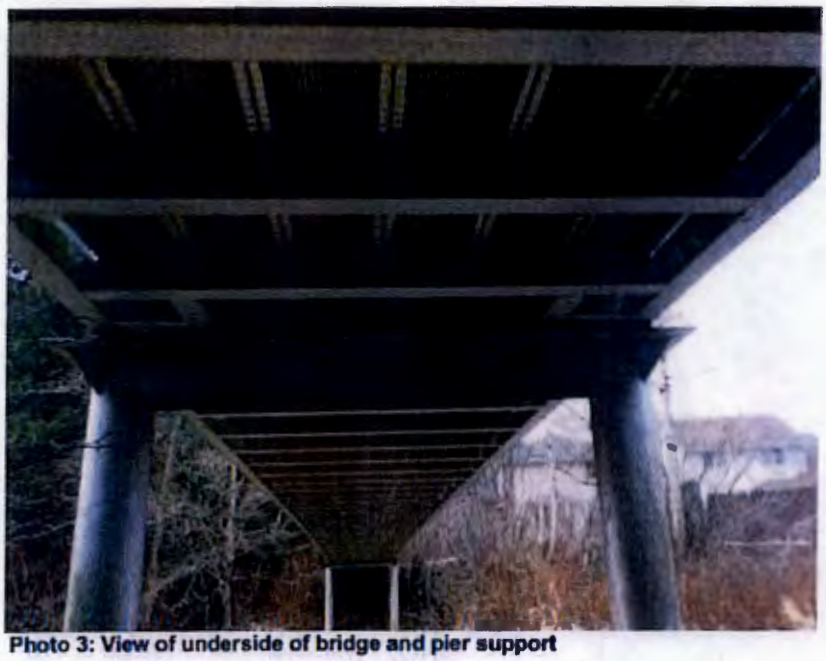


Photo 3: View of underside of bridge and pier support

Photo 4: Protective coating corroded at the bottom portion of steel piles at pier support

Photo 5: Minor general corrosion of protective coating at steel members

Photo 6: Caps missing at deck channels. Traction mat starting to loosen from support.

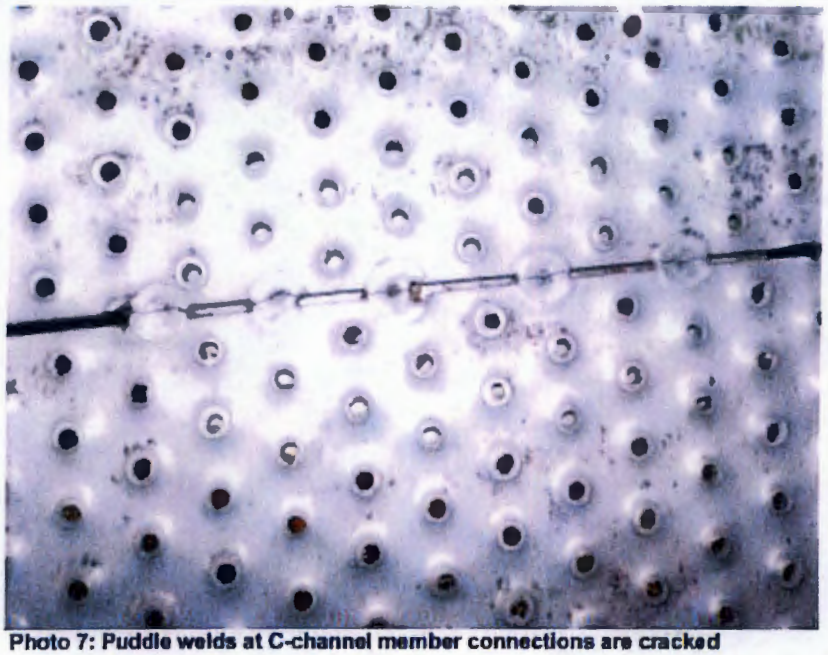


Photo 7: Puddle welds at C-channel member connections are cracked

3. McCOMBS DRIVE NORTH BRIDGE

Photo 1: Approach view of bridge

Photo 2: Side view of bridge

Photo 3: Localized settlement visible between asphalt crack and road barrier

Photo 4: View of underside of road barrier showing extent of bearing material erosion

Photo 5: Timber piles and ballast logs at wingwall

Photo 6: Cap beam and timber pile connection at south abutment

Photo 7: Cap beam and timber pile connection at north abutment. Note severe decay of cap beam.

4. McCOMBS DRIVE SOUTH BRIDGE

Photo 1: Approach view of bridge

Photo 2: Side view of bridge

Photo 3: Differential settlement at sidewalk at bridge/approach interface

Photo 4: South abutment – Left pile cracked near bottom. Adjacent pile has severe split.

Photo 5: North abutment - note cap beam severely split and no longer bearing on top of piles

Photo 6: South abutment - note cap beam severely split and large gap between pile and ballast boards

Appendix L – Stormwater Surface Structures

HARRISON HOT SPRINGS
Naturally Refreshed

CTQ

FIGURE 8: Stormwater Surface Structures

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: Mayor and Council **DATE: August 6, 2019**

FROM: Tracey Jones, Financial Officer **FILE: 1820-20**

SUBJECT: Annual Utility Billing

ISSUE:

Consideration of moving non-metered quarterly utility billing to annual billing.

BACKGROUND:

Water, sewer and garbage utility billing is currently billed four times per year. Currently we print, mail and process payments for over 1250 utility bills each quarter. In order to promote efficiencies and cost savings, staff is proposing to move the non-metered utility accounts to an annual billing cycle. With an annual billing cycle starting in 2020 these non-metered accounts would be invoiced for a full year's utility services (January 1st – December 31st) at the end of July with a payment due date of September 15th. Many of our property owners are seasonal and recent comments indicate that they find it more challenging to track the quarterly billing cycle, as opposed to an annual billing, resulting in missed payments. During the first year there would be a transitional period for those clients on the pre-authorized debit program and staff would communicate directly with those participants to adjust payments to the new billing cycle.

In addition, staff recommends that the Village no longer accept post-dated cheques for utility and property tax payments due to the liability of having to store these cheques for significant periods of time. Payment methods would still include, cash, current dated cheques, debit, online payments through customer banks (Scotia, Royal, Credit Unions) and online payments through the Village web platform that accepts payments from all banks. Property owners can also participate in our pre-authorized debit program that withdraws a fixed monthly amount from their bank account to be credited to their utility account (12 months per year) or their property tax account (10 months per year).

RECOMMENDATION:

THAT Council authorizes staff to move forward with annual utility billing starting in 2020.

AND THAT the Village no-longer accept post-dated cheques for utility and property tax payments.

Respectfully submitted:

Tracey Jones
Tracey Jones
Financial Officer

REVIEWED BY:

Madeline McDonald
Madeline McDonald
Chief Administrative Officer

12(c)

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: Mayor and Council **DATE:** July 18, 2019

FROM: Debra Key, Deputy Chief Administrative Officer/Corporate Officer **FILE:** 4320-50

SUBJECT: **Application for a Structural Change for Liquor Licence - Milos Greek Taverna – Request for Liquor Primary Licence for both floors**

ISSUE: Application for a Structural Change to the Liquor Licence for the Milos Greek Taverna

BACKGROUND:

A request has been received from the Milos Greek Taverna in support of their application to the Liquor and Cannabis Regulation Branch for a Liquor Licence change to their current Liquor Primary Licence. The Taverna currently has a Liquor Primary Licence on the ground floor with an occupant load of 170 and a Food Primary Licence on the second floor with an occupant load of 189. They are proposing that a Liquor Primary Licence include the second floor, currently operating under a Food Primary Licence, and that the Food Primary Licence be eliminated, thereby having only one Licence for the entire establishment with a total occupant load of 359. A Liquor Primary Licence allows for the service of liquor in addition to other services such as food. There is no increase in the occupant load for the entire building, nor any changes proposed to current operating hours. Harmonising the two licences into one will reduce fees currently paid by the applicant to the Province on a monthly basis.

RECOMMENDATION:

THAT a Liquor Primary Licence be recommended for approval for both floors for the Milos Greek Tavern; and

THAT public input not be required as the proposed change to the Liquor Primary Licence will have no net impact on the community with respect to any additional noise or other inconvenience to nearby residents or the general public.

Respectfully submitted:

Debra Key
Debra Key
Deputy Chief Administrative Officer/CO

REVIEWED BY:

Madeline McDonald
Madeline McDonald
Chief Administrative Officer

enclosure

Liquor and Cannabis Regulation Branch
400-645 Tyee Road, Victoria, BC V9A 6X5
Mail: PO Box 9292 Stn Provincial Govt, Victoria, BC V8W 9J8
Phone: 250-952-5787 Fax: 250-952-7066

LIQUOR PRIMARY AND LIQUOR PRIMARY CLUB STRUCTURAL CHANGE APPLICATION

Liquor and Cannabis Regulation Form LCRB012A

What is a Structural Change?

It is defined as a change to the existing approved service area(s), including but not limited to:

- a change in the position of a wall or partial height divider (pony wall) or fixed planters used as separation between/within a service area
- new construction
- the removal or addition of permanent display cabinets, stages or dance floors
- a change to the food and liquor service bar location or size
- in the position of access and exit points leading to or from a licensed service area
- the removal of a service area from the liquor licence
- addition of a new outdoor patio or the removal or expansion of an existing patio
- change to capacity (occupant load) of a licensed establishment with or without changes to the licensed service area(s)
- such other construction or changes the general manager considers may affect patron routing, capacity, or the line of sight between a staff control point and the service area of the establishment.

If you are making changes to the current approved floor plan, other than cosmetic changes, a structural change application is required. If your liquor primary licence overlaps a food primary licence (aka dual licence), a structural change application is also required for the food primary. **Note:** This does not include cosmetic changes such as changes to existing flooring, wallpaper, reconfiguring tables and chairs, countertops, painting, or changing the type of material used in the perimeter bounding of an outdoor patio.

If you have any questions about this application, call the Liquor and Cannabis Regulation Branch toll-free at 1 866 209-2111.

Licence Information

Licence # affected: 001685

☐ Please check if licence is currently dormant.
If yes, attach a letter signed by the licensee requesting the licence to be reactivated if this application is approved.

Do you currently hold other licences at this location? ☒ Food Primary (Licence #) _____

☐ Liquor Primary (Licence #) _____ ☐ Licensee Retail Store (Licence #) _____ ☐ UBrew/UVin or Other (Licence #) _____

Licensee name (as shown on licence): Milos Greek Taverna

Establishment name (as shown on licence): Milos Greek Taverna

Establishment Location address: (as shown on licence)

Street	City	Province	Postal Code
234 Esplanade Ave.	Harrison Hot Springs	BC	V0M1K0

Business Tel with area code: 6044918811 Business Fax with area code: 6044918812

Business e-mail: milostaverna@shaw.ca

Business Mailing address: (if different from above)

Street	City	Province	Postal Code

Contact Name: Sunny Manihani (last / first / middle) Title/Position: Director

Type of Change Requested

Sub- Job Number
Office use only

Please check ☑ appropriate box(es) below:

Part 1	☐ Addition of a New Outdoor Patio	Outdoor Patio (C3-LIC)_____
Part 2	☐ Alteration/Renovation ☐ Removal of an existing service area ☒ Other	Structural - capacity change (C3-LIC)_____ Structural - no capacity change (C4-LIC)_____

Application Contact Person

This applicant authorizes the person below to be the primary contact for the duration of the application process only.

Name: Sunny Manihani | Phone number: 6048807452

Fax number: 6044918812 | E-mail address: manihani@telus.net

Part 1: Addition of New Outdoor Patio

Fee: $440 | C3 - LIC

Provide the following information:

1. Attach one 11" x 17" copy of the proposed patio floor plan (see Appendix I on page 6 for floor plan instructions).

   The branch requires an occupant load (patrons plus staff) for the proposed patio area(s) which must be marked/stamped and dated on the plan you submit. Do not submit this application if you do not have the occupant load calculation stamped on your patio plans.

2. What is the occupant load calculation for the new patio(s)?

   Patio #1: | Patio #2: | Patio #3:

3. If the patio(s) is already constructed, attach a photo.

4. Describe the height and composition of the patio perimeter or bounding (i.e. railings, fencing, planters, hedging, etc.). A patio must be bounded by fixed and immovable physical separation in order to control patrons and liquor within the service area.

5. Describe the location of the patio in relation to the licensed interior - the patio must be immediately adjacent to the interior area.

6. Describe how staff will manage and control the patio from the interior service area.

7. Specify if liquor service to the patio is from: (a) fixed bar located on the patio, (b) portable bar for the patio, (c) licensed interior.

8. Do servers have to carry liquor through any unlicensed areas to get to the patio? Explain:

Note: Patios on grass, earth or gravel require a permit from the local Health Authority. Sidewalk patios require a permit from LG/FN.

A resolution from your Local Government/First Nation is required. Part 3 of this form must be completed by Local Government/First Nation.

You must also complete Parts 4 and 5.

Part 2: Structural Changes

Fee: $440 | C3 - Cap Ch. | C4 - No Cap Ch.

(Excluding construction of new patios)

Provide the following information:

1. Describe in full detail the reason for this application and what the changes are that you want considered.

This is two story building. currently we have liquor primary on ground floor Licence#001685 and upstairs we have food primary licence# 307906. Reason for this application is to have only one licence through out the building. we like to have liquor primary licence on second floor as well and eliminate the food primary licence. we are not changing any structure.All the layouts are staying the same.

2. If you are applying to remove the interior area and create a stand-alone patio, describe the location of the patio in relation to the unlicensed permanent structure. A stand-alone patio must adjoin a permanent structure (affixed to a foundation) which is plumbed and wired, and which the applicant owns or leases.

3. Attach one 11" x 17" copy of the proposed floor plan or patio plan (if creating a stand-alone patio). See Appendix I on page 6 for floor plan instructions.

4. Current total of all service areas (as shown on the liquor licence): 146

5. By making these alterations, the total occupant load will:

- ☐ Decrease to: _____ (patrons plus staff)
- ☐ Stay the same: _____ (patrons plus staff)
- ☒ Increase to: 359 (patrons plus staff)

If there is an increase to occupant load, a resolution from your Local Government/First Nation (LG/FN) is required. Take your application and floor plan to LG/FN. Part 3 of this form must be completed by LG/FN.

Part 3: Local Government/First Nation Resolutions: Confirmation Receipt of Application

If you are applying for a new patio (Part 1) or a proposed change that increases the occupant load (Part 2) then public interest factors may be affected by the structural change(s). This section is to be filled out by the LG/FN prior to submitting this application to the Branch.

Local Government/First Nation (name): _____

Name of Official: _____ Title/Position: _____

Phone: _____ E-mail: _____

Date: _____ (Day/Month/Year)

Signature of Official: _____

Check here if the LG/FN will not be providing comment: ☐ Yes, opting out of comment.

Note: The LG/FN cannot provide comment for their own application.

Is this establishment located on Treaty First Nation land? ☐ No ☐ Yes

Instructions for Local Government/First Nation (LG/FN)

This serves as notice that an application for a structural change to a liquor primary (LP) licence is being made within your community. The Branch requests that you consider this application (application form and floor plan) and provide the Branch with resolution within 90 days of the above received date. Alternatively, LG/FN can delegate staff with the authority to provide comment.

- The applicant will bring their completed Structural Change application form and floor plan to LG/FN.
- If there are any major issues LG/FN may hold off signing the application until the issues are resolved or they have a plan to deal with the issues.
- When LG/FN is comfortable with the application proceeding, LG/FN staff will sign Part 3 of the application form and return it to the applicant. LG/FN will keep a copy of the signed application form and all supporting documents.
- The applicant will submit the signed application package (with all required documents) to the Branch.

To provide a resolution or comment:

- Gather public input for the community within the immediate vicinity of the establishment.
- Consider these factors which must be taken into account when providing resolution/comment:
    - The location of the establishment.
    - The person capacity and hours of liquor service of the establishment.
- Provide a resolution/comment with comments on:
    - The impact of noise on nearby residents.
    - The impact on the community if the application is approved.
    - The view of residents and a description of the method used to gather views.
    - The LG/FN recommendations (including whether or not the application be approved) and the reasons on which they are based.
- Provide any reports that are referenced in, or used to determine, the resolution/comment.
- If more than 90 days is required, provide a written request for extension to the Branch.
- If LG/FN opts out, or is the applicant, the Branch will gather public input and contact LG/FN staff for information to assist the Branch in considering the regulatory criteria.

If you have any questions, or the establishment is located on Treaty First Nation land, please call the Branch toll-free at 1-866-209-2111.

Part 4: Declaration of Signing Authority Including Valid Interest

Section 57(1)(c) of the *Liquor Control and Licensing Act* states: "A person commits an offence if the person (c) provides false or misleading information in the following circumstances: (i) when making an application referred to in section 12; (ii) when making a report or when required and as specified by the general manager under section 59".

As the licensee or authorized signatory of the licensee, I understand and affirm that all of the information provided is true and complete.

Signature: _____
Authorized signatory of the licensee

Name: Saravjit Singh Manihani (last / first / middle) Position: Director (If not an individual) Date: _____ (Day/Month/Year)

Note: An agent, lawyer or third party operator may not sign the declaration on behalf of the licensee.

This form should be signed by an individual with the authority to bind the applicant. The Branch relies on the licensee to ensure that the individual who signs this form is authorized to do so. Typically, an appropriate individual will be as follows:

- If the licensee is an individual or sole proprietor, the individual himself/herself
- If the licensee is a corporation, a duly authorized signatory who will usually be an officer or, in some cases, a director
- If the licensee is a general partnership, one of the partners
- If the licensee is a limited partnership, the general partner of the partnership
- If the licensee is a society, then a director or a senior manager (as defined in the *Societies Act*)

If an authorized signatory has completed the *Add, Change or Remove Licensee Representative* form (LCLB101) and they have specifically permitted a licensee representative to sign this form on the licensee's behalf, the branch will accept the licensee representative's signature.

Part 5: Application Fees - Payment Options

Total Fee Submitted: $ _____

In accordance with Payment Card Industry Standards, the branch is no longer able to accept credit card information via email.

Payment is by (check (☑) one):

- ○ Cheque, payable to Minister of Finance (if cheque is returned as non-sufficient funds, a $30 fee will be charged)
- ○ Money order, payable to Minister of Finance
- ○ Credit card: ○ VISA ○ MasterCard ○ AMEX
  - ◉ I am submitting my application by email and I will call with my credit card information. I will call Victoria Head Office at 250-952-5787 or 1-866-209-2111 and understand that no action can proceed with my application until the application fee is paid in full.
  - ○ I am submitting my application by mail and have given my credit information in the space provided at the bottom of the page.

Note: To ensure legibility, do not submit by fax.

Part 6: Submit Application Package

Once signed by local government/First Nation (if applicable), submit your complete application package to:

Liquor and Cannabis Regulation Branch
Courier: 400-645 Tyee Road, Victoria BC V9A 6X5
Mail: PO Box 9292 Stn Prov Govt Victoria, BC V8W 9J8
E-mail: liquor.licensing@gov.bc.ca

If you have any questions, contact us toll-free at 866-209-2111 or email us at liquor.licensing@gov.bc.ca. Visit our website for more information: www.gov.bc.ca/liquorregulationandlicensing

The information requested on this form is collected by the Liquor and Cannabis Regulation Branch under Section 26 (a) and (c) of the *Freedom of Information and Protection of Privacy Act* and will be used for the purpose of liquor licensing and compliance and enforcement matters in accordance with the *Liquor Control and Licensing Act*. Should you have any questions about the collection, use, or disclosure of personal information, please contact the Freedom of Information Officer at PO Box 9292 STN PROV GVT, Victoria, BC, V8W 9J8 or by phone toll free at 1-866-209-2111.

Credit Card Information (To be submitted by fax or mail only)

Name of cardholder (as it appears on card): _____

Credit card number: _____ Expiry date: _____ (Month) / _____ (Year)

Signature: _____

Appendix I (Floor Plan & Occupant Load Requirements Guide)

Floor Plan

Your application can only be considered if you include floor plans with occupant load. One copy of each of 11"x17" floor plan is required. Plans must show all service areas and the following details:

- labels for each room
- patio(s)
- liquor service bars
- furniture layout
- kitchen
- stage
- sound or DJ booth
- washrooms
- stairs, entrances and exits

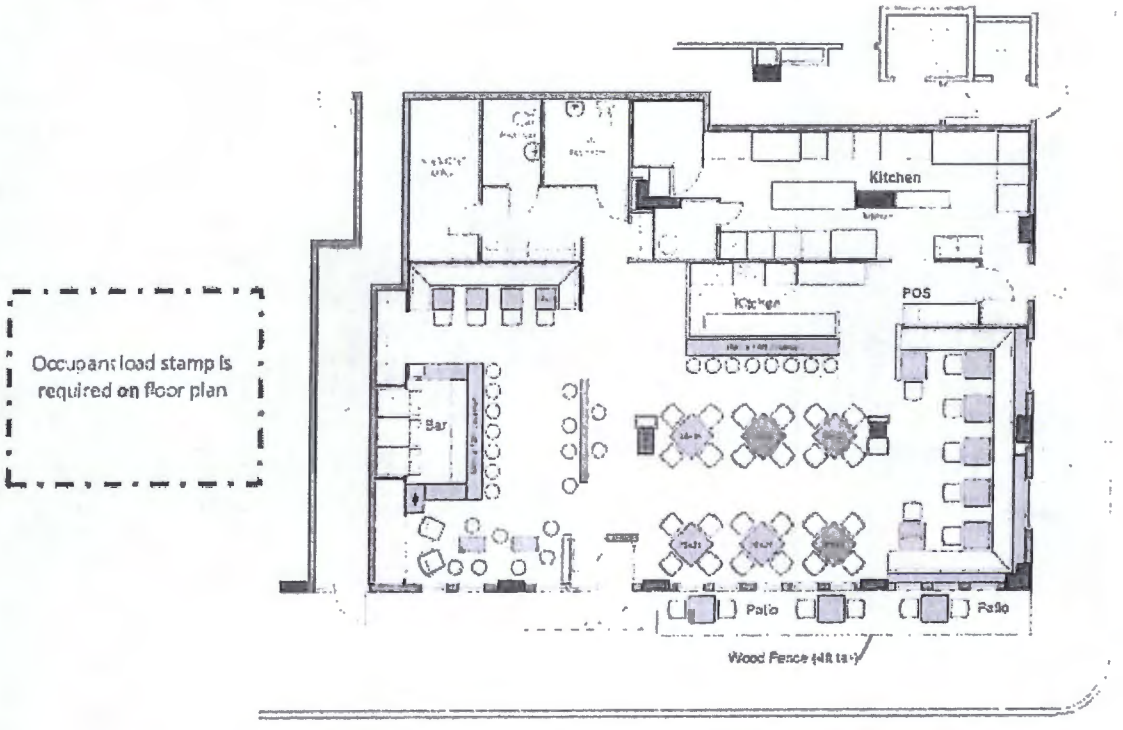
Plans must also show the physical separation (e.g. pony wall or full height wall) separating the proposed service area(s) from other licenses or unlicensed areas. If there is another licence, or another business (such as a retail store) at the same site, provide floor plans showing the other business in relation to the proposed LP establishment.

Occupant Load Calculation

Occupant Load is the maximum number of people (patrons plus staff) permitted in a service area. Contact the Local Government/First Nation to obtain an occupant load on your floor plan. The occupant load must be stamped or written, dated and signed on the floor plan by the appropriate authority.

If Local Government/First Nation (LG/FN) will not provide the occupant load, they must provide a letter confirming they do not issue occupant load. You must submit the LG/FN letter with your floor plan. The Branch will accept an occupant load calculation from a professional architect or engineer.

Sample Floor Plan



FOR OCCUPANT LOAD
LOWER FLOOR -

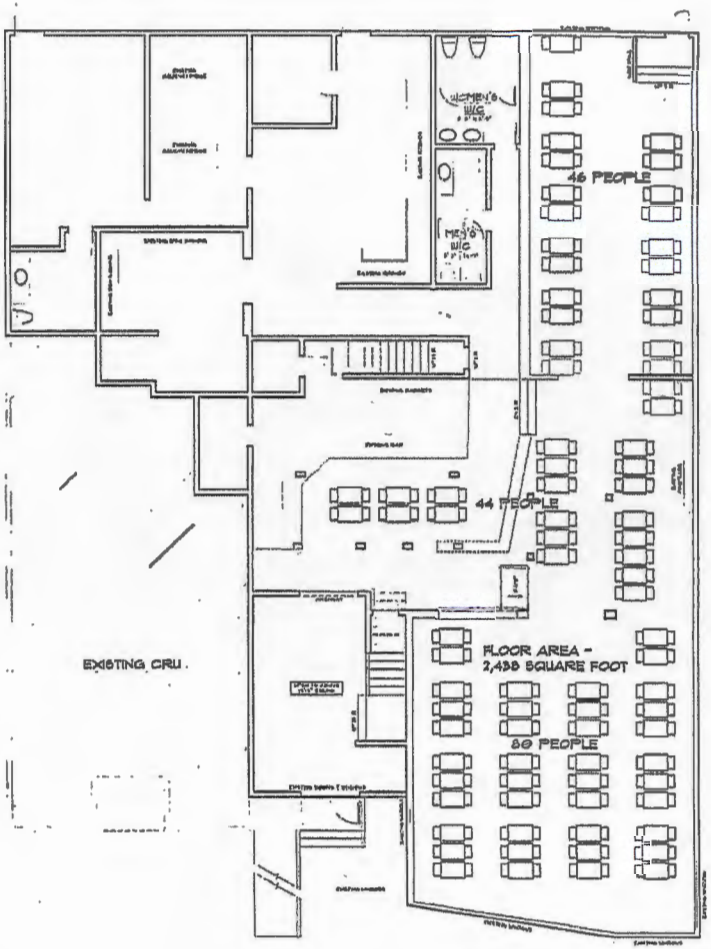
APPROVED

SIGNATURE

Apr 9/2019
DATE

WAYNE DYER FIRE INSP.
LAFC 2067

SERVICE AREA

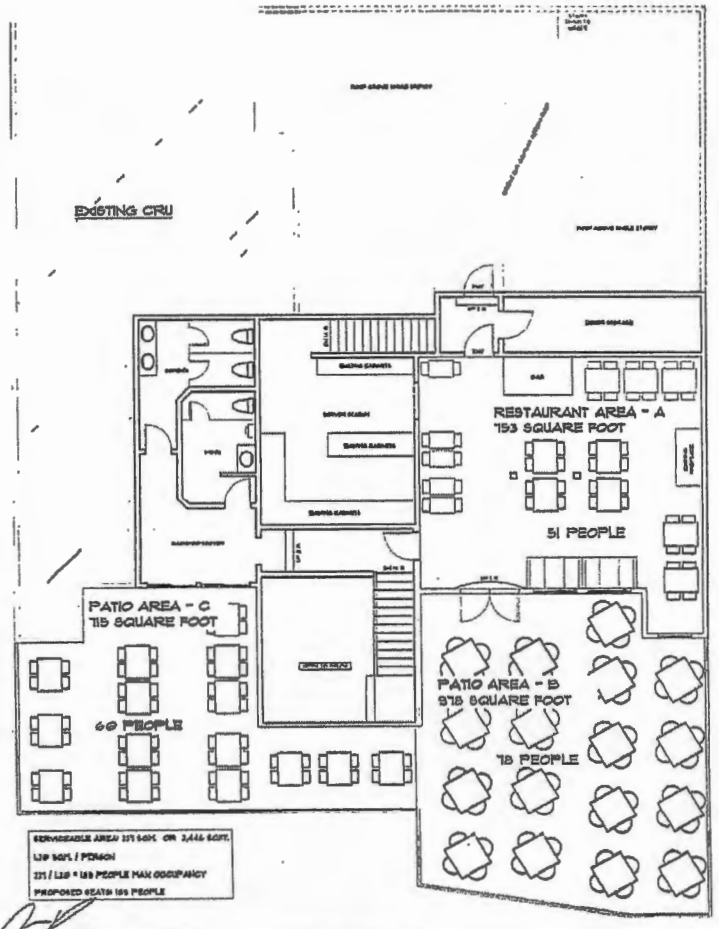


MAIN FLOOR PLAN

SERVICEABLE AREA: 226 SQM. OR 2,438 SQFT.
1.30 SQFT. / PERSON
226 / 1.30 = 166 PEOPLE MAIN OCCUPANCY
PROPOSED OCCUPANT LOAD 166 PEOPLE

JCR Design Ltd
Apr 3/19

Village of Harrison Hot Springs
P.O. Box 160,
Harrison Hot Springs, B.C.
V0M 1K0 Ph. 796-2171



UPPER FLOOR PLAN

JCR Design Ltd
Apr 3/19

FOR OCCUPANT LOAD.
UPPER FLOOR AREA
A

APPROVED

SIGNATURE

9/2019
DATE

WAYNE DYER FIRE INSP.
LAFC 2067

Village of Harrison Hot Springs
P.O. Box 160,
Harrison Hot Springs, B.C.
V0M 1K0 Ph. 796-2171

12(d)

Report of the Chief Administrative Officer
Re: Boat Launch Parking Lot Paving Tender Award

TO BE DISTRIBUTED AT THE

AUGUST 12, 2019

REGULAR COUNCIL MEETING

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: Mayor and Council **DATE: August 7, 2019**

FROM: Rhonda Schell, Community Services Coordinator **FILE: 2240-35-01**

SUBJECT: Synthetic Outdoor Rink Purchase

ISSUE:

To authorize the purchase of a synthetic outdoor rink.

BACKGROUND:

The installation of a synthetic outdoor rink is a key project in the 2019-2021 Resort Development Strategy that was approved at the May 21, 2019 Regular Council Meeting.

DISCUSSION:

Several manufacturers and distributers were compared when selecting a synthetic outdoor rink that would meet our needs. Physical factors that have been taken into consideration are rain, snow, ice, wind, sand, site location including the grade of slope, natural wind breaks, the material the rink will be placed on, the panel connection system, self-lubricating panels, and the size of the rink. In addition to the rink, staff sought out a manufacturer that could provide all equipment necessary for a rental shop such as skates and storage racks, skate sharpener, skating aids, and basic rink cleaning equipment. It was important that all components of the rink package such as the rink panels and surrounding barriers be supplied by one company for support and warranty purposes.

Xtraice has met the above criteria and supplied two quotes, one for a new rink and one with significant savings of approximately $20,000 on a refurbished rink that was used as a rental for one month. The refurbished rink has only been used on one side of the panels, has been inspected by the manufacturer, cleaned, repackaged, and has a full 12-year warranty.

The rink will allow for approximately 60 skaters at one time, will be designed with a hollow center for decoration and lighting, and have surrounding boards. Additional panels can be purchased as replacements or to expand the footprint of the rink.

Company	Supplies all components	Rental Shop Supplies	Panel Connection	Condition	Quote	Sq.Ft.	Notes
Synthetic Ice Solutions	Yes	No	DT*	New	None		Failed to provide quote.
Polyglide Ice.	Yes	Yes	TnG*	New	None		Failed to provide quote.
HockeyShot Inc.	No	Yes	DT	New	$139, 198	3200	Barriers are manufactured by a third party. They only manufacture the panels and source all other components from third parties.
Xtraice	Yes	Yes	TnG	New	$150,670	3250	
Xtraice	Yes	Yes	TnG	Refurbished	$130.000	3276	$96,946.04 USD

Additional Costs: Installation labour, forklift use, cleaning machine, underlay.

DT = Dove Tail
TnG = Tongue and groove with pins to hold panels in place.

RECOMMENDATIONS:

THAT an expenditure of up to $130,000 from the Resort Municipality Initiative funds for the purchase of a synthetic outdoor rink from Xtraice be approved.

AND THAT an expenditure of up to $40,000 from the Resort Municipality Initiative funds for installation, additional panels, maintenance and rental shop accessories be approved.

AND THAT staff be authorized to develop signage and policies for the use of the rink.

Respectfully submitted:

Rhonda Schell
Rhonda Schell
Community Services Coordinator

REVIEWED BY:

Madeline McDonald
Madeline McDonald
Chief Administrative Officer

12(f)

VILLAGE OF HARRISON HOT SPRINGS

HARRISON HOT SPRINGS
Naturally Refreshed

REPORT TO COUNCIL

TO:	**Mayor and Council**	**DATE: Aug 8, 2019**
FROM:	**Ken Cossey, MCIP, RPP** **Planning Consultant**	**FILE: 3090-20-DVP-04/19** **(844 Angus Place)**
SUBJECT:	**To issue a Development Variance Permit (DVP)**	

ISSUE:

Seeking approval to issue DVP permit 3090-20-DVP04/19.

BACKGROUND:

Zoning Information and Parcel Size

The site is approximately 919 M^2 (0.09 Ha or .23 Ac) in size. The parcel is zoned R-1 and due to the configuration of the parcel is bounded on the north by Ramona Place and on the east by Angus Place.

Current Uses

The site is currently developed with a detached dwelling unit. Associated with this dwelling unit will be a new garage. With the new garage being developed the total Lot coverage will be approximately 27-percent which is below the allowable 40-percent, as per the zoning regulations.

Variance Requested

The applicant wishes to vary the following R-1 Land Use Regulation as outlined in Zoning Bylaw 1115, 2017:

Exterior Side yard setback requirements reduced from 7.5 M to 4.5 M

In keeping with the notification requirements, defined as the adjacent lots within 30 M from this site, they have received their written notification of the variance request. As of today's date no comments have been received. If anything arrives before the meeting Council will be informed.

RECOMMENDATION:

THAT Development Variance Permit DVP 04/19 be issued to Jessie Nicole Evelyn Ramsay for the property located at 844 Angus Place, Harrison Hot Springs for land legally described as:

Lot 67 Section 12 Township 4 Range 29 West of the Sixth Meridian New Westminster District Plan 52361

Respectfully submitted:

Ken Cossey

Ken Cossey, MCIP, RPP,
Planning Consultant

REVIEWED BY and Concurrence with the RECOMMENDATIONS

Madeline McDonald

Madeline McDonald
Chief Administrative Officer

Attachments (2) DVP 04/19
Site Map

HARRISON HOT SPRINGS
Naturally Refreshed

Village of Harrison Hot Springs

DEVELOPMENT VARIANCE PERMIT NO. 04/19

ISSUED this ___ day of ____, 2019

FILE No: 3090-20-DVP04/19

FOLIO No: 5254-15523

REGISTERED LANDOWNER

Jessie Nicole Evelyn Ramsay
PO Box 954
Harrison Hot Springs, BC V0M 1K0

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Village of Harrison Hot Springs 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 Village described below:

   Legal Description: Lot 67 Section 12 Township 4 Range 29 West of the Sixth Meridian New Westminster District Plan 52361

   (PID: 005-022-495)

   Civic Address: 844 Angus Place, Harrison Hot Springs, BC

3. Authorization is hereby given for the use of the subject property for the construction of an accessory garage structure in accordance with the conditions listed in Section 4, below.

4. The use must be carried out subject to the following conditions:

   - **That the minimum exterior side setback for accessory buildings under Zoning Bylaw No. 1115, 2017, for the R-1 (Residential 1 Conventional Lot) zone be decreased from 7.5 metres down to 4.5 metres.**

5. The land described herein must be developed in substantial compliance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit must form a part thereof.

6. **This Development Variance Permit is <u>not</u> a Building Permit, a subdivision approval nor a soil removal or deposit permit.** A final inspection must not be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Village.

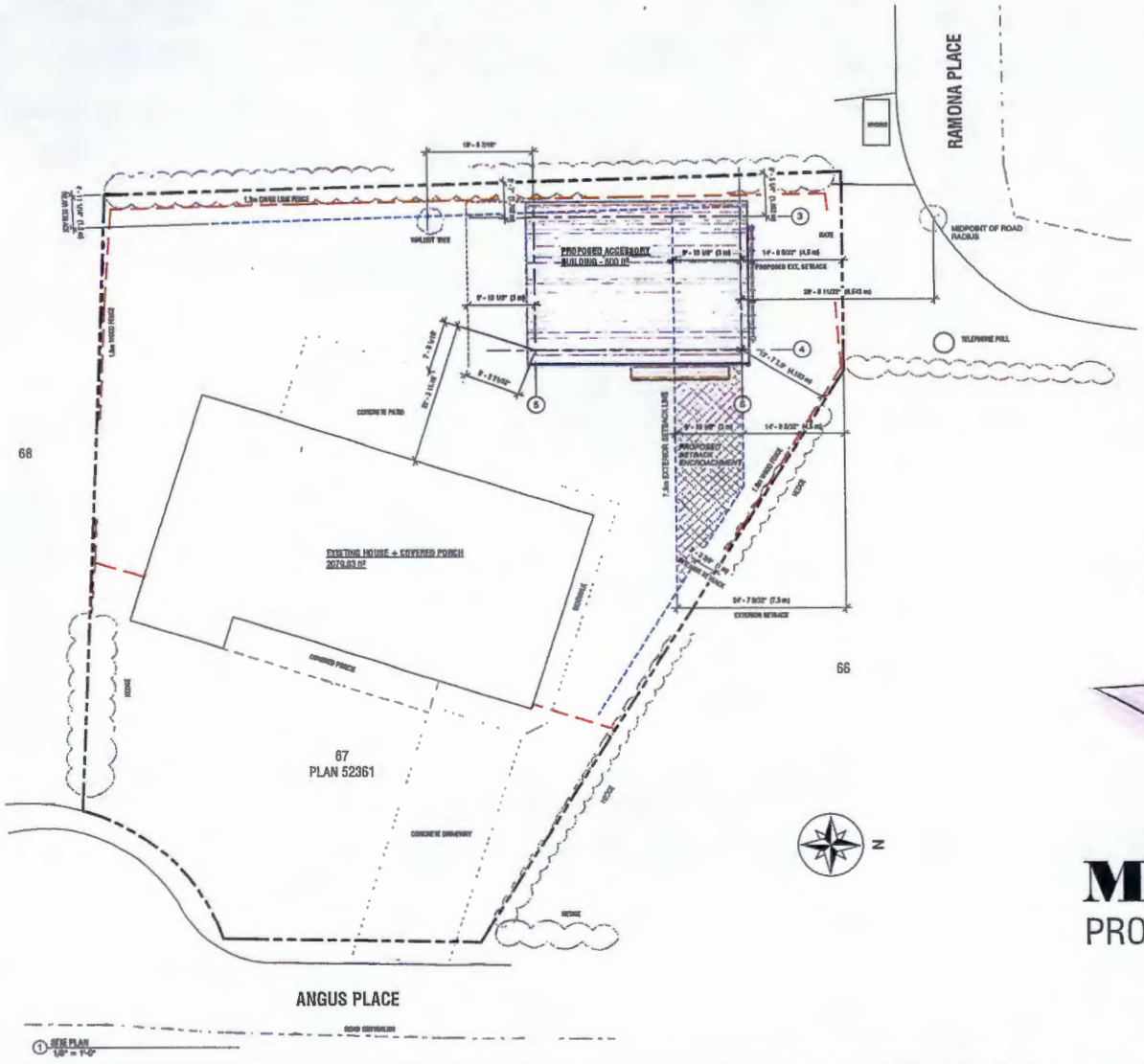
RESOLUTION PASSED BY COUNCIL THIS ___ day of _____, 2019

I HEREBY CERTIFY that I have read the terms and conditions of the Development Variance Permit contained herein. I understand and agree that the Village of Harrison Hot Springs has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with me, other than those contained in this Permit.

_____
Jessie Ramsay

VILLAGE OF HARRISON HOT SPRINGS

_____
Corporate Officer



PROJECT INFORMATION:

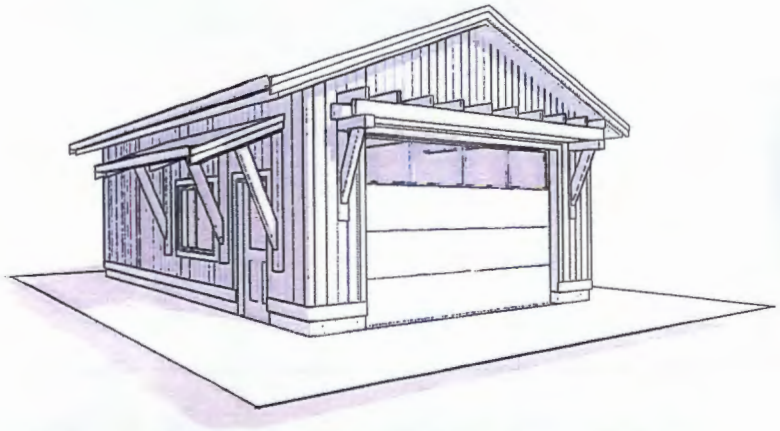
CLIENT:	BEAU HOSKINS
PROJECT:	PROPOSED ACCESSORY BUILDING
LOCATION:	HARRISON HOT SPRINGS, BC
CIVIC:	844 ANGUS PLACE
LEGAL:	LOT 67 S.E. 1/4 SEC.12, TP.4 R.29 W.M.D. PLAN 52361
LOT AREA:	0.2303 ACRES (10,031.868 ft²)
SITE COVERAGE:	2579.03 ft² - 25.705%

REQUIRED SETBACKS:

PRINCIPAL BLDG.	F.I.L.	N/A
	R.I.L.	N/A
	E.S.I.L.	N/A
	I.S.I.L.	N/A
ACCESSORY BLDG:	F.I.L.	N/A
	R.I.L.	1.5m (1.7m PROPOSED)
	E.S.I.L.	7.5m (4.5m PROPOSED)
	I.S.I.L.	1.0m (4.1m PROPOSED)

MAX BUILDING HEIGHT:

PRINCIPAL BLDG.	N/A
ACCESSORY BLDG.	5.0m (3.525m PROPOSED)



MR. BEAU HOSKINS

PROPOSED ACCESSORY BLDG. - HARRISON, BC

① SITE PLAN 1/8" = 1'-0"

CHEAM BUILDING DESIGN

Bus: 604-798-8900
Email: cheambd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

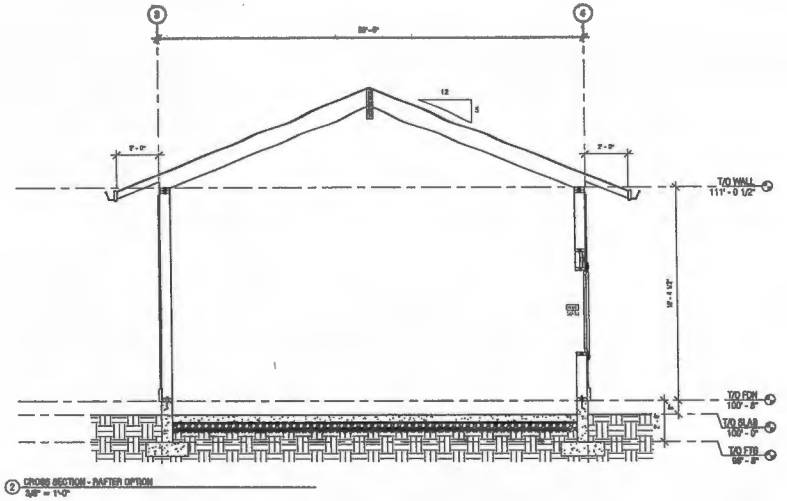
Date:	Scale:
05/30/2019	1/8" = 1'-0"
Drawn By:	**Checked By:**
DV	RV

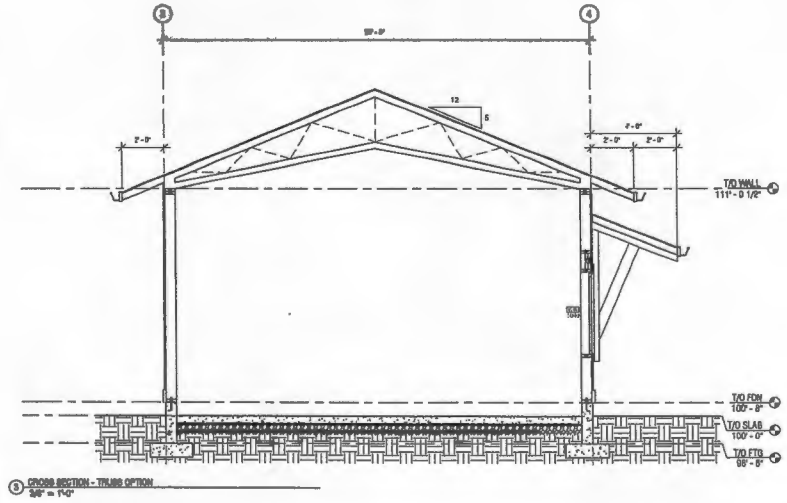
Date:	Issue/Revision
JUNE 6, 2019	PRELIMINARY DRAWINGS

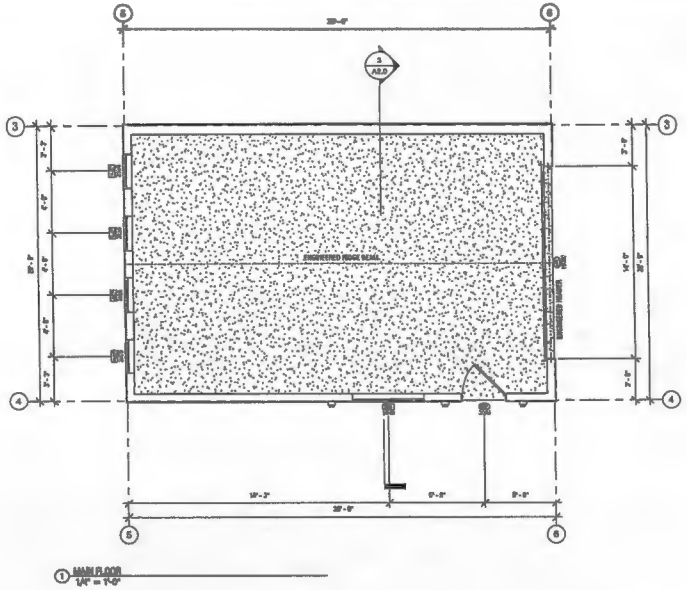
Site

Mr. Beau Hoskins
Proposed Accessory Building
844 Angus Place, Harrison Hot Springs BC

A1.0







CHEAM BUILDING DESIGN

Bus: 604-798-8900
Email: cheambd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

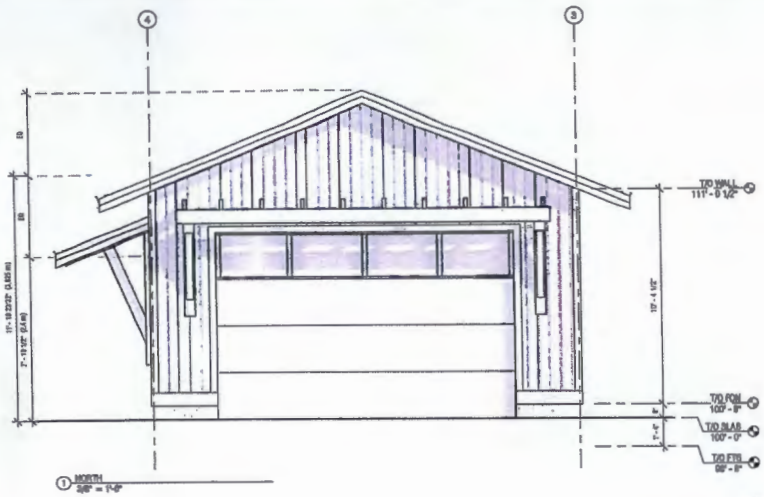
Date:	Scale:
05/30/19	As indicated
Drawn By:	**Checked By:**
DV	RV

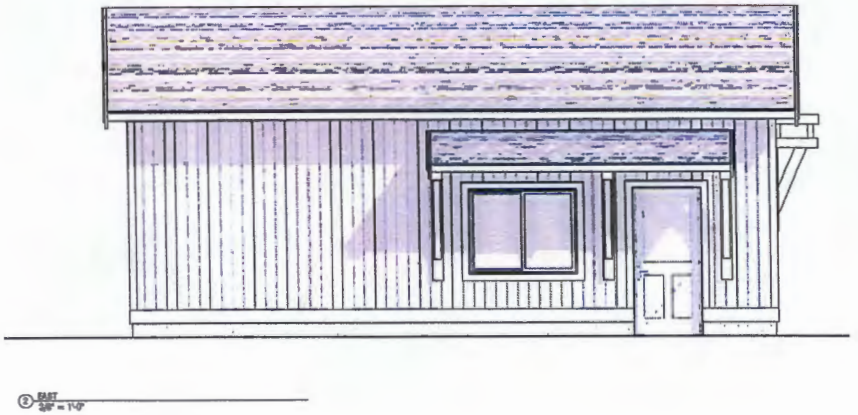
Date:	Issue/Revision
JUNE 6, 2019	PRELIMINARY DRAWINGS

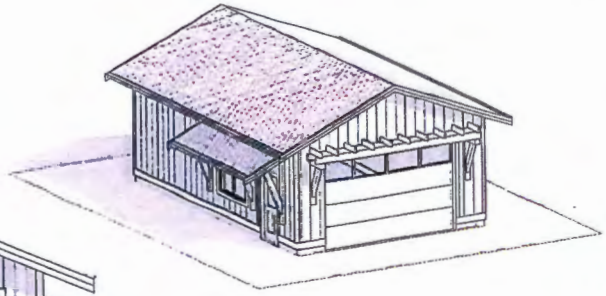
Floor Plans

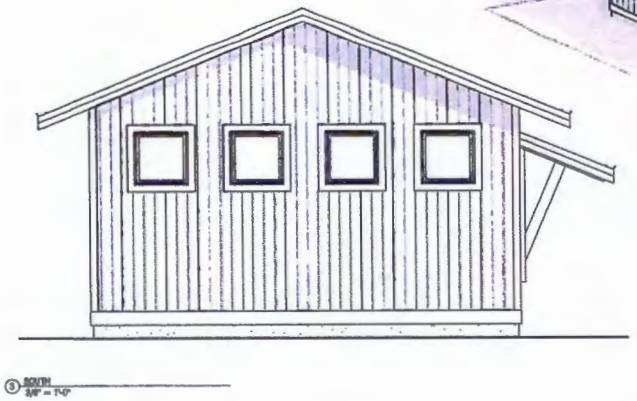
Mr. Beau Hoskins
Proposed Accessory Building
844 Angus Place, Harrison Hot Springs BC

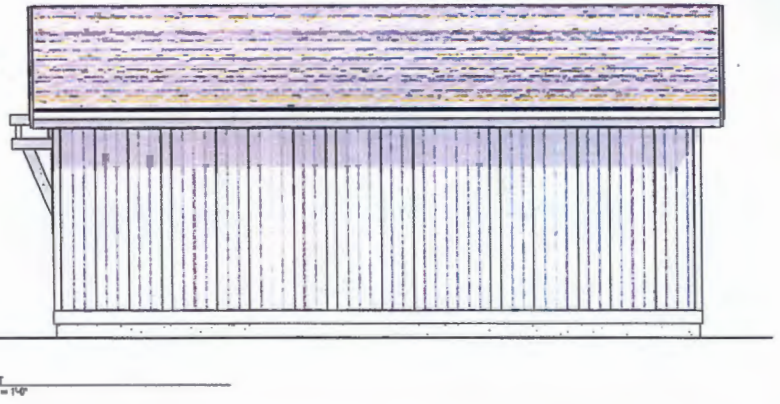
A2.0











CHEAM BUILDING DESIGN

Bus: 604-798-8900
Email: cheambd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

Date:	Scale:
05/30/19	3/8" = 1'-0"
Drawn By:	**Checked By:**
DV	RV

Date:	Issue/Revision
JUNE 6, 2019	PRELIMINARY DRAWINGS

Elevations

Mr. Beau Hoskins

Proposed Accessory Building

844 Angus Place, Harrison Hot Springs BC

A3.0

12(g)

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO:	**Mayor and Council**	**DATE: July 22, 2019**
FROM:	**Ken Cossey, MCIP, RPP** **Planning Consultant**	**FILE: 3360-20-Z01/19** **410 Echo Avenue**
SUBJECT:	**To start the Rezoning process**	

ISSUE:

Seeking approval to start the rezoning review process.

BACKGROUND:

This site is currently developed with one dwelling unit, that is in a dilapidated condition, and is approximately 0.47 Ha (1.16 Ac) in size. The site can be easily serviced as adjacent sewer and water lines and BC Hydro lines are quite close to this site. There is a fire hydrant located immediately adjacent to this site. The requested rezoning amendment is to change the current zoning from an R-2 zone (Residential 2 - Duplex) to an R-3 zone (Residential 3 – Small Lot). The request is to facilitate a future 5-Lot subdivision application.

Official Community Plan (OCP) designation

The site is currently designated as a Low Density Residential area, as per s 6.3.2 of the OCP.

No OCP amendment is required as the proposed R-3 uses are compatible with the current Low Density Residential policies.

Part of this site is within the Miami River Development Permit Area #5. As there is a subdivision application for a five (5) Lot subdivision on this site, the Development Permit requirements will be addressed during the subdivision stage. Please note that the Development Permit application, once received, must still be reviewed and approved by Council.

Surrounding Land Uses

To the north of this site, on the opposite side of Echo Avenue, the zoning is R-2 and immediately adjacent to the site the zoning is R-1. In this neighbourhood there are two sites zoned for R-3 land uses, within approximately 100 M from this site.

RECOMMENDATION:

1/. THAT staff be authorized to work on application 3360-20-Z01/19 for land legally described as: Lot 32, Section 13 Township 4 Range 29 West of the Sixth Meridian New Westminster District Plan 27133, located at 410 Echo Avenue.

Respectfully submitted;

Ken Cossey

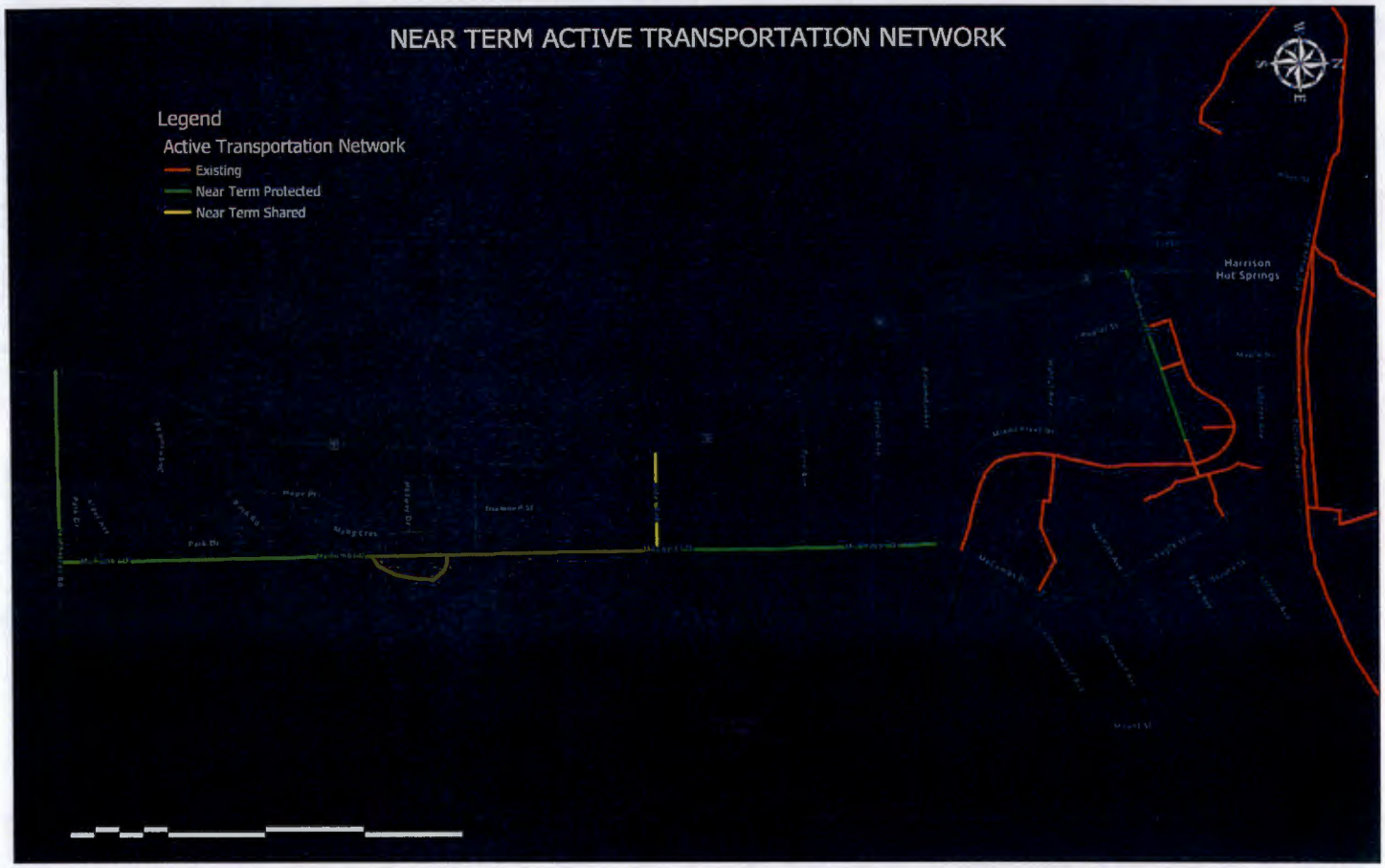
Ken Cossey, MCIP, RPP,
Planning Consultant

REVIEWED BY and CONCURRENCE with the RECOMMENDATIONS:

Madeline McDonald

Madeline McDonald
Chief Administrative Officer

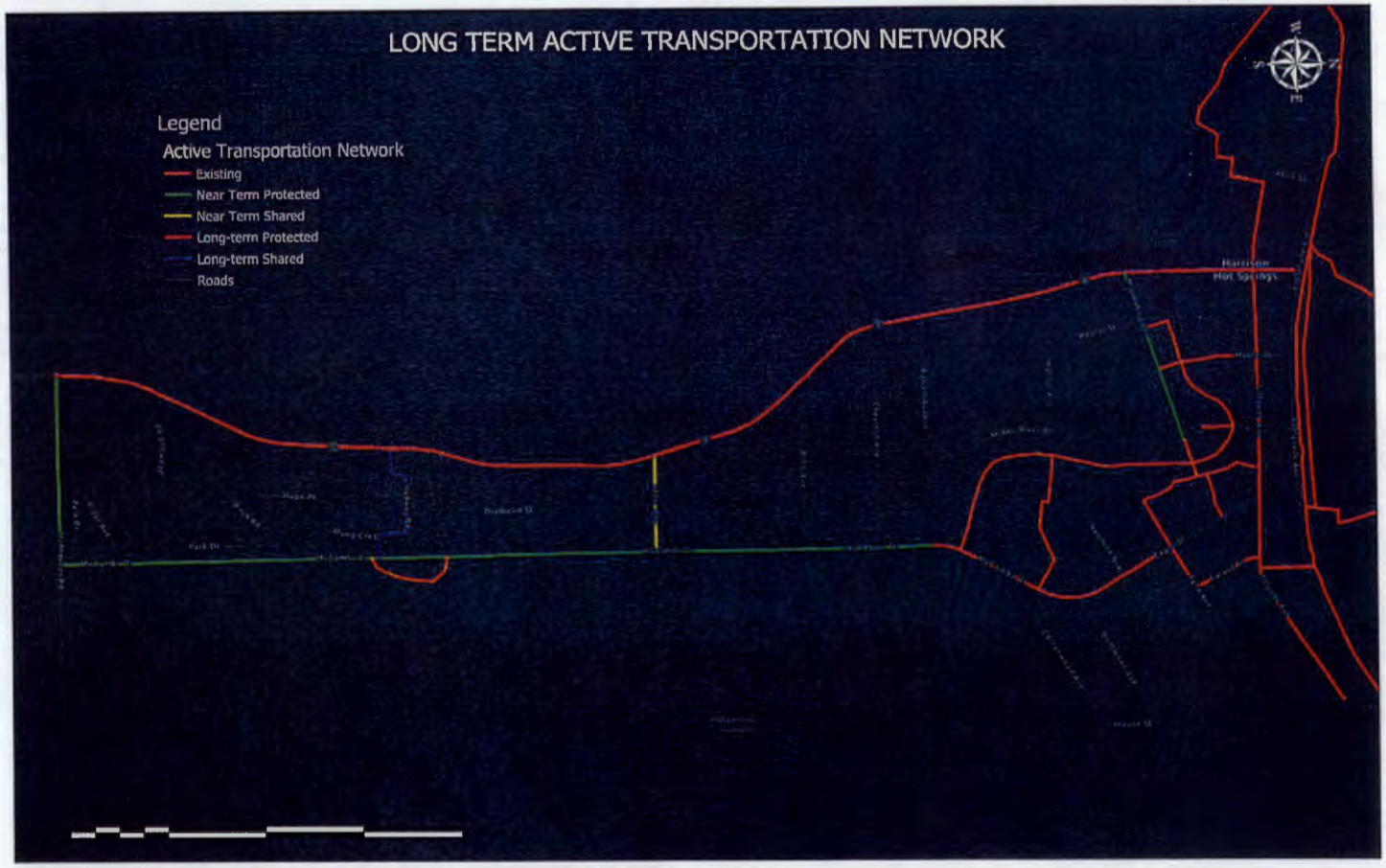
Attachments (1) Location Map



HARRISON HOT SPRINGS
Naturally Refreshed

CTQ

FIGURE 4: Near-Term Active Transportation



HARRISON HOT SPRINGS
Naturally Refreshed

CTQ

FIGURE 5: Long-Term Active Transportation

410 Echo Avenue
Location Map

HARRISON HOT SPRINGS
Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: **Mayor and Council** **DATE: August 2, 2019**

FROM: **Madeline McDonald**
Chief Administrative Officer **FILE: 0890-01**

SUBJECT: **Sale of Surplus Lots Adjacent to Village Office**

ISSUE:

Sale of surplus municipal lands located between Hot Springs Road and Poplar Street for the purpose of raising funds in support of the proposed new Culture Hub building to include a community theatre, public gathering space, cultural exhibits and Village administration offices on the second floor.

BACKGROUND:

In November of 2018, Council authorized the preparation of architectural drawings for the proposed Culture Hub building and instructed staff to make application to the Community, Cultural and Recreation (CCR) Program for a portion of the project funding. The balance of the costs, those deemed ineligible under the grant program criteria, were to be funded from the proceeds of the sale of surplus Village owned lots. The lots are located on the northern portion of the block of land where the current Village Office and Public Works Yard are located. Six lots were identified for sale, leaving room for the construction of the new building and preserving the northernmost two lots, those bordering Miami River Drive, as designated parkland.

On July 30, 2019, during an In-Camera Committee of the Whole Meeting, Council reviewed confidential appraisal information concerning the six lots passed the following resolution directing staff to prepare a zoning amendment for consideration in open meeting:

THAT staff be authorized to prepare a Zoning Amendment Bylaw to allow for a high density residential use with an option for ground floor commercial retail of up to a maximum height of three (3) storeys for the properties legally described as:

Lot 2, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
Lot 3, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
Lot 4, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
Lot 16, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
Lot 17, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
Lot 18, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786

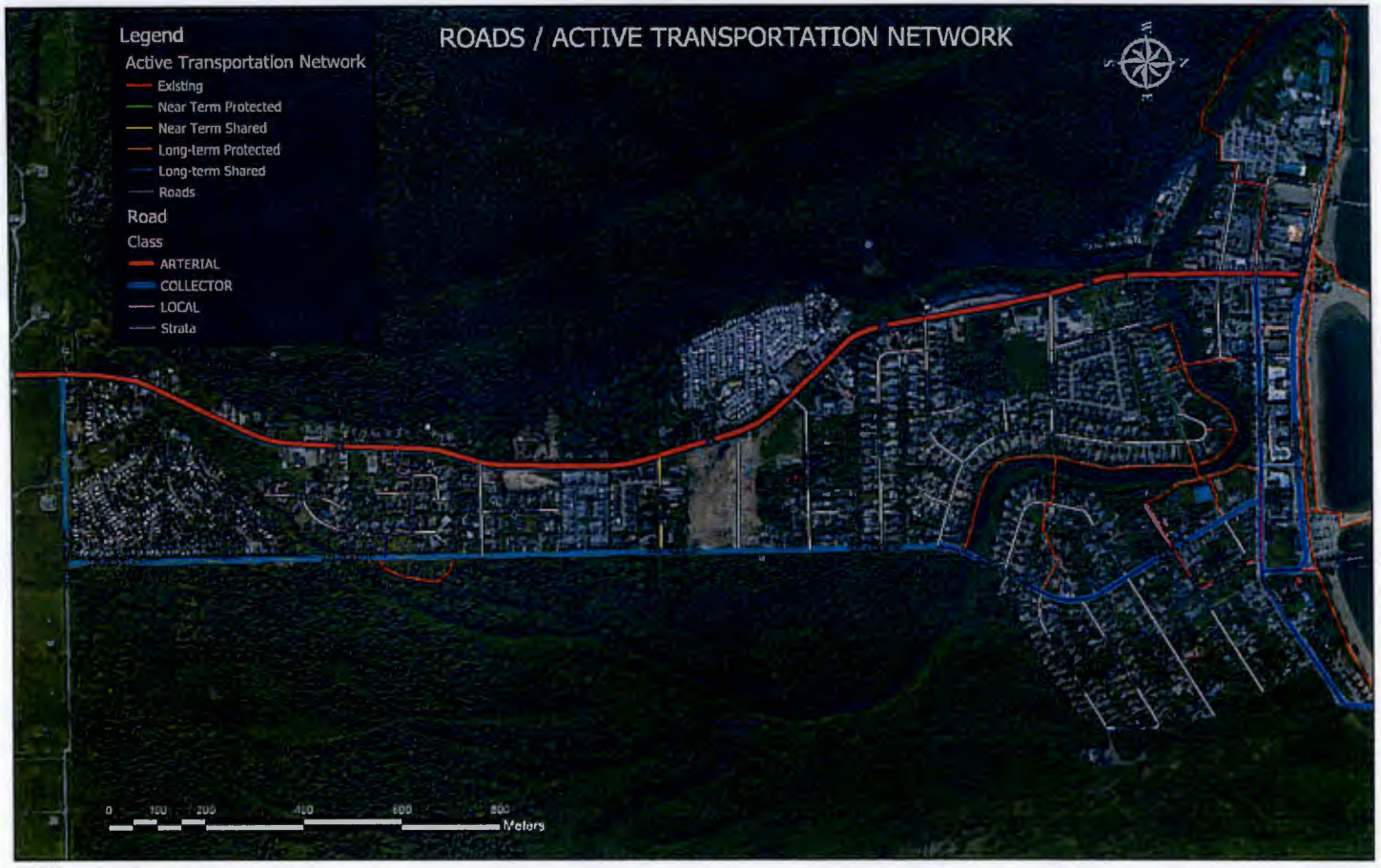
CARRIED
UNANIMOUSLY

The six lots described above are identified on the attached sketch. The change in land use from a P-1 (Community Use) to a new mixed use residential zone will require an amendment to the Official Community Plan, as well as a zoning amendment. Bylaws to enable these changes have been drafted for Council's consideration and included in the August 12, 2019 Regular Council Meeting Agenda.

Since the project was initiated in 2018, staff have worked with the architectural team and Craven Houston Powers to finalize plans for the proposed Culture Hub development. In February of 2019, the public was invited to view the architectural renderings of the proposed building and to provide feedback. As a result, the size of the proposed building increased from the original 8,000 ft^2 to approximately 10,000 ft^2. The increase will allow for bigger public gathering space and make the building better suited to serve as an emergency cooling center in the event of an air quality emergency.

Respectfully submitted;

Madeline McDonald
Madeline McDonald
Chief Administrative Officer



HARRISON HOT SPRINGS
Naturally Refreshed

CTQ

FIGURE 6: Future Integrated Transportation Network

Appendix C – Cost Estimates

VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO:	**Mayor and Council**	**DATE: August 8, 2019**
FROM:	**Ken Cossey, MCIP, RPP Planning Consultant**	**FILE: 3900-01 (445, 455 and 465 Hot Springs Rd and 446, 456, 446 Poplar St)**
SUBJECT:	**Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw 1143, 2019**	

ISSUE:

To start the adoption process for Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw 1143, 2019.

BACKGROUND:

On July 30, 2019 Council directed staff to prepare a zoning amendment bylaw. Upon a review of the current OCP designation an OCP amendment is also required. The six Lots on the northern portion of the block of land where the current Village office and Public Works yard are located. To the north of this site the area is adjacent to Miami River Drive. Lots 2, 3 and 4 fronts onto Hot Springs Road and range in size from 637M^2 to 676M^2. Lots 16, 17 and 18 fronts onto Poplar Street and all three lots are 676M^2 in size. The site is relatively level and is currently used as an overflow parking lot area.

Located between Lots 2, 3 and 4 and Lots 16, 17 and 18 is a lane that is approximately 161M (530 ft) long and 6M (20ft) wide.

Current Official Community Plan (OCP) designation

Upon a review of OCP Bylaw 864, 2007, the site is currently designated as a Public Use area, as per Schedule 1-B of the OCP.

Current Zoning

Upon a review of Bylaw 1115, 2017 the site is zoned Community (P-1)

Surrounding Land Uses

To the north of this site, along Miami River Drive, the zoning is R-1, to the east along Poplar Street the zoning is R-1. On the west side, along Hot Springs Road, the zoning is Tourist Commercial (C-3).

Services

The site is currently serviced with sewer and water lines and can easily be serviced by BC Hydro.

Proposed OCP Designation

As the proposed land use will consist of a mixed commercial-residential development, staff is suggesting that the site be re-designated from Public Use to a Village Centre use. The land development policies associated with this designation are better suited for the proposed Zoning Bylaw. The issue here is not the name of the designation but rather the land development policies associated with the designation. The policies and the direction for the Village Centre Area, as per s 4.3.2 of the OCP indicates the following:

"Within this area, a range of commercial, residential and public uses are promoted, with emphasis on encouraging commercial facilities and mixed commercial-residential developments that maintain public views of the lake at key locations."

In addition, the Village Centre designation of this site will also address objectives 5.2.5 and 5.2.7 of the OCP. The proposed development site is also adjacent to a Waterfront Commercial designated site, located across Hot Springs Road.

Proposed Land Use Zone

Given Council's stated interest that the zone be used for a high-density residential use with the option for commercial uses on the ground floor, staff is recommending that a Comprehensive Development (CD-1) zone be created for this site.

OCP re-designation criteria

Within the OCP, specifically sections 1.5.2 and 1.6, is the criteria used to determine if the area can be re-designated. Staff have reviewed this criteria and have determined that the area can be re-designated. A copy of the review is attached to this report.

Public safety issues

Currently located adjacent to the site there are three fire hydrants. When a building permit is submitted for the proposed uses, the proponent may be required to upgrade the number of hydrants.

Consultation requirements

Section 475 of the *Local Government Act*, requires that stakeholder consultation be undertaken. Listed below in the recommendations section is the suggested consultation plan for this OCP amendment.

RECOMMENDATIONS:

THAT Official Community Plan Amendment Bylaw 1142, 2019 be given first and second reading; and

THAT Zoning Amendment Bylaw No. 1143, 2019 be given first and second reading; and

THAT Official Community Plan Amendment Bylaw 1142, 2019 be referred to the Fraser Valley Regional District (FVRD) to ensure that this bylaw conforms to the FVRD Regional Growth Strategy; and

THAT Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw No. 1143, 2019 be referred to the Advisory Planning Commission for their comment; and

THAT staff be authorized to set up a public hearing for Official Community Plan Amendment Bylaw 1142, 2019 and Zoning Amendment Bylaw No. 1143, 2019.

Respectfully submitted:

Ken Cossey

Ken Cossey, MCIP, RPP,
Planning Consultant

REVIEWED BY and Concurrence with the RECOMMENDATIONS

Madeline McDonald

Madeline McDonald
Chief Administrative Officer

Attachments (3) Official Community Plan Amendment Bylaw 1142, 2019
Zoning Amendment Bylaw No. 1143, 2019
Official Community Plan Amendment Bylaw 1142, 2019
amendment criteria review

HARRISON HOT SPRINGS
Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS
BYLAW NO. 1142, 2019

A bylaw to amend Village of Harrison Hot Springs Official Community Plan Bylaw No. 864, 2007

WHEREAS the Mayor and Council has deemed it advisable to amend the Village of Harrison Hot Springs Official Community Plan Bylaw 864, 2007, the Official Community Plan Bylaw for the Village of Harrison Hot Springs, as adopted May 7, 2007;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

CITATION

1. This Bylaw may be cited for all purposes as the "**Village of Harrison Hot Springs Official Community Plan Amendment Bylaw No. 1142, 2019**".

2. TEXT AMENDMENTS

   2.1 Official Community Plan Bylaw Number 864, 2007 is hereby amended by inserting the following into 4.3.2(b) after the word "Avenue" and before the word "and" ",includes the Lots that front onto Hot Springs Road and Popular Street, as legally described in amendment Bylaw 1142, 2019."

MAP AMENDMENT

2. That:

   (a) Schedule 1-B the Official Community Plan Map of the Village of Harrison Hot Springs Official Community Plan, Bylaw 864, 2007, be amended by re-designating the lands, legally described as:

435 Hot Springs Road – Lot 2, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
445 Hot Springs Road – Lot 3, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
455 Hot Springs Road – Lot 4, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
456 Poplar Street - Lot 16, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
446 Poplar Street - Lot 17 Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
436 Poplar Street - Lot 18 Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786

outlined in red and cross-hatched on Schedule A.1 of this Bylaw from a **Public Use Designation** to the **Village Centre Area Designation**; and,

   (b) this area is also included in the Lakeshore Development Permit Area 1; and

(c) the map appended hereto designated as Schedule A.1 showing such amendment is an integral part of this Bylaw.

READ A FIRST TIME THIS _____ DAY OF AUGUST, 2019

READ A SECOND TIME THIS _____ DAY OF AUGUST, 2019

A PUBLIC HEARING WAS HELD ON THE _____ DAY OF _____, 2019

READ A THIRD TIME THIS _____ DAY OF _____, 2019

ADOPTED THIS _____ DAY OF _____, 2019

_____ _____

Mayor Corporate Officer

Schedule A.1
Bylaw No. 1142, 2019

HARRISON HOT SPRINGS
Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS
BYLAW NO. 1143, 2019

A bylaw to amend Village of Harrison Hot Springs Zoning Bylaw No. 1115, 2017

WHEREAS the Mayor and Council has deemed it advisable to amend the Village of Harrison Hot Springs Zoning Bylaw No. 1115, 2017, the Zoning Bylaw for the Village of Harrison Hot Springs, as adopted May 7, 2018;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

CITATION

1. This Bylaw may be cited for all purposes as the "**Village of Harrison Hot Springs Zoning Amendment Bylaw No. 1143, 2019**".

2. TEXT AMENDMENTS

2.1 Zoning Bylaw Number 1115, 2017 is hereby amended by adding a new Zone, in section 1.8.2 Zone Names, section a) and the new Zone is inserted below the Agricultural Land Reserve Zone as follows:

Column 1	Column 2
Zone Name	**Abbreviation**
Comprehensive Development 1	CD-1

2.2 Zoning Bylaw Number 1115, 2017, is hereby further amended under Part 7.0 Zoning Regulations, by inserting after section 7.1.4 Other Land Uses "section 7.1.5 Comprehensive Development Uses" as follows:

Permitted Comprehensive Development Uses (see the additional requirements below)	CD-1 Zone
Permitted Uses	
Retail Establishments	♦
Restaurants	♦
Convenience Stores	♦
Neighbourhood Pub	♦
Apartments	♦

Comprehensive Development Regulations	CD-1 Zone
Minimum Lot Size for subdivision purposes(m^2)	1500
Subdivision for a relative (Ha)	2.5
Floor Area Ratio	N/A
Minimum Lot Width (m)	45
Maximum Density (units / ha)	N/A
Maximum Lot Coverage (%)	75
Minimum Front Setback (m)	4.0
Minimum Rear Setback (m)	3.6
Minimum Interior Side Setback (m)	1.2
Minimum Exterior Side Setback (m)	3.6
Maximum Height (m)	10.7
Off-Street Parking	As per the requirements of this bylaw, as amended from time to time
Off-Street Loading	As per the requirements of this bylaw, as amended from time to time

Additional Requirements

1/. Additional requirements are noted below:

(a) The first floor must be used only for any of the above referenced Commercial Uses. The final two floors must be used only for the above referenced Residential Use.

(b) All the permitted uses must be hooked into the Community Sewer System and a Community Water System.

MAP AMENDMENT

2. That:

(a) Schedule A, the Zoning Map of the Village of Harrison Hot Springs Zoning Bylaw No. 1115, 2017, be amended by rezoning the lands, legally described as:

435 Hot Springs Road – Lot 2, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
445 Hot Springs Road – Lot 3, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
455 Hot Springs Road – Lot 4, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
456 Poplar Street - Lot 16, Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
446 Poplar Street - Lot 17 Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786
436 Poplar Street - Lot 18 Block 2, S 13, Tp 4, Range 29, W6M NWD Plan 9786

outlined in red and cross-hatched on Schedule 1 of this Bylaw from a **Community P-1 Zone** to a **Comprehensive Development 1 (CD-1) Zone**; and,

(b) the map appended hereto designated as Schedule 1 showing such amendment is an integral part of this Bylaw.

READ A FIRST TIME THIS _____ DAY OF AUGUST, 2019

READ A SECOND TIME THIS _____ DAY OF AUGUST, 2019

A PUBLIC HEARING WAS HELD ON THE _____ DAY OF _____, 2019

READ A THIRD TIME THIS _____ DAY OF _____, 2019

ADOPTED THIS _____ DAY OF _____, 2019

_____
Mayor

_____
Corporate Officer

Schedule 1
Bylaw No. 1143, 2019

OCP Amendment Considerations (1.5.2 of the OCP)

For Official Community Plan Amendment Bylaw 1142, 2019

A/. Contributions towards or impacts on achieving the goals of the OCP and the effects on the relevant OCP objectives and policies.

The proposed Village Centre designation contributions towards achieving the goals of the OCP, specifically Goal 2. In addition, the proposed designation contributes to section 4.3.2 by promoting a mixed commercial-residential development and sections 5.2.5 and 5.2.7 of the Commercial Objectives.

B/. Availability of water and sewer services and evaluation of the impact on the overall community systems.

The water and sewer systems are located on site. The current systems can handle the extra volume.

Current wastewater system is built for a maximum volume 3000 M^3 a day and is currently doing 2300M^3 a day.

Water system – built for a maximum volume of 3270M^3 a day and is doing 2300M^3 (16-hour day)

C/. Environmental impact including effects upon ESA and mitigative measures to deal with the impacts.

N/A

D/. Potentially hazardous conditions – floodplains or unstable soils

Not located in a geotechnical hazardous Development Permit Area. With respect to the floodplain issue, this can be addressed at the building permit stage.

E/. Traffic volumes and patterns and road system capacity and evaluation on the overall road system

Assuming a total of 16 apartments (8 over floors 2 and 3 x two areas at approximately 900ft^2 each) 1.5-2.4 cars per unit (24 to 38 plus the potential commercial traffic). Easily fit into the current system

F/. Impact on the existing land uses and neighbourhood character

The roads will act as a buffer between the uses.

G/. Standards of design and landscaping of the proposed development

To be addressed through the development permit process. In addition, the Zoning Bylaw 1115, 2017 requires a buffer and the buffer requirements are laid out in this bylaw.

H/. Adequate handling of the drainage and stormwater runoff

A storm water management plan will be required.

I/. Effects on the municipal finances

More from an administrative and enforcement perspective. (duties already performed) - Business licence administration, noise bylaw enforcement

J/. Comments from the APC and the community

OCP amendment will be sent to the APC and out for a public hearing

K/. ALR – suited for future agricultural uses

N/A

Plus, the criteria for the re-designation (1.6 of the OCP)

A/. Potential effect of changing the designation on the overall development concept for the village – complement or adversely affect the long-term vision. Complements the current vision. The proposed Village Centre designation contributions towards achieving the goals of the OCP, specifically Goal 2. In addition, the proposed designation contributes to section 4.3.2 by promoting a mixed commercial-residential development and sections 5.2.5 and 5.2.7 of the Commercial Objectives.

B/. Physical suitability of the lands for the purposed uses – capable to handle the change

Yes – large undeveloped parcel of land. The mixed use will add to the character of the local neighbourhood and add to the overall commercial opportunities for businesspeople, artisans or crafts people.

C/. Potential effect on the Village's development servicing plan. Capacity and operations of the current wastewater and water systems.

The current systems can handle the extra volume.

Current wastewater system is built for a maximum volume 3000 M^3 a day and is currently doing 2300M^3 a day.

Water system – built for a maximum volume of 3270M^3 a day and is doing 2300M^3 (16-hour day)

D/. Potential effect on the adjacent land uses and the neighbourhood

Limited. Depending upon the types of lights being proposed could be some additional light pollution.

E/. Availability of land and demand for the proposed land uses – is there sufficient land available for the intended use and would the re-designation displace land supply needed for another use?

Yes, there is a sufficient vacant land base that can accommodate this type of use.