

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE

WEDNESDAY, JANUARY 28, 2009 - 3:00 P.M.

CVRD BOARDROOM, 175 INGRAM STREET

APP	AGENDA ROVAL OF AGENDA:	Pages
ADO	PTION OF MINUTES:	
M1	Committee Minutes of November 12, 2008.	1 - 4
BUS	INESS ARISING FROM THE MINUTES:	
DEL	EGATIONS: (see SD1 under Closed Session)	
	FF REPORTS	
R1	Approval in-principle for takeover of Mill Springs sewer, streetlighting and sidewalks.	5 – 10
R2	Approval in principle for takeover of Cherry Blossom Estates sewer system.	11 – 13
R3	Approval in principle for takeover of Arbutus Ridge water and sewer systems.	14 – 16
R4	2009 capital expenditures prior to budget approval.	17 - 18
R5	Tender award for pickup truck purchase.	19
R6	Shawnigan Lake School agreement regarding use of well.	20 – 21
R7	"Towns for Tomorrow" grant application for Kerry Village System.	22 – 23
R8	New operations building at the Bings Creek Recycling Depot.	24 – 25
R9	Potential provision of economic relief to local recycling facility.	26 – 27
R10	Waste Energy Feasibility Study, prepared by Gartner Lee.	28
R11	Solid Waste 2007 Annual Monitoring Report.	29 - 36

R12	Cobble Hill Drainage System amendment to service area.	37 – 38
R13	Provincial Infrastructure Planning Study Grant applications.	39
R14	Verbal report regarding recycling of feedbags.	

6. <u>INFORMATION</u>

IN1 Court ruling regarding Section 102 of the Health Act.

40 - 42

7. <u>NEW BUSINESS:</u>

8. PRESS/PUBLIC QUESTIONS PERIOD

9. CLOSED SESSION

Motion that the meeting be closed to the public in accordance with the Community Charter Part 4, Division 3, Section 90, subsection as noted in accordance with each agenda item.

SD1 FOI/PPA – $\{Sub(1)(j)\}$.

43 – 49

SSR1 Litigation or potential litigation - {Sub (1) (g)}

50

9. <u>NEXT MEETING:</u> February 25, 2009

10. <u>ADJOURNMENT:</u>

Distribution:

Director Cossey, Chair

Director Haywood, Vice-Chair

Director Dorey

Director Duncan

Director Giles

Director Harrison

Director Kuhn

As Well As:

Director Marcotte, Electoral Area H

Director Morrison, Electoral Area F

Warren Jones, Administrator

Brian Dennison, Manager, Engineering Services

Bob McDonald, Manager, Recycling & Waste Diversion

Dave Leitch, AScT., Manager, Water Management

Kate Miller, Manager, Regional Environmental Policy

Mark Kueber, Treasurer

Agenda Cover Only:

Tom Anderson, Manager, Development Services

Joe Barry, Corporate Secretary

Minutes of the regular meeting of the Engineering Services Committee held in the Boardroom, 175 Ingram Street, Duncan, on November 12, 2008 at 2:30 p.m.

PRESENT: Director Walker, Chair

Directors Duncan, Giles, Hartmann, Hodson, Kent, Lefebure, Peake, Tansley and Alternate Director

McKenzie

ABSENT: Directors Allan, Cossey, Dorey, Hutchins, Marcotte

ALSO Warren Jones, Administrator

PRESENT: Dave Leitch, AScT., Manager, Utilities

Bob McDonald, Manager, SW & Environment

Joanne Bath, Recording Secretary

APPROVAL OF AGENDA It was moved and seconded that the agenda be approved as presented.

MOTION CARRIED

ADOPTION OF MINUTES

It was moved and seconded that the minutes of the October 8, 2008 regular Engineering Services Committee meeting be adopted.

MOTION CARRIED

BUSINESS ARISING OUT OF MINUTES No business arising

DELEGATIONS

No delegations

REPORTS

R1

A staff report was considered providing an amendment to CVRD Bylaw 2108 – Solid Waste Regulations and Charges.

Discussion took place regarding a tipping fee increase of \$5 per tonne for municipal solid waste. The Committee also discussed local alternatives to shipping waste out of the Cowichan Valley.

It was moved and seconded that "CVRD Bylaw No. 3229 – Solid Waste Management Charges and Regulations Amendment Bylaw, 2008" be forwarded to the Board for consideration of three readings and adoption.

MOTION CARRIED

R2

A staff report was presented regarding an amendment to the Lambourn Estates Water System Management Bylaw.

Staff were requested to amend Schedule C-1.1 (a) to change the application fee for a 25-mm connection to \$450.

It was moved and seconded that "CVRD Bylaw No. 3228 – Lambourn Estates Water System Management Amendment Bylaw, 2008", as amended, be forwarded to the Board for consideration of three readings and adoption..

MOTION CARRIED

R3

A staff report was considered providing amendments to sewer system management bylaws.

It was moved and seconded that:

- .1 "CVRD Bylaw No. 3173 Sentinel Ridge Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.
- .2 "CVRD Bylaw No. 3168 Eagle Heights Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.
- .3 "CVRD Bylaw No. 3167 Youbou Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.
- .4 "CVRD Bylaw No. 3166 Cowichan Bay Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.
- .5 "CVRD Bylaw No. 3227 Lambourn Estates Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.

MOTION CARRIED

R4

A staff report was considered regarding extending the boundaries of the Shawnigan Beach Estates Sewer System service area.

It was moved and seconded that:

1. The petition to extend the boundaries of the Shawnigan Beach Estates Sewer Service Area to include one additional property described as Lot A, Section 3, Range 2, Shawnigan District, VIP 82395, PID 026-945-614, be received.

2. That "CVRD Bylaw No. 3225 – Shawnigan Beach Estates Sewer System Service Amendment Bylaw, 2008", be forwarded to the Board for consideration of three readings and adoption.

MOTION CARRIED

R5

A staff report was provided regarding an amendment to the contract between Steel Pacific and the CVRD.

Discussion took place regarding impact of global commodity market crisis on local markets for recyclable commodities.

It was moved and seconded that the CVRD Board approve Steel Pacific's request to amend Contract ES 013-05 Scrap Metal Recovery, allowing Steel Pacific to postpone payment for materials received under the contract on a temporary basis until March 31, 2009, or earlier if markets recover, and further that the Board Chair and Corporate Secretary be authorized to sign the amended contract.

MOTION CARRIED

R6

A staff report providing bylaws for the Shawnigan Lake East Drainage System was considered.

It was moved and seconded that:

- .1 "CVRD Bylaw No. 3226 Shawnigan Lake East Drainage System Capital Reserve Fund Establishment Bylaw, 2008" be forwarded to the Board for consideration of three readings and adoption.
- 2 "CVRD Bylaw No. 3230 Shawnigan Lake East Drainage System Management Bylaw, 2008" be forwarded to the Board for consideration of three readings and adoption.

MOTION CARRIED

R7

A staff report was considered regarding Mesachie Lake Sewer Feasibility Study.

It was moved and seconded that funding in the amount of \$3,000 be provided through the CVRD Electoral Feasibility Studies Function to extend the scope of the Mesachie Lake Sewer Upgrade Assessment to include "green initiatives".

MOTION CARRIED

NEW BUSINESS	There was no new bu	siness.
RESOLVE INTO CLOSED SESSION 3:29 p.m.	public in accordan	seconded that the meeting be closed to the ce with the Community Charter, Part 4, 90 (1) – adoption of closed session minutes.
		MOTION CARRIED
RISE FROM CLOSED SESSION 3:30 p.m.	It was moved and sreport.	seconded that the Committee rise without
o.oo pam.		MOTION CARRIED
ADJOURNMENT		
	It was moved and se	conded that the meeting be adjourned.
		MOTION CARRIED
	The meeting adjourne	ed at 3:30 pm
	Chair	Recording Secretary
		Dated:



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JANUARY 28, 2009**

DATE:

January 19, 2009

FILE NO:

5330-20-MSS

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Engineering Services

SUBJECT: CVRD Takeover of the Mill Springs Sanitary Sewer, Streetlighting and Sidewalks

Recommendation:

That the CVRD Board grant approval in principle for takeover of Mill Springs sanitary sewer, streetlighting and sidewalk systems, in Mill Bay as requested in letters from the owner, Gerald Hartwig, 687033 BC Ltd. (Mill Springs), subject to the following conditions:

1. Previous board resolution No. 98-246, approved in 1998, be rescinded.

A review of the concepts, design and installation for existing sewer system and 2. future expansion must be conducted and approved by CVRD engineering staff to ensure compliance with CVRD Design Standards and Subdivision Bylaw 1215 and the South Sector Liquid Waste Management Plan;

Sewage disposal field capacity must be technically confirmed by the developer; 3.

All lands on which infrastructure works are located be transferred to the CVRD. except where not practical, in which case will be placed within registered Statutory Rights-of-way using the CVRD's standard charge terms;

The owners transfer any reserve funds for the sewer system to the CVRD. 5.

- 6. A utility transfer agreement be executed between the CVRD and the owners/developer:
- The developer provides all sewer servicing infrastructure for future upgrades, 7. including sewage treatment works, disposal system, pumps, controls, gensets, SCADA system and mainlines for the proposed development;

The developer undertakes to provide a two-year warranty on any future sewer 8. works, backed by an irrevocable letter of credit;

9. Take-over of the sidewalk system is dependent upon a modification to provincial legislation allowing the CVRD to transfer liability for sidewalk snow and leaf removal to homeowners:

Further expansion of the service area beyond the Mill Springs development be 10.

subject to public consultation;

A public consultation process regarding CVRD takeover must be undertaken by the owner, and petitions completed by at least 50% of the owners of parcels within the proposed service areas and the total value of their parcels represent at least 50% of the net taxable value of all land and improvements in the service areas.

and further that an assessment of the three systems be carried out, funded to a maximum cost of \$20,000, with \$10,000 from the CVRD Feasibility Study Function and \$10,000 through a Provincial Feasibility Study Grant; and that, upon completion of a successful petition process, bylaws be prepared to create service areas for these utilities.

<u>Purpose:</u> To approve, in-principle, CVRD takeover of the sanitary sewer, streetlighting and sidewalk systems for the Mill Springs development in Mill Bay.

<u>Financial Implications:</u> All costs to be borne by the developer.

<u>Interdepartmental/Agency Implications:</u> Establishment bylaw preparation by Administrative Services.

Background:

In the attached letters, dated May 30, 2008 and December 22, 2008, Gerald Hartwig, owner of the Mill Springs sewer, street lighting, and sidewalk systems, is requesting entering negotiations with the CVRD regarding the takeover of the operations of these three utility systems.

CVRD Board Resolution No. 98-246, dated June 17, 1998, agreed in principle to assume the responsibility for the operation and maintenance of the wastewater collection, treatment and disposal systems, and the streetlighting system for the Mill Springs Village, known as "Alpex", once 200 homes were connected to the sewer system and several conditions were met. Currently this subdivision includes 150 homes and raw land that will be developed in the future. Due to public concerns over the possibility of additional sewage in the drainage fields, further expansion of the service area, beyond the intended development, must be subject to public consultation.

Further, the CVRD does not manage sidewalk systems, but is prepared to maintain the concrete infrastructure, repairing and replacing panels when necessary, provided the homeowners maintain snow and leaf removal of that portion of sidewalk fronting their homes. Currently provincial legislation allows regional districts to create sidewalk service areas; however the CVRD does not have the ability to transfer liability to the homeowners to maintain snow and leaf removal. CVRD staff will only maintain the sidewalk service area if this liability issue can be resolved.

Should these utilities be taken over by the CVRD, the current strata could be dissolved and replaced by fee simple lots. An assessment of the three utilities must be carried out prior to the takeover process being completed, which could be funded through the CVRD's Feasibility Study Function and a Provincial feasibility study grant that would pay \$10,000 of the estimated total cost of \$20,000. CVRD staff is requesting \$10,000 from the Feasibility Study Function as the scope involves three utilities.

To ensure the sewer system complies with CVRD design standards, CVRD Subdivision Bylaw 1215 and the South Sector Liquid Waste Management Plan, Engineering Services staff must review and approve any new works in the preliminary concepts, detailed design and installation stages. Also, sewage disposal capacities must be confirmed for the existing system and for all new works. All new works would be subject to a two-year warranty and backed by a letter of credit.

approved by:

Brian Dennison, Manager, Engineering Services

Submitted by,

Louise Knodel-Joy

Senior Engineering Technologist

T. Lucolel - Sey

Engineering Services

LKJ:jlb

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687033 BC Ltd. (Mill Springs)

2101 Government Street Victoria, BC V8T 4P2 Tel: 250.475.2258 Fax: 250.475.3358

May 30, 2008

Mr. Brian Dennison, P. Eng Manager, Engineering Services Dept. Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8

Dear Sir:

Re: Mill Springs, Mill Bay, BC

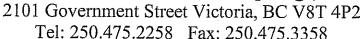
This letter is to advise you that Mill Springs would like to commence discussions with the CVRD regarding the District taking over the operations of the sewage treatment plant at Mill Bay.

Trusting this is the information you require to begin the negotiations, please provide us with a procedure and timeline that you wish to follow.

Yours truly,

Gerald Hartwig

687033 BC Ltd. (Mill Springs)





December 22, 2008

Mr. Brian Dennison, P. Eng Manager, Engineering Services Dept. Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8

Dear Sir:

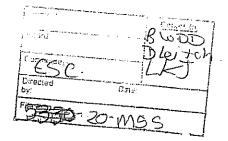
Re: Mill Springs, Mill Bay, BC

This letter is to advise you that Mill Springs would like to commence discussions with the CVRD regarding the District taking over the operations of the sewage treatment plant at Mill Bay. In addition, we would also like to discuss the CVRD taking over the streetlights and sidewalks.

Trusting this is the information you require to begin the negotiations, please provide us with a procedure and timeline that you wish to follow.

Yours truly,

Gerald Hartwig



(98-246)

Moved:

Director C. Boas

Seconded:

Director B. Davies

1. That the Cowichan Valley Regional District agree in principle to assume the responsibility for the operation and maintenance of the waste water collection, treatment and disposal systems, and the streetlighting system for the Mill Springs Village, known as "Alpex", once 200 homes have been connected to the system, and the following conditions have been met or completed:



- The developer will transfer the Waste Management permit to the CVRD. The CVRD will assume ownership of the wastewater collection, treatment and disposal works complete with associated property. The developer will also create statutory right-of-ways favouring the CVRD for the operation and maintenance of the collection system situated on common strata or private property.
- The treatment system must satisfactorily demonstrate that the Waste Management permit criteria can be met.
- Operation and maintenance costs for the sewage treatment system must prove to be economically feasible for the homeowners.
- The developer will provide funding for CVRD staff to review the design and construction drawings for the existing infrastructure and all proposed work with respect to compliance to CVRD Subdivision Bylaw No. 1215, and Workers' Compensation Board Industrial Health and Safety Regulations. All required upgrades will be completed at the developer's expense.
- The developer and the CVRD will enter into an agreement for the CVRD to phase into operation and maintenance of the sewage and lighting systems by the CVRD staff directly operating and maintaining the systems for 6 months prior to the occupancy of the 200th unit. The CVRD operation of the systems during this interim period will ascertain whether the treatment system is reliably meeting the Waste Management permit criteria and operational costs that are not excessive.
- The developer will establish a Reserve Fund for the CVRD to complete repairs, upgrades or maintenance for both the treatment works and the streetlighting system.
- All plans and specifications for the sewage and streetlighting works must be approved by the CVRD prior to commencement of any future construction.

- The developer shall assist the CVRD in the establishment of a Local Service Area under Section 788 of the Municipal Act at such time as the development reaches 200 units or the CVRD is prepared to become the permittee.
- Provide to the CVRD's satisfaction, a video inspection of the sanitary sewer system upon completion.
- Ensure that all proposed units are on a water conservation program.
- A Reserve Fund shall be established and funded by a onetime financial contribution per lot.
- The CVRD's Engineering Services Department will inspect the underground services work within the subdivision at the developer's expense and the developer shall agree to perform whatever works are required to meet the specifications of the CVRD's Engineering Services Department.

(98-247)

Moved:

Director R. Hughes

Seconded:

Director J. Clarkson

That Item One be referred to the June 22, 1998 Engineering Services Department pending comments from senior staff.

MOTION DEFEATED

ORIGINAL MOTION CARRIED

Regional Services

Report and recommendations from Regional Services Committee meeting of June 3, 1998, listing five items, were considered:

(98-248)

Moved:

Director G. Ridgway

Seconded:

Director D. Robinson

- 1. That the Post Disaster Construction Policy, as attached, be approved.
- 2. That the Cowichan Valley Regional District Chair and Secretary be authorized to execute the contract between the Cowichan Valley Regional District and Black Chip Industries for the recycling of asphalt roofing materials collected at the Bings Creek Solid Waste Management Complex.



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JANUARY 28, 2009**

DATE: January 16, 2009 FILE NO:

5330-20-CBE

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Engineering Services

SUBJECT: CVRD Takeover of the Cherry Blossom Park Development Water and Sanitary

Sewer Systems

Recommendation:

That it be recommended to the Board that the CVRD grant approval in principle for takeover of the water and sanitary sewer systems for a proposed 90 lot strata subdivision, described as "Lot 1, Section 8, Range 6, Sahtlam District, Plan 12309, Except Those Parts in Plans 22890, 23708, 25003 and 29157", as requested in a letter from Robin Mayo, Ana Sona Investments Ltd., dated December 8, 2008, subject to the following conditions and without prejudice to the rezoning process:

- 1. The preliminary concepts, detailed design and installation must be approved by Engineering Services staff to ensure compliance with CVRD Design Standards and Subdivision Bylaw 1215;
- 2. The developer must have a qualified professional prepare and submit the Registration of Discharge form, Operation Plan and Environmental Impact Study, and all other necessary documentation, to the Ministry of Environment for the sewage treatment and disposal system;
- 3. That the developer provide a two-year warranty on the completed works, backed by an irrevocable Letter of Credit;
- 4. All lands on which infrastructure works are located are transferred to the CVRD, except where not practical, in which case will be placed within registered Statutory Rights-of-way using the CVRD's standard charge terms;
- 5. All sewage disposal capacities must be confirmed by the developer;
- 6. The developer is required to provide a suitable reserve fund to start the water and sewer functions:
- 7. The developer is required to provide all water and sewer servicing infrastructure, including but not limited to, pumps, reservoir, SCADA system, fire protection, controls and mainlines, and sewage treatment works, disposal system, pumps, controls, gensets, and mainlines for the proposed development;
- 8. The developer shall pay all costs associated with monitoring and sampling requirements for the sewer system for the initial intensive monitoring period;
- 9. A utility transfer agreement must be executed between the CVRD and the owner/developer;
- 10. That the water source, treatment, reservoir and distribution works have adequate capacity and fire flow and have received approval from the Vancouver Island Health Authority.
- 11. That a successful petition process be carried out for establishment of service areas for the water and sewage systems; and further that the necessary bylaw be prepared to create water and sewer-service areas for these systems. --.../2

Purpose: To approve, in-principle, CVRD takeover of the water and sanitary sewer systems for a proposed 90 unit strata subdivision, in Sahtlam, Electoral Area E, described as:

"Lot 1, Section 8, Range 6, Sahtlam District, Plan 12309, Except Those Parts in Plans 22890, 23708, 25003 and 29157"

Financial Implications: All costs to be borne by the developer.

<u>Interdepartmental/Agency Implications:</u> Bylaw preparation by Administrative Services.

Background:

In the attached letter, dated December 8, 2008, Robin Mayo, Ana Sona Investments Ltd., is requesting approval-in-principle for CVRD takeover of the water and sanitary sewer systems for a proposed 90 lot strata development. This parcel is 7.53 hectares (18.6ac.) at 5611 Culverton Road and was formerly a sawmill. This development is considered to be adequately sized for the CVRD to operate the utilities. The developer is currently in the process of rezoning the lands from the existing I-2 – Heavy Industrial to MP-1 Manufactured Home Park.

To ensure each utility complies with CVRD design standards and Subdivision Bylaw No. 1215, Engineering Services staff must review and approve each of the preliminary concepts, detailed design and installation stages. Also, sewage disposal and water supply capacities must be confirmed. All new works would be subject to a two-year warranty and backed by suitable bonding.

All lands on which infrastructure works are located must be transferred to the CVRD, except where not practical, in which case must be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms.

Appro

Brian Dennison, Manager, Engineering Services

Submitted by,

Louise Knodel-Joy

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Senior Engineering Technologist

Engineering Services

LKJ:ilb

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DEC 0 8 2008

Engineering Services (Figs.

December 08th, 2008

CVRD Engineering Services 175 Ingram St. Duncan, B.C.

ATTENTION: Dave Leitch and Louise Knodel-Joy

Re: CVRD File 7 - E - 07RS

We would like to thank you for our recent meeting in your offices regarding the above noted Application.

ANA SONA INVESTMENTS LTD. 5905 Paldi Road

> Duncan, B.C. V9L 6H6 Tel:(250)715-7292

We also wish to confirm that it is our intention to request that the CVRD take over our community sewer and water facilities for this development.

As you are aware, a meeting is scheduled for December 16th between CVRD, the MOE and ourselves at which time we will have the opportunity to discuss further details regarding our proposed systems.

We look forward to our upcoming meeting and remain,

Yours truly,

Per:

Ana Sona Investments Ltd

Original Copies to. Hoard Commace(s)



R3

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 28, 2009

DATE:

January 16, 2009

FILE NO:

5330-20-AR

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Engineering Services

SUBJECT:

CVRD Takeover of the Arbutus Ridge Water, Sanitary Sewer and Storm Drainage

Systems

Recommendation:

That it be recommended to the Board that the CVRD grant approval in principle for takeover of the water, sanitary sewer and storm drainage systems for the existing Arbutus Ridge strata subdivision in Cobble Hill, as requested in the attached letter from the owners, Arbutus Ridge Strata Corporation VIS 1601, subject to the following conditions:

- 1. All lands on which infrastructure works are located will be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;
- 2. A utility transfer agreement must be executed between the CVRD and the owners/developer;
- 3. A public consultation process regarding CVRD takeover must be undertaken by the owner, and petitions completed by at least 50% of the owners of parcels within the proposed service area and the total value of their parcels represent at least 50% of the net taxable value of all land and improvements in the service area.

and further that, upon completion of a successful petition process, bylaws be prepared to create a service area for these utilities.

Purpose:

To approve, in-principle, CVRD takeover of the water, sanitary sewer and drainage systems for the Arbutus Ridge existing strata subdivision, totalling a potential 648 homes, a golf course and an adjacent farm currently connected to the system for domestic water use.

Financial Implications: all costs to be borne by the owners.

<u>Interdepartmental/Agency Implications:</u> Establishment bylaw preparation by Administrative Services.

Background:

The CVRD has received a letter from Arbutus Ridge, Strata Corporation requesting takeover of the water and sewer systems, based on CVRD investigation of the systems. CVRD has also been verbally asked by the strata committee to investigate the potential take-over of the drainage system. Currently this development services 612 constructed homes, with at potential 648 at build-out. Arbutus Ridge development was started in 1987, and the Strata Corporation has managed the utility systems in a professional manner since that time. Recently they have experienced difficultly retaining qualified operators to manage these utilities.

Brian Dennison, Manager, Engineering Services

The water system consists of three domestic wells, a 300,000 gallon reservoir, pressurized pumping system consisting of two pressure reducing stations and one pressure booster station and 17 km of water distribution lines. This water system has water meters measuring total flows, but not on individual homes.

The sewer system consists of 17 kilometres of sanitary sewer collection lines, three lift stations, a primary collection tank, two RBC (Rotating Biological Contactor) treatment plants and ground disposal. The storm drainage system also consists of 17 kilometres of collection lines and catch basins.

Submitted by,

Louise Knodel-Joy

Senior Engineering Technologist

L. Kundel-Jay

LKJ:jlb

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Engineering Services Dept.

DEC 0 1 2008



November 27th, 2008

Cowichan Valley Regional District Mr. Brian Dennison General Manager, Engineering & Environmental Services 175 Ingram Street Duncan, BC V9L 1N8

Dear Mr. Dennison:

We wish to thank you and your colleagues for meeting with the Strata Corporation this week to discuss the feasibility of transferring the Arbutus Ridge water and sewage systems to the Cowichan Valley Regional District. All those in attendance found the meeting to be most productive, and the exchange of information has provided the Strata with a good understanding of the steps involved in this process.

To this end, we can confirm that Strata Plan 1601 is interested in pursuing this matter further, and in having the CVRD carry out the necessary investigation of the community's utilities facilities. We understand this letter to be sufficient to initiate this process; however, should you require any further information, please contact the undersigned at 250-743-3282.

Yours truly,

STRATA PLAN 1601

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Board: BunDD
Dietch
Committee(s)

Origination

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Engineering & Environmental Services Committee Meeting **OF JANUARY 28, 2009**

DATE:

January 16, 2009

FILE NO:

5340-30-CHS/01

5340-30-SBE/01

FROM:

Lisa Daugenet, Engineering Technologist 1

SUBJECT: Request for Capital Expenditure Authorization prior to approval of 2009 budget

Recommendation:

To receive Board approval to incur expenses against the following capital accounts prior to approval of the 2009 budget:

• Cobble Hill Sewer System:

\$75,000

Shawnigan Beach Estates Sewer System

\$105,000

Financial Implications: 2009 capital expenditures in the amount of \$75,000, (\$25,000.00 from MFA borrowing, \$50,000.00 Community Works Fund), for Cobble Hill Sewer System and \$105,000, (\$35,000.00 Reserve/Current Funds, \$70,000.00 Community Works Fund), for Shawnigan Beach Estates Sewer System.

Interdepartmental/Agency Implications: not applicable

Background:

Cobble Hill Sewer System:

The CVRD took over the Cobble Hill Sewer System on December 22, 2008. As a condition of takeover, authority for the CVRD to borrow funds on the residents' behalf to complete the necessary upgrades to the sewer treatment plant was required. At the February 2008 Engineering Services meeting, the \$75,000.00 upgrade project was accepted to receive \$50,000.00 funding from Community Works Fund

As the CVRD Water Management Division is currently operating the system, it is desirable to get started on the upgrades as soon as possible as many of the upgrades are electrical and safety related.

Shawnigan Beach Estates Sewer System

The Shawnigan Beach Estates Sewer treatment system is in need of a replacement solids screen in order to reduce the solid loading on the disposal field and protect the longevity of the field. The original drum filter that made up a portion of the treatment works was beyond repair and not serviceable any longer and therefore was removed from the treatment plant several months ago as it was inhibiting flows. As part of the treatment works upgrade, a UV unit is to be added which will require the installation of upfront screening works.

Brian Dennison, Manager, Engineering Services

The Engineering Department has researched replacement equipment and is currently piloting a Salsness Filter at a cost of \$3,000.00/month. Results from the pilot project are good and the consensus is that we will purchase the unit. As we are currently incurring a monthly cost to pilot the unit, purchasing it now will save the system several thousand dollars.

Submitted by,

Lisa Daugenet

Engineering Technologist

LD:jlb

Bath: Z:\ESMemos2009\CapExp-SBE-CHS-Jan2809.docx

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ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JANUARY 28, 2009**

DATE:

January 20, 2009

FILE NO:

ES-018-08

FROM:

Dave Leitch, AScT, Manager, Utilities

SUBJECT: Borrowing authorization, Utilities vehicle

Recommendation:

1. That the Board approve the purchase of a new Utilities truck for the Water Management Division in the amount of \$29,000.00, prior to the adoption of the CVRD 5 year Financial Plan."; and further

2. That the Board approve up to \$29,000.00 in short term borrowing for 2009 in the Water Management Division to be paid back over five years, under the Liabilities

Agreement Section 175 of the Community Charter."

Purpose: To receive CVRD Board approval for the short term borrowing and purchase of a Utilities truck prior to the adoption of the 2009 5 year financial plan.

Financial Implications: Approximately \$600/month from Engineering Services Budget 575.

Interdepartmental/Agency Implications: not applicable

With the growing number of utility systems being taken over and operated by the CVRD, the department has had an increase in utility operators, which requires the division to acquire an additional vehicle.

In the approved 2008 engineering budget, funds were allocated for the lease of a new utilities truck. Upon tendering and receiving only a single tender back, it was discovered through correspondence with various dealerships that the automotive industry is pulling out of the leasing business and has very little interest in commercial leases. As a result, the Engineering Department has re-tendered the vehicle with the intent of financing the purchase through short term municipal financing, which will actually cost less on a monthly basis than the originally anticipated leasing costs.

Firm	Quotation	Firm	Quotation	
Bow Mel	\$28,479.00 plus tax	Tom Harris	\$29,518.00 plus tax	
Dave Wheaton	\$25,636.00 plus tax	Steve Marshall	\$30,240.00 plus tax	
Willie Dodge	\$27,779.00 plus tax	Jenner	\$35,730.00 plus tax	
Tom Harris /	\$26,631.00 plus tax			

Submitted by

David Leitch, AScT

Manager, Water Management

Brian Dennison, Manager, Engineering Service

DL:ilb

Bath: Z:\ESMemos2009\Truck purchase-Jan2809.doex



R6

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JANUARY 28, 2009**

DATE:

January 21, 2009

FILE NO:

5600-30-SLN/01

FROM:

Dave Leitch, AScT., Manager, Water Management

SUBJECT: Partnership Agreement – Shawnigan Lake School

Recommendation:

That it be recommended to the Board that the CVRD grant approval in principle to develop a partnership agreement for the development, ownership and usage of Wells A and B, located on the Shawnigan Lake School property subject to the following:

- 1. Shawnigan Lake School will provide 100% of the funding for the initial pump testing, hydrological report and assessment of the wells.
- 2. The CVRD will transfer ownership of the wells to the Shawnigan Lake School.
- 3. An agreement is created that will outline all cost sharing, allowable daily, monthly, yearly flows and volumes of each partner as well as the operation and maintenance
- 4. Shawnigan Lake School will provide a statutory right-of-way to the CVRD over their property that will enable access to the wells for operation and maintenance purposes.
- 5. Both parties will be responsible for the treatment of their allocated water.

Purpose: To approve in principal, the CVRD and the Shawnigan Lake School developing an agreement to share in the cost, ownership and usage of wells A and B located on Lot 1, Plan VIP81502 within the R.O.W. Plan VIP69922.

Financial Implications: All preliminary costs for well testing, a hydrological assessment and preliminary engineering to evaluate the feasibility and cost estimates for the project will be paid by the Shawnigan Lake School. Further agreements providing cost-sharing, ownership and usage will be brought to the Engineering and Environmental Services Committee for approval at a later date.

Interdepartmental/Agency Implications: None

Background:

The CVRD has statutory rights-of-way over two wells in Shawnigan, (Wells A and B), on property owned by the Shawnigan Lake School. These rights-of-way provide the CVRD with ownership to the wells along with the ability to construct and develop the wells. Access to the wells was made possible at the time by way of Chickadee Road, which has since been closed and title turned over to Shawnigan Lake School, thereby rendering the wells landlocked to the CVRD and without legal access to the right-of-way.

The CVRD Engineering Department has recently been meeting with the Shawnigan Lake School to discuss the possibility of developing the wells and creating a mutual cost-sharing ownership and usage partnership agreement.

Approved by:

Submitted by,

Dave Leitch, AScT.,

Manager, Water Management

DL:jlb
Bath: Z:\ESMemos2009\SLSchool wellsJan2809.docx



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 28, 2009

DATE:

January 15, 2009

FILE NO:

1880-20-KVS

FROM:

Dave Leitch, AScT, Manager, Utilities

SUBJECT: Towns for Tomorrow, Provincial Grant application

Recommendation:

That the CVRD Board designate the Kerry Village sewer treatment plant and disposal field repair and remediation as the sole Cowichan Valley Regional District application for the 2009 "Towns of Tomorrow" Provincial Grant Program.

Purpose: To designate the 2009 "Towns for Tomorrow" Provincial Grant Program application for the Cowichan Valley Regional District.

Financial Implications: This project is approved for \$167,000 in gas tax funding, with an additional borrowing authority of \$80,000.00 from the Kerry Village residents. This covers approximately 25% of the estimated \$948,000.00 project cost. The "Towns for Tomorrow" program has a maximum potential contribution of \$400,000 with a cost-sharing of 80% from the Provincial Government. Due to an expected partnership agreement with an adjacent development, the anticipated contribution from the Kerry Village residents will be approximately \$480,000.00.

Interdepartmental/Agency Implications: none

Background:

The Provincial Government has introduced a new grant program called "Towns for Tomorrow", which will provide \$71 million over 5 years to Municipalities and Regional Districts with populations up to 15,000. Each local government is allowed to submit one application per application deadline. As part of the application, a resolution from the Regional District Board is required.

Engineering staff, along with the Kerry Village Residents Association, have been working towards a partnership agreement with an adjacent developer that would replace the existing RBC treatment plant with a new plant that will produce Class A effluent, in accordance with the CVRD South Sector Liquid Waste Management Plan. As well, a new sewage disposal field will replace the existing failed field at Kerry Village and be relocated on the new development. Property for the new disposal fields will be provided by the developer along with a contribution for the new treatment plant and other upgrades to the Kerry Village system.

Brian Dennison, Manager, Engineering Services

The Kerry Village sewer treatment plant and disposal fields were constructed in 1982/1983 and have experienced steady deterioration to their current status, which is beyond repair. The sewage disposal fields are not operating within the Ministry of Environment permit requirements and are considered to be in a state of non-compliance and failure.

Due to the limited number of users in the service area, the high cost of repair and replacement and the necessity of the work to be completed, a Towns for Tomorrow grant would greatly reduce the financial burden for the users in the Kerry Village community and therefore be an excellent project for the program.

Submitted by,

Dave Leitch, AScT.

Manager, Water Management

DL:jlb

Bath: Z:\ESMemos2009\Towns for Tomorrow-Jan2809.docx



R8

STAFF REPORT

Engineering and Environmental Services Committee Meeting **OF JANUARY 28, 2009**

DATE:

January 28, 2009

FILE No: 5330-30-BCOpBldg

FROM:

Brian Dennison, P. Eng., Manager, Engineering Services

SUBJECT: New CVRD Operations Building at Bings Creek

Recommendation:

That it be recommended to the Board that:

1. A new operations facility be constructed at Bings Creek Solid Waste Complex to support solid waste and utility operations.

2. A loan authorization bylaw for approximately \$500,000 be prepared to cover the cost of the project.

3. An Alternate Approval Process be utilized.

Purpose: To consider the construction of a new operations facility at Bings Creek.

Financial Implications: As discussed below.

Interdepartmental/Agency Implications: Administrative staff to prepare documentation.

Background:

As the CVRD continues to take over additional sewer, water and drainage facilities the size of the operational crew continues to grow. Temporary facilities for the crew have been provided at what was to be the bottle depot at Bings Creek however operational needs have clearly exceeded this facility. Also there is the need for proper shower and cleanup facilities as this building does not have these attributes. In addition, the size of crew warrants the creation of a foreman position to coordinate the crew from the field as was approved by the CVRD board in 2006. The foreman will require some office space and support to function efficiently.

Similarly, solid waste operations have grown increasingly complex which, together with the growth in staffing and operational hours at the existing two drop-off depots, and the establishment of a South Cowichan Drop-off Depot, warrants the establishment of a manager onsite replacing the existing coordinator. This change was also approved by the board in 2006. This management position requires suitable office space and support.

It is therefore recommended that a new operations and administrative facility be built at Bings Creek. This building would include a utilities shop, stores room, shower, washroom and change rooms, meeting room/lunch room and three offices for supervisory and support staff.

In 2008, the Board approved the allocation of \$100,000 of Gas Tax funding for the establishment of a bio-diesel facility on the Bings Creek site. In discussions with representatives of the non-profit Bio-diesel Co-op, the existing utilities building would perfectly suit their needs. Approval has therefore been obtained from UBCM, which administers the Gas Tax program, to use the \$100,000 of funding for the new building and provide the existing building for the Bio-diesel Co-op.

Together with costs for extending utility services, the expected cost is about \$600,000. A detailed estimate is being prepared by a consultant, which is expected to be available by January 27th. Approximately 20% of the use would be attributable to solid waste purposes with 80% being attributable to utilities usage. The share of approximately \$125,000 from solid waste would therefore mostly be paid through Gas Tax funds. The share of approximately \$475,000 from the utilities would be borrowed and paid back over 20-years, resulting in an annual cost of about \$45,000 distributed amongst all the utilities.

Due to the overwhelming complexity of using an Alternative Approval Process for each of the existing sewer, water and drainage service areas, the CVRD Treasurer recommends that the borrowing authority be obtained for the solid waste function (520) only and the cost recovered from all the utilities through a transfer. The solid waste function would have the largest single share of the cost of the facility. This would also allow flexibility to adjust costs as new utilities are added or utility service areas change. This approach was used for the borrowing of the cost to construct the Ingram Street building.

Submitted by

Brian Dennison, P. Eng.

Manager, Engineering Services

BWDD:jlb

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Approved by:

NOT REQUIRED

Brian Dennison, Manager, Engineering Services



ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING **JANUARY 28, 2009**

DATE:

January 20, 2009

FILE NO:

FROM:

Harmony Huffman, Environmental Technologist

SUBJECT: Potential Provision of Economic Relief to Local Recycling Facility

Recommendation: The Committee's direction is requested.

Purpose: To consider providing relief to Vancouver Island Recycling Centres Ltd., for materials accepted under CVRD multi-bin recycling program.

Financial Implications: Approximately \$3,600 in net cost to the CVRD

Interdepartmental/Agency Implications: None at this time.

Background: Recent economic downturns have had drastic effects on recycling markets worldwide. Decreased demand for raw materials has meant that recycling companies have had considerable difficulty in finding markets for their products. In many cases, recyclers must pay end-processors to accept materials that were once a source of revenue for recyclers. This has created significant pressure on the local recycling industry which will likely continue until such time as markets improve.

Recently, staff from the CVRD, Capital Regional District and the Regional District of Nanaimo met to discuss potential strategies for dealing with industry requests for relief. It was agreed that support should be considered within a hierarchy of preferred management options. Because recycling programs are very difficult to re-establish, it was agreed that the top option should be the maintenance of all existing recycling programs. Alternative options could include, for example, the re-direction of paper-based products to compost facilities, or the diversion of other products to waste-to-energy facilities. Disposal would be the final and least desirable option.

Regional district's, however, still have several options to maintain recycling programs in their current form. These include:

- 1) Allowing recycling facilities to temporarily stockpile materials (until such time as markets improve):
- 2) Allowing companies to temporarily defer payments to the regional district; or
- 3) Providing temporary financial support to operators (e.g. paying tipping fees to operators, or allowing operators to waive payments required by existing contracts).

Vancouver Island Recycling Centres Ltd. (VIRC), located in Nanaimo BC, is the current destination for all recyclables collected under the CVRD's multi-bin and curbside programs. VIRC recently approached CVRD staff with a request for relief in the form of a \$10 per tonne tipping fee for all materials accepted under the multi-bin program, for a maximum of 6 months. Relief in this form would cost the CVRD approximately \$6,000 in additional service charges.

This relief program may be considered as separate from existing contractual obligations between the CVRD and VIRC. As written, these obligations require VIRC to pay \$400 per month to the CVRD for materials received under the multi-bin program; meaning that the relief program, as described above, would result in a net cost to the CVRD of \$3,600 for the 6 month period.

For comparison, the CVRD Board recently approved a relief program for Steel Pacific Recycling that allowed the company to defer payments for metal received from CVRD facilities until March 31, 2009, or sooner should markets improve.

CVRD staff are working with the City of Nanaimo in the hope of allowing VIRC to temporarily stockpile materials on site, something which they are not currently able to do. However, stockpiling as an effective management option is limited due to site size and bylaw constraints. Deferment of payments is also not considered a desirable relief option by VIRC due to uncertainty regarding future market conditions.

Consideration should also be given to the possibility that, by providing financial relief or subsidization to one operator, the CVRD may trigger additional requests for similar relief by other industry representatives.

Brian Dennison, General Manager

Submitted by,

Harmony Huffman

Environmental Technologist

HH:jlb

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R10

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 28, 2009

DATE:

January 15, 2009

FILE NO:

5360-01-AWDO

FROM:

Bob McDonald, Manager, Recycling & Solid Waste

SUBJECT: Report on CVRD & RDN Waste to Energy Facility

Recommendation:

That CVRD staff to continue to work with the Regional District of Nanaimo and other local jurisdictions towards joint waste management solutions.

Purpose: To discuss the findings of a jointly commissioned report on a waste to energy facility.

Financial Implications: Not applicable.

Interdepartmental/Agency Implications: Not applicable.

The report (70 pages, available upon request) entitled "Assessment of New Background: Treatment Technologies", prepared by consultants Gartner Lee Limited (now AECOM), was commissioned in late 2007 as a joint study by the CVRD and Regional District of Nanaimo. It is a comprehensive report that looks at the feasibility of a joint waste to energy (WTE) or Refuse Derived Fuel (RDF) facility to serve the two jurisdictions, and the most appropriate thermal treatment technology. The report builds on a previous study from 2004 that evaluated new and emerging technologies. The author, Mr. Konrad Fichtner, is widely considered one of the most prominent consultants on this topic in North America.

The report reviews the following factors and considerations:

- WTE or RDF after recycling and composting
- Preserving landfill space approx. 20 years
- Environmental and economic sensitivities
- Conventional and advanced thermal treatment
- Available energy markets and end-users
- Start-up costs of approximately \$100 million
- Cost recovery tipping fees from \$90-\$140/tonne

Conclusions and recommendations include:

- 1. Conventional thermal treatment, chosen as the least cost, and most proven technology.
- 2. RDN will not proceed with a facility at this time due to cost of WTE or RDF.
- 3. RDN will continue landfilling, and monitor WTE and RDF costs over next few years.
- 4. CVRD will continue to look at alternative disposal options including WTE and RDF.

Submitted by.

Bob McDonald

Manager, Recycling & Solid Waste

Brian Dennison, Manager, Engineering Services

BMc:ilb

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R11

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 28, 2009

DATE:

January 16, 2009

FILE NO:

Department Head's Appro

Brian Demisson, Manager, Engineering Services

5385-20-SWMP/MWLA

FROM:

Harmony Huffman, Environmental Technologist II

SUBJECT: CVRD Solid Waste Management Plan - Annual Monitoring Report (2007)

Recommendation: For information only.

Purpose: To update the Committee on annual monitoring of the Solid Waste Management Plan.

Financial Implications: None at this time.

Interdepartmental/Agency Implications: Not applicable

Background: Each year, CVRD staff calculate waste disposal and recycling rates within the district, as required by the CVRD's Solid Waste Management Plan. These calculations track the success of recycling programs, and are an important indicator of progress towards Zero Waste.

In accordance with the provincial waste reduction goal set in 1990, the CVRD achieved a 50% reduction in per capita waste disposal by 2000. Although this rate has since been surpassed, disposal rates have tended to fluctuate in recent years. A waste disposal rate of 47.5% in 2007, however, marked a return to shrinking disposal trends. Initial figures for 2008 indicate that this trend will continue. Recycling rates (waste recycled/total waste produced) for 2007 were the highest ever at 68.2%, and have been increasing steadily since the 1990s.

In combination, these figures highlight the success of CVRD diversion programs to-date, while illustrating the considerable work that remains if Zero Waste is to be achieved.

Submitted by,

Harmony Huffman

Environmental Technologist II

HH:jlb

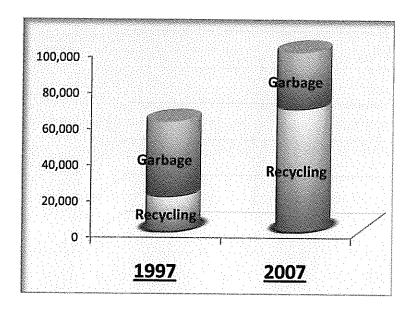
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Helping you towards ZEREWASTE C.V.R.D

CVRD Solid Waste Management Plan Annual Monitoring Report 2007

As per the requirements for plan monitoring set out in the CVRD Solid Waste Management Plan, the following annual report summarizes municipal solid waste disposal quantities and waste reduction program activities for the 2007 calendar year. This report is reviewed annually by the CVRD Environment Commission, who acts as the Plan Monitoring Committee for the Solid Waste Management Plan.

CVRD Garbage and Recycling Tonnages 1997 and 2007



WASTE DISPOSAL

In accordance with the provincial waste reduction goal set in 1990, by 2000, the CVRD had achieved the goal of a 50% reduction in the amount of waste disposed of per person, as compared to 1990 levels. While the disposal rate has fluctuated annually, 2007 marks a return to a trend of declining per capita disposal and corresponding improvement (to 47.5%) of the overall decrease in the disposal rate relative to 1990 levels. This places the CVRD among the leading jurisdictions in the province for achieving waste diversion from landfill.

Table 1

Year	1 Population	2 Waste disposal to Non-CVRD Facilities (CDW/LCD) (est.)	3 Waste Disposal to CVRD Facilities (Transfer Station / Cache Creek)	Total Alternative Waste Disposal (Backyard Burning etc.) (est.)	Total Waste Disposal (Cols. 2, 3, 4) (est.)	Per Capita Disposal Rate (tonnes/capita) (Cols. 5/1)	Per Capita Disposal Rate Decrease Since 1990 (Rate Decrease/ Base Yr.) (Col. 6)
1990	59,059	11,000	29,500	4,975	45,475	0.770	٦
1997	72,691	11,249	30,571	0	41,820		
1998	73,735	10,500	27,823	0	38,323	0.520	
1999	76,386	7,747	24,164	0	31,911	0.418	45.7%
2000	76,820	4,675	23,413	0	28,088	0.366	52.5%
2001	71,998	4,919	21,780	0	26,699	0.371	51.8%
2002	73,129	3,060	24,881	0	27,941	0.382	50.4%
2003	74,260	3,275	26,487	0	29,762	0.401	48.0%
2004	75,392	5,125	27,987	0	33,112	****	
2005	76,523	4,225	27,556	0	31,781	0.415	46.1%
2006	76,929	5,204	27,112	0	32,316	0.420	45.4%
2007	78,060	3,593	27,948	0	31,541	0.404	47.5%

In 2007 the CVRD recorded the lowest per capita disposal rate (404 kg/person/year. See Col. 6) since 2003. The decrease in the per capita disposal rate can be partially attributed to increased enforcement of CVRD disposal bans, improved CVRD waste diversion programs, and the growth of local private sector recycling options.

WASTE REDUCTION

Table 2 shows the total waste reduction efforts for 2007, compared to the base year of 1990. It is a summary of all the recycling activities that took place in the CVRD each year. It is based on an annually conducted survey of all generators (commercial and residential sources), as well as public and private recycling collectors and processors. The survey itself contains detailed information and is considered confidential.

Table 2

Year	1 Population		Waste Disposal	4 Total Alternative Waste Disposal (Backyard Burning etc.)	Total Waste Disposal (Managed & Alternative Disposal) (Cols. 3+4)	Total Waste Potential (Disposal & Recycling) (Cols. 2+5)	7 Recycling Rate (%) (Recycling/Total Waste Potential) (Cols. 2/6)
1990	59,059	3,661	40,500	4,975	45,475	49,136	7.5%
1997	72,691	18,691	41,820	0	41,820	60,511	
1998	73,735	20,019	38,323	0	38,323	58,342	
1999	76,386	23,566	31,911	0	31,911	55,477	
2000	76,820	26,107	28,088	0	28,088	54,195	
2001	71,998	29,817	26,699	0	26,699	56,516	
2002	73,129	33,769	27,941	0	27,941	61,710	
2003	74,260	37,877	29,762	0	29,762	67,639	
2004	75,392	41,173		0	33,112	74,285	
2005	76,523	46,730	31,781	0	31,781	78,511	
2006	76,929	57,975	32,316	0	32,316	90,291	64.2%
2007	78,060	67,503	31,541	0	31,541	99,043	

2006 and 2007 figures reflect a continued increase to the recycling rate, with 2007 being the highest recycling rate to date at 68.2% (see column 7). The 2007 total waste potential set a record at 99,043 tonnes (see column 6), which reflects a strong local economy. Despite the high waste potential, the recycling rates increased by 4% while the overall disposal rate decreased from the previous year.

The CVRD waste statistics show an overall positive trend over the last four years towards increasing waste diversion and decreasing per capita waste disposal rates. This is notable considering that many regional districts have faced challenges maintaining waste diversion rates in the face of strong local economies. In particular the housing and construction boom of recent years has driven increased overall waste generation around the province. CVRD disposal bans on recyclable construction and demolition, as well as infrastructure for recycling these materials at CVRD and private facilities have been key in maintaining the CVRD position as provincial leaders in waste diversion.

SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION

Zero Waste Initiatives

Initiatives pursued in 2007 in support of the CVRD's goal of Zero Waste included:

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- Daily advertisements in the local media regarding disposal bans, curbside recycling, and ongoing waste diversion programs;
- Advertising targeted at initiatives to reduce open burning of yard and garden waste and promote free tipping of these materials at CVRD sites;
- Research, consultation and program development focused on improving recycling options for local Industrial, Commercial, and Institutional (IC&I) sector stakeholders and to improve recycling services to local businesses;
- Ongoing web based updates to the Environmental Guide and Recycling Directory;
- Distribution of the CVRD K-5 Environmental Education Manual and development of a contracted service to deliver education manual content to local schools.

CVRD Solid Waste Facilities

2007 saw a significant increase in traffic to CVRD solid waste facilities, with resulting increases in quantities of materials recycled as detailed in the following table:

Recyclable Materials Received at CVRD Facilities in 2007						
Material	2006 Tonnes	2007 Tonnes	% Increase			
Yard and Garden Waste	1821	3075	69%			
Commercial Organics	645	1094	70%			
Clean Wood Waste	1441	1535	7%			
Asphalt Roofing	670	957	43%			
Scrap Metal	1038	1107	7%			
Drywall	467	478	2%			

The CVRD SWMP contains several commitments to improve our solid waste facilities through ongoing capital works. In anticipation of capital funding for solid waste projects being made available through the federal Gas Tax program, in 2007 Engineering Services staff undertook development of a solid waste facilities plan to evaluate system needs and identify infrastructure priorities. Three solid waste projects were identified as priorities for the first round of Gas tax funding. Conceptual design and costs for the following three projects were prepared for a funding proposal submitted to the Gas Tax program:

1. South End Recycling Drop-off Depot Phase One Development

This project entails the development of a full service recycling drop off depot serving Cowichan Bay, Cobble Hill, Mill Bay, and Shawnigan Lake residents. The facility will be a simple, outdoor arrangement of separate tipping areas for fee-charged materials (garbage, wood waste, drywall etc) and free recyclable materials (yard and garden waste, metals, mixed recyclables etc.).

2. Bings Creek Transfer Station and Recycling Depot Upgrades

This project aims to renovate, and add to, an existing structure in the public tipping area currently used for storage and transfer of hazardous materials (waste oil, vehicle batteries, fluorescent tubes etc., electronic waste, and household hazardous waste). The structure will also provide a permanent location for the 'Free Store', which is currently located in a temporary structure.

3. Peerless Road Recycling Drop-off Depot Upgrades

The goal of this project is to complete the transition of this site, previously used as a waste incineration facility, to a full service recycling drop-off depot. The project entails revising the layout to better accommodate traffic flow and material drop off, create new tipping bays for additional recyclable materials, and complete required maintenance on existing site infrastructure.

Organic Waste Diversion

To support the diversion of commercial organic waste from the waste stream, in 2006 the CVRD developed drop-off capacity for these materials at Bings Creek. Use of the organic waste drop-off grew significantly in 2007, due to expanded education and enforcement of the disposal ban on commercial organics. All organics collected were shipped to the International Composting Corporation facility at Duke Point.

To support local efforts to reduce the open burning of yard and garden waste, in 2007 the CVRD suspended tipping fees for yard and garden material at all CVRD waste facilities on a year round basis. This resulted in a significantly higher quantity of these materials received at CVRD sites in 2007, compared to previous years.

Residual Waste Disposal

During 2007, the CVRD continued to work within the parameters defined by its waste export agreement with Metro Vancouver. In response to increasing waste tonnages in 2006, the CVRD requested an additional 1,500 tonnes to the annual waste disposal limit of 28,000 tonnes for 2007, for a total ceiling of 29,500 tonnes. Actual waste tonnages were well within the allowable limit.

During the summer of 2007, the waste export agreement with Metro Vancouver was suspended during the civic strike affecting lower mainland municipalities. At this time, CVRD waste was temporarily exported to the Roosevelt Regional Landfill operated by Rabanco in Washington State. Efforts by the CVRD in 2007, to secure long term waste disposal capacity at the Port Alberni landfill on Vancouver Island were not successful.

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In 2007, Engineering Services staff received the draft report, Assessment of New Treatment Technologies, prepared jointly for the CVRD and Regional District of Nanaimo. The goal of this study was to focus in on the costs, technical requirements, and operational issues for three promising residual waste treatment technologies and explore the feasibility of a joint RDN/CVRD facility. The draft report was updated with additional data in the summer of 2008, and is currently being reviewed by Engineering Services staff. Completion of this study and subsequent ongoing evaluation of new waste processing technologies is a key SWMP commitment.

Residential Waste and Recycling Collection

The CVRD SWMP contains a commitment to pursue a collectively tendered regional residential waste and recyclables collection contract with local municipalities, which would also include organics collection. The collective regional tendering approach was not feasible for several reasons. However, a joint tender was issued by the CVRD and the Town of Lake Cowichan. Due to the lowest bid price being significantly higher than the cost of the existing collection service, the CVRD and the Town of Lake Cowichan chose to not award the tendered contract and instead pursued an extension to the existing collection contracts. Therefore, introduction of the organics collection component in CVRD Electoral Areas will delayed until at least 2010 at the earliest.

Regulation of Waste Stream

CVRD Bylaw No. 2570, Waste Stream Management Licensing, was implemented in 2005 to regulate waste management and recycling facilities in the Cowichan Valley. This Bylaw sets out environmental, social and operational standards by which all facilities must comply. To obtain a license, each facility must submit a detailed operating plan that outlines how they will meet each requirement of the Bylaw. Full application of the Bylaw began in January 2007, with the CVRD subsequently issuing a total of six licenses to local facilities in 2007. Enforcement action was pursued against four unlicensed facilities, and a number of compliance and enforcement measures were also pursued against licensed facilities.

CVRD staff increased enforcement of Bylaw No. 2108, Solid Waste Management Charges and Regulations, throughout 2007. Staff inspected commercial and residential waste loads for recyclables and organics at the CVRD Bings Creek Solid Waste Management Facility. A total of 27 warnings and 4 fines were issued to commercial businesses in 2007, for disposing of recyclable or organic materials in the waste stream. Each fine resulted in the business or hauler paying double the tipping fee.



R12

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF JANUARY 28, 2009**

DATE:

January 20, 2009

FILE NO:

Bylaws

FROM:

Jeralyn Jackson, Senior Engineering Technologist, Engineering Services

SUBJECT: Revised Cobble Hill Village Drainage Establishment Bylaw

Recommendation:

1. That 3rd Reading of CVRD Bylaw No. 3085 - Cobble Hill Village Drainage System Establishment Bylaw, 2008 be RESCINDED.

2. That Section 6 - Maximum Requisition be deleted in its entirety and replaced with the following:

The maximum amount of money that may be requisitioned annually in support of this service shall be the greater of \$9,912, or an amount that equals the amount raised by applying a property value tax rate of \$0.1434 per \$1,000.00 of the net taxable value of land and improvements in the service area.

- 3. That Schedule A of CVRD Bylaw No. 3085 be amended to include an additional 32 lots within the service area boundary.
- 4. That CVRD Bylaw No. 3085 Cobble Hill Village Drainage System Establishment Bylaw, 2008 be forwarded to the Board for 3rd reading, as amended; and following provincial and voter approval, adoption.

Purpose: To amend the service area boundaries to include an additional 32 lots and to increase the maximum requisition of Bylaw No. 3085 - Cobble Hill Village Drainage System Establishment Bylaw, 2008.

Financial Implications: The annual cost of providing the service is to be recovered through property value taxes to be requisitioned and collected on the basis of the net taxable value of land and improvements within the proposed service area. The maximum amount of money that may be requisitioned annually in support of this service is \$9,912, or \$0.1434 per \$1,000 of net taxable land and improvements. The average costs to taxpayers within the proposed service area with property assessed at \$200,000, would be approximately \$28.68 annually.

Interdepartmental/Agency Implications: Before an establishment bylaw can be adopted, the Inspector of Municipalities and service area electors must give their approval. Engineering Services is responsible for the operation and administration of the services.

Background:

In October 2006, the Board ratified the following resolution:

"That consent of the electorate be obtained from residents of a specified area of Cobble Hill through an Alternative Approval Process for establishment of the Cobble Hill Village Drainage Service Area."

On June 11, 2008 (Resolution No. 08-419) Cobble Hill Village Drainage Establishment Bylaw was given three readings by the CVRD Board and forwarded to the province for approval. On July 18, 2008, the Province approved Establishment Bylaw 3085. Prior to adoption by the CVRD and the initiation of the Alternative Approval Process, the Ministry of Transportation completed drainage works along Cobble Hill Road, which diverted the drainage from 32 lots into the proposed Cobble Hill Drainage area.

The proposed amendments to Establishment Bylaw No. 3085 will add the 32 lots to the proposed service area and increase the maximum requisition as a result of adding lots. The proposed drainage area will now include all of Cobble Hill Village, except the 14 lots on Galliers Road (Cobble Hill Drainage #2) and the 75-Lots of the Twin Cedars Development.

Submitted by,

Jerályn Jáckson/

Senior Engineering Technologist

Engineering Services Engineering Services

JHJ:jlb

Bath:Z:\ESMemos2008\CHDrainageBylawNO 3085-Jun1108.doc

Brian Dennison, Manager, Engineering Services



R13

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF JANUARY 28, 2009

DATE:

January 21, 2009

FILE NO:

FROM:

Louise Knodel-Joy, Senior Engineering Technologist, Engineering Services

SUBJECT: CVRD Infrastructure Planning Grants

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Recommendation:

That it be recommended to the Board that the CVRD support application of five infrastructure planning grants for the following utilities:

1) Mill Springs Sewer Study Grant

- 2) Shawnigan Lake Water Source Study Grant: 4-3-2-1 Compliance with Vancouver Island Health Authority
- 3) Saltair Water Source Study Grant: 4-3-2-1 Compliance with Vancouver Island Health Authority
- 4) Communications Study for Shawnigan Lake Water System
- 5) Communications Study for Saltair Water System

and further that \$10,000 be used from the CVRD's Electoral Area Feasibility Studies Function to fund the Mill Springs Sewer Study.

<u>Purpose:</u> To approve application of five study grants through the Ministry of Community Services Infrastructure Planning Grant Program for the next round of applications due January 30, 2009.

Financial Implications:

The Infrastructure Planning Grant Program provides funding to the maximum of \$10,000 for approved projects of \$15,000 or more. The remainder of funding will be provided by the operating budgets of the existing utilities, or from the CVRD Feasibility Study Function for utilities not currently managed by the CVRD. These funds are then later recovered from the utility when it becomes a CVRD function.

Interdepartmental/Agency Implications: none.

Background:

Infrastructure Planning Grants provide funding for local government to assist in developing infrastructure to improve public health and safety, protect the environment and strengthen local and regional economies. The studies provide a basis for capital projects and for larger infrastructure grants. The CVRD has been successful in the past receiving these study grants.

Submitted by,

Louise Knodel-Joy

Senior Engineering Technologist

Approved by:

Brian Dennison, Manager, Engineering Services

Joanne Bath

From:

Brian Dennison

Sent:

Wednesday, December 03, 2008 6:54 PM

To:

Joanne Bath

Cc:

Jeralyn Jackson; David Leitch; Louise Knodel Joy; Alina Lintea; Lisa Daugenet

Subject:

FW: Emailing: Staples McDannold Stewart.htm

Attachments:

background.gif; spacer.gif; navigation r1 c1.jpg; health.gif; navigation r1 c4.jpg;

navigation r2 c1.jpg; navigation r2 c2.jpg; pdficonsmall.gif

Jo

An update for ESC

BD

From: Gerard LeBlanc [mailto:fly.fisher@shaw.ca]

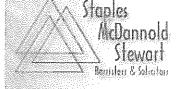
Sent: Friday, November 28, 2008 4:13 PM

To: Tom Anderson; Brian Dennison; Kate Miller; Mike Tippett; 'Kelly Gesner'; David Leitch

Subject: Emailing: Staples McDannold Stewart.htm

Here's another one with possibly serious impact potential - dollars to donuts we'll see the regulation amended very soon!

Gerard



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No 100 Feet Setback For Septic Systems

On November 7, 2008, the BC Supreme Court allowed an appeal under Section 102 of the Health Act and set aside a Section 63 Health Act Order that prohibited a landowner from installing a sewerage system discharge area within 100 feet of a well located on a neighbouring property.

The Court ruled that Section 42 of the Sanitary Regulations did not apply in these circumstances; and held that with the repeal of the Sewage Disposal Regulation, the current Sewerage System Regulation allowed a septic system to be installed within 100 feet of an existing well.

The Court in Wilkinson v. Vancouver Island Health Authority stated:

The respondent's argument, on closer examination, is not based on a statutory interpretation of the Sanitary Regulation at all. Instead, the respondent relies on the finding by Bauman, J., as he then was, in Mortensen v. Nelson, to the effect that an absorption field located within 100 feet of a well is a probable source of contamination within the meaning of s. 42. I observe that the court was not dealing there with the construction and installation of a sewage system but with the wish of Mr. Mortensen to dig a well on his property within 100 feet of the existing septic tank. The decision of the court in Mortensen was reinforced by the historical antecedents of s. 42 coupled with the historical prohibition in the then Sewage Disposal Regulation against locating a disposal system within 100 feet of a well.

I do not view Mortensen as authority for the proposition advanced by the respondent, namely that any sewerage system within 100 feet of a well is necessarily a probable source of contamination. I observe that the current Sewerage System Regulation does not contain such a prohibition. I cannot accept that was an oversight by the Lieutenant Governor in Council rather than a recognition that the science relating to effluent disposal has advanced to a point where a less blunt instrument than measurement can be used to ensure public safety.

I further observe that, under the Sewerage System Regulation, an authorized person must certify that the system has been constructed "in accordance with the standard practice". A standard practice manual was prepared for the Ministry of Health. It recognizes that sewerage systems may, in the circumstances outlined in the manual, be sited within 100 feet of a well without causing or contributing to a health hazard.

Bauman J., of course, did not have the new regulation before him in Mortensen.

Finally, I observe that the authorized persons in the case at bar provided, as required by s. 8(2)(c), the assurances that the plans and specifications filed were consistent with standard practice.

The significance of this decision is that there is now a different standard to be applied for the installation of wells on the one hand and the installation of septic systems on the other hand. The Wilkinson decision means that so long as authorized persons certify that the septic system has been constructed in accordance with the standard practice manual, septic systems may now be lawfully installed within 100 feet of an existing well. The Mortensen decision remains good law with respect to the installation of a well within 100 feet of an existing septic system. Section 42 of the Sanitary Regulation prohibits the installation of a well in such a location.

Whether this different approach to the installation of wells and septic systems is good policy is now up to the government to determine now that the Courts have spoken on the issue.

Guy McDannold



Questions or Comments? webmaster@sms.bc.ca