

Regular Meeting of the Board of Directors

June 29, 2017

6:00 pm

RDKB Board Room-Trail, B.C

FINAL AGENDA

1. Call to Order

2. Consideration of the Agenda (Additions/Deletions)

- 2a) The agenda for the June 29, 2017 meeting of the RDKB Board of Directors is presented.

Move items forward on the agenda if necessary.

Recommendation: Corporate Vote Unweighted

That the agenda for the June 29, 2017 meeting of the RDKB Board of Directors be adopted as presented.

3. Minutes

- 3a) The minutes of the Regional District of Kootenay Boundary Board of Directors meeting held June 14, 2017 are presented.

Recommendation: Corporate Vote Unweighted

That the minutes of the Regional District of Kootenay Boundary Board of Directors meeting held June 14, 2017 be adopted as presented.

[Minutes-Board- 14 Jun 2017-BOARD-June 29 2017 - Pdf](#)

4. Proceed to Closed Meeting

- 4a) Closed meeting pursuant to Section 90 (2) (e) the *Community Charter*.

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors proceed to a closed meeting pursuant to Section 90 (2) (e) of the *Community Charter*.

5. **Delegation(s)**

6. **Unfinished Business**

6a) **Board Action Item List as of June 23, 2017**

Recommendation: That the Board Action Item List as of June 23, 2017 be received.

[RDKB Action Items -2017-06-23 10:00:30 AM](#)

6b) **D. Derby, Regional Fire Chief
Fire Dispatch Services**

Recommendation: Corporate Vote Weighted

That the Regional District Kootenay Boundary Board of Directors approves the Fire Dispatch Services Contract between the Corporation of the City of Kelowna and the Regional District of Kootenay Boundary. **FURTHER**, that the Regional District of Central Kootenay be given written notice that effective April 30, 2018 the RDKB will no longer provide Fire Dispatch Services. **FURTHER** that the Board of Directors authorizes the RDKB signatories to sign and enter into the contract.

[Staff Report - Fire Dispatch Services Contract - Board - June 29, 2017](#)

[RDKB Regional Fire Dispatch Contract - Board - June, 29, 2017](#)

[Kelowna Response to RDKB Fire Dispatch RFP - Board - 29, 2017](#)

6c) **A. Stanley, General Manager Environmental Services
re: East End Sewerage Service Request for Proposals
Design, Engineering and Liquid Waste Management Planning
Services**

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves awarding the contract for Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment to OPUS International Consultants for \$1,572,000.

[Staff Report - East End Sewer Engineering and Planning Contract - Board June 29 2017 - Pdf](#)

7. **Communications**

8. **Communications (Information Only)**

9. **Reports**

- 9a) **J. M. MacLean, Chief Administrative Officer**
re: CAO Report-2nd Quarter (April-June 2017)

Recommendation: Corporate Vote Unweighted

That the CAO Quarterly Report for the 2nd Quarter of 2017 (April-June 2017) be received.

[CAO Quarterly Report - Second Quarter 2017 - Board - June 29, 2017](#)

- 9b) **Adopted RDKB Committee Minutes**

Minutes from the RDKB Committee meetings held during May 2017 are presented.

Recommendation: Corporate Vote Unweighted

That the following RDKB Committee Minutes from meetings held during May 2017 be received:

East End Services (May 9), Policy, Executive and Personnel (May 10), Committee of the Whole (May 10) and Electoral Area Services (May 17).

[Minutes-EES - 09 May 2017-EES June 13-BOARD-June 29 2017 - Pdf](#)

[Minutes-PEP-10 May- PEP June 14-BOARD June 29 2017- Pdf](#)

[Minutes-COW-10 May 2017-BOARD-June 29 2017 - Pdf](#)

[Minutes-EAS-17 May-EAS June 15-BOARD June 29 2017 - Pdf](#)

- 9c) **Adopted RDKB Recreation Commission Minutes**
Electoral Area C/Christina Lake Parks and Recreation
Commission-May 10/17

Recommendation: Corporate Vote Unweighted

That the minutes of the Electoral Area C/Christina Lake Parks and Recreation Commission meeting held May 10, 2017 be received.

[Minutes- Electoral Area C Parks & Recreation - May 10, 2017 -Board-June 29 2017](#)

- 9d) **Draft Minutes-Electoral Area Advisory Planning Commission**
Electoral Area D/Rural Grand Forks-June 6/17

Recommendation: Corporate Vote Unweighted

That the draft RDKB Electoral Area D/Rural Grand Forks Advisory Planning Commission minutes be received.

[Minutes-June 6-APC-Rural Grand Forks-Board-June 29 2017](#)

10. **Monthly Committee Recommendations to Board of Directors**

The RDKB Committee recommendations as adopted by the RDKB Committees are presented for consideration.

10a) **Beaver Valley Regional Trails, Parks and Recreation-Feb 7/17
Director Grieve, Chair/Director Cecchini, Vice-Chair**

***Storage Shed Lewis Field-BV Softball Assoc.-Budget
Amendment***

Recommendation: Stakeholder Vote Weighted

That the Regional District of Kootenay Boundary Board of Directors approves the allocation of \$4,000, as matching funds to the CBT Community Initiatives Program grant funding, from the 019 Beaver Valley Regional Parks and Trails Reserve Account for the construction of a storage shed at Lewis Field. **FURTHER** that the 2017-2021 five-Year Financial Plan Bylaw No. 1637, 20167 be amended accordingly.

[Staff Report-BV Softball Shed-Budget Amendment-BOARD-June 29 2017](#)

10b) **East End Services Committee-June 13/17
Director Grieve, Chair/Director Cecchini, Vice-Chair**

***City of Trail Appointment to the Lower Columbia Initiatives
Corporation Board of Directors***

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors endorses the East End Services Committee's recommendation to support the City of Trail's appointment of Keith DeWitt as the City's representative to the Lower Columbia Initiatives Corporation Board of Directors.

10c) **Policy, Executive and Personnel Committee-June 14/17
Director Gee, Chair/Director Martin, Vice-Chair**

Best Practice - Municipal Appointments Policy

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves the Best Practice-Municipal Appointments Policy as recommended by the Policy, Executive and Personnel Committee on June 14, 2017. **FURTHER** that the Policy be distributed accordingly.

[Background-Best Practices Municipal Appointments-Revisions Feb 2 2017-BOARD-June 29 2017](#)

[Best Practices Municipal Appointments-After Directors Comments PEP June 14-BOARD-June 29 2017](#)

10d) **Electoral Area Services Committee - June 15/17**
Director Worley, Chair/Director Gee, Vice-Chair

Site Specific Exemption to the RDKB Floodplain Bylaw-Electoral Area D/Rural Grand Forks

Recommendation: Stakeholder Vote (Electoral Area Directors) and City of Grand Forks (Fringe Area) Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves the application for a Site Specific Exemption to the RDKB Floodplain Management Bylaw submitted by David Turner and Janice Westlund, in order to construct an addition to their single family dwelling with a secondary suite on the property legally described as Lot A, plan KAP38070, DL 362, SDYD subject to:

1. Adherence to all the recommendations included in the Geotechnical Assessment Report submitted by Norman Deverney, P.Eng., of Deverney Engineering Services Ltd; and
2. The owner registering a new standard floodplain covenant on title in favour of the Regional District of Kootenay Boundary prior to issuance of a building permit.

[Staff Report-Floodplain-Board-June 29 2017](#)

11. Board Appointments Updates

- 11a) Southern Interior Development Initiative Trust (S.I.D.I.T.) - Chair McGregor
Southern Interior Beetle Action Coalition (S.I.B.A.C.) - Chair McGregor
Okanagan Film Commission - Director Gee
Boundary Weed Stakeholders Committee - Director Gee
Columbia River Treaty Local Government Committee and Columbia Basin Regional Advisory Committee (CBRAC) - Director Worley
Kootenay Booth - Director Rotvold
Rural Development Institute (R.D.I.) - Director Martin

12. New Business

12a) **M. Daines-Renew**

Lease with Selkirk College Greater Trail Community and Arts Centre

Recommendation: Corporate Vote Weighted

That the Regional District of Kootenay Boundary Board of Directors approve a lease with Selkirk College for the purpose of leasing administration and classroom space in the Greater Trail Community Center in the amount of \$16,579.68 per month, and in addition, \$3,000 per month to cover janitorial services, for a period from April 1, 2017 to December 31, 2017. **FURTHER** that the Board authorizes the RDKB signatories to sign and enter in to the lease.

[Staff Report-Lease Renewal-Selkirk College-GTCAC-BOARD-June 29 2017 - Pdf](#)

12b) **M. Andison- *Update on Status of Regional Agricultural Liaison Services Project***

Recommendation: Corporate Vote Unweighted

That the staff report from Mark Andison, General Manager, Operations/DCAO providing an update to the Board of Directors on the Regional Agricultural Liaison Services project be received.

[Regional Agricultural Liaison Services Project Update - Pdf](#)

12c) **Active Communities Grant**

Big White Mountain Healthy Community and School District 51

Director Gee will lead a discussion on this matter.

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves the submission of an Active Communities Grant (BC Healthy Communities, BC Healthy Living Alliance) for \$30,000, to support work within the Big White Community, in association with School District 51, Interior Health Authority and the Big White Mountain Community Development Association, towards measurable impacts on, and opportunities for, physical activity through healthy public policy, healthy community design and improving access and or inclusion for targeted populations or communities.

[Active Communities Grant-Application Guide-Background-BOARD-June 29 2017](#)

12d) **J. M. MacLean-Chief Administrative Officer**
re: Sale of Waneta Dam

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves forwarding a letter to the B.C. Premier and the Leader of the Opposition asking that the processes involved with the sale of the Waneta Dam to Fortis Inc. be delayed to October 2017 to allow for the investigation of options and ramifications of the sale.

[Staff Report - Board - Letter to Prov re Teck sale of Waneta - June 1027 - Pdf](#)

12e) **Grant in Aid**

Recommendation: Stakeholder Vote (Electoral Area Directors) Weighted

That the following Grant in Aid applications be approved:

1. Selkirk Rock and Mineral Club-\$200-Electoral Area A
2. Columbia and Western Trail Society-\$4,000-Electoral Area C/Christina Lake
3. Kootenay Robusters Dragon Boat Team-\$200-Electoral Area C/Christina Lake
4. Grand Forks BC Parade Committee-\$1,000-Electoral Area D/Rural Grand Forks
5. Grand Forks Ultimate Frisbee Club-\$300-Electoral Area D/Rural Grand Forks
6. Big White Mountain Community Development Association-\$1,500-Electoral Area E/West Boundary (Big White)
7. Big White Mountain Community Development Association-\$3,500-Electoral Area E/West Boundary (Big White)
8. Lifeguard Outreach Society-\$500-Electoral Area E/West Boundary (Big White)

[Grant in Aid-BOARD-June 29 2017](#)

[Grant in Aid at June 27-BOARD-June 29 2017](#)

13. Bylaws

14. Late (Emergent) Items

15. Discussion Items Referred from Other RDKB Committees

16. Discussion of Items for Future Meetings

17. Question Period for Public and Media

18. Closed (Incamera) Session

- a) Reconvene to the closed meeting pursuant to section 90 (1) (c) of the *Community Charter*.

Recommendation: Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors reconvenes to the closed meeting pursuant to Section 90 (1) (I) of the *Community Charter*.

19. Adjournment



Regular Meeting of the Board of Directors

June 14, 2017

RDKB Board Room, Trail, B.C

6:00 P.M.

Minutes

Present: Director G. McGregor, Chair
Director P. Cecchini
Director J. Danchuk
Director M. Martin
Director D. Langman
Director L. McLellan
Director E. Smith
Director M. Rotvold
Director A. Grieve
Director L. Worley
Director R. Russell
Director V. Gee

Staff: J. M. MacLean, Chief Administrative Officer
T. Lenardon, Manager of Corporate Administration/Recording Secretary

Call to Order

The Chair called the meeting to order at 6:00 p.m.

Consideration of the Agenda (Additions/Deletions)

The agenda for the June 14, 2017 meeting of the RDKB Board of Directors was presented.

The Manager of Corporate Administration noted the additions to the agenda:

- a link to New Business agenda item Ministry of Agriculture Strategic Outreach Initiative-Planning-Grant Funding application,
- a recommendation from the East End Services Committee meeting held June 13, 2017 regarding the City of Trail's appointment to the Lower Columbia Initiatives Corporation Board of Directors was added to Late Emergent Items, and
- a recommendation from the Policy, Executive and Personnel Committee meeting held June 14th prior to the Board meeting regarding Staff compensation was added to Late Emergent Items, and it was;

223-17 Moved: Director Grieve Seconded: Director Martin

Corporate Vote Unweighted

That the agenda for the Regional District of Kootenay Boundary Board of Directors June 14, 2017 meeting be adopted as amended.

Carried.

Minutes

The minutes of the RDKB Board of Directors meeting held May 24, 2017 were presented.

224-17 Moved: Director Rotvold Seconded: Director Worley

Corporate Vote Unweighted

That the minutes of the RDKB Board of Directors meeting held May 24, 2017 be adopted as presented.

Carried.

225-17 Moved: Director McLellan Seconded: Director Smith

That the Regional District of Kootenay Boundary Board of Directors proceed to a closed meeting pursuant to Section 90 (1) (a) of the *Community Charter* (time: 6:05 p.m.)

Carried.

The Regional District of Kootenay Boundary Board of Directors reconvened to the open meeting at 7:09 p.m.

Delegation(s)

There were no delegations in attendance.

Unfinished Business**Discussion Item/Director Russell**

Determine an opportunity for a strategic discussion on perceived and real gaps in RDKB Waste Management Stream (e.g. organics, recycling and garbage).

Director Russell requested direction from the Board for setting aside time to discuss environmental services matters (e.g. garbage pickup in the West Boundary, closure of the reuse centres and changes in recycling with Recycle BC assuming the contract).

The Board members discussed these issues further, and it was;

226-17 Moved: Director Rotvold Seconded: Director Russell

Corporate Vote Unweighted

That staff prepare a report that will provide clarity around, and assist the Board in strategically addressing perceived or real gaps in solid waste management services (e.g. concerns of lack of convenience in waste pickup service expansion in the Boundary, closure of reuse centres, and reductions in availability of recycling streams with the transition to Recycle BC). **FURTHER** that the report also provides information on the implications that making any suggested changes would have. **FURTHER** that the report be presented to the Board of Directors at the July 27, 2017 Board meeting for discussion and for referral to appropriate committees or action by the Board.

Carried.

Communications

There were no communications to consider.

Communications (Information Only)**a) UBCM-May 17/17**

Re: 2016 UBCM Resolutions

b) Canadian Red Cross-May 17/17

Re: Thank You

227-17 Moved: Director Grieve Seconded: Director Langman

Corporate Vote Unweighted

That Communication Information Only Items a) - b) be received.

Carried.

Reports

Boundary Animal Control Monthly Report - May 2017

228-17 Moved: Director Rotvold Seconded: Director Smith

Corporate Vote Unweighted

That the Kootenay Boundary Animal Control Monthly Report for May 2017 be received.

Carried.

Interim Schedule of Accounts-Ending May 2017

Director Martin, Chair Finance/Director Cecchini, Vice-Chair

229-17 Moved: Director Martin Seconded: Director Smith

Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves the Interim Schedule of Accounts (Accounts Payable) ending May 31, 2017 as follows:

Accounts Payable for May 2017	\$1,336,646.25
Total Expenditures for May 2017	\$1,336,646.25

Carried.

Adopted RDKB Committee Minutes

Boundary Economic Development Committee-May 2, 2017

Boundary Community Development Committee-May 2, 2017

230-17 Moved: Director Grieve Seconded: Director Cecchini

Corporate Vote Unweighted

That the minutes of the Boundary Economic Development Committee and Boundary Community Development Committee meetings held May 2, 2017 be received.

Carried.

Draft RDKB Electoral Area Advisory Planning Commission Minutes-June/17

231-17 Moved: Director Worley Seconded: Director Russell

Corporate Vote Unweighted

That the following draft Electoral Area Advisory Planning Commission minutes for meetings held on June 5 and June 6, 2017 be received: Electoral Area C/Christina Lake (June 6), Electoral Area E/West Boundary (June 5), and Electoral Area E/West Boundary (Big White) (June 6).

Carried.

Monthly Committee Recommendations to Board of Directors

The RDKB Committee recommendations as adopted by the RDKB Committees during June 2017 are presented for consideration.

There were no Committee recommendations for the Board to consider at this time.

Board Appointments Updates

Southern Interior Development Initiative Trust (S.I.D.I.T.) - Chair McGregor

There is nothing new to report at this time.

Southern Interior Beetle Action Coalition (S.I.B.A.C.) - Chair McGregor

There is nothing new to report.

Okanagan Film Commission - Director Gee

Due to road closures, Director Gee was unable to attend the last OK Film Commission meeting.

Boundary Weed Stakeholders Committee - Director Gee

- A Committee meeting has not been held since the last Board meeting.
- Barb Stewart, staff and members of the Rural Bridesville Land Use Steering Committee toured the West Boundary to view the escalating problems and issues with weeds.

Columbia River Treaty Local Government Committee (CRTLGC) and Columbia Basin Regional Advisory Committee (CBRAC) - Director Worley

- Director Worley distributed copies of a letter from Mary Anne Coules, BC Hydro Community Relations, to newspaper editors, regarding the Comptroller of Water Rights' instructions to BC Hydro to undertake physical re-contouring where fish are being stranded on the Columbia and Kootenay Rivers.
- The Columbia River Treaty Local Government Committee has not held any recent meetings. Business is in abeyance until further information from the USA has been provided.
- BC Hydro is hosting a seminar on water levels on June 19th and CBRAC is hosting tours of local dams also scheduled for June 19th.
- Director Worley and CAO J. MacLean will attend the CBRAC meeting scheduled for June 20-21 in Nelson.

Kootenay Booth - Director Rotvold

There will be a conference call on June 23rd.

Rural Development Institute (R.D.I.) - Director Martin

There is nothing new to report.

Chair's Update - Chair McGregor

The Chair and the General Manager of Operations/Deputy CAO met with representatives from Teck Metals Inc.-Trail operations at Teck's request, to discuss the company's ownership of, and plans for possible development of Teck-owned lands located within the RDKB.

New Business

Beaver Valley Regional Parks, Trails and Recreation Committee-May 9/17
Director Grieve, Chair/Director Cecchini, Vice-Chair

Recreation Agreement with the City of Trail

232-17 Moved: Director Grieve Seconded: Director Danchuk

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RDKB Board of Directors

June 14, 2017

Corporate Vote Weighted

That the Regional District of Kootenay Boundary Board of Directors approves the Recreation Agreement with the City of Trail to permit Beaver Valley residents to access City recreation and culture services and programs without encumbrance and at the same rate as City residents for a term commencing November 1, 2016 and expiring October 31, 2021 at a cost of \$125,000 per year payable on or before August 15th of each year. **FURTHER** that the Board of Directors authorizes the RDKB signatories to sign and enter into the agreement.

Carried.

Outdoor Fitness Machines**Rivervale Park Electoral Area B/Lower Columbia-Old Glory*****Columbia Basin Trust (CBT Contribution Agreement)***

233-17 Moved: Director Worley Seconded: Director Rotvold

Corporate Vote Weighted

That the Regional District of Kootenay Boundary Board of Directors approves the Contribution Agreement with the Columbia Basin Trust, commencing April 1, 2017, where the Trust will pay the RDKB \$15,000 for the addition of two outdoor fitness machines in the Rivervale Park located in RDKB Electoral Area B/Lower Columbia-Old Glory. **FURTHER** that the Board of Directors authorize the RDKB signatories to sign and enter into the agreement.

Carried.

Ministry of Agriculture**BC Strategic Outreach Initiative Planning Grant**

Director Gee reviewed the grant application that had been distributed to the Board members. She explained that this application, if successful, will provide funds for the development of a business plan and business consultation with SIDIT Business Advisory Services as well as identify certain options for possible communal ownership of an abattoir. This is the next stage of the Marketing and Processing of Meat in the Boundary project, which began with Rural Dividend funds.

Processing and Marketing of Meat in the Boundary Project

234-17 Moved: Director Worley Seconded: Director Cecchini

Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves the submission of a BC Strategic Outreach Initiative Funding Application-Ministry of

Agriculture (Strategic Planning) for \$10,000 for the development of a business plan and business consultation for the Boundary Meat Processing and Marketing Project.

Carried.

K. Gobeil, Planner-Liquor Licence Application

Prospector Pub, Rock Creek, BC-Electoral Area E/West Boundary

235-17 Moved: Director Cecchini Seconded: Director Smith

Corporate Vote Unweighted

Be it resolved that:

1. **The Board recommends the primary liquor license for the Prospectors Pub be supported for the following reasons:**

The liquor licence should have no impact on the residents, community and neighbouring property owners if approved.

2. **The Board's comments on the prescribed considerations are as follows:**

- a. ***The potential for noise:***

No negative noise impact to the community is anticipated by approving this application.

The RDKB does not have a record of noise related or other disturbance complaints associated with the business.

- b. ***The impact on the community:***

It is anticipated that the proposal would not negatively impact the Rock Creek community. The Area Planning Commission for Electoral Area 'E' / West Boundary also noted that there had been no complaints regarding traffic from this location in the past.

- c. ***Is the amendment contrary to the primary purpose of the establishment:***

The business operates as an 'eating, drinking establishment' and is in an area with no zoning bylaw. The license will not affect the primary purpose of the establishment.

3. **The Board's comments on the views of the residents are as follows:**

The applicant was provided with two notice of the proposal signs. The applicant placed the signs in the entrance to the patio, and the end of the Bar on June 2nd, 2017. No comments had been received by the Planning and Development Department at the time the staff report to the Board was prepared.

Carried.

G. Denkovski-Manager of Infrastructure and Sustainability***Regionalized Waste Management Service Front End Loader Purchase*****236-17** Moved: Director Russell Seconded: Director Rotvold

That the Regional District of Kootenay Boundary Board of Directors award the tender to Inland Kenworth for \$435,786.40 for their submission to supply the Case 921G loader.

FURTHER that the Board direct staff to fund the purchase from the Regionalized Waste Management Service (010) 2017 - 2021 Five Year Financial Plan.

Carried.

K. Gobeil, Planner-Bylaw Referral***Bylaw Referral from Regional District of Okanagan Similkameen*****237-17** Moved: Director Cecchini Seconded: Director Worley**Corporate Vote Unweighted**

That the Regional District of Kootenay Boundary Board of Directors advise the Regional District of Okanagan Similkameen that the Regional District of Kootenay Boundary's interests are unaffected by the RDOS Amendment Bylaws No. 2728 and 2773.

Carried.

K. Gobeil, Planner-High Forest Crescent *Local Government Act* Section 510***Parkland Dedication Big White Ski Resort*****238-17** Moved: Director Gee Seconded: Director Rotvold**Corporate Vote Unweighted**

That the Board of Directors requires a third party appraisal to determine the value of 40 High Forest Crescent, Big White, Block A, District Lot 4247, Land District 54 Big White, Electoral Area 'E'/ West Boundary to determine payment in lieu of park land to satisfy Section 510 of the *Local Government Act*. **FURTHER** that the Board of Directors supports payment of 5% of the value of the property as cash in lieu rather than park land to satisfy Section 510 of the *Local Government Act* (requirement for provision of park land or payment for parks purposes).

Carried.

Grant in Aid-June 14, 2017**239-17** Moved: Director Grieve Seconded: Director Worley**Stakeholder Vote (Electoral Area Directors) Weighted**

That the following Grant in Aid applications be approved:

1. Christina Lake Arts & Artisans Society-\$2,750-Electoral Area C/Christina Lake
2. The Sean Noble Curling 60+ Team-\$150-Electoral Area D/Rural Grand Forks
3. Grand Forks Merchants Ladies Fastball-\$500-Electoral Area D/Rural Grand Forks
4. Village of Midway-\$1,500-Electoral Area E/West Boundary
5. Kettle River Food Share Society-\$900-Electoral Area E/West Boundary
6. Boundary All Nations Aboriginal Council-\$1,000-Electoral Area E/West Boundary
7. Discover Rock Creek-\$1,776.27-Electoral Area E/West Boundary
8. Kettle River Museum-\$843.92-Electoral Area E/West Boundary

Carried.

Bylaws**Bylaw No. 1646-Board of Directors Remuneration Bylaw
(Addition of Director Liaison Allowance)****First, Second and Third Readings and Adoption**

Director McLellan expressed his concerns regarding the \$60 monthly allowance for the Director Liaison positions (Environmental Services, Protective Services and Finance) that has been included in the proposed Remuneration Bylaw.

240-17 Moved: Director Worley Seconded: Director Martin**Corporate Vote Weighted**

That the Regional District of Kootenay Boundary Board of Directors Remuneration Bylaw 1646, 2017 be given First, Second and Third Readings.

Carried.

(Director McLellan opposed)

241-17 Moved: Director Rotvold Seconded: Director Martin**Corporate Vote Weighted**

That the Regional District of Kootenay Boundary Board of Directors Remuneration Bylaw 1646, 2017 be Reconsidered and Adopted.

Carried.

(Director McLellan opposed)

Late (Emergent) Items

East End Services Committee-June 13/17

Director Grieve, Chair/Director Cecchini, Vice-Chair

***City of Trail Appointment to Lower Columbia Initiatives Corporation
(LCIC) Board of Directors***

242-17 Moved: Director McLellan Seconded: Director Martin

Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors endorses the East End Services Committee's recommendation to support the City of Trail's appointment of Keith DeWitt as the City's representative to the Lower Columbia Initiatives Corporation Board of Directors.

Carried.

Policy, Executive and Personnel Committee-June 14/17

Director Gee, Chair/Director Martin, Vice-Chair

CAO Salary Cost of Living Increases

243-17 Moved: Director Martin Seconded: Director Russell

Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors annually review the Chief Administrative Officer's salary in relation to cost of living increases in order to determine potential annual increases to salary, between the status quo full review that takes place every three years.

Carried.

Board Quarterly Discussion

Chair McGregor opened the floor for comments.

Director Rotvold thanked the Board members and staff for their participation in the Board Development Session held on May 25th. She noted that she believes the session was a valuable learning experience.

Discussion of Items for Future Meetings

Discussion Item-Location of September Board Meeting Alternate Location in the East End

As a practice each year, the Board of Directors schedules two Board meetings in different locations - one in an alternate East End location and one in an alternate West End location (e.g. other than Trail and Grand Forks).

The February 21, 2017 Board Meeting was held at Mount Baldy (alternate West End location). In 2016, the Board discussed holding the September 21, 2017 Board meeting at the Columbia Gardens Winery (Electoral Area A) as the alternate East End location.

244-17 Moved: Director Grieve Seconded: Director Martin

Corporate Vote Unweighted

That the Regional District of Kootenay Boundary Board of Directors approves scheduling the September 21, 2017 Board Meeting at the Columbia Gardens Winery located in RDKB Electoral Area A. **FURTHER** that Director Grieve work with staff to make the necessary arrangements and meeting details.

Carried.

Question Period for Public and Media

A question period was not necessary.

Closed (In camera) Session

A closed meeting pursuant to Section 90 (1) (a) of the *Community Charter*.

245-17 Moved: Director Danchuk Seconded: Director Rotvold

That the Regional District of Kootenay Boundary Board of Directors reconvene to the closed meeting pursuant to Section 90 (1) (a) of the *Community Charter* (time: 8:10 p.m.)

Carried.

The Regional District of Kootenay Boundary Board of Directors reconvened to the open meeting (time: 9:05 p.m.).

Items for Release to Open Meeting

The following matter was discussed in a closed meeting and released to the open meeting:

That Mr. Murray McConnachie be declared as the successful candidate to represent the RDKB on the Columbia Basin Trust Board of Directors for a three-year term commencing January 1, 2018 and expiring December 31, 2020 with a possible extension of a second three-year term at the discretion of the RDKB Board of Directors.

Adjournment

There being no further business to discuss, it was;

246-17 Moved: Director Danchuk

That the meeting be adjourned (time: 9:06 p.m.)

Carried.

TL

Action Item List
All Committees\Board
June 23, 2017

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
07 Mar 2013							07 Mar 2013
01 Feb 2016	PEP	That Staff draft a report with respect to clear and appropriate policies and procedures for electronic meetings that includes information and options for the development of a framework with respect to the in-person attendance of Committee and Board Chairs and Vice-Chairs. FURTHER that the report also include all possible options for public and applicant participation in electronic meetings. FURTHER that the report be presented back to the Committee at a future meeting but not until the use of electronic meetings has been implemented and practiced for a period of time.	John MacLean	13 Apr 2016	<i>John MacLean - 05 May 2017 09:51:31 AM</i> New interface proposal approved as part of the 2017 Financial Plan. In planning stages for implementation at this time. New interface will utilize individuals rather than participation in the room. will update Committee when we have a firmer ETA for installation. <i>John MacLean - 14 Mar 2017 11:02:25 AM</i> Pilot project undertaken with EAS. Had some technological issues. Looking at different interface to allow for electronic participation. Part of 2017 Financial Plan proposal.	Active	05 May 2017
01 Feb 2016	PEP	That the Policy, Executive and Personnel Committee defer further discussion regarding the allocation of the Board Fees until the Governance/Organizational Review has been completed.	John MacLean	30 Jun 2016	<i>John MacLean - 07 Jun 2017 09:37:03 AM</i> Staff continue to develop information and options for the Board to consider. Will be presented at a future meeting.	Active	07 Jun 2017
04 Feb 2016	COW-ES	That the Committee of the Whole (Environmental Services) direct Staff to carry out community consultation and create a Draft Big White Solid Waste Removal Policy. FURTHER that the draft policy be presented to the COW at a future meeting for consideration, approval and incorporation into the tender documents for the Big White Solid Waste Service.	Alan Stanley, John MacLean	13 Apr 2016	<i>Alan Stanley - 05 May 2017 09:02:14 AM</i> Big White waste management service tendered and contracted to 5-year term, overall policy regarding service levels still under development	Active	05 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
29 Feb 2016	COW-FIN	That the Committee of the Whole (Finance) directs staff to develop an Organizational Reserve Policy in 2016 which encompasses both capital and operating / maintenance requirements. FURTHER that the policy be presented back to the COW (Finance) for review and then be referred to the Policy, Executive and Personnel Committee.	Beth Burget, John MacLean	13 Apr 2016	<i>John MacLean - 26 Apr 2017 09:24:37 AM</i> This policy will be developed in conjunction with the Asset Management Plan which is out for request for proposals now.	Active	04 May 2017
25 Apr 2016	BEDC	That the Boundary Economic Development Committee directs staff to move forward with revisions to the Agricultural Plan and to move forward with a funding request to Investment Agriculture Foundation.	John MacLean	29 Apr 2016	<i>John MacLean - 25 Apr 2017 10:41:43 AM</i> The revision and update of the Agricultural Plan is under way. The necessary sub-committee is being discussed and will be appointed soon.	Active	25 Apr 2017
04 May 2016	Board	That the Staff Report from John M. MacLean, Chief Administrative Officer presenting information regarding the Board's stated goal to improve the RDKB's communications and public profile in keeping with the Strategic Plan be received.	John MacLean	30 Jun 2016	<i>John MacLean - 24 Apr 2017 03:19:11 PM</i> The Board continues to discuss this issue. Adequate resources have been provisionally included in the 2017 Financial Plan should the Board decide to proceed.	Active	24 Apr 2017
04 May 2016	Board	That the Policy, Executive and Personnel Committee recommends to the Regional District of Kootenay Boundary Board of Directors that Staff be instructed to prepare a Request for Proposal for audit services for a five year term commencing in 2017-2021.	Beth Burget	31 May 2016		Active	21 Apr 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
16 May 2016	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors approves the undertaking of the Bylaw Enforcement Notice / Dispute Adjudication system as a means to implement bylaw enforcement for minor infractions. FURTHER that staff be directed to apply to the Lieutenant Governor in Council to enact a regulation to include the RDKB in Schedule 1 of the Bylaw Notice Enforcement Regulation. FURTHER that upon inclusion in the Regulation that Staff draft a Bylaw Notice Enforcement Bylaw for the Board's consideration at a future meeting.	Theresa Lenardon	26 May 2016	Theresa Lenardon - 07 Jun 2017 01:09:10 PM The RDKB has been granted the Order in Council that includes RDKB on the Bylaw Enforcement Notice Regulation . Staff working on the Bylaw Enforcement Notice Bylaw, a penalty (fee) schedule, a payment schedule and a schedule for disputing tickets. Work is ongoing. These matters will be presented to the Board sometime during Fall 2017.	Active	07 Jun 2017
28 Jun 2016	PEP	That the proposed Permissive Taxation Exemption Policy be referred back to Staff for further research into the process that the member municipalities undertake in managing requests for taxation exemption. FURTHER that Staff move forward with drafting the proposed 2017 Permissive Taxation Exemption Bylaw and that it be presented to the Board of Directors within the legislative timeline and in the usual manner while work on the proposed Taxation Exemption Policy continues.	Theresa Lenardon	30 Jul 2016	John MacLean - 07 Jun 2017 08:42:50 AM The Revised Policy will be going to the EAS fro review at their June meeting and then coming back to the PEP Committee for completion. John MacLean - 21 Apr 2017 01:16:12 PM Staff have been working with the EAS Committee. Director Gee was asked to share specific comments. Going back to EAS for comment.	Active	07 Jun 2017
05 Jul 2016	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors requests that the required 100m buffer adjacent to the historic Dewdney Trail be delineated on Forest Development proposals prepared by licensees operating in all electoral areas in the RDKB.	Donna Dean	29 Jul 2016		Active	21 Apr 2017
14 Sep 2016	Board	Corporate Vote Unweighted That Staff follow up with the Ministry of Forests, Lands and Natural Resource Operations to advise that the RDKB Board of Directors would welcome an office presentation including a review of the current Operational Plan in October or November 2016. FURTHER that the Ministry be advised that their offer to provide a field trip and a safety orientation has been deferred until Spring 2017 at which time Staff will undertake a Doodle Poll to determine a possible date for the activity.	John MacLean, Theresa Lenardon	30 Nov 2016	Maureen Forster - 08 May 2017 10:50:03 AM Staff will follow up with BC Timber Sales regarding a date and the necessary arrangements for a Board field tour in the East End.	Active	08 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
28 Sep 2016	UT	Staff will provide the Committee members with information on the transfer amount of surplus funds to the Cities of Trail and Rossland resulting from the transfer of ownership of the sole benefiting assets.	Goran Denkovski	29 Dec 2017	<i>Goran Denkovski - 05 May 2017 09:00:12 AM</i> City of Trail agreement is complete and the City of Rossland is in the process of reviewing their agreement. When agreements are finalized the RDKB will proceed to referendum.	Active	05 May 2017
12 Oct 2016	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary requests the Province to assess the monitoring well status in the Boundary and determine if the current level of information generated is appropriate. FURTHER if the assessment deems that there is insufficient available information, and that additional information is warranted, that the Province install additional wells where necessary or reactivate inactive wells, to assist in implementing the Kettle River Watershed Management Plan.	Donna Dean, Jeff Ginalias	31 Oct 2016		Active	21 Apr 2017
12 Oct 2016	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors direct staff to forward this staff report, 'Atco Wood Products Draft Plan 2016-2021 Forest Stewardship Plan', which includes the recommendations of the Electoral Area 'A' and Electoral Area 'B' / Lower Columbia-Old Glory Advisory Planning Commissions to Atco Wood Products Ltd. for consideration.	Donna Dean	31 Oct 2016		Active	05 May 2017
12 Oct 2016	COW-ES	That Staff proceed with the Solid Waste Management Plan (SWMP) Process with the new Provincial Guidelines in place. As part of that planning process, the Solid Waste Management Plan Steering Committee (SWMPSC) is requested to look at: ongoing collection systems and a plan for the introduction of organics recovery in the east end. the problem of illegal dumping, and the possibility of developing prevention programs.	Alan Stanley	05 May 2017	<i>Maureen Forster - 04 May 2017 09:51:25 AM</i> On going work, eastern communities organic diversion planning activities underway. The matter is being considered by the SWMP Steering Committee. No change to status, longer term project, should refer action item to Solid Waste Management Plan Steering Committee.	Active	04 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
12 Oct 2016	PEP	That the Staff be directed to undertake the review of current policies and practices for Director Remuneration with a report to come forward to the November Meeting of the Committee.	John MacLean	30 Nov 2016	<p>John MacLean - 07 Jun 2017 08:45:33 AM The Bylaw was adopted by the Board. However, as the Board also agreed to move to two Board meetings per month, the Bylaw will have to be revised to include an allowance for the Service Liaison positions that the Committee discussed. The revisions will be coming forward to the Board in June. THIS ITEM IS NOW COMPLETE.</p> <p>John MacLean - 04 May 2017 01:56:46 PM The Bylaw will be presented at the May 10, 2017 meeting.</p> <p>John MacLean - 21 Apr 2017 01:37:22 PM The proposed bylaw was referred to EAS for comment and will be coming back to the next PEP meeting.</p>	Active	07 Jun 2017
28 Oct 2016	BVREC	Staff will work with Rossland Tourism on improving marketing and the reservation system.	Mark Daines	13 Jun 2017		Active	03 May 2017
15 Nov 2016	BEDC	The Harrop Proctor Community Forests group will be invited to a future BEDC meeting to provide a presentation on their activities to the Committee.	John MacLean	06 Dec 2016	<p>John MacLean - 25 Apr 2017 02:03:46 PM During the AKBLG we will reach out and approach people on this issue and identify good candidates to share information with us. This will become work for the Committee Forest Sub-Committee.</p>	Active	25 Apr 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
15 Nov 2016	BEDC	RDKB planning staff will be asked to look at the issue of private rentals not charging MRDT from a planning perspective.	Mark Andison	06 Dec 2016	<i>John MacLean - 25 Apr 2017 10:50:39 AM</i> This matter has been referred to the Planning Department and will be completed as time allows.	Active	25 Apr 2017
15 Nov 2016	BEDC	That the BEDC will discuss a strategy to secure funding for a program to subsidize the installation of bike racks across the Boundary region at a future meeting.	John MacLean	06 Dec 2016	<i>John MacLean - 13 Jun 2017 02:02:28 PM</i> This will be an item for discussion at a future meeting.	Active	13 Jun 2017
22 Nov 2016	EESC	1. Saturday ski bus service will be maintained for the coming year and the Committee will review the service again in the Spring 2017. 2. D. Steven, Tourism Rossland, will be requested to provide the Committee with concise information and operational statistics on the ski bus service at the end of the winter season. 2. Staff will request more information on the ramifications of a cut in service to Sunningdale. 3. BC Transit will be requested to provide a costing of the implementation of options 1 - 10 of the Service Review (excluding the Rossland Ski Bus), and provide information on Options 11 and 13.	John MacLean, Maureen Forster	30 Jun 2017	<i>John MacLean - 09 Jun 2017 08:19:18 AM</i> We have not yet received the report from Tourism Rossland, but they are aware and they have recently gone through a change in management. We will continue to follow up. BC Transit is scheduled to attend the June 14, 2017 Committee meeting to have a full discussion of transit and how we can work towards maximizing the service while being aware of cost escalation. <i>John MacLean - 24 Apr 2017 01:51:08 PM</i> An email has been sent to BC transit and Tourism Rossland asking that they prepare a report on the ridership on the ski bus during the 2016/17 ski season. <i>John MacLean - 24 Apr 2017 01:47:06 PM</i> BC Transit has been asked to cost out the initial 10 recommendations from the service review in order to identify and hour/cost implication. BC Transit will then look at the service expansion options in light of the net cost to the service.	Active	09 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
24 Nov 2016	COW-ES	That the Regional District of Kootenay Boundary Board of Directors direct Staff to engage in the review process for the BCUOMA Stewardship Plan and to cooperate with the Regional Districts of Central and East Kootenays in a submission to the province requesting that prior to approval, the BCUOMA Stewardship Plan include strict requirements for service delivery across all rural areas in the province. FURTHER that Staff be directed to contact the other Regional Districts to coordinate the efforts.	Alan Stanley	30 Dec 2016	<i>Alan Stanley - 05 May 2017 09:13:17 AM</i> Access to BC Used Oil Management Association used oil recycling programs continues to be poor. Staff have been in extensive consultation with regulator and BCUOMA. Report to be presented at May 10 CoW	Active	05 May 2017
17 Jan 2017	COW-PROT	1. Any available surplus funds should be allocated towards undone projects which include the completion of a review and update of the Regional Emergency Plan, an Emergency Communications Plan, a Pet and Livestock Plan and an update to the emergency planning manuals and documentation. 2. Staff will investigate all options and opportunities in dedicating available surplus funds towards the unfinished projects and to prepare a report illustrating how the funds will be expended with the report being presented to COW-Protective Services at a future meeting before any funds are spent.	Dan Derby	28 Feb 2017		Active	02 May 2017
17 Jan 2017	COW-PROT	With the new installation of a repeater tower in the Roderick Dhu Mountain area of Grand Forks, Staff will follow up regarding communication coverage to include the Greenwood communication gaps from the North Boundary Road.	Dan Derby	28 Feb 2017		Active	02 May 2017
17 Jan 2017	BVREC	1. A communication paper will be developed which will list 2016 accomplishments and will be submitted to the Trail Daily Times and the Committee members will also request an interview. 2. The April newsletter will list 2016 capital projects and Montrose residents will be included in the distribution. Staff will provide the Committee members with the costs.	Mark Daines	28 Feb 2017		Active	01 May 2017
27 Jan 2017	UT	The Utilities Committee directs staff to prepare a report for possible costing for future staff resources and what that will look like.	Goran Denkovski	14 Jun 2017	<i>Goran Denkovski - 05 May 2017 08:57:52 AM</i> This item is still in progress and we have been establishing potential Utility service growth in the RDKB.	Active	05 May 2017
31 Jan 2017	BEDC	Format changes will be made to the Memo of Action Items. A list of BEDC sub-committees and their memberships will be added to the Memo of Action Items.	John MacLean	07 Mar 2017	<i>John MacLean - 24 Apr 2017 02:22:45 PM</i> As we have completely changed the format of the Committee Action, we will have to discuss the proper format and process for reporting out the activities of sub-committees.	Active	24 Apr 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
31 Jan 2017	EESC	Victims Services staff will provide a more indepth report on the program in the future.	Mark Andison	30 Jun 2017	<i>John MacLean - 03 May 2017 08:42:28 AM</i> A new report structure will be developed and presented with the next quarters results.	Active	03 May 2017
31 Jan 2017	EESC	That the East End Services Committee receive the letter from the City of Trail regarding the downtown bus shelters. FURTHER that staff be directed to prepare report with the necessary information in order to engage with the City of Trail on the issue of downtown shelters as well as the future of the transit exchange.	John MacLean	30 Jun 2017	<i>John MacLean - 09 Jun 2017 08:21:05 AM</i> Staff will be able to complete the necessary work on this issue in the coming weeks and will be in a position to present it to the Committee for endorsement at a future meeting.	Active	09 Jun 2017
09 Feb 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors approves sending a letter to the Honourable Steve Thomson, Minister of Forests, Lands and Natural Resource Operations articulating concerns regarding the lack of consultation between the Province of BC, Boundary stakeholders and local government on issues regarding BC Timber Sales allocations and other forestry issues.	John MacLean	28 Feb 2017		Active	14 Mar 2017
09 Feb 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors approves the submission of an application to Ministry of Community, Sport and Cultural Development Infrastructure Planning Grant Program for the <i>Development of the Kettle River Watershed Regional Drought Management Team and Kettle River Watershed Regional Drought Plan</i> . FURTHER that the Board directs Staff to submit an application for a \$10,000 grant for the project and that it be ranked first of the four projects. FURTHER that should the funding be received that the Regional District of Kootenay Boundary enter into a contract with CommonsPlace Consulting Ltd. to complete the project. FURTHER that if the grant is received that any shortfall in funding be made up with an application for Gas Tax funding.	Donna Dean	28 Feb 2017		Active	14 Mar 2017
09 Feb 2017	Board	Staff will resource 1 full time employee in the IS Department, to be funded in the General Government F/P at an estimated cost of \$100,000 per annum (all costs included). COW (Finance) will make the necessary change in the 2017 General Government (Administration) F/P. 3. Staff will take the necessary steps to implement this decision as soon as the F/P is adopted.	Beth Burget, Dale Green, John MacLean	31 Mar 2017		Active	24 Apr 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
01 Mar 2017	BEDC	Committee members will be asked for suggested names of participants for whom it would be beneficial to attend the trails development meetings. A steering committee may be struck for oversight purposes.	John MacLean	31 Mar 2017	<i>John MacLean - 24 Apr 2017 02:27:43 PM</i> We have approached several individuals to serve as members of the working group. Currently waiting for a few more confirmations.	Active	05 May 2017
01 Mar 2017	BEDC	That a letter be sent to the appropriate Ministers to request that the Province waives the outstanding PST on the Boundary mobile abattoir.	John MacLean	31 Mar 2017	<i>John MacLean - 25 Apr 2017 02:05:07 PM</i> This issue will be on hold until after the election. A letter will then be directed to the local MLA and the relevant Minister.	Active	26 Apr 2017
01 Mar 2017	BEDC	A discussion at the next meeting will be focused on developing a list of indicators, on a project by project basis, which will measure BEDC's success in delivering programs and/or projects to Boundary stakeholders.	John MacLean	07 Mar 2017	<i>John MacLean - 25 Apr 2017 02:07:50 PM</i> Current plan is to place this item on the June meeting agenda with a focus on developing relevant performance measures and strategies going forward. Part of the discussion will be around the structure of the service. <i>John MacLean - 25 Apr 2017 10:43:08 AM</i> The Chair and Staff will continue to work towards having sufficient time on agendas to carry on this discussion.	Active	25 Apr 2017
04 Mar 2017	BVREC	Staff will develop a contract with BV Softball Association.	Mark Daines	31 Mar 2017		Active	03 May 2017
14 Mar 2017	Board		John MacLean, Theresa Lenardon	21 Mar 2017	<i>John MacLean - 14 Mar 2017 03:26:09 PM</i> Working with prospective consultants to assist with appraisal process. will be reporting to PEP Committee at their March meeting.	Active	14 Mar 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
14 Mar 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors authorizes an amendment to the current Big White Security contract with Paladin Security Group Ltd. to include an additional two hours of security coverage per day at Big White from November 1st to April 15th for the remainder of the term of the contract, beginning March 1, 2017.	John MacLean, Mark Andison, Theresa Lenardon	31 Mar 2017		Active	14 Mar 2017
14 Mar 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors submit the following resolution to the Association of Kootenay Boundary Local Governments (AKBLG) and the Union of British Columbia Municipalities (UBCM): That the Provincial Ministry of Environment require that the British Columbia Used Oil Manufacturing Association (BCUOMA) Stewardship Plan include minimum requirements for public drop-off depots that will insure that there is access to public recycling facilities no more than 10 km from where BCUOMA recycling program materials are sold.	Theresa Lenardon	28 Apr 2017	<i>Theresa Lenardon - 07 Jun 2017 12:56:39 PM</i> The resolution was presented to the AKBLG April/17 and will be included in the UBCM Resolutions Session in Sept/17)	Active	07 Jun 2017
23 Mar 2017	UT	Users of the Columbia Gardens Industrial Water Supply Utility will be notified by letter of the 5% increase in user fees. A draft copy of the letter will be sent to Director Grieve before it's sent to the users.	Goran Denkovski	31 May 2017	<i>Goran Denkovski - 05 May 2017 11:53:52 AM</i> Bylaw passed in April Board meeting. Letter will be completed and sent with billing in May 2017.	Active	05 May 2017
23 Mar 2017	COW-ES	That staff be instructed to prepare a report that illustrates the costs and policy implications for the implementation of curbside collection of recyclable materials in the Sidley/Bridesville areas. FURTHER that the staff report be presented to the COW (Environmental Services) at a future meeting.	Alan Stanley	30 Jun 2017	<i>Alan Stanley - 05 May 2017 09:08:52 AM</i> Work is presently focused on program start up to expand garbage and green bin service to Sidley/Bridesville. Discussions continue with RecycleBC (formerly MMBC) regarding industry funded recycling collection.	Active	05 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
06 Apr 2017	EESC	That the East End Services Committee directs RDKB staff to coordinate with the participating municipalities and Electoral members to share efforts and work with Kiwanis towards the collaboration of Canada 150 celebrations.	Mark Daines	30 Jun 2017	<i>John MacLean - 09 Jun 2017 08:50:47 AM</i> Planning continues for this project. The Elected Officials are fully engaged and there will be a discussion on the June Committee agenda. <i>John MacLean - 24 Apr 2017 01:43:33 PM</i> Staff and the Directors continue to discuss and work towards an collaborative event in partnership with the City of trail and the Kiwanas Club.	Active	09 Jun 2017
06 Apr 2017	EESC	That the East End Services Committee direct staff to explore options and implications on a light duty program to assist employees return to work.	Dan Derby, Terry Martin	30 Jun 2017	<i>John MacLean - 09 Jun 2017 09:02:54 AM</i> Chief Derby has been gathering information from colleagues and his Professional Association. He is generally finding limited information. He will be providing a formal report for the next regular meeting of the Committee.	Active	09 Jun 2017
06 Apr 2017	EESC	That the Committee direct staff to prepare the necessary documents and cost estimates to facilitate the reimbursement of the member municipalities for costs associated with bus stop maintenance, as well as the retaining of a contractor to deal with the rural bus stops and bring forward a report for the Committee's consideration.	John MacLean	30 Jun 2017	<i>John MacLean - 09 Jun 2017 08:52:55 AM</i> Staff will be working to complete this project in the coming weeks for presentation to the Committee.	Active	09 Jun 2017
10 Apr 2017	PEP	Staff will revise the proposed Permissive Taxation Exemption Policy and will refer it back to the EAS Committee for further review before it is presented to the PEP Committee.	Theresa Lenardon	30 Apr 2017	<i>Theresa Lenardon - 07 Jun 2017 12:59:24 PM</i> The proposed policy, procedure and application have been reviewed by the EAS Committee Feb/17 and will be reviewed by EAS Committee again June/17 with a recommendation to refer back to PEP Committee to advance through the policy development and review process.	Active	07 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
10 Apr 2017	PEP	That the Policy, Executive and Personnel Committee develop Terms of Reference for the Strategic Planning session scheduled for Fall 2017. Discussions with staff will take place after the May Board Development Session and the matter of the development of a framework for the Terms of Reference will be included on the June agenda. 2. Staff will provide information on a framework for the June agenda and will undertake a Doodle poll to secure a date in October 2017 for the session.	John MacLean	30 Apr 2017	<p>John MacLean - 07 Jun 2017 08:49:48 AM</p> <p>The date has been established as October 27 - 28, and the Planning Session will be held in Trail. At a future meeting the PEP Committee will have to discuss the particulars of the sessions including format and how to go about selecting a facilitator.</p> <p>John MacLean - 07 Jun 2017 08:47:30 AM</p> <p>This item will be discussed at the May 10, 2017 PEP meeting.</p>	Active	07 Jun 2017
10 Apr 2017	PEP	That the RDKB Board of Directors commence the process of nominating a representative to the Columbia Basin Trust Board of Directors.	John MacLean	30 Apr 2017	<p>John MacLean - 07 Jun 2017 08:51:19 AM</p> <p>The Board will be receiving presentations from the interested candidates and making a recommendation to the Province at the June 14th meeting. THIS ITEM IS NOW COMPLETE.</p> <p>John MacLean - 04 May 2017 03:10:02 PM</p> <p>The advertisement has been published. Deadline for submitting applications is May 5, 2017.</p>	Active	07 Jun 2017
20 Apr 2017	BVREC	Review of the Strategic Plan is deferred to the May 2017 meeting to allow the Committee members more time to review the Plan in order to have a fulsome discussion.	Mark Daines	09 May 2017		Active	01 May 2017
20 Apr 2017	BVREC	Staff will follow up on the status and signing of the lease agreement.	Mark Daines	09 May 2017		Active	01 May 2017
20 Apr 2017	BVREC	Staff will contact the owner of the vacant lot adjacent to the parking lot at the Beaver Valley Arena to see if there is any further interest in selling the vacant lot.	John MacLean, Mark Daines	09 May 2017	<p>John MacLean - 26 Apr 2017 09:33:38 AM</p> <p>Called and left message indicating that we were interested in land.</p>	Active	01 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
20 Apr 2017	PEP	An analysis of this position has been completed and that this and other information, including the salary range will be presented to the Board of Directors at a meeting in the near future. That Staff research the outsourcing of the development of a Communications Plan and prepare a report for the March meeting with examples of Communications Plans prepared for other Regional Districts. FURTHER that the report provide enough information for the Board to have a clearer idea on what resource issues and needs are required at the RDKB to meet the Communications Strategic Theme.	John MacLean	31 May 2017	John MacLean - 04 May 2017 03:03:09 PM This matter will be presented to the Board of Directors at the June meeting.	Active	04 May 2017
20 Apr 2017	PEP	An Employee Code of Conduct and a Code of Conduct for elected officials will be reviewed in more detail once the UBCM has completed its review and releases a working paper.	John MacLean	30 Jun 2017	John MacLean - 07 Jun 2017 09:33:44 AM Staff continue to gather information and samples for consideration. Will be presented at a future meeting.	Active	07 Jun 2017
20 Apr 2017	PEP	That the proposed <i>Best Practice; Municipal Appointments to the Board of Directors</i> be revised to include the relevant sections of the <i>Local Government Act</i> and referred to the Directors for comments.	John MacLean	30 Jun 2017	John MacLean - 07 Jun 2017 08:54:11 AM Directors have had the opportunity to comment and the matter is on the June 14th agenda. John MacLean - 04 May 2017 03:00:50 PM This Best Practice Statement has been referred to the Directors for comment and will be coming back to the June PEP meeting.	Active	07 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
20 Apr 2017	PEP	That staff investigate the restructure of Board and Committee meetings further and draft a report that will provide information including the pros and cons of deleting the current Committee of the Whole and replacing it with a Board meeting. FURTHER that the report provide information on a portfolio system that would take the place of the current Committee of the Whole Chair structure including a draft Portfolio Chair Terms of Reference and job description, Portfolio Chair remuneration, the possible cultural changes at the Board table including flexibility for deferring Board items for better future discussions and the process for Board discussion and making motions. FURTHER that the report be presented at the May Policy, Executive and Personnel Committee meeting	John MacLean	10 May 2017	John MacLean - 07 Jun 2017 08:56:43 AM This matter was referred to the Board, where the decision was made to move to two Board meetings per month. There will be a small revision tot he Director Remuneration Bylaw to reflect the Liaison position that the Committee discussed at the last meeting. THIS ITEM IS NOW COMPLETE. John MacLean - 04 May 2017 03:33:25 PM A report will be presented at the May 10, 2017 PEP meeting.	Active	07 Jun 2017
20 Apr 2017	PEP	That Staff draft a report for a future meeting that includes options and common practices in more up-to-date Hiring Policies as well as information on moving expenses. FURTHER that the current RDKB Policy be revised to capture the Committee's discussions regarding the consideration of internal candidates, only face-to-face interviews for hiring General Managers, subject to flexibility in circumstances where the preferred candidate cannot attend a face-to-face interview, and revised language in the Policy, Purpose and Procedure statements.	John MacLean	30 Jun 2017	John MacLean - 07 Jun 2017 09:10:58 AM At the last meeting the Committee requested changes. Those changes have been made and the revised policy will be presented to the PEP Committee at their June meeting. John MacLean - 04 May 2017 02:40:27 PM The revised policy and requested information will be provided t the Committee at their meeting to be held May 10, 2017.	Active	07 Jun 2017
20 Apr 2017	PEP	There will be discussions around this matter at the upcoming FCM Conference in June 2017. 2. Staff will investigate a regional model, including the logistics and the costs of hiring a single Regional Negotiator.	John MacLean	30 Jun 2017	John MacLean - 07 Jun 2017 09:00:04 AM Staff continue looking into the model. The requested report will be presented at a future meeting.	Active	07 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
20 Apr 2017	PEP	Staff will draft a Terms of Reference necessary for completion of the work required to purchase and implement the appropriate technology, including licencing and application (e.g. "app") options.	Dale Green	30 Jun 2017	<p>Dale Green - 07 Jun 2017 04:32:15 PM consultants have completed a technical draft and are pulling it together into a proposal for RDKB review.</p> <p>John MacLean - 03 May 2017 10:59:35 AM This project is in the planning stage with the Consultants.</p>	Active	07 Jun 2017
20 Apr 2017	PEP	A proposed job description will be presented to the RDKB Joint Labour Management Job Evaluation Committee for a salary review in the near future and prior to the simultaneous internal CUPE and external postings.	Dale Green	31 May 2017	<p>Dale Green - 07 Jun 2017 04:37:15 PM Posting is now closed with nearly 50 applications. 21 of those were viable, narrowed to 10 of the strongest on-paper candidates. MIS is conducting phone interviews this week (of June 5th) to narrow the list of 10 to no more than 5 candidates for live panel interviews next week (of June 12th).</p> <p>Dale Green - 03 May 2017 11:24:42 AM PEP approved the hiring a new IT staff we're calling the Network Infrastructure Analyst. Internal CUPE and external advertising are in progress concurrently. The posting closes on May 31st, after which senior staff and I will review the applications and select a short list for interviews.</p>	Active	07 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
24 Apr 2017	EESC	That Teck be invited to attend an East End Services Committee Meeting to make a presentation on their Ecosystem Management and Offsetting Program.	Mark Andison	29 Sep 2017	<i>John MacLean - 09 Jun 2017 08:54:30 AM</i> Nothing new to report. <i>John MacLean - 24 Apr 2017 09:51:05 AM</i> RDKB Staff continue to be part of the process, however they note that it is a slow process. New staff resources at Teck appear to be engaging in this process more, and it is anticipated that they may be in a position to present in the Fall of 2017. It must be noted that Teck has not committed yet.	Active	09 Jun 2017
24 Apr 2017	EESC	That Staff investigate options and potential partners for development of a Fire training Centre.	Mark Andison	01 Oct 2017	<i>John MacLean - 24 Apr 2017 12:23:54 PM</i> Issue has been deferred while other issues related to the Fire Service are dealt with. <i>John MacLean - 24 Apr 2017 12:23:20 PM</i> Staff have met with representatives from Teck and both parties have agreed to continue discussions. All agree that there is potential for mutual benefit.	Deferred	24 Apr 2017
24 Apr 2017	EESC	Staff will ask BC Transit to provide the Committee with graphic representation of the trending statistics.	John MacLean	01 Jun 2017	<i>John MacLean - 24 Apr 2017 12:29:06 PM</i> BC Transit will work on providing the requested reporting. Technical difficulties that delayed the progress of this request have only recently been rectified.	Active	24 Apr 2017
24 Apr 2017	EESC	The KBRFRS Sustainability Committee, made up of representatives of the Service, the Union, the Volunteer service and the Committee will continue to meet and discuss measures to make the cost of the KBRFRS sustainability.	Mark Andison	15 Jun 2017	<i>John MacLean - 24 Apr 2017 12:34:13 PM</i> The Sustainability Committee has suspended activity while the KBRFRS undertakes discussions on other matters.	Active	05 May 2017

Action Item List

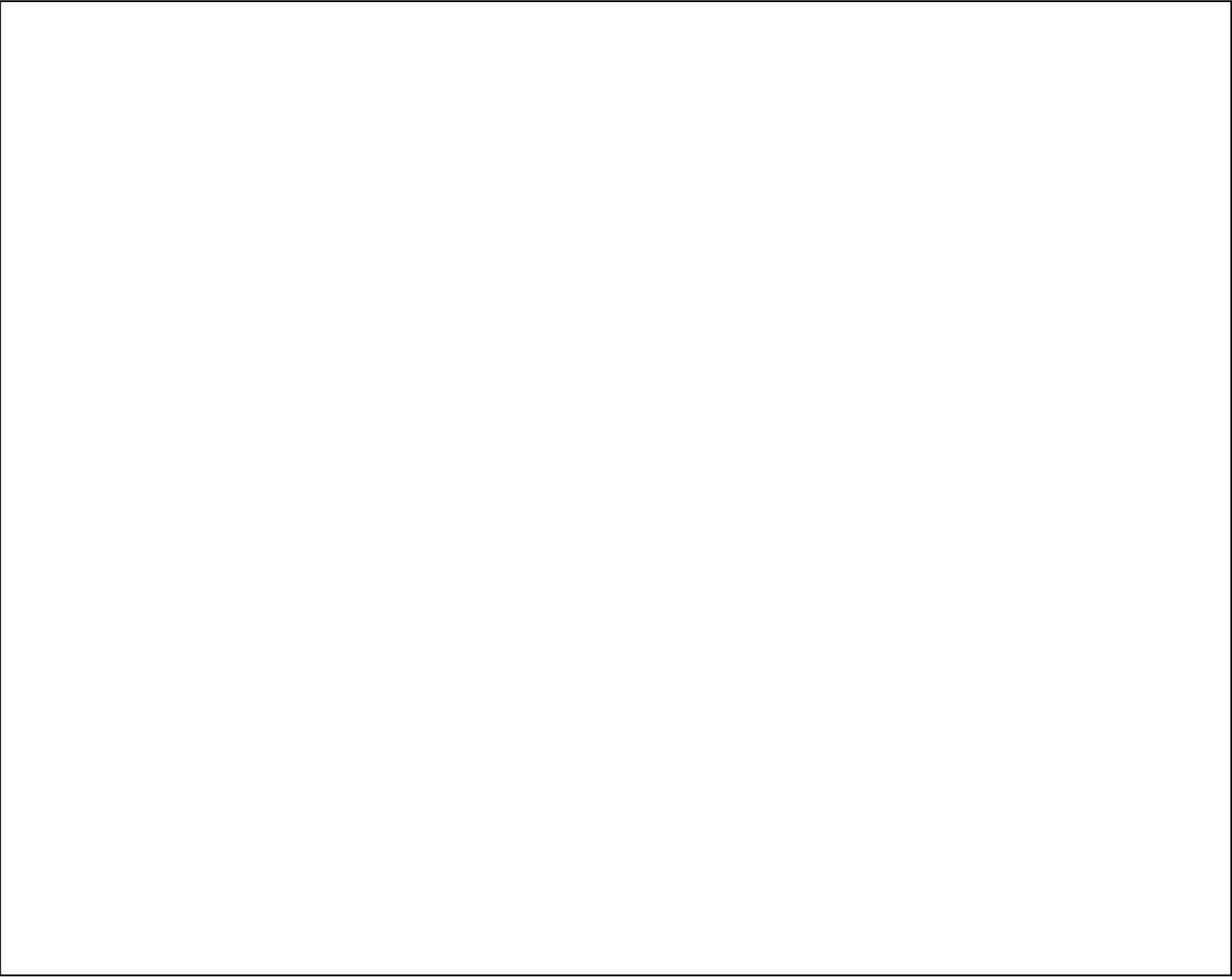
Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
25 Apr 2017	PEP	Staff will draft a report which will provide further information and options on permitting outside community groups to meet in the fire halls.	Dan Derby	28 Apr 2017	<i>Maureen Forster - 25 Apr 2017 04:03:14 PM</i> Further investigation is required and will be provided at a future meeting.	Active	25 Apr 2017
26 Apr 2017	COW-FIN	That Staff be directed to go out for tender for financial services in 2017, with the RFP being presented to the COW - Finance for consideration and approval.	Beth Burget	30 Jun 2017	<i>Maureen Forster - 01 May 2017 03:23:58 PM</i> Will do in Spring/Summer 2017.	Active	05 May 2017
26 Apr 2017	BEDC	A working group will be struck which will provide guidance throughout the project.	John MacLean	31 May 2017		Active	26 Apr 2017
26 Apr 2017	BEDC	That the Boundary Economic Development Committee requests that a letter be sent to Interfor requesting that Boundary stakeholders have the opportunity to see Interfor's operational plans on an annual basis when they exist in the Boundary area. The Boundary Economic Development Committee recommends to the Regional District of Kootenay Boundary Board of Directors that a letter be sent to Interfor articulating concerns regarding forest practices in recreation areas and adjacent to local lakes.	John MacLean	31 May 2017		Active	26 Apr 2017
26 Apr 2017	COW-PROT	A discussion regarding the development of a guideline or policy on the role and expectations of the RDKB during community disaster recovery will be referred to the COW-Protective Services.	Dan Derby	31 May 2017		Active	04 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
27 Apr 2017	PEP	<p>That the Policy, Executive and Personnel Committee direct staff to prepare a policy proposal with the following elements (all days calendar):</p> <ul style="list-style-type: none"> • That the current practice of delivering preliminary Board agendas 6 days prior to the scheduled day with the final agenda going out no later than 2 days prior to the meeting. • That the current practices of delivering committee agendas three days prior to the meeting be maintained. FURTHER that when the third business day falls on a weekend or a statutory holiday, that the agenda be delivered on the previous business day. • That the agendas for the future Committee of the Whole be delivered 5 days prior to the meeting. FURTHER that when the fifth business day falls on a weekend or a statutory holiday, that the agenda be delivered on the previous business day. <p>That the Committee recommend that the above practices be adopted in the interim until a proper policy is in place.</p> <p>That staff be directed to bring forth an amendment to the RDKB Procedure Bylaw No. 1534, 2013 reflecting the decision of the Board in relation to the structure, schedule and number of Chairs of the Committee of the Whole.</p>	Theresa Lenardon	31 May 2017	<p>Theresa Lenardon - 07 Jun 2017 09:36:21 AM</p> <p>Staff are working on agenda delivery timelines with several other changes to the RDKB Procedure Bylaw (eg removing COW, addition of Board meeting second Wednesday etc.). Agenda delivery times will be included in this work and further information regarding this matter will be presented to the Board Aug-Sept. 2017</p>	Active	07 Jun 2017
01 May 2017	BVREC	Staff will work with KCTS and the volunteer group to review options for trail planning and development in the Beaver Valley. The options will be brought back to the Committee members for review and consideration.	Mark Andison	31 May 2017		Active	01 May 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
04 May 2017	COW-ES	Analyze existing collection programs and determine steps to add organics.	Alan Stanley	30 Jun 2017	<i>Alan Stanley - 05 May 2017 09:10:39 AM</i> To be included in SWMP. SWMP Draft Schedule presented at May 10 CoW <i>Maureen Forster - 04 May 2017 10:15:08 AM</i> Staff report will be presented at a SWMPSC meeting.	Active	05 May 2017
05 May 2017	UT	Staff will prepare a Regional Water Management Plan that encompasses the water system acquisition, climate change, balance water supply, public health and improved local service delivery.	Goran Denkovski	29 Dec 2017	<i>Goran Denkovski - 05 May 2017 03:06:58 PM</i> Received cost estimate and planning on applying for Strategic Priorities Fund June 1, 2017 for completion in 2017.	Active	05 May 2017
05 May 2017	UT	Staff will create a reserve policy for the Committee's consideration.	Goran Denkovski	29 Dec 2017	<i>Goran Denkovski - 05 May 2017 03:08:12 PM</i> This is a corporate initiative and is related to the RDKB asset management plan.	Active	05 May 2017
08 May 2017	Board	That staff draft a report that provides possible options, policies and practices for recycling used oil including identification of the steps that need to be taken to get the Province to respond. FURTHER that the report be referred to the May 10th COW-Environmental Services meeting.	Alan Stanley	31 May 2017		Active	08 May 2017
08 May 2017	Board	Staff will follow up with providing the members of the Board with information as to why the "cancelled" notation is placed next to some of the cheques listed on the schedule.	Beth Burget	31 May 2017		Active	08 May 2017
08 May 2017	Board	That the Quarterly Report be referred to the Policy, Executive and Personnel Committee for review and further direction.	John MacLean	31 May 2017		Active	08 May 2017
08 May 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors send a letter to the Ministry of Forests, Lands and Natural Resource Operations – Water Management Branch, requesting Ground Water Licensing notices be sent to property owners via BC Assessment Tax Notices.	Mark Andison	31 May 2017		Active	08 May 2017



Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
08 May 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors approves disbursement of \$751.98 from the General Government Services Legal Fees account for the Federation of Canadian Municipalities Legal Defense Fund.	Beth Burget	31 May 2017		Active	08 May 2017
08 May 2017	Board	Be it resolved that the Regional District of Kootenay Boundary Board of Directors requests Interfor to include a plan for community consultation in their Forest Stewardship Plan that includes sharing operational plans and changes therein with the communities and local governments in the vicinity of such plans prior to their implementation.	John MacLean	31 May 2017		Active	08 May 2017
01 Jun 2017	BEDC	A communications strategy will be developed and sent to the funding recipients of West Boundary Recreation Service.	John MacLean	30 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	The issue of private business vs non-profit organizations and boundaries for support will be brought back to the June 2017 for more discussion.	John MacLean	06 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	A UBCM report stated that oversight and proposed home production will be under the jurisdiction of local government. The Committee will have discussions on how they are positioned for this and how they will have oversight on home production.	John MacLean	30 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	There will be a discussion on whether a mobile maker place (a mobile version of the MIDAS Lab) can be developed that can be rotated through the Kootenays.	John MacLean	30 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	There will be a conversation on the Boundary Regional Chamber of Commerce. The Chamber will be invited to attend a future meeting to talk about their future plans.	John MacLean	30 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	There will be a discussion on the impacts of poverty on economics and measures that can be taken and identifying costs to the Boundary area.	John MacLean	30 Jun 2017		Active	01 Jun 2017
01 Jun 2017	BEDC	A review of scenarios and an update of options for the Boundary Transit agreement (Paratransit) will be developed.	John MacLean	30 Jun 2017		Active	01 Jun 2017
07 Jun 2017	PEP	That Staff prepare a report on the RDKB's Succession Plan.	John MacLean	30 Jun 2017	John MacLean - 07 Jun 2017 01:02:22 PM Staff are working on the requested report and information and will have it to the Committee as soon as is feasible.	Active	07 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
09 Jun 2017	Board	Corporate Vote Unweighted That the RDKB Memorandum of Board Resolutions/Action Items be revised to include an application to the Provincial Government for a change in the maximum tax requisition by 25% to the Beaverdell Fire Service (Service 053) and a 25% increase to the maximum requisition for the Electoral Area E/West Boundary (Greenwood) Library Service (Service 141).	John MacLean	30 Jun 2017		Active	09 Jun 2017
09 Jun 2017	Board	Corporate Vote Weighted That the Regional District of Kootenay Boundary Board of Directors approves the submission of an application to the Province of British Columbia for a 2% Room Tax in Electoral Area C/Christina Lake, Electoral Area D/Rural Grand Forks, Electoral Area E/West Boundary, the City of Grand Forks, the City of Greenwood and the Village of Midway areas to fund tourism promotion activities. FURTHER that the Board direct staff to make any necessary amendments to the Partnership Agreement between the RDKB and the Boundary Museum Society subject to the Boundary Museum Society agreeing to the revised agreement. FURTHER that the Board authorizes the RDKB signatories to sign and enter into the revised Partnership Agreement.	Theresa Lenardon	30 Jun 2017	<i>Theresa Lenardon - 13 Jun 2017 07:49:45 AM</i> The Board recommendation to include Greenwood, Midway and Electoral Area E/West Boundary in the MRDHT and the Partnership Agreement with the Boundary Museum has been sent to the third party to complete the Provincial process and forms etc. Staff are currently working to update the Partnership Agreement.	Active	13 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
09 Jun 2017	Board	<p>Corporate Vote Unweighted</p> <p>That the Regional District of Kootenay Boundary Board of Directors maintain the current RDKB Extended Producer Responsibility program position that designated industries should deliver Extended Producer Responsibility programs. FURTHER that the Board re-inform British Columbia Used Oil Manufacturing Association of the RDKB rental opportunities where appropriate and where British Columbia Used Oil Manufacturing Association has not provided access to used oil recycling depots, specifically Grand Forks, Rock Creek and Beaverdell. FURTHER that the Board write the Minister of the Environment requesting that they compel British Columbia Used Oil Manufacturing Association to deliver access to used oil recycling services in compliance with the Recycling Regulation.</p>	Alan Stanley	30 Jun 2017		Active	09 Jun 2017
09 Jun 2017	Board	<p>Corporate Vote Unweighted</p> <p>That Staff be instructed to request that the British Columbia Used Oil Manufacturing Association provide the RDKB with the relevant information regarding the amount of oil that is purchased within the RDKB's boundaries and that the information differentiate between oil sold for commercial purposes and oil sold for non-commercial purposes.</p>	Alan Stanley	30 Jun 2017		Active	09 Jun 2017

Action Item List

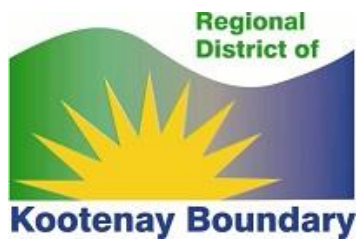
Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
09 Jun 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors refers the Draft Solid Waste Management Plan development schedule to the solid Waste Management Plan Steering Committee for discussion.	Alan Stanley	30 Jun 2017		Active	09 Jun 2017
09 Jun 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors approves the dissolution of the Committee of the Whole (Environmental Services, Protective Services and Finance) and replacing the Committee of the Whole meetings with a meeting of the RDKB Board of Directors thereby also approving the scheduling of two Board meetings per month when practical. FURTHER that when there are two Board meetings in a month, that the first Board meeting be scheduled on the second Wednesday of the month in place of the current Committee of the Whole meetings.	Theresa Lenardon	30 Jun 2017	<i>Theresa Lenardon - 13 Jun 2017 07:52:16 AM</i> Staff is working on revising the Procedure Bylaw to reflect 2 Board meetings per month (when possible) dissolution of the COW and other housekeeping items. A draft revised Procedure Bylaw will be presented to the Board sometime early Fall 2017.	Active	13 Jun 2017
09 Jun 2017	Board	Corporate Vote Unweighted That the recommendation to forward a letter to Columbia Power Corporation requesting that it reconsider its decision to discontinue the provision of leadership and coordination for the Kootenay Columbia Booth beyond 2017 be deferred until such time as Columbia Power Corporation as had an opportunity to clarify its position. FURTHER that staff be instructed to invite representation from Columbia Power Corporation to the June 29, 2017 Board meeting to clarify its position.	John MacLean	30 Jun 2017		Active	09 Jun 2017
09 Jun 2017	Board	That the Regional District of Kootenay Boundary Board of Directors direct staff to submit an application for the Saddle Lake Dam spillway project in the Area 'D'/Rural Grand Forks Regional Parks and Trails Service (045) through the Strategic Priorities Fund.	Goran Denkovski	30 Jun 2017		Active	09 Jun 2017
09 Jun 2017	Board	That the Regional District of Kootenay Boundary Board of Directors direct staff to submit an application for the development of a Regional District of Kootenay Boundary Water Utility Acquisition and Sustainability Policy through the Strategic Priorities Fund.	Goran Denkovski	30 Jun 2017		Active	09 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
20 Jun 2017	Board	Corporate Vote Unweighted That staff prepare a report that will provide clarity around, and assist the Board in strategically addressing perceived or real gaps in solid waste management services (e.g. concerns of lack of convenience in waste pickup service expansion in the Boundary, closure of reuse centres, and reductions in availability of recycling streams with the transition to Recycle BC). FURTHER that the report also provide information on the implications that making any suggested changes would have. FURTHER that the report be presented to the Board of Directors at the July 27, 2017 Board meeting for discussion and for referral to appropriate committees or action by the Board.	Alan Stanley	27 Jul 2017		Active	20 Jun 2017
20 Jun 2017	Board	Corporate Vote Unweighted That the Regional District of Kootenay Boundary Board of Directors annually review the Chief Administrative Officer's salary in relation to cost of living increases in order to determine potential annual increases to salary, between the status quo full review that takes place every three years.	John MacLean	29 Dec 2017		Active	20 Jun 2017
21 Jun 2017	PEP	That staff confirm the budget allocation amounts for teleconferencing software and licencing and forward this information to the members of the PEP Committee.		28 Jul 2017		Active	21 Jun 2017
21 Jun 2017	PEP	That the proposed <i>Management Hiring Policy</i> be referred to the Directors for comments as amended.		28 Jul 2017		Active	21 Jun 2017
21 Jun 2017	PEP	That for the Board Fall Planning Session scheduled for October 27 and 28, 2017, that staff draft an outline for the session, a Request for Proposals for engaging a facilitator and a Facilitator Terms of Reference. FURTHER that these documents be presented to the Policy, Executive and Personnel Committee at the July Committee meeting.		28 Jul 2017		Active	21 Jun 2017
21 Jun 2017	PEP	That the proposed Terms of References for the Finance, Protective Services and Environmental Services Liaison positions be revised accordingly and referred to the Directors for comment as amended.		28 Jul 2017		Active	21 Jun 2017

Action Item List

Date Created	Source	Resolution	Staff Responsible	Due Date	Comments	Status	Date Updated
21 Jun 2017	PEP	That the proposed Procedure Statement - Director Expense Claims be revised as amended and referred to the Directors for comments.		28 Jul 2017		Active	21 Jun 2017
21 Jun 2017	PEP	That staff modify the RDKB's current communications with language that ensures that all individuals responding to the organization's solicitations and/or postings clearly understand that it is their responsibility to follow up with the RDKB to ensure their response has been received.		28 Jul 2017		Active	21 Jun 2017

**STAFF REPORT**

Date: 20 Jun 2017 **File**
To: Chair Grace McGregor and
 Members of the Regional District
 of Kootenay Boundary Board of
 Directors
From: Dan Derby, Regional Fire Chief
Re: Fire Dispatch Contract for Services

Issue Introduction

A staff report from Dan Derby, Regional Fire Chief, recommending approval of the Fire Dispatch Services Contract between the Corporation of the City of Kelowna and the Regional District Kootenay Boundary is presented.

History/Background Factors

In May, the RDKB Board voted in favour of the following recommendations:

- i. The RDKB Administration be authorized to conclude the evaluation phase of the RFP process by written notification of the acceptance of the Kelowna Fire Department proposal (per clause 8 of the RFP); and,
- ii. The RDKB Administration is authorized to undertake the execution of a Contract with Kelowna Fire Department for Fire Dispatch Services (subject to final Board approval); and,
- iii. That \$100,700 capital equipment and \$57,000 one-time expenditures be authorized for TELUS and a Radio Equipment Supplier (TBD).

The purpose of this staff report is to seek approval of the contract between the Corporation of the City of Kelowna and the Regional District Kootenay Boundary. Over the last month staff from both organizations have been working on the attached contract. No new costs were identified and the contract terms and conditions are consistent with the proposal submitted by Kelowna Fire Department. The contract schedules include:

- Schedule A – Agreed upon Fire Dispatch Services
- Schedule B – Cost Schedule

Year	2018	2019	2020	2021	2022
Operating	\$122,570	\$136,986	\$140,410	\$143,291	\$147,519
FDM	\$15,065	\$12,701	\$12,701	\$12,701	\$12,701
Total Costs	\$137,635	\$149,687	\$153,111	\$156,622	\$160,220

(First year would be adjusted if cutover date changes)

- Schedule C – Approved Fire Department Response Agencies
- Schedule D – The Kelowna Fire Department proposal for Fire Dispatch Services

The term of the agreement is April 30, 2018 till December 31, 2022. By mutual agreement the cutover date may be extended to May 31, 2018 if circumstances dictate such an extension. Regional District Central Kootenay (RDCK) would cut over 2 weeks earlier, on April 16, 2018.

Implications

It is important to note that the Kelowna Fire Department proposal includes capital equipment costs in the first year, but does not cover two additional one-time costs that are the responsibility of the RDKB. These costs are:

- Capital / equipment costs - \$100,700
- TELUS – \$30,000 for updating the 911 emergency service zones for RDKB; plus \$5,000 for new dedicated phone lines for Big White, Christina Lake, and Grand Forks.
- Radio Equipment Supplier - \$22,000 for radio interconnection spare parts

The 911 Emergency Communications 2018-2022 Five Year Financial Plan will be developed to reflect the required capital/equipment and one-time costs of \$157,700 in year one, these expenses would be offset by revenue from the 911 Emergency Communications Service – Equipment Reserve. Balance as of December 31, 2016 is \$198,071. The RDKB/RDCK have yet to decide how the reserve balance will be divided between the parties.

Advancement of Strategic Planning Goals

Exceptional Cost Effective and Efficient Services – Ensure responsible and proactive funding for core services.

Background Information Provided

See attached contract between the Corporation of the City of Kelowna and the Regional District Kootenay Boundary.

Alternatives

1. Approve the Fire Dispatch Services Contract between the Corporation of the City of Kelowna and the Regional District Kootenay Boundary.
2. Provide alternate direction to staff.

Recommendation(s)

That the Regional District Kootenay Boundary Board of Directors approves the Fire Dispatch Services Contract between the Corporation of the City of Kelowna and the Regional District of Kootenay Boundary. **FURTHER**, that the Regional District of Central Kootenay be given written notice that effective April 30, 2018 the RDKB will no longer provide Fire Dispatch Services.

THIS AGREEMENT dated for reference the ____ day of _____ 20__.

BETWEEN:

THE CORPORATION OF THE CITY OF KELOWNA
1435 Water Street
Kelowna, B.C. V1Y 1J4

(hereinafter called "Kelowna")

OF THE FIRST PART

AND:

REGIONAL DISTRICT OF KOOTENAY BOUNDARY
843 Rossland Avenue
Trail, BC V1R 4S8

(hereinafter called the "RDKB")

OF THE SECOND PART

WHEREAS:

- A: The *Local Government Act* and the *Community Charter* provide that the corporate powers of local government include the power to make agreements with a public authority respecting activities, works or services within the powers of a party to the agreement, including agreements respecting the undertaking, provision and operation of activities, works and services;
- B: The RDKB issued a Request for Proposals for fire dispatch service (the "RFP");
- C: Kelowna submitted a proposal to the RDKB dated February, 2017 (the "Kelowna Proposal") in response to the RFP; and
- D: The RDKB has agreed to contract with Kelowna for the provision by Kelowna of fire dispatch services to the RDKB in accordance with the terms set out herein for the receipt and processing by means of computer-aided dispatch service and re-transmission of emergency related calls to the RDKB, including selection of optional services regarding records management system.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and agreements herein contained and subject to the terms and conditions hereinafter set out, the parties hereto mutually agree as follows:

1. Definitions

1.1 In this agreement:

- (a) **"CAD"** means the computer-aided dispatch system maintained and used by Kelowna;
- (b) **"Emergency"** means any reported event for which fire department personnel are directed to attend in response to an actual risk of fire, hazardous material spill, accident, disaster or medical situation for which an incident number is generated;
- (c) **"Fire Departments of the RDKB"** means the list of fire departments established or approved by the RDKB as described in Schedule "C" attached hereto and forming part of this Agreement, and as amended from time to time.
- (d) **"Fire Dispatch Centre"** means the Fire Dispatch Centre maintained by the Kelowna Fire Department;
- (e) **"Service"** means the provision by Kelowna of fire dispatch services to the RDKB in accordance with the requirements as set out in paragraph 2 herein and Schedule "A" attached hereto and forming part of this Agreement; and
- (f) **"Term"** means the term of this Agreement as provided under Section 4.

2. Services

2.1 Throughout the Term, Kelowna will provide the RDKB with fire dispatch and communications services including the following:

- (a) 911 emergency calls for fire department assistance that originate in the RDKB will be received and processed by the Fire Dispatch Centre;
- (b) The Fire Dispatch Centre will use its CAD system to initiate incident reporting and dispatch the call to the required Fire Department of the RDKB;
- (c) After the initial dispatch, the Fire Dispatch Centre will provide full incident command support to the RDKB including the call out of additional resources specific to the

incident (including, through the activation of mutual aid agreements between one or more other local governments and fire departments under which firefighting and other resources are provided in the event of an Emergency) where required by the RDKB. The responsibility of Kelowna for the callout of RDKB personnel in addition to those on shift shall be limited to a single point of contact as mutually agreed to by the Parties; and

(d) The services referred to in Schedule "A" hereto and forming part of this Agreement.

- 2.2 Kelowna will provide Services in accordance with standards and operating procedures utilized by the Kelowna Fire Department unless a variance of such standards or operating procedures is mutually agreed between the Parties.

The Fire Dispatch Center will continue to utilize a performance expectations program with its employees, as outlined in the Kelowna Proposal (*attached as Schedule D*). The three phased program will be based upon NFPA 1221, 2010 standards and will assist in motivating, recognizing and enabling employees to improve performance. This program may be modified from time to time.

It is understood that the Fire Dispatch Center will strive to meet the standard of service for emergency communications in the fire service being the National Fire Protection Association Standard 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.

For certainty, any lapse in communication, delay in communication, or miscommunication arising from a failure of the Fire Dispatch Centre communication services as described under section 2.4 will be the sole responsibility of Kelowna.

- 2.3 Kelowna will not be responsible for dispatching RDKB Fire Departments out of their respective specified area.
- 2.4 Kelowna will provide, at the Fire Dispatch Centre, all equipment, computer software and personnel necessary for the provision of fire dispatch and communication services under this Agreement, and will ensure that all Kelowna personnel who participate in providing the Services are fully trained. The RDKB will, on its respective premises, provide all computer hardware and other equipment needed in order to maintain the required service link with the Fire Dispatch Centre. The RDKB will also maintain the radio and paging network used to deliver service in the Kootenay Boundary.
- 2.5 Kelowna will retain all voice recordings of requests for emergency assistance received from within the RDKB for a period of seven (7) years or such longer time as may be required by

law. Kelowna will retain all 911 and other records normally kept by and under its own operating procedures in relation to the dispatch and communication services for a period of two (2) years or such longer time as may be required by law. All records and data maintained by Kelowna will be stored in a secured area, and access to those records and data will be given to duly authorized personnel of the RDKB.

- 2.6 The Parties will meet initially at 3 months, thereafter bi-annually (6 months) or such other frequency as may be mutually agreed, meet for the purposes of resolving issues, sharing information and identifying procedural communications or equipment changes.
- 2.7 Kelowna will provide the service and service levels in accordance with the Kelowna Proposal (*attached as Schedule D*).
- 2.8 All records or recordings and such other data as pertains to Service provided under this Agreement to the RDKB will be and remains exclusively the property of the RDKB and may not be released to others without its express consent. Information may only be released under request of a corporate officer of the RDKB or designates as identified by such corporate officer in writing. Kelowna agrees that all such records, recordings and data will be held in trust by Kelowna as trustee for the sole benefit of the RDKB provided that Kelowna may retain copies. For clarity, all records, recordings and other data remain subject to the retention provisions of section 2.5 of this Agreement.
- 2.9 Kelowna agrees that neither Kelowna nor any person for whom Kelowna is responsible at law will disclose to any person, any information learned about the RDKB, its servants, employees, agents or persons who are subject of an Emergency including any information provided in accordance with the requirements of this Agreement. Kelowna acknowledges and agrees that all such information is confidential and will not be released except in accordance with the requirements of the *Freedom of Information and Protection of Privacy Act, British Columbia*.

3. RDKB Equipment

- 3.1 All radios including base stations, pagers and any other hardware required to facilitate the Service shall be purchased, licensed and maintained by the RDKB, with the exception of equipment within the Fire Dispatch Centre as per proposal (*attached as Schedule D*).
- 3.2 All radio licenses and other related requirements of Industry Canada shall be the responsibility of the RDKB.

4. Term

- 4.1 The term of this Agreement (the “**Term**”) will commence on the 30th day of April 2018 and terminate on the 31st day of December 2022. On or before December 31st, 2021, either party will communicate to the other their interest in negotiating terms of a subsequent agreement and if both parties are in agreement, the parties will commence negotiation of the terms of such subsequent agreement, providing always that failure to reach an agreement on terms will not bind the parties to a subsequent agreement or extension of the current agreement unless otherwise agreed in writing.

5. Fees

- 5.1 For the Service, the RDKB agrees to pay to Kelowna, the fees and charges as contained in Schedule “B” attached hereto and forming part of this Agreement.

6. Indemnity

- 6.1 The RDKB agrees that it will indemnify and save harmless Kelowna, its councilors, employees, and agents from and against any claims, suits, actions, causes of action, costs, damages or expense of any kind that result from:

- (a) negligence of the RDKB and its employees, contractors and agents; or
- (b) a breach of this Agreement by the RDKB.

- 6.2 Subject to the provisions of section 2.3 of this Agreement, Kelowna agrees it will indemnify and save harmless the RDKB, its directors, employees and agents, from and against any claims, suits, actions, causes of action, costs, damages or expense of any kind that result from:

- (a) negligence of Kelowna and its employees, contractors and agents in the provision of the Services; or
- (b) a breach of this Agreement by Kelowna.

7. Default and Early Termination

- 7.1 If either party is in breach of this Agreement and the breach is not corrected within thirty (30) days after notice of the breach provided to that party, the party not in breach may terminate this Agreement.
- 7.2 By notice in writing delivered any time after December 31st, 2020, either party may elect to terminate this Agreement, in which case the arrangement for Services provided hereunder

shall be terminated effective twelve (12) months from the date of the said notice. In the event of early termination under this provision, the fees paid to Kelowna as provided herein for the year of the Term in which such termination takes effect shall be prorated.

8. Dispute Resolution

- 8.1 Both RDKB and Kelowna agree to co-operate and use their best efforts to resolve any dispute which may arise regarding this Agreement or the Services contemplated within this Agreement or the responsibilities or rights of each party under it, including the candid and timely disclosure of all relevant information and documentation to each other. If the dispute cannot be resolved, it shall be first referred to each party's managing director responsible for fire dispatch services in order that they may attempt to resolve the dispute. In the event the two representatives are unable to reach agreement regarding the dispute, may be submitted to arbitration by delivery of a Notice of Arbitration in writing to the other party. The arbitration must be conducted by a three-person panel comprised of one appropriately qualified staff person appointed by the parties and one person chosen jointly by the two appointed staff persons, who shall be the chair of the arbitration panel. If the two staff appointees cannot agree on the choice of the chair of the arbitration panel then the chair must be appointed by a Judge of the Supreme Court of British Columbia. The arbitration will be governed by the *Commercial Arbitration Act (British Columbia)*. The place of arbitration will be Penticton, British Columbia, Canada, and the costs will be borne equally by the parties.

9. No Joint Venture

- 9.1 Nothing contained in this Agreement creates a relationship of principal and agent, partnership, joint venture or business enterprise between the parties or gives either party any power or authority to bind or control the other.

10. Notices

- 10.1 Where any notice, request, direction, consent, approval or other communication (any of which is a "Notice") must be given or made by a party under this Agreement. It must be in writing and is effective if delivered in person, sent by registered mail addressed to the party for whom it is intended at the address set forth above in this Agreement, or sent by fax to Kelowna at its fax number - (250) 862-3371, to the attention of the Fire Chief; or sent by fax to the RDKB at its fax number – (250) 368-3990, to the attention of the General Manager, Operations/Deputy CAO. Any Notice is deemed to have been given:

- (a) if delivered in person, when delivered;
- (b) if by registered mail, when the postal receipt is acknowledged by the other party; and

(c) if by fax, 72 hours after the time of faxing.

A party may change its contact information by Notice in the manner set out in this provision.

11. General Provisions

11.1 If any provision of this Agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the provision that is invalid will not affect the validity of the remainder of this Agreement.

11.2 The RDKB will continue to be responsible for receiving all non-emergency and business calls directly during normal business hours.

11.3 The RDKB will provide Kelowna with all information deemed reasonably necessary by the Kelowna Fire Chief or his designate in order that Kelowna may properly provide the Service and be responsible to update such information on a regular basis as required.

The RDKB will provide a single point of contact for all administration and operational matters.

11.4 Time is of the essence to this Agreement.

11.5 This Agreement will enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

11.6 The waiver by a party of any failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement is not to be construed as a waiver of any future or continuing failure, whether similar or dissimilar.

11.7 No remedy under this Agreement will be deemed to be exclusive but will, where possible, be cumulative, as will all other remedies at law or in equity.

11.8 Whenever the singular, masculine or neuter are used throughout this Agreement, the same is to be construed as meaning the plural or the feminine or the body corporate or politic as the context so requires.

11.9 This Agreement will be construed in accordance with and governed by the laws applicable in the laws of the Province of British Columbia.

- 11.10 Section and paragraph headings are inserted for identification purposes only and do not form part of this Agreement.
- 11.11 Neither party may assign this Agreement without the written consent of the other party.
- 11.12 This Agreement and the schedules attached hereto contain(-s) the entire agreement and understanding may not be modified or amended except by written agreement of the parties.
- 11.13 This Agreement contains the entire agreement and understanding of the parties with respect to matters contemplated by this Agreement and supersedes all prior and contemporaneous agreements between and with respect to such matters.
- 11.14 All representations and warranties set forth in this Agreement and all provisions of this Agreement, the full performance of which is not required prior to a termination of this Agreement, shall survive any such termination and be fully enforceable thereunder.
- 11.15 This Agreement may be executed in as many counterparts as may be necessary or by facsimile, each of which will together, for all purposes, constitute one and the same instrument, binding on the parties and each of which will together be deemed to be an original, notwithstanding that all parties are not signatory to the same counterpart or facsimile.

IN WITNESS WHEREOF this Agreement has been executed as of the day and year first above written.

THE CORPORATION OF THE CITY OF KELOWNA
by its authorized signatories:

MAYOR

CITY CLERK

REGIONAL DISTRICT OF KOOTENAY BOUNDARY
by its authorized signatories:

CHAIR

CHIEF ADMINISTRATIVE OFFICER

Schedule A

It is agreed that the Fire Dispatch Centre will provide the following services:

1. Emergency Call Taking
 - a. Emergency telephone call receipt (9-1-1)
 - b. Receive telephone calls regarding emergency incidents
 - c. Receive radio reports regarding emergency incidents
 - d. Receive smoke sighting reports from Forest Lands and Natural Resource Operations
2. Call Processing and Response
 - a. Dispatch resources in accordance with standard operating guidelines, perceived incident level and local response plans, including customized levels of response for individual departments:
 - i. Incident notification via voice paging system, secondary notification via email and/or text messaging, incident details via facsimile or network/internet rip and run report.
 - b. Call and liaise with local fire chiefs/authority regarding nature of incident/complexity, resources required, via radio or telephone.
 - c. Notification acknowledgement confirmation (within x minutes, then activate default no-response procedures).
 - d. Monitor and record calls at the command channel level.
 - e. Will not remotely record calls at the tactical level unless they are repeated channels.
 - f. Receive and process requests for additional resources:
 - i. Including contact with the utility, Emergency Management BC, highways, forestry, rail representatives and other resources as required.
 - g. Generate and maintain initial incident reports for all incidents.
 - h. Incident reporting post conclusion of incident.
 - i. Dedicated telephone number (toll free) for responders to access the dispatch centre.
 - j. Call out of Civic Staff as required.
3. Media Liaison
 - a. Provide limited incident information to media outlets after hours or if Incident Command has not staffed the Information Officer position.
4. Full recording of all 9-1-1, non-emergency telephone and radio (paging and command) communications.

The following Telus requirements should be noted:

1. Processing of 9-1-1 calls will require the availability of E911 Tandem to Tandem trunking and a reconfiguration of the Telus 9-1-1 network.

2. Some splitting and segregation of the 9-1-1 Emergency Service Zone (ESZ) may be required.

The above noted items will be the responsibility of RDKB, working with Telus to obtain and deliver. We will cooperate and offer to leverage our existing contacts and relationships to ensure that this is completed in an expedient and satisfactory manner. In preparing our response to this RFP we have discussed both issues with Telus and both are obtainable within the time frame and using current technology and infrastructure.

The following additional requirements of RDKB should also be noted:

1. This agreement covers standard emergency dispatch services. Any incident or incidents which escalate into an event requiring extraordinary powers under a declaration of a state of local, provincial or federal emergency may require additional human resources (dispatch and related support personnel) to maintain an appropriate level of service. Should additional personnel be required in addition to staff already on duty, current call back rates would apply and be invoiced.
2. RDKB must supply, and keep current; response Operational Guidelines (including mutual and automatic aid agreements) to guide the dispatch centre in assigning an appropriate response to all incidents.
3. The dispatch centre will not be responsible for the processing of non-emergency or administrative phone calls, beyond providing basic information only. Number (s) must be provided such that these callers can be redirected as required.
4. RDKB is responsible for their radio and pager licensing, acquisition, operation and maintenance costs, related to delivery of the service within the RDKB area.
5. All communications equipment and installations will strive to meet NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.
6. The RDKB ensure that a "Preventative Maintenance" service agreement for all communications equipment is in place and regular maintenance of the equipment to accepted emergency equipment standards is performed.
7. All future additional mobile equipment, or data connection costs, including MobileCAD and/or mobile RMS, is the responsibility of RDKB.
8. RDKB must endeavor to provide a single point of contact for all administration and operational matters.

Proposal Impact on Current Operations:

1. Additions to equipment, software and resources

Additions are required to our FDM RMS software/hardware system as noted in Schedule 'B' of this contract.

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Please note the following data requirements:

- a. Any existing RDKB response logic and response zone shape files currently in use.
- b. RDKB map data in the form of shape files (or other file formats able to be converted to shape files) including but not limited to:
 - i. Political boundaries
 - ii. Fire protection areas
 - iii. Fire contract areas
 - iv. Fire response zones
 - v. Fire hydrants and/or water supplies
 - vi. Trails, pathways
 - vii. Parcels
 - viii. Ortho photos
- c. Information will be updated on a regular basis, as required.

Additions and upgrades will be required to our radio system, and these will be dependent on the type of interface agreed on.

2. Enhancements and additions to current dispatch facility

Our current facility includes three dispatch/call taker positions and two call taker positions,

No enhancements or additions to our current dispatch facility are required.

Other Details

1. Ability to customize service to meet specific response protocols for each fire department

All current clients requiring specific response protocols have been met using one or all of the following capabilities with FDM:

- a. Basic back-up apparatus: where a station has more than one piece of apparatus configured to respond to additional calls for service, they can be defined as back up apparatus. Similarly, if a department has more than one station, apparatus from subsequent stations can be identified as back up apparatus to respond in other response zones.
- b. Mutual Aid apparatus: Apparatus from other departments can be defined to respond into other fire protection areas as part of a mutual and/or automatic aid agreement.
- c. Response override: allows the addition/deletion of apparatus based on limitations a department may have.

- d. Day/Time Response override: allows a department to have different responses based on time of day, day of week, holidays, or any other significant date.

As current clients will attest, Kelowna Fire Dispatch has demonstrated its ability and willingness to customize service to meet the unique nature of individual fire departments.

2. Interoperability

Kelowna will fully cooperate and manage communications with the RCMP dispatch centers, BCAS dispatch centers, the Ministry of Forests Wildfire Coordination center, the e-Comm PSAP, and other fire dispatch areas within the geographical area to maintain a cohesive and integrated level of service for all dispatch customers.

As required, Kelowna will coordinate and facilitate working groups to develop multi-agency emergency response solutions.

Kelowna guarantees it is now and shall remain a member of the Association of BC 9-1-1 Service Providers, APCO, and NENA Canada, subject to economic factors and policy decisions.

Other Operational Standards, Policies, Procedures and Protocols

KFD Dispatch Centre guarantees it will use the following industry-standard operational standards, policies, procedures and protocols, as amended or supplanted from time to time:

- a. National Fire Incident Reporting System (NFIRS Standard for Incident Type classification)
 - i. This allows any department adopting this standard to compare themselves to a data set of over 35,000 other departments across North America
- b. Incident Command System using plain language standards
 - i. Adoption of plain language standards
- c. Unique apparatus call sign designations
 - i. As a lesson learned from the 2003 wildfire event, none of the apparatus protected by Fire Dispatch have duplicate call signs (i.e.: There is only one Engine 1, Engine 201, etc.)
 - ii. This allows for seamless large-scale aid to be enacted without confusion and sacrificing crew safety.

3. Insurance

As a minimum, the City shall procure and maintain, at its own expense and cost, the following insurance policies:

- a. Workers' Compensation Insurance covering all employees of City engaged in the Work or Services in accordance with the statutory requirements of the province of BC.
- b. Comprehensive General Liability Insurance
 - i. providing for an inclusive limit of not less than \$2,000,000 for each occurrence or accident;
 - ii. providing for all sums which the City shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
 - iii. including coverage for Products/Completed Operations, Blanket Contractual, Contractor's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, and Non-Owned Automobile Liability.
 - iv. including a Cross Liability clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder, in respect to any claim, demand, suit or judgement made against any other Insured.
- c. Automobile Liability Insurance covering all motor vehicles, owned, operated and used or to be used by the City directly or indirectly in the performance of the Work or Services. The Limit of Liability shall not be less than \$2,000,000 inclusive, for loss or damage including personal injuries and death resulting from any one accident or occurrence.

The policies required by sections b(ii) above shall provide that the RDKB is named as an Additional Insured thereunder.

4. Other Operational Services

In the event Kelowna upgrades its existing technology or decided to provide additional services, the RDKB is guaranteed the option to participate in any upgraded or optional services at that time, provided, however, that the parties can come to mutual agreement regarding the terms of additional or upgraded service.

Kelowna agrees and covenants that existing Service levels provided to RDKB under the term of this Agreement will not be impacted by upgrades to technology or the addition

or change to optional services. In no circumstance will the upgrade or provision of additional services result in termination of this Agreement, other than as provided under section 7.2.

Schedule B

The cost schedule (including adjustment factor) applicable to the first five (5) years of the Term under this Agreement, as presented in the Proposal is as follows:

Year	2018	2019	2020	2021	2022
Operating	\$122,570	\$136,986	\$140,410	\$143,291	\$147,519
FDM	\$15,065	\$12,701	\$12,701	\$12,701	\$12,701
Total Costs	\$137,635	\$149,687	\$153,111	\$156,622	\$160,220

The above fees are payable as follows:

Each year, the RDKB will be billed the annual charges for the current calendar year (January 1st – December 31st);

All invoices, bills and charges rendered by Kelowna shall be paid by the RDKB within 30 days of receipt, except in the event of a state of local, provincial or federal emergency requiring additional resources.

Implementation Costs

The annual fees above for 2018 include a one-time fee of \$25,000. In addition to this cost, there is an estimated cost for implementation, as outlined in the proposal (attached as Schedule D), of \$100,700 based on research undertaken as part of the proposal process. Actual costs for implementation may vary from initial estimates and will be the responsibility of the RDKB, subject to the RDKB's written approval of such variance prior to implementation.

Schedule C

Approved Fire Department response agencies:

1. Big White Fire Department (C)
2. Beavertown Volunteer Fire Department
3. Christina Lake Volunteer Fire Department
4. Grand Forks Fire Rescue (C)
5. Greenwood Volunteer Fire Department
6. Midway Volunteer Fire Department
7. KBRFR Co#1 Rossland
8. KBRFR Co#2 Warfield
9. KBRFR Co#3 Genelle
10. KBRFR Co#4 Trail (C)
11. KBRFR Co#5 Montrose
12. KBRFR Co#6 Fruitvale
13. West Boundary Road Rescue

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Schedule D

As per Regional District of Kootenay Boundary Regional Fire Dispatch Service Proposal (attached).



REGIONAL DISTRICT OF KOOTENAY BOUNDARY REGIONAL FIRE DISPATCH SERVICE Proposal

February, 2017

Kelowna Fire Department
2255 Enterprise Way
Kelowna, BC V1Y 8B8
Travis Whiting, Deputy Chief
twhiting@kelowna.ca
TEL 250 469-8760
FAX 250 862-3371

kelowna.ca

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2. Letter of Introduction

Please accept this proposal from the City of Kelowna to provide Fire Dispatch Services to the Regional District of Kootenay Boundary.

Our regional dispatch service operates within the Kelowna Fire Department (KFD) and in partnership with the Regional District of Central Okanagan (RDCO), where we take great pride in our commitment to developing and maintaining professional relationships with the responding agencies we support. KFD has provided dispatch services to the residents of Kelowna since 1905 and to all the residents of the Central Okanagan since 1985. In addition, we provide fire dispatch to all the departments of the Regional District of Okanagan-Similkameen and the Regional District of East Kootenay. We look forward to the opportunity to provide the same quality and level of service to your local fire responders.

In total, our modern centre proudly provides National Fire Protection Association (NFPA)-compliant dispatch services for 45 separate fire service clients in addition to multiple external clients such as alarm monitoring services through Omega Communications for clients in three regional districts (Regional District Okanagan Similkameen (RDOS), Regional District Kootenay Boundary (RDKB), and RDCO. The centre is fully backed up with a secondary location, multiple levels of redundancy and is situated in one of the most seismically safe areas of the province.

Knowledge and understanding of the risks and hazards faced by fire departments in British Columbia is critical. Major incidents and events require rapid response and close coordination between incident commanders at the site, knowledgeable fire dispatch staff and those supporting the response. We have extensive experience in the hazards faced by interior communities in relation to the forest interface and wildfire, as well as freshet flooding events. Each summer, KFD Dispatch routinely deals with multiple, concurrent wildfire incidents.

We look forward to the opportunity to build a relationship and support the fire departments in the Regional District of Central Kootenay. This in depth proposal reflects our commitment to providing the best value to your residents in relation to high service levels, customer focused solutions and professional dispatch services.

Respectfully submitted,

Jeffrey G. Carlisle CFO, MA, CD
Fire Chief, Kelowna Fire Department

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Notes on Proposal

The Kelowna Fire Department (KFD) is proud to supply this proposal to the Regional District of Kootenay Boundary (RDKB). The proposal outlines all the technical requirements identified in the RFP. However, KFD would like to highlight the four points below to ensure clarity. We look forward to an opportunity to discuss these points further and to find solutions that work for RDKB.

Regional District of Central Kootenay (RDCK)

- Kelowna Fire Department has prepared a bid for the Regional District of Central Kootenay.
- Acceptance of both bids (RDKB and RDCK) to Kelowna Fire Dispatch may impact costs and timelines (see below) based on potential efficiencies.

Timeline

- We are proposing an extended project timeline, with a planned cut-over of December 18th, 2017, and a fall back (worst case scenario) date of February 15th, 2018.
- We recognize this may create a challenge or a sense of delay, however there are a number of positive reasons for this:
 - Past experience has shown that additional time during implementation allows for a better, more fluid transition including familiarization and training for both dispatchers and responding agencies.
 - Unforeseen delays at each stage, including Board/Council approvals compound and impact later stage tasks.
 - Kelowna Fire is considering a major phone upgrade for September 2017, which will provide an improvement to our current system, but will require some of our technical team's involvement.
 - Past experience shows that summer months are not as productive for implementation due to suppliers, staff and key project members being away.
 - Summer is also prone to unplanned major events such as wildfires that consume substantial time.
- At the outset of the project, this timeline will be revisited, and if agreeable to all parties, it may be moved forward closer to the requested October date, but only once all due diligence by all sides has been exercised.

Tactical Channel Recording

- Tactical channels are simplex channels used by Fire Departments for fire ground or emergency scene operations.
- The key advantage to Tactical Channels are they are dedicated to operations, and are not subject to be interrupted by off-site transmissions (such as Dispatch).
- Dispatch is only able to monitor and record those transmissions received at Dispatch, so generally would not be able to monitor Tactical Channels from the RDKB.

Unit Numbering

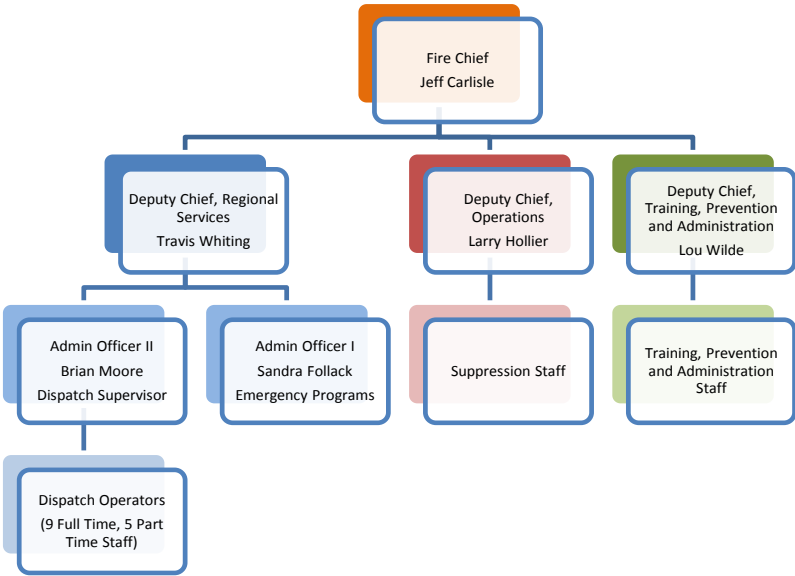
- Departmental unit numbering (example: Engine 1), may need to be reviewed, to allow for consistency in dispatch and ease of clear communication. KFD will work with RDKB on this.

Section numbers within the proposal reflect numbering used in the RFP

4. Organization Overview

The Kelowna Fire Department Dispatch Centre is a core service offered by the Kelowna Fire Department (KFD). As a department within the corporate structure of the City of Kelowna (Kelowna), the fire department and in turn, the dispatch centre is supported by expertise from various city departments, including Information Services, Finance, Human Resources and Infrastructure, Property, Asset Management and all equipment (radio, telephone, software, hardware) related to the dispatch centre is owned, operated, licensed and maintained by the Kelowna. The centre does operate in partnership with our surrounding communities and is supported directly by the Regional District of Central Okanagan (RDCO). This long-term partnership with and commitment by the entire region to maintaining local dispatch service provides stability to the operation.

The dispatch centre, located at 2255 Enterprise Way is staffed by a team of nine full time dispatchers, supported by 5 part-time dispatchers. Oversight of the centre is the responsibility of Deputy Chief, Regional Services, Travis Whiting who reports to the Fire Chief, Jeff Carlisle. Administration Officer (AO) Brian Moore provides direct supervision and brings over 32 years of technical knowledge, experience and passion in fire dispatch. As the Dispatch Supervisor, AO Moore maintains and coordinates software and hardware technology as well as staff scheduling, policy and procedures, training materials and maintenance of standards for the dispatch centre. AO Moore is supported by a second AO, Sandra Follack, an experienced fire dispatcher whose primary role is focusing on our Regional Emergency Management program. AO Follack provides supervision in the absence of AO Moore and also provides direct operational and surge support to the dispatchers as needed.



Our fully functional, off-site centre is located at 550 Valley Road North, Kelowna.

In addition to supporting the departments of RDCO, including City of Kelowna, the dispatch centre provides fire dispatch services to the Regional District of Okanagan-Similkameen (RDOS) and the Regional District of East Kootenay (RDEK). It also administers the ongoing operation and maintenance of the Central Okanagan Fire Radio System (COFRS).

In 2010, the KFD Dispatch Centre was recognized by the Association of Public Safety Communications Officials (APCO) Canada for dedication to public safety in the communities we serve, following a nomination for efforts during the 2009 wildfire season.

The KFD Dispatch Centre is uniquely qualified to provide dispatch services within the Interior. Our centralized, seismically safe geographic location and the fact that we are a relatively short distance from the RDKB provides the opportunity for a detailed understanding of local geography, local knowledge and the ability to interact face to face on a regular basis. In addition, this close proximity will allow our dispatchers to create stronger relationships with the fire departments in the RDKB.

5. Fire Dispatch Experience

KFD has provided services to the residents of Kelowna since 1905.

Since the implementation of 9-1-1 service to the Central Okanagan in 1985, the KFD Dispatch Centre's mission has been to operate a complete secondary safety answering point (9-1-1) and dispatching service for fire, related rescue services and civic operations to support the needs of residents, visitors, and businesses within the RDCO.

The KFD Dispatch Centre now proudly provides dispatch services for 45 separate fire service clients in the RDCO, RDOS, and RDEK. In addition, services are provided to multiple external clients such as civic operations, as well as an ongoing alarm monitoring service through Omega Communications for clients in three regional districts (RDOS, RDKB, and RDCO).

The KFD Dispatch Centre has a motivated team of valued, competent, and highly trained employees who treat the public and each other with respect and professionalism. This culture includes a work ethic that values excellence and strives for continuous improvement and professional development. The centre has received very positive feedback on numerous occasions highlighting their professional approach. The workplace is a comfortable environment with amenities that attract and retain highly motivated and skilled communications experts. KFD is committed to providing the right tools and appropriate staffing levels for the call volume. This commitment is matched by our staff and results in the provision of effective, reliable and efficient communications with local responding agencies.

In 2011, the KFD management team was restructured and the evolution of the fire dispatch centre continued with the addition of a dispatch supervisor position that directly oversees the frontline operation of the dispatch centre.

The KFD Dispatch Centre has a proven ability to respond to major events. We have demonstrated our experience and ability to interface with Emergency Operations Centers (EOC) and Emergency Support Services (ESS) and serve as an effective contact point for these organizations during disasters, both large and small.

Major events such as the 2003 Firestorm, 2009 West Kelowna wildfires, 2010 West Kelowna/Peachland wildfires and the 2011 Spring Freshet prove the KFD Dispatch Centre is well prepared to manage the complex nature of fire dispatching services and is committed to providing up to date technology and constant improvement. We pride ourselves on our local knowledge, experience with the unique hazards and responses within the Interior and our proven ability to react quickly to observation/concerns.

Each summer, the dispatch supports multiple interface wildfire events. The combination of full and part time staff allows flexibility in scheduling to ensure staff levels are responsive to peak periods and major events.

a. Fire Dispatch Clients

- RDCO:

1. Regional Departments
 - a. Ellison
 - b. Joe Rich
 - c. North Westside
 - d. Wilson's Landing
2. KFD
3. YLW Airport
4. West Kelowna Fire Rescue
5. Lake Country Fire Rescue
6. Peachland Fire Rescue

- RDOS :

1. Allison Lake Fire Brigade
2. Anarchist Mountain fire Department
3. Apex Volunteer Fire Brigade
4. East Gate Fire Brigade
5. Erris Fire Brigade
6. Hayes Creek Fire Brigade
7. Hedley Volunteer Fire Department
8. Kaleden Volunteer Fire Department
9. Keremeos and District Volunteer Fire Department
10. Missezula Lake Fire Brigade
11. Naramata Volunteer Fire Department
12. Okanagan Falls Volunteer Fire Department

13. Oliver Fire Department
14. Osoyoos Fire Department
15. Penticton Fire Rescue Service
16. Penticton Indian Band Fire Department
17. Princeton Volunteer Fire Brigade
18. Summerland Fire Department
19. Tulameen and District Volunteer Fire Department
20. Willowbrook Volunteer Fire Department

• RDEK:

1. Baynes Lake Volunteer Department
2. Canal Flats Fire Department
3. Cranbrook Fire Department
4. Edgewater Fire Department
5. Elkford Fire Department
6. Elko Fire Department
7. Fairmont Volunteer Fire Department
8. Fernie Fire and Emergency Services
9. Hosmer Volunteer Fire Services
10. Invermere Fire Rescue Department
11. Jaffray Volunteer Fire Department
12. Kimberley Fire Department
13. Panorama Volunteer Fire Department
14. Radium Hot Springs Fire Department
15. Sparwood Fire Department
16. Windermere Fire Department

ii. Law Enforcement:

1. Kelowna Bylaw Services
2. Westbank First Nation Law Enforcement Services

b. Commencement date of original contracts

KFD has provided dispatch service to its current clients in the RDCO beginning in January, 1985; the RDOS beginning in December, 2011; and RDEK beginning in June of 2016.

Typical Call Volume (Incident Reports Generated)

Year	RDEK	RDOS	RDCO	Annual Total
2016	1,708 ¹	8,262	25,000	34,970
2015	-	8,843	24,108	32,951
2014	-	8,475	21,563	30,038
2013	-	8,823	22,522	31,345

¹ RDEK Service with Kelowna Began June 2016

6. Facility Details

a. Fire Dispatch Facility

Our main Dispatch Centre is located at 2255 Enterprise Way in Kelowna. In May of 2016, KFD proudly commissioned a new stand-alone dispatch building on the property of our main fire station. This upgraded centre includes modern furnishings, contained staff break room facilities, improved technology and greater access to real time information. It includes 6 dispatcher work stations and a supervisor's office.

Our centre complies with NFPA 1221 and ULC S561 Standards including:

- Access Security:
 - Keyless entry x 2 through security vestibule
 - Recorded security cameras at three locations monitoring entry into Dispatch
- Power supply and conditioning:
 - Standard commercial power with UPS backup
 - Kohler Backup generator with dual fuel supply (natural gas/onsite propane) and Kohler Transfer Switch (installed in 2011)
- Telephone system:
 - Nortel/Avaya Telephone System installed May 2011
 - Hardware:
 - Business Series Terminal Central Answering Position (BST CAP)
 - Six 7316E Digital Desk Phones with four T24 Key Expansion Modules (KEMs) per phone
 - Spares:
 - One 7316E Digital Desk Phone
 - Four T24 KEM
 - Software:
 - Business Communications Manager 5.0
 - 9-1-1 Interface:
 - Three-line Automatic Call Distribution (ACD) displayed at each phone
 - Hardware:
 - Algo 4100 KSI with six position cards
 - Spares (one each):
 - Position Card
 - Control Card
 - Power Supply
 - 9-1-1 Automatic Call Distributor with failover to dedicated diverse infrastructure including Cell Phones.

- 6-position 9-1-1 Telephone Queue for peak call volume periods
- On-site multi-line POTS backup system installed ahead of the Nortel system

Radio system:

- 3-position Zetron Model 4219 consoles with Series 4048 backbone (installed Fall 2015); all at Version 5.6

Recording equipment:

- CVDS ComLog digital recording and call check system
- Dual redundant servers in place

HVAC Systems:

- Dedicated to Dispatch HVAC System
- Fully functional redundant system in place

The centre includes a 120 ft radio tower and communications building adjacent to the KFD Dispatch Centre facility. This state of the art communications tower and building allowed for the consolidation of dispatch radios, console equipment and computer servers into a climate controlled, secure building.

Representatives from the RDKB are encouraged to make the trip to visit the dispatch centre at any time. Dispatchers look forward to regularly scheduled visits from fire crews and use the opportunity to develop a mutual understanding of roles and responsibilities.

b. Off-Site Back-up Facility

Our back-up facility is located at 550 Valley Road North in Kelowna.

Using existing systems our downtime for 9-1-1 is 15 seconds or less; with full transition time to the site at approximately 12 minutes. The site is functionally tested at a minimum of four times per year by dispatch staff.

Our back-up facility complies with NFPA 1221 and ULC S561 Standards including:

- Access Security:
 - Keyless entry x 2 through security vestibule
 - Recorded security cameras at three locations monitoring entry into Dispatch;
- Power supply and conditioning:
 - Standard commercial power with UPS backup
 - Temporary backup generator in place
 - Onan Backup generator with dual fuel supply (natural gas/onsite propane) and Onan Transfer Switch (equipment in place; to be installed in Spring 2017)
- Telephone system:
 - Nortel/Avaya Telephone System installed May 2013
 - Hardware:

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- Business Series Terminal Central Answering Position (BST CAP)
- Five 7316E Digital Desk Phones with four T24 Key Expansion Modules (KEMs) per phone
- Spares:
 - One 7316E Digital Desk Phone
 - Four T24 KEM
- Software:
 - Business Communications Manager 5.0
- 9-1-1 Interface:
 - Three-lines displayed at each phone
- On-site multi-line POTS backup system installed ahead of the Nortel system

Radio system:

- 3-position Zetron Series 4020; version 4.8.3
- Fully functional Zetron Model 25 backup system in place

CAD/RMS system:

- Virtual Production environment, with multiple geographically diverse arrays (currently four other sites not including ours)
- Last line of defence is a physical server array at our off-site backup centre
- Virtual Development environment mimics Production; separate test and training environments exist

Recording equipment:

- Dictaphone digital recording and call check system
- Dual redundant servers in place

HVAC Systems:

- Dedicated to Dispatch HVAC System
- Fully functional redundant system in place

7. Fire Dispatch Equipment

a. Radio System

KFD Dispatch uses Zetron Series 4219 consoles (x 3) running Integrator RD software (Version 5.6) and a 4048 Communications Control System backbone with no single point of failure.

We have departments whose primary means of communication is via a telephone-radio interconnect or a dedicated RoIP link and both are very dependable; we would use additional Zetron Phone Couplers or channel cards to achieve the new interconnection points in Kelowna for the RDKB departments.

b. Alerting System

Alerting and dispatching the applicable fire department(s) is achieved by using digital warble tone, Motorola two-tone or DTMF cap codes as required. Where no radio infrastructure or telephone interconnect exists, departments are notified via telephone.

c. CAD/RMS System

Benchmark the apparatus for each fire department in the CAD system

Kelowna was one of the first fire departments in North America to test and then implement a DOS version of the RMS/CAD suite developed by FDM Software Ltd in 1992; while a Windows version of RMS/CAD was introduced several years later.

Benchmarks for apparatus conform to NFPA 1221 standards while fire ground targets conform to BCOFC/FC ABC standards.

Update information in the CAD system to record individual fire department support and vital information relating to the call

Our dispatchers use the CAD Notes feature to record all information pertaining to each call - in essence these become your virtual notebook - anything you or they do becomes a permanent part of the incident report.

Integrated CAD mapping was introduced into the dispatch Centre in May of 2011 and includes access to Phase II wireless data allowing dispatchers to rapidly pinpoint the location of wired and wireless 9-1-1 callers on an integrated CAD map.

Provide the tools (e.g. ability to update closed calls, query/print reports) and access to fire department users to support the continued use of the FDM RMS input and output, as well as access to current archived data

It is our intention to provide the same level of accessibility to FDM RMS departments currently enjoy as part of our hosted package plus many more features.

CAD vendor and the version currently used

FDM Software Ltd,
949 W 3rd Street, Suite 113
North Vancouver, BC V7P 3P7
Phone: 800/604-986-9941

CAD version currently used is 13.1.19; Phase II wireless patch installed and in use; Text with 9-1-1 ready (waiting on Telus).

We can integrate users with the following options:

- FDM to FDM Transfer
- FDM eBiz (network and standalone)
- FDM Regional Access Model (Workspacing)

d. Recording System

KFD Dispatch utilizes a CVDS ComLog digital voice recording and call check system with dual redundant servers in place

e. Mapping Capabilities

FDM uses ArcEngine (currently version 10.2) for mapping in both CAD and RMS.

Response Zone information (ESRI shape file format) is the responsibility of RDKB (with mandatory assistance from our GIS Department) and must be accurate down to the parcel level in order to ensure accurate dispatching. Cost for the provision of this data will be the responsibility of the RDKB.

It is proposed that this information will be provided to KFD Dispatch Centre by RDKB on a regular basis in order to be integrated by the dispatch centre into the FDM CAD system.

Typically dispatch customers also provide the following data to aid in ensuring a successful location of an incident:

- Parcels with legal and civic labeling
- Fire Hydrants
- Hiking trails
- Communities and Neighbourhoods

RMS vendor and current version

FDM Software Ltd,
949 W 3rd Street, Suite 113
North Vancouver, BC V7P 3P7
Phone: 800/604-986-9941

RMS version currently used is 13.1.19 and is offered in both Win4 and 6 configurations.

Modules currently available include:

- Property
- Personnel
- Hydrant
- Permit
- Incident
- Inspection
- Training

Optional modules available:

- Roster
- Asset Management
- Preventative Maintenance
- EMS
- Fitness and Wellness

Options for mobile workstations and rip and run sheets

Rip and run sheets are our current standard method of notification and can be transmitted via facsimile or network/internet printer. Simultaneous email Gateway messages can be configured to be sent as well as interfaces into other notification systems such as I Am Responding.

Field workstations (MobileCAD) are available with 42 existing installations currently on our network. RDKB will be invited to participate at an additional cost (per client device) along with our other dispatch clients. Participation is not mandatory and has no impact on existing service agreements.

8. Technical Ability

Appendix 20.1 - Radio Interconnection Table for the RDKB Departments Connected to RDCO Fire Dispatch Centre in Kelowna.

All proposed connections will be using Zetron Phone Couplers, dedicated wireline or dedicated RoIP link(s) with Zetron channel cards as noted under the Technology and Proposed Connection columns

No.	Department	Technology	Primary Alerting	Secondary Alerting	Items of Note	Proposed Connection	Text Messaging Support
1	Big White	Dedicated wireline	VHF two tone	VHF two tone - cell phone back	Primary is dedicated phone	Zetron Channel Card	Yes
2	Beaverdell	Telephone interconnect	VHF two tone	VHF two tone - Satellite phone back-up		Zetron Phone Coupler	Yes
3	Christina Lake	Dedicated wireline	VHF two tone	VHF two tone - cell phone back	Primary is dedicated phone	Zetron Channel Card	Yes
4	Grand Forks - 5 Halls	Dedicated wireline	VHF two tone	VHF two tone - cell phone back	Primary is dedicated phone line	Zetron Channel Card	Yes
5	Greenwood	Telephone interconnect	VHF two tone	VHF two tone - cell phone back		Zetron Phone Coupler	Yes
6	Midway	Telephone interconnect	VHF two tone	VHF two tone - cell phone back		Zetron Phone Coupler	Yes
7	KBRFR - 6 Halls	IP224 x 3	VHF two tone	VHF two tone - cell phone back		Dedicated RoIP Link	Yes
8	West Boundary Road Rescue	Telephone interconnect	VHF two tone	VHF two tone - cell phone back		Zetron Phone Coupler	Yes

Appendix 20.2 - Radio Towers / Repeaters / Base Station Details.

All proposed connections will be using equipment solutions as noted below under Primary Link

No.	Department	Repeaters	Repeater Location	Primary Link	Mobile Repeaters	Base Station / Mobiles	Back-up / Notes
1	Big White	Motorola GR1225 Dispatch Primary: Motorola CDM750	Bell Media Tower, Big White Mtn BC, 49 43 39N 118 58 19W	Leased Wireline	N/A	Motorola CM300	Dispatch Backup: Motorola CDM750 w/ CSI 9800D
2	Beaverdell	Motorola GR1225	Fire Hall	Telephone Interconnect	N/A	Motorola Radius GR1225	Satellite/ Motorola CDM750/CSI
3	Christina Lake	Motorola R1225 Motorola	Santa Rosa - in Shaw building	Leased Wireline	N/A	Motorola Radius M120	Cell. Matrix/Motorola CDM750/CSI9800
4a	Grand Forks St #1, 11331	Kenwood TKR750	Observation Mountain	Leased Wireline	Base repeater booster -	Motorola Radius SM50	Cell. Matrix/Motorola CDM750/CSI9800
4b	Grand Forks St #2, 5700				N/A	Motorola Radius SM50	Cell. Matrix/Motorola CDM750/CSI9800
4c	Grand Forks St #3, 2460				N/A	Motorola Radius SM50	Cell. Matrix/Motorola CDM750/CSI9800
4d	Grand Forks St #4, 7214 2 nd St, Main				N/A	Kenwood CDM750	Cell. Matrix/Motorola CDM750/CSI9800
4e	Grand Forks St #5, 490				N/A	Motorola Radius SM50	Cell. Matrix/Motorola CDM750/CSI9800
5	Greenwood	Motorola Radius GR1225	Fire Hall	Telephone Interconnect	N/A	Motorola CDM750	Cell. Matrix/Motorola CDM750/CSI9800
6	Midway	Motorola XPR8300	CBC Tower	Telephone Interconnect	N/A	Motorola PM400	Cell. Matrix/Motorola CDM750/CSI9800

Appendix 20.2 - Radio Towers / Repeaters / Base Station Details (Continued)

No.	Department	Repeaters	Repeater Location	Primary Link	Mobile Repeaters	Base Stations /Mobiles	Backup/Notes		
7a	KBRFR - Rossland Hall	Kenwood NXR710K	Granite Mountain	VHF thru dedicated RoIP link into Kelowna Zetron	Back-up in Rossland Hall Motorola RKR1225	Motorola Radius			
7b	KBRFR - Warfield Hall					Kenwood TK760HG			
7c	KBRFR - Genelle Hall					Kenwood TK760HG			
7d	KBRFR - Trail Hall					Motorola CM200			
7e	KBRFR - Montrose Hall	Kenwood NXR710K on Granite Mountain, linked to Beaver Falls Extender/Cross-band repeater consisting of 2 back to back Motorola GM300 radios with a Motorola GR repeater controller (model HLN3948). Located in private residence at 1064 Highway 3B.				Kenwood TK-760HG-1 c/w antenna booster ICP12012-10AG			
7f	KBRFR - Fruitvale Hall					Kenwood TK760[H]G			
8	West Boundary Road Rescue	Motorola XPR8400	CBC Tower	Telephone Interconnect		Motorola PM400	Cell. Matrix/Motorola CDM750/CSI9800		

9. Operational Ability

Standards

The standards of service for emergency communications in the fire service are largely prescribed by the NFPA Standard 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.

In addition, and wherever possible, we reference and strive to adhere to and comply with the following standards:

- NFPA 37, *Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines*
- NFPA 75, *Standard for the Fire Protection of Information Technology Equipment*
- NFPA 110, *Standard for Emergency and Standby Power Systems*
- NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*
- NFPA 731, *Standard for the Installation of Electronic Premise Security Systems*
- NFPA 1061, *Standard on Professional Qualifications for Public Safety Telecommunicator*
- NFPA 1561, *Standard for Emergency Services Incident Management System*
- NFPA 1600, *Standard on Disaster/Emergency Management and Business Continuity Programs*
- NFPA
- CSA Z1600, *Emergency Management and Business Continuity Standard*
- APCO/NENA ANSI 1.107.1.2015, *Standard for the Establishment of a Quality Assurance and Quality Improvement Program for Public Safety Answering Points*

Procedures and Protocols

On a daily basis KFD Dispatch relies on locally-produced formalized Policies and Operational Guidelines with input from the respective Regional Chiefs' Committees.

In all cases KFD Dispatch strives to provide standardized and equitable dispatch services, however some form of uniqueness may be utilized on a needs basis.

Business Continuity Strategy

A Hazard, Risk and Vulnerability Analysis (HRVA) was completed for KFD Dispatch Centre in January of 2014. The HRVA included evaluating the likelihood of any of the provincially-recognized hazards or combination of hazards occurring, taking into account factors such as threat analysis, frequency, history, trends, and probability.

The risk assessment included data on the impact of the risk event on the entity and on people, property, and the environment.

The results of the HRVA were used as a basis for conducting a site-level, detailed analysis of what could occur at Fire Dispatch's location. The HRVA identified the hazards that may have an impact on Fire Dispatch's operations or areas of responsibility. Hazards from the following categories shall be considered:

- a) Natural;
- b) Human-caused; and
- c) Technological.

The following hazards were deemed to be high consequence/high likelihood (ranked most likely to least likely to occur):

- a) Motor Vehicle Accident
- b) Disease or Epidemic
- c) Hazardous Materials Incident
- d) Fire - Urban and Rural
- e) Fire - Wildfire and Interface
- f) Flooding
- g) Vandalism/Terrorism/Accidental Damage to Infrastructure (data cables, etc.)
- h) Loss of infrastructure (telephone, Internet system(s))

Our business continuity strategy conforms to CSA Z1600/NFPA 1600 and includes a number of options to mitigate against and counteract any challenge, and include:

- Phone Systems:
 - Fully redundant 9-1-1 Infrastructure
 - Automatic Failover to diverse routes including cell phones in the event of failure
- CAD:
 - Triple-redundant backup systems
 - Tested twice daily
- Facility:
 - Hot on-site back up two-position dispatch centre
 - Dual fuel generator, state of the art transfer switch and UPS
 - Multiple off-site back-up solutions
 - Primary backup site is fully equipped to be in a hot or warm modes (equipment dependent) at all times
 - Tested quarterly

10. Staffing Details

Staffing plan for support of varying call volumes.

a. Staffing levels

The dispatch centre employs 9 full-time staff, comprised of 4 regular dispatchers who work a dedicated 4 on 4 off schedule and 5 relief dispatchers, 4 who are regularly assigned to a 4 on 4 off schedule. Five casual (part time) dispatchers are assigned to a flexible schedule to cover for sickness and relief, often on short notice. Staffing levels are maintained at a minimum of 2 dispatchers at all times and approximately 30% of the day shifts are increased to 3 dispatchers, primarily to deal with anticipated peak call volume shifts. By utilizing a combination of full time and part time staff, the centre is able to maximize staffing during peak times or times of heightened risk, such as seen in the summers.

The KFD Dispatch Centre is supported by the Dispatch Supervisor (AO Moore) who provides subject matter expertise within the dispatch centre and also coordinates scheduling, additional projects and duties among the dispatch staff. Both the Dispatch Supervisor and the AO responsible for Emergency Management, AO Follack, are trained, experienced dispatchers and provide immediate support to the centre as required in response to call volumes. Support to the dispatch centre is the priority responsibility for both Administration Officers.

The KFD dispatchers also work closely with their respective Platoon Captain for operational advice. The dispatch centre operation is overseen by the Deputy Chief, Communications and Regional Services.

b. Console Positions, Staffing Plan, Experience and Training, Certifications

Information on the number of call answer/dispatch positions and number of staff available per shift and total; as well as the experience, training or certification requirements for call-takers.

i. Console Positions

We have three dispatch/call taking positions and three call taking positions at our primary site.

ii. Capacity to staff up during major emergency events

Call back provisions are in place for our off-duty dispatchers. Dispatchers are empowered to request additional support at any time, without prior approval and do so via an automated call back system that can make multiple phone calls in a short period of time.

Trained administration staff (AOs) are also available to support the dispatch centre in a frontline call taking capacity where required.

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iii. Staff Available per shift and Total

Our minimum staffing level is currently two per shift. Approximately 30% of our day shifts are staffed with an additional dispatcher for a total of three.

iv. Experience

Our depth of dispatcher experience is as follows:

- 2 dispatchers with 10 years of service
- 3 dispatchers with 8 years of service
- 2 dispatchers with 6 years of service
- 2 dispatchers with 5 years of service
- All of our casual staff have prior dispatching experience, either in fire, police or ambulance

Our AO Dispatch Supervisor has 32 years of experience
Our second AO has 20 years of dispatch experience.

Key details on any ongoing training programs in place, and if applicable, union or bargaining agreements.

v. Description of initial dispatcher training

All dispatchers undergo 80-hours of formal classroom and simulator training prior to being assigned to a shift and commencing a period of on the job training and qualification. Training is based on NFPA 1061 (Standard for Professional Qualifications for Public Safety Telecommunicator) and IFSTA Telecommunicator standards. 168 hours of on-the-job training reinforces the formal instruction with final certification at the 9-month point. New recruit training has recently (January 2017) been completely reviewed and updated.

vi. Certification

All dispatchers have completed the Association of Public Safety Communications Officials (APCO) Fire Service Communicator I certification course. Most of the dispatch staff has previous dispatch centre experience, with many of them coming from the RCMP or BC Ambulance dispatch centers and as such have significant existing local knowledge of the RDKB area.

vii. Union Affiliation and Collective Agreement

Our dispatchers are members of the IAFF, Local 952; the current collective agreement is in place until December 31, 2019.

c. Ongoing training and performance evaluation process for personnel

Ongoing training and performance evaluation is conducted using a variety of processes and techniques.

- The dispatch centre employs a customized performance measurement and evaluation process. This process involves monthly statistical reports that are made available to management and staff to monitor ongoing performance.
- A probationary development plan is in place for new employees.
- A training plan is in place for ongoing accredited training provided through APCO.
- Regular in-service training is assigned and accomplished on a monthly basis.
- Staff meets and trains quarterly, where topical industry information is presented and reviewed as a team.

d. Quality assurance program, including number of calls reviewed and how often staff receive feedback

Management within the dispatch centre recognizes that employees perform best if expectations are clearly articulated and their own performance is reported back to them.

We have implemented an ongoing process to assist in motivating, recognizing and enabling employees to improve performance. This program is based upon positive, constructive criticism and endeavors to set a standard and a goal for staff to strive towards. It also provides recognition of accomplishments, identifies resources to assist improvement, increases communications and helps to develop knowledge, skills, abilities, and experience while identifying areas for improvement by providing feedback on specific performance goals.

The program consists of three phases:

Phase 1 - Measurement & Metrics: This phase consists of numbers, facts and figures. This provides an indication of individual performance, group/team performance and overall centre performance and is based upon the NFPA 1221 standards.

Phase 2 QA/QI Call Evaluation: This phase consists of a minimum of 3% of all calls evaluated against the APCO/NENA ANSI 1.107.1.2015 standards. Additionally, staff undertakes self-appraisal of incidents using that same standard, evaluating calls that each staff has chosen to demonstrate excellence or identify improvement opportunities. This identifies necessary skills, abilities and behaviors that constitute an acceptable level of performance and individuals are assessed on how they have demonstrated these performance factors on an incident

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by incident basis. Customer-driven complaints are dealt with in exactly the same manner.

Phase 3 - Employee Evaluation: This phase consists of a 360 Degree Review comprised of three benchmarks to keep doing, stop doing and start doing. This, along with a review of individual metrics from phase 1 and performance from phase 2 results in the development of an individual development plan that highlights employee's accomplishments and documents areas that the employee can improve upon and now forms part of an annual performance review, undertaken by every City of Kelowna employee.

Complaint Procedure Process

As noted above, customer-driven complaints are initially dealt with using our quality assurance and quality improvement Program which adheres to APCO/NENA ANSI 1.107.1.2015 Standards. Within our operational guidelines and policies, mechanisms are in place to deal with disciplinary actions should they be deemed necessary.

Should there be a need to escalate beyond that we have a standard dispute resolution clause within our existing contracts that can be enacted:

Both RDKB and Kelowna agree to co-operate and use their best efforts to resolve any dispute which may arise regarding this Agreement or the Services contemplated within this Agreement or the responsibilities or rights of each party under it, including the candid and timely disclosure of all relevant information and documentation to each other. If the dispute cannot be resolved, it shall be first referred to each party's managing director responsible for fire dispatch services in order that they may attempt to resolve the dispute. In the event the two representatives are unable to reach agreement regarding the dispute, may be submitted to arbitration by delivery of a Notice of Arbitration in writing to the other party. The arbitration must be conducted by a three-person panel comprised of one appropriately qualified staff person appointed by the parties and one person chosen jointly by the two appointed staff persons, who shall be the chair of the arbitration panel. If the two staff appointees cannot agree on the choice of the chair of the arbitration panel, then the chair must be appointed by a Judge of the Supreme Court of British Columbia. The arbitration will be governed by the Commercial Arbitration Act (British Columbia). The place of arbitration will be Kelowna, British Columbia, Canada, and the costs will be borne equally by the parties.

It is worthy to note we have never had a need to escalate a complaint to this level.

11. Remuneration

Remuneration as detailed in Appendix 19.5 - Remuneration

Costing - Excluding FDM Hosting (see separate costing sheet)

	A	B	C	D	E	F
	Contract Year:	Project Management Costs	Capital/Equipment Costs	Operating Costs	Total Annual Fixed Cost (sum of Columns B,C,D)	Maximum Contingency Allowance
1	Year 1 (2018)	\$ 156,664	\$ 100,700	\$9,794*	\$267,158	10% \$26,715
2	Year 2	\$ 134,936	\$ 0	\$2,050*	\$136,986	\$ 0
3	Year 3	\$ 138,309	\$ 0	\$2,101*	\$140,410	\$ 0
4	Year 4	\$ 141,767	\$ 0	\$2,154*	\$143,921	\$ 0
5	Year 5	\$ 145,311	\$ 0	\$2,208*	\$147,519	\$
6	Subtotals: (Sum of rows 1, 2, 3, 4, 5)				\$ 835,994	\$ 26,715
7	Total Maximum Contract Price Over 5 Year Term: (Sum of E6 + F6)				\$ 862,709	

Notes on costing model:

Project management costs reflect the cost of dispatch service annually, based on call volume.

Detailed Project Management Costs for Column B:

- Annual Dispatch Services Fees: \$131,664 with 2.5% escalator applied beginning Year 2
- Initial start up fees: Based on the information provided, start-up costs would include travel, training, local IT support and additional onetime costs, not expected to exceed \$25,000.

Detailed Estimated Onetime non-reoccurring Equipment and installation labour Costs for Column C:

- Based on research and work with third party equipment suppliers. Actual cost may be impacted by customer changes, requirements or unforeseen technical requirements at the RDKB end

- 5 x Zetron Dual Channel Cards; 3 x Telex IP224 Dual IP Remote Adaptors; cable assemblies; Cisco equipment to establish RoIP links: \$70,000.00
- Omega Installation and Programming Labour: \$12,500.00
- Boardwalk programming labour for Cisco equipment: \$10,000.00
- 2 x Digital Voice recorder channel cards: \$5,000.00
- 10 x Avaya telephone KIMS (5 for main dispatch, 5 for backup dispatch): \$3,200 (to be shared equally if RDCK is involved)
- Consideration will be made by Kelowna Fire Department to assume all dispatch equipment currently in place at the RDKB once the cut-over has occurred. Any value for this equipment will be determined during the implementation.

Detailed Estimated Operating Costs for Column D:

- Redundant Internet Connectivity:
 - (Primary, RDKB end and both Kelowna Sites) New Shaw Business Internet 30: \$85.00/month x 3 x 12 = \$3,060.00
 - (Secondary) New Telus Office Internet 25: \$85.00/month x 3 x 3 = \$3,060.00
 - (Tertiary) New Rogers LTE: /month x 3 x 12 = \$1,674.00
 - NOTE: This costing is for a triple-redundant radio link and we understand this may not be monetarily viable; this can be discussed later on.
 - 2.5% has been added to years 2 through 5.
- * Leased dedicated telephone lines for Big White, Christina Lake, and Grand Forks: Costs to be determined with Telus as this portion will require two phases (Phase 1: Kelowna to existing Trail lines; Phase 2: New lines from Kelowna to Big White, Christina Lake, and Grand Forks; decommission Trail lines). For estimating purposes only a figure of \$2,000.00 has been included.

FDM Costing (Assuming support of existing RDKB and Big White Workspaces from RDKB)

	A	B	C	D	E	F
	Contract Year:	FDM Support and Training	Server Hosting	Annual Licence Fees	Total Annual Fixed Cost (sum of Columns B,C,D)	Maximum Contingency Allowance
1	Year 1 (2018)	\$ 5,030	\$ 2,515	\$ 7,520	\$15,065	\$ 0
2	Year 2	\$ 5,030	\$ 2,515	\$ 5,156	\$12,701	\$ 0
3	Year 3	\$ 5,030	\$ 2,515	\$ 5,156	\$12,701	\$ 0
4	Year 4	\$ 5,030	\$ 2,515	\$ 5,156	\$12,701	\$ 0
5	Year 5	\$ 5,030	\$ 2,515	\$ 5,156	\$12,701	\$ 0
6	Subtotals: (Sum of rows 1, 2, 3, 4, 5)				\$65,869	\$ 0
7	Total Maximum Contract Price Over 5 Year Term: (Sum of E6 + F6)				\$ 65,869	

Notes:

- Detailed Costs for Column B:
 - FDM Support and Training (FDM requires mandatory provision by KFD: \$5,030.00 per year; good out to 2019)
- Detailed Costs for Column C:
 - City of Kelowna IT Server Hosting: \$2,515.00 (10% of estimated original FDM licence costs)

Detailed For Column D:

- Year 1 includes Onetime non-reoccurring Conversion and Workspace Transition: ~\$ 2,500.00
- Annual Licence Fee: Current RDKB/Big White costs now under the Trail Workspace transferred to Kelowna: ~ \$5,030.00
- FDM pricing is good out to 2017; 2.5% has been added to years 2 through 5.

Situational Awareness

As an example of the KFD Dispatch Centre commitment to ongoing improvement and innovation, a collaboration with FDM and Defence Research and Development Canada in 2013 led to the creation and implementation of a real-time, automated interface with the Multi-Agency Situational Awareness System (MASAS) that can be deployed to accredited users as long as they have Internet connectivity.

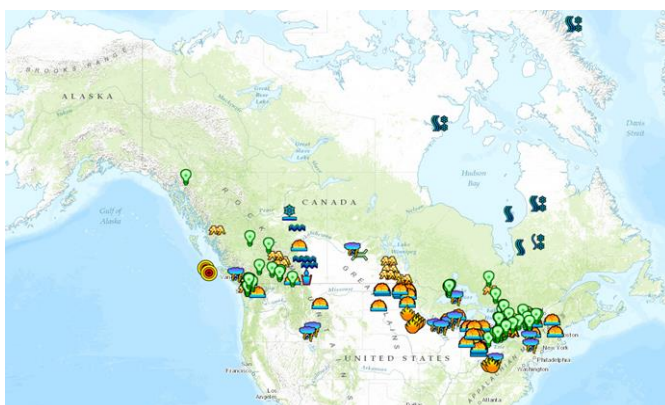
Our CAD has the ability, at the department level, to automatically push relevant incident data (usually those involving two or more agencies) to the secure, invitation-only mapping suite. This gives responders as well as EOC staff the ability to make better informed decisions.

An automatic interface with a growing number of agencies further enhances your real-time situational awareness (SA):

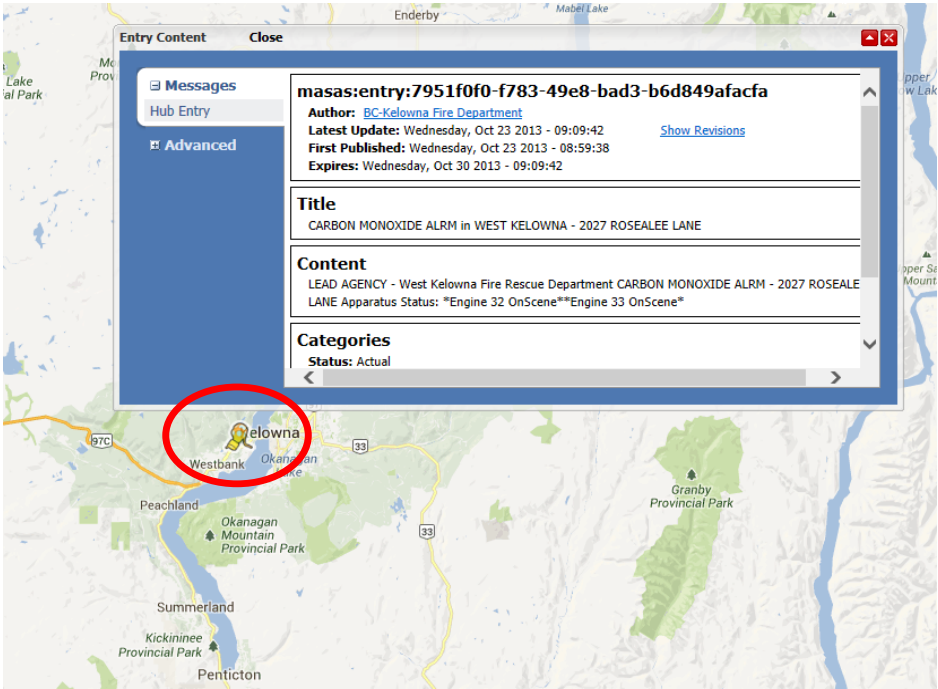
- National Alert Aggregation & Dissemination System
- Environment Canada
- Earthquake Canada
- Drive BC
- BC Hydro
- EMBC
- Cross border SA from FEMA's IPAWS/VirtualUSA

Annual Cost: **No Charge**

KFD purchased the MASAS CAD add-on and does not charge to push incident information as decided by RDKB. At this time CanOps (the MASAS host) does not charge to subscribe to MASAS although there is talk of a very minimal (e.g.: \$100) annual administration fee. For more MASAS information please go to www.masas.ca



MASAS Web Browser Viewer of North America



Typical MASAS Incident Icon and Detail

12. Proposed Agreement Terms and Conditions

Copy of the proposed draft agreement terms and conditions, including all terms and conditions of service that the Proponent would seek to enter into for Section 17 - Scope of Work. Subject to final legal review and comment from both the City of Kelowna and the RDKB.

Fire Dispatch Service Proposal Preamble

This proposal is submitted to the Regional District of Kootenay Boundary (RDKB) in response to Request for Expressions of Fire Dispatch Service

a. Proponent Identification

The Corporation of the City of Kelowna
1435 Water Street
Kelowna BC V1Y 1J4

Authorized Contact and Representative: Deputy Fire Chief Travis Whiting
Kelowna Fire Department
2255 Enterprise Way, Kelowna BC
V1Y 8B8
(250) 469-8760
twhiting@kelowna.ca

b. No Collusion

Except as otherwise specified or as arising by reason of the provision of the contract documents, no person whether natural, or body corporate, other than the Proponent has or will have any interest or share in this Proposal or in the proposed contract which may be completed in respect thereof. There is no collusion or arrangement between the Proponent and any other actual or prospective Proponents in connection with Proposals submitted for this project and the Proponent has no knowledge of the contents of other Proposals and has made no comparison of figures or agreement or arrangement, express or implied, with any other party in connection with the making of the Proposal.

c. Authorization

Entering into any agreement is subject to the approval of Kelowna City Council. A council resolution will be proposed to authorize the Mayor or Fire Chief and City Clerk to execute the agreement.

Neither the Proponent nor any Proponent Member has any interest in the Proposal of any other Proponent, directly or indirectly, and that it has not entered into any agreement that could create such an interest.

d. Conflicts Disclosure

At submission, we were unaware of any existing business relationships, either directly or indirectly through other parties that would be cause for conflict.

Service Requirements

i. Dedicated service

Based on our understanding of the RFP, we will provide the following services:

- Emergency Call Taking
 - Emergency telephone call receipt (9-1-1)
 - Receive telephone calls regarding emergency incidents
 - Receive radio reports regarding emergency incidents
 - Receive smoke sighting reports from Ministry of Forest and Range
 - Receive Works and Utilities after hours calls
- Call Processing and Response
 - Dispatch resources in accordance with standard operating guidelines, perceived incident level and local response plans, including customized levels of response for individual departments:
 - Incident notification via voice paging system, secondary notification via email and/or text messaging, incident details via facsimile or network/internet rip and run report.
 - Call and liaise with local fire chiefs/authority regarding nature of incident/complexity, resources required, via radio or telephone.
 - Notification acknowledgement confirmation (within x minutes, then activate default no-response procedures).
 - Monitor and record calls at the command channel level.
 - Remotely record calls at the tactical level unless they are repeated channels
 - Receive and process requests for additional resources:
 - Including contact with the utility, Emergency Management BC, highways, forestry, rail representatives and other resources as required.
 - Generate and maintain initial incident reports for all incidents.

- Incident reporting post conclusion of incident.
- Dedicated telephone number (toll free) for responders to access the dispatch centre.
- Call out of Civic Staff as required.
- Media Liaison
 - Provide limited incident information to media outlets after hours or if Incident Command has not staffed the Information Officer position.
- Full recording of all 9-1-1, non-emergency telephone and radio (paging and command) communications.

The following Telus requirements should be noted:

- Processing of 9-1-1 calls will require the availability of E911 Tandem to Tandem trunking and a reconfiguration of the Telus 9-1-1 network.
- Some splitting and segregation of the 9-1-1 Emergency Service Zone (ESZ) may be required.

The above noted items will be the responsibility of RDKB, working with Telus to obtain and deliver. We will cooperate and offer to leverage our existing contacts and relationships to ensure that this is completed in an expedient and satisfactory manner. In preparing our response to this RPF we have discussed both issues with Telus and both are obtainable within the time frame and using current technology and infrastructure.

The following additional requirements of RDKB should also be noted:

- This agreement covers standard emergency dispatch services. Any incident or incidents which escalate into an event requiring extraordinary powers under a declaration of a state of local, provincial or federal emergency may require additional human resources (dispatch and related support personnel) to maintain an appropriate level of service. Should additional personnel be required in addition to staff already on duty, current call back rates would apply and be invoiced.
- RDKB must supply, and keep current; response Operational Guidelines (including mutual and automatic aid agreements) to guide the dispatch centre in assigning an appropriate response to all incidents.
- The dispatch centre will not be responsible for the processing of non-emergency or administrative phone calls, beyond providing basic information only. Number(s) must be provided such that these callers can be redirected as required.

- RDKB is responsible for their radio and pager licensing, acquisition, operation and maintenance costs, related to delivery of the service within the RDKB area.
- All communications equipment and installations must meet NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.
- The RDKB ensure that a “Preventative Maintenance” service agreement for all communications equipment is in place and regular maintenance of the equipment to accepted emergency equipment standards is performed.
- All future additional mobile equipment, or data connection costs, including MobileCAD and/or mobile RMS, is the responsibility of RDKB.
- RDKB must endeavor to provide a single point of contact for all administration and operational matters.

Proposal Impact on Current Operations

i. Additions to equipment, software and resources

Additions are required to our FDM RMS software/hardware system as noted in Section 11 of this proposal.

Please note the following data requirements:

- Any existing RDKB response logic and response zone shape files currently in use
- RDKB map data in the form of shape files (or other file formats able to be converted to shape files) including but not limited to:
 - Political boundaries
 - Fire protection areas
 - Fire contract areas
 - Fire response zones
 - Fire hydrants and/or water supplies
 - Trails, pathways
 - Parcels
 - Ortho photos
- Information will be updated on a regular basis, as required.

Additions and upgrades will be required to our radio system, and these will dependent on the type of interface agreed on.

ii. Enhancements and additions to current dispatch facility

Our current facility includes three dispatch/call taker positions and two call taker positions,

No enhancements or additions to our current dispatch facility are required.

3
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Other Details

i. Ability to customize service to meet specific response protocols for each fire department

All current clients requiring specific response protocols have been met using one or all of the following capabilities with FDM:

- Basic back-up apparatus: where a station has more than one piece of apparatus configured to respond to additional calls for service, they can be defined as back up apparatus. Similarly, if a department has more than one station, apparatus from subsequent stations can be identified as back up apparatus to respond in other response zones
 - Mutual Aid apparatus: apparatus from other departments can be defined to respond into other fire protection areas as part of a mutual and/or automatic aid agreement
 - Response override: allows the addition/deletion of apparatus based on limitations a department may have
 - Day/Time Response override: allows a department to have different responses based on time of day, day of week, holidays, or any other significant date

As current clients will attest, Kelowna Fire Dispatch has demonstrated its ability and willingness to customize service to meet the unique nature of individual fire departments.

ii. Interoperability

We maintain an excellent working relationship with fire dispatch agencies within our geographical area. We also maintain close working relationships with RCMP and BCAS dispatch centers as well as Ministry of Forests Wildfire Coordination centre and the e-Comm PSAP.

The integration of fire dispatch service throughout the Southern end of the Interior is a logical choice that will provide a cohesive integrated level of service and increase fire service cooperation from Lake Country to the Alberta Border.

As an example of our commitment to interoperability, the KFD dispatch centre has recently led the Central Okanagan Combined Events Working Group. This group brought together the Royal Canadian Mounted Police (RCMP), British Columbia Ambulance Service (BCAS) and all Central Okanagan Fire Departments to work cooperatively to develop a multi-agency interoperability (Combined Events) solution. This solution established dedicated radio channels with procedures that are accessible on communication equipment used by key public safety officials.

Our dispatch centre is an active member in the Association of BC 9-1-1 Service Providers as well as APCO and NENA Canada which allow

us additional opportunities to work with vendors and experts on a regular basis as well as keep abreast of changes within the industry and take advantage of access to accredited training materials.

Other Operational Standards, Policies, Procedures and Protocols

KFD Dispatch Centre utilizes a number of industry-standard operational standards, policies, procedures and protocols to ensure the most efficient use of resources on either side of the radio is maintained, including:

- National Fire Incident Reporting System (NFIRS) Standard for Incident Type classification
 - This allows any department adopting this standard to compare themselves to a data set of over 35,000 other departments across North America
- Incident Command System
 - Adoption of plain language standards
- Unique apparatus call sign designations
 - As a lesson learned from the 2003 wildfire event, none of the apparatus protected by Fire Dispatch have duplicate call signs (i.e.: there is only one Engine 1, Engine 201, etc.
 - This allows for seamless large-scale aid to be enacted without confusion and sacrificing crew safety

i. Insurance

The City of Kelowna maintains a full and suitable compliment of insurance on behalf of the Kelowna Fire Department. Types and limits suitable to both parties will be discussed upon award of the contract.

ii. Other Optional Services

We strive to continually identify areas for improvement, especially as technology evolves. We are presently in the process of identifying new technologies and upgrade paths and additional services may become available in the near future. RDKB will be offered the opportunity to participate in any upgraded or optional services at that time, however all future additional mobile equipment, or data connection costs, including mobile CAD and/or mobile RMS, will the responsibility of individual users. Existing service levels and agreements will not be impacted by upgrades to technology or the addition or change to optional services.

- a. The following additional optional services are currently offered by the dispatch centre. It should be noted that these services are subject to change and do not form part of the agreement other than as presented, but may be negotiated separately at a later date.

i. IAmResponding

Departments are required to purchase their own accounts at which time IAmResponding will issue one or more email addresses for CAD to send Incident Messages to. It is the responsibility of each department to maintain their members' email addresses by using their mass notification module or third-party forwarding interfaces (Email Dodo, etc.). There is no charge from Kelowna to interface CAD to this system.

ii. SendWordNow Notification System

SendWordNow is an on-demand crisis notification and collaboration service that can:

- Contact thousands of individuals simultaneously
 - Perfect for Fire Department and EOC notification and call-backs
- Gather real-time status of notification and acknowledgements
- Specify escalation rules by user, date, and time
- Supports multiple inbound telephone lines
- Current customers include:
 - Kelowna Fire Department
 - West Kelowna Fire Rescue
 - Penticton Fire Rescue
 - Central Okanagan Regional Emergency Operations Centre

This is offered by Kelowna on a cost-per-person, flat annual fee basis.

13. Implementation Plan

Implementation plan with the key staffing, activities and timelines to cutover, including (but not limited to):

Implementation Plan Overview

As noted at the start of this proposal, KFD recommends an amended cut-over date to ensure the best transition possible. The date is subject to further discussions between KFD and RDKB.

i. Equipment and software capacity/capability/compatibility review

- Completed, to be reviewed in detail with RDKB upon awarding of contract

ii. Equipment and software/data upgrade timeline

April 2017

- Radio integration
- CAD:
 - Mapping
 - Operational Guideline clarification
 - Response Logic
 - Response Overrides
 - Timed Response Overrides

iii. System testing and service implementation timeline

System Testing: October 31, 2017

Parallel Service Implementation: November 29, 2017

Go Live: December 12, 2017

This timeline subject to further discussions once all parties have met and discussed the transition plan.

iv. Year 1 Review

Our implementation plan includes a period of parallel service between Kelowna and Trail dispatch centres during which time all challenges should be rectified.

We have a series of reality check milestones that are scheduled in the detailed project plan.

v. Staff training timeline

Staff training will consist largely of area orientation and familiarization with specific geographical features and the individual departments, fire halls and response boundaries. It is proposed that leading up to the transition a two day orientation program be developed by representatives from both parties and

that this program will be delivered in the month prior to the transition to all dispatch qualified staff. The cost of this training has been included in the start-up cost of this proposal. Ongoing training will be provided including recurrent familiarization training as a part of the ongoing training program within the centre. It is envisioned that at least 1 visit per year to the area be conducted by all staff.

Details about the project manager and team to manage the implementation.

KFD Dispatch Implementation Team Lead

AO Brian Moore will be the lead for the Implementation Team, working with a contracted Project Manager.

Brian has over 35 years of radio, dispatch and emergency management experience beginning in 1979 when he joined the Royal Canadian Navy as an Electronic Warfare Operator and Ship-board Firefighter. In 1982 he joined the Canadian Army (Primary Reserves) as an Armoured and Reconnaissance Crewman, becoming an expert in communications and situational awareness, leaving in 2006. In 1985 he joined the RCMP as a Telecommunications Operator, leaving after 11 years (in 1996) to take on the role of Dispatcher at the Kelowna Fire Department, then Dispatch Supervisor in 1999.

As Dispatch Supervisor, Brian's duties and accomplishments include:

- Manage Regional Fire Dispatch
- Maintain the operational readiness of the Regional Fire Dispatch Centre and Communications System
- System administrator for the FDM CAD and regional fire RMS; includes MobileCAD and Regional Access Model clients
- Oversee the dispatcher training course following NFPA and IFSTA regulations and procedures
- Research Lead, Motorola 700 MHz Public Safety Broadband Network Proof of Concept Deployment
- Member, KFD strategic planning committee
- Technical advisor for the regional fire communications system upgrade project (included disaster avoidance/reduction and recovery strategies)
- Co-chair, Central Okanagan Public Safety Communications Interoperability Working Group
- Project manager, RDOS dispatch and radio implementation
- Project team, RDEK dispatch and radio implementation
- Project manager, Multi-agency Situational Awareness System Exchange/CAD Integration Study; Defence Research and Development Canada, Centre for Security Science
- Project manager for Microsoft-Kelowna EOC information technology upgrade project
- Project manager for dispatch radio console replacement program
- Project manager and administrator of the emergency response geographical information system

PROFESSIONAL AFFILIATIONS AND VOLUNTEER ACTIVITY

- Board of Directors, National Emergency Number Association (BC Chapter)
- Board of Directors, Association of BC 9-1-1 Providers
- Member, 9-1-1 Emerging Technologies Committee, APCO International
- Member, Association of Public Safety Communications Officials (APCO), International Chapter
- Member, Association of Public Safety Communications Officials, Canada Chapter, 1990 to 1998
- Member, National Public Safety Telecommunications Council;
 - Deployable Systems Working Group
 - Cross Border Working Group
- Member, Transport Canada Emergency Response Task Force on the Lac Mégantic Train Disaster
- Member, Multi-Agency Situational Awareness System National Advisory Group
- Director, Partnership Engagement; International Association of Emergency Managers Canada International Association of Emergency Managers (IAEM)
- Member, HAZUS-MH Canada User Group (CanHUG)
- Vice-chair, IAEM Training, Education and Professional Development Committee, 2010-2012
- Member, Centennial College (Toronto, Ontario) Emergency Management and Public Safety Institute Steering Committee; Centre of Excellence Subcommittee
- Member, Centennial College Emergency Management and Public Safety Institute Steering Committee; Learning & Engagement Subcommittee
- Member, Canadian Capability Based Planning Resource Typing Committee
- Member, University of British Columbia Faculty of Medicine MD Admissions Interview Team, 2012-2013
- Member of the board of directors, Métis Community Services of BC, 2013
- Contributor, UNISDR Global Platform for Disaster Risk Reduction, May 2013
- Chair, Aboriginal Parent and Family Education Council, Kelowna, 2006 to 2009
- Member, Foundation of Aboriginal Foster Parents, 2006-2010
- Campaign representative at the fire department, United Way of the Central Okanagan, 2004, 2008
- EOC Advisor, Ford World Women's Curling Championship, Vernon, 2008
- Board of Directors, British Columbia Dragoons Whizzbang Association, 1999
- Security Communications Director, BC Winter Games, 1992

Implementation Team

Kelowna Fire Department

- Travis Whiting, Deputy Fire Chief, Communications and Emergency Management
- Project Manager, KFD will utilize a contracted Project Manager, with direct experience in Regional District Fire Dispatch transitions to oversee project timelines and communication. The PM will be assigned upon successful acceptance of the proposal
- Dedicated FDM support team, including 2 database administrators

City of Kelowna Information Services

- Brian Abrey, Infrastructure Systems Manager
- Mr. Abrey has assigned a dedicated team supporting KFD, including:
 - Business Systems Analyst
 - Customer Service Technician
 - GIS Analyst
 - Network Systems Analyst

Omega Communications

- Russ Coughlan, Manager Wireless Solutions Division
- Jesse Lloyd, Service Manager

Outside Contractors

- Telus
- Shaw
- Rogers
- Boardwalk Communications

Details on key activities and dates from completion of a written agreement through to commencement of service and during the first year of implementation. This should be provided as a detailed Project Plan showing activities, critical path, and milestones.

Detailed Project Plan

Task Name ▼	Start ▼	Finish ▼
Preliminary Equipment and Software capacity/capability review	Wed 17/01/04	Fri 17/01/06
Contract Closing Date	Tue 17/02/21	Tue 17/02/21
Proposal Validity	Fri 17/02/17	Thu 17/05/11
Proposal Review by RDKB	Tue 17/02/28	Mon 17/03/13
RFP Evaluation Completed by RDKB	Wed 17/03/08	Wed 17/03/08
RDKB Board Approval to Proceed	Tue 17/03/21	Tue 17/03/21
Written agreement finalized	Tue 17/04/04	Tue 17/04/04
RDKB Board Approval of Agreement	Fri 17/04/14	Fri 17/04/14
Meet with RDKB Reps to go over implementation Plan	Mon 17/04/17	Mon 17/04/17
Meet with KFD/IT/Omega	Mon 17/04/17	Mon 17/04/17
▲ Order Equipment & Software	Mon 17/04/17	Tue 17/05/09
Console Interface (Channel Cards & IP Remote Adaptors)	Mon 17/04/17	Tue 17/05/09
Cisco Gear	Mon 17/04/17	Tue 17/05/09
FDM - Workspacing Transition Plan	Mon 17/04/17	Tue 17/05/09
FDM - Kootenay Boundary Database Mapping to KFD	Mon 17/04/17	Tue 17/05/09
Shaw/Telus/Rogers Internet Connections	Mon 17/04/17	Tue 17/05/09
▲ Hardware/Software Installs	Mon 17/07/03	Tue 17/09/19
Console Interface	Mon 17/09/04	Tue 17/09/12
Cisco Gear	Mon 17/09/11	Tue 17/09/19
FDM - Workspacing	Mon 17/07/03	Tue 17/07/11
DVR Configuration	Mon 17/07/03	Tue 17/07/11
Install RDKB Response Logic & Mapping	Mon 17/07/03	Tue 17/07/11
Dispatcher Training & Familiarization	Mon 17/10/09	Fri 17/10/13
Equipment Testing and Adjustment	Mon 17/11/06	Fri 17/11/10
Begin Parallel Service	Mon 17/12/11	Wed 17/12/13
Service Cutover	Mon 17/12/18	Mon 17/12/18
Reality Check 1	Mon 17/12/18	Mon 17/12/18
Reality Check 2	Thu 17/12/21	Thu 17/12/21
6 Month Review with Stakeholders	Mon 18/06/25	Tue 18/06/26
Year 1 Review with Stakeholders	Mon 18/11/26	Tue 18/11/27

Details of any activities that must be carried out by the RDKB or its partner fire departments.

Mandatory Activities by RDKB and/or Its Partner Fire Departments

- Detailed assistance to confirm:
 - Existing radio link configurations
 - Written confirmation of all response logic, including unit numbering, common place names and other key critical data.
 - We need to confirm the accuracy of your response zone polygons and obtain the most current version of same
 - Other assistance as required

16.1 Contracting Party and Term

KFD Dispatch intends to be the sole contracting party for the Regional District of Kootenay Boundary.

The negotiated Agreement will cover the Fire Dispatch Service for all fire service areas outlined below in Section 16.2 - Fire Service Coverage, for an initial five-year term, as well as reserving the right for an additional (5) year extension.

16.2 Fire Service Coverage

Fire Service Coverage will include the fire service areas established by bylaw and defined by the fire protection service area boundaries listed below:

1. Big White Fire Department (C) – **1 Fire Hall**
2. Beaverdell Volunteer Fire Department – **1 Fire Hall**
3. Christina Lake Volunteer Fire Department - **1 Fire Hall**
4. Grand Forks Fire Rescue (C) – **5 Fire Halls**
5. Greenwood Volunteer Fire Department – **1 Fire Hall**
6. Midway Volunteer Fire Department – **1 Fire Hall**
7. KBRFR Co#1 Rossland -**1 Fire Hall**
8. KBRFR Co#2 Warfield -**1 Fire Hall**
9. KBRFR Co#3 Genelle – **1 Fire Hall**
10. KBRFR Co#4 Trail (C) – **1 Fire Hall**
11. KBRFR Co#5 Montrose – **1 Fire Hall**
12. KBRFR Co#6 Fruitvale - **1 Fire Hall**
13. West Boundary Road Rescue - **1 Fire Hall**

16.3 Fire Service Structure

Big White, Grand Forks and Trail are considered to be composite fire services. All the remaining Fire Departments within the Regional District Kootenay Boundary are considered volunteer.

16.4 Fire Dispatch Service

The fire departments located within the RDKB boundaries are volunteer and composite as noted above in Section 16.2.

The Zetron radio system utilized by these departments - through the RDKB Fire Dispatch in Trail, is an analog system (*Appendix 19.1 - Radio Interconnection Table refers*).

9-1-1 PSAP services are provided by E-Comm911 Vancouver through an agreement administered by the Regional District of the Central Okanagan.

Emergency calls for fire are processed at the RDKB Fire Dispatch Centre located at KBRFR Co#4 in Trail (contracted service), which is currently responsible for fire dispatch calls in RDKB and RDKB.

The average annual call volume for RDKB only is 2,532.

The service requirements for the Fire Dispatch Service will be addressed by KFD Dispatch as follows:

- A. Answer calls transferred from the 9-1-1 PSAP and make a proper determination of the service type and required response (when applicable)*

NFPA 1221 provides an analysis model for key steps involved with emergency call taking and dispatch and prescribes time milestones in which these should occur.

The standard identifies two key dispatch processes with time milestones:

1. Emergency Call receipt is defined as the time to answer the call reporting an emergency. NFPA 7.4.1 defines that ninety-five percent of alarms received on emergency lines shall be answered within 15 seconds, and 99 percent of alarms shall be answered within 40 seconds.
2. Emergency Call processing is defined as the time to interrogate the caller, determine the emergency, and create a 'dispatchable' service event in the CAD system and alert crews. NFPA 7.4.2 defines that 90 percent of emergency call processing and dispatching shall be completed within 64 seconds, and 99 percent of call processing and dispatching shall be completed within 106 seconds.

- B. Create a CAD dispatch and/or event call and maintain a full chronological record including units assigned, additional notifications, new event info, and final disposition*

New CAD incidents are created and maintain a full chronological record including units assigned, additional notifications, new event information, and final disposition. Upon completion of an incident reports are transferred off CAD and are sent to a department's RMS or faxed for those departments not part of the FDM system

C. Maintain ongoing radio communication for the duration of the incident

Subject to end user equipment configuration, ongoing radio communication is maintained for the duration of an incident.

D. Alert and dispatch the applicable fire department(s) in accordance with existing operational procedures (including future updates as agreed between the parties)

Alerting and dispatching the applicable fire department(s) is achieved by using digital warble tone, Motorola two-tone or DTMF cap codes as required. Where no radio infrastructure or telephone interconnect exists, departments are notified via telephone.

E. Benchmark the apparatus for each fire department in the CAD system

When advised of apparatus evolution, Dispatchers will enter the date/time in the applicable transition column. Where Dispatchers are not advised, we will not assume and leave one or more columns blank.

F. Update information in the CAD system to record individual fire department support and vital information relating to the call

As noted in paragraph A., everything pertinent to the incident (units assigned, additional notifications, new event information, etc.) is logged and date/time stamped.

G. Provide the tools (e.g. ability to update closed calls, query/print reports) and access to fire department users to support the continued use of the FDM Records Management System and the FirePro Records Management System input/output and the FDM Text Gateway, as well as access to current archived data (clearly define user roles in relation to data entry to FDM e.g. who is responsible for what?)

KFD Dispatch will host the RDKB and Big White databases, we would take over these licences; existing security roles would be brought over initially; and we would provide remote access via eBiz connectivity.

H. Interconnect and operate on the existing radio infrastructure (IMPORTANT: Be aware that the current Zetron interconnection point is in Trail at the RDKB Fire Dispatch Centre which will no longer be providing this service, therefore arrangements with RDKB will be required OR a proposal to establish a new interconnection point at suitable location will be required)

KFD Dispatch uses Zetron Series 4219 consoles running Integrator RD software and a 4048 Communications Control System backbone with no single point of failure.

We have departments whose primary means of communication is via a telephone-radio interconnect or a dedicated RoIP link and both are very dependable; we would use additional Zetron Phone Couplers or Channel Cards/RoIP link to achieve the new interconnection points in Kelowna for the RDKB departments.

This configuration allows us to traditionally connect to analog and digital environments on the following platforms (existing platforms bold faced):

- **Motorola**
 - **MotoTrbo**
 - **ASTRO**
 - **iDEN**
- EF Johnson
 - 3500 Series
 - Analog and P25 conventional
- Harris
 - EDACS
- Kenwood
 - TK-x80
 - TK-x180
 - TK-5x10
 - NEXEDGE

I. Have the capacity to dispatch in both analog and digital mode

KFD Dispatch currently interfaces with the RDEK system, which is a combination of digital and analog modes.

Our Central Okanagan system is analog (with full digital capabilities), using four mountain-top repeaters; while on the law enforcement side our hosted system is in the process of digitization using MotoTrbo IP Site Connect in conjunction with our Fire Department-owned wireless broadband backhaul system in the licenced spectrum.

Both systems allow for a number of standard MDC1200 protocol end user enhancements (with compatible option boards or newer integrated equipment) including Emergency Alert/Acknowledge, ID, etc.

J. Voice and call logging of phone calls and command channel and retention for the time period defined by law

All telephone lines, including 9-1-1, are recorded and archived. Paging and Command Radio Channels are similarly recorded and archived.

Voice and call logging of phone calls, paging, and command channels at our primary location is accomplished using our CVDS ComLog Digital Voice Recorder (DVR); and all recordings are saved for a minimum of seven years. Recordings can be quickly provided via email or electronic access to agencies for legal, statutory or training purposes.

Our Dictaphone DVR is similarly configured at our back-up location.

K. Conduct daily test alerting for each fire department as detailed in Appendix 19.7

We will conduct page test alerting based on each department's requirements as outlined in Appendix 19.7; typically, this is accomplished using the Motorola two-tone standard to meet the NFPA 1221 requirement, however, interconnect and other systems can be similarly configured.

Secondary notification systems we currently support are I Am Responding and Send Word Now.

L. Ensure that fire dispatch services are provided at the NFPA 1221 standards for dispatch operations; including the requirements for a backup facility

Performance within the KFD Dispatch Centre is measured monthly. NFPA 1221 Standards were met by the dispatch centre for the previous 12-month period.

	Average 9-1-1 Answer Time	9-1-1 Calls % Answer < 15 secs (95%)	9-1-1 Calls % Answer < 40 secs (99%)	Average Call Process Time (35 sec)	% Calls within 35 sec. (95%)	Average Call Dispatch Time (60 sec)	% Calls within 60 sec. (90%)
12 Month Average	6 sec	99%	99%	22 sec	95%	34 sec	93%

The standards of service for emergency communications in the fire service are largely prescribed by the NFPA Standard 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.

Our main facility complies with NFPA 1221 and ULC S561 Standards including:

- Access Security:
 - Keyless entry x 2 through security vestibule
 - Recorded security cameras at three locations monitoring entry into Dispatch

- Power supply and conditioning:
 - Standard commercial power with UPS backup
 - Kohler Backup generator with dual fuel supply (natural gas/onsite propane) and Kohler Transfer Switch (installed in 2011)
- Telephone system:
 - Nortel/Avaya Telephone System installed May 2011
 - Hardware:
 - Business Series Terminal Central Answering Position (BST CAP)
 - Six 7316E Digital Desk Phones with four T24 Key Expansion Modules (KEMs) per phone
 - Spares:
 - One 7316E Digital Desk Phone
 - Four T24 KEM
 - Software:
 - Business Communications Manager 5.0
 - 9-1-1 Interface:
 - Three-line Automatic Call Distribution (ACD) displayed at each phone
 - Hardware:
 - Algo 4100 KSI with six position cards
 - Spares (one each):
 - Position Card
 - Control Card
 - Power Supply
 - 9-1-1 Automatic Call Distributor with failover to dedicated diverse infrastructure including Cell Phones.
 - 6-position 9-1-1 Telephone Queue for peak call volume periods
 - On-site multi-line POTS backup system installed ahead of the Nortel system

Radio system:

- 3-position Zetron Model 4219 consoles with Series 4048 backbone (installed Fall 2015); all at Version 5.6

Recording equipment:

- CVDS ComLog digital recording and call check system
- Dual redundant servers in place

HVAC Systems:

- Dedicated to Dispatch HVAC System

- Fully functional redundant system in place

The centre includes a 120 ft radio tower and communications building adjacent to the KFD Dispatch Centre facility. This state of the art communications tower and building allowed for the consolidation of dispatch radios, console equipment and computer servers into a climate controlled, secure building.

Our back-up facility is located at 550 Valley Road North in Kelowna.

Using existing systems our downtime for 9-1-1 is 15 seconds or less; with full transition time to the site at approximately 12 minutes. The site is functionally tested at a minimum of four times per year by dispatch staff.

Our back-up facility complies with NFPA 1221 and ULC S561 Standards including:

- Access Security:
 - Keyless entry x 2 through security vestibule
 - Recorded security cameras at three locations monitoring entry into Dispatch;
- Power supply and conditioning:
 - Standard commercial power with UPS backup
 - Temporary backup generator in place
 - Onan Backup generator with dual fuel supply (natural gas/onsite propane) and Onan Transfer Switch (equipment in place; to be installed in Spring 2017)
- Telephone system:
 - Nortel/Avaya Telephone System installed May 2013
 - Hardware:
 - Business Series Terminal Central Answering Position (BST CAP)
 - Five 7316E Digital Desk Phones with four T24 Key Expansion Modules (KEMs) per phone
 - Spares:
 - One 7316E Digital Desk Phone
 - Four T24 KEM
 - Software:
 - Business Communications Manager 5.0
 - 9-1-1 Interface:
 - Three-lines displayed at each phone
 - On-site multi-line POTS backup system installed ahead of the Nortel system

Radio system:

- 3-position Zetron Series 4020; version 4.8.3
- Fully functional Zetron Model 25 backup system in place

CAD/RMS system:

- Virtual Production environment, with multiple geographically diverse arrays (currently four other sites not including ours)
- Last line of defence is a physical server array at our off-site backup centre

Recording equipment:

- Dictaphone digital recording and call check system
- Dual redundant servers in place

HVAC Systems:

- Dedicated to Dispatch HVAC System
- Fully functional redundant system in place

In addition, we reference and strive to adhere to and comply with the following standards:

- NFPA 37, *Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines*
- NFPA 75, *Standard for the Fire Protection of Information Technology Equipment*
- NFPA 110, *Standard for Emergency and Standby Power Systems*
- NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*
- NFPA 731, *Standard for the Installation of Electronic Premise Security Systems*
- NFPA 1061, *Standard on Professional Qualifications for Public Safety Telecommunicator*
- NFPA 1561, *Standard for Emergency Services Incident Management System*
- NFPA 1600, *Standard on Disaster/Emergency Management and Business Continuity Programs*
- NFPA
- CSA Z1600, *Emergency Management and Business Continuity Standard*
- APCO/NENA ANSI 1.107.1.2015, *Standard for the Establishment of a Quality Assurance and Quality Improvement Program for Public Safety Answering Points*

M. Have a well-developed Quality Assurance Program; including a clearly defined complaint procedure process

Management within the dispatch centre recognizes that employees perform best if expectations are clearly articulated and their own performance is reported back to them.

We have implemented an ongoing process to assist in motivating, recognizing and enabling employees to improve performance. This program is based upon positive, constructive criticism and endeavors to set a standard and a goal for staff to strive towards. It also provides recognition of accomplishments, identifies resources to assist improvement, increases communications and helps to develop knowledge, skills, abilities, and experience while identifying areas for improvement by providing feedback on specific performance goals.

The program consists of three phases:

Phase 1 - Measurement & Metrics: This phase consists of numbers, facts and figures. This provides an indication of individual performance, group/team performance and overall centre performance and is based upon the NFPA 1221 standards.

Phase 2 QA/QI Call Evaluation: This phase consists of a minimum of 3% of all calls evaluated against the APCO/NENA ANS 1.107.1.2015 standards. Additionally, staff undertakes self-appraisal of incidents using that same standard, evaluating calls that each staff has chosen to demonstrate excellence or identify improvement opportunities. This identifies necessary skills, abilities and behaviors that constitute an acceptable level of performance and individuals are assessed on how they have demonstrated these performance factors on an incident by incident basis. Customer-driven complaints are dealt with in exactly the same manner.

Phase 3 - Employee Evaluation: This phase consists of a 360 Degree Review comprised of three benchmarks to keep doing, stop doing and start doing. This, along with a review of individual metrics from phase 1 and performance from phase 2 results in the development of an individual development plan that highlights employee's accomplishments and documents areas that the employee can improve upon and now forms part of an annual performance review, undertaken by every City of Kelowna employee.

Complaint Procedure Process

As noted above, customer-driven complaints are initially dealt with using our quality assurance and quality improvement Program which adheres to APCO/NENA ANS 1.107.1.2015 Standards. Within our operational guidelines and policies, mechanisms are in place to deal with disciplinary actions should they be deemed necessary.

Should there be a need to escalate beyond that we have a standard dispute resolution clause within our existing contracts that can be enacted:

Both RDKB and Kelowna agree to co-operate and use their best efforts to resolve any dispute which may arise regarding this Agreement or the Services contemplated within this Agreement or the responsibilities or rights of each party under it, including the candid and timely disclosure of all relevant information and documentation to each other. If the dispute cannot be resolved, it shall be first referred to each party's managing director responsible for fire dispatch services in order that they may attempt to resolve the dispute. In the event the two representatives are unable to reach agreement regarding the dispute, may be submitted to arbitration by delivery of a Notice of Arbitration in writing to the other party. The arbitration must be conducted by a three-person panel comprised of one appropriately qualified staff person appointed by the parties and one person chosen jointly by the two appointed staff persons, who shall be the chair of the arbitration panel. If the two staff appointees cannot agree on the choice of the chair of the arbitration panel, then the chair must be appointed by a Judge of the Supreme Court of British Columbia. The arbitration will be governed by the Commercial Arbitration Act (British Columbia). The place of arbitration will be Kelowna, British Columbia, Canada, and the costs will be borne equally by the parties.

It is worthy to note we have never had a need to escalate a complaint to this level.

N. Ability to meet quarterly with stakeholders (in person or via teleconference)

KFD is committed to ongoing communication with our clients and are willing to meet as needed to satisfy any concerns. Over the past 12 months, KFD has adjusted its internal structure to better serve customers and to ensure a quicker turn around when concerns are raised.

These changes include:

- Creation of a new Information Services team made up of a Business Systems Analyst, Customer Service Technician, GIS Analyst, Network Systems Analyst and the divisions Manager. Meetings are held with the technical team every 2-3 weeks to review any technical challenges.
- Reorganization of Dispatcher responsibilities to allow for assigned duties on FDM administration, mapping support, operating guidelines and dispatcher training.
- Implementation of real-time monitoring (Intermapper) of all systems to ensure the fastest possible resumption of services in the event of equipment failure.

- Currently reviewing implementation of a ticket tracking software program that will allow items to be time stamped and response times tracked.

Post implementation, we are open to meeting with either the assigned point of contact or as a group to review the service to date and make recommendations on improvements. Based on customer feedback, further meetings are able to be scheduled.

We continuously strive for clear communication, looking to find solutions and working with our partners through open dialogue on opportunities to improve.

The management team within the KFD Dispatch Centre is highly available and responsive to issues as they are identified. Clients have access to an escalating set of managers including a duty chief to deal with issues immediately, 24/7. We would commit to a response to non-critical reported issues within 24 hours of the issue being identified.

In addition, it has been a long term standing offer to any of our clients that the doors to the dispatch centre are open and they are welcome to visit at any mutually agreeable time. It is common practice for the centre to host current clients for tours in which firefighters and other interested parties are given an orientation to the dispatch operation. We offer the advantage of close geographic proximity, making this a good opportunity to build relationships and mutual respect between dispatchers and field responders.

- O. Provide timely notification of any maintenance, upgrades, breakdowns, or changes to dispatch equipment or protocols that will impact the proper dispatch and/or safety of fire department responders*

Service Level Agreements

- Functions will be undertaken by our dispatch centre and service delivery and performance standards contained therein will be implemented by the dispatch centre.
- We will use existing redundancies in the FDM, telephone and radio systems to maintain functionality.
- Planned outages will be broadcast to all users no less than 24 hours prior to the planned outage.
- Unplanned outages or equipment failures/malfunctions that affect Kelowna Fire Dispatch Centre will be dealt with in the most expedient manner possible, including an immediate switch to backup infrastructure.
- An issues register will be established to document complaints or anomalies in service provision and a resolution process will be established between the two parties.

We work closely with our radio system, CAD system and telephony providers to ensure that our operation is as robust as possible. We have invested significantly in our backup systems and development of a backup plan in the event of disaster and endeavor to maintain service despite failure of any one component within the operation.

P. Capacity to handle future boundary extensions, new service areas, and enhanced notification processes e.g. IAmResponding

The KFD Dispatch Centre has the capacity currently to handle boundary extensions and new service areas with the assistance of the RDKB Fire and GIS departments.

We currently support the following enhanced notification applications:

- IAmResponding
- Send Word Now

Q. Provide FDM RMS technical support during regular business hours (Monday to Friday 0830 to 1630 hours) with a possibility of after-hours and weekend support

KFD Dispatch Centre will provide technical and end user support Monday to Friday 0800 to 1630 and basic end user support after hours (1631 to 1900) evenings, very basic end user support (24 hours) weekends and holidays.

Kelowna will support the continued use of FDM RMS modules for existing fire department users.

As we understand this option, RDKB departments will be hosted by Kelowna with a Regional Access Model (workspace).

R. Provide future FDM RMS training for major upgrades and new users

KFD Dispatch will provide end user training required, for major upgrades and/or new users (face-to-face and/or web-based) for major upgrades and new users based on the composition and configuration of all FDM RMS modules as shipped from FDM. Charges will be dependent on type of training and travel requirements.

S. Describe your ability to monitor, record, & retain tactical channel communication (including limitations)

Tactical channels are simplex channels used by Fire Departments for fire ground or emergency scene operations.

The key advantage to Tactical Channels is they are dedicated to operations, and are unable to be interrupted by off-site transmissions (such as Dispatch).

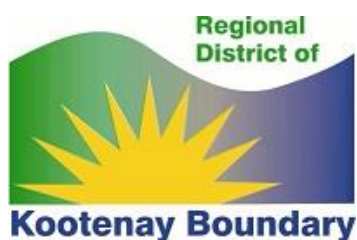
Dispatch is only able to monitor and record those transmissions received at Dispatch.

Currently KFD Dispatch has no ability to monitor, record and retain tactical channel communications.

T. Advise whether you are also bidding on the parallel RDKB RFP process

Kelowna Fire Department has submitted a bid to the Regional District of Central Kootenay for Fire Dispatch.

Acceptance of both bids (RDKB and RDKB) to Kelowna Fire Dispatch may impact costs and timelines (see below) based on potential efficiencies.



STAFF REPORT

Date: 29 Jun 2017

File

ES Administration -
Liquid Wastee

To: Chair McGregor and Board of Directors

From: Alan Stanley - General Manager of Environmental Services

Re: Columbia Pollution Control Centre - Design and Engineering

Issue Introduction

A Staff Report from Alan Stanley, General Manager of Environmental Services regarding a Request for Proposals for design, engineering and Liquid Waste Management Planning Services for the East End Sewerage Service.

History/Background Factors

Canada and British Columbia launched the Clean Water and Wastewater Fund (CWWF) in September 2016. The CWWF will help accelerate short-term local government investments, while supporting the rehabilitation of water, wastewater and stormwater infrastructure, and the planning and design of future facilities and upgrades to existing systems. The CWWF is administered through the Province of British Columbia, Ministry of Community, Sport and Cultural Development. This program offers funding up to a maximum of eighty-three percent (83%) of the total eligible project costs. Fifty percent (50%) is contributed by the Government of Canada and thirty-three percent (33%) by the Province of British Columbia. The remaining eligible project costs, plus all ineligible projects costs are the responsibility of the applicant.

The CWWF awarded a grant for East End Sewerage Service Liquid Waste Management Plan Stage 3 and Columbia Pollution Control Center Plant Upgrade Design with a total project cost of \$1,572,000, with 17%, or \$267,240 of the total provided by the RDKB.

A Request for Qualifications (RFQ) was issued for the work with one firm, OPUS International Consultants (OPUS) responding. The RFQ was evaluated by RDKB Staff

and TRUE Consulting was retained as an independent third-party professional to evaluate the proponents qualifications. Through this process, OPUS was deemed fully qualified to complete the work.

A Request for Proposals was issued to OPUS and they submitted the attached proposal. Again, TRUE Consulting was retained to evaluate the proposal in addition to RDKB Staff. The proposal submitted by OPUS is considered by TRUE Consulting and the RDKB to be of high quality, with a deep understanding of the situation and will provide good value. The TRUE Consulting evaluation is attached.

OPUS is intimately familiar with the East End Sewer Service and has a comprehensive understanding of the requirements contained in the CWWF grant agreements.

Implications

There is strict time limit on the funds according to the CWWF Agreement (attached) and all work must be completed by March 31, 2018. This time restriction makes it imperative that work begins quickly.

The CWWF grant for 83% of project costs is \$1,304,760 and the 17% RDKB project funding requirement in the CWWF grant is \$267,240 and is included in the East End Sewer Service Financial Plan.

Advancement of Strategic Planning Goals

Exceptional Cost Effective And Efficient Services - We will ensure we are responsible and proactive in funding our services.

Background Information Provided

- OPUS International Consultants - Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment
- TRUE Consulting - Request for Proposals Evaluation
- East End Sewer Service CWWF Agreement

Alternatives

1. Award the Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment contract to OPUS International Consultants for \$1,572,000
2. Do not award the Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment contract to OPUS International Consultants and take no further action.

3. Reissue a Request for Qualifications and subsequent Request for Proposals for design, engineering and liquid waste management planning services.

Recommendation(s)

That the RDKB Board of Directors award the Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment contract to OPUS International Consultants for \$1,572,000.



Regional District of Kootenay Boundary

REQUEST FOR PROPOSALS

Stage 3 Liquid Waste Management Plan,
Predesign and Design Services for the Columbia Pollution
Control Centre — Upgrade to Secondary Treatment

Closing Date: June 23, 2017





June 23, 2017

Opus International Consultants (Canada) Limited

P +1 604 990 4800

Mr. Goran Denkovski, P.Ag.
Manager of Infrastructure and Sustainability
Regional District of Kootenay Boundary
843 Rossland Avenue
Trail, BC V1R 4S8

North Vancouver Opus Office
210-889 Harbourside Drive
North Vancouver BC V7P 3S1
Canada

Ref: D-06429.PP

Request for Proposals - Stage 3 LWMP, Predesign and Design Services for the Columbia Pollution Control Centre - Upgrade to Secondary Treatment

Dear Mr. Denkovski

Opus International Consultants (Canada) Ltd. ("Opus") is pleased to submit our proposal for the Stage 3 LWMP, Predesign and Design Services for the Columbia Pollution Control Centre – Upgrade to Secondary Treatment, in response to the Request for Proposals (RFP) issued by the District on June 8, 2017. Our submission has been structured in accordance with "Part 4.0 – Submission Format."

Though our extensive background work in assisting the District to plan this Project, we have developed a thorough understanding of the technical requirements for upgrading the Columbia Pollution Control Centre ("CPCC"), as well as community requirements in regards to the aesthetics of the plant, noise concerns, and odour control.

As introduced in our previous Request for Qualification submission, we have assembled a highly-qualified team of specialists capable of completing all work as described in the RFP and supporting documents. Led by the Project Director, Al Gibb, Ph.D., P.Eng., and the Project Manager, Roger Warren, P.Eng., the team has decades of experience in the design of wastewater treatment facilities. To ensure that Project objectives, budget, and schedule requirements are met and/or exceeded, Al will provide corporate support to the District and the Project team, and allocate appropriate resources as required for successful Project completion, with assistance from the project coordinator, Aline Bennett. As noted in the attached Proposal, we have requested inclusion of additional team members, including Northwest Hydraulic Consultants, who will provide specialist services to identify the optimum discharge location for the extended outfall, Libin Ren, P.Eng., who will provide specialist expertise in the design of small footprint wastewater facilities, and Graham Stewart, a former Utilities Operations Supervisor with the City of Campbell River (now retired) who will provide a review of the designs from the standpoint of a facility operator, and will also ensure compliance with health and safety requirements.

We look forward to continuing our collaborative relationship with the District, and we would be happy to further discuss any aspects of this submission if desired.

Yours truly,

Al Gibb, Ph.D., P.Eng.
VP - Wastewater Treatment
AG/ab

Gurjit Sangha, P.Eng.
Senor VP Opus Canada

Regional District of Kootenay Boundary

REQUEST FOR PROPOSALS

Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre — Upgrade to Secondary Treatment



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Facsimile: +1 604 990 4805

Date: June 23, 2017

Reference: D-06229.PP

Contact Person: Al Gibb, Project Director
al.gibb@opusinternational.ca

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SECTION 1

Project Methodology

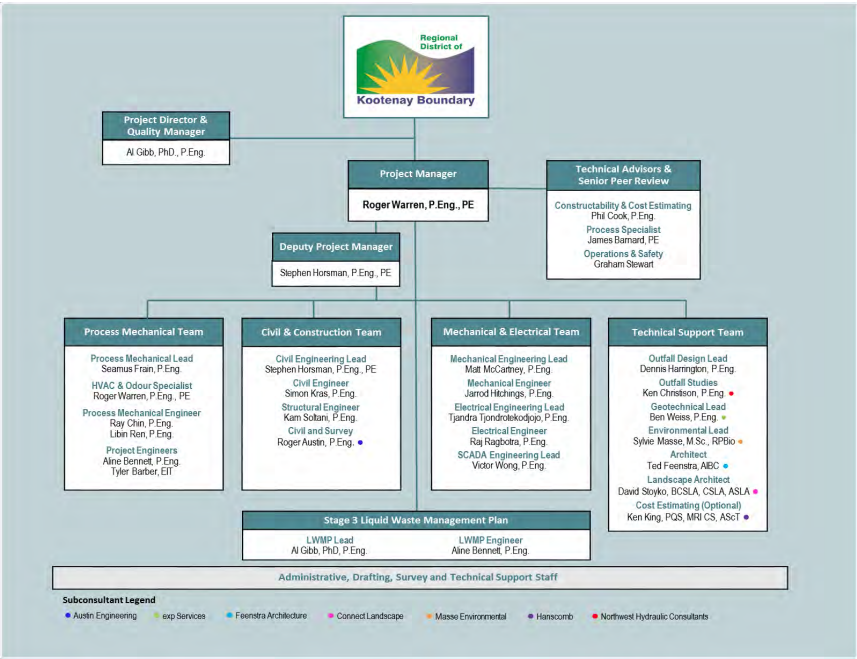
1 Introduction

This proposal is submitted in response to the Request for Proposals (“RFP”) issued by the Regional District of Kootenay Boundary (“RDKB” or the “District”) on June 8, 2017, for the Stage 3 Liquid Waste Management Plan, Predesign and Design Services for the Columbia Pollution Control Centre (“CPCC”) – Upgrade to Secondary Treatment. A description of the Opus team, including Project Understanding and Team Qualifications and Experience, was submitted previously in response to the Request for Qualifications (“RFQ”) issued on May 14, 2017.

At this proposal stage, we respectfully request that the following members be added to the Opus team for this project:

- **Northwest Hydraulic Consultants (“NHC”)**, to provide specialist services and assisting in the identification of the optimum discharge location for extension of the outfall, including geomorphic assessment, hydraulic assessment, field survey and dilution modeling;
- **Graham Stewart**, formerly Utilities Operations Supervisor with the City of Campbell River (now retired), to provide review of designs for ease of operation and maintenance and compliance with health and safety requirements; and,
- **Libin Ren, M.Sc., P.Eng.** to provide specialist expertise in the design of small footprint wastewater treatment facilities. Libin’s experience in working for SUEZ Environmental (Degremont) and Veolia Water Systems provides him with an in-depth understanding of small footprint processes, making him uniquely qualified for this project. Libin is proposed as an alternative to Ron Walz, who was included as a Process Mechanical Engineer in the RFQ submission.

Resumes and other relevant information for the above additional team members are attached in Appendix B. An updated organizational chart for the Project team is provided below to reflect the changes made, and is also included in Appendix B.





As set out in the RFP, the following sections contain descriptions of our proposed methodology, schedule, and fees for completion of the Predesign and Design Services for the CPCC Upgrade to Secondary Treatment and completion of the Stage 3 Liquid Waste Management Plan, hereinafter referred to as “the Project”.

2 Project Approach

The Regional District of Kootenay Boundary has a unique opportunity to develop this Project with a higher than usual level of financial support from senior government for this design phase (83% support). In a competitive design environment, an opportunity such as this is rare, and Opus will strive to take full advantage of this for the long-term benefit of the District.

The existing CPCC incorporates primary treatment with anaerobic sludge digestion, and discharges disinfected primary effluent to the Columbia River downstream from the City of Trail. The site of the CPCC is relatively small and is in close proximity to residential, commercial and institutional facilities on the outskirts of the City of Trail. The RDKB has just completed the Stage 2 Liquid Waste Management Plan (“LWMP”), and has decided to proceed with implementing secondary treatment at the existing site. With the high level of senior government support, there is now a unique opportunity to focus on the plant design to produce a robust treatment plant with low operating and maintenance costs to the long-term benefit of the District.

Opus proposes to focus on the long-term aspects of plant performance, such as providing high quality assets with low ongoing operating costs for the plant – costs which will be borne entirely by the local community.

In addition to the key issues described for the Project in the RFQ submission, Opus offers the following comments which underlie our approach to the facility design and describe the philosophy that Opus will bring to the Project implementation:

- The existing site is relatively small, but is entirely suitable for the implementation of a high rate secondary treatment process to achieve the required treatment objectives at the site.
- Primary sedimentation is an essential pre-treatment step for high rate treatment processes, since these processes perform best over the long term with a steady influent quality, with low suspended solids, no oil and grease, and no heavy sediments that may be prone to settling in the secondary process. With primary clarifiers in operation at the site, this is a significant advantage for the District and enables it to consider high rate treatment processes.
- Anaerobic sludge digestion is already in place, and can accept thickened sludge from the secondary process for digestion with increased energy recovery – a second significant advantage for the District.
- Opus considers that high rate secondary treatment processes with a fixed growth component are an excellent process choice to satisfy the District’s objectives for the following reasons:
 - Primary sedimentation and primary sludge handling and digestion is already in place.
 - The site is relatively small and near neighbouring developments, requiring a high level of odour and noise control and an aesthetic appearance that does not negatively impact the surrounding community. Small footprint high rate processes are easy to enclose which can address the concerns identified here.
 - An enclosed secondary process is very advantageous for maintaining higher operating temperatures in winter, thus maintaining the secondary performance at optimum levels throughout the year. In addition, an enclosed environment is more operator friendly for operations and maintenance and prolongs the operating life of the equipment and tanks.
- With all secondary treatment processes, good quality pre-treatment (screening and grit removal) is an essential consideration for reducing operating issues in the downstream processes. For this reason, Opus will focus on upgrading influent screening to provide high quality screening with full redundancy, screenings washing, and compaction.
- Opus has recent experience with the design of the Ladysmith moving bed biofilm reactor (“MBBR”)/dissolved air flotation (“DAF”) high rate secondary treatment facility, which addresses many of the issues faced by the RDKB (i.e., small site, primary treatment in place, and odour sensitive area). During the design of Ladysmith, Opus configured this facility so that nitrogen removal can be added in the future at minimal cost, if required to meet more stringent effluent standards. If nitrogen removal is not required, this additional capacity can be redirected to biological treatment (BOD removal) in the future, resulting in an



increase of almost 50% in the biological treatment capacity of this plant. The additional cost to accommodate this step during design and construction was minimal, but would have been much greater if this step had to be added in future.

- Currently the Opus Wastewater Group is assisting the University of British Columbia with commercializing an exciting microwave technology that breaks up biological sludge, releasing nutrients and significantly reducing the ultimate production of waste sludge volumes. This promising technology is undergoing full scale pilot testing at a large wastewater treatment plant ("WWTP") in the Fraser Valley. Opus is uniquely positioned to understand and capture the potential benefits of this technology for sludge reduction and residuals handling at WWTPs, and to configure the upgraded CPCC so that this technology can be easily implemented in future, if desired.

Based on the above, and given the very tight design schedule proposed by the funding agencies, the approach that Opus will bring to this Project is to develop the plant Predesign around the implementation of a well-proven high rate treatment process. The final process recommendation will be developed after a Predesign evaluation of two or more high-rate processes, with lifecycle costs for the District's specific needs.

3 Methodology

The methodology provided in this section is designed to address all of the Project requirements set out in the RFQ and the RFP, supplemented by our in-depth knowledge of the requirements of the District, the member municipalities, and the area stakeholders including the public and regulatory agencies. Where appropriate, we have identified optional, value-added services that can be added to the core scope at the District's discretion. As set out in the RFP, design of the upgrades to the CPCC can proceed in parallel with completion of the Stage 3 Liquid Waste Management Plan ("LWMP"). The table below summarizes the workplan; detailed methodology follows the table, broken down into the following sections:

- Phase A – Predesign
- Phase B – Detailed Design
- Phase C – Stage 3 LWMP

SUMMARY OF PROJECT TASKS			
TASK		ACTIVITY	WHO IS INVOLVED
Phase A: Preliminary Design of the Columbia PCC			
A1	Project Initiation, Site Visit and Project Management	<ul style="list-style-type: none"> ▪ Introduce Project team; ▪ Confirm priorities, scope, schedule, and budget; ▪ Confirm timelines for tasks, budgets, and permits; ▪ Site reconnaissance by key team members; ▪ Project Management Plan and Quality Management Plan; and, ▪ Kickoff the Stage 3 LWMP. 	RDKB, Opus, and other subconsultants as required
A2	Review background information	Update flow and load data, population projections, etc. Develop required CAD files.	RDKB to provide background information
A3	Permitting and Approvals	Determine required permits and approvals, Municipal Wastewater Regulation ("MWR") Pre-registration meeting with Ministry of Environment ("MOE")	<ul style="list-style-type: none"> ▪ Opus, Masse Environmental ▪ RDKB to attend meeting with MOE
A4	Establish Design Criteria	Confirm populations, flows, loads. Confirm treatment objectives and regulatory requirements.	Opus; RDKB to review

SUMMARY OF PROJECT TASKS			
	TASK	ACTIVITY	WHO IS INVOLVED
A5	Geotechnical Study	Detailed site investigation including test holes and site stability analysis to inform foundation design.	Opus and exp; RDKB to review
A6	Outfall Upgrades	Dilution modelling, geomorphic survey, location recommendations for upgraded outfall, permitting needs, and regulatory windows for construction. Present design options for upgraded outfall. Environmental Impact Study on the effluent discharge to the Columbia River. Selection of outfall location and design options and recommendations.	Opus, Masse Environmental and Northwest Hydraulic Consultants (“NHC”); RDKB to review
A7	Resource Recovery Evaluation	Analysis of potential for use of recovered heat for space heating at the CPCC (and reclaimed water for in-plant use at the District’s option).	Opus; RDKB to review
A8	Wastewater Treatment Process Selection, Residual Solids Management Options, and Odour Control	Evaluate major equipment and treatment processes and provide recommendations based on ease of operation, capital costs, long-term operational costs, and other criteria identified in consultation with the District. This task will also include odour control recommendations. Evaluate residual solids options and provide a recommendation on the preferred residual solids management approach.	Opus; RDKB to review
A9	Site Survey	A topographic survey of the treatment plant site, an internal survey of the treatment plant and outfall alignment will be completed (as necessary).	Opus and Austin Engineering
A10	Preliminary Site Layout and Aesthetics	Based on the recommendations from wastewater treatment process selection, detailed environmental and geotechnical investigations, and site survey, a preliminary site layout will be prepared showing locations of major treatment process units for the initial upgrade and build out. This task will also present preliminary architectural and landscaping concepts.	Opus, Feenstra, and Connect; RDKB to review
A11	Predesign Report, Cost Estimate and Preliminary Drawings (30% Design Submission)	The Predesign Report, cost estimates, and preliminary drawings are the final deliverable for Phase A. The material developed in Tasks A1 through A11 will form chapters of the Predesign Report. Also included: <ul style="list-style-type: none"> ▪ Class B capital cost estimate; ▪ Preliminary design drawings for the CPCC upgrades; ▪ Preliminary design drawings for the outfall upgrades; ▪ Preliminary process flow diagrams (“PFDs”) and piping and instrumentation diagrams (“P&IDs”); ▪ Preliminary process control narratives and functional descriptions; ▪ Draft Operating Plan for MWR registration; and, ▪ Preliminary equipment and instrumentation list. 	Opus, other technical disciplines as necessary

SUMMARY OF PROJECT TASKS			
	TASK	ACTIVITY	WHO IS INVOLVED
C2	Stage 3 LWMP Public Open House	A public Open House is recommended at this point to review Stage 3 LWMP funding commitments and present preliminary WWTP renderings to the public.	Opus, RDKB, other technical disciplines as required

3.1 Phase A - Preliminary Design

Task A1 – Project Initiation and Project Management

A Project initiation meeting will be scheduled in conjunction with a site visit, with key team members in attendance. This will be an opportunity for RDKB staff to meet the team, pose questions, establish priorities, and confirm the Project work plan and schedule. Key team members will tour the CPCC and interview operations staff to identify bottlenecks and confirm priorities.

Bi-weekly conference calls will be held with key Project team members to ensure the design is on track. Monthly progress reports will be completed by the Project Manager, Roger Warren, to allow the RDKB to track completion of the Project versus budget spent. This system will allow for early identification and resolution of budget, scope, or schedule issues.

The Opus Project Management Plan (“PMP”) and Quality Management Plan (“QMP”) offer an integrated approach to managing quality, schedule, and budget in a systematic work plan. Our project delivery program is designed to get the project started and keep the project team on task, on budget and on schedule using proven and successful project management tools. Our PMP and QMP are guided by our company-wide corporate procedures, which are clearly defined and available to all employees on our dedicated Intranet. These management systems are called “OurWay” and are the basis for our ISO 9001 certification. The principles and tools are accessible and mandatory, and all employees are taught the system. OurWay is a blueprint for how we do things at Opus and it sets the benchmark for achieving quality results, as demonstrated by the successful completion of the projects described in Opus’ RFQ submission, among others. OurWay acknowledges that the success of our company is founded on strong management and quality principles. Our approach will be to apply these same principles on the District’s Project and build-in synergistic milestones, cost and quality review and reporting requirements into the Project schedule.

The Project initiation meeting will also kickoff the concurrent Stage 3 LWMP; the scope, schedule and deliverables of the Stage 3 LWMP process will be discussed. A schedule will be prepared that integrates with the proposed design schedule for the upgrades.

As good practice, stakeholders should be kept informed of Project developments. The best approach for this can be determined in consultation with the RDKB upon Project start-up.

A1 Deliverables

- Attendance at bi-weekly conference calls
- Meeting minutes
- Monthly progress reports
- Site visit by key team members and discussions with operations staff
- Process for community information established
- Project Management Plan and Quality Management Plan

Task A2 – Review of Background Information

Opus is very familiar with the Project site and scope, having worked with the RDKB over the past 12 years developing the Stage 1 and 2 Liquid Waste Management Plan as well as the CPCC Audit and related projects, which will significantly reduce our team’s learning curve on this Project.

A review of background documentation is recommended to get the entire design team up to speed on the Project’s key issues and requirements. The following information will be confirmed with the RDKB:



- Updated population projections;
- Updated wastewater flows and load data;
- Flow meter data from Rossland and Trail;
- Available record drawings of the CPCC and outfall subsequent to its initial construction (we are in possession of the original drawings as the CPCC was designed by Dayton & Knight Ltd.);
- Any CAD files of the CPCC related to above;
- Available geotechnical or environmental studies related to the CPCC site; and,
- CAD standards.

As part of our Project management approach, a data log will be maintained to track information received from the RDKB and to aid with document management.

A2 Deliverables

- Relevant information obtained and reviewed
- Summary for inclusion as a chapter in the Predesign Report

Task A3 – Permitting and Approvals

Opus, supported by our specialist subconsultants, will identify permitting and approval requirements as follows:

- Opus, supported by Masse Environmental, will be responsible for permits related to the new outfall;
- Opus will be responsible for coordinating registration of the plant discharge under the MWR (or the “harmonized” federal/provincial regulation, as the case may be);
- Masse Environmental will be responsible for identifying environmental approvals associated with construction of the upgrades;
- Building permits, and other associated permits required by the RDKB are typically the responsibility of the contractor, and will be included as a contractor requirement in the final tender package.

A3 Deliverables

- Permitting plan with list of permits, approvals and registrations required through the design phase for the CPCC upgrades meeting with MOE; and,
- Chapter for inclusion in the Predesign Report.

Task A4 – Establish Design Criteria

In this task, the team will confirm populations, flows and loads to the plant from City's of Rossland, Trail, Warfield, Rivervale and Oasis. Requirements and effluent criteria for both provincial (MWR) and federal (WSER) regulations, including BOD/TSS concentrations, reliability standards, ammonia toxicity reduction and disinfection will be confirmed. Wastewater flow and load and waste solids projections will be updated and confirmed for the 15-year projected population of 16,400 and ultimate build-out of 20,800. In particular, the method(s) of monitoring waste solids quantities need to be reviewed, to address data anomalies identified in the Stage 2 LWMP.

Current fees for service costs are based on contributory flows from the service areas; flow meters were recently upgraded to improve accuracy of the flow data. This task will include analysis of the most recent data collected and evaluation of the degree of inflow and infiltration (“I&I”) contribution in the flow projections. This information will also be summarized in the LWMP Report.

This task will form the basis for sizing major plant process units, developing plant layouts and determining future space requirements.

A4 Deliverables

- Confirmation of Design Criteria;
- Chapter for inclusion in the Predesign Report; and,
- Key information summarized in LWMP Report.

Task A5 – Geotechnical Studies

Key geotechnical considerations include excavation and possible shoring requirements, possible presence of bedrock, protection of existing structures, foundations for new structures, settlement considerations, and potential for hydrostatic uplift and lateral pressures for below grade structures. Exp will conduct the detailed



geotechnical assessment of the site. Details regarding the geotechnical investigation and reporting are attached in Appendix A.

Based on their review of the site, Exp anticipates the presence of “firm” ground conditions at relatively shallow depths with a low probability of encountering liquefiable soils below proposed structure/pipe invert depths in the project area, so boreholes or Cone Penetration Testing (CPT) has not been allowed for. In the unlikely event that the test pits encounter loose to compact granular soils below groundwater that are susceptible to liquefaction extending to significant depth, Exp may recommend a supplemental exploration using boreholes, CPT or other appropriate means, as deemed warranted.

It is assumed that underground utilities will be located greater than two metres away from proposed borehole drilling locations; therefore, hydro-excavation would typically not be required to mitigate risk of damage to buried utilities. If the RDKB wishes to have hydro-excavation done in advance of drilling, this would be an extra cost and Exp would provide a budget for such services at the time.

A5 Deliverables

- Recommendations for geotechnical considerations as a chapter in the Predesign Report; and,
- Geotechnical Study by exp as an Appendix to the Predesign Report.

Task A6 – Outfall Upgrades

This task will provide a recommendation on extension of the outfall into the deeper water. Specialist subconsultant Northwest Hydraulics Consultants (“NHC”) will perform a geomorphic survey and hydrologic assessment of the Columbia River in the vicinity of the outfall. The geomorphology study is needed to identify a location for the extended outfall discharge that is in a stable section of the river bed removed away from sedimentation zones. Masse Environmental will perform the Environmental Impact Study (“EIS”) based on dilution modelling by NHC confirming end of pipe effluent requirements that meet provincial and federal criteria for a river discharge. This task will use the information developed by NHC and Masse Environmental to recommend a final outfall diffuser location and outfall upgrades to alleviate current concerns with the existing outfall.

A6 Deliverables

- Chapter in the Predesign Report featuring recommendations for outfall upgrades;
- River geomorphology study and dilution modeling for relocated outfall discharge as an Appendix to the Predesign Report; and,
- EIS to support registration of the discharge under the MWR as an Appendix to the Predesign Report.

Task A7 – Resource Recovery Evaluation

This task will include an evaluation and recommendation on opportunities for heat recovery of the effluent. As discussed, effluent heat recovery for heating of the plant administration building can be a cost-effective way to incorporate resource recovery into the plant design. Some key criteria for determining the viability of heat recovery at the CPCC will be based on whether the existing boilers will have capacity for the additions to the CPCC, and whether both heating and cooling of the buildings are required.

Use of reclaimed water for non-potable in-plant applications, as commonly practiced at other facilities, will also be included at the District’s option.

A recommendation on these resource recovery considerations will be provided in the Predesign report. An allowance for detailed design of these systems has been included as an optional item to be discussed prior to the detailed design phase.

A7 Deliverables

- Heat Recovery (and Reclaimed Water) Study and Recommendations as a chapter in the Predesign Report.

Task A8 – Wastewater Treatment Process Selection

The original CPCC was constructed in 1972, with various upgrades and small projects since then. This will be the first major upgrade of the CPCC since its original construction.

The choice of wastewater treatment technology will be driven by the available area requirements of the CPCC site. A recommended option for upgrading the plant to secondary treatment within the site constraints is the MBBR technology which is small footprint, high rate technology with enclosed bioreactors. Other secondary treatment processes can be considered during Predesign (supported by GPS-X computer modelling), as well as selection of major equipment (e.g., type of influent screens, grit removal process, type of cover for primary tanks, sludge dewatering units, and/or UV disinfection equipment, and more). We will also review loading to the digesters based on the updated data.

Recommendations on plant electrical, control systems and backup power will be developed. The SCADA system will be reviewed and recommendations will be made for system upgrades. Effort in the detailed design phase currently assumes SCADA design for the new equipment, and an allowance for full plant SCADA upgrades is included as an optional item. Odour control recommendations will be made considering the close proximity to residential areas.

Process flow diagrams, preliminary equipment sizing, and preliminary site layouts for the proposed new facilities will be developed in this task to feed into Task A10. As a component of this task, we will update the waste solids production data for the existing and upgraded facilities. Possible methods for management of digested biosolids will be reviewed and updated.

At the RDKB's discretion, field trips with RDKB staff to reference facilities to view major process units in operation and to discuss pros and cons with owners can be undertaken as an optional extra.

A8 Deliverables	<ul style="list-style-type: none">Wastewater Treatment Process Selection and Odour Control as a chapter in the Predesign Report;Recommendations for dewatering upgrades and solids management; and,Field trips to reference facilities for RDKB staff are included as an option.
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Task A9 – Site Survey

A detailed topographic site survey, as well as an internal CPCC pipe survey will be undertaken by a local firm, Austin Engineering, to be used for site layouts and detailed design. Additional site survey at detailed design can also be undertaken.

Task A10 – Preliminary Site Layout and Aesthetics

With the environmental and geotechnical investigations, site survey data, and selection of treatment processes, a layout of the treatment equipment on the site will be developed for conceptual purposes. Facilities will be shown for the initial upgrade to handle the 15-year projected population of 16,400, and for the Ultimate Build-out of 20,800 (and beyond if feasible). This will be accompanied by architectural concept renderings to give the District a clear picture of the future infrastructure.

The site is surrounded by development, with a senior's residence located north and uphill, looking down on the plant facilities. A shopping mall is located to the east, with a campground to the west, and a large car dealership downhill to the south. The largest area available for construction of the new secondary facilities is on the northern section of the site; facilities built here will be visible from the senior's residence above. Therefore, visual aesthetics will be important, and this will be addressed through architectural and landscape design.

Feenstra Architecture will work closely with Opus and the RDKB to develop architectural design for the buildings that reflect the visible location and close proximity to residential areas. Feenstra will develop up to three architectural concepts for review and discussion with the RDKB. These concepts will be developed in 3D for easy review. Similarly, landscaping concepts will be developed by Connect for discussion with the RDKB. This material can be shown at the LWMP Open House if desired.

A10 Deliverables

- Preliminary WWTP Site Layout, Architectural Building Concepts, and Landscaping Concepts as a chapter in the Predesign Report.

Task A11 – Predesign Report, Cost Estimate and Preliminary Drawings (30% Submission)

The Predesign Report is a key step in the design process because it builds on the LWMP, and evaluates and selects the treatment process to be used along with other key preliminary design criteria. This report lets you, the client, know what it is you're getting at the end of the day.

Equipment and instrumentation lists and tags will be prepared and coordinated with RDKB requirements. These lists and P&ID drawings will be coordinated with electrical and instrumentation engineers to allow for development of control design and electrical power design.

This deliverable will include Class B capital cost estimates, refined from the Class C cost estimates provided in the LWMP. This is a key deliverable for the RDKB in preparation for applying to grant applications for construction and commissioning funds.

The Predesign Report will contain at a minimum:

- The work conducted in Tasks A1 through A10 as chapters of the Predesign Report;
- Class B cost estimates for the WWTP and outfall;
- A draft Operating Plan and other documentation, required for MWR Registration and other approvals will also be prepared;
- Preliminary construction phasing of the upgrade works; and,
- Wastewater Treatment Plant & Outfall preliminary 30% drawings, including:
 - Key plan and site plan;
 - Process flow diagrams;
 - Hydraulic profile;
 - Preliminary electrical drawings and control and instrumentation;
 - Preliminary P&IDs;
 - General WWTP arrangement drawings (overall layouts and sections); and,
 - Preliminary outfall alignment drawings.

A11 Deliverables

- Predesign report;
- 30% preliminary design drawings;
- Class B cost estimate;
- Draft Operating Plan for the WWTP;
- Permitting information as applicable;
- Preliminary construction phasing strategy; and,
- Preliminary commissioning and contingency plans.

Task A12 – Formal Review Meeting

A formal review meeting should take place after submission of the draft Predesign Report, with opportunity for RDKB to review and provide input. The meeting will be attended by key team members, including the Project Director, Al Gibb, and the Project Manager, Roger Warren.

This meeting will be an opportunity to review all the work to date, confirm the recommendations, and lay the foundation to proceed with 60% detailed design. If requested by the RDKB during this period, the Opus team will participate in a value engineering exercise as an optional extra.

This meeting can also be used to review the draft Stage 3 LWMP draft report (see Task C1).

Subsequent to the Formal Review Meeting, the draft Predesign Report will be finalized. This Report will essentially function as a Master Plan for the CPCC going forward and will guide detailed design of the upgrades in Phase B.



3.2 Phase B – Detailed Design

The detailed design will follow directly from the final recommendations and the 30% design effort undertaken in the Predesign report.

The design drawings will be advanced to the 60% and 90% stages, with submissions at each stage sent to the RDKB for review, followed by formal review meetings. Final drawings, specifications, and tender documents will be prepared.

Task B1 – Design of the Treatment Plant Upgrades

The treatment plant design package will include drawings covering the range of work required. A drawing list will be prepared to identify key areas of the work.

Working towards the 60% design submission, the draft P&IDs prepared during the Predesign will be finalized, and process control descriptions will also be finalized from the P&IDs. This will form the basis from which the detailed design will proceed.

At a minimum, the detailed design package will encompass the following improvements:

- Conversion of the existing chlorine contact tank to a third primary sedimentation tank, and covering of all three primary tanks for odour control;
- New enclosed headworks building with screening, grit removal, and odour control;
- Addition of small-footprint secondary treatment process with separation of biological solids;
- Addition of waste biological solids thickening and sludge storage;
- Review and possible expansion of existing biogas system;
- Replacement of the existing belt press with two centrifuges and addition of odour control to the dewatering building;
- Addition of a blower/MCC/chemical/waste biological sludge pumping building;
- Cleaning and refurbishment of the secondary anaerobic digester as recommended in the CPCC Audit Report (if desired by the District);
- Addition of effluent UV disinfection;
- Backup power; and
- Associated plant electrical, controls, and SCADA system upgrades.


A functional description document will be prepared from the P&IDs to aid in design of plant controls and training. Site plans, concrete outlines, and piping layouts will be developed, followed by detailed structural, HVAC, mechanical, electrical, and instrumentation and control drawings. Ancillary disciplines including geotechnical and architectural will follow. The structural engineer will collaborate with the geotechnical engineer on foundation design and any needed ground improvements. Detailed design for the process automation will evolve from the Predesign and P&ID drawings, and will interface with requirements from the manufacturer-supplied equipment. Pre-purchase of equipment with long delivery times will be considered and discussed with the District.

The facilities will be designed with simplicity and ease of operation in mind. The secondary treatment process will be configured to allow future expansion, so that minimal new construction upgrades are required in the future to meet more stringent effluent standards (such as at the Ladysmith WWTP). The result will be an efficient, smooth-functioning plant that meets all the required standards, including community aesthetics, now and into the future.

As an initial estimate, the following drawings will make up the design package for plant upgrades and the outfall extension:

DRAWING DELIVERABLES		Estimated Number of Drawings
Process	Process schematic, hydraulic profile, and P&IDs.	45
General Civil	Piping, tie-ins, excavation details, utilities, roads and access, site plan drawings, landscaping, and finish grading.	30

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Architectural	Building elevations, roofing plans, architectural details for the new headworks, blower/chemical building, and other miscellaneous improvements.	40
Structural	Structural concrete outlines, reinforcement drawings, and structural steel drawings.	90
Mechanical	Major mechanical items (i.e., screens, grit removal, pumps, UV equipment, etc.), HVAC heat recovery, and odour control details. Specifications for pumps and valves, restraints, plumbing, and miscellaneous ancillary systems.	90
Electrical and Instrumentation	Electrical single line diagram, MCC layouts, instrumentation and controls, cable schedules, and plant PLC architecture.	150
Estimated Total Number of Drawings		~445

Construction Strategy and Schedule

The plant upgrade will need to occur while the plant is online and functioning, allowing CPCC staff to maintain functional operation of the plant. The construction phasing strategy will be developed by the engineering team and discussed with the RDKB, with opportunity for input by District staff.

The tender package(s) will require that the contractor(s) develop the construction plan to keep key plant components functioning during the upgrades. However, the construction strategy developed by the engineering team in consultation with District staff will be referenced and applied as needed to avoid major plant upsets.

Cost Estimates

Detailed Class A cost estimates in spreadsheet format will be provided for the design packages, and will be undertaken in conjunction with the design process. Recent tender prices, equipment quotes from suppliers, and experience will be used for developing the construction cost estimates.

As an optional extra, Hanscomb's cost-estimating professionals can provide additional cost control services. They recently provided cost control services during the Ladysmith WWTP upgrade, which allowed for early identification of potential cost escalation issues, and helped keep the final WWTP construction costs within 6% of the original tender price.

Asset Management Data

Asset management data for the plant will be made available to the RDKB for incorporation into an asset management database. Access to the data will help the RDKB with long-term O&M planning and cost forecasting. Data provided will include equipment makes, models, installed costs, installation year, and expected lifetime. This was not requested in the RFP, but is incorporated here as a value-added extra to assist the RDKB with its asset management program.

Heat Recovery and Reclaimed Water System Design Option

Resource recovery design will be incorporated as an optional extra based on recommendations made in the Predesign phase. An allowance for design of these systems has been included as an option.

Controls, SCADA and Backup Power

As discussed in the Audit, the CPCC presently has four programmable logic controllers (PLC) units, which are outdated and have little spare I/O capacity. Upgrades to the overall plant control system are recommended, however the cost estimates provided during the LWMP planning process, allowed for electrical and controls design for the secondary plant upgrades only. Therefore, we have made an allowance for overall plant control upgrades as an optional item.

Design for backup power for key treatment processes was recommended in the CPCC Audit and will be provided to meet the MWR requirements for process reliability.



Task B2 - Design of the Outfall Upgrades

Based on the tasks carried out during Predesign, and on input from the RDKB and regulatory agencies, detailed design of the outfall improvements will proceed in parallel with Task B1. Design of the outfall upgrades is currently based on an assumption that the required outfall extension will be fairly short (approximately 100 m).

At minimum, the outfall design package will encompass the following improvements:

DRAWING DELIVERABLES		Estimated Number of Drawings
General Civil	Piping, tie-ins, excavation details, extended outfall alignment, plan and profile.	7
Mechanical	Valve and piping details, and diffuser design details.	3
Estimated Total Number of Drawings		~10

Task B3 – 60% WWTP Detailed Design Submission and Formal Review

The 30% design submission presents the “big picture” of the upgrades on the site, and will show the process used, where major process units will fit on the site, and how it will work. In the 60% design submission, the civil, mechanical, electrical and controls design will be further developed from the 30% preliminary design submission, and will be submitted for the RDKB to review and comment, ensuring the design meets RDKB expectations. Design specifications will also be advanced to a 60% stage, along with updated equipment and instrumentation lists.

At the 60% stage, deliverables will include:

- 60% design submission;
- 60% tender specifications; and
- Updated equipment and instrumentation lists.

A review meeting will be held with RDKB staff to go over the 60% Design Package. This meeting will be attended by the Project Director, Al Gibb, and the Project Manager, Roger Warren, as well as other key team members as appropriate.

Task B4 – 90% WWTP Detailed Design Submission and Formal Review

The 90% Detailed Design will proceed from the 60% design submission and will be submitted to RDKB for review and comment. A Class A cost estimate, based on the 90% schedules of quantities, will be prepared and then refined for the final 100% detailed design submission.

As design is nearing completion, design drawings will be submitted to the appropriate regulatory agencies as required.

At the 90% stage, deliverables will include:

- 90% design submission;
- 90% tender specifications;
- Class A Cost Estimates; and,
- Updated equipment and instrumentation lists.

A review meeting will be held with RDKB staff to go over the 90% Design Package. This meeting will be attended by key members of the engineering team, including the Project Director, Al Gibb, and the Project Manager, Roger Warren.

Task B5 – Final Design and Tender Package

The final 100% tender-ready design package will be submitted and will include:

- Tender documents;

- Final WWTP Design Drawings;
- Final WWTP Design Specifications;
- Final Outfall Design Drawings; and,
- Final Outfall Design Specifications.

Final deliverables for the RDKB will include:

- Final Design Report;
- Class A Cost Estimates;
- Final Equipment and Instrumentation Lists;
- Asset Management Data;
- Necessary permits and approvals;
- Recommendations for pre-purchase of key equipment, if deemed appropriate; and,
- Construction staging plan.

3.3 Phase C – Stage 3 LWMP

Task C1 – Stage 3 LWMP Report

Development of the Stage 3 LWMP will follow the design process in parallel. The Stage 3 LWMP Report will provide a short overview of the LWMP process, a list of the financial commitments that have been developed over the course of the LWMP planning process, a schedule to achieve those commitments, and associated sources of funding.

As requested by the RDKB, the Stage 3 LWMP Report will include analysis of the data provided by the new flowmeters in Rossland and Trail, to assess the degree of I&I and comment on I&I reduction measures. This will be undertaken as a component of the Predesign, but it will also be summarized in the Stage 3 LWMP Report.

The Stage 3 LWMP Report will contain recommendations for I&I reduction and water conservation by the municipalities, and commitments for the RDKB to develop a source control bylaw and enforcement policy. Potential options for management of waste solids will be reviewed in the Stage 3 LWMP Report. The draft Stage 3 LWMP Report will be submitted for review by the District, and will be discussed at the Formal Review Meeting (see Task A12). Following the meeting, the Stage 3 LWMP Report will be revised as appropriate for submission to the Sewer Board.

The Stage 3 LWMP must be formally adopted by the RDKB before submission to the MOE for final approval. Final public consultation in conjunction with a presentation of the concept renderings of the upgraded treatment facility is also recommended.

C1 Deliverables

- Stage 3 LWMP submitted for approval.

Task C2 – LWMP Public Open House

The RDKB has requested continuing engagement with the public throughout the design process, which can be effectively accomplished through an Open House. This public Open House will present the Stage 3 LWMP commitments, implementation schedule, and the proposed upgrades to the CPCC, including treatment technology, site layout with architectural renderings and updated cost estimates. These can be 3D renderings to help the public visualize the new facility. Opus can provide the material to the District for the Open House presentation, and reuse much of the material from the previous Stage 2 Open Houses. We have assumed that the District will be responsible for printing of the material and organization of the Open House.

Opus staff will be in attendance at the Open House as part of the base fee. Other technical disciplines can be in attendance as an optional extra.

C2 Deliverables

- Opus attendance at Open House; and,
- Attendance of selected subconsultants at Open House as an optional extra



3.4 Optional Value-Added Items

Optional items identified in parts 3.1 through 3.3 of this section are discussed below. Fees and disbursements for these items are identified in Section 4.

3.4.1 Hanscomb Cost Estimating

Hanscomb provides professional cost estimating services which can act as an independent, third-party review of capital cost estimates. Hanscomb were recently involved with the Ladysmith WWTP construction, where they reviewed the initial cost estimates and helped manage cost-escalations. Their services helped keep final construction costs within 6% of original tender price. More information and a letter quote from Hanscomb is provided in Appendix A, should the RDKB wish to include this in the scope of services.

3.4.2 Field Trips to Other WWTPs

The District may wish to conduct field trips to other operating WWTPs to inform selection of processes and major equipment. We have found this to be beneficial on other projects. We recommend that the District visit the Ladysmith WWTP to view the MBBR/DAF process and other major equipment (headworks, centrifuges, etc.). The Norm Wood Environmental Centre at Campbell River could be visited on the same trip, to view the recently completed installation of new influent step screens. As appropriate, other trips can be arranged as well. Opus would be pleased to arrange these visits and to accompany District staff as a value added extra.

3.4.3 Attendance at Public Open House by Subconsultants

The fee for the core scope of work includes attendance at review meetings and the LWMP Open House by key Opus staff. Subconsultants can also attend meetings to answer questions and/or present material if desired, as an optional value added extra. Costs for the various subconsultants to attend meetings are included in the letter proposals contained in the Appendix A.

3.4.4 Value Engineering

The RFP indicates that the District may wish to undertake value engineering review work. The review meetings described in the Methodology section will be used to incorporate feedback from the District and this is included in the core scope of work. If an additional value engineering exercise is envisioned using a third party, Opus will be happy to participate in this as a value added extra, with the scope to be determined in consultation with the District.

3.4.5 Detailed Design Options

The Preliminary Design phase will make a number of design recommendations to be pursued in the Detailed Design phase. Some of these design recommendations have been included as options, not included in the base scope, to allow the District flexibility in the CPCC upgrade design. Options are:

- Full CPCC SCADA upgrade design;
- Heat recovery system design; and
- Reclaimed water system design.



SECTION 2 Project Schedule



2 Project Schedule

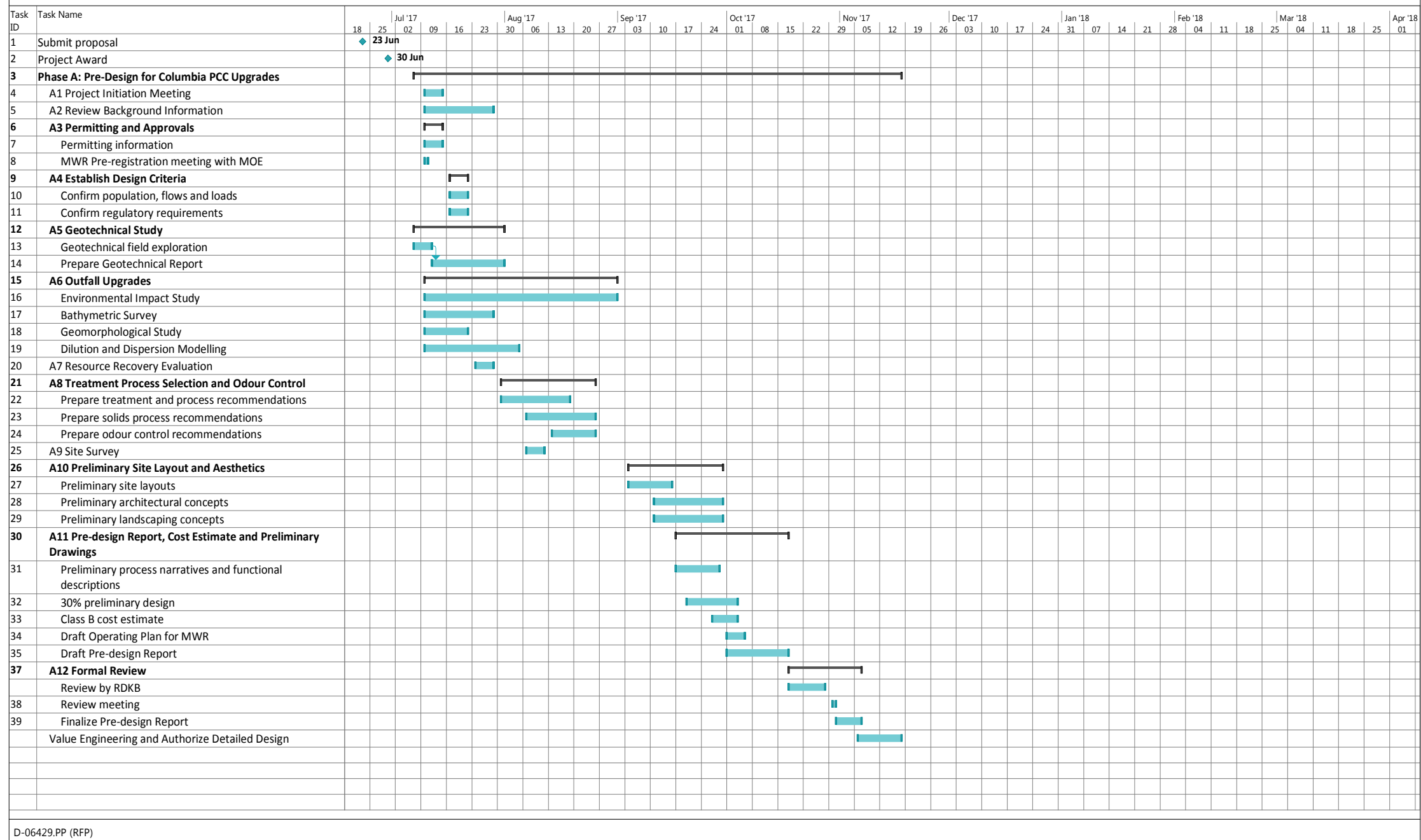
A preliminary detailed project schedule outlining the tasks to achieve the target milestones set out in the RFP is included for your review. We have made allowances within the schedule for RDKB review of drawings and specifications. Milestone dates to meet the Clean Water and Wastewater Fund grant requirements will be discussed and confirmed at the project initiation meeting.

The proposed project milestones include:

RFP Milestone	RFP Target Date
Phase A: Preliminary Design	
RDKB: Authorize Design	June 30, 2017
Complete Geotechnical Study	July 31, 2017
Complete Environmental Impact Study	August 31, 2017
Complete Predesign Study	October 31, 2017
Phase B: Detailed Design	
RDKB: Value Engineering and Authorize Detailed Design	November 30, 2017
Finalize detailed drawings and design brief	February 28, 2018
Finalize pre-tender cost estimate and design specifications	March 31, 2017
Phase C: Stage 3 LWMP	
RDKB: Authorize Stage 3 LWMP	July 7, 2017
Complete first draft of Stage 3 LWMP Report	November 30, 2017
Complete public consultations	February 28, 2018
Finalize Stage 3 LWMP	March 31, 2018



Request for Proposals
Stage 3 LWMP, Predesign and Design Services
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Upgrade to Secondary Treatment



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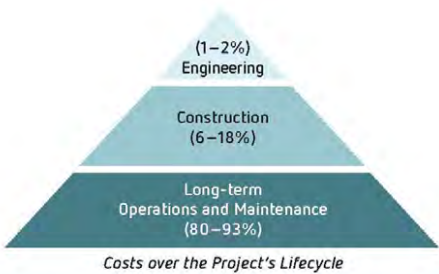


SECTION 3
Fee Estimate

3 Fees and Level of Effort

Our proposed fees and level of effort are based on our deep Project understanding and our commitment to delivering a quality product to the RDKB.

Over 50 years, the long-term operation and maintenance of infrastructure and building assets are between 80% to 93% of the asset's total lifetime costs. Engineering typically represents 1% to 2% of the asset's total lifetime costs, making it a relatively small percentage; however, the role that design plays in the long-term operability of the infrastructure is pivotal. With the CPCC being a medium-sized wastewater treatment facility in a relatively remote location from suppliers and service providers, ensuring long-term operability and low operating costs is a top design priority.

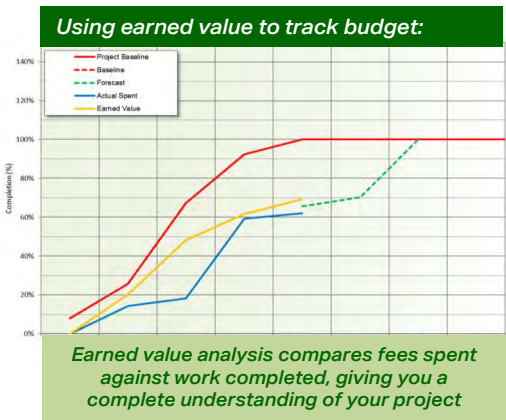


It is in the District's best interest to take full advantage of the funding allocation from senior government for design of these facilities. It is preferable to expend the effort during detailed design, to provide the detail and clarity that will minimize cost overruns during construction caused by scope changes and change orders. We have provided what we feel is an optimal allocation of effort for Preliminary and Detailed Design within the project budget. Our hourly rates for staff and design fees, as a percentage of construction value, are well within current guidelines published by the Consulting Engineers of BC.

3.1 Managing Budget and Schedule

Opus proposes to manage budget and schedule using an 'earned value' method. This method works because it aligns proposed fees with the scheduled tasks, creating a cost-loaded schedule. Tracking this schedule with work completed and money spent, allows us and you the client, to understand if deliverables and the level of effort matches the fees spent.

The figure for example, tells you whether the project is on budget and on schedule compared to your initial plan. The actual dollars spent per month is shown in blue, and the earned value, or percent complete, is shown in yellow. Compared to the baseline, shown in red, this project is under budget for the work completed, but it is behind schedule. Using this kind of analysis helps you identify budget and schedule issues early on.



Monthly progress reports will accompany the invoice discussing work completed in the previous month, work proposed for the next month, comments on the budget and schedule health, and will identify issues as they develop.

3.2 Fee Summary

Our fee estimate is based on the level of effort, and the number of drawings described in our project methodology, and the project capital costs developed through the Liquid Waste Management Planning process. A detailed fee table showing estimated hours and charge out rates is shown for each project phase is provided at the end of this section. A summary is provided below:



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FEE SUMMARY PER PROJECT PHASE FOR CORE SCOPE

(See Tables 1 and 2 for detailed breakdown)

Project Phases	Fee Summary for the Core Scope of Work
Project Management	\$ 47,840
Phase A – Preliminary Design	\$ 370,046
Phase B – Detailed Design	\$ 960,842
Phase C – Stage 3 LWMP	\$ 28,205
TOTAL (excluding GST)	\$ 1,406,933

The fees for the core scope are within the CWWF grant amount of \$1,572,000 and allow room for contingencies, scope changes and addition of optional items. Addition of effluent heat recovery detailed design, and design of full Columbia PCC SCADA upgrades to the core scope of work still leaves budget leftover for contingencies. A summary of estimated fees for optional items identified in Part 3 of Section 1 is provided below:

OPTIONAL ITEMS

Optional Items	Fees for Optional Items
Cost Control Services (Hanscomb)	\$ 11,820
Full Columbia PCC SCADA Upgrade Design (Opus)	~ \$ 30,000 Full scope and fees to be determined in consultation with the District
Heat Recovery System Design (Opus)	~ \$ 50,000 Full scope and fees to be determined in consultation with the District
Reclaimed Water System Design (Opus)	~ \$ 50,000 Full scope and fees to be determined in consultation with the District
Participation in Value Engineering (Opus)	Scope and fees to be determined in consultation with the District
Site Visits to reference Wastewater Treatment Plants (Opus)	~\$ 2,500 per site visit
Attendance at Open Houses (Subconsultants)	~\$2,500 - \$3,500 depending on subconsultant and number of people in attendance. Fee estimates are provided in subconsultant proposals.

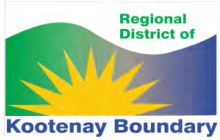


Table 1: Core Scope
Predesign and Design Services for the Columbia Pollution Control Centre - Upgrade to Secondary Treatment



		Opus																		Subconsultant						5% Administration Fee	Total Fees & Disbursements (including Sub-Consultants)		
		Roger Warren	Stephen Horsman	Al Gibb	Phil Cook / James Bernard / Graham Stewart	Seamus Train/ Ray Chin/ Libin Ren	Aline Bennett/ Tyler Barber	Dennis Harrington	Simon Kras	Matt McCartney/ Jarrod Hitchings	Junior Engineer	Tjandra Tjondrotekedioplo	Raj Ragbotra	Junior Engineer	Kam Soltani	Victor Wong	Drafting												
	Tasks	Project Manager and Process Design Lead	Deputy Project Manager & Senior Civil Engineer	Project Director and QA/QC	Senior Technical Advisors	Senior Process Engineers	Process Engineer	Senior Outfall Engineer	Civil Engineer	Mechanical Engineer	Junior Mechanical	Senior Electrical & I&C Engineer	Electrical Engineer	Junior Electrical	Structural Engineer	SCADA Engineer	Drafting	Opus Subtotal Hours	Opus Subtotal Fees	Opus Disburs- ements	Opus Total	exp Services	Feenstra Architecture	Masse Environmental	nhc	Connect Landscape	Austin Engineering		
	2017 Hourly Rates	\$190	\$175	\$200	\$200	\$180	\$120	\$190	\$140	\$165	\$115	\$185	\$150	\$115	\$170	\$200	\$90												
Project Management																													
	Bi-weekly update meetings	24	24	24														72	\$13,560		\$13,560						\$0	\$13,560	
	Scope, schedule and budget management	24	24															48	\$8,760		\$8,760						\$0	\$8,760	
	Subconsultant management	24	24	16														64	\$11,960		\$11,960						\$0	\$11,960	
	Attend meetings with design team	24	24	24														72	\$13,560		\$13,560						\$0	\$13,560	
Project Management Sub-Total Hours		96	96	64	0	0	0	0	0	0	0	0	0	0	0	0	0	256											
Project Management Sub-Total Fees & Disbursements		\$18,240	\$16,800	\$12,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,840	\$0	\$47,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,840
Phase A Preliminary Design																													
A1	Project Initiation Meeting & WWTP Site Visit	8	8	8		8	8						8					48	\$8,400	\$5,000	\$13,400							\$250	\$13,650
A2	Review Background Information		12			12	32	12			8	12	8	8	8	8	8	128	\$19,640		\$19,640							\$0	\$19,640
	Develop CAD layouts						4											44	\$4,080		\$4,080							\$0	\$4,080
A3	Permitting and Approvals																											\$0	\$0
	Determine Required Permits and Approvals				2	2	4	2										20	\$3,400	\$3,000	\$6,400			\$2,410				\$271	\$9,081
	MWR Pre-Registration Meeting with MOE	2	8		4													4	\$800	\$1,200	\$2,000							\$60	\$2,060
A4	Establish Design Criteria																											\$0	\$0
	Confirmation of Design Populations, Flows and Loads				1		4	8										13	\$1,880		\$1,880							\$0	\$1,880
	Confirmation of Treatment Objectives and Regulatory Requirements				1		4	8										13	\$1,880		\$1,880							\$0	\$1,880
A5	Geotechnical Investigation	4																4	\$760		\$760	\$17,572						\$879	\$19,210
A6	Outfall Upgrades																											\$0	\$0
	Environmental Impact Study	1		4				2										7	\$1,370		\$1,370			\$16,030				\$802	\$18,202
	Bathymetric Survey	1		1				2										4	\$770		\$770				\$23,000			\$1,150	\$24,920
	Geomorphological Study	1		1				2										4	\$770		\$770				\$9,500			\$475	\$10,745
	Detailed Dilution Modelling	1		1				2										4	\$770		\$770				\$12,000			\$600	\$13,370
	Recommend Upgraded Outfall Alignment	1		1														16	\$0	\$1,500	\$9,410							\$75	\$9,485
A7	Resource Recovery Evaluation and Recommendation	12		1		16	32			4	16							81	\$11,700		\$11,700							\$0	\$11,700
A8	Treatment Process Selection																											\$0	\$0
	Wastewater treatment process evaluation and recommendation	16		8	8	24	32			4		4						116	\$18,040		\$18,040							\$0	\$18,040
	Solids treatment process recommendations	2			4	16	16			2		2						12	\$4,760		\$7,760							\$0	\$7,760
	Odour Control Recommendations	16			4	8	32											12	\$10,200		\$10,200							\$0	\$10,200
A9	Site Survey																											\$0	\$0
	Detailed site topographic and internal WWTP survey	2																32	\$3,260		\$3,260						\$2,400	\$120	\$5,780
	Detailed site survey outfall alignment	2																8	\$1,100		\$1,100						\$1,000	\$50	\$2,150
A10	Preliminary Site Layout																											\$0	\$0
	Preliminary Architectural concepts	4					4											8	\$1,240		\$1,240		\$37,420					\$1,871	\$40,531
	Preliminary WWTP site layout	8	4			16	32		4	2		2			2		16	86	\$11,980	\$1,500	\$13,480							\$75	\$13,555
	Preliminary landscape concepts	2																2	\$380		\$380				\$1,545			\$77	\$2,002
A11	Pre-Design Report, Cost Estimate and Preliminary Design Drawings																											\$0	\$0
	Draft Prepare Pre-design report	4	4	8	4	16	80	4	4									124	\$17,660	\$500	\$18,160							\$25	\$18,185
	Class B Cost Estimate	2	4	2	4	12	24	12	4	4		2	8		4	4		86	\$13,870		\$13,870							\$0	\$13,870
	30% Preliminary Design Drawings and P&ID's	8	4	2		12	80			12	24	4	4	20			200	370	\$40,760	\$1,000	\$41,760							\$50	\$41,810
	Preliminary process narratives and functional descriptions	2				16	32					4	4	24		4		86	\$12,000		\$12,000							\$0	\$12,000
	Draft Operating Plan for MWR Registration			8			8											16	\$2,560		\$2,560							\$0	\$2,560
	Preliminary Equipment & Instrumentation List	1				4	16			4		2						27	\$3,860		\$3,860							\$0	\$3,860
A12	Formal Review Meeting	8	8	8	24	8	8											64	\$11,720	\$4,000	\$15,720							\$200	\$15,920
	Final Predesign Report					16												16	\$1,920		\$1,920							\$0	\$1,920
Phase A Opus Sub-Total Hours		108	52	59	50	178	476	70	12	40	52	36	24	52	14	20	352	1595											
Phase A Sub-Total Fees & Disbursements		\$20,520	\$9,100	\$11,800	\$10,000	\$32,040	\$57,120	\$13,300	\$1,680	\$6,600	\$5,980	\$6,660	\$3,600	\$5,980	\$2,380	\$4,000	\$31,680	\$222,440	\$17,700	\$240,140	\$17,572	\$37,420	\$18,440	\$44,500	\$1,545	\$3,400	\$7,029	\$370,046	

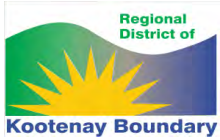


Table 1: Core Scope (continued)
Predesign and Design Services for the Columbia Pollution Control Centre - Upgrade to Secondary Treatment



		Opus																	Subconsultant						5% Administration Fee	Total Fees & Disbursements (including Sub-Consultants)	
		Roger Warren	Stephen Horsman	Al Gibb	Phil Cook / James Bernard / Graham Stewart	Seamus Fain/ Ray Chiu/ Libin Ren	Aline Bennett/ Tyler Barber	Dennis Harrington	Simon Kras	Matt McCarney/ Jarrod Hitchings	Junior Engineer	Tandra Tondrickodjolo	Raj Ragbora	Junior Engineer	Kam Solani	Victor Wong	Drafting										
Tasks		Project Manager and Process Design Lead	Deputy Project Manager & Senior Civil Engineer	Project Director and QA/QC	Senior Technical Advisors	Senior Process Engineers	Process Engineer	Senior Outfall Engineer	Civil Engineer	Mechanical Engineer	Junior Mechanical	Senior Electrical & I&C Engineer	Electrical Engineer	Junior Electrical	Structural Engineer	SCADA Engineer	Drafting	Opus Subtotal Hours	Opus Subtotal Fees	Opus Disburse- ments	Opus Total	exp Services	Feenstra Architecture	Masse Environmental	nhc	Connect Landscape	Austin Engineering
2017 Hourly Rates		\$190	\$175	\$200	\$200	\$180	\$120	\$190	\$140	\$165	\$115	\$185	\$150	\$115	\$170	\$200	\$90										
Phase B - Detailed Design																											
B1	General - Design of WWTP Plant Upgrades																										\$0
	Provide a recommended construction staging plan	12	12	4	4							2	2					36	\$6,650		\$6,650						\$0
	Attend meetings with design team	24	8	16		30				16		24			8	4		130	\$23,800	\$3,000	\$26,800						\$150
	Attend meetings with external stakeholders	8		16			16											40	\$6,640	\$3,000	\$9,640						\$150
	Obtain permits and prepare required documentation for authorities	2	8	8			12	2										32	\$5,200		\$5,200						\$0
	Prepare equipment pre-purchase contracts	8				16	24											48	\$7,280		\$7,280						\$0
	HAZOPs	24	16			24	24			24		24						136	\$22,960		\$22,960						\$0
	Internal review of drawings at 60%, 90% and 100% stage	40	8		32					24		24			24			152	\$27,880		\$27,880						\$0
B2	Outfall Design																										\$0
	Detailed outfall design and specifications	4						40									40	84	\$11,960		\$11,960						\$0
	Develop Class A construction cost estimate						16											16	\$3,040		\$3,040						\$0
B3	Prepare 60% WWTP Design Submission																										\$0
	Prepare 60% Design	24	16	20	4	60	120		40	30	80	40	60	260	200	16	1100	2070	\$239,610	\$500	\$240,110	\$3,901	\$28,552		\$2,266	\$2,400	\$1,881
	Prepare Specifications	12	16	4		8	40		8	16	32	8	32	2	24	8		210	\$31,750	\$500	\$32,250						\$25
	Prepare process narratives and functional descriptions	8				32	32		8	16	16	16	32	0		8		152	\$23,640		\$23,640						\$0
	Prepare Equipment and Instrumentation List	2	16			2	8		4	2		2	8		8	8		60	\$9,920		\$9,920						\$0
	60% Design Review Meeting	8	8	8	8	8	8			4	4	4						48	\$8,320	\$3,000	\$11,320						\$150
B4	Prepare 90% Design Submission																										\$0
	Prepare 90% Design	24	16	20	4	60	60		40	30	60	40	60	220	160	16	1100	1910	\$218,710	\$500	\$219,210	\$975	\$8,854		\$2,060		\$619
	Prepare Specifications	8	16	4		24	16		8	12	24	8	16	2	24	8		170	\$27,010	\$500	\$27,510		\$1,785				\$114
	Prepare Equipment and Instrumentation List	2	12			8	32		4	4	32	8	16	2	8	4		132	\$18,930	\$100	\$19,030						\$5
	Prepare Class A cost estimate	4	4			12	16		12	4	16	4	16	2	16	4		110	\$16,610		\$16,610						\$0
	90% Design Review Meeting	8	8	8	8	8	8			8		8			8			64	\$11,080	\$4,000	\$15,080						\$200
B5	Prepare Final Tender Package																										\$0
	Prepare Tender documents	2	12				16											30	\$4,400		\$4,400						\$0
	Prepare Issued for Tender drawings	24	12	8		12	32		8	16	8	8	40	40	4	4	300	512	\$59,300	\$500	\$59,800						\$25
	Prepare Final Design Specifications	32	12			12	32		12	12	16	16	8	4	12	4		172	\$27,140	\$500	\$27,640						\$25
	Prepare Final Design Report	8	8	16	4	32	48		24	8	16	16	8	2	20	4		214	\$33,550	\$500	\$34,050						\$25
	Prepare Class A Cost Estimates	12	12		8	8	12	4	4	16	4	4	16	4	4	4		108	\$16,580		\$16,580						\$0
	Prepare Final Equipment & Instrumentation Lists	2	8			8	16		12	8	12	4	4	8	8	4		94	\$13,940		\$13,940						\$0
	Prepare Asset Management Data	1	8			8	8		8	2	8			2	8			53	\$7,950		\$7,950						\$0
	Permitting and Approvals	1	4	8		8	16	2										39	\$6,230		\$6,230						\$0
Phase B Opus Sub-Total Hours		304	240	140	56	380	596	60	176	224	344	260	274	560	572	96	2540	6822									\$0
Phase B Sub-Total Fees & Disbursements		\$57,760	\$42,000	\$28,000	\$11,200	\$68,400	\$71,520	\$11,400	\$24,640	\$36,960	\$39,560	\$48,100	\$41,100	\$64,400	\$97,240	\$19,200	\$228,600		\$890,080	\$16,600	\$906,680	\$4,876	\$39,190	\$0	\$0	\$4,326	\$2,400
Phase C -Stage 3 LWMP																											
C1	Draft Stage 3 LWMP																										\$0
	Stage 3 Kickoff			8			8											16	\$2,560	\$1,500	\$4,060						\$75
	Data Review			4			24											28	\$3,680		\$3,680						\$0
	Prepare Stage 3 LWMP report			8			48										16	72	\$8,800		\$8,800						\$0
	Final Stage 3 LWMP			2			12											14	\$1,840	\$1,500	\$3,340						\$75
C2	Stage 3 LWMP Public Open House																										\$0
	Develop Open House presentation			1			8										32	41	\$4,040	\$1,500	\$5,540						\$75
	Attend Open House			8			8											16	\$2,560		\$2,560						\$0
Phase C Opus Sub-Total Hours		0	0	31	0	0	108	0	0	0	0	0	0	0	0	0	48	187									\$0
Phase C Sub-Total Fees & Disbursements		\$0	\$0	\$6,200	\$0	\$0	\$12,960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,320		\$23,480	\$4,500	\$27,980	\$0	\$0	\$0	\$0	\$0	\$0
OPUS TOTAL PROJECT HOURS																											
TOTAL PROJECT FEES & DISBURSEMENTS (excluding GST)		\$96,520	\$67,900	\$58,800	\$21,200	\$100,440	\$141,600	\$24,700	\$26,320	\$43,560	\$45,540	\$54,760	\$44,700	\$70,380	\$99,620	\$23,200	\$264,600		\$1,183,840	\$38,800	\$1,222,640	\$22,448	\$76,610	\$18,440	\$44,500	\$5,871	\$5,800
																											\$10,623
																											\$1,406,933



APPENDIX A

Subconsultant Proposals

Connect Landscape Architecture





Regional District of Kootenay Boundary

Stage 3 LWMP

Predesign and Design Services for the Columbia Pollution Control Centre – Upgrade to Secondary Treatment

Landscape Architecture scope of work outline

APPROACH AND METHODOLOGY

The Landscape Architectural work will be coordinated with all engineering works to provide an attractive and functional situation for all of the key upgrade areas:

- Provide landscape support to the upgrade areas of the facility.
- Design interventions that improve the edge conditions in relation to views and screening of the facility for neighbours.
- Focus on site edges to integrate the upgraded areas, and retain existing trees as feasible.
- Provide practical solutions that help provide a low-maintenance end product for operations staff.

Our firm has been recognized locally and nationally for award winning designs that enhance projects which fit into the urban fabric. We advocate for a demonstrated leadership towards sustainability while also meeting long-term objectives. We are experienced at projects that integrate infrastructure facilities into a local context.



1.0 Work Plan

PHASE 1 | PRELIMINARY DESIGN STAGE

Project initiation, site analysis, and visioning

- Start Up Meeting with Client/Design Team to review direction, work completed to date, schedule, budget, and objectives;
- Site Background: Collect relevant base information (survey, arborist report, topography, utilities provided in digital format);
- Visioning: Develop preliminary landscape design concept(s) and design rationale. Concepts to focus on landscape improvements and repairs based on the engineering extents of work;
- Prepare Order of Magnitude (Class C) Cost Estimate; and
- Submit drawings for review and approval.

Deliverable

Landscape concept designs, Class 'C' cost estimate

PHASE 2 | DETAIL DESIGN PHASE

Design Development and preparation of plans with details as required to meet City requirements and coordinated with engineering designs

- Drawings include: preliminary layout, surface landscape materials and finishes, landscape grading and drainage, tree protection / removal, and location and type of site plantings – plans and details;
- Allow for up to 1 meeting with District Staff;
- Landscape Specifications (CMS or MMCD format);
- Submit 1 IFC Submission in coordination with the Engineers; and
- Provide all information in printed and digital formats.

Deliverable

Signed and sealed IFC drawings and specifications

PHASE 3 | CONSULTING SERVICES DURING CONSTRUCTION PHASE

TENDER / PROCUREMENT

Provide construction review services as directed by the prime consultant for consultation, inspections, and shop drawings review. 1 field review at Substantial Completion expected along with field report and deficiency list.

Tender review and recommendations can be provided in this estimate.

As-built drawings to be provided at the end of the construction period.

Deliverable

Field Report, Site Instructions, Deficiency Reports, Substantial, Final Completion Report, As-Built Drawings



2.0 Fee

Our fee for this project is based on our understanding of the assignment and the specific tasks described in our work plan. The professional services required will be provided on the basis of a fixed fee or lump sum, based on the hourly rates as provided below.

We will not exceed this amount, or provide additional services not outlined in the scope of work, without prior written approvals from the Client. Project fee excluding taxes and disbursements are summarized below:

PHASE 1 – Preliminary Design Stage	\$1,500
PHASE 2 – Detail Design Phase	\$4,200
PHASE 3 – Consulting Services During Construction Phase (50 hours)	\$4,000
<hr/>	
DESIGN FEE	\$9,700
Disbursements (estimate)	3%

ASSUMPTIONS & LIMITATIONS

The following are considered our assumptions of our work plan with consideration of additional scope items that will require clarification and/or additional fee:

1. Major revisions to work and services beyond our control to our scope of work including, but not limited to unreasonable schedule changes, project phasing, separate tenders, and substantial additional field review services is subject to fee adjustment or work at hourly rates.
2. Minor revision to landscape plans in response to City prior-to-comments is included. Multiple design submissions upon direction from the client, other consultants, or applicable project authorities are not included. Should re-submissions be required, we request review of scope and fee.
3. Allowance for regular consultant and client coordination meetings has been included. Attendance at City meetings is outlined in our work program. Requests for additional meetings or significant coordination process with the City, and other authorities have not been included.
4. The Engineer is the prime consultant and will administer the project.
5. LEED services unless identified in our work plan, are not included.
6. Services for additional consultants (or management of) such as Arborist, Surveyor, Environmental, public artist, signage and wayfinding, or mechanical/electrical engineering for water features are not included in the landscape scope of work.



7. Public Meetings/Open Houses: We have assumed that the City and/or Client will coordinate and schedule venues and services required for public information sessions and or Open House Meetings. Media related communication or liaison with the community including assembly, compiling and documenting comment forms is by others. We will assist, however primary role by others.

PROFESSIONAL RATES	(HOURLY	(PER DIEM)
Principal	\$150 / hour	\$1,200 / day
Land. Architect / Project Manager	\$100 / hour	\$ 800 / day
Intern Landscape Architect	\$ 80 / hour	\$ 640 / day
Support / Technical	\$ 65 / hour	\$ 520/day

PERSONNEL

In the event any member of the project team becomes unavailable for this project, they will be replaced by another equally or more qualified personnel and such that there would be no detrimental effect on the quality, scheduling or cost of the scope of work and deliverables specified in the Request for Proposal. Connect will also notify Client well in advance for any personnel changes.

SCHEDULE

Connect Landscape Architecture Inc. will monitor budget and scope to keep Client and team informed throughout the process, ensure key milestones and design quality is maintained throughout the project.

DISBURSEMENTS

The cost of all disbursements, including courier, travel outside of Vancouver, mileage, plotting, and printing will be charged at cost +10%. Out of town travel expenses include airfare, car rental, per diem meals, and accommodation.

INSURANCE

Connect Landscape Architecture Inc. has insurance coverage in the amount of: \$5 million for General Liability and \$2 million for Professional Liability. Copies will be provided upon request.

BILLING PROCEDURES

Invoices will be submitted on a monthly basis throughout the project, with each invoice reflecting the time expended and disbursements. Invoices are due and payable within 30 days of receipt. Invoices not paid within 60 days from the date issued will be charged interest at a rate of 2% per month. Please sign and date below or confirm your acceptance in writing at your earliest convenience.

exp Services Inc.





275 – 3001 Wayburne Drive
Burnaby, BC V5G 4W3 Canada
T: 604.874.1245 • www.exp.com

June 16, 2017

Mr. Al Gibb, P.Eng.
Opus International Consultants (Canada) Limited
210 – 889 Harbourside Drive
North Vancouver, BC V7P 3S1

Email: Al.Gibb@opusinternational.ca

Project No.: 999-00048647-PP

Subject: Proposal for Geotechnical Engineering Services
Regional District of Kootenay Boundary
Columbia Pollution Control Centre – Upgrade to Secondary Treatment

Dear Mr. Gibb:

1.0 INTRODUCTION

Exp Services Inc. (exp) is pleased to submit this proposal to Opus International Consultants (Canada) Ltd. (Opus) for provision of geotechnical engineering services related to the above referenced secondary treatment upgrade project, as outlined in the Regional District of Kootenay Boundary (RDKB) Request for Proposals dated June 8, 2017. This proposal has been based on the RFP package as well as our past experience on projects of a similar nature.

Exp presents a team with experience in geotechnical foundation engineering and seismic upgrading of numerous pump stations, forcemains, pipelines, reservoirs, and other water, linear, and building infrastructures.

A brief description of the project details, anticipated sub-soil conditions and scope of work are outlined below. Overview of **exp's** background and profile, project staff resumes, and relevant project experience has been provided separately. Level of effort and fees are provided on a separate spreadsheet.

2.0 PROJECT UNDERSTANDING

Further to the RFQ, the Regional District of Kootenay Boundary (RDKB) is seeking proposals from qualified engineering firms to provide predesign and design phase services for the Columbia Pollution Control Centre - Upgrade to Secondary Treatment. The proposed upgrade is understood to predominantly comprise an expansion to the north of the existing facility which is to include the following:

- MBBR Tanks;
- DAF Tanks;
- Blower/Chemical Building;
- New piping between existing and new facilities;
- Headworks Building at the northeast corner of existing facility;

The site is located within Waneta Village on Bear Creek Road on the north side of Highway 3B, just east of Trail, BC. The Columbia River is located south of the highway. The expansion area is presently undeveloped relatively cleared land immediately north of the existing facility. The ground surface topography generally slopes down moderately from east to west and from north to south.

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*Proposal for Geotechnical Engineering Services
Prepared for Opus International Consultants (Canada) Limited
RDKB – Columbia Pollution Control Centre – Upgrade to Secondary Treatment
Proposal Number: 999-00049082-PP
June 16, 2017*

2.1 Anticipated Sub-Soil Conditions

Based on review of published surficial geology mapping for the general area, it is inferred that the general area is underlain by shallow colluvial veneer deposits overlying bedrock. The static groundwater level may be contained within the bedrock, but also could be perched above the bedrock.

2.2 Key Geotechnical Considerations and Challenges

Based on the anticipated geological conditions, key geotechnical considerations for the project appear to be include the following:

- Excavation and possible shoring and dewatering requirements for below grade structures and piping;
- Possible presence of bedrock within proposed excavation depths and potential need for blasting to facilitate excavation and removal of bedrock;
- Mitigation of potential influences on existing structures from adjacent construction;
- Foundation support for the proposed new structures and piping;
- Settlement considerations from static loading of structures supported on overburden soil, and potential settlement impacts from dewatering.;
- Hydrostatic uplift impacts for structures constructed below groundwater table; and,
- Static and seismic lateral pressures for structures constructed below grade.

3.0 PROPOSED METHODOLOGY AND WORK PLAN

3.1 Predesign Phase

Desktop Study

The following desktop study tasks would be completed for this phase of the study:

- Review of any topographic information provided by Opus.
- Review of geotechnically relevant information provided by the District, such as, construction records of the existing infrastructure and geotechnical reports by others.
- Review of any available surficial and geology mapping;

An exploration plan would be submitted to the District for review and approval, and to determine areas requiring special access approvals.

Subsurface Exploration

Exp will conduct a subsurface exploration to assess the subsurface conditions in order to provide geotechnical engineering input as required for the design and construction of the key project elements

Based on the available background information outlined above, with conditions expected to consist of shallow colluvial veneer deposits overlying shallow bedrock, we propose a field exploration program consisting of the excavation of about 6 test pits using an excavator to visually log soil conditions and obtain samples for select index testing in the laboratory. It is anticipated that the test pits would be excavated to maximum depths of up to about 4 to 5m in order to "prove out" "firm" ground conditions or bedrock.

At this time, as we anticipated the presence of "firm" ground conditions at relatively shallow depths with a low probability of encountering liquefiable soils below proposed structure/pipe invert depths in the project area, we have not allowed for boreholes or Cone Penetration Testing (CPT). In the unlikely event that the test pits encounter loose to compact granular soils below groundwater that are susceptible to liquefaction extending to significant depth, we would advise the client and may recommend a supplemental exploration

*Proposal for Geotechnical Engineering Services
Prepared for Opus International Consultants (Canada) Limited
RDKB – Columbia Pollution Control Centre – Upgrade to Secondary Treatment
Proposal Number: 999-00049082-PP
June 16, 2017*

using boreholes, CPT or other appropriate means, as deemed warranted. We would provide costs for such work at that time and would not proceed with any additional services without authorization from the client.

The test pits would be located, logged and sampled by **exp's** field representative who would also make note of inferred groundwater depth at each location at the time of exploration.

To minimize the risk of damaging buried utilities in developed/roadway areas, **exp** would plan the borehole locations based on available as-built utility drawings provided by the client, BC One Call, and by retaining a utility service locator. It is assumed that underground utilities will be located greater than two metres away from proposed borehole drilling locations; therefore, hydro-excavation would typically not be required to mitigate risk of damage to buried utilities. If the Regional District wishes to have hydro-excavation done in advance of drilling, this would be an extra cost and **exp** would provide a budget for such services at the time.

The test pits would be backfilled with the excavation spoils and bucket tamped in place. We will attempt to limit disturbance to the extent practical with the methods used; however, some ground disturbance should be expected and no provisions have been allowed for any formal landscape restoration.

Laboratory Testing Program

Geotechnical laboratory tests will be carried out on select soils samples collected during the exploration. All samples would be subject to visual soil classification and a number would be subjected to moisture content determination. Additional geotechnical laboratory testing consisting of sieve analysis and possibly Atterberg limits would be carried out on a limited number of representative soil samples, as appropriate, to obtain additional information for site characterization purposes.

Preliminary Geotechnical Report

Exp will issue a preliminary geotechnical report which will include the following:

1. Compilation of findings from the site exploration, lab testing, and analytical results.
2. Preliminary recommendations relative to the design and construction of the key project elements including:
 - Structure and pipe excavation, trenching, shoring, dewatering, and backfilling considerations;
 - Structure and pipe foundation preparation requirements;
 - Structure foundation bearing parameters and interpreted Site Class for seismic design;
 - Potential ground settlement impacts related to dewatering if applicable;
 - Static and seismic lateral pressures on below grade walls;
 - Discussion on susceptibility of sub-soils to liquefaction during a major earthquake and recommendations for further study in the unlikely event it is warranted.

3.2 Design Phase

Exp will address any Opus/Regional District review comments or design changes, and incorporate into the final geotechnical report at the design stage. **Exp** would also be available to review geotechnically relevant components of the project plans and specifications to be prepared by OPUS, and provide consultation as required.

A detailed site-specific response analysis is not contemplated to be necessary for the anticipated soil conditions, and therefore, has not been included in the scope of services. If the unlikely event that liquefiable soils are encountered to significant depth at any of the key structure locations, and the design criteria calls for post-disaster performance requirements, then such analysis may be warranted along with the supplemental borehole/CPT exploration or other means, as mentioned previously. **Exp** would provide cost for such analysis at the time and would not proceed without prior approval from the client.

*Proposal for Geotechnical Engineering Services
Prepared for Opus International Consultants (Canada) Limited
RDKB – Columbia Pollution Control Centre – Upgrade to Secondary Treatment
Proposal Number: 999-00049082-PP
June 16, 2017*

3.3 Schedule

Desktop reviews and field explorations would be undertaken to meet overall project timelines provided in the RFP. We have allowed 2 days including travel for the utility locating and field exploration program. A preliminary geotechnical report could be submitted within approximately 3 to 4 weeks after completion of the field exploration program.

3.4 Fees

The breakdown of the fee to complete the geotechnical services is shown in the attached Project Budget spreadsheet. Any changes to the scope of work, requiring additional time and expenditures, will be invoiced on a time-and-expense basis in accordance with the rate sheet attached. Prior approvals will be obtained in advance of additional services.

4.0 CLOSURE

We trust that you will find our proposal acceptable and we look forward to working with you on this project. It is assumed that our services would be completed in accordance with the pre-approved Opus Sub-Consultant agreement used between Opus and **exp** on recent projects. If you have any questions, please do not hesitate to contact the undersigned at (604) 874-1245.

Sincerely,

exp Services Inc.

Reviewed by:



Ben Weiss, P.Eng.
Senior Geotechnical Engineer



Evan Sykes, P.Eng.
Senior Geotechnical Engineer

Enclosures: Project Budget Spreadsheet
Rate Sheet

cc: Aline Bennett, Opus, e: aline.bennett@opusinternational.ca



<div><div><div><div></div><div>exp.</div></div></div><div><div>Project Budget - Geotechnical Engineering Services</div><div>Regional District of Kootenay Boundary</div><div>Columbia Pollution Control Centre - Upgrade to Secondary Treatment</div><div>June 16, 2017</div><div>Proposal No. 999-00048647-PP</div></div></div>									
			Project Manager	Project	Project	Field	Drafting	Admin Support	
				Engineer	Engineer	Engineer			Hours
			B. Weiss	U. Chakraborty	S. Daly	S. Prime	M. Gee	D. McCulloch	Task
No	Tasks	Hourly Rate	200.00	155.00	120.00	115.00	120.00	80.00	
1. Predesign Phase									
1.1	Project management, coordination, attendance of kick-off meeting		8	2				1	\$1,990.00
1.2	Desktop study; review of existing geotechnical and other info provided by client, in-house data			2	2				\$550.00
1.3	Field coordination, BC One Call					4			\$460.00
1.4	Utility locating, Test Pit Supervision, logging and sampling					20			\$2,300.00
1.5	Lab Coordination, Data Compilation, Drafting of Logs & Site Plan			2	3		4		\$1,150.00
1.6	Engineering analysis & consultation including excavation, bearing, settlement, liquefaction potential, bedrock impacts, groundwater impacts and other relevant considerations		2	16	4				\$3,360.00
1.7	Preparation of Preliminary Geotechnical Report		2	12				2	\$2,420.00
	Hours Subtotal		12	34	9	24	4	3	86
	Fees Subtotal:		\$2,400.00	\$5,270.00	\$1,080.00	\$2,760.00	\$480.00	\$240.00	\$12,230.00
86									
1.4.1	Disbursements - Subcontracted:		Units	cost / unit		Total Units			Subtotal
	Excavation Subcontractor	Excavator	ea	\$1,500		1			\$1,500.00
	Utility Locator	Local Line Locating Company	ea	\$1,500		1			\$1,500.00
	Subtotal Subcontracted Disbursements:								\$3,000.00
1.4.2	Disbursements - exp								
	Lab Testing	Grain Size		unit cost		4	\$115		\$460.00
		Moisture contents		unit cost		20	\$15		\$300.00
		Atterberg Limits		unit cost		1	\$175		\$175.00
	Courier			unit cost		2	\$20		\$40.00
exp	Travel Expenses - Accomodations, Meals, Mileage			ea		1	\$1,000		\$1,000.00
	Subtotal exp Disbursements:								\$1,975.00
2. Design Phase									
2.1	Project Management & allowance for attendance of one (1) local design team meeting		6						\$1,200.00
2.2	Address review comments and submit Final Geotechnical Report		4	6			1	1	\$1,930.00
2.3	Assist/Review Design/Tender Drawings & Specifications for Geotechnically Relevant Content		4	4					\$1,420.00
	Hours Subtotal:		14	10	0	0	1	1	26
	Fees Subtotal:		\$2,800.00	\$1,550.00	\$0.00	\$0.00	\$120.00	\$240.00	\$4,710.00
26									
2.3.1	Disbursements - exp mileage 50 km @ \$0.50/km								\$25.00
	Total Hours:		26	44	9	24	5	4	112
	Total Fees:		\$5,200.00	\$6,820.00	\$1,080.00	\$2,760.00	\$600.00	\$320.00	\$16,780.00
	Disbursements Subtotal								\$5,000.00
SUMMARY OF PROJECT BUDGET									
			Fees +	Production Fee 3%		= Total Fees	Disbursements	=	Subtotal
	Predesign Phase		\$12,230.00	\$366.90		\$12,596.90	\$4,975.00	=	\$17,571.90
	Design Phase		\$4,710.00	\$141.30		\$4,851.30	\$25.00	=	\$4,876.30
	Subtotal:		\$16,940.00	\$508.20		\$17,448.20	\$5,000.00	=	\$22,448.20
	GST 5%*								\$1,122.41
	Grand Total:								\$23,570.61

16/06/2017



GEOTECHNICAL GROUP RATE SHEET (To April 2018)

Standard Personnel Rates

Professional Staff	Hourly Rate
Senior Geotechnical Engineer	\$160-240/hour
Senior Hydrogeologist	\$175/hour
Intermediate Geotechnical Engineer	\$125-160/hour
Junior Geotechnical Engineer	\$110-125/hour
Engineer-In-Training (EIT)	\$85-120/hour
Administrative Support	\$60-80/hour
Trip To Site (mileage only)	50c/km
Technical Staff	Hourly Rate
Senior Geotechnical Technician	\$110-\$120/hour
AutoCAD	\$120/hour
Trip To Site (mileage only)	50c/km

Field and Laboratory Services

TEST	UNIT RATE
1.0 SOILS	
1.1 Moisture Density Relationship Standard Proctor (ASTM D698) Modified Proctor (ASTM D1557)	\$165/test \$165/test
1.2 Compaction Tests (ASTM D2922) With Rock Correction	\$80/hour (min 2 hours)
1.3 Gradation Analysis Washed (ASTM C117)	\$115/test
2.0 CONCRETE (CSA CAN-A23.2-04)	
2.1 Concrete Mix Design Review	\$150/hour
2.2 Concrete Spot Check - 3 Cylinders per Test	\$160/test
2.3 Full-Time Inspection / Standby	\$60/hour
2.4 Additional Cylinders	\$20/cylinder
2.5 Hourly Rates Materials Engineer Sr. Materials Technician	\$150/hour \$90/hour
3.0 ASPHALT	
3.1 Full Marshall Test (ASTM D2172, C136/C117, D3203)	\$295/test
3.2 Superpave Test	\$355/test
3.3 Asphalt Coring & Testing (ASTM D2726) Thickness, Density, Compaction	\$95/core
3.4 Marshall Test - Remoulded Cores (ASTM D2172, C136/C117, D3203)	\$320/test
3.4 Hot Mix Asphalt Sampling	\$80/hour
4.0 MILEAGE ONLY	\$0.65/km

- NOTES:**
1. exp reserves the right to adjust rates
 2. Disbursements (supplies, courier, mileage, etc.) are charged at cost plus 15%
 3. Unit rates should be confirmed after 90 days from Proposal date
 4. Rates based on regular hours-Mon to Fri, 8:00am-4:30pm; Premium of 1.5 for overtime
 5. Production Fee on Hourly Fees & Disbursements - Plus 3%

Feenstra Architecture Inc.





601 - 1587 West 8th Avenue | Vancouver | British Columbia | V6J 1T5 | T: 604.739.8888 | F: 604.739.8889

June 16, 2017

Opus International Consultants Ltd.
#210 - 889 Harbourside Drive
North Vancouver, BC V7P 3S1

Attention: **Al Gibb, P. Eng.**
 Project Engineer

Re: **Fee Proposal for Columbia Pollution Control Centre**

Dear Al,

We are pleased to provide our proposal for architectural design services for the Columbia Pollution Control Centre in the Regional District of Kootenay Boundary, BC.

As requested, this proposal includes consulting services for Preliminary Design and Detailed Design.

We understand that our work will involve a new Headworks Building and Chemical/Electrical/Blowers Bldg and an upgrade to the Thickening/Dewatering Bldg. The approx floor area of the buildings is approx 800 SM and the high level cost estimate is approx \$ 1,000,000 - \$1,500,000 for the buildings.

Our scope will include preparation of three (3) design concepts for the main buildings. The design options will be illustrated using 3D digital models and will illustrate the form of the buildings and proposed material options. In addition, the preliminary design phase will include floor plans and a site plan.

Upon Client review, comments and selection of the preferred design concept, the preferred design concept will be developed to achieve final design. The final design package will include site plan, roof plan, elevations and sections as required to illustrate the design.

Our scope includes preparation of construction drawings. The construction drawings will include all architectural details required for construction, tendering and a building permit application. We will also include specification information as required. Our proposal assumes that a Development Permit Application will not be required for this project.

Our fee proposal includes fees for an initial site visit however separate fees are identified for attendance at a public meeting and for printing and mounting renderings on presentation boards for a Public Meeting.

Our fee proposal is based on the number of hours estimated to complete the work. We assume geotechnical, structural, mechanical, electrical, landscaping and Leed consulting requirements will be completed by others.

The Architectural Institute of British Columbia requires that all proposals for architectural services include the following compliance statement. "This proposal is in compliance with the AIBC Bylaws including Bylaw 28; Professional Engagement and Bylaw 34:16; Tariff of Fees for Architectural Services and the Code of Ethics."

We have also attached a copy of our Certificate of Insurance.

With your approval of our fee proposal, we propose to use the AIBC Document 8C - 2010 as the form of contract between Client and Architect.

Fee Proposal - Columbia Pollution Control Centre

Page 2

The following list includes proposed phases of work, deliverables and proposed fees.

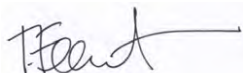
<u>Schematic Design & Design Development Phase (Preliminary Design)</u>		\$	37,420.00
1	Review project requirements		
2	Review existing site conditions (site visit)		
3	Develop three (3) design concepts (3D Digital Modeling, Floor Plans, Site Plans)		
4	Present design concepts to Client for selection		
5	Attend project meetings and tele-conferences		
6	Finalize design of selected design concept		
7	Finalize exterior materials and building details		
8	Coordinate Final Design with engineering consultants		
9	Prepare Final Design Drawings (Site Plan, Floor Plan, Roof Plan, Elevations, Section, 3D Model)		
<u>Construction Drawings (Detailed Design)</u>		\$	35,690.00
1	Prepare all drawings required for construction and building permit (Site Plan, Floor Plan, Roof Plan, Sections, Elevations, Details)		
2	Prepare applicable specifications		
3	Attend project meetings with Client and engineering consultants, as required		
4	Coordinate drawing requirements with engineering consultants		
<u>Disbursements</u>		\$	3,500.00
<u>TOTAL</u>		\$	76,610.00
Optional fee for attending a Public Meeting		\$	3,500.00
Optional fee for printing & mounting renderings for Public Meeting		\$	1,500.00

Our fees are normally invoiced monthly, throughout the course of the project in accordance with the work completed. Disbursements including courier, photocopying and printing of drawings & specifications are invoiced at cost plus 5%. An allowance for disbursements is included in the fee above.

We trust that this proposal responds to the scope of work and services that you require for this project. We thank you for the opportunity to be of service and look forward to working with you.

Yours very truly,
FEENSTRA ARCHITECTURE INC.

Proposal acceptance
with signature



Ted Feenstra, Architect AIBC

Client

Date

Masse Environmental Consultants Ltd.





Masse Environmental Consultants Ltd.
812 Vernon St.
Nelson, BC, V1L 4G4
Tel.: 250-352-1147
Fax: 250-352-0422
www@masseenvironmental.com

Opus International Consultants Ltd
#210-889 Harbourside Drive,
North Vancouver, B.C., V7P 3S1

June 15, 2017

Attention: Allan Gibb, Ph.D., P.Eng.

**RE: Regional District of Kootenay Boundary - Liquid Waste Management Plan Stage 3
Environmental Impact Study**

Dear Allan,

We are pleased to provide a proposal to complete an Environmental Impact Study (EIS) for the Columbia Pollution Control Center (CPCC) as part of the Stage 3 Liquid Waste Management Plan (LWMP) for the facility.

The EIS would include the following:

- Review and summarize historical effluent quality and quantity, with an emphasis on the most recent available data,
- Review and summarize historical water quality and quantity in the Columbia River,
- Review and summarize available data on aquatic resources in the receiving environment,
- Incorporate the results of dilution modeling (to be provided by Opus Dayton Knight),
- Predict water quality in the Columbia River under a variety of effluent flow and dilution scenarios,
- Develop an effluent and receiving environment monitoring program.

A substantial amount of information is available on water quality in the Columbia River, and no additional field work is proposed as part of the EIS.

The fee estimate for the EIS is \$16,030 (Table 1).

Proposed upgrades to the CPCC may require additional environmental permitting as part of the construction process. Extension of the existing outfall is expected to require a 'Change Approval' under Section 11 of the Water Sustainability Act. Most of the information needed to support permitting can be obtained at the same time as the EIS. Environmental regulatory requirements and environmentally sensitive areas, as well as potential mitigation options, will be summarized in an Environmental Management Plan that can be used to support permitting.

Environmental Solutions

The fee estimate for the Environmental Management Plan and Section 11 application is \$2,410 (Table 1).

We look forward to working with you on this project.

Sincerely,



Sylvie Masse, M.Sc., R.P.Bio.
Masse Environmental Consultants Ltd.
sylvie@masseenvironmental.com

Table 1. Detailed cost estimate.

TASKS	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (\$)	COST (\$)
1	Environmental Impact Study				
1.1	Project Management				
	Project Management	Snr Biologist Hours	8	\$105.00	\$840.00
	Client and agency liaison	Biologist Hours	8	\$95.00	\$760.00
	Administration	Admin	8	\$55.00	\$440.00
1.2	Background Review				
	Review/compile CPCC effluent data	Technician	16	\$80.00	\$1,280.00
	Review/compile Columbia River water quality data	Technician	16	\$80.00	\$1,280.00
	Review aquatic resources	Technician	16	\$80.00	\$1,280.00
	Species at risk review	Technician	4	\$80.00	\$320.00
1.3	Site Visit				
	Site visit	Biologist Hours	8	\$95.00	\$760.00
	Site visit	Technician	8	\$80.00	\$640.00
	Mileage	km	200	\$0.55	\$110.00
1.4	Report				
	Description of environment	Biologist Hours	8	\$95.00	\$760.00
	Effluent characterisation	Biologist Hours	16	\$95.00	\$1,520.00
	Water quality assessment	Biologist Hours	16	\$95.00	\$1,520.00
	Impact assessment	Biologist Hours	24	\$95.00	\$2,280.00
	Monitoring Plan	Biologist Hours	8	\$95.00	\$760.00
	GIS	Technician	8	\$80.00	\$640.00
	Senior Review	Snr Biologist Hours	8	\$105.00	\$840.00
	Subtotal				\$16,030.00
2	Section 11 Application				
	Application	Technician	8	\$80.00	\$640.00
	Environmental Management Plan	Biologist Hours	16	\$95.00	\$1,520.00
	Application fee	Lump sum	1	\$250.00	\$250.00
	Subtotal				\$2,410.00

Environmental Solutions

Northwest Hydraulic Consultants Ltd.





30 Gostick Place | North Vancouver, BC V7M 3G3 | 604.980.6011 | www.nhcweb.com

NHC Ref. No. 3003602

16 June 2017

Opus Dayton Knight Consultants Ltd
210-889 Harbourside Drive
North Vancouver BC V7P 3S1

Attention: Dr. Al Gibb, P.Eng.

Via email: Al.Gibb@opusdaytonknight.com

Re: REGIONAL DISTRICT OF KOOTENAY BOUNDARY
COLUMBIA POLLUTION CONTROL CENTRE – UPGRADE TO SECONDARY
TREATMENT

1 INTRODUCTION

1.1 Background

Northwest Hydraulic Consultants Ltd. (NHC) is pleased to submit the followed proposal to support OPUS' proposed service with Regional District of Kootenay Boundary (RDKB). This proposal is based on information developed as part of a response to the RDKB's CPCC LWMP Stage 3 and Design Services Request for Proposal and subsequent communications between NHC and OPUS.

2 SCOPE OF WORK

It is our understanding that NHC's primarily role is to:

- To conduct a geomorphological assessment and recommend potential outfall locations; and
- to conduct effluent dispersion analysis to support the Environment Impact Study for the effluent discharge into the Columbia River.

2.1 Bathymetric and Current Survey

The goal of the field monitoring effort is to document the conditions near existing and potential outfall alignments. NHC will spend up to three days on site collecting bathymetric and river current data. The bathymetry and river current data will also be utilized to further calibrate NHC's existing Columbia River HEC-RAS model to develop stage discharge current velocity profiles. Once calibrated, the model will be used to provide design hydraulic conditions for the effluent dilution and dispersion analysis.

water resource specialists



A Progress Report will be submitted to OPUS for review upon the completion of the bathymetric and river current survey. The Progress Report will include a summary of the survey efforts completed and expected impact on the stage-discharge relationships previously defined.

2.2 Geomorphological Study

Geomorphology considers both the existing physical conditions as well as the ongoing processes that either maintain that physical form or are causing it to evolve. The existing outfall is located near Bear Creek which discharges sediment into Columbia River. The goal of the geomorphological study is to address the following questions:

- How has the reach of Columbia River in the vicinity of the existing and proposed outfall alignments changed historically?; and
- How will this reach change in the near- to medium-term?

These questions will be addressed based on a desktop study of available information including historical aerial photos, published and unpublished reports, and existing surveys. NHC will review the updated survey information and reassess the geomorphologic evaluation previously conducted as it pertains to the existing outfall and potential outfall alignments.

A Progress Report will be developed and submitted to OPUS for review. The report will assess the potential of sedimentation impacting the effectiveness at up to three locations as low, medium, or high likelihood of inundation.

2.3 Effluent Dilution and Dispersion Analysis

A nearfield dilution and dispersion modelling analysis will be conducted to evaluate effluent dilution and dispersion process in Columbia River near the outfalls. Design hydraulic conditions required for the analysis will be obtained from NHC's existing Columbia River HEC-RAS model. The model will first be updated with bathymetry data collected during the proposed river survey and further calibrated with the river current data. For budgeting purposes NHC has assumed one outfall design geometry and discharge at two river flow scenarios to and at three outfall locations. This represents a total of six scenarios.

A Progress Report will be developed and submitted to OPUS for review.



3 BUDGET AND SCHEDULE

The lump sum costs (excluding 5% GST) for the Bathymetric and Current Survey, River Design Stage Flow Events and Geomorphological Study, as described herein, is provided in the following table.

Task	Duration (days)	Task Totals
2.1 Bathymetric and Current Survey	15	\$23,000
2.2 Geomorphological Study	10	\$9,500
2.3 Effluent Dilution and Dispersion Analysis	20	\$12,000

We trust the above information is sufficient for your present needs. If you have any questions or require additional information, please contact either myself (EWang@nhcweb.com) or Ken Christison (KChristison@nhc-van.com) at (604) 980-6011.

Sincerely,
Northwest Hydraulic Consultants Ltd.

Edwin Wang, P. Eng.
Senior Engineer

Ken Christison, P.Eng.
Principal



EDWIN WANG, M.ENG., P.ENG., MBA

Hydrotechnical Engineer

Education

MBA, Strategic Management,
University of British Columbia,
2014

Coastal Engineering Certificate,
Old Dominion University, US,
2007

M.Eng., Environmental Fluid
Mechanics, University of
British Columbia, 2002

B.A.Sc., Civil Engineering –
Environmental Option,
University of British Columbia,
2000

License/Affiliations

Association of Professional
Engineers and Geoscientists of
British Columbia (APEGBC),
P.Eng.

Canadian Water Resources
Association (CWRA)

Years Experience

14

Publications

2005 Association of Pacific
Ports Conference: Fraser River
Shipping Channel Dredging
Study

2005 CWRA BC Branch
Conference: Summerland
Water Intake Feasibility Study

2003 Fourth International
Conference on Computer
Applications in Mineral
Industries: Submarine Mine
Tailings Management

Areas of Expertise

Numerical modelling

Water quality

Sediment transport

Coastal engineering

Edwin Wang has over 14 years of consulting experience conducting numerical modelling studies related to water quality, coastal/marine engineering, river hydraulics and sediment transport. He has been involved in various water quality assessment studies to assess the impact of effluent in the receiving environment and assist with the water intake location selection as well as diffuser geometry configuration. In addition to water quality assessment experience, Edwin has conducted numerous sediment transport studies for Port Metro Vancouver to examine changes in sediment transport patterns and hydraulic dynamics in response to different management options including deepening of the navigation channel and installation and removal of selected in-river structures.

Selected Project Experience

Tsawwassen First Nation Outfall Assessment study (for Urban Systems Ltd.).

Hydraulic engineer responsible for identifying key marine conditions and developing diffuser design parameters related to the marine discharge of treated wastewater effluent for a Tsawwassen First Nation owned domestic wastewater treatment facility (2013).

City of Kelowna Drinking Water Source Protection (for City of Kelowna).

Hydraulic engineer responsible for development of a 3D hydrodynamic and water quality model of the Okanagan Lake. The model was used to investigate quantitatively the source characterization of the City's intake and the reduction in threat to each intake if the intake were at a deeper depth. The study was used to support the City of Kelowna Water Utility in obtaining a "Filtration Deferral" permit from the Interior Health Authority" (2011).

Emergency Response Modeling for Kelowna Drinking Water System (for City of Kelowna).

Hydraulic engineer responsible for conducting a hydrodynamic and contaminant tracking modeling analysis to forecast the movement, travel times, maximum concentration and distribution of contaminated water (containing fertilizers and pesticides) entering the lake from firefighting operations (2011).

Gibraltar Mine Plume Modelling (for Gibraltar Mine).

Hydraulic engineer responsible for conducting a hydrodynamic and water quality modelling analysis to evaluate the near-field and far-field effluent dispersion in the Fraser River (near Marguerite) based on the proposed outfall configuration. (2011).

George Massey Tunnel Replacement (for MMM Group Ltd.).

Hydraulic engineer responsible for development of a 3D hydrodynamic and sediment transport model of the lower Fraser River. The model is to be used to evaluate the hydraulic and sedimentation changes that would result from proposed designs (ongoing).

Pattullo Bridge Seismic Retrofit and Rehabilitation (for Buckland & Taylor Ltd.).

Hydraulic engineer responsible for development of a 3D hydrodynamic and sediment transport model of Sapperton Channel. The model is to be used to evaluate the hydraulic and sedimentation changes that would result from proposed designs (ongoing).

water resource specialists

Edwin Wang

Ladner Harbour Infill (for Port Metro Vancouver). Hydraulic engineer responsible for development of a 3D hydrodynamic and sediment transport model encompassing Ladner Reach, Sea Reach and Canoe Pass. The model was used to investigate the factors affecting the infill process and develop mitigations to reduce the maintenance dredging requirement (2011).

Mclvor Lake and Lower Campbell Lake Hydrology Study (for City of Campbell River). Hydraulic engineer responsible for development of a 3D hydrodynamic model of the Lower Campbell Lake system. The model was used to investigate quantitatively the movement of water and tracers from Summerland wastewater treatment plant and Trout Creek and assist in assessing the viability of the proposed intake location (2006).

Summerland Water Intake Feasibility Study (for District of Summerland). Hydraulic engineer responsible for development of a 3D hydrodynamic and water quality model of Okanagan Lake. The model was used to investigate the movement of water and tracers from Summerland wastewater treatment plant and Trout Creek and assist in assessing the viability of the proposed intake location (2004).

Fraser River Land Reclamation Study (for Port Metro Vancouver). Hydraulic engineer responsible for development of a 3D hydrodynamic and sediment transport model of the lower Fraser River. The model was used to evaluate the hydraulic and sedimentation changes that would result from proposed land reclamation designs involving modifications to Albion Dyke, Chatterton Channel, Gunderson Slough and Sapperton Channel (2010).

Steveston Harbour Re-development (for Small Craft Harbours). Hydraulic engineer responsible for development of a 3D hydrodynamic and sediment transport model of the Steveston Harbour. The model was used to evaluate the navigability, changes in sedimentation, water level, flushing rates, and flow distribution associated with the proposed development (2010).

Seaweed and Circulation Study for Al-Buhairat City (for Al Afandi Group). Hydraulic engineer responsible for development of a 3D hydrodynamic and water quality model of the newly developed Al-Buhairat City constructed by dredging an extensive channel system into the coastline north of Jeddah. The model was used to investigate the water movement, the flushing processes in the waterways and develop mitigative measures to improve water quality in the system (2004).

Lower Duncan River Hydraulic Study (for BC Hydro). Hydraulic engineer responsible for development of a 3D hydrodynamic model of Lower Duncan River to support an Adaptive Stranding Protocol Development program. The model is used to forecast the flow ramping events in order to reduce fish stranding and dewatering of redds, and improve overall fisheries productivity of the Lower Duncan River (2012).

Gulf Islands National park Reserve Midden Remediation Study (for Public Works). Coastal engineer responsible for establishing the design wave climates at three midden sites: Beaumont Park, Brackman Island and Sidney Spit. For the Brackman Island site, which is within a kilometer of various ferry sailing lines, ferry wake was also considered in determining the design wave climate. The wave climate results were used to develop conceptual Green Shores design for these sites involving beach nourishment, vegetation, and large woody materials to provide the reserve with a more secure shoreline, and slow the erosion process (2011).

Golden Ears Bridge Pier Sediment Study (for Metro Vancouver). Hydraulic engineer responsible for development of a three-dimensional hydrodynamic and sediment transport model. The model was used to determine the causes of excess sedimentation over the Langley Wastewater Treatment Plant outfall pipe located just downstream of one of the Golden Ears Bridge piers, and recommend possible courses of action (2009).

Manteo and Eldorado Marina Expansion Sediment Modeling Study (for Manteo and Eldorado Hotels). Hydraulic engineer responsible for development of a three-dimensional hydrodynamic and sediment transport model of Okanagan Lake. The model was used to quantify sediment transport along the lake shore, including the effects of waves, currents and river inputs, and to evaluate the cumulative effects of the proposed marina expansion on the shoreline (2008).



VANESSA O'CONNOR, M.ENG., P.ENG.

Senior Hydrotechnical Engineer

Education

M.Eng. Hydrotechnical Engineering, University of British Columbia, 2007

B.Sc.(Eng.), Civil/Environmental Engineering, Queen's University, 2005

License/Affiliations

Association of Professional Engineers and Geoscientists of British Columbia, P.Eng.

Canadian Water Resources Association

Years Experience

10

Awards

2010 CEBC Award of Merit: Cowichan Valley Integrated Flood Management Plan

Areas of Expertise

Numerical modelling

River Engineering

GIS Applications

Ms. Vanessa O'Connor joined NHC in 2007 and her project experience has consisted almost exclusively of developing and running large-scale hydrodynamic models for flood related studies. She is adept at working with HEC-RAS, RAS2D, TELEMAC2D, River2D, and DHI's MIKE11, MIKE21 FM, and MIKEFlood modelling packages. Vanessa makes extensive use of GIS applications, DSS-Vue and custom scripts to facilitate model development and processing of numerical modelling inputs and results.

Floodplain Analysis, Mapping, and Management

Upper Bow River Hazard Study, AB (for Alberta Environment and Parks). Alberta Environment and Parks retained NHC to complete a flood hazard assessment for the Upper Bow River between Banff National Park and the City of Calgary, following the Alberta Flood Hazard Identification Program guidelines. The study reach is approximately 118 km long and includes four tributaries to the Bow River. Lead hydraulic modeller responsible for the development of a HEC-RAS 1D model to compute flood levels for mapping of flood depths, inundation extents and hazard areas. (Ongoing 2015-2017)

Elk River and Fairy Creek Floodplain Mapping (for City of Fernie). Hydrotechnical hazards along the Elk River and Fairy Creek in the City of Fernie, BC were identified and mapped. The study included hydrology, geomorphic assessment, hydraulic modeling, hazard assessment, climate change analysis, and GIS mapping. Hydraulic modelling engineer responsible for the development of the hydraulic model and generation of the design flood profile based on a recent extreme event (plus climate change) (2017).

Fraser River Flood Hydrographs (for FM Global). Project involved generating flood hydrographs at key locations in the lower Fraser River for select return periods. Hydraulic modelling engineer responsible for generating appropriate inflow hydrographs and running the Fraser hydraulic model (MIKE11) for winter and freshet conditions. (2016)

Alouette Rivers Floodplain Mapping, British Columbia (for City of Maple Ridge). The City of Maple Ridge retained NHC to update a hydraulic assessment of the North and South Alouette Rivers originally conducted by NHC in 2010, and to prepare floodplain maps. Hydraulic modelling engineer leading the update of the hydraulic model (MIKEFlood) using recent geometry and revised flows for production of floodplain maps. (2014)

Fraser River Hydraulic Model Update and Related Work, British Columbia (for Ministry of Forests, Lands and Natural Resource Operations). Hydraulic modelling engineer providing technical expertise and reviewing model files to assist the Ministry with the update of the Fraser River hydraulic model (MIKE11) of the gravel reach based on new survey information. The model was then used to generate an updated design flood profile for the gravel reach of the Fraser River. Also assisted Ministry with flood level forecasting during the 2012 freshet. (2012 and 2013)

Samahquam, Skatin and Douglas First Nations, Flood and Debris Flow Hazard Assessment (for Lower Stl'at'imx Tribal Council). The Samahquam, Skatin and Douglas First Nations, located by the Lillooet River, are all experiencing population growth. Some of the land where future development may occur is low-lying and at risk of flooding, and there is also a concern over potential debris flow from tributary

water resource specialists

Vanessa O'Connor

creeks. The Tribal Council retained NHC to assess flood and debris flow hazards, along with Urban Systems Ltd. to prepare mitigation and development plans. Project engineer undertaking the hydrology assessment and the development of four 1-D HEC-RAS models to generate FCLs at each of the study sites. (2013)

Fraser River 100 and 500-year Design Profile (for FM Global). Project involved estimating the 100 and 500-year flood flow and tide conditions and simulating the corresponding water surface profiles from Laidlaw near Hope to the Ocean using the previously developed MIKE11 hydraulic model. Results were used for insurance purposes. Hydraulic modelling engineer generating Fraser River flood profiles using a 1-D (MIKE11) numerical model spanning from Mission to the ocean. (Mar – Apr-2011)

Cowichan and Somenos River Flooding Event Assessment (for Municipality of North Cowichan and Emergency Management British Columbia). Over fifty homes were inundated in the Cowichan Valley months after NHC submitted the IFMP. Surveyor and modelling engineer for the assessment of a flood event including collecting technical, survey, and anecdotal information about the flood and establishing the mode of flooding with a MIKEFlood model. Recommendations were provided to the client on flood mitigation efforts that could be made in future. (2010)

River Modelling Training Course (for Department of Science and Technology, Government of India). Assisted the flood mapping expert for a training program for a team of five specialists from the Mission for Geo-spatial Applications, Indian Department of Science and Technology. An eight-day course was developed and held at NHC's North Vancouver office in 2010, followed by a four-day course in 2011 and ongoing support via email and webinar. Assisted with the development and presenting of course materials including on the use of 1D and 2D hydraulic models for preparation of flood maps. (Nov – Dec-2010)

Cowichan River Integrated Flood Management, British Columbia (for Cowichan Valley Regional District). NHC developed an integrated flood mapping and management plan for the Lower Cowichan Valley River System. The project included detailed surveys of the river, hydraulic modelling, geomorphological assessment, habitat mapping, creation of a comprehensive GIS database, and development of a detailed flood management plan. Hydraulic modelling engineer responsible for developing a coupled 1-D and 2-D unsteady hydraulic model (MIKEFlood) of the Lower Cowichan Valley River System to simulate flooding scenarios, assess the capacity of existing dikes, and identify high hazard floodway zones. The model was a key technical tool in the development of the integrated flood mapping and management plan. (Mar-2008 – Sep-2009)

Fraser River Flood Forecasting, British Columbia (for BC Ministry of Environment). Hydraulic modelling engineer assisting with generation of real-time 5-day forecasts of water levels in the Fraser River during the spring freshet. Forecasts were done using a 1-D MIKE11 numerical model spanning from Hope to the ocean. In 2009, provided a 1 week training session to MOE staff on forecasting procedures and use of the Fraser River model. (2008 and 2009, 2015, 2016)

Fraser River Flood Profiles, British Columbia, (for Associated Engineering). Hydraulic modelling engineer generating Fraser River flood profiles for a series of return period flood conditions (winter and spring) using a 1-D (MIKE11) numerical model spanning from Mission to the ocean. (2009)

Fraser Flood Review, British Columbia, (for BC Ministry of Environment). Hydraulic modelling engineer responsible for developing a 1-D numerical model (MIKE11) of the Fraser River reach from Hope to Laidlaw as part of a study of the 1894 Fraser River flood estimate. (2008)

Coquitlam Flood Review, British Columbia (for City of Coquitlam). Hydraulic modelling engineer responsible for reviewing the river network and cross-section data in an existing 1-D hydraulic model (HEC-RAS) by comparing with survey data and floodplain maps. The model simulations under various flow conditions were compared with previous results and causes for discrepancies in the modelling results were identified. (2007)

Geomorphic Studies

BC Hydro Revelstoke Unit 6, Environmental Assessment, Sediment and Geomorphology Assessment (for BC Hydro). Member modelling team directly responsible for the development and running of a 1-D model (HEC-RAS) of a 50 km reach of the Columbia River downstream of Revelstoke Dam. The model was used to predict changes in flows and water levels from the addition of unit 6 and estimate the impacts on sediment transport and bank erosion. (2016)

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Vanessa O'Connor

Surrey Lowland Morphology Study (for City of Surrey). The study included an assessment of channel and bank stability and the review of proposed remediation projects. Member of hydraulic modelling team providing simulated timeseries from an existing 1-D model (HEC-RAS) to use as boundary conditions in a morphodynamic model and other detailed hydraulic models. (2016)

Terminal 2 Container Capacity Improvement Project, British Columbia (for Port Metro Vancouver). Member of hydraulic modelling team assisting with the development of Strait of Georgia three-dimensional wave-current-sediment transport models. The proposed terminal expansion is located in the Fraser River delta, and has the potential to alter the natural regime of coastal processes that shape and maintain the inter-tidal portion of the delta. The model is to be used as a key tool to assess the relative effects of the selected port configuration. Findings will be used by other project teams, particularly the engineering and environmental teams. (2013).

River Hydraulics

Transport and Fate of Slag in the Columbia River, Washington State. Hydraulic modelling engineer in charge of developing 2-D hydraulic models (MIKE21 FM) of selected reaches in the Upper Columbia River to assess flow and sediment transport patterns. Modelling results were used to assess the accuracy of hydraulic and sediment transport predictions made by others using a 1-D model (HEC-RAS). (2011)

Nicomekl Sea Dam Fish Slot, Surrey (for City of Surrey). Hydraulic modelling engineer using an existing 1-D model (HEC-RAS) to investigate the impacts of adding a fish slot in the Nicomekl Sea Dam to allow upstream migration of salmon at high tide. (2015)

Sapperton Bar Sediment Transfer Analysis, Fraser River (for Metro Vancouver). Hydraulic modelling engineer responsible for developing a 2-D hydraulic model (River2D) of the Sapperton Bar reach of the Fraser River between Pattullo and Port Mann Bridges. The model was used to investigate the impacts of recent anthropogenic changes to the hydraulics computed for various flow conditions. (2010)

Fraser River Navigation Model, British Columbia, (for Canadian Coast Guard). Hydraulic modelling engineer responsible for forecasting hourly Fraser River water depths for the year 2009 using an existing unsteady 1-D MIKE11 mode. Generated data files for upload to the Canadian Coast Guard AvaDepth website for use by vessels navigating the Fraser River south arm. (2009)

Selected Publications and Presentations

Osler, M. and V. O'Connor. 2015. Sea Level Rise Vulnerability by the Decade, City of Surrey, British Columbia. 2015 CWRA BC Conference. November 18 – 19, 2015, Richmond, B.C.

Mannerström, M., M. Leytham, B. Walsh, V. O'Connor, M. Osler 2013. A Continuous Simulation Approach for Estimating Future Flood Hazards Due to Joint Occurrence of High Ocean Levels and High Runoff. CSCE 21st Canadian Hydrotechnical Conference, Banff, Alberta.

Vasquez, J., D. McLean, V. O'Connor, V. and A. Zimmermann 2012. Hydraulic Modeling for the Padma River Bridge, International Conference on Fluvial Hydraulics, River-Flow.

Lyle, T., K. Miller, and V. O'Connor 2012. Protect: Is Our Finger in the Dike. Planning on the Edge of Change. Planning Institute of British Columbia Annual Conference. May 29 – June 1, Harrison Hot Springs, B.C.

O'Connor V., T. Lyle, D. McLean and C. Menezes 2010. Checking the Math: A Review of MIKEFlood Modelling Following Recent Flooding of Lower Cowichan Valley, British Columbia. 63rd CWRA National Conference. June 15-18, 2010, Vancouver, B.C.

Mannerström, M., D. McLean, V. O'Connor, N. Peters 2009. The Fraser River Design Flood – the Flood of Record. 62nd CWRA National Conference. June 2009. Québec, QC.

Hanscomb Ltd.

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Proposal Support
for
Cost Estimating Services

to

**OPUS International Consultants
(Canada) Limited**
210 – 889 Harbourside Drive
North Vancouver, BC V7P 3S1

**Columbia Pollution Control
Centre – Upgrade to
Secondary Treatment
Project**

Submitted By:

Hanscomb

Local service...global experience
TOTAL PROJECT SUPPORT!

Hanscomb Limited
409 Granville Street, Suite 600
Vancouver, BC V6C 1T2
Telephone: (604) 685-1241

June 15, 2017

Hanscomb

Columbia Pollution Control Centre – Upgrade to Secondary Treatment Project
OPUS International Consultants (Canada) Limited
Cost Estimating Services

June 2017

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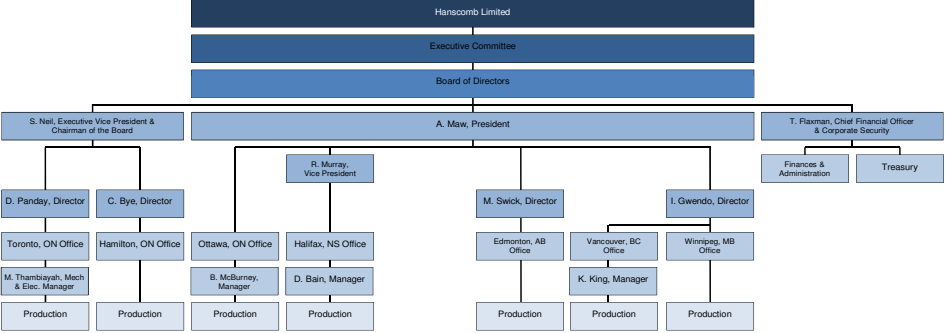
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A Respondent Profile

Vancouver Office, Corporate Size and Overall Experience

The Vancouver office will be in charge of this project and it come with a contingent of 3 full time staff with QS/Team Leader in Vancouver (Ken King). With 40 years of local experience from just our team leader we have extensive experience across Canada and regionally for these type of projects.

Hanscomb, established in Canada since 1957, has grown to seven offices including its head office in Toronto, and more than 60 professional staff becoming Canada's longest lasting leading independent organization of cost control and project support with an admirable international reach and reputation. Annually, Hanscomb provides services to clients both national and international in nature with total fees for services projected to exceed \$13 million in 2017. Hanscomb's extensive record of excellence is recognized and referenced as an authority in Canada on a variety of project support topics, such as cost guidelines. With this unique perspective, Hanscomb produces a number of periodical national reports for use by the entire construction industry for cost information and other areas of project support. Specifically for this project, the regular contingent of team member professionals in our Vancouver have a collective industry experience of more than 50 years ready to serve you, our client.



The nature of our work requires us to stay in constant touch with the construction market. In addition to supporting our extensive cost control work on behalf of our building industry clients, and unique among Canadian Cost Consulting firms, our ongoing cost research activities form the basis of a number of annual construction cost publications, including *Hanscomb's Yardsticks for Costing* and two publications in association with the Toronto Real Estate Board: *The Rough Guide to Building Costs* and the recently published *Advanced Rough Guide to Construction Costs*.

Hanscomb continues to work on projects throughout Canada and British Columbia at a steady pace, but will always have additional capacity to take on this assignment due to its well organized professional staff. All of our current projects are all well progressed and easily managed by Hanscomb Limited at this time. To ensure prompt delivery of services from our team, Hanscomb will make this project a priority deliverable from its Vancouver office, and should additional resources be required, any one of its other Western offices (Edmonton and Winnipeg) assigning senior management and technical staff as needed. Hanscomb is able to provide this level of service 'in-house' without the need of subcontractors.

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 OPUS International Consultants (Canada) Limited
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A Respondent Profile

Key Personnel



Office

Hanscomb Limited (Vancouver)
 Suite 600, 409 Granville St
 Vancouver, BC V6C 1T2
 Phone (604) 685-1241
 Cellular (778) 227-6902
 Fax (604) 682-9102
 e-mail: kking@hanscomb.com

Years of Experience

Hanscomb: 5 Total: 40

Professional Qualifications & Memberships

Professional Quantity Surveyor:
 Canadian Institute of Quantity Surveyors PQS

Member: Canadian Institute of Quantity Surveyors – British Columbia

Member: Royal Institute of Chartered Surveyors MRICS

Charter Member: Applied Scientific Technologists and Technicians of British Columbia ASCT

Ken King, PQS, MRICS, ASCT Vancouver Team Leader, Senior Cost Consultant

Project Role(s)

Overall responsibility for Estimate Review, Adjustments and Total Project Cost Estimate Deliveries.

Professional Experience

For the past 40 years, Ken has been intimately involved with the construction and real estate development industry in British Columbia and Alberta. Professionally trained and qualified as a Quantity Surveyor, Ken also has two diplomas in Urban Land Economics from the University of British Columbia (UBC), one in Appraisal and one in Real Estate Management. With this background, Ken has lectured at Vancouver Community College, Langara College, Douglas College, the University of Alberta and UBC. He has also presented programs featuring mortgage underwriting skills, consulting skills, public speaking and management techniques to such institutions as Canada Mortgage and Housing Corporation, Business Development Bank of Canada, Veterans Affairs Canada and the Certified General Accountants of British Columbia to name a few.

Ken has successfully delivered quantity surveying, project management and development management services to a wide range of P3, public and private sector building projects with a combined construction value well in excess of 30 billion dollars. He also has security clearances to work on PWGSC and RCMP projects.

Representative Experience

Prior to joining Hanscomb early in 2012, Mr. King's work experience includes contract and consulting roles for a number of companies and institutions, including, but not limited to, the following:

Alberta Infrastructure – Assistant Director, Cost Management Services
 Territory of Nunavut – Project Manager

City of Vancouver – Quantity Surveyor, Facilities and Properties

Since joining Hanscomb, Mr. King has been an integral part of many key infrastructure projects within the last 5 years that include, but are not limited to, the following:

- Ladysmith Waste Water Treatment Plant, Ladysmith BC
- Vancouver Airport Fuel Delivery Project, Richmond BC
- Surrey Sanitary Pump Station Replacement, Surrey BC
- UBC District Energy and Cogen Centre, Vancouver BC
- Surrey BioFuels Processing Facility, Surrey BC
- Kwadacha Bioenergy Project, Williston Lake BC
- Harmac Pacific Biomass Energy Project, Nanaimo BC

The above is not an exhaustive list

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Project Offices

Hanscomb will complete the majority of its work (75% or better) for this project from its Vancouver office noted below. The other percentage of works relate to the mechanical and electrical cost estimating specialties which will be completed from our head office in Toronto.

- .1 **Hanscomb Limited (Vancouver), Suite 600 – 409 Granville St, Vancouver BC, V6C 1T2**
- .2 Hanscomb Limited (Edmonton), Suite 503 – 10080 Jasper Ave, Edmonton AB T5J 1V9
- .3 Hanscomb Limited (Winnipeg), Suite 810 – 330 St. Mary Ave, Winnipeg MB R3C 3Z5
- .4 Hanscomb Limited (Hamilton), Suite 1705 – 25 Main St W, Hamilton ON L8P 1H1
- .5 Hanscomb Limited (Toronto), Suite 900 – 40 Holly St, Toronto ON M4S 3C3
- .6 Hanscomb Limited (Ottawa), Suite 605 – 151 Slater St, Ottawa ON K1P 5H3
- .7 Hanscomb Limited (Halifax), Starlight Gallery, Suite 301 – 7071 Bayers Rd, Halifax NS B3L 2C3

We have provided a complete list of all our offices from coast to coast to coast. Should additional resources ever be required for any OPUS project, any one of our professional staff will be available from these other offices.

Sub-Contractors

Given the depth of the professional staff employed by Hanscomb, we will not be engaging outside sub-contractors for any OPUS assignment unless specifically directed to do so by our client.

Response Time

Hanscomb commits to providing access to the Team Leader (Ken King or equivalent) within 24 hours over any normal business day. All other staff will be available within 48 hours under the same conditions. Hanscomb can provide most of its completed reports within 10 to 15 working days upon receipt of all necessary documentation. In all cases, we will endeavour to meet any and all reasonable timelines requested of Hanscomb with prior notice.

Location

The location of the services that Hanscomb provides to OPUS will be carried out from the Vancouver offices as noted above.

Reporting

Hanscomb can provide a wide variety of reporting documents to OPUS for a variety of services. With regard to cost estimating services, we typically provide the following when the appropriate completed documentation is provided:

- Order of Magnitude Estimates
- Class 'D' Conceptual Estimates
- **Class 'C' Preliminary Estimates**
- Class 'B' DD Estimates
- **Class 'A' Detailed Estimates**
- CO Verification Estimates

During Value Engineering and Risk Analysis for any OPUS project, Hanscomb will provide the appropriate value assessment or risk analysis reports on an 'as-needed' basis.

Finally, when required, Hanscomb is proficient in providing monthly Payment Certification reports for clients such as OPUS to ensure the proper performance of the Contractor throughout the project regarding both the budget and the schedule.

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Term Qualifications, Requirement Deviations

Not Applicable. Hanscomb does not have any term qualifications or requirement deviations of this RFP.

Innovation

Aside from the traditional role that many Quantity Surveyors hold, Hanscomb is proud to provide services that give TOTAL PROJECT SUPPORT. Fundamentally this means that Hanscomb can be an integral and trusted advisor to OPUS for those roles that fall between the actual design services or construction of any project (as evidenced in our value added services noted herein).

One example of where this manifests itself in an innovative way is that Hanscomb can assist OPUS in creating a Project Charter and a Project Scope Rationale Matrix.

First, the Project Charter is a workshop and an agreement to hold all parties accountable to the goals of the concept for each project.

Second, the Project Scope Rationale Matrix is a framework that we develop for the entire team that provides a range of suitable materials or systems for the design team that, if followed, will ensure the project meets its functional, budgetary and timeline goals. This Project Scope Rationale Matrix is a guide for the team coming out of the Project Charter to ensure the success of the entire team and the project. This approach was used most notably on Vancouver's Library Square project which was built on time and on budget.

Value Add

Beyond the core services identified within any RFP, Hanscomb is pleased to note the following value added services we offer to a wide variety of clientele:

- Construction stage cost control, claims analysis and negotiation support
- Project budget status reporting
- Life cycle costing
- Value management workshop facilitation
- Project risk assessment
- Litigation support
- Construction loan monitoring and payment certification
- Procurement strategy and business case development support
- Technical advisory services for P3 and Design-Build projects
- Independent certification services for P3 and Design-Build projects
- Applied research
- Cost benefit analysis
- Operational readiness planning
- Partnering and project charter support
- Project feasibility analysis including 'What-If' modelling
- Project controls monitoring and support (i.e. KPI's such as SPI, CPI and Trend Analysis)
- Project scheduling and cash flow modelling
- Social capital analysis including benefit and drawback modelling

Other Information

Hanscomb Vancouver is proud of its sustainable operations model where staff are to use cycling and public transit (SkyTrain) for our operational needs unless otherwise precluded.

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B Quotation, Deliverables and Schedule

Project Description – This project involves the design and construction of the infrastructure upgrades that includes the upgrade to the secondary treatment system of the Columbia Pollution Control Centre for the Regional District of Kootenay Boundary as per the current RFP.

Hanscomb's Deliverables – To provide a single Class 'C' Preliminary Design capital cost estimate as defined within the RFP in both elemental and trade format. Also, to provide a single Class 'A' Detail Design capital cost estimate as defined in the RFP in both elemental and trade format. Each of our digital PDF elemental and trade format estimates can be complete and ready for your review in approximately 10 - 15 business days from receipt of all relevant design documentation. Please note that our fee excludes all expenses (such as travel outside of the Greater Vancouver area) and applicable taxes. If expenses are incurred, these items would be billed at cost as would be approved and acceptable to the Regional District of Kootenay Boundary.

Fee Schedule:

Cost Consultant	Rates	Class 'C' @ Prelim Design	Class 'A' @ Detail Design	Total Fees and Hours
Ken King	\$135/Hr	\$270	\$540	\$810
<i>Lead QS</i>		2 Hrs	4 Hrs	6 Hrs
Dennis Smith	\$120/Hr	\$1,320	\$1,800	\$3,120
<i>Mech. QS</i>		11 Hrs	15 Hrs	26 Hrs
Mariola Ilia	\$120/Hr	\$1,320	\$1,800	\$3,120
<i>Elect. QS</i>		11 Hrs	15 Hrs	26 Hrs
Dmitrii Volokitin	\$90/hr	\$1,980	\$2,790	\$4,770
<i>CEC</i>		22 Hrs	31 Hrs	51 Hrs
Total Fees and Hours		\$4,890	\$6,930	\$11,820
		46 Hrs	65 Hrs	111 Hrs

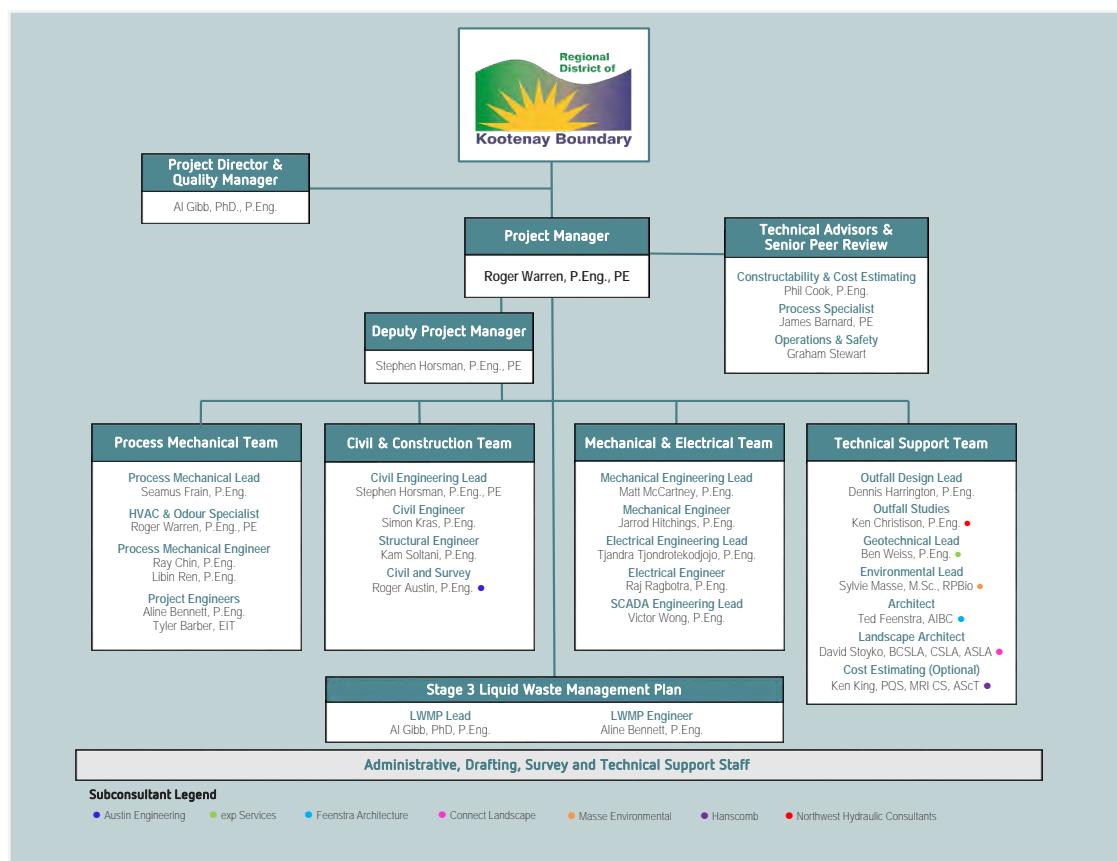
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APPENDIX B

Additional Resumes

Updated Organization Chart
Stage 3 LWMP, Predesign and Design Services for the
Columbia Pollution Control Centre – Upgrade to Secondary Treatment



Additional personnel added to the Project Team includes:

- **Ken Christison, P.Eng.**, from Northwest Hydraulic Consultants, who will perform the outfall studies identifying the optimum discharge location and extension for the outfall.
- **Graham Stewart**, former Utilities Operations Supervisor for the City of Campbell River, will provide review of the designs for ease of operations and maintenance, and ensure they are in compliance with health and safety requirements.
- **Libin Ren, P.Eng.**, as Process Mechanical Engineer, will provide specialist expertise related to the design of small footprint wastewater treatment facilities.



KEN J. CHRISTISON, M.ENG., P.ENG.

Hydraulic Design

Education

M. Eng. in Civil Engineering,
University of Alberta

B.Sc. in Civil Engineering,
University of Alberta

License/Affiliations

Registered Professional
Engineer, Alberta, British
Columbia, and the Yukon

Years Experience

20 years

Years with Firm

20 years

Areas of Expertise

Responsible for more than
100 municipal physical
hydraulic model studies

Completed numerous drop
shaft evaluations analyzing
both capacity and air
entrainment characteristics

Currently manages NHC's
Vancouver hydraulics
laboratory

Ken Christison has strong technical and managerial skills in hydraulic engineering with particular emphasis on hydraulic design and modeling applications. He has been involved in hydraulic model design and testing, data acquisition and processing, and report preparation. Modeling experience includes pump stations, pipelines, spillway design and rehabilitation projects, inlet/outlet facilities, hydroelectric developments, river intake designs, and a range of river processes and sediment management investigations.

Selected Project Experience

Project Manager, City of Columbus Ohio OSIS Augmentation Relief Sewer (OARS) Hydraulic Analysis, City of Columbus, OH. An ongoing series of physical hydraulic model studies and design reviews to evaluate the hydraulics a proposed major upgrade to the City's stormwater system. The general objective of the physical model studies was to evaluate the proposed system and develop a solution to remedy potential operational shortfalls.

Densmore Stormwater System Physical Hydraulic Model and Analysis, King County, WA. A 1:6 scale physical hydraulic model of stormwater system. The general objective of the physical model study was to evaluate the existing system and develop a solution to remedy existing operational shortfalls. The specific study objectives included evaluating air venting and flow stabilization while considering applicable permitting issues that restrict construction in the area of interest.

City of Los Angeles Air Treatment Facility, Los Angeles, CA. 2011. Review and testing of the Air Treatment Facility model owned by the City of Los Angeles, Bureau of Sanitation. The scope of work included using the City of Los Angeles hydraulics laboratory and the physical model of the existing ECIS drop structure to assess air demand and air flow. The drop structure evaluated for a range of flow rates up to the design flow capacity of the structure. The data that were collected included: air flow rate being pulled into the drop structure, air flow rate venting through the air flow return line in the drop structure, air flow continuing downstream of the air flow return line, and still photographs and video of the tests.

Centennial 2745 Pump Station: Project Manager for a 1:3.05 scale physical hydraulic model of the new Centennial 2745 Pump Station for the Las Vegas Valley Water District. Northwest Hydraulic Consultants (NHC) was retained by GC Wallace to construct and test. The proposed pump station will have a capacity of 40,400 gpm.

Rose Coulee Pump Station: Project manager on a 1:12 scale model to evaluate the flood control pump station at Rose Coulee in Fargo, North Dakota. The proposed pump station is a cast-in-place concrete structure with 6 pump bays, a superstructure housing the electrical/control equipment and a gravity outlet structure. The three large pumps are rated at 400 cfs each and the three small pumps are rated at 200 cfs each.

City of Phoenix 24th Street WTP GAC Implementation Design Project Phase 2 Post-Filter GAC Contactor Design: Project manager on a physical hydraulic model to determine if an initial design of provided satisfactory approach hydraulics to the pumps and to develop modifications to improve flow to the pumps. The layout surface and subsurface vortices formed and excessive velocity fluctuations entering

water resource specialists

Ken J. Christison, M.Eng., P.Eng.

the pumps. Vane/grating baskets attached to the pumps were developed that provided acceptable approach flow to the pumps and all adverse hydraulics were eliminated.

Brightwater Conveyance System, King County, WA. Detailed hydraulic review and design development of a number of drop shafts along the Brightwater Conveyance System developed by King County. The Study included three conceptual design review and 1:6 scale physical hydraulic model of tangential inlet drop structure. The general objective of the physical model study was to develop structures that were capable of safely conveying flow vertically over long distances while accounting for downstream air entrainment and venting.

McCook Reservoir Tunnel Distribution System Conduit Control Gates. A 1:5 scale physical hydraulic model of McCook Reservoir Distribution Tunnel System. The general objective of the physical model study was to provide design data to be used in designing the system of bonneted gates. The specific study objectives included determining dynamic pressures at various locations on the control gate at fixed partial and full gate openings measuring dynamic pressures at various locations in and immediately downstream of the control gate slots, documenting flow patterns approaching and leaving the gates, developing a gate rating curve (discharge coefficient) at selected gate openings, and, measuring air demand through the air vents.

UEL Drainage Facilities Drop Structure, GVRD, Vancouver, BC. A 1:7.38 scale model study of the intake and drop shaft structure. Commissioned to determine the capacity of the existing structures, examine venting and downstream submergence characteristics, observe air entrainment through the system, and examine the potential to increase capacity by improving inflow distribution.

Bushard Diversion Structure, Orange County, CA. A design review and physical model study of the Bushard Diversion Structure. The overall objective of the model study is to determine if the proposed diversion structure provides adequate flow control with minimal solids deposition. Specific objectives include verifying intended operational control at varying flows and measure flow distributions with unthrottled and throttled valves/gates for range of inflow discharges and downstream pump station discharges, verifying flow patterns and turbulence within the structure under each of the above flow conditions, assessing the potential for free-surface and subsurface vortices under all flow conditions; and developing corrective actions to mitigate undesirable hydraulic conditions and/or sediment deposition.

Mill Creek/Peaks Branch Drainage Relief Tunnel, Dallas, TX. An ongoing 1:16 scale physical model of a proposed vortex drop shaft and a section of the 30 ft diameter tunnel to evaluate the effectiveness of structure with regards to conveyance, air entrainment and release, energy dissipation, and to develop any modifications to the design to optimize the performance. The project is in the City of Dallas and includes a deep tunnel for storm-water conveyance. The current proposed tunnel layout is 30 feet in diameter, varies in depth from 110 to 170 feet, and includes several drop connections to existing near-surface storm-drain lines. The tunnel will outfall to an existing open channel and will include a 20,000 to 30,000-gpm pump station for emptying the tunnel during inspection and/or maintenance purposes.

Madison Valley CS System, Seattle, WA. A 1:8 scale physical hydraulic model of SPU's Madison Valley CS System. The physical model was over 300 ft long and was developed to evaluate the existing system and validate a parallel numerical modelling effort, and where applicable, develop a solution to remedy existing operational shortfalls. The specific study objectives included evaluating air venting and flow stabilization while considering applicable permitting issues that restrict construction in the area of interest.

San Antonio Backup Pipeline Project Physical Hydraulic Model Study, SFPUC, CA. A 1:8 scale physical hydraulic model of a current and future cone-valve discharge points into San Antonio Creek at the base of Turner Dam. The main objective of the model study was to investigate the hydraulic characteristics of both of the existing and proposed discharge outlet structures into a common discharge. Modifications were considered in the model to reduce and redistribute velocities and protect the tailrace. Modifications considered included installing fillets, baffles, and louvers in the existing chamber and adding a concrete pad within the tailrace.

PUBLICATIONS

Babb, A.F., J. Cain, K. Christison, and M Ahmann, 2000. "Spillway Deflectors for Dissolved Gas Reduction at McNary Dam", Proceedings of the International Conference: New Trends in Water and Environmental Engineering for Safety and Life: Ecocompatible Solutions for Aquatic Environments, Italian Hydrotechnic Association, Capri, Italy.

Ken J. Christison, M.Eng., P.Eng.

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Graham Stewart

Operations & Safety and Site Liaison

Graham is a seasoned municipal supervisor with over 37 years of experience. He is well-versed in on-site construction supervision and possesses an innate ability to lead diverse teams. He has been involved in both the water and wastewater services as an owner representative in many new and rebuild projects.

Graham was previously employed with the City of Campbell River as a Water and Wastewater Supervisor (2002-2016), where he was responsible for various new build and upgrades projects, including water treatment plants and sewage pump stations. He also worked for the Town of Gibsons as a Public Works Supervisor (1995-2002), managing utility and road upgrades.

Employment History
Opus International
Consultants (Canada) Ltd.
Senior Technical Advisor
2016 to Present
City of Campbell River
Utilities Operations
Supervisor
2006 — 2016
City of Campbell River
Water and Wastewater
Supervisor
2002 — 2011
Town of Gibsons
Public Works Supervisor
1995 — 2002
Village of Gold River
Labour to Assistant Public
Works Supervisor
1980 — 1995

Relevant Project Experience

WATER AND WASTEWATER

UV Water Treatment Plant

City of Campbell River

Graham was the *Site Liaison*, involved with the design, budget and construction of the water treatment plant.

Chlorine Station Upgrade

City of Campbell River

As *Site Liaison*, Graham was assisted with a chlorine station upgrade for the City of Campbell River.

Sewage Lift Station

City of Campbell River

Graham was the *Site Liaison* for this project. The work involved the installation of a new sewage lift station and the upgrade of another.

Operation of Roads, Parks and Utilities

Town of Gibsons

Graham was the *Public Works Supervisor* for multiple projects in Gibsons. His responsibilities included planning, budgeting and construction of projects, including the complete upgrade to the main commercial area. The scope of work involved utilities, road upgrades and street amenities.

Recycling, Collection and Processing Plant

Village of Gold River

Graham was the *Labour to Assistant Public Works Supervisor* for various projects in Gold River. A notable achievement is his involvement in the development and building of one of the first recycling collection and processing plants in British Columbia.





Libin Ren, M.Sc., P.Eng.

Process Mechanical Engineer

Libin has 20 years of extensive experience in the design, management, construction support and commissioning of municipal wastewater conveyance and treatment facilities. His Master's degree in Environmental Engineering specialized in water and wastewater treatment. He is proficient in project scheduling, budget estimating, and cost control. Libin has comprehensive management and communication skills in coordinating with other disciplines, equipment vendors, third party contractors, regulatory organizations and clients. His experience in working for SUEZ Environmental (Degremont) and Veolia Water Systems provides him with an in-depth understanding of small-footprint processes and innovative designs. Libin's technical strengths include water and wastewater treatment process analysis and modelling, process design, specifications, hydraulic analysis, instrumentation and control, and troubleshooting.

Education

M.Sc., Environmental Engineering, Beijing Technology and Business University (1996 – 1999)
B.Sc., Environmental Engineering, Beijing Technology and Business University (1990 – 1994)

Professional Registration

Alberta

Professional Affiliations
Registered Professional Engineer, Association of Professional Engineers and Geoscientists of Alberta

Relevant Project Experience

TECHNICAL SKILLS

- Led engineering teams for water and wastewater treatment engineering design in all phases.
- Prepared and maintained engineering design schedules, and conducted engineering budget estimates and cost control.
- Collaborated with other disciplines and third party contractors to ensure the engineering design was carried out on schedule and to the required standards.
- Communicated and coordinated with clients to meet requirements within the frame of contracts.
- Hosted technical validation and project progress review meetings.
- Performed duties on site for construction support and project commissioning.
- Acted on the Health & Safety ("H&S") Execution Plans and provided remediation resolutions to the design.
- Provided on-job mentoring and training to junior engineers.
- Built water models as the design basis for water and wastewater treatment projects.
- Performed water and wastewater and sludge treatment process analysis and technologies selection.
- Developed Process Flow Diagrams ("PFD") and Piping & Instrumentation Diagrams ("P&ID"), process control philosophy, and technical specifications.
- Sized critical equipment, e.g., high density settler, sand filter, granular activated carbon adsorption, biological filter, dissolved air flotation, activated sludge reactor, ion exchange, ultrafiltration ("UF") and reverse osmosis ("RO") processes.
- Carried out process calculations including chemical injection, pump station, air compressor, tank, control valve, plant hydraulic, pipe sizing and more.
- Conducted equipment material selection according to water and wastewater projects.



MUNICIPAL WATER AND WASTEWATER

Qingdao Laixi City WWTP

Responsible for schedule, budget and cost control at a \$10M, 100,000 m³/day municipal wastewater treatment plant. As *Engineering Manager*, Libin peer reviewed PFD, P&ID, H&S actions, process designs, specifications and vendor technical quotations. He coordinated seamlessly with a multi-discipline group of professionals, third party contracts and the client. Due to Libin's effective project management, the design was completed ahead of schedule by two months. He also provided support to construction and commissioning on-site. The treatment process consists of biological filters (Biofor N & Biofor DN), high density settler (Densadeg), sand filter (Aquazur V) and ozone disinfection.

Macao MSR Phase II WTP

This \$19M, 60,000 m³/day facility is the most compact drinking water plant ever installed in China. As *Lead Design Engineer*, Libin designed dissolved air flotation and the first immersed UF (Zenon) application in China, which simplifies the design and saves the footprint significantly. By eliminating primary settler and sand filters, he saved 40% in space and civil work in the design by eliminating primary settler and sand filters. The successful design became a "role model" for following projects.

Tianjin Jinbin WTP

This \$9M, 500,000 m³/day drinking water plant is equipped with Densadeg settling and AquazurV technologies. As *Design Engineer* for Degremont, Libin adopted a new type of Polyfloor Slab in Aquazur V for the first time. This filtration slab saved 60% in construction costs, and the risk of faulty slab construction was reduced by 80%. By optimizing the design of the piping and the pump station, he reduced the backwash pump size and saved 30% in costs.

Handan East WWTP

Libin was the *Design Engineer* for a \$13M, 80,000 m³/day municipal wastewater treatment plant. He designed the wastewater distribution, high density settler (Densadeg), sand filter, pump station, sludge dewatering and chemical injection. The design was completed two months ahead of schedule, and the design saved 20% in project costs.

Shanghai Linjiang WTP Debottlenecking & Expansion

According to Veolia, this \$84M, 600,000 m³/day drinking water plant has the most complicated treatment process in the world. Treatment units include pre-ozonation, settler (Actiflo), rapid sand filter (TGV), ozonation, activated granular carbon filter (GAC), UV disinfection and chemical injection. As *Design Engineer*, Libin developed PFD, P&ID, specifications and plant general layout. He also calculated and designed the Actiflo, TGV and GAC.

Baoji Fengjiashan WTP Expansion (120,000 m³/d, \$12M)

This \$12M, 120,000 m³/day drinking water plant consisted of grit removal, GAC, Settler (Actiflo), rapid sand filter (TGV), and a treated water tank. As *Design Engineer*, Libin prepared PFD, P&ID and specifications. He designed the main treatment units including Actiflo, TGV, chemical injection and also the general plant layout.

Beijing Bijie WWTP

Libin was the *Design Engineer* for this 80,000 m³/day municipal wastewater treatment plant. He calculated and designed settler (Multiflo), biological reactor (Biostyr), disinfection, chemical injection and sludge dewatering. By carrying out the design in a fast track manner, he helped the client save 15% in labour costs.

Beijing Beiyuan WWTP

This was a concurrent project for the 80,000 m³/day Beijing Bijie WWTP. As *Design Engineer*, Libin assured consistent quality design, and calculated and designed settler (Multiflo), biological reactor (Biostyr), disinfection, chemical injection, and sludge dewatering.

INDUSTRIAL WASTEWATER TREATMENT

Wuhan Chemical Industrial Park

As *Engineering Manager*, Libin led a multidiscipline engineering team for a \$12M, 12,000 m³/day centralized chemical industrial park wastewater treatment plant. He provided engineering plans, schedule, budget estimation, and carried out engineering cost control. He also collaborated with project management, the construction team, third party partners and the client, and provided on-site training to junior engineers. Libin conducted consistent construction inspections on-site. He reviewed design document including PFD, P&ID, calculations, and the process control philosophy. The treatment process consists of oil separator, activated sludge reactor ("A/O"), dissolved air flotation ("DAF"), high density settler (Densadeg), sand filter (Aquazur V) and granular activated carbon filter (GAC).

Tianjin Tiantie Steel Co. WWTP

As *Engineering Manager*, Libin led the engineering team to carry out the fast track detailed design for a \$8M, 28,800 m³/day steel industrial wastewater treatment plant. His efforts were key in facilitating the engineering team with proficient capability for work in high pressure work environment. He provided the engineering schedule, budget estimation, and cost control. His efforts helped save 20% in engineering costs. Libin communicated closely with client to ensure the design met clients up-to-date requirements. The reduced backwash pump size optimized the design and reduced project costs by 15%. Libin provided construction support for the main treatments units, including high density settling (Densadeg), sand filter (Aquazur V), chemical injection and sludge dewatering.



Shanghai Chemical Industrial Park WWTP Phase IV
As *Engineering Manager*, Libin led the engineering team working on the detailed design for a \$12M, 13,000 m³/day centralized chemical industrial park wastewater treatment plant. He reviewed design documents including PFD, P&ID, calculations and drawings, reported design progress on biweekly basis, and inspected construction on-site on a regular basis. The main treatment units include A/O, secondary clarifier, DAF, ozone disinfection and sludge treatment.

CNPC Sichuan Petrochemical WWTP
The \$47 M, 60,000 m³/day CNPC Sichuan Petrochemical WWTP is a comprehensive refinery wastewater treatment and reuse plant. As *Lead Design Engineer*, Libin was responsible for detail design, budget and schedule for the ethylene wastewater treatment facility, refining wastewater treatment, reuse treatment and sludge treatment. He prepared PFD, P&ID, process descriptions, control philosophy, process calculations, and specifications. He also reviewed equipment vendor technical quotations and verified the material selections. The main technologies include oil separator, DAF, A/O, high density settler (Densadeg), sand filter, ozonation, biological filter (Biofor), UF, RO, chemical injection and sludge dewatering. The detailed design was completed three months ahead of schedule and under budget.

Chengde Xinxin Vanadium & Titanium Co. WWTP
This was a wastewater treatment project for 36,000 m³/day Vanadium and Titanium processing plant. The treatment process mainly consists of grit removal, high density settler (Densadeg), and sand filter (Aquazur V). As *Design Engineer*, Libin developed PFD and P&ID, and designed the Densadeg, Aquazur V, chemical injection and sludge dewatering. He also computed the operation sequence of sand filters. By optimizing the design of high density settler, the polymer dosage was reduced by 20%.

Baxian Aluminum Process WWTP
This project involved wastewater treatment for an 80,000 m³/day aluminum processing plant. The treatment process consists of primary pre-treatment, high density settler (Densadeg) and sand filter (Aquazur V). As *Design Engineer*, Libin developed PFD and P&ID, and designed the Densadeg, Aquazur V, chemical injection and sludge dewatering.

Shanghai Chemical Industrial Park WWTP Phase II
The main treatment units for this \$10M, 12,500 m³/day centralized chemical industrial park wastewater treatment plant included an A/O, secondary clarifier, chemical injection, and pump station. As *Design Engineer*, Libin was also responsible for the plant layout. He maintained a good relationship with the client, which benefited the following Phase IV expansion.

Handan Steel Co. WWTP
As *Design Engineer* for a 30,000 m³/day wastewater treatment plant for the steel processing industry. Treatment units include grit and grease removal, high density settler (Densadeg), sand filter (Aquazur V), chemical injection and sludge dewatering. Libin designed the plant in a single two-story building to accommodate the very limited space. He standardized the design for steel wastewater treatment with small footprint, reducing construction costs by 10 to 15%. Libin also developed the PFD and P&ID.

Wool Scouring Effluent Treatment Project
This project was a three-year research collaboration with the Commonwealth Scientific and Industrial Research Organization ("CSIRO") of Australia. Libin led a group of engineers to conduct lab research and analysis of wool processing effluent in wool processing factories, national lab in Beijing, and the CSIRO lab in Geelong, Australia. By adopting improved scouring sequence and increasing grease recovery, he reduced the ratio of scouring water to wool from 20/1 (W water/W wool) to 5/1. The project won the Technology Process Prize from the Ministry of Water Resources of China in 2002.

OTHER WATER/WASTEWATER TREATMENT PROJECTS

Early in his professional career, Libin completed additional water and wastewater treatment projects including swimming pool water, office building gray water, fast food processing water, oily industrial wastewater, pulp and paper wastewater, pharmaceutical wastewater, and more.

PRODUCED WATER TREATMENT

MEG Energy Christina Lake Regional Project 2BX
Libin conducted detailed design for a 33,000 m³/day water treatment facility for heavy oil SAGD project. He built water models, developed PFD and P&ID, and debottlenecked the design basis for project expansion. He also carried out calculations of pumps, tanks, chemical injections, hot lime softener ("HLS"), induced gas flotation ("IGF"), oil removal filters, ion exchange (WAC/WAC) and facility hydraulics.

Devon NEC Pike Place Phase 1A (18,000 m³/d)
Libin was responsible for the detailed design of a 18,000 m³/day water treatment facility for heavy oil SAGD project. He completed process analysis and detailed design, developed PFD and P&ID, built water models, and sized the oil skim tank, HLS, IGF, oil removal filters and ion exchange (WAC/WAC).



Devon NEC Jackfish Phase 3 Construction Support

Libin acted as a site liaison between the construction site, engineering team, and the client. He answered revolving questions from the construction site and provided detailed resolutions for non-conformity technical issues for this 17,000 m³/day water treatment facility. Libin also verified and corrected equipment calculations and process specifications, i.e., for pumps, tanks, HLS, ion exchange (WAC/WAC) and chemical injection.

JACOS Hangingstone Expansion Project

Libin conducted the detailed design for a 20,000 m³/day water treatment facility for a heavy oil SAGD project. He developed PFD and P&ID, and provided designs for the water treatment process, equipment, hydraulic, and pipe sizing. Libin also participated in HAZOP meetings, identifying hazards and risks of the design and providing remediation measurements.



Opus International Consultants (Canada) Ltd.
#210 — 889 Harbourside Drive
North Vancouver, British Columbia V7P 3S1

opusinternational.ca



June 26, 2017

Our File: 960-091

Regional District of Kootenay Boundary
202-843 Rossland Avenue
Trail, BC V1R 4S8

Attention: Goran Denkovski, Manager of Infrastructure and Sustainability

Dear Sir:

RE: CPCC Design and LWMP Stage 3 – RFP Evaluation

Background

TRUE Consulting has recently provided assistance to the RDKB in preparation of a Request for Qualifications document, as well as a Request for Proposal document associated with the Columbia Pollution Control Centre (CPCC) Design and Liquid Waste Management Plan (LWMP) Stage 3 completion.

On May 30, TRUE provided evaluation comment via email regarding a submission by Opus International Consultants (Canada) Ltd (OPUS) for the Request for Qualifications. Key comments provided in that RFQ evaluation are summarized as follows:

1. Project Understanding

- OPUS provided a thorough description of key issues applicable to the WWTP upgrading design, stemming from past LWMP work.
- Given OPUS' long history of involvement with the RDKB's LWMP and CPCC improvements, it is likely not possible for another firm to have a better understanding of the project requirements.
- OPUS has assembled a project team with the intent of targeting the 'key issues', and has identified specific experienced individuals within their organization to provide internal peer review.
- OPUS could provide a better description of the 'heat recovery study' and the Stage 3 LWMP scope of work in their proposal document.

2. Proponent Qualifications

- Relevant examples were provided to highlight OPUS' experience. The project sheets for Ladysmith and Salmon Arm wastewater treatment plants are great examples of similar scope of work, similar sized projects, some similarities in issues to be resolved.

2-860 Eldorado St ■ Trail BC ■ V1R 3V4 ■ www.true.bc.ca ■ tel 250.368.8707 ■ fax 250.368.8708

ENGINEERING ■ PLANNING ■ URBAN DESIGN

CPCC Design – RFP Evaluation
Attn: Mr. Goran Denkovski

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- The project team assembled includes several firms that OPUS has worked closely with over a number of past wastewater treatment plant upgrading projects.
- OPUS has identified numerous project team members for certain tasks (process mechanical engineer, civil engineer). This provides confidence that OPUS has the staffing depth to support the project.
- With the exception of one local firm (Austin Engineering), it appears that OPUS has worked with all the proposed sub consultants on at least one project in the past. Since OPUS kept many of these team members together for several projects (internal staff and some sub consultants), TRUE would expect their management capability of the team would be high.

Request for Proposal Evaluation

On June 22, the RDKB received a proposal from OPUS for the CPCC Design and LWMP Stage 3 project. TRUE's evaluation comments of this recent proposal submission are noted below.

1. Project Methodology

- OPUS's submission is clear and easy to understand. They have requested to add members to the project team with focused experience on the proposed style of treatment plant, the long terms operations, and the river outfall. The river outfall was an element that TRUE noted during the RFQ evaluation as needing more clarity. OPUS's proposed specialized subconsultant for the outfall design ensures appropriate experience is allocated for that component of the project.
- Deliverables or outcomes are identified for every scope of work task, and for each project phase. Scope of work is split into three project 'phases' (Preliminary design, Design, and LWMP Stage 3). The breakdown of project phases and tasks will assist with schedule and budget control. Key review points are provided for RDKB at the 30% (preliminary design), 60% and 90% (detailed design) completion milestones.
- Geotechnical assumptions for the planned investigation appear to be appropriate for the project site.
- Hydrotechnical assumptions have been made for an approximate length (100m) of the proposed outfall extension. Initial hydrotechnical review work could result in changes to the final scope of work (and cost) associated with the outfall.
- 3D renderings of the CPCC site (prepared for up to 3 architectural concepts) will provide a solid understanding on the visual impacts to the site, and will be useful for inclusion in any LWMP Stage 3 public consultations.
- Proposed LWMP Stage 3 works have been clarified, and are noted to be relatively minimal in relation to the Stage 1 and 2 work. The Stage 3 work (notably, the public consultation) can benefit from the information generated during the CPCC preliminary and detailed design.
- Optional works are identified, for consideration by RDKB. These include:
 - Preparation of equipment pre-purchase contracts for items with extended delivery times
 - Provision of independent, third party review of construction cost estimates.
 - Field trips to reference facilities with RDKB staff to view major process units and to discuss pros and cons

CPCC Design – RFP Evaluation
Attn: Mr. Goran Denkovski

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- Attendance at public open house by sub consultants
- Participation in 'Value Engineering' review near the completion of the Preliminary design phase
- Detailed design options:
 - i. full CPCC SCADA upgrading design
 - ii. evaluation of reclaimed water for in-plant use during the Preliminary design phase,
 - iii. heat recovery and reclaimed water system design during the Detailed design phase; depending on outcomes and recommendations of the preliminary work

2. Project Schedule

- OPUS has provided a detailed schedule inclusive of 81 'Task' identification numbers, to assist with schedule tracking through completion of the work.
- Milestone dates are included, with the project stages defined as:
 - Preliminary design occurring July through to mid November 2017
 - LWMP Stage 3 occurring July 2017 through to end of March 2018
 - Detailed design occurring mid November 2017 through to end of March 2018

3. Fee Estimate

- OPUS uses an 'earned value' method of managing budget and schedule, which will provide a clear indication of whether there are any cost overruns or savings being achieved, relative to work tasks identified.
- Total proposed fees of \$1,406,933 are lower than the grant funding application budget of \$1,572,000.
- It is worth noting that the bulk of the engineering services are to be completed by OPUS 'in house'. This will assist in cost control for the design work. Subconsultant fees are estimated at approximately \$185,000, or 13% of the total fee estimate.
- OPUS appears to propose appropriate amounts of senior engineering input to the project, including almost 2300 hours of senior staff time (relative to an overall staff contribution of approximately 8900 hours). Half of OPUS' senior staff time (1200 hours) is from three individuals: Roger Warren (project manager), Steven Horsman (deputy project manager), and Al Gibb (project director).
- Fees associated with OPUS' architectural subconsultant are estimated at \$76,000. Although this is a small percentage of the overall engineering scope of work, architectural details have potential for significant construction cost increases. RDKB and OPUS will have consideration for managing this during the design review, relative to the project aesthetic objectives.
- Additional fees associated with Optional Works are estimated to be in the range of \$150,000, depending on the final scope of completed. Some of these items are dependent on outcomes of Preliminary design work. All of these items will need to be reviewed and a decision made by the RDKB.

CPCC Design – RFP Evaluation
Attn: Mr. Goran Denkovski

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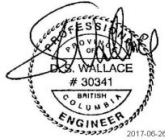
Closure

The proposal provided by OPUS is clear and complete. The scope of work, schedule, and fee estimate are well defined. OPUS' system of project management including schedule and fee control are comprehensive. OPUS' familiarity with the project intentions and experience with similar projects in other communities makes them a good choice for the proposed work.

In addition to comments noted above, TRUE's completed evaluation 'scoring' matrix for both the Qualifications and Proposal submissions are attached to this letter. We expect this information will assist the RDKB in moving this project forward. If you have any questions, please contact the undersigned.

Yours truly,

TRUE Consulting



Scott Wallace, P.Eng.

SW/slf

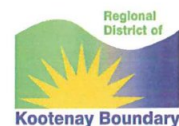
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CPCC RFQ Design Evaluation

Evaluation Criteria	Scoring	Opus
1. Project Understanding		
a) • Understanding of project requirements	25%	22%
b) • Solution adapted to goals, needs and objectives	20%	18%
c) • Clarity of the submission (concise, consistent, comprehensible and good format)	5%	4%
2. Proponent Qualifications		
a) • Reputation, proven performance and relevant experience of the proponent's firm.	10%	8%
b) • Proposed team's experience in similar projects	20%	17%
c) • Technical and management capability, capacity, skills and qualifications of the proponent and any proposed subcontractor(s)	10% 10%	8% 9%
d) • Minimum of two references based on past performance for similar projects (high quality finished project, goals and time frames achievement)		
TOTAL	100%	86%

REVIEW BY: SCOTT WALLACE
TRUE CONSULTING
DATE: MAY 30, 2017



CPCC Design and LWMP Stage 3 - RFP Evaluation

Evaluation Criteria	Scoring	Opus
1. Project Methodology (35%)		
• Clarity of the submission (concise, consistent, comprehensible and good format)	5%	5
• Understanding of project requirements	5%	5
• Description of planned tasks and scope of work	25%	23
2. Project Schedule (30%)		
• Clarity of timelines associated with proposed scope of work	5%	5
• Adequacy of proposed resources dedicated to this project	10%	10
• Proven performance and ability to meet scheduling requirements on past projects	15%	13
3. Fee Estimate (35%)		
• Clarity of fees broken down by intended tasks	10%	10
• Hourly rate structure for proposed project team	5%	4
• Proponent's method of managing and reporting fees	10%	8
• Proposed total fees in relation to project budget and in comparison to other proposals received	10%	7
TOTAL	100%	90

Evaluation completed by:

JUNE 26, 2017

SCOTT WALLACE, PENG.
TRUE CONSULTING

Clean Water and Wastewater Fund

MINISTRY OF COMMUNITY, SPORT AND CULTURAL DEVELOPMENT
Local Government Infrastructure and Finance
Location: 4th Floor, 800 Johnson Street
Mailing: PO Box 9838 STN PROV GOVT, Victoria, BC V8W 9T1
Telephone: 250-387 - 4060
Website: www.gov.bc.ca/cleanwaterwastewaterfund

March 13, 2017

John MacLean
 Chief Administrative Officer
 Regional District of Kootenay Boundary
 202 - 843 Rossland Ave
 Trail, British Columbia V1R 4S8

Dear John MacLean:

Re: Clean Water and Wastewater Fund
Project #C40118 – Columbia Pollution Control Centre Upgrade to
Secondary Treatment

It is my pleasure to inform you that your application for funding under the Clean Water and Wastewater Fund (CWWF) for 'Columbia Pollution Control Centre Upgrade to Secondary Treatment' has been **confidentially** approved at a maximum federal/provincial contribution of \$1,304,760.

By receiving and entering into this agreement you are required to keep this confidential until such time as a public announcement has been made by the program partners.

Enclosed is the agreement between the Ministry of Community, Sport and Cultural Development (MCSCD) and your local government in relation to the above mentioned project.

Please ensure a PDF version of the signed shared cost agreement is emailed to INFRA@gov.bc.ca by **March 23th, 2017** with the originally signed shared cost agreement to follow by post.

All public information material pertaining to the project shall clearly and prominently indicate that the project is funded pursuant to CWWF, which includes tendering. Contracts will be awarded in a way that is transparent, competitive and consistent with value for money principles. It is the responsibility of the local government to comply with all local regulations and obtain necessary permits.

... /2



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In addition, Schedules B and C "Payment Terms and Conditions" and "Reporting Requirements" outline the claims process and the various reports to be submitted. A provincial representative will be in contact reporting requirements at a future date.

If you have any questions, please contact Elizabeth Crossley, Grant Analyst, at Elizabeth.Crossley@gov.bc.ca or 778-698-3256.

Yours truly,

A handwritten signature in black ink, appearing to be 'Liam Edwards', with a long horizontal stroke extending to the right.

Liam Edwards, Executive Director
Local Government Infrastructure and Finance

Enclosure

This Shared Cost Agreement dated for reference the 13th day of March, 2017.

BETWEEN

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, represented by the Minister of Community, Sport and Cultural Development and Minister Responsible for Translink (the "Province")

AND

REGIONAL DISTRICT OF KOOTENAY BOUNDARY (the "Recipient")

for the Columbia Pollution Control Centre Upgrade to Secondary Treatment Project No. C40118

WHEREAS:

- A. The Government of Canada ("Canada") and the Province entered into the Clean Water and Wastewater Fund Funding Agreement (the "CWWFA") made September 30, 2016.
- B. Funding has been approved under the CWWFA to be paid by the Province to the Recipient for the Project defined in this Agreement, on the terms and conditions set out in this Agreement.
- C. The participation and performance of the Recipient play a critical role in achieving the purposes of the CWWFA.
- D. The parties wish to delineate their respective responsibilities under this Agreement and ensure compliance with the CWWFA.

NOW THEREFORE, in consideration of the sum of One Dollar and other valuable consideration, the receipt and sufficiency of which is acknowledged by each party, the parties agree as follows:

DEFINITIONS

- 1. In this Agreement and its recitals the following definitions apply:

"Agreement" means this Shared Cost Agreement and any attached schedules;

"Applicable Laws" means all laws, statutes, regulations, and bylaws of any governmental authority having the force of law from time to time including those

affecting, applicable to or otherwise relating to the Project, the Recipient or any Third Party;

"Commencement Date" means the date identified in Schedule A;

"Completion Date" means the date identified in Schedule A upon which the Recipient will complete the Project;

"Contract" means a contract between the Recipient and a Third Party whereby the Third Party agrees to contribute a product or service to the Project in return for financial consideration which may be claimed as an Eligible Expenditure;

"CWWFA Staff" means employees of the Ministry of Community, Sport and Cultural Development who are directly involved in the administration of the CWWFA, and includes anyone authorized to act on their behalf;

"Eligibility Criteria" means the criteria established by the Province set out in Schedule B of this Contribution Agreement;

"Eligible Expenditures" are those expenditures set out in Schedule D which represent the categories of Project costs toward which the contribution by the Province is to be used and those Project costs which are eligible for reimbursement through the contribution by Canada;

"Fiscal Year" means the period beginning April 1 of a year and ending March 31 of the following year;

"Ineligible Expenditures" are those expenditures set out in Schedule D;

"Oversight Committee" means the Committee established under the authority in section 7 of the CWWFA;

"Project" means the project described in Schedule A;

"Provincial Minister" means the Minister of Community, Sport and Cultural Development and Minister Responsible for Translink and includes anyone authorized to act on his/her behalf;

"Stipulations" means the terms set out in this Agreement that must be met in order for the Recipient to retain the funds received under this Agreement; and

"Third Party" means any person, employee or agent, other than a party to this Agreement, that is involved in the implementation of the Project.

SCHEDULES

2. The Schedules to this Agreement are:

Schedule A	Project Information
Schedule B	Payment Terms and Conditions
Schedule C	Reporting Requirements
Schedule D	Eligible and Ineligible Expenditures

TERM

3. Notwithstanding the actual date of execution of this Agreement, the term of this Agreement begins on the Commencement Date, and expires on March 31, 2019.

OBLIGATIONS OF THE RECIPIENT

4. As a Stipulation to this Agreement the Recipient agrees to:

- (a) carry out the Project in a diligent and professional manner;
- (b) commence carrying out the Project within three months of the date of reference of this Agreement;
- (c) complete the Project no later than the Completion Date;
- (d) provide evidence satisfactory to the Province that the Recipient has commenced the Project in accordance with section 4(b) of this Agreement. Such evidence may consist of verification that construction has started, or other evidence deemed appropriate by the Province;
- (e) submit its claims for reimbursement of Eligible Expenditures in accordance with the provisions of Schedule B of this Agreement; and
- (f) be responsible for any and all costs, expenses and liabilities (other than Eligible Expenditures which are reimbursed in accordance with the terms of this Agreement) including all Ineligible Expenditures, unapproved expenditures, and cost overruns.

5. If the Recipient has failed to provide evidence satisfactory to the Province in accordance with section 4(d) of this Agreement to demonstrate the Project has commenced, the Province will inform the Federal Co-chair of the Oversight Committee and the Oversight Committee will examine the issue.

6. As a stipulation to this Agreement the Recipient and any Third Party will comply with all Applicable Laws.
7. As a stipulation to this Agreement the Recipient agrees to:
 - (a) establish and maintain accounting and administrative records which clearly disclose the nature and amounts of the different items of cost pertaining to the Project, including those that are to be used as the basis for the calculation of the claims by the Recipient for reimbursement from the contribution by Canada of Eligible Expenditures and which shall include the Contracts, invoices, statements, receipts and vouchers in respect of the Project;
 - (b) permit the Province, Canada, or any member of the Oversight Committee, for contract monitoring and audit purposes, to inspect at all reasonable times both before and after the Completion Date, any books of account or records (both printed and electronic, including, but not limited to, hard disk or diskettes), and any other information reasonably required by the Province or Canada, whether complete or not, that are produced, received or otherwise acquired by the Recipient as a result of or in connection with this Agreement;
 - (c) maintain all such accounts, records and information for a period of six years after the Completion Date;
 - (d) ensure that all Contracts entered into by the Recipient with any Third Parties contain the provisions in section 6 above; and
 - (e) adhere to all environmental mitigation measures, if any, identified during the environmental assessment process.
8. As a stipulation to this Agreement the Recipient is solely responsible for all aspects of the Project, including without limitation, the planning, design, construction, operation, maintenance, worker and public safety, completion and ownership of the infrastructure, and nothing in this Agreement shall be deemed to give the Province interest in, or responsibilities for the Project, unless otherwise expressly provided in this Agreement.
9. As a stipulation to this Agreement the Recipient will ensure that the federal/provincial contribution is to be used solely for the purpose of defraying the Eligible Expenditures incurred by the Recipient in carrying out and completing the Project as described in Schedule A.
10. As a stipulation to this Agreement the Recipient acknowledges that Eligible Expenditures that have received funding from any other federal or provincial sources may not be reimbursed under this Agreement, and the Recipient agrees to promptly

notify the Province through CWWFA Staff in writing of any and all such funding received.

11. As a stipulation to this Agreement the Recipient will not knowingly permit any member of the House of Commons of Canada or the Senate of Canada or the Legislative Assembly of British Columbia to be admitted, directly or indirectly, to any share or part of any Contract, agreement or commission made pursuant to this Agreement or in relation to the Project or to obtain any benefit arising therefrom.
12. As a stipulation to this Agreement the Recipient acknowledges and agrees that it is not an agent of Canada or the Province and that it will not hold itself out as such and will not do any act or thing which might be construed as authorizing any contract or permitting any other liability or obligation to be incurred on behalf of either Canada or the Province.
13. For the purposes of this section "significant change" in respect of a Project includes:
 - (a) any material change to its location, scope or timing; or
 - (b) any change that would trigger a further environmental assessment.

Any request for changes or variations to the Project, including significant changes, will be made in writing and will be reviewed by the Province.

14. As a stipulation to this Agreement the Recipient will retain title to, and ownership of infrastructure resulting from the Project for at least five (5) years after the Completion Date.
15. As a stipulation to this Agreement if at any time within five (5) years from the Completion Date, the Recipient sells, leases, or otherwise disposes of, directly or indirectly, any asset purchased, acquired, constructed, rehabilitated or renovated, in whole or in part, with funds contributed by Canada or the Province under this Agreement, other than to Canada, the Province, a local government, or otherwise with Canada's consent, the Recipient may be required to reimburse Canada and the Province, any funds received for the Project.

The Recipient will immediately notify the Province in writing if at any time during the five (5) year period following the Completion Date, any transaction triggering the above-mentioned repayment occurs.

16. As a stipulation to this Agreement the Recipient will ensure that any Contracts it awards to any Third Party will be awarded in a way that is transparent, competitive, and consistent with value for money principles.

17. As a stipulation to this Agreement all Contracts for works associated with the Project will be publicly tendered. If this is not feasible or practicable, the Recipient agrees to notify the Province in writing before proceeding with the Project.
18. As a stipulation to this Agreement the Recipient acknowledges that the Province reserves the right to review the Recipient's procurement and tendering policies and practices relating to the Contracts at any time from the date of approval of the Project to three years after the Completion Date.

OBLIGATIONS OF THE PROVINCE

19. Provided the Recipient is in compliance with its obligations under this Agreement, and subject to the terms of this Agreement, the Province will pay the Recipient the Province's and Canada's contributions in the manner set out in Schedule B of this Agreement.
20. Without prejudice to the generality of section 19, the Province will not have any obligation to make the Province's or Canada's contribution under section 19 unless the Recipient has complied with the provisions set out in Schedule B.
21. Notwithstanding any other provision of this Agreement, the payment of money by the Province to the Recipient under this Agreement is subject to satisfactory implementation of all environmental mitigation measures, including the requirements of the *Canadian Environmental Assessment Act, 2012* and the *BC Environmental Assessment Act*, if any, identified during the environmental assessment process.

COMMUNICATIONS

22. The Recipient acknowledges it has reviewed and agrees to comply with:
 - (a) the communications protocol set out in Schedule C of the CWWFA; and
 - (b) the Provincial Communications Protocol.

Copies can be found on the Provincial Clean Water and Wastewater Fund website at www.gov.bc.ca/cleanwaterwastewaterfund.

23. The Recipient acknowledges that the eligibility of expenditures related to communication activities will be subject to Schedule D of this Agreement.
24. The Recipient agrees to be responsible for all required Project signage.

25. The Recipient agrees to follow signage guidelines as provided by the Province. Pursuant to section D.1 (e) of Schedule D of this Agreement, Project signage costs are an Eligible Expenditure.
26. In compliance with the CWWFA communications protocol and the Provincial Communications Protocol referred to above, the Recipient agrees to install in a visible location at the Project site, temporary signage thirty (30) days prior to the start of construction which will remain in place until thirty (30) days after construction is completed and the infrastructure is fully operational or opened for public use.

INDEMNIFICATION

27. The Recipient shall indemnify and save harmless Canada, the Province, and their respective elected officials, officers, servants, employees or agents from and against all actions, whether in contract, tort or otherwise, claims and demands, losses, costs and expenses, damages, suits or other proceedings by whomsoever brought or prosecuted in any manner that Canada, the Province, and their respective elected officials, officers, servants, employees, or agents may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement by the Recipient or a Third Party, or their respective employees, officers, directors, sub-contractors, servants, or agents, related to or arising from this Agreement or the Project including without limitation the on-going operation, maintenance and repair of the infrastructure resulting from the Project, except always liability arising out of the independent negligent acts of the Province or Canada.

INSURANCE

28. The Recipient will, without limiting its obligations or liabilities herein, purchase and maintain insurances with insurers licensed in Canada with coverage of a type, and in amounts, that any similar business, acting reasonably, would procure for a project of the scope, size and exposure of the Project, during the term of this Agreement and for any subsequent ongoing operations and maintenance of the resulting infrastructure.
29. The Recipient shall require and ensure that each Third Party maintains insurances comparable to those required above.
30. Upon request by the Province, the Recipient will deliver a certified copy of the policies of insurance applicable under this Agreement. No review or approval of any insurance policy by the Province derogates from or diminishes the Province's rights or the Recipient's liability under this Agreement.

DEFAULT

31. Any of the following events will constitute an Event of Default, whether any such event is voluntary, involuntary or results from the operation of law or any judgment or order of any court or administrative or government body:
- (a) the Recipient fails to comply with any provision of this Agreement;
 - (b) any representation or warranty made by the Recipient in connection with this Agreement is untrue or incorrect;
 - (c) any information, statement, certificate, report or other document furnished or submitted by or on behalf of the Recipient pursuant to or as a result of this Agreement is untrue or incorrect;
 - (d) the Recipient ceases, in the opinion of the Province, to carry on business as a going concern;
 - (e) a change occurs with respect to one or more of the properties, assets, conditions (financial or otherwise), business or operations of the Recipient which, in the opinion of the Province, materially adversely affects the ability of the Recipient to fulfill its obligations under this Agreement;
 - (f) an order is made or a resolution is passed or a petition is filed for the liquidation or winding up of the Recipient;
 - (g) the Recipient becomes insolvent or commits an act of bankruptcy or makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency; or
 - (h) a bankruptcy petition is filed or presented against the Recipient, or a proposal under the *Bankruptcy and Insolvency Act* (Canada) is made, or a receiver or receiver-manager of any property of the Recipient is appointed.

TERMINATION

32. Upon the occurrence of any Event of Default and at any time thereafter the Province may, notwithstanding any other provision of this Agreement, at its sole option, elect to do any one or more of the following:
- (a) terminate this Agreement and request repayment of all or a portion of the funding paid under this Agreement in which case the Province's obligation to make any further payment of the money remaining unpaid under this Agreement is terminated;

- (b) require that the Event of Default be remedied within a time period specified by the Province;
 - (c) suspend any installment of payment due to the Recipient by the Province while the Event of Default continues;
 - (d) waive the Event of Default;
 - (e) pursue any other remedy available at law or in equity.
33. If the Province terminates this Agreement under section 32 and requests repayment of all or a portion of the funding paid to the Recipient under this Agreement, the Recipient shall repay the requested amount forthwith to the Province and the Province is discharged of all liability to the Recipient under this Agreement.
34. If the Province terminates this Agreement under section 32(a), then such termination may take place on ninety (90) days written notice.
35. The Province may, at its sole option, terminate this Agreement at any time without cause upon one hundred and twenty (120) days written notice to the Recipient.

REMEDIES NON-EXCLUSIVE

36. The rights, powers and remedies conferred on the Province under this Agreement or any statute or law are not intended to be exclusive and each remedy shall be cumulative and in addition to and not in substitution for every other remedy existing or available to the Province.
37. The exercise of any one or more remedies available to the Province will not preclude the simultaneous or later exercise by the Province of any other right, power or remedy.

APPROPRIATION

38. Notwithstanding any other provision of this Agreement, the payment of money by the Province to the Recipient under this Agreement is subject to:
- (a) there being sufficient monies available in an appropriation, as defined in the *Financial Administration Act*, to enable the Province, in any fiscal year or part thereof when any payment by the Province to the Recipient falls due under this Agreement, to make that payment; and

- (b) Treasury Board, as defined in the *Financial Administration Act*, not having controlled or limited expenditure under any appropriation referred to in subsection (a) of this section.

NO FURTHER OBLIGATIONS

39. The Recipient acknowledges that nothing in this Agreement will bind Canada or the Province to provide any financing for any addition or improvement to the Project, or any cost overruns of the Project and that no partnership, joint venture or agency will be created or will be deemed to be created by this Agreement or any action of the parties under this Agreement.

TERMS APPLICABLE TO CANADA

40. The Province and the Recipient acknowledge the financial contribution to the Project by Canada under this Agreement and, in consideration of that contribution and notwithstanding that Canada is not a signatory to this Agreement; the parties agree that the terms of this Agreement applicable to, or with respect to, Canada are for her sole benefit.

JOINT AND SEVERAL OBLIGATIONS

41. In the event the Recipient is comprised of more than one entity, then the covenants and obligations of each of such entities with the others will be both joint as well as several.

AMENDMENTS

42. Unless otherwise specified in this Agreement, this Agreement may be amended only by further written agreement between the parties.

SURVIVAL OF TERMS

43. Sections 7(b) and (c), 14, 15, 24 and 27, continue in force indefinitely, even after this Agreement ends.

NOTICE

44. Any written communication from the Recipient to the Province must be mailed, personally delivered, or electronically transmitted to the following address:

Ministry of Community, Sport and Cultural Development
 Local Government Infrastructure and Finance Branch
 P.O. Box 9838, STN PROV GOVT
 Victoria, British Columbia V8W 9T1
 Email: INFRA@gov.bc.ca

Attention: Director, Infrastructure and Engineering

45. Any written communication from the Province to the Recipient must be mailed, personally delivered, or electronically transmitted to the following address:

Regional District of Kootenay Boundary
202 - 843 Rossland Ave
Trail, British Columbia V1R 4S8

Attention: Chief Administrative Officer

46. Any written communication from either party will be deemed to have been received by the other party on the tenth business day after mailing in British Columbia or on the date of transmission if emailed.
47. Either party may, from time to time, notify the other party in writing of a change of address or number and, following the receipt of such notice, the new address or number will, for the purposes of sections 44 or 45 of this Agreement, be deemed to be the contact information of the party giving notice.

LOBBYISTS AND AGENT FEES

48. The Recipient warrants:
- (a) that any person it has hired, for payment, to speak to or correspond with any employee or other person representing Canada or the Province on the Recipient's behalf, concerning any matter relating to the contribution under this Agreement or any benefit hereunder and who is required to be registered pursuant to either the *Lobbying Act*, R.S.C. 1985, c. 44 (4th Supp.) or the *Lobbyists Registration Act*, S.B.C. 2001, c. 42, as amended, is registered pursuant to one or both of those acts; and

- (b) it has not and will not make a payment or other compensation to any legal entity that is contingent upon or is calculated upon the contribution hereunder or on negotiating the whole or any part of the terms of this Agreement.

In the event of a breach of subsections (a) or (b), the Province may terminate this Agreement or recover from the Recipient the full amount of all contributions under this Agreement.

MISCELLANEOUS

49. This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia and the laws of Canada applicable in British Columbia.
50. The Schedules to this Agreement are an integral part of this Agreement as if set out at length in the body of this Agreement.
51. If any provision of this Agreement or the application to any person or circumstance is invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to any other person or circumstance will not be affected or impaired thereby and will be enforceable to the extent permitted by law.
52. Nothing in this Agreement operates as a consent, permit, approval or authorization by the Province or any ministry or branch thereof to or for anything related to the Project that, pursuant to Applicable Laws, the Recipient is required to obtain unless it is expressly stated herein to be such a consent, permit, approval or authorization.
53. All disputes arising out of or in connection with this Agreement will be referred to and finally resolved by arbitration pursuant to the *Arbitration Act*, R.S.B.C. 1996, c.55.

IN WITNESS WHEREOF each of the parties has executed this Agreement on the dates set out below.

SIGNED by the Minister of Community,)
Sport and Cultural Development and)
Minister Responsible for Translink or his or her)
duly authorized representative on behalf of)
HER MAJESTY THE QUEEN IN RIGHT OF)
THE PROVINCE OF BRITISH COLUMBIA)

_____ Date: _____
Minister or his/her authorized representative

REGIONAL DISTRICT OF KOOTENAY BOUNDARY (the “Recipient”):

Per: _____ Date: _____
Authorized Signatory

Name/Title

Schedule A: PROJECT INFORMATION

- A.1 Project Title: Columbia Pollution Control Centre Upgrade to Secondary Treatment Project No. C40118.
- A.2 The Columbia Pollution Control Centre Upgrade to Secondary Treatment will consist of the following:
- The Regional District of Kootenay Boundary (RDKB) owns the Columbia Pollution Control System (PCS), a sewerage network that provides regional wastewater collection, treatment and disposal for the communities of Rossland, Trail, Warfield, Oasis and Rivervale. This application is for phase 1 of the project, which includes completion of the Stage 3 LWMP, pre-design studies, followed by preparation of detailed design drawings and specifications for the treatment plant upgrade to provide a 'shovel-ready' project.
- A.3 The Commencement Date of the Project is April 1, 2016; the Project was approved on March 8, 2017.
- A.4 The Completion Date of the Project shall be no later than March 31, 2018.

Schedule B: PAYMENT TERMS AND CONDITIONS

B.1 Payment by the Province of the Financial Contributions from Canada and the Province:

The Province will make financial contributions to the Recipient which will not exceed the lesser of 83% of the total costs of the Project or One Million Three Hundred Four Thousand Seven Hundred Sixty Dollars and No Cents (\$1,304,760) being the maximum amount (the "Total Contribution") approved to be paid under this Agreement to pay for Project costs incurred by the Recipient.

These financial contributions are available to the Recipient through two funding sources, both to be paid through the Province. One-third of the Project costs are eligible for funding by the Province ("Contribution by the Province") based on the eligibility criteria established in B.2 and one-half of the Project costs are eligible for funding provided by Canada ("Contribution by Canada") based on the eligibility criteria established in B.3.

B.2 Contribution by the Province:

B.2.1 Initial Contribution of Provincial Funding:

Upon the execution of this Agreement by both parties, the Recipient becomes eligible for, and the Province will make one initial payment for, eighty percent (80%) Four Hundred Fifteen Thousand Eight Dollars and No Cents (\$415,008) (the "Initial Payment") of the Contribution by the Province. The Initial Payment by the Province does not require the Recipient to incur Project costs before becoming eligible for the Initial Payment.

B.2.2 Final Payment of Provincial Funding:

Upon completion of the Project and after receipt and approval of the Final Report, the Recipient becomes eligible for a Contribution by the Province of up to twenty percent (20%) of the total Contribution by the Province in the amount of One Hundred Three Thousand Seven Hundred Fifty Two Dollars and No Cents (\$103,752) or one-third of the total project costs, whichever is less.

B.3. Contribution by Canada:

- B.3.1** The Recipient will be eligible for the Contribution by Canada once claims for Eligible Expenditures have been submitted to and approved by the Province. The Recipient will deliver to the Province through CWWF Staff, claims setting out the amount of

Eligible Expenditures actually incurred and paid by the Recipient to the date of such claims.

- B.3.2 Claims for reimbursement will be submitted in accordance with the forecast detailed in the Recipient's most current budget forecast report, or at a time otherwise acceptable to the Province.
- B.3.3 Claims must be submitted with an up-to-date progress report and a summary of expenditures which includes the name of the payee, date paid, work rendered, start/end dates, invoice number, and invoice date.
- B. 3.4 The Eligible Expenditures included in each claim must all be incurred and paid in one Fiscal Year. Claims submitted that include Eligible Expenditures incurred and paid in more than one Fiscal Year will not be accepted by the Province.
- B.3.5 No reimbursement will be paid if a claim is received later than March 31, 2019.
- B.3.6 For each approved claim the Province will reimburse the Recipient for one-half of the approved claim to the Recipient (which is a Contribution by Canada). The amounts paid by the Province to the Recipient for all claims plus the amount of the Initial Payment and the Final Payment shall not exceed the Total Contribution amount.
- B.3.7 The following documents must be submitted with each claim made by the Recipient and the Province will not reimburse a claim unless the following have been submitted:
 - a) a current Periodic Progress Report;
 - b) a current Budget Forecast Report; and
 - c) any other additional technical reporting requirements as required under Schedule C of this Agreement.

Schedule C: REPORTING REQUIREMENTS

C.1 Periodic Progress Reports:

The Recipient will deliver to the Province through CWWFA Staff on a quarterly basis and/or upon request by the Province, periodic progress reports ending March 31, June 30, September 30, and December 31 of each year of the term of this Agreement commencing on the first quarter following the date of execution of this Agreement and ending on the date of Project completion. The periodic progress reports will be in a form established by the Province and are to be completed and submitted within a time frame as stipulated by the Province.

C.2 Budget Forecasting Report:

The Recipient will deliver to the Province through CWWFA staff on a monthly basis and/or upon request by the Province, budget forecast reports ending the last day of each month for each year of the term of this Agreement commencing on the first month following the date of execution of this Agreement. The budget forecast reports will be in a form established by the Province.

C.3 Final Report:

In order to receive final payment when the Project is completed, the Recipient will deliver to the Province through CWWFA Staff a Final Report, in a form established by the Province.

C.4 Project Audit Report:

Prior to payment of the final claim for Eligible Expenditures, the Recipient may also be required to provide a Project audit report from a person authorized to be an auditor under section 169 of the *Community Charter* confirming that the Project expenditures have been made in compliance with this Agreement and the CWWFA guidelines. If required by the Province, the audit is to be in accordance with the form and reporting standards recommended by the Canadian Institute of Chartered Accountants.

C.5 Additional Reporting Requirements:

(a) The additional reporting requirements are:

System Enforced Planning and Design Projects

Prior to payment in excess of 50% of approved funding amount, the Recipient must submit to the province an interim Financial and Progress Report in a form established by the Province to be completed when the Project reaches fifty percent (50%) completion or by October 31, 2017 whichever comes first.

Asset Management

Prior to payment in excess of 75% of approved funding amount, the Recipient must submit to the Province the following:

- A summary of the current state of asset management practice within the organization as related to the asset group which corresponds with the project (ex. for a water supply project, the asset group would be 'all water assets'); and
- A summary of the activities (related to the same asset group) that the organization intends to carry out to improve asset management practice within the organization.

The Asset Management BC Roadmap and/or AssetSMART 2.0 can be referred to: www.assetmanagementbc.ca. Responses relying upon different formats or resources may also be accepted at the discretion of the program lead.

System Enforced Water Conservation Plan Technical 75%

Prior to payment in excess of 75% of approved funding amount, the Recipient must do one of the following:

1. Provide an up-to-date, succinct, effective, council or board endorsed water conservation plan, which covers the entire water system, to the Province; or
2. In the situation that a water conservation plan has been previously submitted to the Province and/or is more than 5 years old, the Recipient is required to submit an updated outline of that plan that identifies actions that are complete, in process and any new actions planned. An effective water conservation plan may include the completion of a Water Conservation Calculator report (see: www.waterconservationcalculator.ca) and the following:
 - Identify current water consumption (e.g. 600 L/capita/day);
 - Set a water reduction target (e.g. 350 L/capita/day by xxxx year);
 - Outline the communities current and planned water conservation actions/measures (e.g. universal metering, inclined block water rates, conservation plumbing fixtures, leakage reduction, rebate programs, education programs, xeriscaping, etc.);
 - Identify current and planned mitigation and adaptation strategies to address climate change (e.g. installing water meters to secure water supply, lowering demand to reduce pumping requirements, etc.);
 - Detail how strategies/initiatives will be implemented (e.g. schedule, funding, staff responsibility, etc.); and,
 - Link the plan to other regulatory mechanisms, policies and plans (e.g. Official Community Plan, water master plan, wastewater management strategy, BC Living Water Smart, Climate Action Plan, etc.).

System Enforced Asset Renewal Profile Technical 100%

Prior to final payment, the Recipient must complete and submit an asset renewal profile for the asset group which corresponds with the project for which the grant was awarded (ex. for a water supply project, the asset group would be 'all water assets'). A renewal profile attempts to forecast the time of failure of assets and project when they will require financing for replacement.

An effective renewal profile should include the following:

- Data regarding expected remaining life and replacement value for individual assets from the community's asset data register;
- A graph with replacement year on the X-axis and the collective replacement costs for assets on the Y-axis. The X-axis should start at the current year and show the projected replacement costs for the next 30 years or more;
- Show the annual expenditures required to renew existing assets, including those assets constructed as part of the project (ex: for a drinking water project, include all drinking water asset components such as pipes, valves, pumps, etc. for the entire asset group, not just the newly installed assets), over the next 30 (or more) years.

(b) Reports submitted by the Recipient under this section, if any, are for the Province's information and CWWFA guidelines accountability only, and their review by the Province in no way endorses, approves or verifies the findings, technical data, results, quality statements, representations or recommendations therein, and the Recipient warrants that all information contained in any report is true and correct.

C.6 Other Information:

The Recipient will provide the Province through CWWFA Staff, upon request, all such other information concerning the progress of the Project to completion and payment of Eligible Expenditures, as may be required by the Province from time to time.

Schedule D – ELIGIBLE AND INELIGIBLE EXPENDITURES

D.1 ELIGIBLE EXPENDITURES

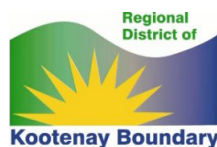
Excluding those identified under Section D.2 (Ineligible Expenditures), Eligible Expenditures will be all costs considered by the Province to be direct and necessary for the successful implementation of the Project. Eligible Expenditures will include only the following:

- a) the capital expenditures for acquiring, constructing, renewing, rehabilitating, materially enhancing or renovating an Asset, as defined and determined according to Public Sector Accounting Standards in effect in Canada;
- b) costs incurred between Commencement Date and the Completion Date set out in Schedule A and are deemed to be direct and necessary.
- c) expenditures directly associated with joint federal communication activities and with project signage related to funding recognition set out in Schedule C (Communications Protocol) of the CWWFA and in the Provincial Communications Protocol as described in section 22 of this Agreement;
- d) the expenditures for engineering and environmental reviews, including environmental assessments and follow-up programs as defined in the *Canadian Environmental Assessment Act 2012* and the expenditures of remedial activities, mitigation measures and follow-up identified in any environmental assessment;
- e) the expenditures for Project-related signage, lighting, Project markings and utility adjustments;
- f) Recipient audit and evaluation expenditures if an audit is requested under Schedule C of this Agreement;
- g) the incremental expenditures of the Recipient's employees or leasing of equipment may be included as eligible expenditures under the following conditions:
 - i. The Recipient is able to demonstrate that it is not economically feasible to tender a contract;
 - ii. The employee or equipment is engaged directly in respect of the work that would have been the subject of the contract is required to complete the project; and
 - iii. The arrangement is approved in advance and in writing by the Province; and.
- h) other expenditures that, in the opinion of the Province, are considered to be direct and necessary for the successful implementation of the Project and have been approved in writing prior to being incurred.

D.2 INELIGIBLE EXPENDITURES

The following expenditures are ineligible:

- a) expenditures incurred before the Commencement Date;
- b) expenditures incurred after the Project Completion Date with the exception of expenditures related to audit and evaluation requirements pursuant to the Agreement;
- c) costs incurred for cancelled projects;
- d) the expenditures related to purchasing land, buildings and associated real estate and other fees;
- e) financing charges and interest payments on loans;
- f) leasing land, buildings, equipment except those noted under D.1(g) above and other facilities;
- g) furnishings and non-fixed assets which are not essential for the construction and operation of the Project;
- h) general repairs and maintenance of the Project and related structures, unless they are part of a larger capital expansion project;
- i) services or works normally provided by the Recipient, incurred in the course of implementation of the Project, except those specified as eligible expenditures;
- j) the expenditures related to any goods and services which are received through donations or in kind;
- k) any overhead expenditures, including salaries and other employment benefits of any employees of the Recipient, direct or indirect operating or administrative expenditures of Recipients, and more specifically expenditures related to planning, engineering, architecture, supervision, management and other activities normally carried out by staff except in accordance with subsections D.1 (g) in the Eligible Expenditures above;
- l) taxes for which the Recipient is eligible for a tax rebate and all other expenditures eligible for rebates;
- m) legal fees;
- n) Permits fees charged by the Recipient to itself; and,
- o) any of the following expenditures for joint federal communication activities (media consultant, event planners, gifts, and hospitality costs such as, but not limited to, food/beverages, liquor, or entertainment).



Quarterly Report

2nd Quarter 2017

Introduction

This report is designed to provide the Board and public with information on key accomplishments in the past three months and how those projects connect to the Board's strategic priorities. The period covered by this report is April – June 2017.

Administration

The Administration department is led by the Chief Administrative Officer – John MacLean. The Department has responsibility for the following Regional District Services:

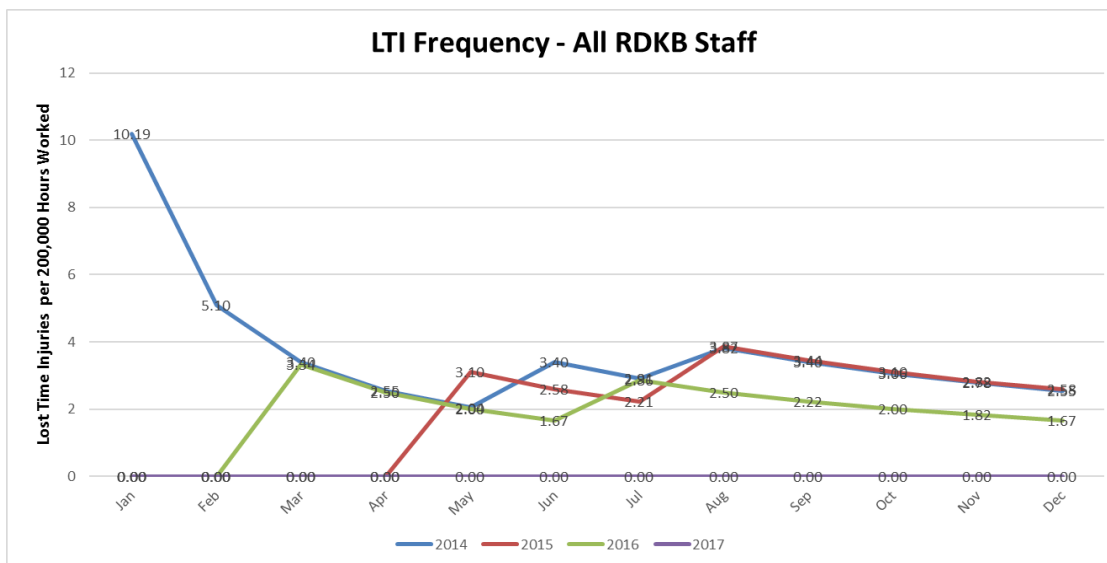
- General Government
- Electoral Area Administration
- Boundary Economic Development
- East End Economic Development
- Transit Services (Boundary and Kootenay)
- Greenwood/Area 'E' Cemetery Services

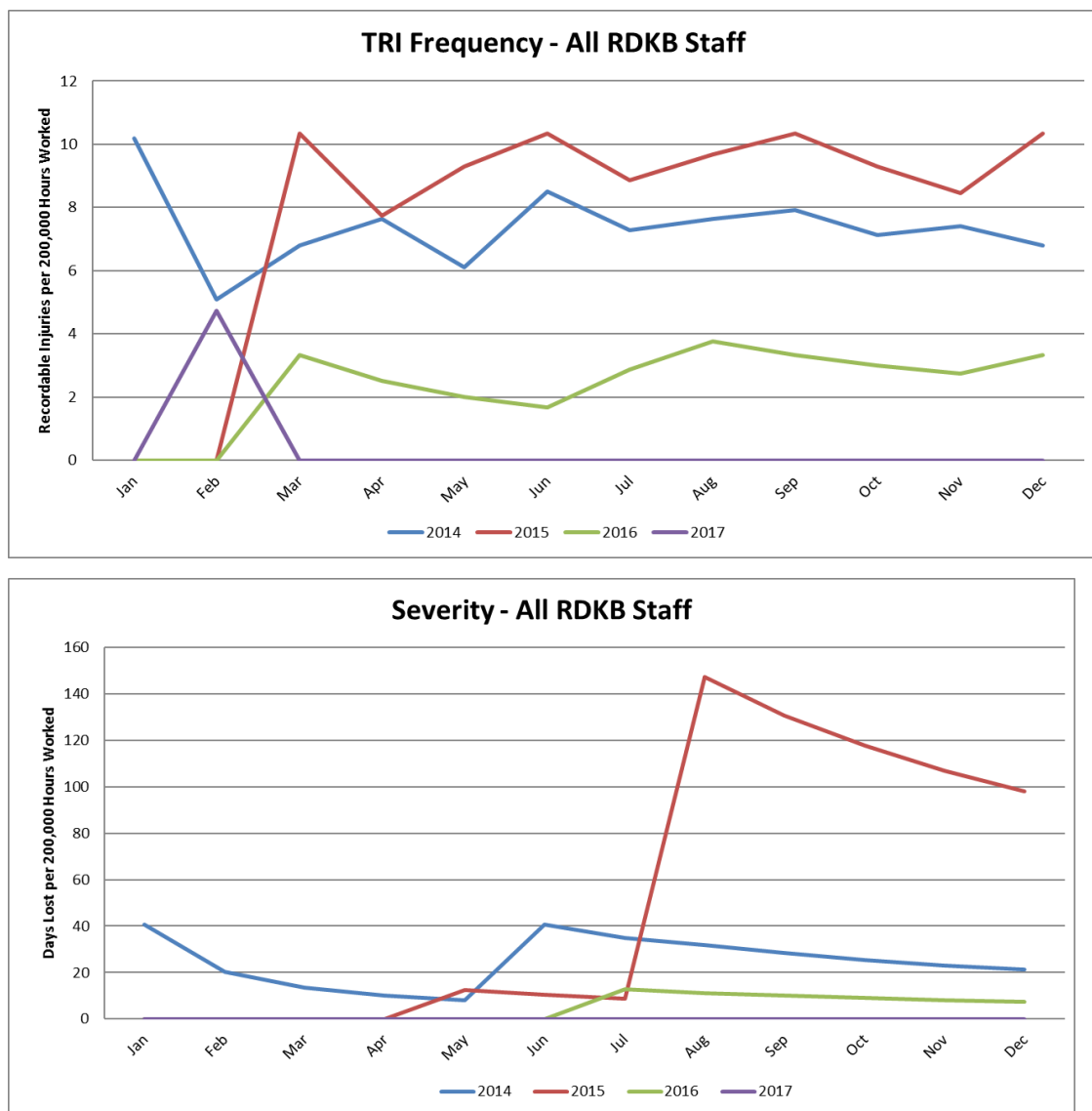
Activity in the second quarter of 2017 was around implementation of the projects and initiatives identified in the 2017 Financial Plan, as well as a return to normal policy work at the Committee level.

Accomplishments in the Second Quarter	
Project	Connection to Strategic Plan
Continued work on the Boundary Recreational Trails Master Plan – BCDC.	<p>This project was identified as part of a strategic planning process undertaken by the BCDC.</p> <p>Regionally this project will identify whether or not RDKB resources should be dedicated to this endeavor which is consistent with the identification of core services.</p>

Continued work on the Big White Community Centre Feasibility Study.	We will use this process to ensure that we are being prudent in the funding or creation of services.
Worked with Board to hold Board Governance Session with Mr. Jerry Berry. The session was held on May 25, 2017.	This is consistent with the Board's commitment to focus on good management and governance.
Attended the Federation of Canadian Municipalities Conference in Ottawa, Ontario.	This is related to the Board's interest in advocating on behalf of the Region.
The Emergency Operation Centre was activated for an extended period in May due to flooding on the Kettle and Grandby Rivers.	This is related to the necessary performance of our responsibilities and therefore is part of a commitment to good management and governance.

The Regional District of Kootenay Boundary is committed to ensuring the health and safety of our employees. The following are graphs indicating our safety performance from 2014 to 2016:





Operations

The Operations Department is led by General Manager – Operations Mark Anderson. The Department has responsibility for the following Regional District Services:

- Protective Services
 - Kootenay Boundary Regional Fire Rescue
 - Big White Fire Service
 - Christina Lake Volunteer Fire Service

- Grand Forks Rural Fire Service
- Greenwood Rural Fire Service
- Beaverdell Volunteer Fire Service
- Kettle Valley Rural Fire Service
- Big White Security
- Building Inspection
- Planning and Development
- Facilities and Recreation (Greater Trail)
- Facilities and Recreation (Grand Forks)
- Greater Trail Victim Services
- Boundary Animal Control Service
- East End Animal Control Service

Accomplishments in the Second Quarter	
Project	Connection to Strategic Plan
Review of implications of contracting 911 Service upon KBRFR Service.	<ul style="list-style-type: none"> - We will ensure we are responsible and proactive in funding our services - We will continue to focus on good management and governance
Developed contract for provision of 911 Emergency Communications Service with Kelowna Fire Department.	<ul style="list-style-type: none"> - We will continue to focus on good management and governance - We will ensure we are responsible and proactive in funding our services
Managed construction-related issues and outstanding delay costs associated with completion of Big White Fire Hall addition.	<ul style="list-style-type: none"> - We will continue to focus on good management and governance
Managed transition of new Fire Chief for Christina Lake Fire Department.	<ul style="list-style-type: none"> - We recognize the role that our staff play in delivering services in the region - We will continue to focus on good management and governance
Continued discussions with Grand Forks Fire Department about the closure of two fire halls in Grand Forks Rural Fire Service Area.	<ul style="list-style-type: none"> - We will ensure we are responsible and proactive in funding our services - We will continue to focus on good management and governance
Completion of Board-approved operating agreement for new Kettle Valley Rural	<ul style="list-style-type: none"> - We will continue to focus on partnerships that advance the interests of the Region

Fire Service under contract with Village of Midway.	<ul style="list-style-type: none"> - We will continue to focus on good management and governance
Purchase of new pumper truck for Kettle Valley Rural Fire Protection Service.	<ul style="list-style-type: none"> - We will ensure we are responsible and proactive in funding our services
Applications submitted to Ministry of Forests, Lands and Natural Resource Operations and Agricultural Land Commission for license of occupation and non-farm use approval in ALR for new fire hall to service Kettle Valley Rural Fire Protection Area at BC Wildfire Service Forward Attack Base.	<ul style="list-style-type: none"> - We will continue to focus on partnerships that advance the interests of the Region - We will ensure we are responsible and proactive in funding our services
Continued implementation of new asbestos control protocols for Building Inspection Service as per WorkSafe BC requirements.	<ul style="list-style-type: none"> - We will continue to focus on partnerships that advance the interests of the Region - We will continue to focus on good management and governance
Recruitment of new Building and Plumbing Official for the Trail office to replace a recently retired employee.	<ul style="list-style-type: none"> - We recognize the role that our staff play in delivering services in the region - We will continue to focus on good management and governance
Initial work with consulting team to undertake Boundary Agricultural Plan and Food Security Study - Planning Department.	<ul style="list-style-type: none"> - We will continue to focus on partnerships that advance the interests of the Region - We will continue to focus on good management and governance
Worked with partners at RDEK, RDCK, and CBT to hire consulting team to undertake Regional Agricultural Liaison Services project.	<ul style="list-style-type: none"> - We will continue to focus on partnerships that advance the interests of the Region
Submission of Gas Tax - Strategic Priorities Fund grant application for Christina Lake pedestrian bridge project.	<ul style="list-style-type: none"> - We will ensure we are responsible and proactive in funding our services - We will continue to focus on partnerships that advance the interests of the Region
Invitation to Tender issued for Grand Forks and District Aquatic Centre retrofit – pool deck re-surfacing project.	<ul style="list-style-type: none"> - We will ensure we are responsible and proactive in funding our services

Consultation with Village of Midway staff and contractors regarding extension of Boundary Animal Control Service to include Midway.	- We will continue to focus on partnerships that advance the interests of the Region
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Environmental Services

The Environmental Services Department is led by General Manager – Environmental Services Alan Stanley. The Department is responsible for the following Regional District Services:

- Regional Solid Waste Management
- Big White Solid Waste Management
- Utilities
 - East End Sewer
 - Beaver Valley Water
 - Rivervale/Oasis Water
 - Rivervale Sewer
 - Christina Lake Water
 - Street lighting functions in Beaverdell and Big White
 - Saddle Lake Dam
- Sustainability
- Noxious Weed Control
 - Areas D and E
 - Area A
- Milfoil Control
- Mosquito Control
 - Christina Lake
 - Area D/City of Grand Forks

Accomplishments in the Second Quarter	
Project	Connection to Strategic Plan
RSWM - Completed communications and green bin distribution for July 1 start up.	Environmental Stewardship/Climate Preparedness - Region-wide organics diversion
RSWM - Completed coordination of region-wide handover of residential recycling collection to industry for July 1 handover.	Exceptional Cost Effective and Efficient Services - We will distinguish between those services that are "core" and "discretionary" Improve and Enhance Communication - We will continue to focus on partnerships that advance the interests of the region

RSWM - Completed tender for new front-end loader, received Board approval, initiated purchase with successful vendor.	Exceptional Cost Effective and Efficient Services
Mosquito Control - Very difficult season with repeated flooding over previously treated areas; many re-treatments. Completed open, web-based reporting system.	Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services
East End Sewer - Grant for \$1.572 million for design of plant upgrade - Engineering services sourced, Board approval expected in second quarter.	Improve and Enhance Communication - We will continue to focus on partnerships that advance the interests of the region Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services
East End Sewer - Completed testing/analysis/approval of Columbia River crossing.	Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services
Beaver Valley Water - Grant for \$216,000 for water line replacement - Engineering services sourced, detailed design complete, contract tenders prepared.	Improve and Enhance Communication - We will continue to focus on partnerships that advance the interests of the region Exceptional Cost Effective and Efficient Services Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services
Rivervale/Oasis Water - Grants for \$201,000 for pump replacement and \$92,000 for water intake improvements - Engineering services sourced, detailed design complete, contract tenders prepared.	Improve and Enhance Communication - We will continue to focus on partnerships that advance the interests of the region Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services
Christina Lake Water - Grant for \$805,000 for multiple system improvements - Engineering services sourced, detailed design complete, contract tenders prepared.	Improve and Enhance Communication - We will continue to focus on partnerships that advance the interests of the region Exceptional Cost Effective and Efficient Services Exceptional Cost Effective and Efficient Services - We will ensure that we are

	responsible and proactive in funding our services
Sustainability - Corporate greenhouse gas reduction plan - submitting for Board approval.	Environmental Stewardship/Climate Preparedness - We will plan for climate change adaptation and mitigation
Sustainability - Finalizing Accelerate Kootenays electric charging stations working within regulatory requirements.	Environmental Stewardship/Climate Preparedness - We will plan for climate change adaptation and mitigation
Noxious Weed Control - Awarded multi-year contract tenders and vendor selection for all service areas - three contractors began work - received additional funding from Province for highways and forestry work.	Exceptional Cost Effective and Efficient Services
Milfoil Control - Completed contest to name new vessel, completed conversion to new equipment.	Environmental Stewardship/Climate Preparedness - We will actively plan and advocate on behalf of our watershed Exceptional Cost Effective and Efficient Services - We will ensure that we are responsible and proactive in funding our services

Financial Administration

The Financial Administration Department is led by General Manager – Finance Beth Burget. This department is responsible for overall financial administration of the Regional District and assisting all of the services in meeting the statutory and policy requirements they have.

Accomplishments in the Second Quarter	
Project	Connection to Strategic Plan
Completion of the 2016 Audited Financial Statements. The Regional District is required by statute to provide financial statements on or before May 15 of each year.	This is a statutory requirement, but how it is undertaken represents the Board's commitment to good governance.
Completion of 2016 LGDE Report. The Regional District is required by statute to complete by May 15 of each year.	This is a statutory requirement, but how it is undertaken represents the Board's commitment to good governance.

Completion of 2016 SOFI Report. The Regional District is required by statute to complete by June 30 of each year.	This is a statutory requirement, but how it is undertaken represents the Board's commitment to good governance.
Issue of RFP for capital asset management. Contract was awarded to Opus and first meeting was held on June 19, 2017.	Progression with capital asset management is required to be eligible for grant funding as well as identifying projected resource requirements including future requirements for capital, operations and maintenance.
Recruitment of Accounting Clerk/Receptionist.	We recognize the role of staff in service delivery. We will continue to focus on good governance.



East End Services Committee

**Tuesday, May 9, 2017
4:30 p.m.
RDKB Board Room-Trail, BC
Minutes**

Committee members:

Director A. Grieve - Chair
Director L. Worley
Director P. Cecchini
Director J. Danchuk
Director M. Martin
Director L. McLellan
Alternate Director A. Parkinson

Staff present:

T. Lenardon, Manager of Corporate Administration/Recording Secretary
D. Derby, Fire Chief, Kootenay Boundary Regional Fire Rescue
M. Andison, General Manager Operations/Deputy Chief Administrative Officer

Others Present:

B. Edwards, Alternate Director, Electoral Area B/Lower Columbia-Old Glory

Call to Order

The Chair called the meeting to order at 4:30 p.m.

Acceptance of the Agenda (additions/deletions)

The agenda for the May 9, 2017 East End Services Committee meeting was presented.

Moved: Director Cecchini Seconded: Director Worley

That the agenda for the May 9, 2017 East End Services Committee meeting be adopted as presented.

Carried.

Minutes

The minutes of the East End Services Committee meeting held on April 11, 2017 were presented.

Moved: Director Martin Seconded: Director Cecchini

That the minutes of the East End Services Committee meeting held on April 11, 2017 be adopted as presented.

Carried.

Delegations

B. Fry, International Industrial IoT Innovation Center (I4C)

Chair Grieve introduced Mr. Fry to the meeting and he thanked the Committee for the opportunity to present information on his company, i4C Innovation (International Industrial Internet of Things (IoT) Innovation Center). He acknowledged the i4C Founders and noted that society in general, has entered the "Fourth Industrial Revolution" with the creation of cyber physical systems.

The Industrial IoT sector includes all applicable applications, physical devices and sensors, big data, cognitive services, machine to machine communications, augmented business intelligence and cloud computing and networking. The i4C location within Metal Tech Alley in RDKB Electoral Area A is a strategic North American location on the Canadian side of the border targeting the Americas for talent and companies and which has easy access to the US markets and excellent Canadian immigration. The location is enhanced with being nearby the Trail Airport, the Waneta Industrial lands, US rail exchanges and the Waneta Dam. The larger BC cities are challenged with recruiting employees qualified to work in the tech industry, therefore the location of i4C in the RDKB could result in new families moving to the area.

With job creation, the company is investing and focusing in the Kootenay Region in hopes of attracting people into the region who can contribute with the development of this initiative.

Mr. Fry invited the Committee members to the i4C Grand Opening on May 24th. The Committee members thanked Mr. Fry for the presentation noting their interest in the project and he was excused from the meeting.

Unfinished Business**East End Services Committee Action Item List - May 5, 2017**

The East End Services Committee Action Item List for the period ending May 5, 2017 was presented.

There was a discussion regarding the KBRFR Training Facility and the costs to bring in a live-fire training unit. D. Derby, Fire Chief, KBRFR reviewed the costs. He noted that by bringing in the unit, firefighters are able to achieve live-fire certification without having to travel where costs (travel, accommodation etc.) would increase. The KBRFR Training Facility item will remain on the Action Item list as a placeholder.

Moved: Director Danchuk Seconded: Director McLellan

That the East End Services Committee Action Item List for the period ending May 5, 2017 be received as presented.

Carried.

New Business

There was no new business to discuss.

Late (Emergent) Items**Discussion Item****Lower Columbia Community Development Team Society (LCCDTS)****Nominations to Lower Columbia Initiatives Corporation (LCIC)****Board of Directors**

The Committee members reviewed the nomination list. It was noted that to date, the nomination list does not include a representative from the City of Trail. The City will be posting an Expression of Interest for its nominee in the near future.

There was a discussion regarding the reporting structure and accountability for the RDKB / East End Services Committee's non-voting appointment to the LCIC Board of Directors. There was also a discussion regarding the submission of a Monthly Report from the LCIC.

Moved: Director Cecchini Seconded: Director McLellan

That the Regional District of Kootenay Boundary Board of Directors approves the Lower Columbia Community Development Team Society's nominations to the Lower Columbia Initiatives Corporation Board of Directors as presented to the East End Services

Committee on May 9, 2017 with the inclusion of the representative from the City of Trail at a later date.

Carried.

(Director Martin opposed)

Discussion Item

Canada 150 Celebrations

Chair Grieve provided an update regarding preparations for a joint Canada 150 Celebration. Director Langman will be attending Canada 150 Celebration Planning Committee meetings and will provide a report at a future Committee meeting.

This item will remain on the agenda for the June Committee meeting.

Discussion - Update on the East End Services Economic Development Review

The Committee reviewed previous discussions regarding the City of Trail's position for entering into its own Economic Development Service Agreement with the Lower Columbia Community Development Team Society (LCCDTS) alongside the current contract.

The City of Trail has volunteered to draft a contract with the LCCDTS for economic development services as delivered by the Lower Columbia Initiatives Corporation (LCIC) while the other six East End Service participants continue with the current contract. It was noted that the City would continue to pay its share. To determine whether the other six participants approve of this option, the draft City of Trail contract would be presented to the East End Services Economic Development Review Committee once it has been drafted.

Further to the City of Trail providing notice for withdrawal from the current East End Services Economic Development contract and from the East End Economic Development Service overall, it was noted that should the service dissolve, dissolution would be sanctioned by the East End Services Economic Development Review Committee.

Discussion of items for future agendas

A discussion was not required.

Question Period for Public and Media

A question period was not necessary

Closed (In camera) Session

Moved: Director Danchuk Seconded: Alternate Director Parkinson

That the East End Services Committee convene to a closed meeting pursuant to Section 90 (2) (b) of the *Community Charter* (time: 5:32 p.m.).

Carried.

The East End Services Committee reconvened to the open meeting at 5:47 p.m.

Adjournment

There being no further business to discuss, it was;

Moved: Director Cecchini

That the meeting be adjourned (time: 5:49 pm).

TL



**Policy, Executive and Personnel Committee
Minutes
Wednesday, May 10, 2017 – 2:00 pm
RDKB Board Room, Trail, BC**

Committee Members Present:

Director V. Gee, Chair
Director R. Russell
Director M. Martin
Director G. McGregor
Director P. Cecchini (arrived 2:16 pm)
Director J. Danchuk

Staff Present:

J. M. MacLean, Chief Administrative Officer
M. Forster, Executive Assistant/Recording Secretary

CALL TO ORDER

The Chair called the meeting to order at 2:00 pm.

ADOPTION OF AGENDA (ADDITIONS/DELETIONS)

The agenda for the May 10, 2017 meeting of the Policy, Executive and Personnel Committee was presented.

Moved: Director McGregor Seconded: Director Danchuk

That the agenda for the May 10, 2017 meeting of the Policy, Executive and Personnel Committee be adopted as presented.

Carried

ADOPTION OF MINUTES

The minutes of the Policy, Executive and Personnel Committee meeting held April 12, 2017 were presented.

Moved: Director Danchuk Seconded: Director Martin

That the minutes of the Policy, Executive and Personnel Committee meeting held April 12, 2017 be adopted as presented.

Carried

GENERAL DELEGATIONS

There were no delegations present.

UNFINISHED BUSINESS

Policy, Executive and Personnel Committee Action Items - as of May 5, 2017

The Policy, Executive and Personnel Committee Action Items as of May 5, 2017 were presented.

J. MacLean, CAO, reviewed the new format of the action item list with the Committee members. It is staff's intention to attach a report on completed items to the CAO's quarterly report.

An update was provided on the status of nominating an RDKB representative to the Columbia Basin Trust (CBT) Board of Directors. The CBT CEO will be invited to attend the interviews. A watermark indicating the date of the Action Item List will be added. A succession policy item will be added to the list.

Moved: Director Martin Seconded: Director Russell

That the Policy, Executive and Personnel Committee Action Items as of May 5, 2017 be received.

Carried

J. M. MacLean
Re: Revised Hiring Policy

A staff report from J. M. MacLean, CAO presented the revised Hiring Policy for further consideration. The following revisions will be made to the revised Hiring Policy:

1. "Both External and Internal" will be added to the "Attracting Candidates" section on page 1. It will read: "Attracting Both Internal and External Candidates".
2. "up to a maximum of \$10,000" will be added to the "Eligible Expenses for the Successful Candidate - Moving Expenses" section on page 3. It will read: "The RDKB will pay up to a maximum of \$10,000 of the moving expenses (pack and move)."
3. "effective and" will be deleted and "management staff" will be replaced by "external and internal positions" to the "Policy" section on page 1. It will read: "The Regional District of Kootenay Boundary (RDKB) shall utilize reasonable practices when attracting and hiring external positions".

Discussion ensued on the terms of the probationary period. The following revision was made to the "Successful Candidate" and terms of probation section on page 3. "Appropriate salary grid level" will be replaced by "negotiated salary". It will read: "During those six months, the employee will be paid at the 95% level of the negotiated salary".

Moved: Director McGregor Seconded: Director Cecchini

That the Policy, Executive and Personnel Committee, endorses the proposed policy, as amended. **FURTHER** that the Hiring Policy will be brought back to the Committee for further review after the amendments have been made.

Carried

J. M. MacLean
Re: Bylaws and Policies - Director's Remuneration

The next steps with the proposed revisions to the bylaws and policies governing Director's remuneration were presented for discussion.

Discussion ensued on including expense receipts when submitting expense claims, expense advances and reporting travel expenses.

Moved: Director Russell Seconded: Director Cecchini

That Bylaw 1621 be forwarded to the Board of Directors with a recommendation of three readings and adoption.

Carried

Moved: Director Martin Seconded: Director Russell

That Staff will provide the Policy, Executive and Personnel Committee with a procedural statement, for review, that will provide direction for filling out expenses for reporting travel.

Carried

J. M. MacLean

Re: Fall Board Planning Session

Preliminary planning for the Fall Board Planning session was discussed by the Committee members.

Moved: Director McGregor Seconded: Director Martin

That the Fall Board Planning Session will be held on October 27/28, 2017, with the location to be determined.

Carried.

J.M. MacLean

Re: Board Meeting Schedule (Two meetings per month?)

A staff report presented the advantages and disadvantages of eliminating the Committee of the Whole meeting and adding a second Board meeting per month.

J. MacLean, CAO, informed the Committee members that should they endorse adopting a two Board meeting per month schedule, it would not come into effect until September 2017 should the Board approve it at the May meeting. The Committee also discussed the introduction of Portfolio Liaisons for Finance, Environmental and Protective Services. It was recognized that the Portfolio Liaisons would meet and discuss issues being brought to the Board with General Managers. There was general consensus among the Committee members to adopt a two Board meeting schedule. Staff will develop a template for all the Committee Liaisons.

Moved: Director McGregor Seconded: Director Cecchini

That the Policy, Executive and Personnel Committee endorse the recommendation of adopting a two Board meeting per month schedule and refer it to the Board of Directors for discussion and decision. **FURTHER** that the Terms of Reference will be amended to include "Make suggestions on having items added to the agenda at the Board table" under the "Responsibilities" section.

Carried

NEW BUSINESS

J. M. MacLean

Re: CAO and Quarterly Report

An item for discussion, feedback and suggestion for improvements to the CAO and Quarterly Report recently introduced to the Board of Directors was provided.

J. MacLean, CAO, provided the Committee members with the first quarter 2017 CAO report. Discussion ensued on the content of the report. Suggestions were made on the addition of topics such as: health and safety, personnel, labour relations, connection to the strategic plan and legal matters. The CAO informed the Committee members that the quarterly report was crafted so it can be a public document and that personnel or legal issues would be addressed in camera.

LATE (EMERGENT) ITEMS

There were no late (emergent) items for discussion.

DISCUSSION OF ITEMS FOR FUTURE MEETINGS

1. Develop a policy that addresses sending flowers to Directors and/or staff for different occasions.
2. Eliminating the copying of newspaper excerpts.
3. A discussion on local community commissions.
4. Providing a letter to Realize Strategies that critiques the Organization Governance Review.

QUESTION PERIOD FOR PUBLIC AND MEDIA

A question period for public and media was not required.

CLOSED (IN CAMERA) SESSION

There will be a closed (in camera) session pursuant to Section 90(1) (c) of the *Community Charter*.

Moved: Director McGregor Seconded: Director Cecchini

That the Policy, Executive and Personnel Committee convene to a closed meeting pursuant to Section 90 (1) (c) of the *Community Charter* (time: 3:57 pm).

Carried

The Policy, Executive and Personnel Committee reconvened to the open meeting at 4:31 pm.

ADJOURNMENT

The meeting was adjourned at 4:31 pm.



**Committee of the Whole
Minutes
Wednesday, May 10, 2017
RDKB Board Room, Trail**

Directors Present

Director R. Russell, Chair, COW (Environmental Services)
Director M. Rotvold, Chair, COW (Protective Services), Vice-Chair COW (Environmental Services)
Director V. Gee, Vice-Chair COW (Protective Services)
Alternate Director T. Webber, Vice-Chair, COW (Finance)
Director A. Grieve
Director L. Worley
Director G. McGregor
Director J. Danchuk
Director L. McLellan
Director F. Konrad
Director E. Smith
Alternate Director R. Cacchioni (Environmental Services, Protective Service)

Staff Present

J. M. MacLean, Chief Administrative Officer
M. Forster, Executive Assistant/Recording Secretary
A. Stanley, General Manager Environmental Services
B. Burget, General Manager Finance

CALL TO ORDER

The Chair called the meeting to order at 6:16 pm.

ADOPTION OF AGENDA (ADDITIONS/DELETIONS)

The agenda for the Committee of the Whole May 10, 2017 meeting was presented.

Moved: Director Worley Seconded: Director McLellan

That the agenda for the May 10, 2017 meeting of the Committee of the Whole be adopted as amended.

Director Gee requested a report under the Memorandum of Action Items on the timing of the Environmental Services staff investigating the recycling contract in the Sidley area.

Carried

ADOPTION OF MINUTES

The minutes of the Committee of the Whole meeting held March 15, 2017 were presented.

Moved: Director Worley Seconded: Director Grieve

That the minutes of the Committee of the Whole meeting held March 15, 2017 be adopted as presented.

Carried

PRESENTATIONS

**Aimee Ambrosone, Chief Operating Officer,
Columbia Basin Broadband Corporation
Re: Federal Broadband Project**

Ms. Ambrosone, COO, Columbia Basin Broadband Corporation, attended the meeting to provide the Committee members with a presentation on the Connect to Innovate Project, a Federal program that supports new and upgraded backbone and last-mile infrastructure projects in rural and remote communities across Canada. The Committee was informed that one of the major fibre builds will be from Warfield to Grand Forks.

COMMITTEE OF THE WHOLE MEMORANDUM OF ACTION ITEMS

The Committee of the Whole Memorandum of Action Items in the new format was presented for the Committee's consideration.

Director Gee discussed a recycling contract in Sidley. Staff informed the Committee that it was not in the current budget and tender could be put out for next year. As the cost is unknown, a full budget amendment would be required. At the March 2017 meeting staff was directed to prepare a report that illustrates the costs and policy implications for the implementation of curbside collection of recyclable materials in the Sidley/Bridesville areas. Staff will prepare this report in time for the next budget process which begins in September 2017.

Moved: Alternate Director Cacchioni Seconded: Director Worley

That the Committee of the Whole Memorandum of Action Items be received.

Carried

BUSINESS

Finance

Old Business

There was no old business to discuss.

New Business

B. Burget - Quarterly Financial Results

A staff report from Beth Burget, General Manager of Finance, regarding the financial results for the year-to-date ending March 31, 2017 was presented.

The Committee members were informed that this was the first report following budget approval.

Moved: Director Rotvold Seconded: Alternate Director Webber

That the staff report from Beth Burget, General Manager of Finance regarding the Financial Plan Comparison - 2017 First Quarter be received.

Carried

B. Burget - Statement of Financial Information

A staff report from Beth Burget, General Manager of Finance, regarding the 2016 Statement of Financial Information (SOFI) was presented.

Moved: Alternate Director Cacchioni Seconded: Director McLellan

That the Regional District of Kootenay Boundary Board of Directors approve the SOFI schedules for the Year Ended December 31, 2016. FURTHER That the Board make the SOFI Schedules available to the public by providing copies upon request and by making the reports available on the Regional District's web site. FURTHER that the Board waive the \$5.00 fee for the SOFI Schedules as prescribed by the *Financial Information Act*.

Carried

B. Burget - Interim Schedule of Accounts

A staff report from Beth Burget, General Manager of Finance, regarding the monthly reporting - Interim Schedule of Accounts was presented.

The Committee members were informed that at the last Board meeting a resolution was passed requesting more information on payroll accounts. Considering that the current payroll information provided does not provide value and after surveying colleagues in other Regional Districts and given the fact that similar organizations do not provide this information, the General Manager of Finance recommended that the reporting of payroll information be eliminated on the monthly report for the Board - Interim Schedule of Accounts.

Moved: Director Rotvold Seconded: Alternate Director Webber

That the Committee of the Whole (Finance) recommends that payroll information be eliminated from the monthly report - Interim Schedule of Accounts.

Carried.

B. Burget - Fraudulent Activity

A staff report from Beth Burget, General Manager of Finance, regarding fraudulent activity was presented.

B. Burget, General Manager of Finance, informed the Committee members that the RDKB had recently been contacted by its bank in regards to suspected fraudulent activity on its account. The incident was reported to the RCMP.

Moved: Alternate Director Cacchioni Seconded: Director Grieve

That the Committee of the Whole (Finance) directs staff to report any suspicious or fraudulent activity on RDKB's bank accounts to the RCMP.

Carried

Closed (In camera) Session

A closed (in camera) session was not required.

Environmental Services**Old Business**

A. Stanley-Draft Schedule**Development of Solid Waste Management Plan**

A Staff Report from Alan Stanley, General Manager of Environmental Services regarding a draft schedule for Solid Waste Management Plan development was presented.

A. Stanley, General Manager of Environmental Services, informed the Committee members that two issues should be considered; identifying a priority and identifying how staff resources should be used. Currently staff is working on a large capital plan which is time consuming. The best use of staff's time needs to be established.

Moved: Director McGregor Seconded: Director Worley

That the Committee of the Whole (Environmental Services) refer the DRAFT Solid Waste Management Plan development schedule to the Solid Waste Management Plan Steering Committee for discussion.

Carried

New Business**A. Stanley-Used Oil Recycling**

A Staff Report from Alan Stanley, General Manager of Environmental Services regarding used oil recycling in the Regional District of Kootenay Boundary was presented.

The Directors were provided with an update on the progress to date working with the provincial regulator and the RDKB Board attempts to raise issues at the UBCM. Staff recommended that the RDKB Board of Directors maintain its position that designated industries should deliver EPR programs, re-inform BCUOMA of RDKB rental opportunities where appropriate and further that a letter be sent to the Minister of Environment requesting that BCUOMA be compelled to deliver access to used oil recycling services.

Moved: Director McLellan Seconded: Director Worley

That the Regional District of Kootenay Boundary Board of Directors maintain the current RDKB Extended Producer Responsibility program position that designated industries should deliver Extended Producer Responsibility programs. **FURTHER** that the Board re-inform British Columbia Used Oil Manufacturing Association of the RDKB rental opportunities where appropriate and where British Columbia Used Oil Manufacturing Association has not provided access to used oil recycling depots, specifically Grand Forks, Rock Creek and Beaverdell. **FURTHER** that the Board write the Minister of the Environment requesting that they compel British Columbia Used Oil Manufacturing Association to deliver access to used oil recycling services in compliance with the Recycling Regulation.

Carried

Closed (In camera) Session

A closed (in camera) session was not required.

Protective Services

Old Business

There was no old business to discuss.

New Business

There was no new business to discuss.

Closed (In camera) Session

A closed (in camera) session was not required.

DISCUSSION OF ITEMS FOR FUTURE AGENDAS

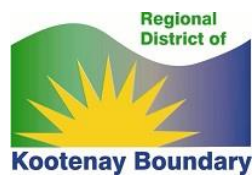
A discussion of items for future agendas was not required.

QUESTION PERIOD FOR PUBLIC AND MEDIA

A question period for public and media was not required.

ADJOURNMENT

The meeting was adjourned at 7:00 pm.



Electoral Area Services Minutes

Wednesday, May 17, 2017
RDKB Board Room, 843 Rossland Ave., Trail, BC

Directors Present:

Director Linda Worley
Director Grace McGregor
Director Vicki Gee

Directors Absent:

Director Ali Grieve
Director Roly Russell

Other Directors:

Director Lloyd McLellan
Alternate Director Bill Edwards

Staff Present:

Donna Dean, Manager of Planning and Development
Louise Hamazaki, Recording Secretary

CALL TO ORDER

Chair Worley called the meeting to order at 4:32 p.m.

ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

May 17, 2017

There were additions to the agenda as late (emergent) items as follows:

**Electoral Area Services
May 17, 2017
Page 1 of 9**

1. Attendance at conferences
2. Medical Marijuana
3. Properties in Bridesville adjacent to the former drug lab

Moved: Director McGregor

Seconded: Director Gee

That the May 17, 2017 Electoral Area Services Agenda be adopted as amended.

Carried.

MINUTES

April 13, 2017

Moved: Director McGregor

Seconded: Director Gee

That the April 13, 2017 Electoral Area Services Minutes adopted as presented.

Carried.

DELEGATIONS

There were no delegations in attendance.

UNFINISHED BUSINESS

A Memorandum of Committee Action Items

Director Gee inquired about which committee could assist her in having a Tax Requisition raised. She was directed to discuss with the Finance Department and request this be included as an action item on the next Board agenda.

Moved: Director McGregor

Seconded: Director Gee

That the Memorandum of Electoral Area Services Committee Action Items be received.

Carried.

Unightly Premises - follow-up discussion

Director Gee described how ranchers in the Bridesville area support the clean-up of properties. Director Gee is offering assistance via Grant in Aid to cover cost of tipping fees to assist with a project to clean up some parcels in the Bridesville townsite.

Director Gee would like staff to research the cost of unsightly premises enforcement; possibly have a By-Law Enforcement Officer to oversee unsightly premises and outline other issues that could be addressed by this position.

She would also like staff to explore the idea of holding a referendum in conjunction with the 2018 elections to create service for enforcement of unsightly premises for all five electoral areas.

NEW BUSINESS

Lawrence and Mary Dick

Ed and Kate Garlinge, Agents

RE: OCP & Zoning Amendment

Richie Road, Electoral Area 'B'/Lower Columbia-Old Glory

RDKB File: B-Twp28-10967.170

Donna Dean presented a brief description of the application and images outlining the proposed options. Donna describe how Option #1 is not consistent with the RDKB Policy unless a more liberal interpretation of 'rural resource' is made. Donna outlined the concerns for the neighbors:

- a. Neighbors purchased their properties with the knowledge of what they were purchasing, including the zoning,
- b. An increase in traffic,
- c. Predictability to neighbours,
- d. Setting a precedent.

Director Worley advised of her APC's concerns regarding the potential year-round use and density. Director Worley also commented that the APC supported this niche market and also that this proposal is an economic driver.

Director Gee requested clarification of square footage as the information provided on page 27 of the agenda differs from that on page 31.

Director McLellan spoke in favour of the application and its potential contribution to the community.

Electoral Area Services

May 17, 2017

Page 3 of 9

Discussion included the mitigation of zoning opportunities only permitting 'Temporary accommodations' and being specific to the subject property.
The development proposal may require a change in the covenant regarding the location of the septic system.

As the RDKB has received one letter supporting and one letter not in favour of the proposal, Director Worley advised that a Public Hearing would be a fair procedure.

Moved: Director McGregor

Seconded: Director McLellan

That the application submitted by Kate and Ed Garlinge, as agent for Lawrence and Mary Dick, for an Official Community Plan and a Zoning Bylaw amendment to permit a proposed family nature retreat on Lot 7, Richie Road in the Black Jack Residential area of Electoral Area 'B'/ Lower Columbia-Old Glory, be supported AND FURTHER that staff be directed to draft amendment bylaws for presentation to the RDKB Board of Directors for first and second readings and to schedule and hold a public hearing on the proposed bylaw amendments.

Carried.

Kathy Novokshonoff

RE: Zoning Amendment

2081 Perkins Road, Electoral Area 'D'/Rural Grand Forks

RDKB File: D-581s-04694.055

Moved: Director McGregor

Seconded: Director McLellan

That the application to amend section 317 of the *Electoral Area 'D' / Rural Grand Forks Zoning Bylaw No. 1299* submitted by Kathy Novokshonoff be deferred to allow time for staff to address questions raised by the Electoral Area 'D'/Rural Grand Forks Advisory Planning Commission.

Carried.

Randy DeBiasio**RE: Development Variance Permit**

420-3rd Avenue, Rivervale, BC

RDKB File: B-367-02303.070

Donna Dean reviewed this application with the committee members. The location of the property, the proposed siting of the garage, and the proposed garage size (20' x 30') were discussed.

Moved: Director Gee

Seconded: Director McGregor

That the application for a Development Variance Permit submitted by Randy DeBiasio to allow for an accessory building rear yard setback variance of 0 metres (from 3 metres to 0 metres) on Lot 35, District Lot 367, Plan NEP2667, KD, *Electoral Area 'B' / Lower Columbia - Old Glory* be presented to the Regional District of Kootenay Boundary Board of Directors for consideration with a recommendation of conditional support, subject to a variance of 1.5 metres to permit a setback of 1.5 metres from the rear yard for an accessory building, and approval from the Ministry of Transportation and Infrastructure.

Carried.

Big White Ski Resort Ltd.**Brent Harley, Agent****RE: Development Permit**

Black Forest Area, Big White

RDKB File: BW 4255-Temp

Donna Dean reviewed this application with the committee members. Discussed were outstanding issues of access to the building by Waste Management and Big White Fire Department. Concerns raised are: year-round access to all buildings; and where the snow is going to be stored. As this facility will be utilized as employee housing, there will likely be cars parked for a greater duration over the winter months.

Moved: Director McGregor

Seconded: Director Gee

That the Development Permit application submitted by Brent Harley and Associates (BHA), on behalf of Big White Ski Resort Ltd., to construct 4 buildings for employee housing in the Alpine Environmentally Sensitive Landscape Reclamation and Commercial and Multi-Family Development Permit Area on proposed DL 4255, SDYD, be received.

Carried.

Electoral Area Services**May 17, 2017****Page 5 of 9**

Shawn Warren

Mark Takenen, Agent

RE: Development Permit

384 Feathertop Way, Big White

RDKB File: BW-4222-07500.820

Donna stated the Planning Department is waiting on further information on setbacks and groundcover, and that a permit cannot be issued until any concerns are addressed.

Moved: Director McGregor

Seconded: Director Gee

That the application for an Alpine and Environmentally Sensitive Landscape Reclamation Development Permit on Lot 44 District Lot 4222 Plan KAS3134, 384 Feathertop Way, Big White of the *Electoral Area 'E' / West Boundary* submitted by Mark Takenen of IFERIN International, be received.

Carried.

Donald Beliveau

RE: MOTI Subdivision

12095 Brown Creek Road

RDKB File: D-2843s-06906.000

Moved: Director McGregor

Seconded: Director Gee

That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed conventional subdivision for the parcels legally described as South ½ of DL 2842s and DL 2843s, in Electoral Area 'D' / Rural Grand Forks, be received.

Carried.

Coreen & Donald Piltingsrud

RE: MOTI Subdivision

20 Cottonwood Road, Beaverdell

RDKB File: E-1078s-04600.130

Moved: Director McGregor

Seconded: Director Gee

That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed conventional subdivision for the parcel legally described Lot 11 District Lot 1078s, SDYD, Plan KAP90380, in Electoral Area 'E' / West Boundary, be received.

Carried.

Electoral Area Services

May 17, 2017

Page 6 of 9

Okanagan Water Forum-Discussion

Director Gee addressed the committee detailing that the forum will be held in Kelowna and facilitated by the Okanagan Nations Alliance.

Moved: Director McGregor

Seconded: Director Worley

That the Electoral Area Services Committee approves the attendance of Director Gee at the Okanagan Water Forum to be held in Kelowna, BC on May 30, 2017.

Carried.

Alternate Director Discussion- Item added from last month's meeting

UBCM is looking at policy regarding alternate directors. Since Alternate Directors are not elected, there are concerns about their authority to make decisions when there is a long term absence of a director.

Rural Director Name Change Discussion-Item added from last month's meeting.

Director McGregor is in communication regarding the potential for a name change for Electoral Area Directors with other areas such as Powell River

Westbridge Recreation Society RE: Gas Tax Application

Moved: Director McGregor

Seconded: Director Gee

That the Gas Tax application by Westbridge Recreation Society in the amount of \$20,699.41 to replace the Westbridge Community Hall kitchen be forwarded to the RDKB Board of Directors with a recommendation of approval. FURTHER that the Board of Directors authorizes the RDKB signatories to sign and enter into the agreement.

Carried.

Grant in Aid Update

Moved: Director Gee

Seconded: Director McGregor

That the Grant in Aid report be received.

Carried.

Gas Tax Update

Moved: Director Gee

Seconded: Director McGregor

That the Gas Tax report be received.

Carried.

LATE (EMERGENT) ITEMS

Conference Attendance

Director Gee attended 'Share the Trail' convention and found the material offered to be informative and presented by a great facilitator. The convention was attended by 4x4 clubs and ATVers that are concerned about not having access to the trails to access the permitted motorized areas. Both groups seemed to understand each other's point of view.

Director Gee became a member of the Share the Trail committee representing Area 'E'/West Boundary only.

Director Gee is interested in attending the Interior Lumber Manufacturers (ILM) & BC Cattleman's conference - both will include travel and an overnight stay.

Director Gee requested permission to attend with expenses paid.

Moved: Director McGregor

Seconded: Director Worley

That the Electoral Area Service Committee approves the attendance of Director Gee for the ILM AGM & BC Cattleman's conference, with all expenses paid.

Carried.

Bridesville Properties

Director Gee acknowledged that the RCMP & Interior Health worked well with residents upon the discovery of the drug-lab. However, neighbours are concerned that the remains of contaminated soil and water may impact neighbouring properties. Director Gee brought the situation with CAO John MacLean's attention. Donna Dean offered to follow-up to determine the status of the investigation and clean up.

Medical Marijuana

Director Gee briefly discussed the anticipated increase in demand for 'marijuana growing facilities' upon the legalization of marijuana. She is aware of two proposed facilities in Area 'E'/West Boundary, one of which has good support in the community. Director Gee questioned how many facilities the federal government will allow?

DISCUSSION OF ITEMS FOR FUTURE AGENDAS

Local Community Commissions

CLOSED (IN CAMERA) SESSION

A closed (in camera) session was not required.

ADJOURNMENT

There being no further business to discuss, Chair Worley adjourned the meeting at 5:34 p.m.

**Electoral Area “C” Parks & Recreation Commission
Regular Meeting
Wednesday, May 10, 2017
Welcome Centre
8:00 AM**

AGENDA

- 1. Approval of the Agenda**
- 2. Delegations: Ministry of Transportation- Trail Development for Cove Bay to Brown Rd**
 - Rajeeta Bains/Christine Nichol- Attending meeting to answer questions regarding the development for the Cove Bay to Brown Rd Trail
- 3. Minutes**
 - Minutes of the Regular meeting of April 12, 2017 –**Pgs 1-4**
- 4. Business Arising from the Minutes-**
- 5. Correspondence-** Christina Lake Stewardship 17th Annual Lake cleanup day-**Pg 5**
-One Tree Adventure – Summer Camps-**Pg 6**
- 6. Financial Plan –**
 - 2017 – RDKB Financial Statement –Not Available-
- 7. Old Business**
 - Christina Lake Disc Golf Course- **Correspondence-Pg7-8**
 - Kettle River Walk Trail-Report- N/A
 - Pedestrian Bridge – UBCM Strategic Priorities Fund- **Verbal Report**
 - Removal of Dangerous Trees in the Nature Park and Dog Park-**Verbal Report**
- 8. New Business-**
 - Trail Development from Cove Bay to Brown Rd- 3.5km
 - Christina Lake Tourism Society Canada 150 Funding-**Report-Pgs 9-16**
 - Little Lakers Centre Request for funding to help purchase playground equipment. **Verbal Report**

9. Sub Committee Report

- **COP Update- Dave Beattie**
-
- **Recreation Program Update**
 - **May Flyer-Pgs17-18**
 - **Pickleball Tournament- As of Today, there are 52 people registered for Tournament-**
 - **Pharmasave Christina Lake Triathlon-Slow start to the registration**
- **- Park Maintenance - Report**
- **Trails – Josh Strzelec-**
- **Community Coordinator Report-Update**

10. Other Business Arising from the Floor –(If Public Members Present)**11. Adjournment****Outstanding Projects for Future Development**

- Kids Bump Bike Park–Dust Control
- Walking Trail around Golf Course-
- Pedestrian Bridge –
- Disc Golf/Frisbee Golf-
- Moro Footbridge-

Tech Property to Access River

Christina Crest Trail-

Marine Study

- Boat House
- Nature Park Shore line and garden Project
- Boat Dock @ Community Park

Minutes of the Regular Meeting of the Electoral Area "C" Parks & Recreation
Commission held Wednesday May 10, 2017 at the Welcome Centre

Present

Carlo Crema
Dave Beattie
Dianne Wales
Josh Strzelec
Paul Beattie-Late

Absent

Brenda Auge
Larry Walker
Liz Stewart

RDKB Staff

Tom Sprado/Lilly Bryant

Area Director

Grace McGregor

Guest

Donna Wilchinsky

Agenda

1. **M/S Josh Strzelec, Dave Beattie, that the May 10, 2017 agenda be adopted as amended- Addition To:**

Financial Plan: RDKB Financial Statement –March 2017-Draft Copy

Delegations

**Ministry of Transportation- Trail Development for Cove Bay Rd to Brown Rd
Rajeeta Bains/Christine Nichol-**

- Developing a non-motorized walking trail from the end of Cove Bay Rd to Brown Rd on the Eastside of Christina Lake was discussed.
- Length of trail to be developed is approximately 2km which includes a section of Private Property
- Confirmation is needed on Ministry of Highways right of way
- Ministry of Highways will request for a trail development proposal
- License of occupancy would be required to develop a Trail on Ministry of Highway Right of Way.

Minutes

2. **M/S Josh Strzelec, Dave Beattie that the minutes of the regular meeting from April 12, 2017 be accepted as circulated.**

Carried

Business Arising from the Minutes: N/A

Correspondence:

- **Christina Lake Stewardship 17th Annual Lake cleanup day**
Received for Information
- **One Tree Adventure – Summer Camps**
Recreation Commission agreed not to support One Tree Adventure Summer Camp proposal. They felt it would jeopardize the Stewardship Society and Little Lakers summer programs.

Financial Plan:

- Reviewed the RDKB Financial Statement dated the end of March 2017

Old Business

- **Disc Golf Course-Report-**
 - The Application has been approved at the first level - The Ministry of Community, Sport and Cultural Development is sponsoring our application to obtain a Free Crown Grant to develop the Disc Golf Project.
 - The Front Counter BC and other lands staff at Forests, Lands and Natural Resource Operations will process the application when they receive a copy of the sponsorship letter, and will notify RDKB for additional information if required.
- **Pedestrian Bridge –**
 - UBCM Strategic Priorities Fund: Grant application is being completed by RDKB staff
Application deadline is June 1, 2017
- **Removal of Dangerous Trees in the Nature Park and Dog Park-**
 - Kodiak Forestry Service is contracted to cut all the deemed dangerous trees in the Nature Park/Dog Park/ Pickleball, Tennis courts area.

New Business

- Trail Development from Cove Bay to Brown Rd- 2km
Met with Ministry of Transportation (MOT) – Direction will be provided by MOT for a Trail development proposal.
- **Christina Lake Tourism Society Canada 150 Funding-**
- 3. **M/S Josh Strzelec, Paul Beattie, recommends that additional funding to support the Christina Lake Tourism Society and the Canada 150 Laker Style Celebration is denied.**

Carried

- **Little Lakers Centre Request for funding to help purchase playground equipment Operational Budget.**
Grace McGregor indicated that she has provided Grant -In-Aid for the amount of \$3500 towards the Little Lakers Centre Operational budget and for the purchase of outdoor equipment for 2017.
Christina Lake Parks & Recreation Commission will consider financial support for 2018 through the operating grants budget.

Subcommittee Report

- **COP Update-**

- Monday May 8th meeting – 11 members attended
- Concerned about July long weekend
- No New tires will be needed this year
- Received \$100 from ICBC for the Reader Board sign project
- RCMP will be returning this summer-Grace will contact Sergeant Jim Fenske about a return date for Chris

Carlo Crema left meeting at 9:32 am – We no longer had a Quorum to continue with meeting

4. Moved by Josh Strzelic that the meeting be adjourned at 9:32am

Carried

- **Recreation Program Update**

- May Flyer
- Christina Lake Triathlon
- Pickleball Tournament scheduled during Homecoming 74 Registered as of today Meeting

- **Park Maintenance Monthly Report-No Report available**

- **Trails: -Josh Strzelec**

- Trails are in great shape
- 25 riders attended the Mountain Bike Club's AGM
- Safety on Trails

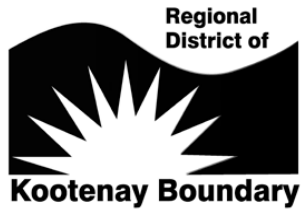
- **Community Coordinator Report- Donna Wilchinsky**

Other Business Arising from the Floor: –No public present

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Lilly Bryant, Recording Secretary

Dianne Wales, Chairperson



ELECTORAL AREA 'D'/RURAL GRAND FORKS

ADVISORY PLANNING COMMISSION

MINUTES

Tuesday, June 6, 2017 at the RDKB Office – Grand Forks.

PRESENT: Deb Billwiller, Edith MacAllister, Christie Wheaton, Lesley Matthews,

ABSENT: Werner Behrens, Kathy Hutton

RDKB DIRECTOR: Roly Russell

RDKB STAFF:

GUESTS:

1. CALL TO ORDER

The meeting was called to order at 7:01 p.m.

2. ADOPTION OF AGENDA

It was moved: Wheaton; seconded: Matthews that the June 6, 2017 Electoral Area 'D'/Rural Grand Forks APC agenda be adopted as circulated. Carried.

3. ADOPTION OF MINUTES

It was moved: Matthews; seconded: Wheaton that the May 2, 2017 Electoral Area 'D'/Rural Grand Forks APC minutes be approved as circulated. Carried.

4. DELEGATIONS

None

5. OLD BUSINESS

A. Kathy Novokshonoff

RE: Zoning Amendment-Reduce Minimum Parcel size to subdivide for a relative
2081 Perkins Rd, Electoral Area 'D'/Rural Grand Forks
RDKB File: D-581s-04694.055

After a lengthy discussion of how this might be doable, with specific references to minimum parcel sizes in Rural Resource 1 zoning, split designation land use (Agricultural Resource 2 and Rural Resource 1) in OCP and the possibilities of a second dwelling on 1 parcel, it was:

Moved: Billwiller; seconded: Wheaton that the APC is, regretfully, unable to support this application for subdivision due to minimum parcel sizes and the potential of setting precedents. Carried.

6. NEW BUSINESS

A. David Turner & Janice Westlund

RE: Site Specific Exemption to the Floodplain Bylaw
5070 AlmondGardens Road, Electoral Area 'D'/Rural Grand Forks
RDKB File: D-362-02703.010

Because the existing building and the neighbours' buildings are all already within the floodplain, it was:

Moved: MacAllister; seconded: Wheaton that the APC supports this application with the conditions that: 1. the owner enter into a covenant holding the Regional District harmless in the event of damage, loss or injury from any flood; 2. that minimum setbacks from the road be adhered to; and 3. that the plans be adjusted to meet the 40% size rule in section 320 of the zoning bylaw. Carried.

B. Michael Slatnik & Jennifer Dressler

Re: Zoning Amendment
3530 Hardy Mountain Road
RDKB File: D-538-03778.010

Much of the discussion centered around the building permit for the primary residence having been granted due to the property owners having signed an affidavit to remove or render inhabitable once the new house was completed. There were also concerns regarding whether the manufactured home would actually be a dwelling for an immediate family member or a guest house for visitors. It was:

Moved: Wheaton; seconded: Billwiller that the APC support this application with the conditions that the manufactured home meets the 9 metre maximum width limit and be for immediate family only. Further, that the home owner would sign an agreement with the Regional District agreeing to those conditions and that they be registered on title of the property. Defeated.

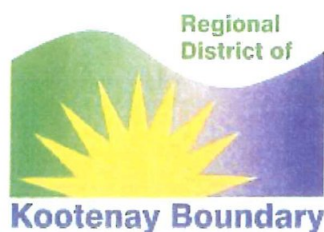
As more discussion followed, it became obvious that the 4 members of the APC who were present were split in half regarding support or non-support of this application and no recommendation can be made.

7. FOR INFORMATION

None

8. ADJOURNMENT

Billwiller moved adjournment at 8:38 p.m.

**STAFF REPORT****Date:** 03 May 2017**File**

Staff Reports -BRD-
Amendment to 2017
Financial Plan to
Access Funds from
Reserves

To: RDKB Board Of Directors**From:** Mark Daines - Manager of Facilities and Recreation**Re:** Staff Report - BRD-Amendment to 2017 Financial Plan to Access funds from Reserves**Issue Introduction**

A staff report from Mark Daines, Manager of Facilities and Recreation regarding a budget amendment proposal to the 2017-2021 Financial Plan for the purpose of building a storage shed in upper Lewis field.

History/Background Factors

On Feb 7, 2017 the Beaver Valley Recreation Committee received a letter of request for funds (\$4,000) from the Beaver Valley Softball Association to offset the costs of building a storage shed on to the existing baseball dug out in upper Lewis field.

At the February 2017 Beaver Valley Recreation Committee meeting the Beaver Valley Recreation Committee approved the funding request for \$4,000 from the Beaver Valley Softball Association.

In addition to the request for \$4,000 from Beaver Valley Recreation, the Softball Association has secured matching funds from the Columbia Basin Trust.

This expense was not originally part of the 2017-2021 Five Year Financial Plan.

Implications

Financial: the \$4,000 will reduce the 019 Beaver Valley Parks and Trails reserve fund from \$101,538.00 to \$97,538.00.

Advancement of Strategic Planning Goals

That by approving the budget amendment to the financial plan ensures that we are responsible and proactive in funding our services and that plans are developed to address aging infrastructure in our services to ensure sustainable services.

Background Information Provided

See attached letter of request from the Beaver Valley Softball Association.

Alternatives

None

Recommendation(s)

That the Regional District of Kootenay Boundary Board of Directors approves the allocation of \$4,000.00, as matching funds to the CBT Community Initiatives Program grant funding, from the 019 Beaver Valley Park's and Trail Reserve Account for the construction of a storage shed at Lewis Field. **FURTHER** that the 2017-2021 Five-Year Financial Plan Bylaw No. 1637,2017 be amended accordingly.

February 7, 2017

Regional District of Kootenay Boundary
202 – 843 Rossland Avenue
Trail, BC V1R 4S8

Attention: Mark Daines
Manager of Facilities and Recreation

Dear Chair & Members:

Re: Storage Shed Upper Lewis Ball Field

As the head of Beaver Valley Softball, I have been playing and coaching for over 40 years, and I am very excited to see the growth in both softball and baseball in our local area. Both Beaver Valley Softball & Beaver Valley Baseball Associations have had a huge resurgence of the sport & our numbers are way up (both associations up 25% adding 4 new teams and in need of space). We are requesting \$4000.00 to be included in the 2017 budget for a permanent storage unit at Upper Lewis Field. This shed is desperately needed to store equipment and field maintenance materials. We are currently challenged with space as we are looking for an extra storage in order to make maintenance more manageable for our volunteer coaches and parents.

Your consideration of this request is appreciated by the children and youth players, the parents and the volunteer coaches.

Yours truly,

Tammy Gallamore
Beaver Valley Softball



Best Practices
Municipal Appointments to the Board of Directors

REVISED – February 2, 2017

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Municipal Directors to a Regional District Board are appointed by their respective Councils. The statutory authority is established by:

Appointment and term of office for municipal directors

198 (1) After the first appointment under section 41 (2) (e) [first board for regional district], each municipal director is to be appointed at pleasure by the council from among its members.

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(2) The term of office of a municipal director

(a) begins when the person takes office in accordance with section 202 (3) [oath or affirmation of office], and

(b) continues until the earliest of the following:

(i) another director taking office in the original director's place;

(ii) the director ceasing to be a member of the council before the next general local election;

(iii) November 30 in the year of a general local election.

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784 (1) After the first appointment under section 777 (1) (e), each municipal director is to be appointed at pleasure by the council from among its members.

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(2) The term of office of a municipal director

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(a) begins when the person takes office in accordance with section 210 (3) [oath of office], and

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(b) continues until the earliest of

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ITEM ATTACHMENT # B)

(i) ~~another director taking office in the original director's place,~~

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(ii) ~~the director ceasing to be a member of the council before the next general local election, and~~

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(iii) ~~December 31 in the year of a general local election,~~

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It is important to recognize the following issues:

- The appointment is at the pleasure of Council and not an appointment of the Mayor.
- The appointment is for the term of office or until Council changes the appointment.

Generally, the practice is that the appointment is made at the inaugural meeting of Council, ~~which~~. This is held in ~~December~~ November following the local government election of each year. The initial municipal appointment ~~is~~ should be made in advance of the Regional District holding its inaugural meeting.

The Regional District of Kootenay Boundary would like to present the following as best practices in making appointments:

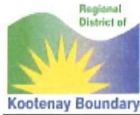
1. The municipal appointment should be made at the first Council meeting in ~~December~~ November. If ~~the municipal Council chooses to make there is to be a~~ change, it ~~should be made prior to the~~ should consider the timing for the Regional District ~~and when it will~~ holding its annual inaugural meeting (which must be held each year to elect a Board Chair). This is for the following reasons:
 - a. ~~Committee appointments are made by the Regional District and the Board Chair. The Regional District and the Board Chair make committee appointments~~ immediately after the inaugural meeting.
 - b. The Municipal Director will be able to participate in the election of the Chair.
 - c. It allows appointees to fully participate in the financial planning process.
 - e.d. ~~Where a change is made any other time during the year, the new Municipal Director will assume the responsibilities of the past Municipal Director unless changed by the Board Chair.~~
2. ~~It is not the responsibility of the Regional District to report back report to municipal Council and this responsibility rests with the Municipal Director. A municipal Council should have a frank discussion discuss a reporting protocol with their appointees as to the as part of establishing a process and protocol to disseminate regional information, and reporting they desire.~~ A common complaint is that the

Best Practices – Appointment of Municipal Director
Page 2 of 2

ITEM ATTACHMENT # B)

Municipal Director is not appropriately reporting back to on regional matters back to the respective Council. It is not the Regional Districts responsibility to report back to the municipal councils.

3. Councils have to understand that the Municipal Directors, along with Electoral Area Directors, have a responsibility to the Regional District as prescribed by legislation. That The responsibility includes the requirement to make decisions at the Board table, which in: Mmost cases of these decisions are made independently from the of-municipality and Council they represent. The majority of Not-all decisions are going to will not be referred back to a Council for discussion. In fact very few are.
4. Given the complexities and differences between a municipality and regional district, a municipal Council should consider wherever possible have the making appointments that provide consistency and appropriate individual experience to strengthen the overall capacity of the Regional Board. relatively consistent: Regional Districts are very different from municipalities and there is value in experience.



Best Practices
Municipal Appointments to the Board of Directors

REVISED – February 2, 2017

Municipal Directors to a Regional District Board are appointed by their respective Councils. The statutory authority is established by:

Appointment and term of office for municipal directors

198 (1) *After the first appointment under section 41 (2) (e) [first board for regional district], each municipal director is to be appointed at pleasure by the council from among its members.*

(2) *The term of office of a municipal director*

(a) *begins when the person takes office in accordance with section 202 (3) [oath or affirmation of office], and*

(b) *continues until the earliest of the following:*

(i) *another director taking office in the original director's place;*

(ii) *the director ceasing to be a member of the council before the next general local election;*

(iii) *November 30 in the year of a general local election.*

It is important to recognize the following issues:

- The appointment is at the pleasure of Council and not an appointment of the Mayor.
- The appointment is for the term of office or until Council changes the appointment.

Generally, the practice is that the appointment is made at the inaugural meeting of Council, which is held in November following the local government election. The initial

ITEM ATTACHMENT # C)

municipal appointment should be made in advance of the Regional District holding its inaugural meeting.

The Regional District of Kootenay Boundary would like to present the following as best practices in making appointments:

1. The municipal appointment should be made at the first Council meeting in November. If the municipal Council chooses to make a change, it should consider the timing for the Regional District and when it will hold its annual inaugural meeting (which must be held each year to elect a Board Chair). This is for the following reasons:
 - a. The Regional District and the Board Chair make committee appointments immediately after the inaugural meeting.
 - b. The Municipal Director will be able to participate in the election of the Chair.
 - c. It allows appointees to fully participate in the financial planning process.
 - d. Where a change is made any other time during the year, the new Municipal Director will assume the responsibilities of the past Municipal Director unless changed by the Board Chair.
2. It is not the responsibility of the Regional District to report to municipal Council and this responsibility rests with the Municipal Director. A municipal Council should discuss a reporting protocol with their appointee as part of establishing a process and protocol to disseminate regional information. A common complaint is that the Municipal Director is not appropriately reporting on regional matters back to the respective Council.
3. Municipal Directors, along with Electoral Area Directors, have a responsibility to the Regional District as prescribed by legislation. The responsibility includes the requirement to make decisions at the Board table, which in most cases are made independently from the municipality and Council they represent. The majority of decisions will not be referred back to a Council for discussion.
4. Given the complexities and differences between a municipality and regional district, a municipal Council should consider making appointments that provide consistency and appropriate individual experience to strengthen the overall capacity of the Regional Board.

ITEM ATTACHMENT # C)

From: Lloyd McLellan
To: [Maureen Forster](#)
Cc: [Grace McGregor](#); [Roly Russell](#); [Ali Grieve](#); [Ali Grieve](#); [Patricia Cecchini](#); [Linda Worley](#); [Joe Danchuk](#); [Mike Martin](#); [councillormclellan](#); [Marguerite Rotvold](#); [Vicki Gee](#); [Frank Konrad](#); [Ed Smith](#); [Diane Langman](#); [John MacLean](#); [Theresa Lenardon](#)
Subject: Re: Best Practice - Municipal Appointments to the Board of Directors
Date: May-05-17 5:24:41 AM

Re : Municipal Appointments best practices.
 Under " the RDKB would like to present the following under best practices in making appointments."

2 : delete everything after the first sentence

3 : delete everything after the first sentence

4 : delete in it's entirety

These comments are made, as I believe, it is the prerogative of each Municipality, beyond complying with the Local Government Act, to determine their expectations of their appointees.
 Maureen please pass this on to Theresa.
 Thank you,
 LLOYD

From: "Maureen Forster" <mforster@rdkb.com>
To: "Grace McGregor" <gem9293@gmail.com>, "Roly Russell" <rrussell@rdkb.com>, "Ali Grieve" <ali.grieve@kscu.com>, "Ali Grieve" <aligrieve@telus.net>, "Patricia Cecchini" <mayor@village.fruitvale.bc.ca>, "Linda Worley" <lworley@rdkb.com>, "Joe Danchuk" <jdanchuk@rdkb.com>, "Mike Martin" <MMartin@trail.ca>, "councillormclellan" <councillormclellan@rossland.ca>, "Helen McLellan" <lhmclellan@shaw.ca>, "Marguerite Rotvold" <rotvoldrdkb@shaw.ca>, "Vicki Gee" <vgee@rdkb.com>, "Frank Konrad" <fkonrad@grandforks.ca>, "Ed Smith" <edjanbc@gmail.com>, "Diane Langman" <diane.langman@warfield.ca>
Cc: "John MacLean" <jmaclean@rdkb.com>, "Theresa Lenardon" <tlenardon@rdkb.com>, "Maureen Forster" <mforster@rdkb.com>
Sent: Thursday, May 4, 2017 3:32:15 PM
Subject: Best Practice - Municipal Appointments to the Board of Directors

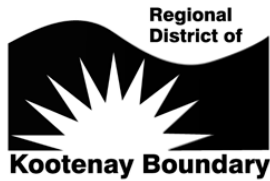
Chair McGregor and Directors:

I have attached the Best Practice – Municipal Appointments to the Board of Directors Policy for your comments. This policy was presented at the April 12, 2017 PEP Committee meeting. The policy was revised to include the relevant sections of the *Local Government Act* and it was approved for Directors' comments.

Please provide your comments to both Theresa and I.

Thank you,

Maureen



Electoral Area Services Committee Staff Report

Prepared for meeting of June 2017

Site Specific Exemption to the Floodplain Bylaw			
Owners: David Turner and Janice Westlund		File No: D-362-02703.010	
Location: 5070 Almond Gardens Road			
Legal Description: Lot A Plan KAP38070, DL 362, SDYD		Area: 2.4ha (6.0 acres)	
OCP Designation: Agricultural Resource 1	Zoning: Agricultural Resource 1	ALR Status: Entirely In	DP Area: None
Report Prepared by: Ken Gobeil, Planner			

ISSUE INTRODUCTION

The owners have submitted an application for a Site Specific Exemption to the Floodplain Bylaw, to expand upon their single family dwelling on their property on Almond Gardens Road, west of Grand Forks (*see, Site Location Map*). A Site Specific Exemption to the Floodplain Bylaw is necessary because the applicant is proposing to build within the 200-year floodplain for the Kettle River.

In 2004 the *Local Government Act* was amended transferring authority to approve site specific exemptions to Floodplain Bylaws to Regional Districts if they are either consistent with Provincial Guidelines, or if a professional engineer or geoscientist has certified that the land may be used safely for the use intended.

HISTORY / BACKGROUND FACTORS

The subject property is entirely within the Agricultural Land Reserve (ALR). Within the *Electoral Area 'D' / Rural Grand Forks Official Community Plan Bylaw no. 1555, 2016* (OCP) the land use designation for the subject property is 'Agricultural Resource 1'. Within the *Electoral Area 'D'/Rural Grand Forks Zoning Bylaw No. 1299, 2005* (Zoning Bylaw) the subject property is within the 'Agricultural Resource 1' zone. Surrounding properties are also in the ALR and have the same designation in the OCP and Zoning Bylaw.

The subject property, which was created by subdivision in 1987, is rectangular, cultivated, and relatively flat. The Kettle River is approximately 300 metres west of the property.

The only building on the property is a barn, which has been converted to a single family dwelling on the top level. The main floor has been converted into a laundry room, art studio, secondary suite and shop.

PROPOSAL

The applicant proposes to construct a 28ft by 12ft (a 22% increase in floor area) addition onto the main floor on the western wall in order to add onto the secondary suite. The intent of this addition is for the current owners to move into it so that younger family members could move in to the main residence upstairs to help develop the property to its potential as the owners age (*see Applicants' Submission*).

The Regional District Floodplain Bylaw (Bylaw No. 677) specifies a setback distance of 30m from the natural boundary of the Kettle River and a Flood Construction Level (FCL) of 3m above the natural boundary, if there is no floodplain mapping. If mapping exists, the flood construction level is identified by the mapping.

This area of the Kettle River has floodplain mapping. In this case, the entire property, and generally every parcel in the area, is within the floodplain (*see Floodplain Map*). The proposed house is beyond the 30m setback from the natural boundary, so floodplain setback is not an issue. Safely and legally meeting the elevation requirement, or designated Flood Construction Level (FCL), of 527.0 - 527.4 is the site specific exemption being applied for. The exemption applied for is 0.51 metres below the FCL.

There is a discrepancy between the applicant's statement and the engineer's report in the application. Elevation data presented in the engineer's report will be considered in this report (*see, Applicants' Submission*).

IMPLICATIONS

Similar to the existing building, the floor will be a cement slab. The elevation of the existing suite floor and this new concrete slab will be 526.54 metres. This would be 0.86 to 0.46 metres below the Flood Construction Level (FCL) as the designated FCL ranges from 527.0 to 527.4 metres in the Floodplain Map (*see, Floodplain Map*). An engineer hired by the applicant estimated that at the building location, the Flood Construction Level is 527.1 metres, meaning the proposed addition will be 0.51 metres below the FCL.

Flood Hazard Report

The applicants have provided a geotechnical report, dated May 17, 2017, prepared by Norman L. Deverney, P. Eng., of Deverney Engineering Services Ltd., in Nelson, BC. The report reviews the applicant's proposal in light of the flood hazard threat, and

provides comments, conclusions and recommendations (*see Applicants' Submission*). The following is a summary of the Report.

- The flood construction level (the elevation necessary to satisfy the floodplain building requirements) for the property is given in a range of 527.0 to 527.4m, and estimated that at proposed building site the FCL is 527.1m ASL (above sea level).
- The Kettle River has historically been a stable river channel and the possibility of the property and building site being exposed to overland flow is low. Flooding that does take place is estimated to have extremely low velocity, with little potential for scour or erosion, the more likely outcome is pooling water with deposition of suspended sediments as water levels slowly subside.
- The report notes that the FCL is a maximum daily water level with a 10% allowance for waves. It was estimated that peak levels could not be sustained and would last a short period of time while water may remain in lower areas for several days or weeks.
- The cement slab will be erosion resistant against placid flows and possible wave action, and the proposed addition will not increase an erosion hazard to the existing building.
- The report recommends that foundation design should consider the potential for high groundwater table conditions and reduced pressure to improve soil bearing capacity.

The Report concludes that the site can be safely used for the intended purpose subject to the provisions stated.

Planning Department Comments

Section 524 of the *Local Government Act* transferred authority to the local government in granting site specific floodplain exemptions, and allows the local government to impose any terms or conditions they deem advisable when granting an exemption. The statute specifically provides that the local government may require the person obtaining the exemption to enter into a covenant under Section 219 of the *Land Title Act*.

There is a very possible chance of flooding. Flooding in early May of 2017 caused the river to rise over the bank to the west of the subject property causing water to enter homes adjacent to the river. Depending on where the data was collected, this year's floods were between a 1 in 20-year event to a 1 in 50-year event. Looking at the Flood Map the elevation of the subject property is lower than lands closer to the river bank, it is likely that flood water would reach the subject property if the flooding continued as originally predicted in early May 2017. The subject property is within the 200-year floodplain, and 20-year floodplain, as noted on the inserted section of the floodplain map as the larger and smaller numbers in the black box below. There is no distinction to annotate smaller events.

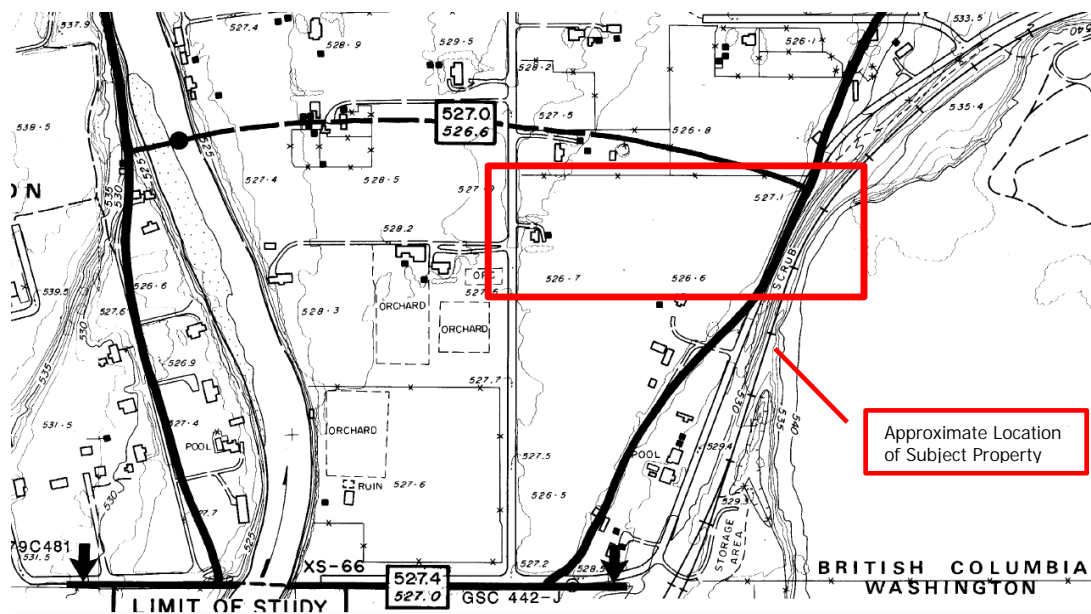


Figure 1: Section of Floodplain Map

Another way to define flood events is probability of occurrence in a year as a percentage. For example; a 1 in 100-year flood is a 1% probability of occurring in any given year. A 1 in 50-year flood has a 2% probability, and a 1 in 20-year event has a 5% probability of occurring in any given year. A 1 in 200-year flood is also stated as a 0.5% chance of a flood event of this magnitude occurring in any given year. Recent studies regarding climate change have noted that the frequency of severe weather events (such as those that caused the 2017 flooding) will increase. It is presumed that a 1 in 200-year food (or flood with a 0.5% annual probability) may occur more frequently in the future along these rivers than what the floodplain bylaw (which was approved in 1995 using data from 1992) indicates.

As this area is known to be a flood risk, if the exemption is approved, requiring the owner to enter into a covenant holding the Regional District harmless in the event of damage, loss or injury from a flood should be mandatory.

Secondary Suite

Secondary suites are a permitted secondary use within the Agricultural Resource 1 zone. Secondary suites are further regulated in section 320 of the Zoning Bylaw. Secondary suites floor area may not exceed 40% of the square size of the primary residence or 90 square metres (968.7 square feet). Including the proposed addition, the secondary suite floor area will be 610 square feet (*see, Applicants' Submission*). Assuming the entire top floor of the barn is the same size as the main floor of the 30'x50' building the square footage of the residence is 1500 square feet, this proposed addition to the secondary suite will be smaller than 90m² however, the floor space will be 40.7% of the size of the primary residence (*see, Applicants' Submission*).

ADVISORY PLANNING COMMISSION COMMENTS

This item was discussed during the Advisory Planning Commission (APC) June 6, 2017 meeting. The application was supported under the following conditions:

1. The owner enter into a covenant holding the Regional District harmless in the event of damages, loss, or injury from any flood.
2. The minimum setbacks from the road be adhered to.
3. The building plans be adjusted to meet the 40% size rule in section 320 of the Zoning Bylaw.

PLANNING COMMENTS

An agreement to register a covenant on title is a recommended requirement for all site specific exemptions since there is a documented risk associated with that development. Grand Forks in particular has seen severe flooding in 2017 which further supports the case for protection of liability should this proposal be approved.

The minimum setback from a front property line for the subject property is 7.5 metres. The current building is approximately 16 metres from the property line. The proposed development will be within the required setbacks. Making a condition of the approval that the addition be granted on the eastern side of the building, the furthest side of the building from the river, may also be used to mitigate flood concerns.

The requirement for a secondary suite to be no more than 40% of the primary residence is a requirement of the National Building Code and cannot be relieved by the Planning Department. The Building Inspector will be able to address this issue during the building permit stage.

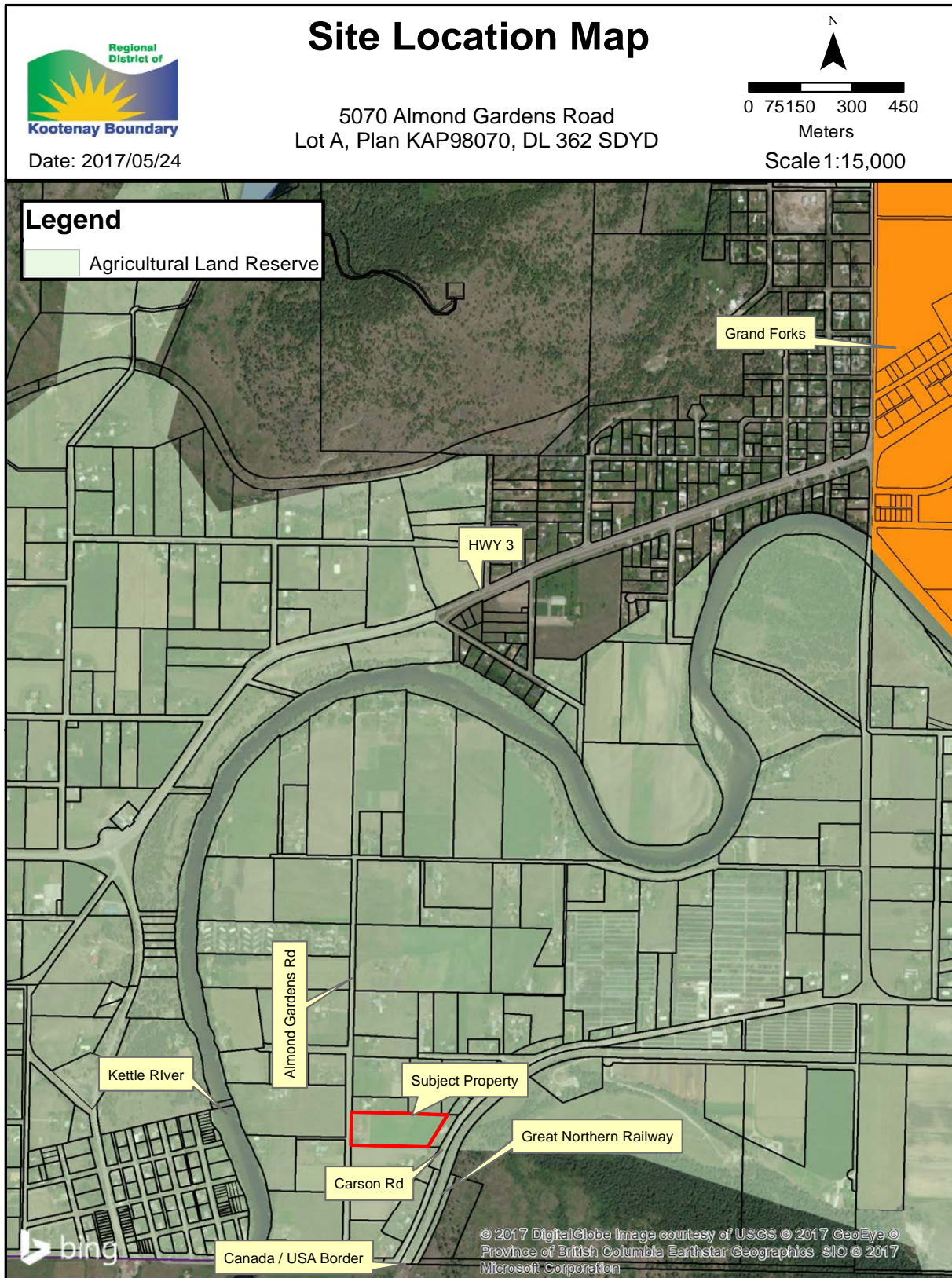
RECOMMENDATION

That the application for a Site Specific Exemption to the Floodplain Management Bylaw submitted by David Turner and Janice Westlund, in order to construct an addition to their single family dwelling with a secondary suite on the property legally described as Lot A, Plan KAP38070, DL 362, SDYD be approved, subject to:

- Adherence to all the recommendations included in the Geotechnical Assessment Report submitted by Norman Deverney, P. Eng., of Deverney Engineering Services Ltd; and
- The owner registering a new standard floodplain covenant on title in favour of the Regional District of Kootenay Boundary prior to issuance of a building permit.

ATTACHMENTS

Site Location Map
Subject Property Map
Floodplain Map
Applicant Submission



Document Path: P:\PD\EA_'D\362-02703.010 Turner\2017-June-FloodplainExemption\2017-05-24.mxd



Document Path: P:\PD\EA_'D\362-02703.010 Turner\2017-June-FloodplainExemption\2017-05-24.mxd

FLOODPLAIN MAP

Use and Limitations of Floodplain Maps

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain, or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

NOTES

Produced by: Acres International Limited
40 Floor, 840 Columbia St.
Vancouver, B.C. V6C 3P4 (Dec. 1991)
Survey: River Survey done by Survey Section,
Vancouver, B.C. 1989-94 (Dec. 1991)
a) Horizontal control based on provincial
network.
b) Elevation is in metres and is
determined by the Survey of Canada
datum.
c) Indicated Survey
Method.

Mapping: Base mapping done by Map Production
Division, Survey and Resource Mapping
Branch, Project 87-084, 1988 Air Photography,
Map 2.
a) Contour interval is 1 metre and greater
spot elevation shown to 0.1 metres,
with accuracy to 0.3 metres, where
noted.
b) Grid origin referred to U.T.M.
Projection Zone 11.

FLOODPLAIN DATA

- The floodplain areas as depicted on this map have been designated pursuant to the Canada-British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment, Lands and Parks for British Columbia. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.
- The Designated Flood has a statistical frequency of occurrence of once every 200 years.
- The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
- The floodplain limits assume the absence of all obstructions.
- The floodplain limits and flood levels include an allowance for freeboards.
- The floodplain limits are not established on the ground by legal survey.
- The floodplain limits are not delineated for side streams and tributaries.
- The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipal files or the Minister of Environment, Lands and Parks.
- MAPS AVAILABLE FROM SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C. MAP AND AIR PHOTO SALES, VICTORIA, B.C.

LEGEND

DESIGNATED FLOODPLAIN LIMIT
FLOOD LEVEL
200 Year Frequency
20 Year Frequency
(METRES G.S.C. DATUM)

KEY MAP

REVISIONS

No.	DESCRIPTION	DATE
1	REPLACES DRAWING 5015, SHEETS 1 TO 7, DATED NOVEMBER, 1973.	SEPT. 30, 1992

ISSUE OF MAPPING

DATE: SEPT. 30, 1992
DRAWN: V.W.
CHECKED: M.N.-P.
RIVER SURVEY
DESIGNED: M.N.-P.
ENGINEER: [Signature]
RECOMMENDED: [Signature]
APPROVED: [Signature]

FLOODPLAIN MAPPING
KETTLE & GRANBY RIVERS
GRAND FORKS AREA

Scale in metres
0 100 200 300 400 500m

Acres International Limited
Vancouver, B.C., Canada

FILE NO. 320-0000
N.T.S. MAP NO. 82/1, 2
SCALE 1:5 000
DRAWING NO. 90-34-6
SHEET 5 of 9

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain (natural or constructed) will affect flood levels and render site-specific information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high winds, which may be caused by debris from a flood event.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, ground subsidence, etc. may be assumed to be plus or minus levels in the vicinity indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary sources.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to confirm property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base map used to generate the map. The accuracy of the floodplain boundary is also limited by the ground contour.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

SEE SHEET 5

BRITISH COLUMBIA
WASHINGTON

FILE No.	
320-0000	
N.T.S.MAP No.	
82E/1, 2	
SCALE	
1 : 5 000	
NEGATIVE No.	
DRAWING No.	REV.
90-34-6	
SHEET 6	of 9

FLOODPLAIN DATA

1. The floodplain areas as depicted on this map have been designated pursuant to the Canada/Federal Provinces Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Ministers of the Environment and Lands and Parks for British Columbia.
2. Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.
3. The designated flood plain has a statistical frequency of occurrence of once every 200 years.
4. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions, and the floodplain limits assume the absence of all dikes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not established on the ground by legal survey.
7. The floodplain limits are not delineated for side streams and tributaries.
8. The required types of buildings from the category of structures that require watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment, Lands and Parks.
9. MAPS AVAILABLE FROM SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C. MAP AND AIR PHOTO SALES, VICTORIA, B.C.

REVISONS	
no.	DESCRIPTION
	REPLACES DRAWING 5015, SHEET 1 TO 7, DATED NOVEMBER, 1973.

DATE	ISSUE OF MAPPING
	DATE <u>SEPT. 30, 1992</u>
	DRAWN <u>V. W.</u>
	CHECKED <u>M. N. - P.</u>
	RIVER SURVEY
	DESIGNED <u>M. N. - P.</u>
	ENGINEER <u><i>[Signature]</i></u>

ENVIRONMENTAL CANADA
 INLAND WATERWAYS
 DE L'ENVIRONNEMENT
 CANADIEN
 VOIES D'EAU D'INTÉRIEUR

COLLOQUE-BRITANNIQUE
 MINISTRE DE L'ENVIRONNEMENT
 MINISTERE OF THE ENVIRONMENT

L'ACCORD CANADAIN-MONTÉNEGGI
 L'ACCORD CANADAIN-BRITANNIQUE
 L'ACCORD CANADAIN-ESPAGNOL
 L'ACCORD CANADAIN-ITALIEN
 L'ACCORD CANADAIN-PORTUGAL
 L'ACCORD CANADAIN-ESPAGNOL
 L'ACCORD CANADAIN-ITALIEN
 L'ACCORD CANADAIN-PORTUGAL

FLOODPLAIN MAPPING
 CARTOGRAPHIE DES PLAINES INONDABLES

KETTLE & GRANBY RIVERS
 GRAND FORKS AREA

100m 0 100 200 300 400 500m
 Scale in metres

RECOMMENDED *R. J. Jones*
 APPROVED *John A. ...*

FILE No. 320-0000
N.T.S. MAP No. 82E/1, 2
SCALE 1 : 5 000
NEGATIVE No.
DRAWING No. REV.
90-34-6
SHEET 6 of 9

Page 291 of 417

ITEM # 126111

APPLICANT SUBMISSION**Exemption Application****Page 2A****Rationale:**

We are currently living in a one bedroom, one bathroom apartment in the loft of our converted barn at 5070 Almond Gardens Road. The lower floor of the 30' by 50' building is comprised of ~60% workshop/storage, ~20% laundry room/studio and ~20% existing secondary suite. The entire lower level is insulated and finished. The floor of the secondary suite on the west side is plywood construction over 2" by 8" joists on soil. All other floors are concrete and/or tile on concrete.

We wish to renovate and enlarge the suite by pouring a concrete slab floor in the existing area and extending it 28' by 12' on the outside of the west wall.

This will increase the suite size from ~ 275 sq. ft. to 610 sq. ft. The new construction will be covered by an existing shed roof attached to the west side of the building in 2012 under building permit #12-0213D. It will include a full kitchen and living room.

Our desire is to expand the living area on the lower level which would essentially be an in-law-suite. This would enable us to age in place over the next several years while providing opportunity for younger family members to live upstairs to help us develop this seven-acre parcel to potential.

Proposal:**Demolition:**

- Remove interior wallboard, bathroom partitions and flooring.

Construction:

- Create six foot opening in west exterior wall utilizing appropriate header/support in accordance with Code
- Excavate outside perimeter of new area for appropriate footings and foundation walls
- Extend existing kitchen plumbing into the new construction area (sink drain)
- Renovate existing three-piece bathroom configuration (increase size, include tub)
- Pour concrete slab flooring at the same elevation as the balance of the building into existing footprint and expansion (see drawings)
- Relocate entrance door from south side to new west side of suite
- Frame and enclose new area in accordance with standard building codes and practices.

As indicated on drawings, elevation benchmark of 526.54 meters is located on the sidewalk outside of the existing suite (four feet east of the west wall and one foot south of the south wall). Existing concrete slab and proposed new slab will be at 526.59 meters.

APPLICANT SUBMISSION



Ms. Janice Westlund and Mr. David Turner
 5070 Almond Gardens Road
 Grand Forks, BC
 V0H 1H4

Date: May 17, 2017
 File: DE15-1571

Re: Site Specific Exemption from Floodplain Bylaw,
Westlund – Turner Residence, 5070 Almond Gardens Road, Grand Forks, BC

Dear Sir,

This letter-report presents a summary of findings a geotechnical assessment of the site of a proposed residential structure at 5070 Almond Gardens Road, Grand Forks, BC.

Legal description of the property is:

Lot A, Plan KAP38070, District Lot 362, Similkameen Division, Yale Land District.

Authorization to proceed with the work was received from Mr. David Turner on May 6, 2017.

1.0 LIMITATIONS OF REPORT

Deverney Engineering Services Ltd. (DESL) has prepared this report for and at the expense of the property owners. The material in it reflects the judgement of DESL in light of the information available to DESL at the time of report preparation.

Findings and recommendations presented in this report are intended to support application for a Development Permit and can be used by the Owner and the Development Approval bodies to adjudicate the proposed development.

Any use that other third parties make of this report, or any reliance on decisions to be based on it is the responsibility of such third parties. DESL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

As a mutual protection to our client, the public, and ourselves, all reports and drawings are submitted for the confidential information of our client. Authorization for any use and/or publication of this report or any data, statements, conclusions or abstracts from or regarding our reports and drawings, through any form of print or electronic media is reserved pending written approval from DESL.

Mailing address: 4711 Robertson Road, Nelson, BC V1L 6N4
 Business Telephone: 250-825-4347
 Email: deverney.engineering@shawcable.com

APPLICANT SUBMISSION**2.0 SITE INVESTIGATION**

The site field investigation was conducted by the writer on May 10, 2017. The investigation included a reconnaissance assessment of the existing building site on the subject property as well as nearby areas. No sub-surface investigation of the subject property was conducted.

Reference was made to observations of surficial soils at this and nearby properties, to regional soils reports, aerial images, and topographic maps. A list of references follows the signature page.

3.0 SITE SPECIFIC EXEMPTION FROM FLOODPLAIN BYLAW

Exemption from the Floodplain Bylaw requires a report from a Professional Engineer or Geoscientist that states the land may be used safely for the use intended. Such a report may recommend requirements for measures, that may include, but is not limited to items such as erosion / scour protection, special foundation design to address reduced soil bearing capacity under flooding conditions, and limits to use of portions of the building for electrical and mechanical installations.

Under the Local Government Act, a covenant may be placed on the property title that limits the Owner's eligibility for Provincial Floodplain Relief.

Reference has been made to APEGBC Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia, March 2006 / Revised May 2010.

4.0 SITE DESCRIPTION

The subject property is situated on a flat to very gently sloping 6.0 acre lot in the Almond Gardens neighbourhood of Grand Forks. The subject property is bounded on the west by Almond Gardens Road, on the east by a rural residential property and Carson Road, and on the north and south by rural residential / agricultural properties (see Location Plan Map).

The existing house is 320 m east of the nearest reach of the Kettle River. Streamflow direction at this reach of the river is northward.

4.1 Flood Construction Level (FCL)

The owners are proposing to construct an addition to the existing residential structure on the subject property. The existing dwelling is not in conformance with current requirements for construction in relation to the Designated Flood Construction Level (FCL).

The FCL is based on the projected 200 - Year Return Period maximum daily flood water level in the Kettle River. For the subject property, the FCL is given as a range, 527.0 to 527.4m, with the projected water levels decreasing to the north.

Based on a simple linear interpolation, the FCL at the existing house is **527.1m**.

APPLICANT SUBMISSION

Development within the area affected by floodwaters is restricted according to the RDKB's Floodplain Bylaw. Structures in that area are exposed to natural hazards including inundation by floodwaters and from erosion.

4.2 Site Elevation Benchmark

At the request of the property owners, a Bench Mark was established by a British Columbia Land Surveyor (BCLS) - A.F. Hoefsloot, BCLS, on the surface of the concrete floor at the grade level of the existing house at elevation **526.54m** (see Appendix). That benchmark elevation is the same as, or slightly below the ground floor elevations of the existing house.

Floor elevations of the proposed building addition will match existing building floor levels, and will be constructed as a concrete slab – on – grade with perimeter footings established a minimum of 0.7m (28") below grade for frost protection.

4.3 Stratigraphy

Soils at the subject property and at nearby cuts and natural slope exposures comprise blanket deposits of well-drained sand or sand and gravel with trace to little silt and possible scattered cobble sizes. Typical soil depths are estimated to be in the order of 10 metres or more.

5.0 FLOODING AND EROSION HAZARDS

5.1 Inundation Hazards

Considering the existing house's distance from the Kettle River, and the relatively recent (past approximately 100 years) history of a relatively stable river channel, there is only a remote possibility of the subject property and building site being exposed to overland flow due to avulsion or re-routing of the existing river channel.

Overland flooding for streamflow events of similar magnitude to a 200 year return period maximum daily flow is expected to occur as placid over-bank flows either due to spillage of flows from the river channel, or more likely, inundation due to rising groundwater levels through the underlying soils to match nearby river surface elevations.

The Design Brief that accompanies the Floodplain Mapping Report for the Kettle River notes that the Designated Flood Construction Levels consist of the projected 200 year return period maximum daily water level (static water level) plus a 0.6 m Freeboard Allowance for waves, wind setup, and effects of localized obstructions on streamflow.

- As described above in Section 4.1, the FCL at the subject property is **527.1 m**.
- The associated static water level (FCL less the Freeboard Allowance) is **526.5 m**.
- Floor level of the proposed building addition is **526.54 m**, which is 0.04m (40 mm) above the projected static water level.

APPLICANT SUBMISSION

5.2 Erosion Hazards During Flooding Events

Flow velocities under flooding conditions would be very low, and of limited capacity for soil erosion. The more likely outcome would be deposition of suspended sediments and floating debris as water levels subside.

Wave erosion due to wind during the period of high water levels is of only modest concern, where surface waves might tend to break against the building walls. Loss of surficial soils and vegetation might be anticipated to be in the order of a few tenths of a metre where such erosion occurs.

We note that the FCL refers to a maximum daily water level, where peak levels might be expected to remain for a time period in the order of a day, followed by recession of water levels. Low lying areas could remain under water for days to weeks, but the peak water level and associated erosion and wave action would not be sustained.

5.3 Climate Change Implications

Effects of climate change have been considered in this assessment.

An allowance for climate change of 10 % was used to increase the design flows. This allowance is in accordance with the APEGBC document, "Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC," dated June 2012.

With reference to the floodplain study's Design Brief, flows of the magnitude of a 17% increase above the 200 year maximum daily flow were considered in modeling of the projected maximum instantaneous flows. In that instance, the ratio of the Maximum Instantaneous Flow to the Maximum Daily Flow was estimated to be 1.17.

Further, the sensitivity analysis conducted for the floodplain study concluded that,

"... for a 20% increase in discharge, the mean water level increase is within the 0.6 m freeboard allowance used in calculating flood levels for floodplain delineation purposes".

6.0 CONCLUSIONS

Proposed building addition floor levels will be 0.04 m (40mm) above the projected 200 year return period maximum daily static water level.

The building addition will be erosion resistant against placid flows and possible wave action because of the slab on grade construction with a concrete perimeter foundation set at an elevation below the anticipated depth of scour.

The proposed building addition will not increase the potential flooding and erosion hazard for the existing building, and will tend to protect the existing building floor and foundation against erosion or scour.

APPLICANT SUBMISSION**7.0 RECOMMENDATIONS – DEVELOPMENT APPROVAL****7.1 Approval of Exemption**

It is recommended that consideration be given to approval of an Exemption from the Floodplain Bylaw for the proposed building construction on the subject property as follows:

7.2 Flood Construction Level (FCL)

Existing building elevations and the proposed building addition at elevation **526.54 m** are not compliant with the FCL, however they are above the projected 200-year return period maximum daily static water level.

Recommendations are made for building design and construction to consider possible effects of high water levels on building foundations and the design of interior spaces and mechanical / electrical fixtures to mitigate potential damage to buildings and contents.

8.0 RECOMMENDATIONS – SITE WORKS AND CONSTRUCTION**8.1 Erosion Protection**

There are no recommendations for specific erosion protection measures to be installed for the proposed building addition.

It is judged that construction of a concrete perimeter foundation with footings at depth for frost protection will be suitable to protect against possible short term wave erosion and low velocity flows.

There are no recommendations for erosion protection measures to be installed at existing building foundations.

8.2 Building Foundation Design and Construction

Building foundations will be affected by high groundwater levels during periods when river water levels approach the 200-year return period maximum. It is recommended that building foundation design include consideration of potential high groundwater table conditions.

These measures typically consist of widened footings, which simultaneously reduce bearing pressures and improve soil bearing capacity. Other measures may be appropriate depending on site and soil conditions encountered during construction.

It is recommended that building design consider measures to mitigate possible damage to buildings and contents, including electrical and mechanical installations, during periods of high lake water levels up to and including the FCL elevation of **527.1 m**.

APPLICANT SUBMISSION**8.3 Supervision**

The implementation of foundation recommendations, including verification of site native soils, bearing capacity, and the excavation, preparation, and construction of building foundations are to be conducted under the direction or supervision of a suitably qualified Professional Engineer to meet the intent and requirement of Schedule B under the BC Building Code.

It is recommended that verification of building elevations and foundations locations with respect to Flood Construction Levels be conducted by a BCLS or other suitably qualified Registered Professional.

8.4 Safe for Intended Purpose

On the basis of the findings of this assessment with regard to flooding hazards and erosion hazards, building construction and site development in accordance with the recommendations presented herein are deemed to be **safe for the purpose intended, and said purpose is residential construction.**

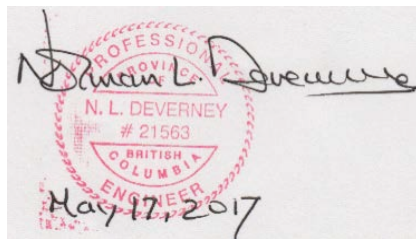
9.0 CLOSURE

This report is prepared in accordance with generally accepted engineering practices in this area. No other warranty, express or implied is made.

Variability is inherent in geological features, and actual ground conditions in some parts of the site may differ from those inferred. Subsurface soil conditions have been inferred from the observed exposures. Changes to design details, work procedures and other project considerations may be warranted on the basis of site conditions encountered.

Respectfully submitted

DEVERNEY ENGINEERING SERVICES LTD.



Norman L. Deverney, P.Eng., FEC

APPLICANT SUBMISSION

References

Air Photos Google Earth Images

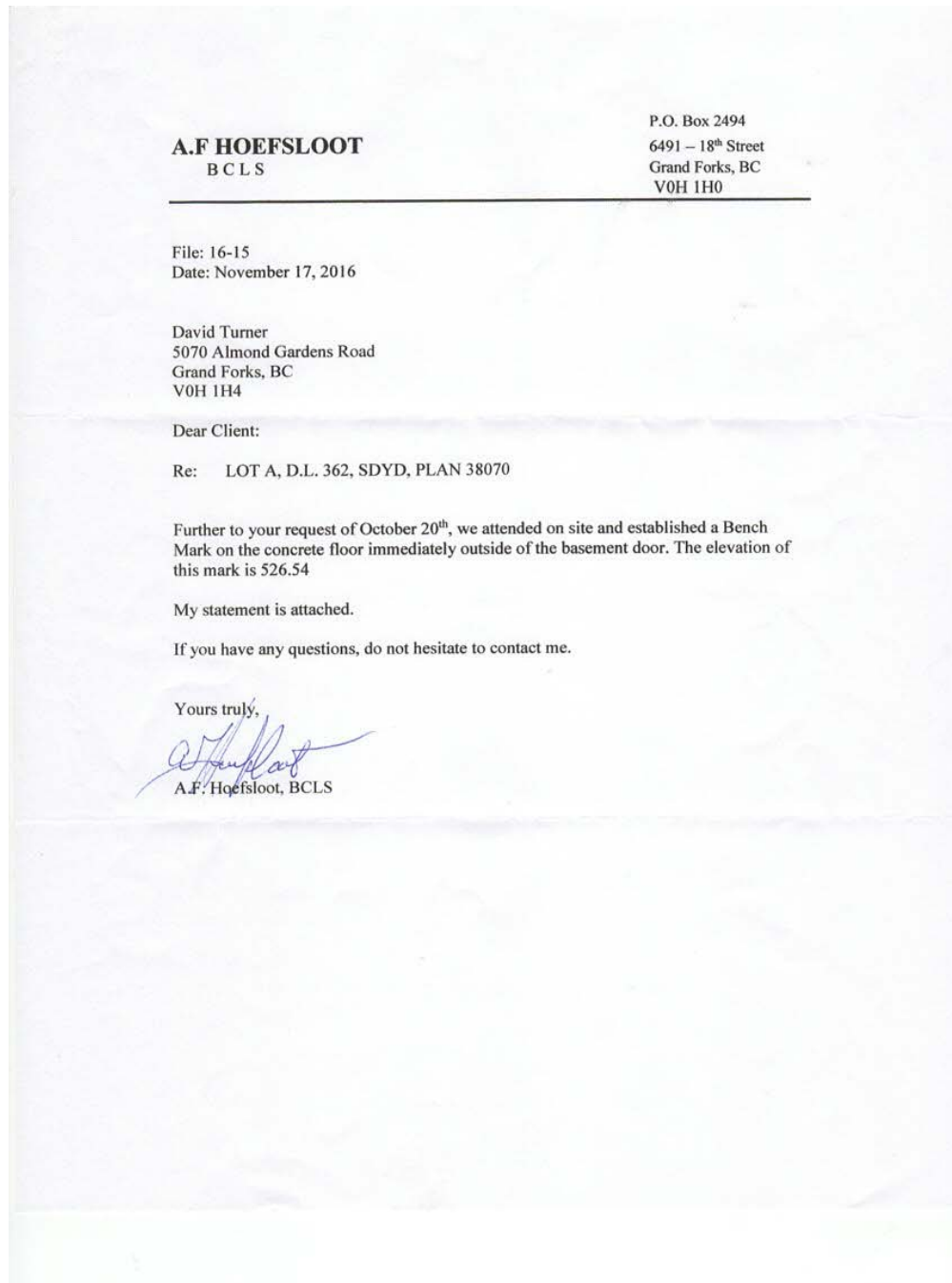
APEGBC, **Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC**, June 2012

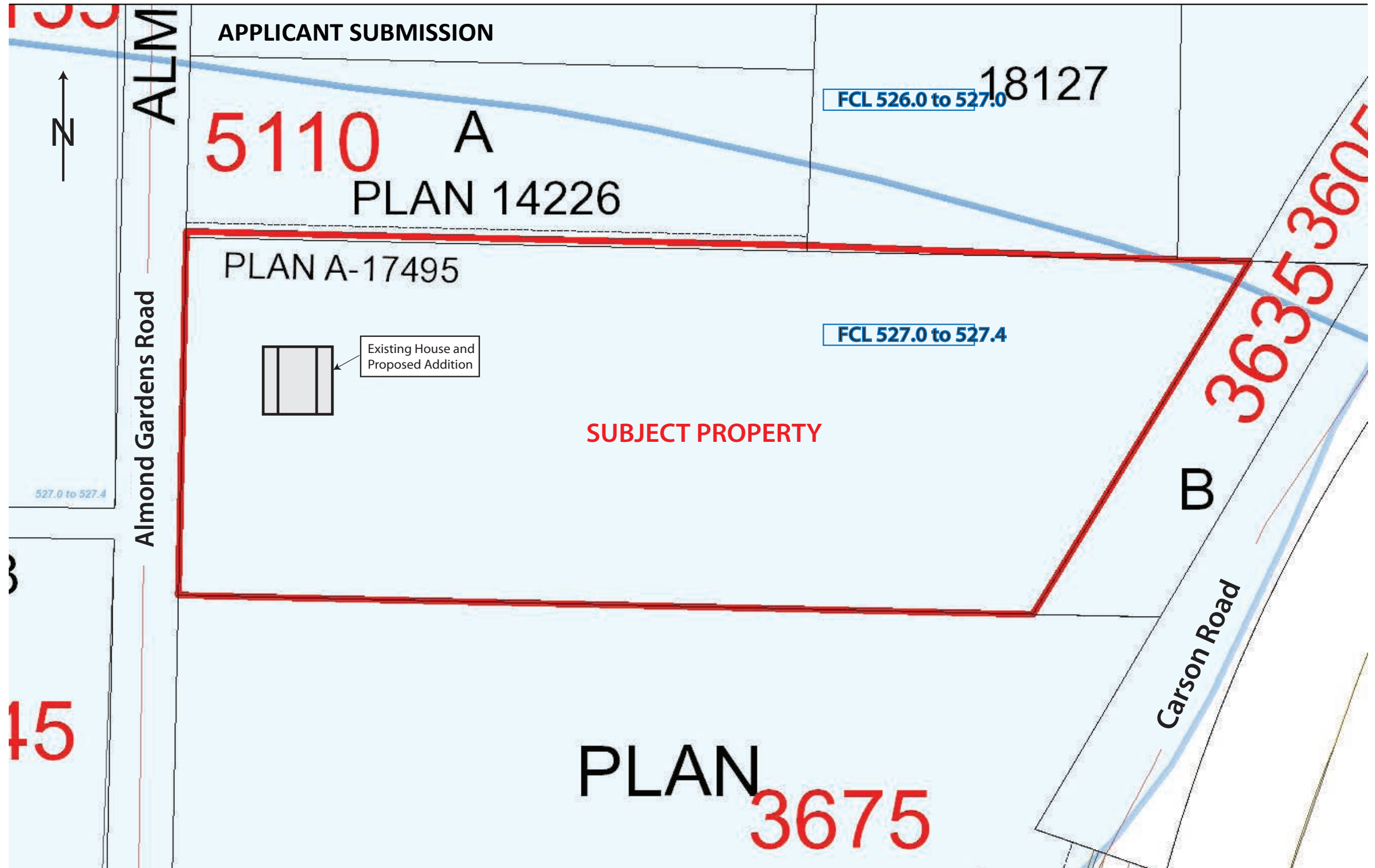
Canadian Geotechnical Society, **Canadian Foundation Engineering Manual, 4th Edition, 2006.**

Acres International Ltd., **Floodplain Mapping, Kettle and Granby Rivers**, Design Brief
December 1991, Floodplain Maps, September 30, 1992.

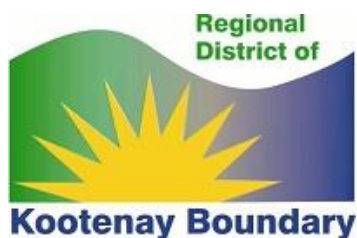
Naval Facilities Engineering Command, **Soil Mechanics Design Manual**, 7.01, 2005

APPLICANT SUBMISSION

Appendix: Elevation Benchmark Description (A.H. Hoefsloot, BCLS)



DEVERNEY ENGINEERING SERVICES LTD.				Location Plan Map Site-Specific Exemptions from Floodplain Bylaw 5070 Almond Gardens Road, Grand Forks, BC Lot A, Plan KAP38070, DL 362, SDYD Ms. Janice Westlund and Mr. David Turner	
Reference:	Date: May 2017	Designed by: NLD	Drawn by: JCD	Scale: 1 : 1,000	Job number: DE16-1571



STAFF REPORT

Date: 09 Jun 2017

File

Staff Report-BRD-Selkirk College Lease Agreement

To: RDKB Board of Directors

From: Mark Daines - Manager of Facilities and Recreation

Re: Staff Report-BRD-Selkirk College Lease Agreement

Issue Introduction

A staff report from Mark Daines, Manager of Facilities and Recreation regarding the 2017 lease renewal between Selkirk College and the RDKB for premises leased in the Greater Trail Community Center.

History/Background Factors

In 2015 Selkirk College informed the Manager of Facilities and Recreation that the Province has passed down new legislation to Colleges that lease space off campuses that they can only enter in to a lease agreements for no longer than a one year term.

In the past the lease agreements were for a 3 year term.

Terms and conditions of this agreement have not changed since the last lease agreement was signed.

Implications

None

Advancement of Strategic Planning Goals

That by entering in to a new lease agreement with Selkirk College ensures that we are responsible and proactive in funding our services and that plans are developed to address aging infrastructure in our services to ensure sustainable services.

Background Information Provided

Please see attached 2017 Lease Agreement.

Alternatives

None

Recommendation(s)

That the Regional District of Kootenay Boundary Board of Directors approve a lease with Selkirk College for the purpose of leasing administration and classroom space in the Greater Trail Community Center in the amount of \$16,579.68 per month, and in addition, \$3,000 per month to cover janitorial services, for a period from April 1, 2017 to December 31, 2017.

Further, that the Board authorizes the RDKB signatories to sign and enter in to the lease.

LEASE

THIS INDENTURE made effective the 1st day of April, 2017.

IN PURSUANCE OF THE "LAND TRANSFER FORM ACT" PART 2

BETWEEN:

REGIONAL DISTRICT OF KOOTENAY BOUNDARY, a
municipal body corporate with offices at 202-843 Rossland
Avenue, in the City of Trail, in the Province of British Columbia,
V1 R 4S8

(Hereinafter called the "Lessor")

OF THE FIRST PART

AND:

SELKIRK COLLEGE, an incorporated college, 301 Frank
Beinder Way, in the city of Castlegar, in the Province of
British Columbia, V1N 4L3

(Hereinafter called the "Lessee")

OF THE SECOND PART

WHEREAS the Lessor has acquired and has renovated for community and educational purposes the former Trail Junior Secondary School, being those lands and premises on Cedar Avenue, in the City of Trail, in the Province of British Columbia described as:

Lots 11-20 inclusive
Block 14, DL 230
Kootenay District Plan 465
(Hereinafter called the "Greater Trail Community and Arts
Centre");

AND WHEREAS, among diverse uses included in the foregoing purposes, that part of the Greater Trail Community and Arts Centre hereinafter described has been developed as college educational facilities hereby to be leased to and operated by the Lessee;

WITNESSETH the Lessor doth demise unto the Lessee, its administrators and successors, all and singular those premises described being those parts, comprising 27,865 square feet more or less, of the Greater Trail Community and Arts Centre shown outlined on four (4) plans (respectively of the Ground, Main, Second and Third Floors thereof with the exclusion of Room 02A and Room 02B), together attached hereto as Schedule "B" (herein called the "Demised Premises");

TOGETHER with all improvements therein erected or installed, or hereafter during the term hereby granted to be erected or installed, and also with all privileges, advantages and appurtenances whatsoever to the said Demised Premises belonging or otherwise appertaining;

AND FURTHER TOGETHER with the rights of free access, ingress and passage to and from the Demised Premises in, through and by means of all entrances, exits, doorways, staircases, passages, corridors, walkways and otherwise in, of or about the Greater Trail Community and Arts Centre, and which are customarily or can be conveniently and reasonably used for such purposes without trespass upon premises exclusively reserved or demised to other than the Lessee;

FROM the 1st day of April, 2017 until December 31, 2017.

THE LESSEE COVENANTS WITH THE LESSOR:

TO pay to the Lessor rent as follows:

- (a) The sum of \$16,579.68 (being \$7.14 per square foot per annum, multiplied by 27,865 square feet, divided by 12) on the 1st day of April, 2017, and the sum of \$16,579.68 on the 1st day of each and every month thereafter up to and including the 1st day of December, 2017; and

AND to pay rates for telephone, cable television and any other rates or charges for services to the Demised Premises not hereinafter covenanted to be provided by the Lessor.

AND that the Lessee shall not commit waste nor permit the same; AND that the Lessor may enter and view the state of repair; AND that the Lessee will follow operating procedures which would be reasonable for a facility of this type in order to ensure a normal use of power and utilities; AND that the Lessee will leave the Demised Premises in reasonable and tenant-like condition upon the expiration or termination of this Lease.

AND that, without limiting the Lessor's covenants of repair and to maintain and redecorate, and save as hereinafter limited, the Lessee may further and better improve, renovate, decorate and re-decorate the Demised Premises at the Lessee's costs, both upon the original demise herein and from time to time thereafter, appropriate to and consistent with the intent of the demise and the permitted purposes herein; PROVIDED that every such substantial improvement, renovation, decoration and re-decoration shall be with the prior consent of the Lessor, not unreasonably withheld; AND further that the Lessee shall not make alterations in the structure, plan or partitioning of the Demised Premises nor in any plumbing, piping, wiring or heating apparatus without such prior consent of the Lessor.

AND that the Lessee shall give or cause to be given to the Lessor prompt notice of any damage to or defect in the structure, systems or services of the Demised Premises, and, without limiting the foregoing, in water, gas or other pipes or fixtures, heating apparatus, elevator, hoist, machinery, electric or other wires or fixtures, or of other casualty to, in or about the Demised Premises.

AND that all improvements, renovations and decorations made by the Lessee in or to the Demised Premises shall thereupon become and remain the property of the Lessor and shall thereafter be part of and remain with the Demised Premises. SUBJECT to the foregoing, the Lessee may, upon the expiration of the term hereof, take and remove from the Demised Premises all moveable and unattached chattels or equipment without thereby causing damage to the Demised Premises.

AND the Lessee shall give to the Lessor's management, maintenance, repair and janitorial staff and contractor's access to the Demised Premises as required from time to time.

AND that the Lessee will neither carry on nor permit to be carried on in the Demised Premises any business or commercial venture save that of or reasonably associated with a college or otherwise with the consent of the Lessor, nor carry on, commit nor permit any business, conduct or acts that shall be deemed a nuisance in the Demised Premises; PROVIDED that the operations of an educational facility and all reasonable uses associated therewith, subject to customary and reasonable levels of supervision by or on behalf of the Lessee, shall not be deemed to be nuisances.

AND that the Lessee shall neither assign this Lease nor sublet the Demised Premises.

AND that, except for those things herein required to be performed by the Lessor at its costs, the Lessee shall be liable for, and shall pay or cause to be paid all costs and expenses of every nature whatsoever arising, directly or indirectly, from the Lessee's use and occupancy of the Demised Premises and from all Lessee's conduct of its aforesaid operations or otherwise in or upon the Demised Premises and from all Lessee's conduct of its aforesaid operations or otherwise in or upon the Demised Premises throughout the term hereof;

AND THE LESSOR COVENANTS WITH THE LESSEE:

TO maintain, repair and from time to time redecorate, and to keep in a state of proper and reasonable repair all the Demised Premises; AND further to maintain and repair the Greater Trail Community and Arts Centre, and its structure, exterior and other walls, roofs, floors and substructure supporting and containing the Demised Premises and all electrical, heating, air-conditioning, plumbing and other systems and all building related fire safety equipment serving the Demised Premises; PROVIDED that, notwithstanding the aforesaid covenants, and that the Lessor's performance shall be at its costs, nothing therein shall be deemed to render the Lessor liable for costs of repairs and maintenance by whomever performed to and of the Demised Premises solely or primarily caused by the willful act or neglect, beyond reasonable wear and tear, by or of the Lessee or others claiming by or through the Lessee, or by breach or non-observance of any lessee's covenant herein.

AND that the Lessor shall provide to and for the Demised Premises all reasonable and timely janitorial services, and all labour and materials therefore required for the due cleanliness and maintenance thereof, including but not limited to the provision of snow removal services and the cleaning of windows, upon such terms as are agreed from time to time between the parties, including the payment of janitorial services fees by the Lessee calculated, in part, in the same proportion as the area of the Demised Premises bears to the total area within the Greater Trail Community and Arts Centre for which the Lessor incurs costs for the provision of such services; AND that the fee for such services shall be Thirty-six Thousand Dollars (\$36,000.00) payable in advance at Three Thousand Dollars (\$3,000.00) per month coincident with and in like manner as rents.

FOR QUIET ENJOYMENT OF THE DEMISED PREMISES.

AND, that the Lessor will demise or let the reminder of the Greater Trail Community and Arts Centre only to tenants whose uses thereof and activities therein, within the limits of the Lessor's knowledge, reasonable anticipation or prediction, will be compatible with the uses and activities of the Lessee PROVIDED that, having reasonably performed the foregoing whether by its choice of lessees or tenants by the terms of such demise or letting thereto or otherwise, and having sought reasonable remedies in the event of incompatibility, the Lessor shall not be liable to the Lessee for any consequences thereof or of any alleged breach hereof.

AND to pay realty taxes, and that the Lessor shall provide or cause to be provided at its costs to the Demised Premises hot and cold water, sewer, electricity, gas, heat and air-conditioning reasonable to the foregoing purposes and uses. These costs will be recovered through the lease payment.

AND the Lessor shall insure at its costs the Demised Premises to their full replacement value against loss or damage by fire and all customary insured risks including extended coverage's; PROVIDED that, further to the limits hereinafter set forth as to risk of loss and insurance upon the Lessee's chattels, nothing herein shall require the Lessor to insure either the Lessee against liability, or any interest of the Lessee

or otherwise howsoever, or to insure itself or any other person against liability in any manner or to any extent other than by that blanket policy or other liability insurance customarily carried by the Lessor.

AND THE LESSOR AND LESSEE MUTUALLY COVENANT:

The parties shall each indemnify and save harmless the other from and against all liability including, but not limited to claims, losses, damages, judgements, costs, expenses, actions and other proceedings made, incurred, sustained, brought, prosecuted or threatened to be brought or prosecuted that are based upon, occasioned by or arising out of any act, error, deed, matter, thing, negligence, or omission on the part of the indemnifying party, its officers, employees, students, agents or volunteers arising out of the Agreement.

IN any event during the term hereof that the whole or a substantial part of the Demised Premises shall be damaged or destroyed by fire or other peril, and whereby the Demised Premises are wholly or substantially rendered unfit for the purposes of the Lessee, or in any event the same are condemned for use by any governmental authority, then the Lessor shall offer to the Lessee as alternate premises such vacant lands, building or other premises as are owned or controlled by the Lessor and are available and suitable for such purposes, until the Demised Premises are again suitable for use and occupation by the Lessee-, PROVIDED that the Lessor does not hereby covenant and shall not be bound, in the absence of available premises so owned or controlled, to seek, offer or provide alternate premises to and for the use of the Lessee; AND FURTHER PROVIDED that if the Lessee deems that suitable premises are not available, rent shall abate and be discontinued until the Demised Premises are made fit for the purposes of the Lessee; AND FURTHER PROVIDED that either the Lessee, or the Lessor in the limited event hereinafter described, may terminate this Lease within thirty (30) days of such damage, destruction or condemnation by giving the other notice of such termination; the Lessor's latter right of termination shall be limited solely to that event wherein, at no fault (measured, in the absence of breach of covenant by the Lessor, against the standard of conduct then expected of a prudent and reasonable Lessor) of the Lessor, either no or substantially insufficient insurance then exists to cover the costs of repair or restoration of the Demised Premises from such damage, destruction or condemnation.

IN the event, save and except for damage or destruction in the nature of or to the extent contemplated by the covenants next preceding, the Lessor fails to repair or maintain the Demised Premises within fifteen (15) days of notice by the Lessee to the Lessor demanding such repair or maintenance, then the Lessee may so repair or maintain, and in every such event the Lessee may deduct the costs thereof from the rents next due until the Lessee shall have recovered its entire costs therefor.

IN the event the Lessor fails to pay any Lessor's costs payable pursuant hereto, or permits any liens on the Demised Premises, or if the Lessor's title to or this Lease of the Demised Premises is in any way threatened by the Lessor's non-payment of any obligations whatsoever, then the Lessee at its sole option may pay such costs, or discharge such lien or other obligation and may deduct the same from the rents next due until the Lessee shall have recovered its entire costs therefore.

THE Lessee shall have first right of refusal to lease additional premises in the Greater Trail Community and Arts Centre, to be exercised within fourteen (14) days of notice from the Lessor, on the same terms and at the same rents as the Lessor is prepared to lease or otherwise let the same to any other person; PROVIDED that such right is hereby limited and waived by the Lessee in respect of those several and separate premises FIRSTLY leased to the Senior Citizens' Association of British Columbia, Branch NO. 47, SECONDLY hitherto defined, known to the Lessee and intended to be leased or otherwise let and used for a youth drop-in or recreational facility, THIRDLY likewise defined, known and intended for arts and crafts facilities, and FOURTHLY hitherto defined, known to the Lessee and reserved for public and private short-term uses by lease or license including but not limited to the auditorium and gymnasium; the Lessee's waiver as to the premises described FIRSTLY, SECONDLY and THIRDLY, shall have effect only for so long as such several premises are so leased, let and used, whether initially or by renewal or replacement demise to the initial lessees or tenants thereof or their permitted assigns or successors.

THE Lessor shall schedule renovations, repairs, maintenance and janitorial services so as to cause minimal disruption or interruption to the Lessee's operations, and will give the Lessee notice of scheduling of all major renovations or repair work; PROVIDED that the Lessor's liability for observance or performance of the foregoing covenant in any event of emergency shall be limited to such notice and scheduling as is appropriate to the then circumstances.

THE risk of loss or damage to the Lessee's chattels, tenant's improvements, fixtures and contents within the Demised Premises shall be that of the Lessee solely and nothing herein shall oblige or require the Lessor to pay for, make good or insure against any loss or damage to the same; AND without limiting the foregoing, the Lessee shall insure itself against loss or damage by fire and extended coverage's to the Lessee's chattels, tenant's improvements, fixtures and contents in the Demised Premises all by such policy or policies of insurance, and in such forms and with such limits and deductibles as are both reasonable and prudent in all prevailing circumstances.

Landlord's Insurance

The landlord during the term of the lease shall maintain the following:

1. All risk property and boiler and machinery insurance in respect of the building and fixed improvements in the building including the common facilities, excluding tenant's fixed improvements and tenant's property, to an amount which the landlord shall, from time to time determine, as reasonable or sufficient and other such risks as are normally insured against in the circumstances by prudent landlords of similar property.
2. General liability insurance against claims for bodily injury, personal injury and property damage occurring out of the operations of the landlord in the building in an amount which the landlord shall from time to time determine as reasonable.

The tenant agrees to pay for their proportionate share of operating costs for the above-noted insurance on the building.

Tenant's Coverage

The tenant during the term of the lease shall maintain the following:

1. Property coverage in respect of the tenant's inventory and stock in trade, furniture and fixtures and such other property in or forming part of the leased premises.
2. General liability coverage including bodily injury, the property damage on an occurrence basis with respect to the business carried on or in or from the tenant's leased premises and tenant's use and occupancy thereof. The limit on such coverage shall be for not less than Two Million Dollars (\$2,000,000.00) inclusive per occurrence.

All such coverage shall provide the landlord with thirty (30) days notice of material change or cancellation. The tenant shall provide the landlord with evidence of all required coverage if and when requested in the form of a certificate of coverage.

FOR reasons other than what is covered elsewhere in this Agreement, either party; the Lessor or the Lessee may, on providing 90 days notice in writing to the other party, terminate this Agreement without penalty.

PROVISO for re-entry by the Lessor on non-payment of rents, or non-performance of covenants, or upon abandonment, actual or constructive, of the Demised Premise by the Lessee.

PROVISO FOR RE-ENTRY ON SEIZURE OR FORFEITURE OF THE SAID TERM

AND ALSO that if the term hereby granted shall be at any time seized or taken in execution or in attachment by any creditor of the Lessee, or if the Lessee shall make any assignment for the benefit of creditors, or becoming bankrupt or insolvent, shall take the benefit of any act that may be enforced for bankrupt or insolvent debtors, the then current three months' rent shall immediately become due and payable, and the said term shall immediately become forfeit and void.

PROVIDED further that if the Lessee shall hold over after the expiration of the term hereby granted without renewal, and the Lessor shall accept rent, the new tenancy thereby created shall be a tenancy from year to year and shall be subject to the covenants and conditions herein contained insofar as the same are applicable to a tenancy from year to year.

IN the event of any dispute under this Lease, or the demise herein, or any term, covenant, condition or proviso herein contained, or the construction or interpretation thereof, or any other matter flowing, directly or indirectly, from this Lease or from the Lessee's occupancy of the Demised Premises, or in the event the parties fail in any manner to agree on the performance of their obligations hereunder, or if any matter arises which was not within the contemplation of the parties and at the option of either of them such question or matter in dispute, including any questions pertaining to the scope and

interpretation of this clause, shall be determined by a single arbitrator appointed pursuant to the Commercial Arbitration Act, S.B.C. 1986 Chapter 3.

THE LESSOR and the Lessee hereby expressly disclaim any intention hereby or otherwise inferred or implied from this Lease and demise to create a joint venture, partnership or any other relationship between the parties hereto other than that of Lessor and Lessee.

PROVIDED that in the event that any term, covenant, condition or proviso herein be adjudged or otherwise found to be unlawful, ultra vires, or otherwise beyond the competence or power of the Lessor, or otherwise unenforceable, the same shall be deemed to be severed herefrom, and the remainder of the Lease shall remain in full force and effect.

THIS LEASE and all terms, covenants, conditions and provisos herein contained shall enure to the benefit of and be binding upon the parties hereto, their respective administrators, successors, and permitted assigns.

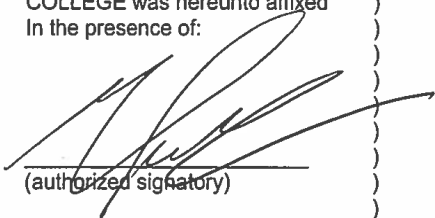
IN WITNESS WHEREOF the parties hereto have caused these presents to be executed effective the day, month and year first above written.

The Corporate Seale of)
REGIONAL DISTRICT OF)
KOOTENAY BOUNDARY was)
Affixed in the presence of:)

(authorized signatory)

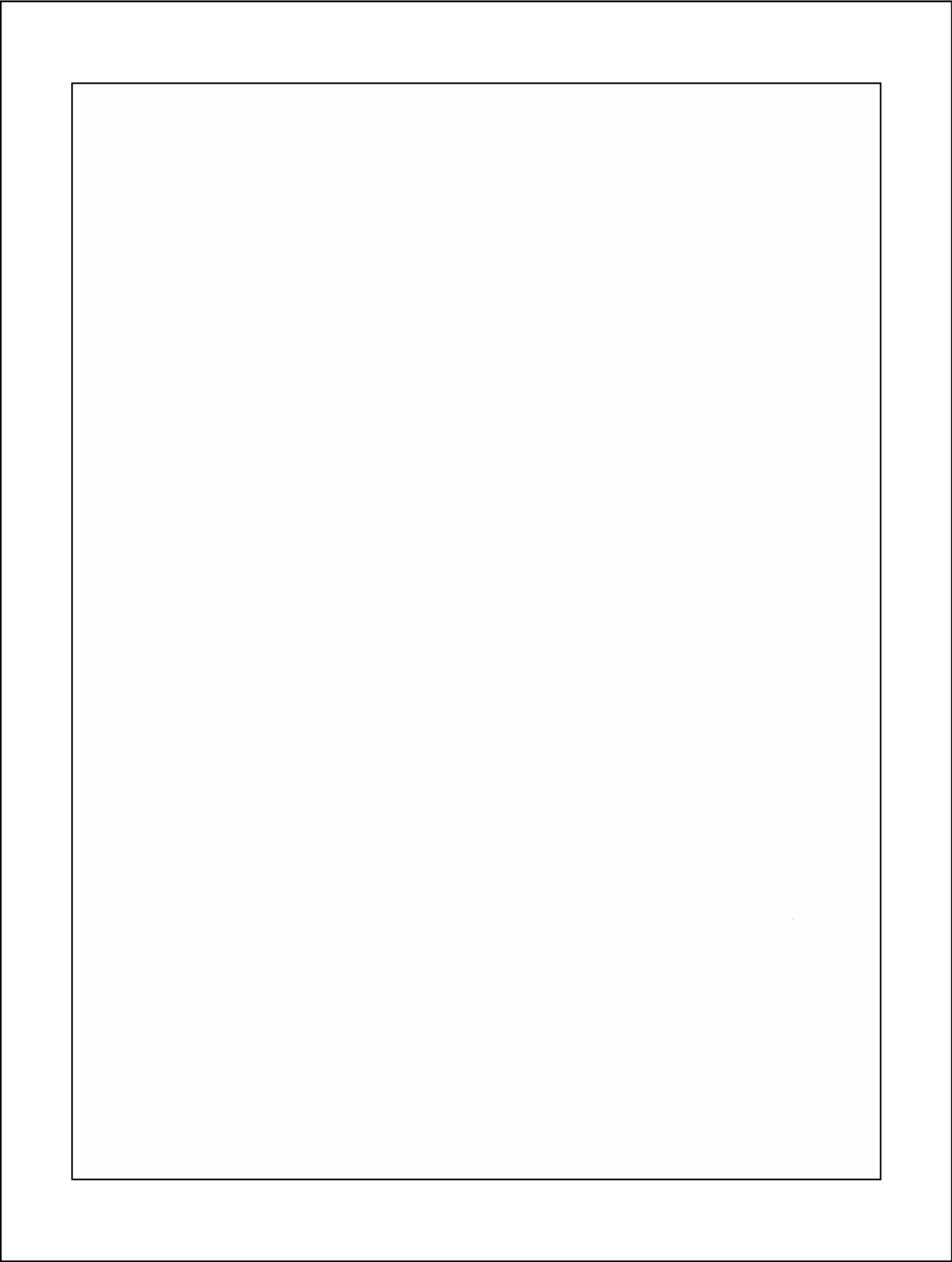
(authorized signatory)

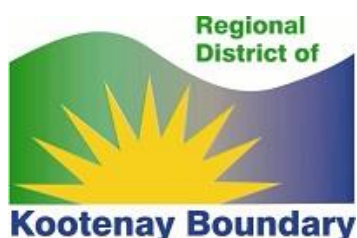
The Corporate Seal of SELKRIK
COLLEGE was hereunto affixed
In the presence of:



(authorized signatory)

(authorized signatory)





STAFF REPORT

Date: 20 Jun 2017

File

Regional Agricultural
Liaison Services
Project

To: Chair McGregor and Board of
Directors

From: Mark Andison, General Manager,
Operations / DCAO

Re: Regional Agricultural Liaison Services
Project Update

Issue Introduction

A staff report from Mark Andison, General Manager, Operations / Deputy CAO providing an update on the status of the Regional Agricultural Liaison Services project, a partnership initiative of the Regional District of Kootenay Boundary, the Regional District of Central Kootenay, the Regional District of East Kootenay, and the Columbia Basin Trust.

History/Background Factors

The purpose of this report is to provide an update to the Board of Directors on the Regional Agricultural Liaison Services project which has been discussed at previous meetings of the Board of Directors, the Boundary Economic Development Committee, and the East End Services Committee.

The last update to the Board outlined the process undertaken to draft the Request for Proposals document utilized to solicit consulting teams to undertake the project. There was only one response received in relation to the initial Request for Proposals and it covered only the marketing aspects of the scope of work - excluding the technical extension and business development components. The lack of an adequate response from consultants forced the project Steering Committee to review the scope of the project outlined in the initial RFP document. This approach was taken after Steering Committee members received feedback from consultants in the area that the scope of work included in the initial RFP was too broad. The Steering Committee subsequently drafted a second RFP document which narrowed the scope of the project to primarily focus on the provision of technical extension services to

the agricultural sector. The business development and marketing aspects of the original RFP were excluded, to be delivered in the future by other means.

In response to the second RFP, the Steering Committee received five proposals. Of those five proposals, the Steering Committee selected two consulting teams to interview. Based upon their proposal and the interview, the Steering Committee unanimously selected Keefer Ecological Services Ltd. as the preferred candidate to undertake the the Regional Agricultural Liaison Services project. Regional District of East Kootenay staff presented a recommendation to the RDEK Board of Directors recently that Keefer Ecological Services be awarded the contract to undertake the work. The RDEK Board of Directors has resolved to enter into a contract with Keefer Ecological Services Ltd. to undertake the technical extension services component of the Regional Agricultural Liaison Services project. A copy of the Keefer Ecological Services Ltd. proposal is attached.

Implications

With the selection of the consulting team complete, the team will begin work immediately to pursue the year-one goals and objectives of the three-year project. These include the following:

Goal

Ensure producers can access prompt and useful technical agricultural advice to increase their knowledge and improve the efficiency and viability of their agricultural operation.

Objectives

The first year of RALS will aim to achieve the following objectives:

- *Engage with agricultural producers across the region to provide information on the RALS, cultivate relationships and create a database of producers;*
- *Provide technical extension services and advice to agricultural producers through the team and supplemental experts;*
- *Increase producers' technical knowledge of their operations;*
- *Document the training, networking, capacity building and research needs of agricultural producers;*
- *Create a monitoring and evaluation framework for the RALS;*
- *Develop a network of technical experts; and*
- *Develop a framework and methodology for extension delivery services.*

As the project begins to proceed to the implementation phase, the Steering Committee will be meeting with the consultants on a monthly basis over the next four months to ensure that the project is on track and proceeding consistently with the terms of reference. After four months, the consultants

will be required to report on a quarterly basis on the progress of the project, addressing several reporting criteria which are explicitly documented in the project terms of reference.

Advancement of Strategic Planning Goals

Participation in the Regional Agricultural Liaison Services project with RDEK, RDCK, and CBT advances the Board of Directors' strategic priority "...to continue to focus on partnerships that advance the interests of the region."

Background Information Provided

Keefer Ecological Services Ltd. Proposal

Alternatives

1. That the staff report from Mark Andison, General Manager, Operations/ DCAO providing an update to the Board of Directors on the Regional Agricultural Liaison Services project be received.
2. That the staff report from Mark Andison, General Manager, Operations/ DCAO providing an update to the Board of Directors on the Regional Agricultural Liaison Services project be received and, further, that the Board of Directors provide additional direction regarding the project.

Recommendation(s)

That the staff report from Mark Andison, General Manager, Operations/ DCAO providing an update to the Board of Directors on the Regional Agricultural Liaison Services project be received.

Regional Agriculture Liaison Services (RALS) – Technical Extension

Proposal



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Michele Bates, Planner
Regional District of East Kootenay
1924 Avenue South Cranbrook, BC, V1C 3H8

March 21, 2017

Re: Regional Agriculture Liaison Services (RALS)-Technical Extension

Dear Michele Bates,

Keefer Ecological Services Ltd. (KES) is pleased to offer this proposal for the Regional Agriculture Liaison Services (RALS) technical extension. As a company that specializes in ecological science, agriculture, economic development, and sustainability leadership, we appreciate the importance of supporting agricultural producers to grow and thrive within the East Kootenay, Central Kootenay, and Kootenay Boundary Regional Districts, and we are both keenly interested and well-positioned to offer this service.

KES understands the main project components are to develop and coordinate a program to deliver specific technical advice as required by existing and new producers, and to support the development and implementation of educational opportunities to increase food production and farm viability. Our team will deliver a program that is professional, science-based, and rooted in our strong connections to regional, provincial, and academic programs.

We are also aware of some unique attributes to agriculture in our region:

- We are agriculturally, climatically, and topographically diverse.
- We have a blend of large-scale agriculture for tree fruits, forage, and cattle, and small-scale agriculture for crops such as mixed vegetables, berries, small livestock, and poultry.
- Farmland is underutilized and the agricultural potential of our region could increase by over three-quarters if all quality soils were farmed.

Certain common constraints also shape the context:

- The average age of farmers is increasing and farmers are retiring.
- New farmers often lack experience and knowledge (including a lack of knowledge transfer from older farmers); however, they are often interested in trying new, innovative approaches.
- Land costs are prohibitive and it can be difficult to access working capital.

Extension services help ensure that decision-making by farmers, so often made "on the fly" with limited information, is rooted in relevant, locally specific, scientific knowledge tailored to the needs of each operation. Extension workers work closely with producers to help them identify science-based strategies

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and technologies appropriate to their farm, and to connect them with other producers and useful resources.

Due to the broad scope and geographic area of the program, our team recognizes that program delivery must be creative, flexible, and inclusive. It is important in the initial stages of RALS to establish a solid foundation of best practices drawn from existing extension programs, and to continually adapt implementation to the specific needs of the region's varied producers.

We propose to establish a network of expertise and implement a scalable pilot program in the first year. The project will produce a complete set of program materials, systems to expand on successes, and an established network of resources. We will also offer educational opportunities and materials to address the most crucial knowledge needs identified through the pilot.

We will actively forge partnerships between RALS and the wide variety of institutions and complementary programs and services that already exist across the region and province. This network will allow us to leverage resources, funding, and expertise to support producers to grow their farm businesses.

The KES team is well connected and knowledgeable about the work and support of regional organizations, and we offer experience, expertise, and efficiency to successfully deliver this program. We look forward to working with the Steering Committee to review and modify our proposal so that the service we implement best meets the Basin's needs.

Please be in touch with any questions that may arise from this proposal.

Sincerely,

Michael E. Keefer, MSc, PAg

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The KES Team

Relevant Experience

Keefer Ecological Services Ltd. (KES) provides leadership and expertise in sustainable agriculture, ecological science, economic development, and social responsibility and engagement. KES has a breadth of experience in agricultural program development and management, which has included providing extension services. Examples include:

Nursery Business Development

Tipi Mountain Native Plants Ltd.

Michael Keefer, owner of KES, and his partners bought assets of the former Aq'am Native Plant Nursery and formed Tipi Mountain Native Plants Ltd. (TMNP) in 2008. A majority owned Aboriginal company, TMNP is the premier native plant nursery in southeastern British Columbia. In 2013, Michael was awarded the Full Circle Award from the Society for Ecological Restoration, an international award recognizing his successful integration of indigenous knowledge into the discipline of ecological restoration, and TMNP was awarded an Aboriginal Business of the Year Award. Recently, Michael sold his shares of the company.

Greenhouse Operation: Doig River First Nation

KES assessed the potential for Doig River First Nation to operate a commercial greenhouse. The goal of the pre-feasibility study was to examine the inputs required to establish a for-profit northern greenhouse business for both small scale and large-scale operations, and provide a snapshot of anticipated costs and returns for the project. In addition to profits, a greenhouse business would meet social objectives such as providing meaningful employment for community members.

Agricultural Business Study

Tobacco Plains Agricultural Business Study

KES assessed the strengths, weaknesses, challenges and opportunities of agricultural options available to the Tobacco Plains Indian Band to determine which, if any, should be examined further to pursue as business ventures. The state of agriculture in the East Kootenay was examined, specifically the livestock and meat processing sectors. Opportunities to establish a horticultural enterprise were explored, such as a market garden, or the possibility of specialty crops including hops and Echinacea.



Horticulture Training

Growing Our Futures

Established in 2013, Growing Our Futures: Native Plant Horticulture Program is a joint venture between KES and Royal Roads University. It is a portable training program in native plant propagation that can be delivered in partnership with First Nations government or community organizations. The program is delivered in-community to reduce barriers and increase community support for students. To date, 26 students have graduated from three Growing Our Futures programs that were delivered in diverse regions of British Columbia: the Peace Region in partnership with Twin Sisters Native Plant Nursery and West Moberly and Saulteau First Nations (2013), the Kootenays in partnership with Tipi Mountain Native Plants and Ktunaxa Nation Council (2013), and South Vancouver Island in partnership with the Tsawout First Nation (2014).

Farm Consultation

Environmental Farm Plans

Two members of the KES team, Rachael Roussin and Andrew Bennett, have been recently trained as Environmental Farm Plan Advisors and anticipate being hired by ARDCorp under contract with the Ministry of Agriculture to provide free, voluntary, on-farm consultations to BC farmers. Planning Advisors work one-on-one with each farmer and use a comprehensive workbook to systematically review the farm's environmental impacts, exposure to risk, and relevant legislation. The advisor suggests contingency plans, a workplan to implement beneficial practices, and gives support to access funding and follow-up planning programs.

Land Management

Invasive Plants

KES has been involved in various invasive plant management programs. Two of the most recent have been the creation of invasive management plans for Lower Kootenay Indian Band (Creston, BC) and Tobacco Plains Indian Band (Grasmere, BC). Efforts involved conducting invasive plant surveys on the reserves to identify the invasive plants present and their density and distribution. This information was used to create a detailed invasive plant management plan outlining survey results and management tools to employ—mechanical, chemical, and biological—to control invasive plant infestations to improve reserve lands.



RALS Program Team

Team member project roles as well as experience and qualifications are described below. Further detail on each team member is provided in Appendix A: Resume Package.

Michael Keefer, MSc, PAg – Senior Project Oversight

Experience

Michael has over 20 years' experience managing large and complex projects in the fields of ecology, agriculture, First Nations traditional knowledge, economic development, and environmental assessments. He is widely recognized as one of Canada's top experts on the use of native plants to restore degraded landscapes as well as Aboriginal ethnobotany.

Michael has led the start-up of three native plant nurseries and is actively engaged in the start-up of two mixed nursery businesses primarily focused on food production. Michael has also led the development and delivery of the Growing Our Futures: Native Plant Horticulture Training and Employment Readiness Certificate program in collaboration with Royal Roads University. Further, Michael is a consultant listed under the BC Farm Business Advisory Services Program, offering specializations in business structure, business strategy, succession planning, production economics, and human resources.

As a long-term resident of the East Kootenay who spends a great deal of time in the West Kootenay, Michael is very well connected to the residents, businesses, and environments of the Kootenays.

Project Role

Michael will provide strategic guidance throughout each project phase and provide extension services to farms in the region during the pilot period (see *Methodology* for detailed project phase descriptions).

Tim Ross, Msc, PAg — Program Advisor, Extension Liaison

Experience

Tim has been a Professional Agrologist for more than 35 years, which includes more than 27 years as a Consulting Agrologist. Tim has been practicing in the East Kootenay since 1991. Ross Range and Reclamation Services has been a registered company in British Columbia since 1990. As well as a Bachelor of Science in Agriculture (1979), he also holds a Master of Science (1988), and is a Certified Range Management Consultant.

Tim has extensive experience in all types of landform, soil and land capability assessments, including aerial photography interpretation and map production. His firm has completed numerous assessments in forest, range and wildlife management, soil reclamation, and land capability. Together, he has made more than 150 contributions to science.

He is very familiar with agricultural practices in British Columbia. He has acted as an inspector and project manager for the Wild Ungulate Compensation Program in the East Kootenay since 2004. This project provides compensation to farmers and ranchers for wild ungulate depredation by assessing



forage production and determining losses caused by wild ungulate foraging. Tim is also a beef producer and is Secretary/Manager of the St. Mary's Prairie Irrigation District.

Project Role

Tim will be acting as a Program Advisor, providing valuable insight based on his professional experience in agrology within the region. He will also provide extension services to farms in the region during the pilot period and aid in evaluation of the pilot project and the official program launch (see *Methodology* for detailed project phase descriptions).

Rachael Roussin, MLWS – Program Coordinator, Engagement, Extension Liaison

Experience

Rachael brings to the team strong communication skills, over six years' experience with program coordination, and a technical background in agriculture, soils, and watershed management.

She holds a master's degree in Land and Water Systems (MLWS) from UBC with a focus on soil science and watershed management. Her research focused on the projected impacts of climate change for the agricultural sector in BC and assessed the agricultural potential of the West Kootenay using the Canadian Soil Capability Classification System for agriculture and farm data.

Rachael has designed and implemented community engagement programs across the Columbia Basin for local government, non-profits, and the provincial government. She is skilled at public communication and has given presentations to diverse audiences on agriculture in the Columbia Basin, and taught courses at Selkirk College on soil health.

Rachael has deep connections with food groups and agriculture in the region from her experience as a member on the Columbia Basin Rural Development Institute's Food Advisory Group and conducting research on abattoirs in the Columbia Basin (2015). Rachael is also well connected to provincial and academic institutions that focus on applied research and agricultural programs. She recently completed the training for the Ministry of Agriculture's Environmental Farm Plan program.

Project Role

Rachael will act as the Program Coordinator, facilitating the establishment of the pilot program, leading program launch and outreach, delivering extension services, developing education strategies, conducting monitoring and program evaluation, and leading the official program launch (see *Methodology* for detailed project phase descriptions).

Andrew Bennett, BSc, MSc – Program Development, Communications, Extension Liaison

Experience

An agroecologist with more than a decade of practical farming experience, Andrew's background includes a strong foundation in environmental sciences and an ability to translate complicated topics into simple language. His Master's in Community Ecology involved modeling complex systems and novel approaches to multivariate data analysis. He has been employed to implement wildlife surveys and to communicate ecological findings to the general public.



He has owned and operated a small mixed farm in Rossland since 2010, implements restoration contracts to manage riparian areas and erosion, has three permaculture design certificates, and was recently trained as an Environmental Farm Plan Advisor. He runs workshops on efficient farm design with topics including poultry, small livestock, forage, pasture, fencing, irrigation, soil, microclimates, propagation, market gardens, restoration, walking tractors, hand tools, portable infrastructure, storage, and processing.

Andrew specializes in clear presentations of technical material. His recent work for CBT includes editing Abattoirs in the Columbia Basin (2015) and writing the North Kootenay Lake Priority Synthesis (2016). He was hired in 2013 to moderate a six-month online course on ecological animal farming, after which he compiled and edited the Salatin Semester manual published by Acres USA (2016).

Andrew administers the Kootenay Local Agricultural Society and its Kootenay Mountain Grown farm certification program, speaks at local food and agriculture events, and maintains good relationships with farmers throughout the Basin.

Project Role

Andrew will aid in the facilitation of program development, provide oversight for pilot program launch and outreach, deliver extension services, develop education strategies, conduct monitoring and program evaluation, and assist with the official program launch (see *Methodology* for detailed project phase descriptions).

Myra Juckers, BSc, PAg – Program Support

Experience

As an Ecologist and Professional Agrologist at KES, Myra has worked on an array of projects, including agricultural development. In 2014, Myra assisted with an Agricultural Business Study for Tobacco Plains Indian Band. She also aided in the development of a pre-feasibility study for Doig River First Nation in 2015 that focused on food production.

Myra is presently working on the development of a native plant nursery and reclamation business feasibility for a First Nation Working Group that includes Kitselas and Kitsumkalum First Nations. As a research lead for the project, Myra is conducting a market analysis to identify potential economically viable products and services and to determine possible joint venture opportunities based on the goals and objectives of the Working Group. She is experienced in data management and analysis, report and presentation compilation, and development of study design, research, and sampling methodology.

Project Role

Myra will provide program support throughout each phase of the project as needed (see *Methodology* for detailed project phase descriptions).



*Jessica Lowey, BSc – Program Support and Website Development***Experience**

Jessica has been working at KES since October 2016 as an Environmental Scientist. Jessica has been instrumental in completing a number of projects, including socio-economic reports and business feasibility studies for First Nation groups. She has also been pivotal in company marketing through the redesign of the company website (www.keefereco.com).

Project Role

Jessica will design the program website and provide program support as needed (see *Methodology* for detailed project phase descriptions).

*Mike Kuruz, BBA – Administration and Financial Accounting***Experience**

Mike is a highly skilled Business and Administration Coordinator with over ten years' experience working in financial and accounting environments. Mike completed his Bachelors of Business Administration at the University of Regina in 2008. From there he worked at Island Savings Credit Union auditing, underwriting, and providing lending advice, operational support, and accounting administration.

As an Administrator at KES, Mike has proven his efficiency in establishing, organizing, and managing budgets and business plans. Mike is also very proficient in a wide range of computer applications including managing websites, social media, and databases. His education, experiences, and strong customer service background make him a uniquely qualified individual.

Project Role

Mike will conduct the administration and financial accounting for the project.

Senior Program Mentors

The following individuals will act as Senior Program Mentors, providing information and support throughout the project as needed.

Mike Malmberg – Previous Extension Worker

Mike provided previous agriculture extension services for the Province of BC. He has a lifetime of farming experience and has co-owned and operated Fort Steele Farms since 1979. Mike will be an invaluable resource for the project.

Hans Schreier – Professor Emeritus, UBC Land and Water Systems

Dr. Schreier's research reflects his specialization in three areas—land evaluation, soil processes, and water chemistry—and his particular interest in land-water interactions. Dr. Schreier has worked extensively in the Columbia Basin, including acting as a key advisor to the Columbia Basin Water Smart Program. He is an expert in, and has conducted research on agricultural water use and mountain



agriculture. Dr. Schreier will advise this project on land use suitability for specific crops, irrigation, and linking academic research opportunities with local issues.

Les Lavkulich – Professor Emeritus, UBC Land and Water Systems

Dr. Lavkulich was appointed Head of the Department of Soil Science at UBC in 1980. He has worked on a range of agricultural and land remediation research projects, including local work on agricultural soil projects in Creston and the broader region. Dr. Lavkulich will advise this project on agricultural soil science and linking academic research opportunities with local issues.

Dieter Geesing — PhD, PAg, Regional Agrologist, BC Ministry of Environment

Dr. Geesing's background in Natural Resource Management includes a focus on soil and plant science, experience as a plant manager for composting and biogas operations, and work as a sessional instructor at technical colleges. As a Regional Agrologist in Abbotsford, he works with local governments and other agencies, organizations, producers, and Ministry of Agriculture specialists to deliver programs, develop policy, and build relationships. He is a technical expert in his field and well connected to other government and sector specialists.

RALS Program Overview

Producers have confirmed that the former BC extension service helped farmers succeed in our region. Unfortunately, the loss of extension services in the past decade has left the institutional knowledge and structures for agricultural extension at "ground zero." The RALS program will begin to revitalize farm extension and support the viability of the diverse forms of agriculture practiced in the Basin, and consequently increase the amount, quality, and variety of food produced by the region. The RALS program will help producers leverage resources and funding from across the region and province to grow their farm businesses.

Given the large void RALS must fill—notably the lack of institutional networking and support, the discontinuation of the previous extension program, and the wide geographic and agricultural scope of the RALS mission—it is critical in this first year that we work methodically to create a solid and long-lasting foundation on which the technical extension can continue to evolve with farmers' needs for the long term. Below we propose steps to build a firm foundation that will allow extension in the Basin to aid producers to thrive.

The first step will be to research and adopt a viable extension structure as we establish a network of resources and expertise. A complete set of program materials will then be drafted to enable a small but scalable pilot program to be implemented. Ongoing feedback from this pilot will allow us to continually refine and supplement the program materials. Crucial knowledge gaps among farmers will begin to be identified by this time to help develop an initial education strategy. Finally, an evaluation of the pilot program will set the stage for a full program launch, including educational workshops next spring.



It is important to emphasize the evolutionary approach we will structure into the management of the RALS technical extension from the outset. Ongoing adaptive management is a common trait in all long-lasting and successful extension services.

Technical Extension Overview

Successful technical extension services share an important set of goals and traits. First and foremost, technical extension is performed in collaboration with producers to focus services and research on production issues. Extension workers must be on the ground to see first-hand what is working and what is not, and then consult with scientists and other experts to form a bridge to bring knowledge back to the community.

Fundamentally, extension is educational and should cultivate a culture of life-long learning at all levels. Extension has been described as "the front door to the university" and aims to provide accessible, relevant, high quality, unbiased education. To achieve these goals requires continual feedback between producers, extension workers, experts, and government.

Without support, farmers often make decisions "on the fly", with the best knowledge they have. The extension service we propose will tailor support and educational opportunities to the individual needs of farms and growers. Pest, soil, and water experts will make field visits and work closely with growers to suggest ways and means to adopt current, science-based strategies and technologies. This will ensure that decision-making on farms is rooted in relevant, locally specific, scientific information to help farmers implement practical, long-lasting, and ecologically conscious systems.

Structuring the Technical Extension Service

The best ideas and practices to manage the provision of services for the RALS operating region will be gleaned from a wide variety of sources, beginning with the pre-existing provincial program. We will seek advice from extension professionals such as Regional Agrologists employed by the Ministry of Agriculture and the Kwantlen Polytechnic University Institute for Sustainable Food Systems who are developing a training program for extension workers.

A wide variety of existing extension services will also be studied, including "full spectrum" and well-established services such as the Washington State University Extension (WSU), the Oregon State University Extension (OSU), and the University of California Davis Cooperative Extension (UCDavis). Although these extensions offer far more advanced and comprehensive services than RALS can reasonably attain in the near term, their models and the resources within their departments will be valuable as we structure the RALS extension to allow for future flexibility and expansion.

Technical Extension Liaisons

The broad structure of the program would entail having agricultural extension service liaisons across the Columbia Basin region, including the RDKB, RDEK, and RDCK. The skills we will seek in liaisons include an



academic background in agricultural sciences, registered professional agrologists, and sector specialists who can work as "translators" between farms and technical or academic resources.

Due to the notable lack of extension in the province, very few individuals have been trained in the full complement of skills required for effective extension delivery. Training, mentorship, and knowledge transfer between experienced and new extension professionals is key to building up the extension capacity of our region. To address this need, we propose to support additional extension training for qualified liaison candidates, and to establish mentor relationships between those with valuable extension experience and younger professionals.

Extension liaisons will also connect farmers with existing regional and provincial programs to address needs such as business planning, financial management, and access to capital infrastructure grants and loans (complementary programs are listed below).

Liaisons and External Expertise

External expertise will be sought when our extension liaisons need additional support to help a producer with their needs. Examples of when external expertise will be required include technical services, such as soil and water laboratory analysis, integrated pest management, and highly specialized advice such as issues related to specific crops (e.g., cherries).

Besides academic institutions (see below), RALS liaisons can also access information and collaborate with the many province-wide producer associations under the BC Agriculture Council, such as the BC Cherry Association, BC Cattlemen's Association, and BC Landscape and Nursery Association.

Complementary Programs and Institutions

A key component of RALS will be to link producers with existing regional and provincial programs. The list provided under the methodology section indicates a small example of the breadth of existing resources that RALS liaisons can leverage.

Business planning is vital to make viable decisions on products and marketing. The Business Basin Advisors program is already established and well-positioned to offer business development and financial planning advice and resources.

The Ministry of Agriculture's Environmental Farm Plan (EFP) program provides free, on-site, confidential farm consultations to review farms' environmental impacts, exposure to risk, and relevant legislation. It suggests contingency plans, workplans to implement beneficial practices, and provides means to access capital funding and follow-up management plans.

The BC Climate Action Initiative can connect producers with on-farm climate change adaptation pilot projects and the Invasive Species Council of BC can provide weed management support and information.

Academic institutions provide opportunities for applied on-farm research and development projects including the Faculty of Land and Food at UBC and the Columbia Basin Rural Development Institute.



Locally, many organizations in the Basin focus on farm support and education, each with particular interests or regional affiliations. Examples include the Kootenay chapter of Young Agrarians, the Kootenay Livestock Association, Groundswell in Invermere, the Kootenay Local Agricultural Society in the West Kootenay, the West Kootenay Permaculture Co-op, the Fields Forward Initiative in Creston and The Kootenay Organic Growers Society in both the East and West Kootenay's.

Methodology

To execute the RALS technical extension, we will establish the structure for a pilot program in Phase 1 that we will launch and promote with outreach in Phase 2. The pilot extension will be run in Phase 3. Educational materials and programming will be developed according to an education strategy in Phase 4. Ongoing monitoring of the pilot program will be evaluated in Phase 5, prior to the full implementation of the RALS extension service in Phase 6.

The timeline and budget we propose for these phases are presented in tables at the end of this section.

PHASE 1: ESTABLISHING THE PILOT PROGRAM

Communicate with Producers

To understand the services producers need, our team will solicit input in a number of different ways. We plan to implement a comprehensive online survey for producers, but we also understand the importance of face-to-face meetings, on-farm visits, and telephone calls. Our team will allocate a portion of the budget to on-farm visits and telephone calls with key producers to collect their input on what they need from an extension service. We will also attend producer meetings and field days to collect input.

Inventory of Producers, Products, and Regional Distribution

Our team will compile a dynamic spreadsheet of existing producers, products, and locations to create minimum targets for extension services that ensure all sectors and regions receive program communication materials and outreach.

An analysis of existing agricultural data based on the 2011 Census of Agriculture and the Columbia Basin Rural Development Institute will inform the development, allocation, and delivery of services. It is particularly important that the pilot program is applied across all sectors and regions so that the full-scale program can address the broad diversity of the region.



Develop Program Materials

We will look to existing extension programs to establish best practices and develop program materials that will include (but are not limited to) documents such as:

- **Terms of Reference (TOR) for extension liaisons** - A TOR will be developed for extension liaisons and program staff that will include the purpose and structure of the program, roles and responsibilities, code of conduct, and scope of services.
- **Worksheets and materials for extension liaisons** - Standard reporting templates will be developed for liaisons to report back to the program manager and producer. This will support the producer, who will receive a written summary of recommendations. As well, the RALS program coordinator will be able to document what services were provided and which producers were reached.
- **Confidentiality agreements** - The success of this program will rely on our ability to build relationships with producers and respond to their inquiries in a timely and professional manner. Confidentiality is an important issue for some producers.
- **Program overview documents** - A comprehensive list of RALS services will be developed to define the scope of the RALS program for producers.

Program Development Support

We will seek expertise in extension delivery from the following institutions:

- Kwantlen Polytechnic University Institute for Sustainable Food Systems
- BC Ministry of Agriculture Regional Agrologists
- Canadian Agricultural Universities (BC, Alberta, Saskatchewan, Manitoba)
- US Land-Grant Colleges (e.g. Washington, Oregon, Idaho, Montana, UCDavis)

Additional resources to support program and materials development include:

- BC Climate Action Initiative (2015). Options for Agriculture Extension Services in the Cowichan Valley.
- Community Futures Fraser Fort George (2015). Beyond the Market Proposal for a Provincial Community-Based Extension Services Program.

Build Networks of Resources

It is of primary importance that we build relationships across a comprehensive network of experts and complementary programs, both to gather pertinent information for the initial development of RALS, and to establish a broad range of capacity that RALS liaisons can leverage to best address producer needs.

The table below lists some of the important institutions, programs, and contacts we have already identified.



Programs and Institutions with Relevant Expertise

Organization	Programs	Contact
BC Agriculture Council	Member associations	
	Farm management planning	
BC Climate Action Coalition	Climate Change Adaptation	Anna Stremberger
	On-farm trials	
BC Ministry of Agriculture	Environmental Farm Plan and capital infrastructure grants	Geoff Hughes
	Extension programming	Darrell Smith
	Technical information	Dr. Dieter Geesing
Business Basin Advisors Program	Business development and extension	Will Nixon
College of the Rockies	Education delivery (East Kootenay)	
Rural Development Institute	Applied research (Columbia Basin)	
Fields Forward Initiative (Creston Valley Food Hub)	Farm support	Laura Francis, Paris Marshall-Smith
Invasive Species Council of BC and regional chapters	Technical information	Todd Larsen, Jenn Vogel
Kwantlen Polytechnic University – Inst. for Sustainable Food Systems	Applied research	Dr. Kent Mullinix
	Extension training	
Land-grant college extensions	Extensions (WSU, OSU, UCDavis, UI)	
Selkirk College	Education delivery (West Kootenay)	
Society for Range Management	Rangeland research, extension, and conservation	
Society Promoting Environmental Conservation (SPEC)	Extension service and training (Lower Mainland)	Emma Holmes
Summerland Research and Development Centre	Applied research	Dr. Joyce Boye
UBC Okanagan - Bio-economy Sustainability Management	Applied research	Dr. Nathan Pelletier
UBC Okanagan - Soil Microbial Ecology Group	Applied research	Dr. Louise Nelson
UBC - Centre for Sustainable Food Systems	Applied research	Dr. Hannah Wittman
	Climate change adaptation	
UBC - Faculty of Land and Food Systems	Applied research	Dr. Sean Smukler
	Climate change adaptation	Dr. Hans Schreier
	Water management	Dr. Les Lavkulich
Young Agrarians	Training and land access	Sarah Dent



Community Resources

In addition to the resources above, the Basin is rich in civil society and private organizations committed to food and agriculture issues such as regional food security, standards and certification, education, tool libraries, permaculture, and farmers' markets. These groups may be in a good position to assist producers with some of their needs. They include, but are not limited to:

- Central Kootenay Food Policy Council — food security
- Kootenay & Boundary Food Producer's Co-op — marketing, distribution, storage
- Young Agrarians — education, networking, land access
- Groundswell — community greenhouse, permaculture, education
- West Kootenay Permaculture Co-op — education
- Kootenay Food — outreach, networking
- Kootenay Organic Growers Society — certification
- Kootenay Local Agriculture Society — certification, growing information, tool library
- Kaslo Food Hub — growing information, facilities, tool library
- Creston Valley Food Hub — local food, marketing, outreach
- BC Farmers Market Association — markets across the region
- Kootenay Co-op True Local Program — local food retail

Program Communication Tools

Communication and outreach materials will be developed for RALS to:

- Advertise the program:
 - Branding (program logo)
 - Advertise RALS in local online and print publications
- Provide a space for producers to find information and resources:
 - Program website (similar to the Basin Business Advisor Program website)
 - Contact phone number with regular office hours
- Share information with producers:
 - Quarterly newsletters to producers (via email)
 - Educational factsheets and resources as developed (on website and printable)

These communication products would be developed by KES in consultation with the RALS advisory committee and program Steering Committee.

PHASE 2: PILOT PROGRAM LAUNCH AND OUTREACH

Light Launch before Full Service

Our team acknowledges that the timeline is very tight to deliver extension services by this growing season. For this reason, we propose a "light launch" of the pilot program this summer followed by the continued delivery of the pilot program for the remainder of 2017.

To prepare for full implementation of the RALS service in 2018, the pilot will be designed as a "scalable model" that starts small and then expands. It is important to begin with targeted services on a small



scale so that changes can be implemented quickly in response to feedback. The pilot will strategically target needs across regions and sectors to ensure that the initially limited scale is not narrow in scope, and so serves the full spectrum of producers.

To advertise the program to producers in the initial start-up phase we propose:

- Targeted outreach to known producers who require extension services, based both on the survey results and outreach conducted during program development.
- Outreach to specific sectors through presentations given at sector meetings.
- Press releases in regional publications and newsletters, including the RDKB, RDCK, RDEK and CBT, and also through the vast network of local food and agriculture organizations (See “Connecting with Programs and Services” in Phase 1).
- RALS program website, to be operational by July.

PHASE 3: DELIVERY OF EXTENSION SERVICES

Extension Service Coordination

One program coordinator will oversee the program to ensure that goals and objectives are met, and to be the point person for initial communication with producers. Producers will contact the program coordinator, who will then connect the producer to a technical extension liaison based on needs, geography and expertise. A small advisory committee made of the extension service liaisons and senior program mentors would help support these decisions.

Regular program inquiries, ongoing program promotion, and manageable questions from producers will be handled by the program coordinator.

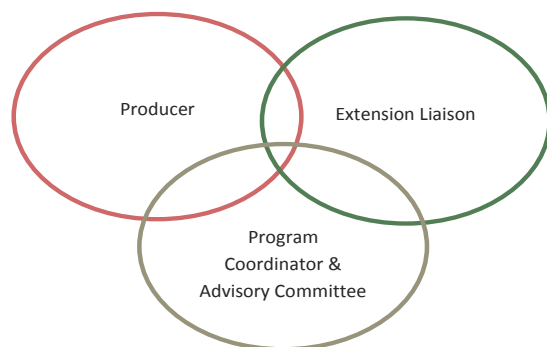


Figure 1: Linkage between people involved in RALS program delivery



Liaison Service Delivery

Extension liaisons will work with producers one-on-one and will decide with the program coordinator the best means to deliver services.

The value of on-farm visits cannot be underestimated and we believe it will be a key element of the RALS' program success. We are also aware of the vast geographic scope of this program and therefore telephone, skype, and other technologies will help make the most efficient use of program time and resources, and maximize the program's reach across the region.

The liaison will record the producer's needs and farm observations, and will then work with the producer to develop an action plan. This plan may include information the liaison is able to provide, and also some combination of recourse to external expertise, including access to complementary programs (e.g. BBA or EFP), plans for testing (i.e. soils, water, pests), further research by the liaison (e.g. into equipment, methods, or academic resources), educational opportunities, and connections to local or sector organizations.

Subsequently, the liaison will follow-up with the producer to track progress and to help the producer understand and apply information received from laboratories, specialists, and academics. The liaison will file all relevant resources (expert advice, academic articles, etc.) to be used to develop educational materials. The liaison will track the process so RALS management and the Steering Committee can review data and adapt the overall program accordingly.

RALS Liaisons

Extension liaisons will be professionals with backgrounds in agricultural sciences, Professional Agrologists, or sector experts. Beyond the initial team of liaisons, the number of extension liaisons will grow as required. KES already has a recruitment and hiring system in place which can be adapted to the RALS program.

To address the lack of trained extension workers in our region, we propose to provide additional training to qualified liaison candidates, potentially through an institution such as Kwantlen Polytechnic's Extension Program (in development). Furthermore, it is important to establish mentor relationships between those with valuable extension experience (former extension workers and current regional agrologists) and younger professionals.

Team member Tim Ross and Senior Program Mentor Mike Malmberg are both senior fellows who can advise on the structure of extension service delivery. Our team is already connected with a number of experienced Professional Agrologists including Deiter Geesing, Regional Agrologist in Abbotsford, Darrell Smith, Regional Agrologist in Invermere, and Kent Mullinix from Kwantlen Polytechnic.

Administration of Extension Liaison Services

Budget for Extension Services

A structure to allocate financial resources and liaisons' time to producers will be established during program start-up. This will likely include the allocation of hours per farm that extension liaisons can dedicate to each producer. As with all elements in our proposal, the structure below is open for discussion with the program Steering Committee.

For budgeting, we estimate:

- Each farm will require 12 hours (1.5 days) of an extension liaison's time.
- The need for additional time and resources from liaisons would require pre-approval from the program coordinator to keep services within the program budget.
- Each extension liaison would receive the same hourly rate.
- A goal of providing RALS one-on-one producer services has been set to an average of six farms per month from July – November 2017.

The RALS program will not be in a position to cover expenses related to technical services such as laboratory time to test soils and water or identify pests and plant diseases. The extension liaisons will, however, provide support to interpret laboratory results.

Sub-contractor Responsibilities

The following outlines the sub-contractor structure to deliver the RALS:

- Extension liaisons will operate as sub-contractors under KES and will thus be covered by Work Safe BC.
- Extension liaisons will carry their own liability insurance.
- The extension liaisons will be responsible to report to the program coordinator for all services provided under RALS.
- Liaisons will require pre-approval from the program coordinator to deliver services, to ensure the program stays within budget.

KES Administration

KES will manage all administration including:

- Handling and distribution of project funds, and reporting to the funding agency.
- Tracking budgets.
- Distribution of funds to agricultural extension liaisons (as per invoices).
- Paying all sub-contractors (as per invoices).
- Payment and distribution of all project expenses such as communication materials.



PHASE 4: DEVELOP EDUCATION STRATEGIES

Identifying Education Needs

Recurring farm issues, needs, and questions will inevitably emerge as individualized extension work progresses. These needs may arise within sectors or specific regions. Once such patterns are identified, it will be more efficient to create educational opportunities and materials to help a broad swathe of producers with their common issues and concerns, rather than treating similar problems over and over.

While this educational component of extension is vital for an efficient and effective service, the need for education must come from a recognized pattern of knowledge deficiencies. Both the start-up survey to producers and feedback received during the pilot program will inform educational opportunities.

Education Strategies

We are creative, adaptive, and flexible in our management of the learning environment, able to match the learner's experience to their needs, but also to the limits of the budget. Depending on the preferences of the Steering Committee, we can work with many different learning formats. Some ideas we have include:

- Keynote speakers combined with other events.
- Workshops with hands-on demonstrations.
- Field trips to working examples.
- Seminars for in-depth presentations and discussions.
- 90-minute webinars with an expert interviewed by a forum moderator.
- Factsheets with diagrams and compact information.
- Two to five-minute narrated and animated infographics.

Linking with Educational Programs

A producer's learning needs may often be met by external educational programs. Many relevant educational programs are offered by a wide variety of organizations and institutions. An important element of RALS technical extension services is to actively connect farms to relevant partners and organizations when that best serves the farm's full set of needs.

Educational Materials

Information and research collected during the delivery of extension services could include academic articles, web resources, policy documents, sector publications, and expert advice. Relevant and non-confidential information that would be useful to share with other producers could be made available through a variety of means:

- **RALS Website:** RALS education materials, resource links, webinar archives, and specialist contact information could be posted and organized by sector or theme.
- **Factsheets:** For certain recurring themes, it may be efficient to produce a clear, concise summary of the pertinent information that can be printed or viewed online.



Workshops and Webinars

Our team has experience hosting and coordinating workshops and webinars, and we will incorporate these options for educational delivery when developing the education strategy. We anticipate the delivery of workshops and webinars will be limited during the 2017 pilot as we begin to identify needs. Our team will respond, however, if a clear opportunity arises. The 2018 spring workshops will likely provide the best opportunity to deliver the first face-to-face educational workshops.

PHASE 5: MONITORING AND ONGOING PROGRAM EVALUATION

Monitoring Framework

Program data will be tracked and documented, including the number of producers reached, services provided, and resources leveraged. Although some information will be confidential to the producer, the program will track and share information related to trends, important topics, and resource needs.

Indicators

Our team will develop a framework of indicators to monitor the program, in consultation with producers and the Steering Committee. Indicators may include, but are not limited to, capital grants leveraged, external services utilized, improved efficiencies and margins, number of participants at workshops, RALS website visits, and applied on-farm research projects.

Producer Feedback

Feedback forms will be completed by each producer after receiving extension services to allow the program to respond and adapt. Completing the feedback form will be included under a terms-of-service agreement prior to receiving extension services.

Program Evaluation

Our team proposes a thorough program evaluation in January and February 2018 after the delivery of the pilot program from July to November 2017. This evaluation will help refine and develop products and services for the 2018 growing season (pending funding). This evaluation will include consultation with producers, sector leaders, and the program steering committee.



PHASE 6: OFFICIAL PROGRAM LAUNCH

The launch events are budgeted in this proposal, but the launch itself is contingent on continued program funding for 2018 – 2019.

Launching the Full Service

Our team proposes a program launch in the spring of 2018, almost one year after the pilot program's inception. We believe it is prudent and professional to have a trial period to "iron out the kinks" prior to offering a full extension service.

The launch will introduce and promote the program, share results from the 2017 pilot program, gather feedback from producers, and offer a range of educational opportunities. Face-to-face time with producers and the extension service liaisons will be an important component of the launch.

Multiple Launch Events

To ensure that producers across the Basin can attend, multiple launch events will be organized. Larger workshops may be hosted in two to three larger agricultural communities (i.e. Grand Forks, Creston, Cranbrook), and smaller outreach events in five to seven smaller, more rural communities (e.g. Rock Creek, Kaslo, Slocan Valley, Nakusp, Revelstoke, Invermere, and Fernie).

Educational Workshops and Presentations

The launch events will be combined with educational workshops and seminars based on recurring knowledge needs recognized over the course of the pilot project and through outreach to producers. For example, field experts could present on such topics as business planning, farm management, and capital funding, to any number of technical production issues from ecology to equipment.

We see this as an excellent opportunity to provide critical educational needs and simultaneously advertise the RALS extension for the 2018 growing season.

Advertising and Communication

Outreach to advertise the RALS launch and educational workshops would include an extensive communications campaign with press releases to local agricultural societies, print advertisements, information in sector newsletters (such as the Kootenay Livestock Association) and targeted phone calls to local producers. Furthermore, connections developed through the course of 2017 with local and regional organizations would be leveraged to spread the word by word-of-mouth and across social media platforms.



Project Timeline

The following outlines the proposed project timeline to execute the RALS technical extension.

Tasks Per Project Phase	2017												2018			
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April			
Phase 1. Program start up																
Meet with Steering Committee																
Research best practices, outreach with experts, and start resource data base																
Survey and interview producers																
Build draft program materials																
Build draft communication materials (website, logo)																
Review of program materials by Steering Committee																
Phase 2. Light launch including outreach and communication																
Press releases about pilot program to producers and organizations																
Targeted outreach and communication to producers about program																
Meetings with producer groups to advertise pilot program																
Phase 3. Delivery of extension service pilot program																
Training for extension liaisons																
Start of extension services (pilot period) with ongoing feedback																
Update program materials based on pilot period feedback																
Phase 4. Develop education strategies																
Document and identify educational opportunities & prepare education strategy																
Prepare educational resources and/or delivery																
Phase 5. Program evaluation																
Meet with Steering Committee																
Review monitoring and evaluation data from pilot period																
Update program materials																
Identify educational opportunities and needs for producers																
Phase 6. Official Program Launch - producer workshops and/or webinars																
Plan content for producer workshops																
Advertise producer workshops and RALS program																
Coordinate workshops																
Deliver workshops																



Budget

The budget provided below is presented in both a summary by task and a full breakdown of time and expense projected for each project phase. Note that project administration, to be conducted by Mike Kurucz, is incorporated into the billing structure.

Summary Budget

Task #	Task Description	
1	Phase 1: Program Start-Up	\$ 30,672.00
2	Phase 2: Light Launch	\$ 23,460.00
3	Phase 3: Pilot Delivery of Extension Services (8 months)	\$ 96,480.00
4	Phase 4: Education Strategy Preparation	\$ 6,820.00
5	Phase 5: Program Evaluation	\$ 15,872.00
6	Phase 6: Official Program Launch	\$ 17,560.00
		\$ 190,864.00



Detailed Budget

Item, Rate, Unit	Phase 1: Program Start-Up	Phase 2: Light Launch	Phase 3: Pilot Delivery of Extension Services (8 months)	Phase 4: Education Strategy Preparation	Phase 5: Program Evaluation	Phase 6: Official Program Launch	Line Item Total
Senior Project Oversight - M. Keefer	4.0	8.0	2.0	2.0	4.0	4.0	24.00
\$110.00 hour	\$ 440.00	\$ 880.00	\$ 220.00	\$ 220.00	\$ 440.00	\$ 440.00	\$ 2,640.00
Program Coordinator - R. Roussin	160.0	100.0	320.0	40.0	40.0	80.0	740.00
\$75.00 hour	\$ 12,000.00	\$ 7,500.00	\$ 24,000.00	\$ 3,000.00	\$ 3,000.00	\$ 6,000.00	\$ 55,500.00
Program Developer - A. Bennett	120.0	80.0	60.0	40.0	40.0	40.0	380.00
\$75.00 hour	\$ 9,000.00	\$ 6,000.00	\$ 4,500.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 28,500.00
Program Support - M. Juckers	24.0	24.0	40.0	8.0	8.0	16.0	120.00
\$75.00 hour	\$ 1,800.00	\$ 1,800.00	\$ 3,000.00	\$ 600.00	\$ 600.00	\$ 1,200.00	\$ 9,000.00
Communication Support - J. Lowey	40.00	24.00	40.00		8.00	8.00	120.00
\$50.00 hour	\$ 2,000.00	\$ 1,200.00	\$ 2,000.00	\$ -	\$ 400.00	\$ 400.00	\$ 6,000.00
Technical Extension Liaisons*	40.00		576.00				616.00
\$75.00 hour	\$ -	\$ 3,000.00	\$ 43,200.00	\$ -	\$ -	\$ -	\$ 46,200.00
Technical Expert Services**	8.00	8.00	120.00		80.00	24.00	240.00
\$100.00 hour	\$ 800.00	\$ 800.00	\$ 12,000.00	\$ -	\$ 8,000.00	\$ 2,400.00	\$ 24,000.00
Kilometredge	800.00	2,000.00	14,000.00		800.00	3,000.00	20,600.00
\$0.54 kilometre	\$ 432.00	\$ 1,080.00	\$ 7,560.00	\$ -	\$ 432.00	\$ 1,620.00	\$ 11,124.00
Communication Product Design	1.00						1.00
\$3,000.00 expense	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00
Printing Communication Products and Materials	1.00						1.00
\$1,200.00 expense	\$ 1,200.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200.00
Outreach Expenses		1.00					1.00
\$1,200.00 expense	\$ -	\$ 1,200.00	\$ -	\$ -	\$ -	\$ -	\$ 1,200.00
Workshop Expenses						1.00	1.00
\$2,500.00 expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500.00	\$ 2,500.00
	\$ 30,672.00	\$ 23,460.00	\$ 96,480.00	\$ 6,820.00	\$ 15,872.00	\$ 17,560.00	\$ 190,864.00

Budget notes

Communication Product Design

Finalizing logo design, production of communication materials such as fact sheets, development of advertisements for print, news, and social media

*Technical Extension Liaisons

This amount is based on the concept of providing services to 6 farms per month for 8 months (see Phase 3 under Methodology). Each farm is allocated 1.5 days (12 hours). Extension liaisons training is included under the 'light launch.'

**Technical Expert Services

This includes paying technical experts to develop the program (and/or technical fees) and technical expertise for delivering extension services (i.e. sector experts on tree fruits)



Appendix A: Resume Package





MICHAEL KEEFER, MSc, PAg

E-MAIL Mike@KeeferEco.com

OFFICE PHONE 250-489-4140 • CELL PHONE 250-420-7532

PROFESSIONAL PROFILE

Michael is senior results based environmental leader and visionary with extensive experience in a variety of areas including: mining environmental assessments, hydroelectric and transmission line assessments and habitat mitigations, First Nations traditional knowledge studies, ecological restoration and reclamation, managing large and complex projects and other related works. Michael is able to work effectively in a wide variety of cultural settings that range from remote First Nations communities to that of formal urban environments. He is well known for his vast knowledge of the uses of native plants for ecological restoration and human consumption in western Canada.

PROFESSIONAL EXPERIENCE

Keefer Ecological Services Ltd. **OWNER**

2005 – present

Since Keefer Ecological Services (KES) was formed in 2005 the company has experienced strong growth and developed a superb team of environmental and business professionals. Michael has led the company to establish a well-developed and diverse clientele base that can count on the firm to provide scientifically robust, reliable and timely services. Clientele of KES include: mining and hydroelectric firms, First Nations and provincial governments, and the federal government. Services of KES include: socio-economic and environmental assessments, business leadership, management and planning, green sector business development, reclamation and ecological restoration, research, technical writing, regulatory permitting and other such related services. Along with Michael's role as company President, he generally acts as Senior Project Manager thus ensuring the effective flow of work amongst his team of experts. Some projects that Michael has recently led include:

- The development of an accounting system for a major Canadian mining firm assessing the impacts on the environment that will lead the company towards a net-positive impact on biodiversity;
- Rare plant translocation and recovery work for Columbia Power Corporations Waneta Expansion Project;
- The planning for and development of Twin Sisters Native Plants, a joint venture between Saulteau and West Moberly First Nations and Walter Energy;
- The leading of baseline assessments for listed plant species, terrestrial ecosystem mapping, wildlife studies as part of two environmental assessments for proposed mines including permitting; and
- Technical reviews of third party permitting documents.

Tipi Mountain Native Plants Ltd.
PRESIDENT

2008 – 2017

As past President and minority owner, Michael led the organization from its inception to create a majority First Nations owned long term sustainable enterprise. Michael's work with the nursery was strategic and occupied approximately two percent of his time. In 2013, Michael was awarded the Full Circle Award from the Society for Ecological Restoration, an international award recognising his successful integration of indigenous knowledge into the discipline of ecological restoration. In the same year, Tipi Mountain Native Plants was awarded an Aboriginal Business of the Year Award.

Tipi Mountain Eco-Cultural Services Ltd.
PRESIDENT

2011 – 2017

Through his work with clients of KES, Michael became aware that the science, art and business of archaeology was being poorly managed in the Kootenay region and unnecessarily impacting the region's economy. Through his desire to correct this deficiency, Tipi Mountain Eco-Cultural Services was formed as the business solution to this problem. The company now has three permit holding archaeologists, a GIS department and a variety of junior staff. It is widely recognised in the region that the archaeological resource is now being well managed by the private sector through the creation of this profitable, service oriented company.

Ktunaxa Kinbasket Tribal Council
ETHNOBOTANIST

In his eight years (1997-2005) at the Ktunaxa Kinbasket Tribal Council as Ethnobotanist he developed a self-funded and well organized department that led much of the research pertaining to the Nation's culture, with an emphasis on positive interactions with industrial projects that resulted in opportunities for the Ktunaxa and environmental benefits. He was actively involved in providing solutions to environmental challenges posed by the Kootenay 230 kV powerline, the Hugh Keenleyside Redevelopment Project and a host of other environmental assessments for large industrial projects in the Kootenay region. He was also active in BC Hydro's Water Use Planning Projects.

EDUCATION

Master of Science in Environmental Management
Royal Roads University

2005

Bachelor of Arts in Environmental Studies and Geography
University of Victoria

1995

MEMBERSHIPS & AFFILIATIONS

BC Institute of Agrologists – Professional Agrologist
Royal Roads University, Centre for Continuing Studies – Adjunct Professor
Society for Ecological Restoration BC – Co-Chair
Canadian Land Reclamation Association – Member

SELECTED PAPERS & PRESENTATIONS

- Keefer M. 2012. "Trials and Tribulations in the Development of a Culturally and Economically Viable Native Plant Nursery Business". Presented at the Northern 'Food Security: The Greenhouse Solution' Conference hosted by University of Saskatchewan.
- Keefer M. & Allison Kennedy 2011. Comparative inventory of vegetation and soils surrounding Teck Coal Ltd.'s Coal Mountain operations, 2010. Mine Closure 2011 Conference.
- Keefer M. 2008. Study looks at huckleberry productivity. Link Forest Research Extension Partnership: FORREX Forum for Research and Extension in Natural Resources.
- Keefer, M, R. Moody, A. Chapman & T. Ross. 2009. "Kinbasket Reservoir Revegetation Program Physical Works (Phase 2)." Keefer Ecological Services Ltd. for BC Hydro.
- Keefer, M., T. Ross, T. Ehlers. 2008. "Arrow Reservoir Revegetation Program Physical Works (Phase 2)." Keefer Ecological Services Ltd. for BC Hydro.
- Keefer, M., R. Munro, W. Cocksedge, J. Meuleman, T. Ehlers, & N. MacPherson. 2008. "What about the berries? The development of management recommendations for important native shrubs in BC." Conference presentation to Botanists Without Borders, UBC.
- Winder, R., M. Keefer. 2008. Ecology of the 2004 Morel Harvest in the Rocky Mountain Forest District of British Columbia. Botany 86: 1152-1167.
- Keefer, M, T. Ehlers & N. MacPherson. 2007. A Regional Profile of Commercial Harvesting of Non-Timber Forest Products in the Cascade Forest District, British Columbia. Royal Roads University, Centre for Non-Timber Resources - online publication.
- Keefer, M. 2005. Ecology and Economy of Morels in South-eastern BC. M.Sc. thesis, Royal Roads University.
- Keefer, M. & P. McCoy. 1999. All Living Things - A Ktunaxa Ethnobotanical Handbook. KKTC.

Timothy James Ross

Education

1988 Master of Science

University of British Columbia, Plant Science Department, Vancouver, BC
Remote Sensing, Land Reclamation, Range Management

1979 Bachelor of Science in Agriculture

University of Guelph, Guelph, Ontario
Honours Crop Science, Minor: Agri-business

Professional Experience

1979-1981 - Territory Manager – Swift Feeds, Edmonton, AB

1982-1984 – Agrologist – Northrup King Seeds - Edmonton, AB

1988-1989 - Range Technician - BC Ministry of Forests, 100 Mile House, BC

1989-1990 – Environment/ROW Inspector – TransCanada Pipelines, Calgary, AB

1990-present - Ross Range and Reclamation Services, Cranbrook, BC

Principal of service specializing in:

- Wildlife/cattle interaction studies
- Forage crop and invasive plant species assessments and management
- Experiment and sampling design, data analysis and interpretation
- Rangeland inventory, monitoring and planning
- Environmental, soil, land capability and reclamation assessments
- Forest ingrowth/encroachment inventory, monitoring and planning

Recent Projects

- Inspector – Agriculture Wildlife Program, BC Ministry of Agriculture, Cranbrook, BC
- Program Manager – Wild Ungulate Compensation Program, Kootenay Livestock Association, Cranbrook, BC
- Forest ingrowth/encroachment assessments and ecosystem restoration plans – 14 Units in the Central Cariboo FD; 9 Units in the Rocky Mountain FD
- Reclamation and silviculture assessments – Teck Coal Ltd., Fording River Operations, Elkford, BC; Line Creek Operations, Sparwood, BC
- Forage production/ecological typing – Cascades and Central Cariboo FD
- Land Capability for Agriculture Assessments – 16 properties
- Long-term vegetation monitoring - Central Cariboo FD and Rocky Mountain FD
- Re-vegetation management assessment, planning and implementation in the Kinbasket and Arrow Lakes reservoirs – BC Hydro, Castlegar, BC
- Range Inventory and Management Plan – St. Mary's IR#1, Cranbrook, BC
- Herbicide assessments - TransCanada Pipelines, Wasa Lake and Wigwam Flats
- East Kootenay Trench Agriculture/Wildlife Project – Vegetation Monitoring
- Monitoring vegetation response to post-harvest residual conifer distribution; Range Inventory and Management Plans – Canadian Forest Products Ltd., Elko, BC
- Monitoring pre- and post-harvest conditions following ecosystem restoration at Miller Road, Cherry Creek WMA, Bull River WMA, Kikomun Creek PP
- Range Inventory and planning – 14 Range Units in Rocky Mountain Forest District
- Native Stand Christmas Trees and Silvo-pasture – Best practices project

Box 283, Cranbrook, BC, V1C 4H8
Telephone/Fax: (250) 427-3300
tim@rossrange.com

Client References

Mr. Chris Armes - Central Cariboo Forest District – Williams Lake, BC – (250) 398-4362

Ms. Victoria Gehue - Teck Coal, Fording River Operations, Elkford, BC –
(250) 865-5264

Mr. Maurice Hansen – Rocky Mountain Trench Natural Resources Society, Kimberley,
BC – (250) 427-5200

Mr. Harry Jennings – Central Cariboo Forest District – Williams Lake, BC –
(250) 398-4358

Mr. Dan Murphy - Rocky Mountain Trench Natural Resources Society, Cranbrook, BC –
(250) 489-4049

Mr. Rob Neil – The Nature Trust of BC, Cranbrook, BC – (250) 489-8549

Dr. Reg Newman – BC Ministry of Forests, Research Branch, Kamloops, BC –
(250) 371-3825

Mr. Lawrence Pachal – TransCanada Pipelines, Cranbrook, BC – (250) 421-7386

Mr. Martin Sills - BC Ministry of Agriculture, Williams Lake, BC – (250) 398-4505

Ms. Faye Street – Kootenay Livestock Association, Cranbrook, BC – (250) 426-5992

Mr. Greg Tegart – BC Ministry of Agriculture, Vernon, BC – (250) 260-3000

Dr. Brian Wikeem – Solterra Resources Inc., Bowser, BC – (250) 757-8342

Professional Affiliations

British Columbia Institute of Agrologists
East Kootenay Invasive Plant Council
Society for Range Management – Certified Range Management Consultant
Society for Range Management – Past-president, Pacific Northwest Section
St. Mary's Prairie Irrigation District – Secretary/Manager

Report/publication record available on request

Box 283, Cranbrook, BC, V1C 4H8
Telephone/Fax: (250) 427-3300
tim@rossrange.com

Rachael Roussin, MLWS

rachael.roussin@gmail.com

250-231-2034, Rossland, BC

Education**MLWS**, *Master of Land and Water Systems (MLWS)*, UBC, Faculty of Land and Food, 2014**B.A.**, *Major Latin American Studies, Minor Political Science*, UBC, Faculty of Arts, 2005**Professional Profile**

- Nine years' experience working with environmental and agricultural sectors
- Eight years' experience as a consultant for program coordination and community engagement
- Soil investigation, soil sampling, and watershed management
- Technical report writing and Geographic Information Systems
- Level III First Aid, health and safety training, and work in wilderness environments
- Spanish as a second language

Professional Experience**Field Investigation, Soil Laboratory Analysis & Watershed Management**

Soil science education at graduate level including soil laboratory analysis. Field experience collecting soil samples, water samples, and hydrology data for environmental risk assessments. Competent in managing data and using GIS.

2015 – Current, Keefer Ecological Services Ltd., Cranbrook, BC*Research, Field Technician and Soils Consultant*

Field technician for environmental risk assessments including soil and water sampling, managing hydrology programs and data management, leading invasive species inventories and writing land management plans, report writing, and, business feasibility studies for commercial greenhouse operations in BC.

Agriculture and Food Security

Experience with small scale production and grassroots food security initiatives. Technical academic training in soil science, soil classification and climate change impacts for agricultural production.

2016, BC Ministry of Agriculture, Environmental Farm Plan Training, BC*Consultant*

Trained as an Environmental Farm Plan Advisor as per the Provincial program.

2015 – 2016, Sector research*Research and public engagement (Consultant)*

Research and report on the situational analysis on abattoirs in the Columbia Basin (Columbia Basin Trust, 2015). Greenhouse and nursery feasibility studies for First Nations in Northern BC (Keefer Ecological, 2015 - current).

2013 – 2014, Professional Masters, Land and Water Systems (MLWS), UBC, Vancouver, BC*Graduate Student*

Soil science and watershed management for agricultural and mountain environments including soil laboratory experience. Research included quantifying the distribution of underutilized farmland in the West Kootenay using soil capability maps, and analysing the potential impacts of climate change to the agricultural sector.

2008 – Current Rossland REAL Food, Rossland, BC*Market Manager, Volunteer program coordinator*

Coordinated local food growing initiatives including spearheading and managing the Farmers' Market (09-12), constructed the Rossland Community Garden, and currently coordinate educational events and workshops.

Communications and Stakeholder Engagement

Skilled at delivering presentations to clients, local government, and stakeholders, and developing and delivering community and stakeholder engagement strategies.

2015 – 2016, Community Values Study – Friends of Kootenay Lake Stewardship Society, Kootenays

Community Engagement (Consultant)

Partnered with Compass Resource Management to develop a values survey to inform future lake management planning, including an extensive engagement and communications plan.

2012 – 2013, BC Ministry of Energy, Mines and Natural Gas, Columbia Basin Region

Columbia River Treaty Consultation (Consultant)

Project coordinator for community consultation sessions across the Canadian Columbia Basin including the development and delivery of work plans with provincial staff.

Program Coordination and Management

Managed programs, events and environmental projects including budgets, communication plans, project planning and implementation.

2009 – Current, Columbia Basin Trust (CBT), Columbia Basin Region

Facilitator and program coordinator (Consultant)

Program coordinator of the Canadian Columbia Basin Glacier and Snow Research Network (2015 - current). Program support for the Communities Adapting to Climate Change Initiative (2009 – 2012). Event manager for the Columbia Basin Symposium (2013), Watershed Network (2012), and Water Smart (2011) regional conferences.

2013 – 2016, City of Rossland - Wetland Rehabilitation Project, Rossland, BC

Project Manager (Consultant)

Site assessment and project installation for a wetland rehabilitation project including a soil and hydrology investigation, production of a comprehensive feasibility report and a community consultation program.

2011 – 2013, Rossland Council for Arts & Culture, Rossland, BC

Administrator and Program Coordinator

Worked collaboratively with stakeholders, volunteers, and local government to deliver community arts programming. Secured operational funding, delivered annual reports to provincial funders and developed communication materials.

2007 – 2009, BC Conservation Foundation (BCCF), Bear Aware Program, Rossland/Trail, BC

Regional Coordinator

Delivered program in accordance with BCCF's mandate including managing budgets, fundraising, and reporting. Developed and delivered communication strategies and presentations to residents and local government.

Training and Volunteer

2008 – Current: Outdoor Emergency Care First Aid III (OEC) (annual re-certification)

2014: Soil Classification Course, Pacific Regional Society of Soil Science, Fort Saint James, BC

2013: Wetland Restoration Design Certificate, BC Wildlife Federation, West Kootenay, BC

2012: Certificate in Community Economic Development, Simon Fraser University/Selkirk College

2011: Graphic Facilitation Workshop, Michelle Laurie & Nancy White, Trail, BC

2014-Current: Advisor, Columbia Basin Rural Development Institute, Food Systems Research

2013-Current: Chair, Rossland Society for Environmental Action (Rossland, BC)

2008-Current: Co-founder, Coordinator and Board Member, Rossland REAL Food (Rossland, BC)

2008 -Current: Volunteer Ski Patrol, Red Mountain Resort (Rossland, BC)

2007 – 2010: Farm Hand, Earthy Organics Vegetable Farm (Fruitvale, BC)

2005 – 2006: Internship, Canadian International Development Agency, placement: Guyana, S.A.

ANDREW BENNETT

Box 2121, Rossland, BC, V0G 1Y0

Andrew@LivingLands.ca

(250-521-2500)

- More than eight years experience in agricultural production.
- Skilled editor, technical writer, and data analyst.
- Educator in ecological farm design and management.

EDUCATION

2005 - 2007	M.Sc. Biology	Laurentian University	<i>Sudbury, ON</i>
	Ecological complexity and multivariate data analysis of communities and landscapes. <i>Scholarships: NSERC PGS-M (\$17,000), OGS-TEMBEC (\$10,000).</i>		
2002 - 2005	B.Sc. Env. Science	McGill University	<i>Montreal, QC</i>
	Environmetrics, Great Distinction, GPA 3.96, Dean's Honour List.		
2000 - now	Self-study in Agriculture		<i>Various</i>
	Contemporary and traditional farming systems and innovations in ecological integration. Farm apprenticeships, workshops, farm tours, reading and syntheses. <i>Locations: BC, ON, QC, WA, OR, CA, ID, IN, OH, TX, Mexico, Guatemala, Bhutan, SE Asia.</i>		
1998 - 2000	Undergraduate Science	University of British Columbia	<i>Vancouver, BC</i>
	Math and Astrophysics, First Class, GPA 3.91, Dean's List 1999, 2000.		
1994 - 1998	IB Diploma	Jakarta International School	<i>Indonesia</i>
	International Baccalaureate, Full Diploma, 41/45 (average 30/45).		

AGROECOLOGY

2017	Env. Farm Planner	ARDCorp (for BC MoA)	<i>Kootenays, BC</i>
	Completed EFP training in March 2017 and anticipate a contract by early summer.		
2015 - now	Ecological Restoration	Cameron Landscape Design	<i>Rossland, BC</i>
	Contracted for bank stabilization, earthworks, native plantings, and wetland restoration.		
2015 - now	Administrator	Kootenay Local Ag. Society	<i>Kootenays, BC</i>
	Administer the Kootenay Mountain Grown farmer-to-farmer certification program. Maintain KLAS membership records, and design and update the website.		
2010 - now	Ecological Farmer	Moon Gravity Farm	<i>Rossland, BC</i>
	Grow food and biodiversity on a combination of farm-status properties. Grazing, gardens, earthworks, vegetables, chickens, goats, direct sales.		
2009	Bird Surveyor	Min. of Natural Resources	<i>Chapleau, ON</i>
	Used call-playback to search for the endangered Kirtland's Warbler. Collected broad habitat data, analyzed it, and wrote recommendations.		
2008 - 2009	Volunteer Ecologist	Royal Soc. for Prot. of Nature	<i>Bhutan</i>
	Communication on Bhutanese conservation issues. Trained staff in research methods. Helped implement two bird surveys and a community forestry biodiversity assessment.		
2008	Tree Planting Assessor	A&M Reforestation	<i>North Ontario</i>
	Planned daily operations and collected data on tree quality with quadrats and GPS. Foreman (2007) managed block and mentored planters. Tree planter (2005, 2006).		
2007 - 2008	Wildlife Field Technician	Parks Canada	<i>Banff, AB</i>
	Monitored mammal tracks and wildlife cameras at 30 highway crossings. Contributed to technical and popular science publications.		

COMMUNICATIONS

2010 - now	Educator	Moon Gravity Farm	<i>Kootenays, BC</i>
	<i>Consultations:</i> grazing management, riparian and landscape design, portable infrastructure. <i>Workshops:</i> fencing, irrigation, walking tractors, hand tools, earthworks, plants, animals, processing. <i>Presentations:</i> water, soil, microbes, evolution, eco-dynamics, farm systems, and efficient design. <i>Community:</i> farm tours and slideshows for schools, organizations, and events.		
2014 - now	Writer and Editor	Freelance	<i>(Online)</i>
	<i>Rossland REAL Food:</i> wrote the "Rossland Food Charter" (2017), a statement of municipal values. <i>Acres USA:</i> compiled "The Salatin Semester" (2016) on commercial ecological animal farming. <i>Columbia Basin Trust:</i> wrote "North Kootenay Lake Priority Synthesis" (2016), and edited "Abattoirs in the Columbia Basin" (2015), policy documents in clear language. <i>Verge Permaculture:</i> edited "Passive Solar Greenhouses" (2014) on thermal efficiency and design.		
2013 – 2014	Forum Moderator	Verge Permaculture	<i>(Online)</i>
	Moderated a six-month online course on animal eco-farming with ~150 students worldwide. Conducted eight 90-minute interviews with Joel and Daniel Salatin of Polyface Farms, Virginia.		
2010 – 2013	Photojournalist	Local media	<i>Rossland, BC</i>
	Weekly news, editorials, and photographs for two outlets. Engaged community commentary.		

VOLUNTEER

2010 – now	Community Volunteer	Rossland REAL Food	<i>Rossland, BC</i>
	Organize workshops and events. Farmers' Market assistant (2012-2014).		
2013 – 2014	Board (Secretary)	Kootenay Local Ag. Society	<i>Kootenays, BC</i>
2009 – 2016	Volunteer Ski Patrol	Red Mountain	<i>Rossland, BC</i>
2006 – 2009	Volunteer Leader	Camp Manitou	<i>L. Huron, ON</i>
2006 – 2007	Design Review Board	Living with Lakes Center	<i>Sudbury, ON</i>
	Student representative on the design board for a LEEDS Platinum environmental research station.		
2003 – 2004	Founding Member	La Co-op Sur Genereux	<i>Montreal, QC</i>
	Helped found a housing co-op focused on sustainable culture and managed by consensus.		

CERTIFICATIONS and OTHER SKILLS

- Environmental Farm Plan advisor training (March 2017, BC Ministry of Agriculture).
- Permaculture Design Certificates (PDCs: Lamoreux 2010, Verge 2012, Lawton 2015).
- Avalanche Operations Level 1 (CAA 2011).
- Wilderness First Aid (Slipstream 2009), OFA III (Heartsafe 2009), NUOEC III (PEAK 2011).
- BC Driver's License, 1999, class 5, clean record.
- **Farm Skills:** carpentry, natural building, fences, irrigation, plumbing, electricity, mechanical repairs, portable structures, plant propagation, animal breeding, food processing.
- **Computer Skills:** word processing, photo editing, publishing, slideshows, websites, databases, multivariate statistics, GIS and photometrics, scientific programming.
- **Languages:** conversational French (formerly also Spanish and Indonesian).



MYRA JUCKERS, BSc, PAg

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PROFESSIONAL PROFILE

Myra developed a passion for environmental research while partaking in the Environmental and Resource Science honours program at Trent University. Her desire to obtain skills in environmental research resulted in contributions to two scientific studies at Trent. As an Ecologist at Keefer Ecological Services Ltd., Myra has been involved in project management, business development, data management, including entry and quality assurance, as well as experimental design, research, and sampling methodology.

PROFESSIONAL EXPERIENCE

Keefer Ecological Services Ltd.

August 2014 – present

ECOLOGIST

- Research lead for a nursery and reclamation business feasibility study for a Tri-Nation Working Group
- Assist in research and drafting of a greenhouse pre-feasibility study for Doig River First Nation
- Assist in research and drafting of an Agricultural Business Study for Tobacco Plains Indian Band
- Assist with document control for an Environmental Assessment review on behalf of two First Nations
- Facilitate invasive plant surveys on Tobacco Plains Indian Reserve using methods from the Invasive Alien Plant Program (IAPP)
- Facilitate the design and implementation of a project for the East Kootenay Invasive Plant Council and Ministry of Transportation & Infrastructure to research which 16 native grass & forb species will have the greatest revegetation potential on roadsides
- Facilitate the collection of soil and vegetation samples for a baseline metal and polycyclic aromatic hydrocarbon study in the Elk Valley
- Assist with rare plant and terrestrial ecosystem mapping surveys within the Elk Valley
- Assist in recovery efforts for the endangered whitebark pine
- Assist in design, implementation, reporting, and presentations of projects
- Conduct proposal writing

Acorus Restoration

April to May, 2014

INTERN

- Participated in operations of the native plant nursery, including seed inventory, plant propagation, transplanting, and preparing customer orders
- Assisted in the implementation of plants for the Manning Road Improvement Project in Windsor, ON
- Learned principles of conservation and restoration of natural areas

Trent University

May – August 2012

RESEARCH ASSISTANT**Dr. Shaun Watmough Research Laboratory**

- Assisted with field research on a project investigating the biogeochemistry of peatlands in the Greater Sudbury Area, Ontario
- Assisted with processing peat and pore water samples

Kawartha Turtle Trauma Centre

September 2011 – April 2012

INTERN

- Assisted in managing the 2010 and 2011 turtle intake data
- Assisted in the headstarting (a technique which attempts to improve the survivorship of turtles by harvesting eggs, rearing the turtles until they have reached a prescribed size, and subsequently releasing them) of Blanding's turtles

Trent University

May – August 2011, 2010

RESEARCH ASSISTANT**Dr. Marguerite Xenopoulos Research Laboratory**

- Assisted in analyzing the impacts of land use on nutrient flux within streams
- Performed nutrient analysis to determine the concentration and flux of oxygen, carbon, phosphorus, and nitrogen at the sediment-water interface in streams

EDUCATION**Bachelor of Science in Environmental and Resource Science (Honours)**

2013

Trent University

MEMBERSHIPS & AFFILIATIONS

Professional Agrologist of the British Columbia Institute of Agrologists

November 2016

SELECTED PAPERS

Roussin, R., T. White, M. Keefer and M. Juckers. 2016. Doig River First Nation Greenhouse Operation Pre-Feasibility Study. Keefer Ecological Services Ltd., Cranbrook, BC.

Carignan, G., M. Keefer and M. Juckers. 2014. Tobacco Plains Agricultural Business Study. Keefer Ecological Services Ltd., Cranbrook, BC.

Juckers, M. and S.A. Watmough. 2014. Impacts of simulated drought on pore water chemistry of peatlands. *Environmental Pollution*, 184: 73-80.

Juckers, M., C.J. Williams, and M.A. Xenopoulos. 2013. Land-use effects on net resource flux and demand in stream sediments. *Freshwater Biology*, 58: 1405-1415.



JESSICA LOWEY, BSc, AAg

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PROFESSIONAL PROFILE

Jessica has a wide range of experience from field based work to computer based geomatics work. Through her education, which was a combination of field orientated training and computer training, she has been able to develop and implement projects that require a keen knowledge of both skill sets.

PROFESSIONAL EXPERIENCE

Keefer Ecological Services Ltd **JUNIOR ECOLOGIST**

September 2016 – Present

Socio-Economic Study

- Drafting a socio-economic study for Ulkatcho First Nation related to the potential impacts and benefits of the proposed New Gold Blackwater project.

Canadian Environmental Assessment Review

- Developed a presentation regarding the CEAA review process to present to First Nations to gather feedback on the current Environmental Assessment process and ideas to make improvements.

Tri-Nations Feasibility Study

- Presently developing a feasibility study for the Tri-Nations Native Plant greenhouse near Prince Rupert BC.

Keefer Ecological Services Marketing Strategy

- Redeveloped the Keefer Ecological Services marketing strategy, including website design, business card design, updating email signatures and brochure design.

DST Consulting Engineers **Project Manager**

October 2014 – October 2016

Providing environmental engineering and consulting services to clients throughout the Kootenays through each phase of a project's development from design and planning, environmental approvals and permitting, through to facility decommissioning or transfer.

- Prepared cost proposals for bidding purposes, monitored financial performance for each project, and managed capital and operating budgets
- Retained and executed projects through all phases of development
- Performed Phase I Environment Site Assessments in accordance with CSA standards in the province of British Columbia detailing historical and current uses, natural vegetation, soil and bedrock geology and possible sources of contamination

- Composed, organized and presented water quality management program documents in response to a Request for Proposal for groundwater monitoring including the implementation of a monitoring program, scheduling meetings, collection of samples and preparation of reports
- Administered policy using a comprehensive knowledge of provincial and federal environmental guidelines and legislation with regards to industry activities, hazardous materials and waste
- Developed and implemented detailed standard operating procedures and safe work practices for employees and clients
- Adapted project scope to accommodate unexpected timeline, budget and personnel changes

Cabin Forestry Services

May 2014 – October 2014

Forestry Technician

Provided forest management services in the Okanagan Valley that included forest resource management, recreation trail planning and development, and mountain pine beetle assessments.

- Extensively documented native, rare and invasive plant species according to the British Columbia Weed Control Act and the Invasive Species Council of British Columbia
- Compiled final site plans for clients outlining the results of a variety of forestry assessments
- Aided in the planning, layout and construction of trail projects for community user-groups, BC Parks, Ministry of Tourism and the Central Okanagan Regional District
- Demonstrated an extensive understanding of the British Columbia Forest Act and the Forest Practices Code of British Columbia Act
- Lead the greatest number of riparian assessments, silviculture prescription plots for harvesting and revegetation, and forest health surveys

Navus Environmental

September 2013-May 2014

Environmental Consultant

Provided site assessment and planning services to the oil and gas industry including coordination and completion of Phase I Environmental Site Assessments, pre-disturbance assessments and detailed post-disturbance site assessments to catalogue soils, vegetation, wildlife and landscape in accordance with provincial reclamation criteria.

- Performed extensive vegetation surveys (native, rare and invasive species) and ecosite identification according to the Alberta Native Plant Council, the Alberta Weed Act, the British Columbia Weed Control Act and the Invasive Species Council of British Columbia
- Administered policy using a comprehensive knowledge of provincial and federal environmental guidelines, legislation and other environmental impact agreements with regards to construction and drilling activities
- Conducted soil classification based on the Canadian System of Soil Classification for the determination of new construction and drilling locations
- Investigated spills and field screened soil and surface water for contaminants
- Compiled a variety of detailed scientific reports for clients outlining the results of the field data (Pre-Disturbance Assessments, Phase I Site Assessments, Detailed Site Assessments)

Nipissing University
Geomatics Lab Instructor

January 2013-April 2013

Provided instruction to students for projects related to GIS fundamentals, data sources, data models, data entry, data structures and map projections using ArcGIS 10.0 and remote sensing applications using PCI Geomatica.

EDUCATION

Honours Bachelor of Science in Environmental Geography (2012)

Nipissing University

Successfully completed a Bachelor of Science degree with an undergraduate thesis in Soil Science and a specialization in Geomatics.

- Examined ecological principles underlying Canadian environmental problems
- Utilized appropriate keys to identify native, rare and invasive plant species
- Developed a comprehensive understanding of provincial and federal environmental legislation
- Completed an undergraduate thesis focusing on the classification forest and agricultural soil profiles based on the Canadian System of Soil Classification
- Used a variety of geomatics software (PCI Geomatica, ArcGIS 10.0) to prepare maps, models and change detection images

Geomatics Certificate (2012)

Nipissing University

- Certified in geographic information systems, remote sensing, computer cartography and spatial quantitative analysis.

Master of Science, Environmental Practice (2016)

Royal Roads University

- Currently working towards a Master of Science with a focus on environmental management, risk assessment, remedial technologies, and endangered species and wildlife.

MEMBERSHIPS & AFFILIATIONS

BC Institute of Agrology – Articling Agrologist



Mike Kurucz, BBA

m.kurucz@KeeferEco.com

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PROFESSIONAL PROFILE

Mike is a highly skilled business & administration coordinator with over five years' experience working in financial and accounting environments. Some of the skills he has mastered throughout his career include: office management, accounting administration, record management, customer relations and event coordination. He has also been a member of an Occupational Health and Safety committee for over four years. Mike has maintained the highest level of performance standards within a diverse range of occupations. His education and experiences make him a uniquely qualified individual.

PROFESSIONAL EXPERIENCE

Keefer Ecological Services Ltd & Tipi Mountain Native Plants Ltd.

2014 – Present

Business & Administration Coordinator

- Assisting with budgeting, purchasing, accounts payable and receivable, payroll and communications
- Providing IT support for all user on the network and email systems
- Maintaining and updating the company website and all other social media
- Providing human resources support
- Coordinating and maintaining the Occupational Health & Safety Plan

Island Savings Credit Union

2013 – 2014

Accounting Coordinator

- Performed all day-to-day AP/AR operations for the Organization
- Reconciled a variety of GL accounts of banking, insurance and accounting systems
- Reconciled vendor and customer statements
- Prepared and posted journal entries, adjustments, month-end accruals
- Stored, arranged, indexed and classified records from their creation through to their eventual disposal in compliance with policy and regulations

Island Savings Credit Union

2009 – 2013

Lending Services Advisor

- Fast-tracked from Service Representative to Lending Advisor
- Initially processed transactions such as deposits, withdrawals, cheques, money orders, utility bill payments, foreign exchange and account transfers while making qualified referrals to other business areas
- Ultimately served as Advisor for sixteen branches, providing lending advice and operational support
- Verified/dispersed/renewed/paid-out mortgages and personal loans

- Coordinated the creation, maintenance, and destruction of all mortgage records in compliance with legal and financial requirements

Highlights: *Was instrumental in an implementation project to convert the mortgage records management system and application process to an electronic system (2009-2011). Trained and coached new employees.*

Aramark Higher Education

2008 – 2009

Special Events Coordinator / Office Manager

- Organized food and beverage for special events/catering at the University of Regina (our major client), to include. athletics, conferences (U of R sponsored), film/music, public lectures and seminars, theatre, youth camps and sporting team receptions
- Managed five to eight food and beverage outlets within the university, working closely with three regular vendors
- Handled all prepaid orders and concessions at each event
- Process invoices, valued from \$500 to \$5,000
- Continuously cycle counting inventory to ensure appropriate product and equipment levels
- Planned on average two-three larger events per week, with up to 200 attendees each.
- Maintained company websites and prepared event posters and flyers

Highlights: *Organised ~150 events at University of Regina and hired and trained ~five staff over the year. (2008-2009)*

During his degree, he extended his studies to work overseas (UK/Ireland) & in Canada, where he held a number of contractual roles as AP/AR Clerk & Operations Support for ~ four years, primarily within the hospitality industry.

- Operations Manager for Kitty O'Shea's tavern (2004-2006)
- AP/AR Clerk for Northern Foods (2006-2007)

Responsibilities included providing operational & administrative support, handling financial transactions (e.g. supplier invoices/credit notes/internal costs), balancing and reconciling GL transactions, performing data entry, managing inventory and vendors and preparing the daily bank deposit, while typically supervising up to ~ten staff.

EDUCATION

BBA with Major in Management, 2008

University of Regina

Focus on Finance & Accounting, Marketing

CERTIFICATION

Occupational First Aid Level 1

IT SKILLS

Advanced MS Word, Excel & Outlook

Sage MAS 500 (One year), Wealthview (three years), SAP (One year), Oracle (One year)

QuickBooks (Three years)

OTHER SKILLS

Personal Property Services: PPR/PPSA Searches & Registrations
Real Estate: Lien Searches • Real Estate/Land Title Searches
Marketing: Advertising • Social Media (Twitter & Facebook) • Website Content Management
Events Management: Location Set-up • Venue Management
Leadership: Coaching & Mentoring • Employee Engagement • Training & Development



ACTIVE COMMUNITIES GRANT APPLICATION GUIDE INTERIOR AND ISLAND HEALTH REGIONS



Healthy People



Healthy Society



Healthy Environments

May 2017



ACTIVE COMMUNITIES GRANT APPLICATION GUIDE – INTERIOR AND ISLAND HEALTH REGIONS

1. OVERVIEW

1.1 GOAL & OBJECTIVES

Active Communities grants are available for local governments and their partners in **Vancouver Island and Interior regions**. Grants of up to \$30,000 are available to individual communities. Combined grants of up to \$100,000 are available to communities that are working together for greater impact in their region.

The Active Communities grants will support innovative projects that work towards having a measurable impact on physical activity. Examples of initiatives the grants will support are:

- Population level projects that address the underlying root causes of physical inactivity.
- Projects that seek to remove barriers to physical activity for target populations or communities through improving access and inclusion, healthy community design, and/or healthy public policy.

Objectives:

The purpose of the Active Communities Grants in the Vancouver Island and Interior regions is to support local governments and their partners to:

1. **ACT FOR IMPACT:** Take upstream¹ action to work towards measurable impact on physical activity, and improve opportunities for physical activity specifically through one or more of the following:
 - a. **Improving access and/or inclusion for targeted populations or communities** such as rural and remote communities, low-income families, children and youth, newcomers, older adults and Aboriginal and First Nations peoples.
 - b. **Healthy community design** (e.g. integrating physical activity into the planning, engagement, and research of community design such as public parks, transportation networks, and public spaces)
 - c. **Healthy public policy** (e.g. integrating physical activity goals and strategies into an OCP, neighbourhood planning, or program)
2. **STRENGTHEN COLLABORATIVE LEADERSHIP ACROSS SECTORS:** Strengthen multi-sector collaborations and shared leadership to increase physical activity, including partnerships between local governments, health authorities and other sectors to develop comprehensive strategies, integrated approaches and shared goals.
3. **INNOVATE, EXPERIMENT & LEARN:** Go beyond “business as usual” to work and take action together in new ways that address the underlying root causes of physical inactivity with a specific target population, community or region. Co-create active community ideas and solutions, test them out, evaluate, identify and share data and lessons learned.

¹ **Upstream:** Thinking and action that creates the conditions and commitments to address problematic situations at their source. <http://bchealthycommunities.ca/toc>

ACTIVE COMMUNITIES GRANT APPLICATION GUIDE – INTERIOR AND ISLAND HEALTH REGIONS

1.2 OVERVIEW OF THE GRANT AND SUPPORTS

Island and Interior Health Regions each have a total of \$353,800 in grants to award. Individual community grants of up to \$30,000 are available, with the opportunity for larger combined grants (up to \$100,000) for joint proposals from communities working together for greater impact in their region.

In addition to the Active Communities grants, communities will have access to the following supports:

- **Move it! Move it!** Exploring Active Communities Innovations: A Virtual Forum (May 17th)
 - For more information about the forum and to register, [please go here](#).
- **Active Communities Learning Network Webinars**
- **Active Communities Coaching Grants:**
 - BC Healthy Communities is pleased to offer additional supports in the form of a coaching grant valued at \$5000 (in-kind, customized coaching support. *Please note this is not a cash grant*) for three grant recipients per health authority region.

For more information about additional supports, please refer to Section 4 of this Guide.

1.3 APPLICANT ELIGIBILITY

The following local government organizations are **eligible to apply**:

- Regional Districts
- Municipalities
- First Nations Bands
- First Nations Tribal Councils
- Métis Chartered Communities

The following organizations are **not eligible to apply**:

- Individuals
- For-profit groups
- School Districts
- Hospital Foundations
- Community Groups
- Non-profit organizations
- Health Authorities

Building active communities cannot be achieved by any one organization or sector working alone. All applicants must demonstrate existing **cross-sector relationships** for improving physical activity. At a minimum, this collaboration must include an existing partnership between the local government and the regional health authority, and involvement of community stakeholders such as local non-governmental organizations.

 ACTIVE COMMUNITIES GRANT APPLICATION GUIDE – INTERIOR AND ISLAND HEALTH REGIONS

Please note: we strongly encourage you to contact us in advance of the deadline with any questions about the eligibility of your application.

Eligible local governments who are working in partnership with other sectors and who are interested in applying, should read the application guidelines thoroughly.

1.4 PROJECT TIMELINES:

Projects are expected to take place between August 2017 and October 2018. A final report is required within 30 days of completing activities, and no later than November 30, 2018.

- **May 17, 2017:** Move it! Exploring Active Communities Innovations: A Virtual Forum – STRONGLY ENCOURAGED FOR ALL APPLICANTS
- **June 30, 2017:** Deadline to apply
- **August 4, 2017:** Communities notified
- **April 30, 2018:** Mid-Term report due
- **October 2018:** All projects must be completed
- **November 30, 2018:** Final report due

1.5 PROJECT EVALUATION & LEARNING:

Grant recipients will be expected to participate in evaluation activities and track certain data as part of the evaluation of the provincial Active Communities program.

Successful applicants are required to submit two reports to the BC Healthy Communities: a midterm report on **April 30, 2018** and a final report by **November 30, 2018**. This reporting will capture information on activities completed, partnerships established and their contributions, financials, successes, challenges and emerging issues.

In addition, grant recipients are highly encouraged to participate in Active Communities Learning Network Webinars. These webinars will be an opportunity for grant recipients to learn more about innovative approaches to increasing physical activity and share learnings across communities.

What is the working title of your proposed initiative?

Big White Mountain Healthy Community Steering Committee

How will project activities address physical activity, specifically through at least one of the following areas: improving access and inclusion for physical activity opportunities, active community design (250)

Primary project activities include:

- Bring key stakeholders together to design/execute shared use agreements across public, school district & private resources.
- Plan operation & programming across these resources
- Public consultation component for above.
- Use the allowable capital portion of the grant to upgrade current assets

Improving access & active community design:

- There is currently no publicly owned space at Big White, except for fire hall properties
- There are few opportunities outside of Winter time for outdoor recreation & no opportunities to public for indoor recreation at any time of the year
- Weather on the mountain is unpredictable outside of Winter & can be challenging for outdoor activities in the shoulder seasons.
- The Regional District of Kootenay Boundary (RDKB) has hired consultants to design & cost building of a community centre. There are elements of this project that have yet to be defined before going to referendum in Fall of 2017 (e.g. operation/programming plans)
- The RDKB is in discussion with the resort and the community about trail development that will connect the Village with the school and the proposed new community centre. There is a trail that's usable in the winter, but is currently not useable when the snow is gone. This will make walking safer than using roadways & will allow use of strollers & other mobility devices.
- School District facilities have not been usable by the community because of resource challenges in supporting such a remote school

Inclusion:

- Vulnerable population include: large seasonal staff population, families with preschool children, seniors
- Finances are a barrier to some segments of the population

Tell us about any target populations you may be considering for your active communities work and why these are a priority (250)

People in remote communities:

- Community is 70 km from nearest city & access to many services (medical, dental, year-round recreation facilities, shopping, library)
- Year-round population in the community is 251
- After grade 9 students travel by bus to high school in Rutland. Distance & time factors reduce their ability to participate in after school sports

Children & youth:

- There are 14 families with children aged 2 or younger in the community
- Aside from 1 day per week during the school term (Strong Start), there's no place for them to meet
- Little for children & youth to do outside of school, outside of Winter

Large seasonal staff population; mostly young people:

- Access to basics like suitable housing has been a challenge for this population; many couch surf or live in extremely cramped & unsafe conditions

Visitors with disabilities:

- There is an adaptive ski program available in the Winter, but it is limited in size & scope

Finances are a barrier to some segments of the population, especially snow sports. Some school age children need to be supported to join in school ski program.

How was this project identified? How does this project link to previous or current work you have done on active communities (eg strategies in OCP, municipal policies, cross sector initiatives etc (250)

Big White Mountain Community Development Association (BWMCD) brought this project to our attention. This is a group of very involved, very motivated community members who formed to initiate activities & projects (e.g. community-wide Thanksgiving dinner, community garden, Summer activities for kids, community soccer, etc.).

BWMCD has been working with the area director on a number of projects. This application seeks to reach out to other sectors: public education, health & the private sector.

If your proposal is based on any local/regional data related to physical activity or the populations you are targeting please specify (eg community profile, needs assessment, census data etc (250)

A general sense of the activity levels of Interior Health Authority Region residents produced by the Public Health Agency of Canada in 2013 indicated that almost 35% of residents led inactive lifestyles, increasing their risk of lasting health effects and increasing their economic burden on the healthcare system.

Research on the physical activity levels of residents in the Kootenay Boundary region is extremely limited, however research completed by the Vancouver Foundation does provide some indication of the mindset of residents in regard to health and belonging.

The Phoenix Foundation's 2014 Vital Signs report for the Boundary region indicated that 28% of respondents believe that health is one of the top 3 issues facing the region, which is 10% higher than the provincial average. 43% of respondents in the same report indicated that their sense of belonging to groups/activities is weak, which is a full 11% higher than the provincial average.

The community feedback portion of the proposed project will help to provide a clearer picture of the health of the region, how much physical activity is happening, and the areas where improvement needs to be focused.

What is the role of local government in this project?

- RDKB is the applicant, and as such, is ultimately responsible for the project
- A grant administrator will be hired to manage the budget & do all necessary reporting
- RDKB staff will pay the bills and approve all final reports
- RDKB will provide a staff & area director presence for meetings
- RDKB will provide expertise, as required, from recreation, planning & building inspection departments
- RDKB will allow our website to be used to direct public to new website
- RDKB will seek Board approval & execute action items that come out of this multi-stakeholder process (e.g. possible Shared Use Agreement with School District)

This grant opportunity requires collaboration between local government, health authorities and other community partners. What is the role of your regional health authority in this initiative and how does this build on your existing partnership? (250)

- Interior Health Authority (IHA) is already is already partnering with RDKB on an Agriculture/Food Systems Planning initiative that involves Big White Community. This project will be a great extension to our relationship. Of course, IHA currently has a multi-faceted relationship with the community school. We share common interests.
- RDKB will be approaching IHA to discuss them being a potential tenant in the new community centre. This could bring services to the community, offset costs and make the whole project more viable.
- IHA will be asked to help determine if programs offered help the community meet established health targets, and are based on research and data pertinent to the members of the community.

If you have an existing partnership with your health authority please provide key contact information.

Contact person: Kady Hunter
Email: kady.hunter@interiorhealth.ca
Position: Public Health dietician, Population Health
Phone: 250-420-2313

Which other collaborators and partners will be involved in your activities? Does this list include stakeholders from other sectors beyond the people you most often work with? Outline the organizations or individuals that are already involved and those that you intend to get involved

Nature of involvement?

Big White Mountain Community Development Association (a non-profit)

- this would be the first direct involvement with RDKB
- they would be liaisons to the greater community
- they would work most closely with the grant administrator

School District 51 (Boundary)

- we have a Shared Use Agreement with them in another part of the Boundary; this would be the first interaction in the West Boundary
- informal, preliminary discussions indicate that they are interested in shared services, including the possibility of shared custodial
- the school has a tennis court, a playing field and a large open basement that could be made more available to the community if there were staff resources to manage the access

Big White Resort

- this is the major business on the mountain & holder of the Resort Master Plan with the Province
- although we consult frequently with them on planning, building & service issues, this project will seek common goals for infrastructure & access that will benefit the community
- RDKB will be negotiating a property purchase with them if the community centre passes referendum.
- Any discussion about Active Transportation will involve them, as they own all the non-MOTI (Ministry of Transportation & Infrastructure) rights of way

How do you plan to convene, engage and develop shared leadership and action between your partners and other collaborators?

Each of the listed partners on this application have agreed to participate in planning & discussion.

Distance will be a challenge for the non-resident organizations to participate. In order to mitigate this, in addition to in-person meetings, the following are planned:

- Use of online platforms enabling file sharing & management
- Electronic meetings and/or teleconference
- There's a budget for overnight accommodation (Big White is about 3 hours drive from the School District Board Office, and about 4 hours from RDKB Board Office)

Development of a website is included in the budget:

- To engage public to help guide the process

Additional work of administrator to promote shared leadership & action:

- Staff for the partner organizations are very busy; we need to make participation as easy as possible
- Administrator will do research to supplement decisions, take/distribute meeting notes
- They'll schedule meetings & manage logistics (accommodation, venue, food)
- Draft wording on agreements for approval prior to submission to lawyers

What is the specific impact you are aiming to achieve through this initiative? What are your anticipated outcomes? (250)

- Renovation & restructuring of existing infrastructure (convert tennis court to a pickle ball court & basketball court; levelling & grading school playing field, electronic & mechanical separation of school so that parts can be more securely used by community after hours)
- Active transportation: work with Big White Resort & RDKB on trail from village centre to school
- Legal support to BWMCDCA for some of their initiatives (e.g. pump track on vacant fire dept. land)
- Establishment of joint use agreements that will share facilities across organizations
- Shared programming & operations
- Tenancy agreements that will contribute both income & health/social benefit to the proposed community centre (IHA, private fitness businesses), making it more viable
- Community will have access to year-round physical activity

Please provide a short description of your proposed activities (50)

- planning sessions (RDKB, BWMCDCA, School District, IHA & Big White Resort) to develop strategies around the joint use, operations & impact of current and future programs and assets.
- Community engagement
- Research (what are other communities doing)

- Development of draft shared use agreements for approval by each organization
- Work with school district on upgrades to facilities (described above)

What do you hope to learn about physical activity in your community through this project? Please include a description of any innovative approaches you may be trying (250)

The health of residents in Big White is uniquely impacted by its location and seasonality, but very little qualitative or quantitative research has been done to understand its specific risks and needs. This process will help to develop an understanding of the root causes of inactivity in Big White and implement both short term and long term strategies to address both.

Participating groups hope to gain an understanding of the frameworks available for assessing health and the quality of strategies to address inactivity and then use those frameworks to establish and implement a plan for Big White.

Additionally, this plan will identify and reduce barriers to the use of recreation facilities and natural areas in the community, and develop strategies to engage all members of the community in healthy activity.

Tell us how you plan to measure progress toward your anticipated outcomes and make use of any learning along the way (250)

Physical asset changes are completed:

- Learning: community & inter-organizational experience in recreational infrastructure & management
- Measured by: facilitators/supervisors record attendance (e.g. soccer, use of tennis court); community centre referendum results; feedback about use of active transportation to school

Increased physical activity, year-round:

- Learning: challenges addressing complex preferences & needs across diverse population; ongoing public consultation will help shape future directions
- Measured by: feedback generated via social media, surveys & enrolments (where applicable)

Shared Use Agreements are in place:

- Learning: Needs & challenges of each organization
- Measurement: Use is documented by facilitator (e.g. how often the school basement is booked & for what activity); reduced costs to operations which are restructured through this initiative

How will knowledge, learning, and promising practices generated by this project be harvested and shared with others in your community/region (250)

A component of this project will be a website which will act as a hub for information sharing on all community healthy lifestyle activities, spanning from exercise to food and nutrition. The site will cover all seasons and incorporate grassroots and structured activities available to community members and visitors. Links to this site will be available on the RDKB website and shared through social media. Community members will have the opportunity to engage in planning sessions throughout the process via the project website and social media surveys.

BWMCDA will share progress reports at monthly meetings and a summary report following the final planning session. These meetings generally bring together > 30 members of the community from a wide demographic profile.

RDKB, BWMCDA and Big White Community School will make the final report available on their websites and social media channels. Residents will also be notified that a hard copy can be obtained by a posting on the community message board. A presentation will be made to the RDKB and School District #51 boards sharing results, impact and strategies generated from the project following the final planning session and report.

Other parts of the West Boundary will be watching this project with interest to see if it can be applied to their communities.

What is your work plan? What will you do? When will you do it? Identify the specific activities you will undertake and when these activities will take place:

Timeline	Key Steps/Activities	Responsibility
September 1, 2017	Call for proposals	BWMCDA
September 30, 2017	Select administrator	All
October 15, 2017	Sign contract with administrator	BWMCDA/RDKB
October 30, 2017	Set meeting dates	Administrator
November 2017-October 2018	5 strategic planning sessions	All
November 30, 2017	Website design and implementation	BWMCDA
April 30, 2018	Midterm report submission	RDKB (Administrator)
November, 2018	Final Report and community presentations	All
November 30, 2018	Final Report to Active Communities	RDKB (Administrator)



BC Healthy Communities
People. Place. Potential.



Planning a **healthy** community starts here



Active Communities Grants		
<div> <div>Name of Lead Local Government Applicant:</div> <div>Regional District of Kootenay Boundary</div> </div>		
<div> <div>Project Name: Big White Mountain Healthy Commur</div> </div>		
Expenses	Description	Projected Cost
Facilitator/Guest Experts		\$ 5,000
Administrator		6,000
Venue Rental		1,000
Meeting expenses	Food, accommodation, travel	4,000
Supplies	Materials, office	500
Website		1,500
Capital	Upgrade existing assets	12,000
Total Expenses		\$ 30,000
Revenue	Confirmed or Projected?	Cash or In-kind?
<i>BC Healthy Communities</i>	<i>Projected</i>	<i>Cash</i>
RDKB, SD51, IHA, Big White Resort	staff time	in-kind
RDKB, SD51, IHA, Big White Resort	legal fees	in-kind
RDKB (fire hall)	meeting space/small meetings	in-kind
RDKB	teleconference costs	in-kind
RDKB, SD51, IHA, Big White Resort	social media, website	in-kind
RDKB, SD51, IHA, Big White Resort	mileage to in-person meetings	in-kind
Total Revenue		
Tips for filling out budget template:		
1) List all project expenses. Please refer to the application guide for a list of eligible expenses.		
2) List all revenue sources, whether they are confirmed or projected, cash or in-kind.		
3) Make sure that your budget is balanced (total expenses should equal total revenue)		
4) Please upload your completed budget form in Section 6 of your online application		
5) Questions? Contact grants@planh.ca or 250-590-8432		

[illegible]



Suite 215, 101-1865 Dilworth Avenue, Kelowna, BC V1Y 9T1

For the Attention of: Mark Andison & Director Vicki Gee, Regional District of Kootenay Boundary

Re: Support for Active Communities Grant

We are writing to express support for the Regional District of Kootenay Boundary (RDKB) application for an Active Communities Grant in relation to the community of Big White Mountain.

The Big White Mountain Community Development Association is very interested in working in partnership with RDKB and other relevant parties to explore opportunities for collaboration towards a more active community. Finding solutions to some of our complex community level issues surrounding access to year-round physical activity is a key priority for BWMCDA due to the unique nature of our community and we would welcome any opportunity to strategically plan to address these issues working in partnership with RDKB, SD51, IHA and the ownership of Big White Ski Resort. We are a small rural community with strength in volunteerism and a proactive Community Development Association, with currently very minimal community resources, no access to public fitness facilities or areas of any kind, and an increasingly diverse & growing population. This grant would be a catalyst for development of an active and healthy community with a strong basis in physical activity.

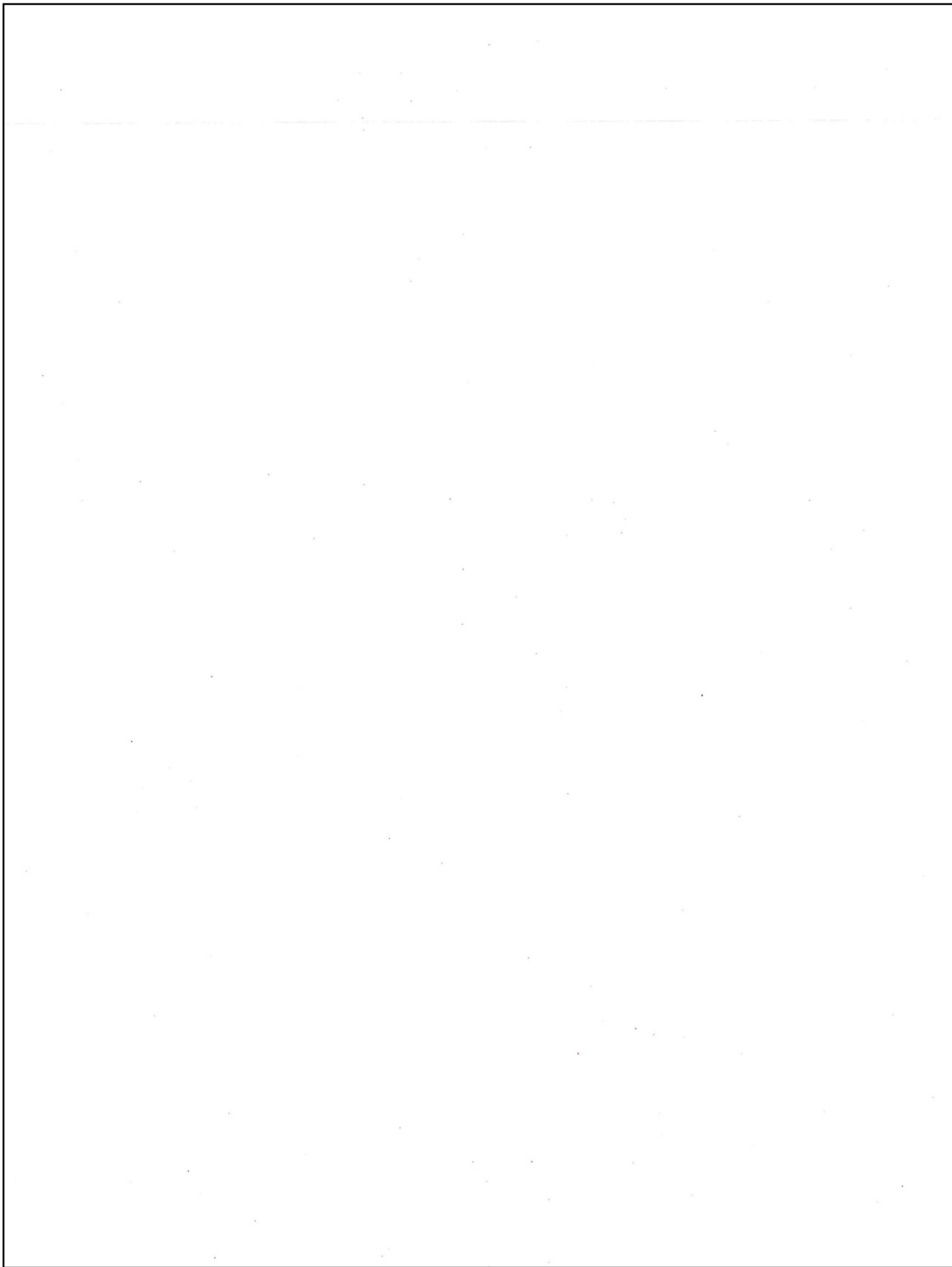
Please let us know if you require any further information at this stage.

Sincerely

Colin Burns, President
Jude Brunt, Vice President

On behalf of the Board of Directors and membership of BWMCDA

Tel: 250 899 1204





SCHOOL DISTRICT No. 51 (BOUNDARY)

June 15, 2017

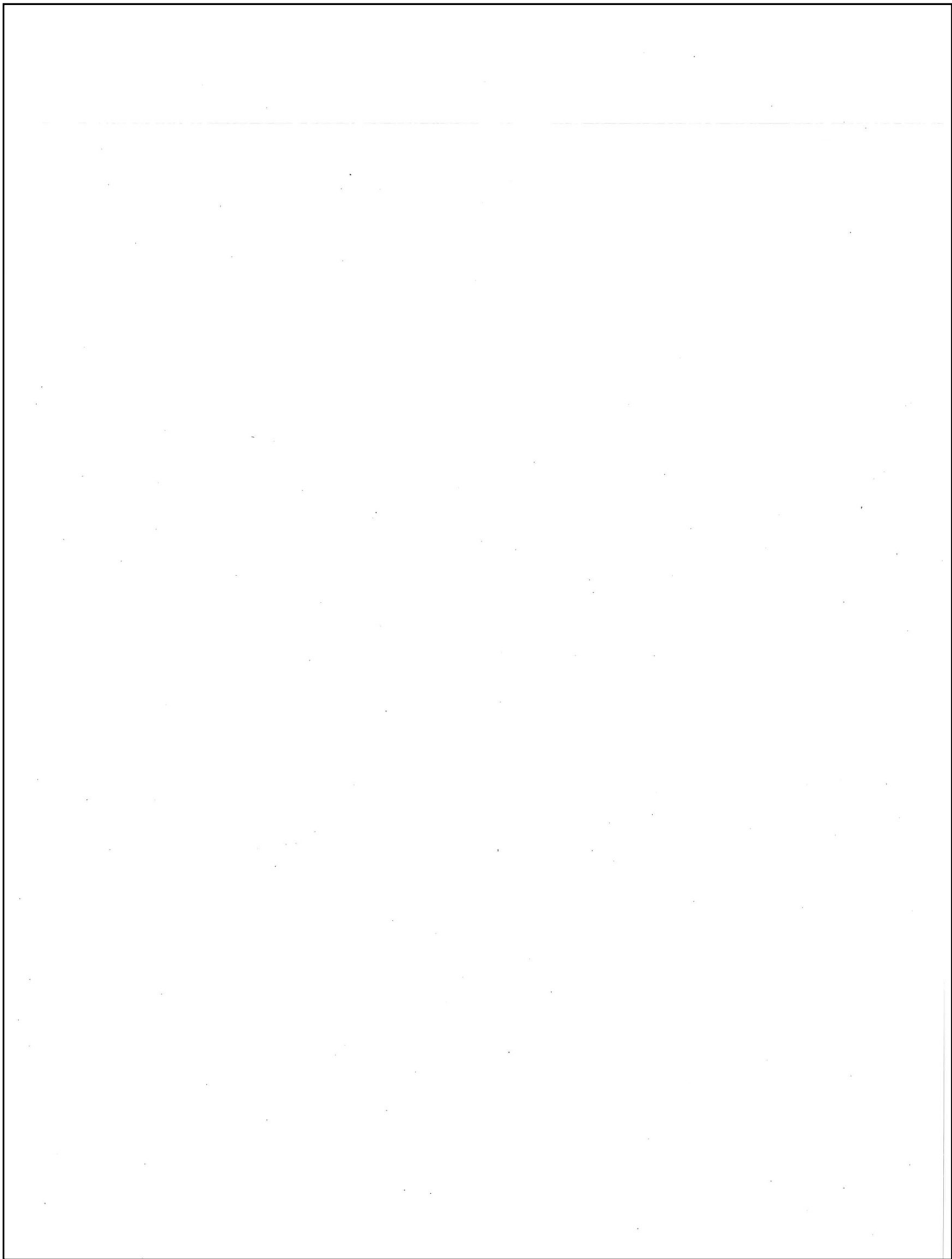
To Whom It May Concern:

On behalf of School District No. 51 (Boundary), I would like to express our support for the Regional District of Kootenay Boundary's application for an Active Communities Grant. School District 51 (Boundary) is interested in working in partnership with the RDKB to explore opportunities to collaborate on addressing community level issues related to physical activity.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Teresa Rezansoff', is written over a faint, light blue circular stamp.

Teresa Rezansoff
Board Chair



s



Mike Figurski MD Inc.
Box 45058
Kelowna BC
Canada V1P 1P3
250 765-0544
FAX 604 330-4434

re
ACTIVE COMMUNITY GRANTS
APPLICATION FOR BIG WHITE

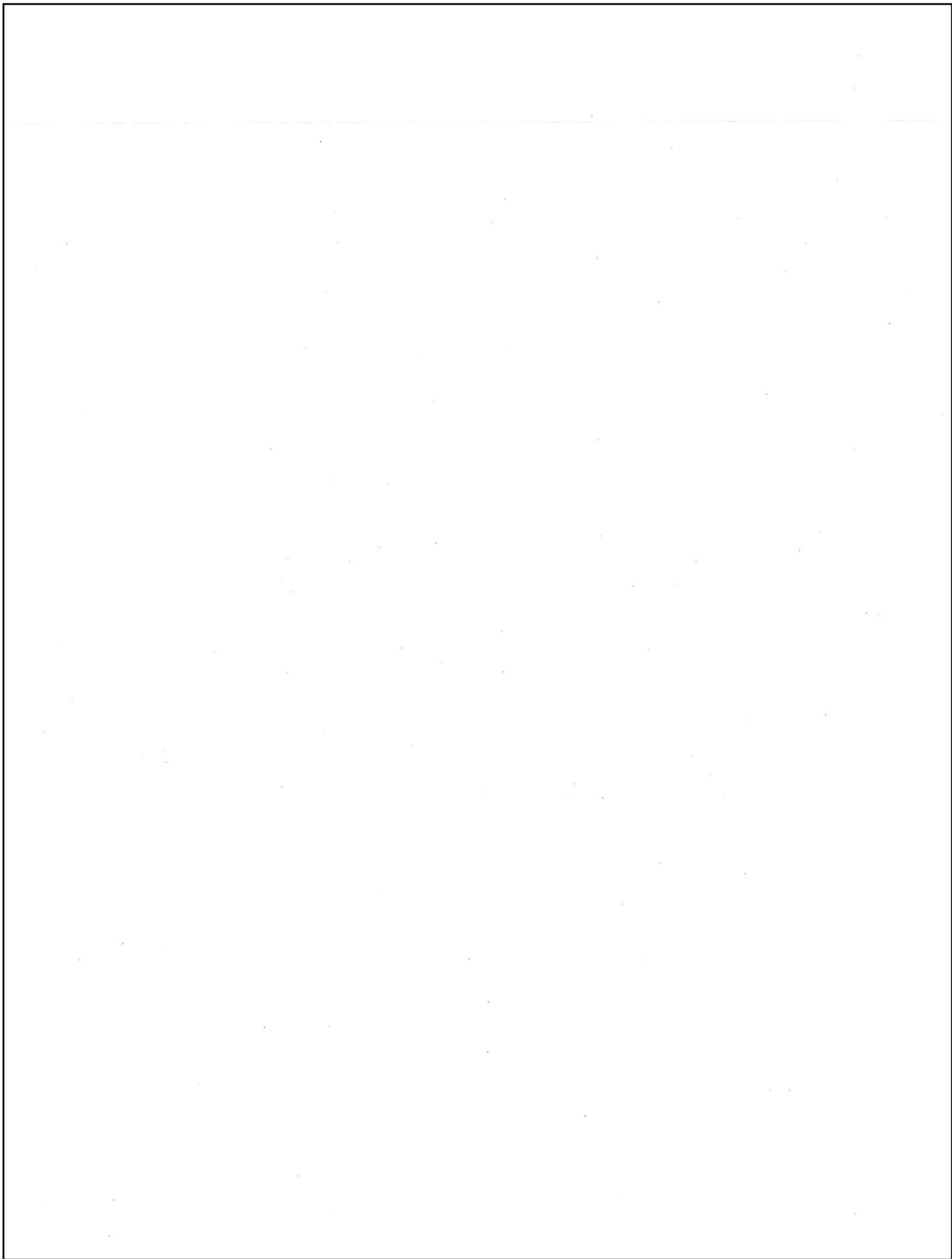
June 26, 2017

This letter is in support of the Active Community Grant on behalf of Big White. As a long time resident and physician in this community I am aware of the total lack of public recreational facilities and community assets in this growing community in the Boundary Region. There is currently no public recreational or community facility, and not so much as a blade of grass dedicated to public use. All recreational facilities are pay per use and this creates a hardship for less affluent community members, and severely restricts sport community and recreational opportunities for our residents.

The population at Big White is an active one. I believe funds towards and active community will reduce the burden of chronic disease, improve health and fitness for youth and elderly, and foster a healthy lifestyle in this community.

Sincerely,

Dr. Mike Figurski





June 26, 2017

Mark Anderson
General Manager, Operations
Regional District of Kootenay Boundary
202-843 Rossland Avenue
Trail BC, Canada
V1R 4S8

Dear Mr. Anderson,

**Re: Request for Support and Collaboration in Pursuit of
Active Communities Grant Funding for the Big White Community**

Big White Ski Resort Ltd. has been approached by the members of the Big White Community Development Association (BWCD) to support an application for an active communities grant available through the Ministry of Health for communities in British Columbia like Big White Mountain. Although I have been briefed verbally, please let this letter act as our official support of this application before the Regional District of Kootenay Boundary (RDKB) on behalf of BWCD.

As you may or may not be aware, my company is investing millions of dollars in physical activities and attractions on Big White Mountain. To that end, we continue to invest in both winter and summer seasons and as recent as Friday, June 23rd, we opened the resort for our 3rd summer featuring a new \$15,000 pump track so the community and visitors would have a mountain bike feature to play on in the middle of the village. We are encouraged that the community is using the assets around the school and will be enhancing some of their features to benefit the community on a year round basis.

We have many new families that have become permanent residents of our village and on a daily basis I see more and more mothers with young children looking for something to do. On behalf of the 127 permanent staff on our payroll and the 900+ winter seasonal (residential) staff, I thank you for your support and consideration of this important request for the benefit of the community of Big White Mountain.

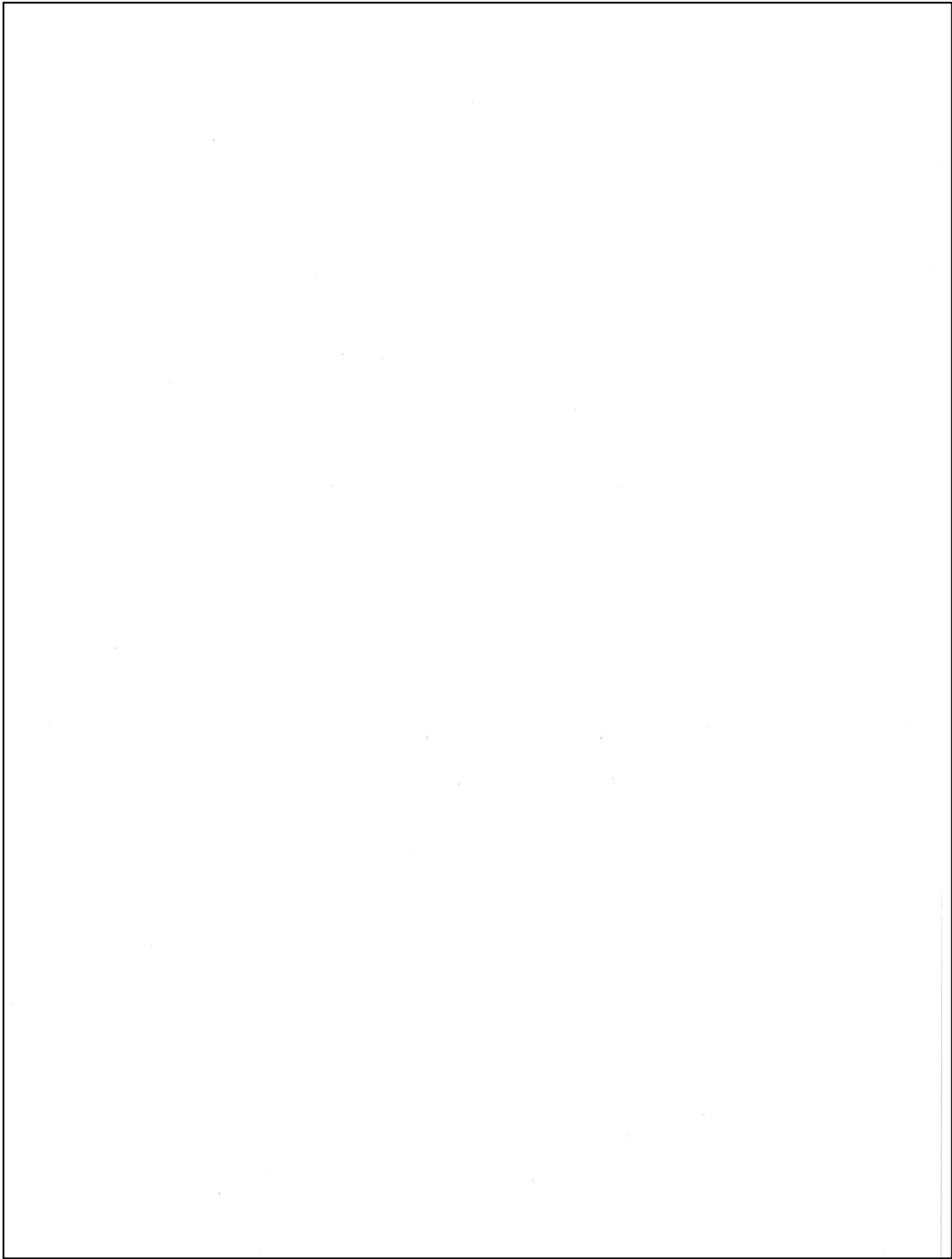
Sincerely,

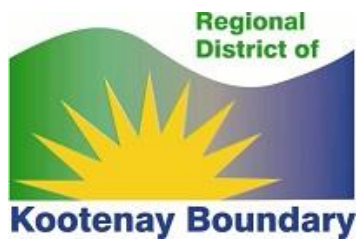
Peter Plimmer
President, Big White Ski Resort Ltd.

Big White Ski Resort Ltd.

Mountain Address: 5315 Big White Road, Kelowna, B.C. V1P 1P3 • Telephone 250.765.3101 • Fax 250.491.6122
Kelowna Office: 1894 Ambrosi Road, Kelowna, B.C. V1Y 4R9 • Telephone 250.491.6262 • Fax 250.491.6261

BIGWHITE.COM





STAFF REPORT

Date: 27 Jun 2017 **File**
To: Chair McGregor and Board
From: John M. MacLean, CAO
Re: Proposed Sale of the Waneta Dam

Issue Introduction

A draft letter to the Premier and Leader of the Opposition asking that the sale of the Waneta Dam by Teck Resources Ltd. to Fortis Inc. be delayed to allow for further investigation of options and impacts is presented.

History/Background Factors

There has been a concern raised regarding the proposed sale of the Waneta Dam to Fortis Inc. The Lower Columbia Directors met, discussed the matter and asked that the following letter be drafted. They are seeking Board support to send the letter on behalf of the Regional District.

Implications

The purpose of seeking a delay is to allow for the proper investigation of any possible ramifications.

Advancement of Strategic Planning Goals

The Board has committed to lobby on behalf of the Region on matters that impact our communities.

Background Information Provided

Selected articles from the Press.

Alternatives

1. Approve the letter with or without revisions
2. Deferral
3. Receipt only

Recommendation(s)

That the Board of Directors approve sending the letter to the Premier and the Leader of the Opposition asking that the processes involved with the sale of the Waneta Dam to Fortis Inc. be delayed to October 2017 to allow for the investigation of options and ramifications of the sale.

June 30, 2017

Mr. John Horgan, MLA
Honourable Leader of the Opposition
Room 201, Parliament Buildings
Victoria, BC V8V 1X4

Dear Mr. Horgan,

Re: Sale of Waneta Dam by Teck Resources to Fortis Inc.

On May 12, 2017 Teck Resources Ltd. and Fortis Inc. announced "an agreement under which Fortis will purchase Teck's two-thirds interest in the Waneta Dam and related transmission assets in British Columbia, Canada, for \$1.2 billion cash." (Teck/Fortis News Release).

This announcement has raised questions in the Lower Columbia (specifically for those communities immediately adjacent to and including both Teck Trail Operations and the Waneta Dam, Trail, Rossland, Warfield, Montrose, Fruitvale and Areas A and B of the Regional District of Kootenay Boundary, where a majority of the Teck employees live, work and play). Teck Trail Operations represents the key economic driver in the Lower Columbia with approximately 1500 direct employees and 8,500 positions in spin off employment. Anything that changes the financial situation of Teck Trail Operations has an immediate impact on the financial sustainability of the Lower Columbia.

A second concern is related to the water license and its transferability. Our understanding is that the water license was originally issued with terms and conditions that made it clear it was directly related to smelter operations and the economic well being of the community. Is that still the case and how are those interests being considered?

Thirdly, and lastly, local elected officials representing five municipalities, two electoral areas in the Lower Columbia and the Regional District of Kootenay Boundary have not had the opportunity to learn, discuss and understand the full ramifications of this proposed sale. Is the economic well being of the Lower Columbia and its twenty thousand residents being considered?

We strongly urge you to seek a delay in this process until October 2017, including the timelines for BC Hydro to consider its options, to allow for a frank and fulsome discussion of this proposed sale and the potential ramification to our community. Allow local government to ask questions, gather information and to build understanding so that we can address the needs of our communities for today, and into our future.

We are ready and willing to meet and discuss this issue. Please contact us at your earliest convenience.

Sincerely,

cc: Katrine Conroy, MLA

6/19/2017

2017 - Teck

Teck (/)

[News \(http://www.teck.com/news/news-releases/\)](http://www.teck.com/news/news-releases/) → [News Releases \(http://www.teck.com/news/news-releases/\)](http://www.teck.com/news/news-releases/) → 2017

Fortis and Teck Announce Waneta Dam Agreement

May 12, 2017

[Download | PDF \[0.16 Mb\] \(/media/17-25-TR.pdf\)](#)

Share



(mailto:?subject=Fortis and Teck Announce Waneta Dam Agreement&body=http://www.teck.com/news/news-releases/2017/fortis-and-teck-announce-waneta-dam-agreement)

Vancouver, British Columbia and St. John's, Newfoundland and Labrador – Fortis Inc. ("Fortis"), (TSX/NYSE:FTS) and Teck Resources Limited ("Teck"), (TSX: TECK.A and TECK.B, NYSE: TECK) today announced an agreement under which Fortis will purchase Teck's two-thirds interest in the Waneta Dam and related transmission assets in British Columbia, Canada, for \$1.2 billion cash.

Under the agreement, Teck Metals Ltd. ("Teck Metals") will be granted a 20-year lease to use Fortis' two-thirds interest in Waneta to produce power for its industrial operations in Trail ("Trail Operations"). Annual payments will begin at approximately \$75 million per year and escalate at 2% per annum, equivalent to an initial power price of \$40/MWh based on 1,880 GWh of energy per annum. Teck Metals will have an option to extend the lease for a further 10 years at comparable rates.

"This agreement will further strengthen Teck's balance sheet and provide significant new capital that can be reinvested to grow our overall business," said Don Lindsay, President and CEO, Teck. "We have secured a long-term power supply for Trail Operations at competitive, below-market pricing and will invest in innovative projects to further enhance and modernize this facility."

"Waneta is a high-quality, renewable energy facility located in an area central to our BC operations, making this acquisition a natural fit with our strategy to increase our investment in sustainable energy," said Mr. Barry Perry, President and CEO of Fortis. "Waneta will be a stable long-term asset that will generate strong cash flows secured by a 20-year lease with Teck. The transaction is expected to be immediately accretive to earnings per share."

Teck expects to realize a net book gain of approximately \$800 million on the closing of the transaction. No cash tax will be payable on the proceeds.

Since 2012, Teck has invested approximately \$525 million at Trail Operations in projects to improve efficiency, productivity and environmental performance. In addition, Teck has committed \$174 million for a second new acid plant which is currently under construction and scheduled to be operational in summer 2019. Teck has also identified, and is currently evaluating, a further \$150 million in new projects to improve profitability, productivity and environmental performance over the next five years.

<http://www.teck.com/news/news-releases/2017/fortis-and-teck-announce-waneta-dam-agreement>

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6/19/2017

2017 - Teck



The acquisition of the Waneta Dam, located in the centre of FortisBC's territory, demonstrates Fortis' commitment to and confidence in British Columbia. FortisBC has longstanding roots in the area that span more than a century with FortisBC employing approximately 350 workers in the Kootenay region. In addition to operating four of its own generating facilities on the Kootenay River, FortisBC currently operates and maintains Waneta and the Waneta Expansion.

The Waneta Dam will operate as a non-regulated energy infrastructure subsidiary of Fortis Inc. Fortis will finance the transaction through a combination of cash on hand, debt and equity.

Closing of the transaction is subject to customary conditions, including receipt of certain approvals and consents. In addition, BC Hydro, which owns one-third of the Waneta Dam assets and currently receives one-third of the Waneta Dam generation, has a right of first offer with respect to the sale of Teck's two-third interest under the 2010 co-ownership and operating agreement between Teck Metals and BC Hydro in relation to Waneta. In addition, certain consents and amendments from BC Hydro are required in connection with the transaction. Teck will pay a break fee to Fortis in the event BC Hydro exercises its right of first offer. Closing is expected to occur in the fourth quarter of 2017.

CIBC World Markets Inc. is acting as exclusive financial advisor to Teck Resources with respect to the transaction.

About Waneta Dam

The Waneta Dam, located on the Pend d'Oreille River, has a total capacity of 496 megawatts (MW) of renewable power and generates an average of 2,750 gigawatt hours of energy per year. Teck's Trail Operations utilizes approximately 1,880 gigawatt hours of energy per year from Waneta. BC Hydro has a one-third ownership interest in Waneta and receives approximately one-third of the Waneta Dam generation. Fortis holds a 51% interest in the Waneta Expansion, completed in 2015. This project added 335 MW of new clean power generation from a second powerhouse downstream of the dam. The Waneta Dam is governed by the Canal Plant Agreement ("CPA"), a contractual arrangement between BC Hydro, FortisBC and other plant owners along the Kootenay and Pend d'Oreille rivers. The CPA enables the parties, through the coordinated use of water flows and coordinated operation of storage reservoirs and generating plants, to generate more power collectively from their respective generating plants than if they were to operate independently. Teck's two-thirds interest in the Waneta Dam output is defined and determined in accordance with the terms of the CPA. The CPA mitigates hydrology risk for the Waneta Dam. Also included in this acquisition is the Line 71 transmission line and other local transmission assets. This line enables access to the U.S. power import/export market.

About Trail Operations

Teck's Trail Operations, located in southeastern British Columbia, is one of the world's largest fully integrated zinc and lead smelting and refining complexes. It also produces a variety of precious and specialty metals, chemicals and fertilizer products. Over half of the product refined at Trail Operations comes from Teck mines.

In 2016, Trail Operations produced and sold 312,000 tonnes of refined zinc and generated \$2.05 billion in revenues and \$241 million in gross profit before depreciation and amortization.

About Fortis

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2017 - Teck



Fortis is a leader in the North American regulated electric and gas utility industry with total assets of approximately \$48 billion. The Corporation's 8,000 employees serve utility customers in five Canadian provinces, nine U.S. states and three Caribbean countries.

Fortis shares are listed on the Toronto Stock Exchange and New York Stock Exchange and trade under the symbol FTS. Additional information can be accessed at www.fortisinc.com (<http://www.fortisinc.com/>), www.sedar.com (<http://www.sedar.com/>), or www.sec.gov (<http://www.sec.gov/>).

About Teck

Teck is a diversified resource company committed to responsible mining and mineral development with major business units focused on copper, steelmaking coal, zinc and energy. Headquartered in Vancouver, Canada, its shares are listed on the Toronto Stock Exchange under the symbols TECK.A and TECK.B and the New York Stock Exchange under the symbol TECK. Learn more about Teck at www.teck.com (<http://www.teck.com>) or follow @TeckResources (<http://twitter.com/teckresources>).

Forward-Looking Statements

Fortis and Teck include forward-looking information in this release within the meaning of applicable securities laws including the Private Securities Litigation Reform Act of 1995. Wherever possible, words such as "anticipates", "believes", "budgets", "could", "estimates", "expects", "forecasts", "intends", "may", "might", "plans", "projects", "schedule", "should", "target", "will", "would" and the negative of these terms and other similar terminology or expressions have been used to identify the forward-looking information, which includes with respect to Fortis, without limitation: statements related to the acquisition of an interest in the Waneta Dam and related transmission assets; the expected timing and benefits thereof; the total expected consideration and adjustments; the conditions precedent to the closing, including receipt of certain approvals and consents; and the expected financing of the acquisition. Forward-looking information with respect to Teck includes, without limitation: statements related to the sale of an interest in the Waneta Dam and related transmission assets and lease of an interest therein, expected benefits of the transaction, amount of the expected net book gain, timing of completion of the second acid plant at Trail Operations, potential for new projects at Trail Operations and potential benefits thereof, the conditions precedent to the closing, including receipt of certain approvals.

Forward-looking information involves significant risk, uncertainties and assumptions. Certain material factors or assumptions have been applied in drawing the conclusions contained in the forward-looking information. These factors or assumptions are subject to inherent risks and uncertainties surrounding future expectations generally, including those identified from time to time in the forward-looking information. Such risk factors or assumptions include, but are not limited to: the ability to obtain the required approvals in connection with the acquisition and the timing and terms thereof; risks associated with the uncertainty of the completion of the acquisition and the timing thereof; the risk that BC Hydro exercises its pre-emptive right; interloper risk; the risk that conditions to the acquisition may not be satisfied; risk associated with the impact of less favorable economic conditions on Fortis' and Teck's results of operations; currency exchange rates and general economic, market and political conditions. In addition, with respect to Teck, assumptions regarding new projects at Trail Operations and their benefits assume such projects are approved and perform as anticipated. Fortis and Teck caution readers that a number of factors could cause actual results, performance or achievements to differ materially from the results discussed or implied in their forward-looking information. These factors should be considered carefully and undue reliance should not be placed on the forward-looking information. For additional

6/19/2017

2017 - Teck

Teck (/) information with respect to certain of these risks relating to Fortis, reference should be made to the continuous disclosure materials filed from time to time by Fortis with Canadian securities regulatory authorities and the Securities and Exchange Commission. Fortis disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. For additional information with respect to certain of these risks relating to Teck, reference should be made to the continuous disclosure materials filed from time to time by Teck with Canadian securities regulatory authorities and the Securities and Exchange Commission. Teck does not assume the obligation to revise or update forward-looking statements after the date of this release or to revise them to reflect the occurrence of future unanticipated events, except as may be required under applicable securities laws.

Investor Enquiries

Ms. Janet Craig
 Vice President, Investor Relations
 Fortis Inc.
 709.737.2900
investorrelations@fortisinc.com (<mailto:investorrelations@fortisinc.com>)

Greg Waller
 Senior Vice President, Investor Relations and Strategic Analysis, Teck
 604.699.4014
greg.waller@teck.com (<mailto:greg.waller@teck.com>)

Media Enquiries

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 Director, Communications & Corporate Affairs
 Fortis Inc.
 709.737.5323
media@fortisinc.com (<mailto:media@fortisinc.com>)

Chris Stannell
 Senior Communications Specialist, Teck
 604.699.4368
chris.stannell@teck.com (<mailto:media@fortisinc.com>)

17-25-TR

Latest News

Teck Updates Steelmaking Coal Guidance

JUN 15, 2017 (<http://www.teck.com/news/news-releases/2017/teck-updates-steelmaking-coal-guidance-->)

Teck Named to 2017 Best 50 Corporate Citizens in Canada

<http://www.teck.com/news/news-releases/2017/fortis-and-teck-announce-waneta-dam-agreement>

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JUN 06, 2017 (<http://www.teck.com/news/news-releases/2017/teck-named-to-2017-best-50-corporate-citizens-in-canada>)**Teck** (/)

Teck Announces Redemption of US\$214 Million Principal Amount of Notes

JUN 02, 2017 (<http://www.teck.com/news/news-releases/2017/teck-announces-redemption-of-us-214-million-principal-amount-of-notes>)[More News \(/news/\)](/news/)

Teck Resources Limited

Suite 3300, Bentall 5
 550 Burrard Street
 Vancouver, B.C.
 Canada V6C 0B3
 t: 604.699.4000
 f: 604.699.4750

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Teck is a diversified resource company committed to responsible mining and mineral development with business units focused on copper, zinc, steelmaking coal and energy.

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TECK.B CAN\$ \$20.49 0.76

http://www.teck.com/news/news-releases/2017/fortis-and-teck-announce-waneta-dam-agreement

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6/19/2017
BC Hydro statement regarding Teck Resources intent to sell its share of Waneta Dam

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Statement

May 12, 2017

BC Hydro statement regarding Teck Resources intent to sell its share of Waneta Dam

BC Hydro has been informed by Teck Resources (Teck) that it has reached an agreement to sell its two-thirds share of the Waneta Dam to Fortis Inc. The transaction includes a lease agreement where the two-thirds share would continue to supply power to Teck's smelter in Trail, B.C. at a fixed price. [BC Hydro owns the other one-third share of the Dam.](#) Under its Co-Ownership and Operating Agreement (COA) with Teck Resources, BC Hydro has the right of first offer enabling it to match Fortis's offer and purchase the two-thirds share of the Waneta Dam under the equivalent terms.

As per the COA, upon receipt of a sale notice BC Hydro has 60 days to review the transaction and make a decision. BC Hydro will carefully evaluate the terms of this opportunity to determine if it is in the best interest of our customers. A decision to move forward would be subject to approval by the BC Utilities Commission and a transaction would need to be completed within 12 months of our decision.

Over the past year, Teck Resources kept BC Hydro informed, under a strict non-disclosure agreement, of its interest in selling its two-thirds share of the Waneta Dam. BC Hydro has assessed its interest at every stage in accordance to its rights under the COA.

Background on Waneta Dam

- The Waneta Dam is located close to the Canada-US border, near the mouth of the Pend d'Oreille River just before it enters the Columbia River, near Trail, B.C.
- The dam was originally constructed in 1954 by the Consolidated Mining and Smelting Company of Canada Limited (now known as Teck Resources) to generate power specifically for use at its smelter located in Trail, B.C.
- Its four generating units total 490 megawatts of capacity and produce approximately 2,800 gigawatt hours of energy per year.
- In 2010, BC Hydro purchased a one-third share of the Waneta Dam for \$825 million. Teck Resources owns the other two-thirds.
 - [The BC Utilities Commission found](#) that the BC Hydro purchase of one-third interest in the Waneta Dam was in the public interest. This decision was based on a review of cost effectiveness, due diligence and local impact.
- BC Hydro's one-third is supplied to BC Hydro customers and Teck's two-thirds is supplied to the Teck smelter in Trail. Under the terms of the current transaction two-thirds of the generation will continue to supply electricity to Teck's smelter in Trail during the lease period.
- FortisBC currently operates and maintains Waneta Dam and the Waneta Expansion.

Contact:
BC Hydro Media Relations
p. 604 928 6468

https://www.bchydro.com/news/press_centre/news_releases/2017/statement-teck-sell-share-waneta-dam.html
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6/19/2017

BC Hydro statement regarding Teck Resources intent to sell its share of Waneta Dam

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We rely on a variety of suppliers for a wide range of products and services.

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An aerial shot taken of the Waneta Dam in 2015 near the end of the expansion project with the new powerhouse below the dam. Trail Times file photo

What's the deal with the dam?

Teck will sell its two-thirds interest in Waneta Dam to Fortis Inc. for \$1.2 billion

SHERI REGNIER ([HTTP://WWW.TRAILDAILYTIMES.CA/AUTHOR/SHERI-REGNIER/](http://www.traildailymtimes.ca/author/sheri-regnier/)) / Fri May 12th, 2017
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Cheap power from Waneta Dam has long been attributed to the sustainability of mining operations in Trail.

Following Teck's big news on Friday – the company is selling its two-thirds share of the Waneta Dam to Fortis Inc. for \$1.2 billion – locals are now questioning longevity and voicing concern about the future of Trail operations.

The *Trail Times* summarized what readers have been saying since the announcement, and forwarded three questions to Carol Vanelli Worosz, Teck's community engagement leader.

Low cost hydroelectric power has been the lifeblood of Trail Operations. By selling its shares, what does this mean for the future of the company?

Vanelli Worosz: Teck has reached an agreement with Fortis for the sale of our two-thirds interest in the Waneta Dam. Under the terms of the agreement, Teck will enter a 20-year lease agreement for the Waneta Dam, to provide power to Trail Operations at competitive, below-market pricing, with an option to extend for a further 10 years.

The power cost under this lease has been established to achieve a balance between optimizing proceeds from the transaction to strengthen Teck's overall financial position, while at the same time maintaining reasonable cost power for Trail Operations.

Nothing changes for Trail Operations or our employees. We will continue to draw power from the Waneta Dam as we do now, and regular operations at our facility will not be affected. We do not anticipate changes in employment levels as a result of this agreement. As we have done in the past, Trail Operations will continue to focus on safety, productivity and cost improvements.

The number one concern heard over the weekend, has been, "does this mean the company will close in 20 years?" What can we tell our readers concerned about the future of Teck?

Vanelli Worosz: This agreement ensures long-term power supply for Trail Operations at below-market pricing. Trail Operations is a high-quality asset and will remain an important and integrated part of Teck's broader business as the primary refiner for zinc from our Red Dog mine in Alaska and our Pend Oreille mine in Washington State.

That is why we are continuing to make significant capital investments to further modernize Trail Operations. Over the last five years alone, we have invested \$525 million in projects to improve performance and efficiency at the facility. And, in addition to regular ongoing sustaining capital, \$174 million has been committed for the new No.2 Acid Plant and we've identified, and are evaluating, \$150 million in new projects to further improve profitability, productivity and environmental performance over the next five years.

The agreement terms provide Trail Operations with flexibility around future supply options, specifically the opportunity to source elsewhere should there be a lower cost option.

With \$1.2 billion coming Teck's way for selling its shares, will any of that capital be re-invested locally? Where will the money be invested?

Vanelli Worosz: The sale will strengthen Teck's overall financial position and provide significant new capital that can be reinvested to further grow the company's overall business. This includes additional investment to further improve efficiency, productivity and environmental performance at Trail, as well as other capital priorities across Teck.

As noted above, in addition to regular sustaining capital, \$174 million has been committed for the new No.2 Acid Plant and we've identified, and are evaluating, \$150 million in new projects to further improve profitability, productivity and environmental performance over the next five years.

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Summary of Teck press release

The power cost under the 20-year lease will begin at \$75 million per year – the sale itself will net gain the company about \$800 million.

"Under the agreement, Teck Metals Ltd. will be granted a 20-year lease to use Fortis' two thirds interest in Waneta to produce power for its industrial operations in Trail ("Trail Operations")," the release states. "Annual payments will begin at approximately \$75 million per year and escalate at 2 per cent per annum, equivalent to an initial power price of \$40/MWh based on 1,880 GWh of energy per annum. Teck Metals will have an option to extend the lease for a further 10 years at comparable rates."

"This agreement will further strengthen Teck's balance sheet and provide significant new capital that can be reinvested to grow our overall business," said Don Lindsay, President and CEO, Teck. "We have secured a long-term power supply for Trail Operations at competitive, below-market pricing and will invest in innovative projects to further enhance and modernize this facility."

The Waneta Dam will operate as a non-regulated energy infrastructure subsidiary of Fortis Inc. Fortis will finance the transaction through a combination of cash on hand, debt and equity.

Closing of the transaction is subject to customary conditions, including receipt of certain approvals and consents. In addition, BC Hydro, which owns one-third of the Waneta Dam assets and currently receives one-third of the Waneta Dam generation, has a right of first offer with respect to the sale of Teck's two-third interest under the 2010 co-ownership and operating agreement between Teck Metals and BC Hydro in relation to Waneta. In addition, certain consents and amendments from BC Hydro are required in connection with the transaction. Teck will pay a break fee to Fortis in the event BC Hydro exercises its right of first offer. Closing is expected to occur in the fourth quarter of 2017.

The release states the acquisition of the Waneta Dam, located in the centre of FortisBC's territory, demonstrates Fortis' commitment to and confidence in British Columbia. FortisBC has longstanding roots in the area that span more than a century with FortisBC employing approximately 350 workers in the Kootenay region. In addition to operating four of its own generating facilities on the Kootenay River, FortisBC currently operates and maintains Waneta and the Waneta Expansion.

"Waneta is a high-quality, renewable energy facility located in an area central to our BC operations, making this acquisition a natural fit with our strategy to increase our investment in sustainable energy," said Barry Perry, President and CEO of Fortis.

"Waneta will be a stable long-term asset that will generate strong cash flows secured by a 20-year lease with Teck. The transaction is expected to be immediately accretive to earnings per share."

Located on the Pend d'Oreille River, the Waneta Dam has a total capacity of 496 megawatts (MW) of renewable power and generates an average of 2,750 gigawatt hours of energy per year. Teck's Trail Operations utilizes approximately 1,880 gigawatt hours of energy per year from Waneta. BC Hydro has a one-third ownership interest in Waneta and receives approximately one-third of the Waneta Dam generation.

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Fortis holds a 51 per cent interest in the Waneta Expansion, completed in 2015. This project added 335 MW of new clean power generation from a second powerhouse downstream of the dam. The Waneta Dam is governed by the Canal Plant Agreement ("CPA"), a contractual arrangement between BC Hydro, FortisBC and other plant owners along the Kootenay and Pend d'Oreille rivers. The CPA enables the parties, through the coordinated use of water flows and coordinated operation of storage reservoirs and generating plants, to generate more power collectively from their respective generating plants than if they were to operate independently.

2 Comments

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Add a comment...

Norm Yanke

This scares me. When I read Fortis CEO receives 3 times the salary as BCH's CEO and third party recommendations say bonuses should not exceed 50% of their salary but regularly are far greater, what happened to the cheapest power days when it was WKPL?

Does any of this money stay here to benefit BC? Now Fortis power is about 25% greater than BC Hydro and we know the government rapes BC Hydro for billions into general revenue every year. Fortis is guaranteed 9.9% return, on every dollar they handle, some say this creates needless projects. Another BC resource sold out from the residents of the p... See More

Like · Reply · May 20, 2017 10:51am · Edited

Surugao del Sur · Havana, Cuba

Trail's people and surrounding area should be grateful for Teck, glad they are here and pumping vast amounts of money into the region. Running such huge operations is complex and very challenging. The plant is one of the cleanest on the earth, teck are very responsible citizens, they live here also, sure they have to sell of assets, make deals and soldier-on, such is business. Three cheers to Teck for their commitment to Trail.

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6/19/2017

Teck Resources to sell stake in Waneta dam near Trail for \$1.2 billion | Vancouver Sun

Teck Resources to sell stake in Waneta dam near Trail for \$1.2 billion

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Published on: May 12, 2017 | Last Updated: May 12, 2017 6:48 AM PDT



Teck Resources Ltd. has signed a deal to sell its two-thirds interest in the Waneta Dam in B.C. to one of Canada's largest utility companies. Teck Mining Company's zinc and lead smelting and refining complex is pictured in Trail, B.C., on Monday November 26, 2012. **DARRYL DYCK / THE CANADIAN PRESS**

<http://vancouversun.com/business/local-business/teck-resources-to-sell-stake-in-waneta-dam-near-trail-for-1-2-billion>

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6/19/2017

Teck Resources to sell stake in Waneta dam near Trail for \$1.2 billion | Vancouver Sun

VANCOUVER — Teck Resources Ltd. has signed a deal to sell its two-thirds interest in the Waneta Dam in B.C. to one of Canada's largest utility companies.

It says Fortis Inc. has agreed to pay \$1.2 billion in cash for Teck's stake in the dam and related assets.

Under the deal, Teck will then be granted a 20-year lease to use the assets to produce power for its operations in Trail.

Teck will also have an option to extend the lease for another 10 years.

The agreement has several conditions, including approval by BC Hydro — which owns the remaining stake in the power generation operation.

Teck says it will pay Fortis a break fee if BC Hydro exercises its right of first offer under a co-ownership and operating agreement.

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Fortis makes power play on Waneta dam | Mining & Energy | Business in Vancouver

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Fortis makes power play on Waneta dam

Teck to sell its share of Waneta dam to Fortis, buy back power

By Nelson Bennett | May 12, 2017, 10:02 a.m.

Teck Resources Ltd. (TSX:TECK.B) is selling its two-thirds share of the Waneta dam to Fortis Inc. (TSX:FTS) for \$1.2 billion, but will end up paying much more than that over a 20-year period to continue to use power from the dam for its zinc and lead smelter in Trail.

In a deal announced Friday May 12, Fortis will pay Teck \$1.2 billion for its share of the dam, plus related transmission infrastructure, and then Teck will buy power from Fortis under a 20-year power purchase agreement, with annual payments starting at \$75 million and escalated 2% annually.

That is unless BC Hydro tries to thwart the sale. As a one-third owner of the dam, BC Hydro has a right of first offer to match Fortis' offer and assume full ownership.

"BC Hydro will carefully evaluate the terms of this opportunity to determine if it is in the best interest of our customers," BC Hydro said in a press release, in response to the sale's announcement.

"A decision to move forward would be subject to approval by the BC Utilities Commission and a transaction would need to be completed within 12 months of our decision."

But as far as FortisBC is concerned, it's a done deal.

"It is BC Hydro's prerogative to look into that or take advantage of that is the way it's written," said Michael Allison, manager of corporate communications for FortisBC, the B.C. subsidiary of Fortis Inc. "As far as we're concerned, we've signed a deal and we've announced it. The deal hasn't close yet, but we are confident that it will close in the fourth quarter of this year."

The sale would have no impact on FortisBC's customers, Alison added, because Fortis' share of the power will be sold directly to a private customer – Teck – not used for its residential customers.

<https://www.biv.com/article/2017/5/fortis-makes-power-play-waneta-dam/>

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6/19/2017

Fortis makes power play on Waneta dam | Mining & Energy | Business in Vancouver

"This agreement will further strengthen Teck's balance sheet and provide significant new capital that can be reinvested to grow our overall business," Teck CEO Don Lindsay said in a press release.

"We have secured a long-term power supply for Trail Operations at competitive, below-market pricing and will invest in innovative projects to further enhance and modernize this facility."

Teck and BC Hydro co-own the dam, which has a generating capacity of 496 megawatts – a little less than half the generating capacity of Site C dam.

BC Hydro paid more than \$800 million in 2009 for its one-third share of the dam. Teck's share of the power is used for its zinc and lead smelter in Trail.

nbennett@biv.com (<mailto:nbennett@biv.com>)

0 Comments (https://www.biv.com/article/2017/5/fortis-makes-power-play-waneta-dam/#disqus_thread) on this topic.
Join the discussion.

Jennifer Kuhn

From: is@rdkb.com
Sent: June-19-17 10:27 AM
To: Theresa Lenardon; Jennifer Kuhn; Information Services
Subject: Grant-in-Aid Form submitted by Selkirk Rock and Mineral Club, email address - stevies@telus.net

Online Grant-in-Aid Application**Electoral Area(s) Applied to:**

Electoral Area 'A' Director Ali Grieve

Applicant Information:

Applicant: Selkirk Rock and Mineral Club

Address: Trail, B.C.

Phone: 250-367-7005

Fax:

Email: stevies@telus.net

Representative: Mary Stephenson

Make Cheque Payable To: Selkirk Rock and Mineral Club

Other Expenses:

Total Cost of Project: \$\$200.00

Amount Requested from RDKB Director(s): \$\$200.00 *Approved by Director Grieve June 19/17*

What is the Grant-in-Aid for?

We would like to buy Visi Vests for our members to use when looking at rock samples on the highway. We want to keep members safe from traffic by being seen clearly.

List of Other Organizations Applied to for Funding

Name of Organization

Amount Requested

Amount Secured

Name of Organization

Amount Requested

Amount Secured

Name of Organization

Amount Requested

Amount Secured

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Jennifer Kuhn

From: is@rdkb.com
Sent: June-16-17 9:03 AM
To: Theresa Lenardon; Jennifer Kuhn; Information Services
Subject: Grant-in-Aid Form submitted by Columbia and Western Trail Society, email address - jeremy@cuttingedgege.com

Online Grant-in-Aid Application**Electoral Area(s) Applied to:**

Electoral Area 'C' / Christina Lake Director Grace McGregor

Applicant Information:

Applicant: Columbia and Western Trail Society

Address: Box 3062, Castlegar, B.C. V1N 3H4

Phone: 250-368-7608

Fax:

Email: jeremy@cuttingedgege.com

Representative: Jeremy Nelson, President

Make Cheque Payable To: Columbia and Western Trail Society

Other Expenses:

Total Cost of Project: \$\$8,000

Amount Requested from RDKB Director(s): \$\$4000

*Approved by chair McGregor
June 16/17*

What is the Grant-in-Aid for?

Urgent wash-out repairs on the Columbia and Western Rail Trail at Coryell, Walker Creek, and near the Verigin monument on the Christina lake side. Also washout repairs to the Walker Creek rec sit area.

List of Other Organizations Applied to for Funding

Name of Organization Interfor (New Culverts)

Amount Requested \$2000

Amount Secured \$2000

Name of Organization Impact Equipment (Lowbedding)

Amount Requested \$2000

Amount Secured \$2000

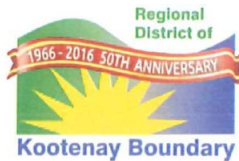
Name of Organization

Amount Requested

Amount Secured

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Grant-in-Aid Request

The personal information you provide on this RDKB document is being collected in accordance with the Freedom of Information and Protection of Privacy Act and will be used only for the purpose of processing RDKB business. This document may become public information. If you have any questions about the collection of your personal information, please contact Theresa Lenardon, Manager of Corporate Administration/Corporate Officer and Freedom of Information Protection of Privacy Officer at 250-368-9148 or foi@rdkb.com.

Please check all Electoral Area Boxes You Are Making Application To:

<input type="checkbox"/> Electoral Area 'A' Director Ali Grieve	<input type="checkbox"/> Electoral Area 'B' Lower Columbia-Old Glory Director Linda Worley	<input checked="" type="checkbox"/> Electoral Area 'C' Christina Lake Director Grace McGregor	<input type="checkbox"/> Electoral Area 'D' Rural Grand Forks Director Roly Russell	<input type="checkbox"/> Electoral Area 'E' West Boundary Director Vicki Gee
---	--	---	---	--

Applicant:	* Kootenay Robusters Dragon Boat Team			
Address:	* c/o Box 135, Christina Lake, BC			
Phone:	* 250-584-4595	Fax:		E-Mail: * wlinnington@hotmail.com
Representative:	* Wendy Linnington			
Make Cheque Payable To:	* Kootenay Robusters			

**Starred items, including contact information, must be completed in full.*

****GIA Requests of \$5,000.00 or more may require official receipt. The Electoral Area Director may ask for additional information.

What is the total Cost of the Project? \$ _____ What amount are you requesting from this RDKB Director(s)? \$ 200.00

What is the Grant-in-Aid for? (attach an extra sheet if necessary)

The Kootenay Robusters launch their boat in early Spring on Christina Lake and through practices, races, cancer fundraisers and participation in community events, we raise awareness of breast cancer and offer support and encouragement to those who have been diagnosed with this disease. Our major fundraiser is an annual calendar with dramatic images representing our beautiful area in all its glory and the funds raised go to support the Robuster paddling program and the regional hospitals' initiatives to support cancer patients. Grace has approved a \$200 donation in return for mention that Area C Christina Lake Regional District of Kootenay Boundary is a proud supporter of the Kootenay Robusters. Thank you, Grace!

Please list all other organizations you have applied to for funding (attach an extra sheet if necessary)

Name of Organization _____
Amount Requested: \$ _____ Amount Secured: \$ _____

Name of Organization _____
Amount Requested: \$ _____ Amount Secured: \$ _____

Name of Organization _____
Amount Requested: \$ _____ Amount Secured: \$ _____

Date: June 19, 2017 Applicant Signature Wendy Linnington Print Name Wendy Linnington

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Grant approved by Electoral Area Director: _____

Approved by Board: _____

STAMP

Theresa Lenardon

From: is@rdkb.com
Sent: June-12-17 4:01 PM
To: Theresa Lenardon; Jennifer Kuhn; Information Services
Subject: Grant-in-Aid Form submitted by Grand Forks BC Parade Committee, email address - gfparades@gmail.com

Online Grant-in-Aid Application**Electoral Area(s) Applied to:**

Electoral Area 'D' / Rural Grand Forks Director Roly Russell

Applicant Information:

Applicant: Grand Forks BC Parade Committee

Address: c/o PO Box 516, Grand Forks, BC, V0H 1H0

Phone: 250-444-0199

Fax:

Email: gfparades@gmail.com

Representative: Beverly Osachoff and Bud Alcock

Make Cheque Payable To: Grand Forks BC Parades

Other Expenses:

Total Cost of Project: \$\$1000

Amount Requested from
RDKB Director(s): \$\$1000

*Approved by Director Russell
June 15/17*

What is the Grant-in-Aid for?

the 2017 Santa Claus Parade: this is a free, fun, family event that benefits our community by enabling parade participants to showcase their business, group, teams, organization, etc.

List of Other Organizations Applied to for Funding

Name of Organization	City of Grand Forks
Amount Requested	\$500
Amount Secured	\$0

Name of Organization	
Amount Requested	
Amount Secured	

Name of Organization	
Amount Requested	
Amount Secured	

Documents uploaded with Submission?

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Jennifer Kuhn

From: is@rdkb.com
Sent: June-20-17 5:07 PM
To: Theresa Lenardon; Jennifer Kuhn; Information Services
Subject: Grant-in-Aid Form submitted by Grand Forks Ultimate Frisbee Club, email address - ipass9@hotmail.com

Online Grant-in-Aid Application**Electoral Area(s) Applied to:**

Electoral Area 'D' / Rural Grand Forks Director Roly Russell

Applicant Information:

Applicant: Grand Forks Ultimate Frisbee Club

Address: 7923 Riverside Dr

Phone: 2504424297

Fax:

Email: ipass9@hotmail.com

Representative: Keith Kuromi

Make Cheque Payable To: Grand Forks Ultimate Frisbee Club

Other Expenses:

Total Cost of Project: \$500.00

Amount Requested from RDKB Director(s): \$300.00

What is the Grant-in-Aid for?

We are a newly formed Ultimate Frisbee club in Grand Forks, and we would like to purchase some new team jerseys. We are seeking some Grant in aid to help offset the cost of them to our club members. We have about 40 active members ranging from ages 9 to about 55.

List of Other Organizations Applied to for Funding

Name of Organization

Amount Requested

Amount Secured

Name of Organization

Amount Requested

Amount Secured

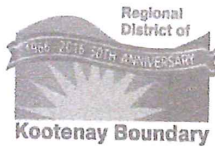
Name of Organization

Amount Requested

Amount Secured

Documents uploaded with Submission?

I:\Portals\0\Documents\GIA-Attachments\



Grant-in-Aid Request

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Please check all Electoral Area Boxes You Are Making Application To:

<input type="checkbox"/> Electoral Area 'A' Director Ali Grieve	<input type="checkbox"/> Electoral Area 'B/' Lower Columbia-Old Glory Director Linda Worley	<input type="checkbox"/> Electoral Area 'C/' Christina Lake Director Grace McGregor	<input type="checkbox"/> Electoral Area 'D/' Rural Grand Forks Director Roly Russell	<input checked="" type="checkbox"/> Electoral Area 'E/' West Boundary Director Vicki Gee
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Applicant:	* Big White Mountain Community Development Association				
Address:	* 101-1865 Dilworth Rd. Suite 215 Kelowna BC V1Y 9T1				
Phone:	* 778-877-9086	Fax:		E-Mail:	* abbie.norrish@gmail.com
Representative:	* Abbie Norrish				
Make Cheque Payable To:	* Big White Mountain Community Development Association				

*Starred items, including contact information, must be completed in full.

****GIA Requests of \$5,000.00 or more may require official receipt. The Electoral Area Director may ask for additional information.

What is the total Cost of the Project? \$ 4000 What amount are you requesting from this RDKB Director(s)? \$ 500 1,500

What is the Grant-in-Aid for? (attach an extra sheet if necessary)

During the summer months there are 10 children ages 0-5 living in Big White with no access to formal programming. Provincial programs are discontinued which leaves many families searching for ways to create social and learning experiences for their children. Early learning programs are incredibly important to the emotional, social, physical and intellectual development of children. We would like purchase \$500 of educational toys, craft supplies and outdoor equipment that could be used to support these children during the summer months. We have several moms in the community who are willing to organize events, and activities but need equipment that they can have on hand rather than brining toys/games/crafts from home each time. The equipment would be stored at the school when not in use.

Please list all other organizations you have applied to for funding (attach an extra sheet if necessary)

Name of Organization Interior Savings Credit Union

Amount Requested: \$ 4000

Amount Secured: \$

Name of Organization

Amount Requested: \$

Amount Secured: \$

Name of Organization

Amount Requested: \$

Amount Secured: \$

Date: 06/06/2017 Applicant Signature

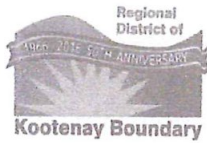
Print Name Colin Burns

Office Use Only

Grant approved by Electoral Area Director:

Approved by Board:

SUBMIT



Grant-in-Aid Request

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Applicant:	* Big White Mountain Community Development Association			
Address:	* 101-1865 Dilworth Dr, Suite 215 Kelowna BC V1Y 9T1			
Phone:	* 778-877-9086	Fax:		E-Mail: *abbie.norrish@gmail.com
Representative:	* Abbie Norrish			
Make Cheque Payable To:	* Big White Mountain Community Development Association			

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What is the total Cost of the Project? \$4100 What amount are you requesting from this RDKB Director(s)? \$4100 ^{\$} 3,500 *

What is the Grant-in-Aid for? (attach an extra sheet if necessary)

See attached
"Outdoor cinema"

Please list all other organizations you have applied to for funding (attach an extra sheet if necessary)

Name of Organization _____	Amount Requested: \$ _____	Amount Secured: \$ _____
Name of Organization _____	Amount Requested: \$ _____	Amount Secured: \$ _____
Name of Organization _____	Amount Requested: \$ _____	Amount Secured: \$ _____
Date: 24/06/17	Applicant Signature:	Print Name: Colin Burns

Office Use Only
Grant approved by Electoral Area Director:
Approved by Board: _____

SUBMIT

BWMCDA would like to be able to offer community outdoor cinema nights, primarily during the summer months. We have negotiated a joint purchase of outdoor cinema equipment with Big White Ski Resort (BWSR) and the Big White Chamber of Commerce (BWCC). The purchase price is \$15,000, with BWSR & BWCC both agreeing to contribute \$6000 and BWMCDA contributing \$3000.

Ownership of the equipment will be joint between these three organizations with BWSR housing and insuring the equipment.

The BWMCDA will have free use of the equipment when we request it in the usage calendar. During the summer & shoulder months BWSR don't have staff on in the evenings so the equipment will be available to book regularly. BWMCDA will organize members of the association to be trained on the usage of the equipment.

In 2016, BWMCDA hosted a very successful "Movie under the Stars" night at Big White where over 150 people attended a late night showing of the Star Wars franchise. We hope to replicate this on a more regular basis. Movie nights will be free to attend and provide us with a great community building opportunity.

Hopefully in the future we can use them a fundraising opportunities by having a BBQ, selling non-alcoholic beverages etc.

Budget

Equipment costs: \$3000

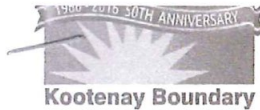
Movie Rental License for public viewing: \$1100

* Vicki, I have spoken with Jude's contact today (he is getting me more accurate pricing) but there is an annual streaming license which would allow use 10-15 movie nights for somewhere between \$900-\$1100. He indicated that outdoor cinema movies are more expensive than indoor licenses. A single license is roughly \$150-\$200 per movie.

* if the grant for the licensing is too much to ask for please adjust it as you feel appropriate and we will fund-raise or ask small businesses on the mountain to make a small donation in return for displaying their logo on the screen prior to the movie being shown. *Please note that we will not charge a fee to come to the movie night even if this is the case. Movie nights will be open to every member of the community.*



Colin Burns
President,
Big White Mountain Community Development Association



Grant-in-Aid Request

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Applicant:	* Lifeguard Outreach Society			
Address:	* 4982 Mariner Place, Delta, BC V4K 4J4			
Phone:	* (250) 574-9288	Fax:	na	E-Mail: * info@lgos.ca
Representative:	* Paul Wechselberger			
Make Cheque Payable To:	* 4982 Mariner Place, Delta, BC V4K 4J4			

*Starred items, including contact information, must be completed in full.

****GIA Requests of \$5,000.00 or more may require official receipt. The Electoral Area Director may ask for additional information.

What is the total Cost of the Project? \$ 500.00 What amount are you requesting from this RDKB Director(s)? \$ 500.00

What is the Grant-in-Aid for? (attach an extra sheet if necessary)

The Lifeguard Outreach Society will send a team of volunteer lifeguards/instructors to teach swimming survival, lifesaving, and first responder skills to teach 2 days of lessons in Beaverdale and Rock Creek this July. The Grant-In-Aid will cover their travel expenses from Vancouver to the Boundary.

Please list all other organizations you have applied to for funding (attach an extra sheet if necessary)

Name of Organization	na	
Amount Requested: \$	_____	Amount Secured: \$ _____
Name of Organization	_____	
Amount Requested: \$	_____	Amount Secured: \$ _____
Name of Organization	_____	
Amount Requested: \$	_____	Amount Secured: \$ _____
Date: 6/20/2017	Applicant Signature <u>Paul Wechselberger</u>	Print Name Paul Wechselberger

Office Use Only
Grant approved by Electoral Area Director: <u>Vicki Gee</u>
Approved by Board: _____

SUBMIT



Survival Swimming

Swimming Skills

Swim 50 meters
Tread water for 60 Seconds
Recover from an unexpected fall into a body of water

Lifesaving and Water Safety Skills

Lifejacket safety
How to rescue others from drowning without becoming a victim too.
The dangers of open water

First Responder Skills

Perform CPR
Use a AED
Clear an obstructed airway
Put a victim into the recover position

How long are lessons?

Our team will visit a community for 2 or 3 days to run aquatic and first aid lessons. Swimming survival lessons run for one and half hours per group of swimmers. We are mainly limited by water temperature and teach a portion of wet and dry skills. Multiple lesson sets can be scheduled during our stay to meet different age and activity group needs in your community.

Community driven programming.

Our team wants to partner with your community in drowning prevention. Local knowledge and community priorities drive effective programming. Is your community interested in youth learning first aid skills or young children learning swimming skills? We work together with local community leaders to prevent drownings on a community by community basis.

