



Date: April 30, 2015 **File:** 2015.2942.002.201
To: Marc Rutten
From: Kathleen Porter
Project: Comox No. 2 Pump Station Realignment
Subject: Final Report

MEMO

1 INTRODUCTION

The CVRD established the Comox No. 2 Pump Station Site Advisory Group to involve public, political, technical and administrative representatives in a series of facilitated meetings to work with the CVRD towards a site selection process for a Comox No. 2 pump station. The sewage commission established the Advisory Group in response to concerns related to a decision by the CVRD to locate a pump station on a property in the Croteau Beach neighbourhood.

Terms of Reference for the Advisory Group were distributed to selected representatives with the mandate to provide advice to the sewage commission on matters pertaining to site selection as per the sewage commission resolution dated February 3, 2015. The Advisory Group was mandated to:

- Review the current sewer system and seek to understand the available options for addressing various technical, operational, financial, environmental and social considerations;
- Consider suitable sites including but not limited to those referenced by the delegation at the February 3, 2015 sewage commission meeting;
- The commission specifically excluded the following properties from consideration at its February 3, 2015 meeting: Mack Laing, MacDonald Wood, Baybrook (Stubbs property) and Filberg Parks; and
- Report back to the sewage commission regarding the recommended site (or sites) at the regular scheduled meeting of May 12, 2015.

The CVRD contracted Associated Engineering to provide professional facilitation services. The following tasks were completed in preparation for working with the Advisory Group:

- Review of the Advisory Committee composition and Terms of Reference,
- Advise the CVRD on stakeholder involvement,
- Review technical and background material,
- Meet with staff and engineering consultants to provide tips and techniques for effective ways to communicate with the public,
- Design the meeting process and draft meeting agenda,
- Contact stakeholders to identify interests and perspectives,
- Facilitate one to four meetings to develop a consensus agreement to be forwarded as a recommendation to the sewage commission and the CVRD Board,
- Review meeting notes,
- Prepare a summary of the consultation process and outcomes for presentation to the Board.

Memo To: CVRD

April 30, 2015

- 2 -

2 PROCESS

2.1 Review of the Advisory Committee Composition and Terms of Reference

The Terms of Reference provided a clear outline of the mandate and responsibilities of the Advisory Group (AG). The advisory group included three public representatives from the Croteau Beach neighbourhood.

The role for the Chair of the Advisory Group was to address those aspects of the meeting related to documenting the proceedings for the record. The Terms of Reference including: mandate, deadline, membership, conflict of interest, contact with the media and confidentiality were provided to members in advance, and reviewed at the first meeting. The meetings were then turned over to the facilitator to work through the details of developing a recommendation to the sewage commission.

2.2 Advise the CVRD on Stakeholder Involvement

Collaborative negotiation is an effective method to engage parties with diverse and opposing interests. It is effective for inter-jurisdictional decision-making and for higher levels of public consultation such as is envisioned in the Terms of Reference prepared by the CVRD. Collaborative negotiation is a structured process for parties to work together where competing and divergent interests are represented and there is a need to reconcile differences and provide a path forward or solution to a particular problem or situation. The following stages of the collaborative negotiation process provide opportunities to explore issues with the intention of finding areas of common ground:

- Identify issues
- Clarify interests
- Explore options
- Select options for mutual benefit

2.3 Review Technical and Background Material

The CVRD provided background material on work completed by previous engineering consultants and documents related to stakeholder interests prior to the first meeting. This information was reviewed and used to prepare the agenda and process for the first Advisory Group meeting and to become familiar with the issues. These documents included:

- CH2MHill - Forcemain Re-alignment Study (2005)
- Heuristic Consulting Associates – Site Selection Process (2014)
- CVRD - Comox No. 2 Pump Station - Keeping the Neighbourhood Informed (2014)
- CVRD - Pump Station Siting Study – Jane Place Versus Docliddle Road (2014)
- CVRD - Communication Plan – Land Acquisition: Future Siting Of Comox No. 2 Wastewater Pump Station (2014)
- CVRD Staff – Options and Implications(2014)

Additional maps and background information was also provided. This included letters to the Board from local residents.

AECOM provided two Technical Memos that were distributed to the participants in preparation for exploring options and drafting the final recommendation. These memos provided functional and cost analyses for each of four sites and a fifth alternative solution.

Memo To: CVRD

April 30, 2015

- 3 -

The Croteau Beach members provided background information to reflect their concerns and to explore options. This included:

- Martin Hagarty, local architect who presented his opinion on zoning for utilities and utility facilities
- a cost analysis for an alternative solution

This information was reviewed and included in the meeting agenda for discussion.

2.4 Meet With Staff and Engineering Consultants

The process for public involvement was discussed with CVRD staff and their Engineering Consultant AECOM in preparation for the first meeting. No concerns were identified. AECOM provided excellent summaries of the functional and financial aspects of the options under consideration.

2.5 Design the Meeting Process and Facilitate Consensus Agreement

Each meeting was designed to engage the members of the Advisory Group in meaningful dialogue. It was clear from the outset that members of the Advisory Group had differing views on a possible solution for siting the No. 2 Pump Station. As a result the process was designed to understand the underlying interests in order to find common ground. The five meetings addressed the following stages with the intention of drafting some form of consensus agreement.

One to four meetings of the Advisory Group were anticipated with a completion date prior to May 12, 2015. The meetings were designed to progress through the four stages of collaboration the details of which are outlined in Section 3. The final section includes the consensus recommendation from the Advisory Group to the sewage commission. The rationale, both for presenting the proposed options and for not putting forward other proposed sites, is also described in Section 3.

2.6 Contact Stakeholders to Identify Interests and Perspectives

The Advisory Group members were selected by the CVRD. Although some interests were known prior to the meeting as a result of reviewing the background information provided by the CVRD, no meetings were held with individual members prior to the first meeting. . The focus on issues and interests permeated the meetings with new perspectives and interests arising at each meeting.

2.7 Review Meeting Notes

Meetings were documented by CVRD staff and distributed to the core team of Marc Rutten, Kathy Porter and Ken Moysiuk for review prior to distribution to the Advisory Group. The meeting notes were adopted as read by the Advisory Group at the outset of each meeting. The first two meetings included sessions open to the public but once specific properties were identified the meetings were held in-camera. Meeting notes were used to prepare the agenda for subsequent meetings.

Memo To: CVRD

April 30, 2015

- 4 -

2.8 Summary of the Consultation Process

The consultation process is summarized in Section 3. The summary includes the key results and/or outcomes of each of the five meetings, the consensus recommendation to the CVRD Board through to the sewage commission and the rationale for the selection or rejection of each of the five options considered.

Memo To: CVRD

April 30, 2015

- 5 -

3 SUMMARY OF CONSULTATION

Meeting minutes were recorded by the CVRD and adopted as read at the beginning of each session and are included in Appendix A.

3.1 Meeting 1, March 9, 2015 – Identify Issues

Purpose

The purpose of the meeting was to establish the process for selecting a site for Comox No. 2 Pump Station. Guidelines for working effectively together and the collaborative negotiation process were presented. A consensus decision process was to be used throughout the process with the intention of presenting a draft recommendation to the sewage commission.

Issues

All members of the Advisory Group were invited in turn to identify issues and concerns in regards to the group's mandate. The following issues were identified:

- Siting: access to site; environmental risks; time and cost; viewscape; aquifers; land availability; DarkSky; size of lot vs size of building; environmental risk; Beech Street site selected without public input
- Function: Courtenay pump station nearing capacity; redundancy; tying into other systems i.e. the Courtenay pump station; old Field Mill site; Jane Place pump station; south sewer treatment plant; elevation is a factor (lower elevation has less impact, higher elevation can be done but there will be cost implications)
- Zoning: Beech Street property not in service area; zoning issues
- Facility functions (enhanced benefits/uses): washrooms; education; meeting rooms
- Quality of life: construction; access; noise levels; odours
- Design criteria: timing of related projects, length and elevation requirements
- Environment: Potential for damage to exposed portion of forcemain in the Willemar Bluffs area

Discussion

The following issues were discussed:

- Potential to tie into the South Sewer project
 - Currently a separate project
 - Some members considered this beyond the scope of the AG while others felt alternate solutions should be considered
- Pump station design and size
 - Design considerations will be to fit within the neighbourhood
- Construction including noise and traffic need to be managed appropriately for the surrounding neighbourhood
- Is the sawmill site a potential locale?
 - Unknown
- What are the impacts of higher and lower elevation?
 - Optimum elevation of 12 to 17m

Memo To: CVRD

April 30, 2015

- 6 -

- Is redundancy a consideration?
 - Would depend on state of existing infrastructure.
- What are the zoning requirements?
 - Perspectives varied as to whether zoning would need to be changed for the Beech Street site.

3.2 Meeting 1, March 9, 2015 (in Camera) Identify Issues

Purpose

To explore specific sites as alternatives to the proposed Beech Street property.

Discussion

Other potential sites were considered based on options provided in the Heuristic Report and from local knowledge. Interests included:

- Elevation
- Proximity to neighbourhood area
- Size of property
- Potential for property to be available for purchase
- Impact on the community – properties identified as ‘park’ were also considered but given direction from the sewage commission these sites were eliminated from future consideration
- Sites previously considered by CVRD
- Site in the neighbourhood being served rather than outside of the service area (Beech Street property not in service area)

Two alternate sites were presented:

- [REDACTED] Balmoral Ave, Comox
- [REDACTED] Hawkins Rd, Comox [REDACTED]

Further work to evaluate these properties to be completed by AECOM in preparation for the next meeting.

Decision

There were no blocks to consensus: *Include the two privately owned properties at Balmoral Avenue and Hawkins Road as alternative options for Comox No. 2 Pump Station siting prior to looking at other properties.*

3.3 Meeting 2, March 23, 2015 – Clarify Interests

Purpose

The purpose of the second meeting was to explore the issues in more detail in order to identify underlying interests and to develop criteria for selecting a site.

Interests

Memo To: CVRD

April 30, 2015

- 7 -

Five categories for criteria were presented: social, financial, natural, physical and technical to help frame the conversation and to avoid duplication. Once established the interests would become the criteria for selecting a preferred site. The proposed criteria were discussed to clarify the intent and a first draft accepted. It was recognized that some duplication existed and further work would be needed to refine the criteria. The criteria were grouped as follows:

Social

- community buy in
- effects on neighbourhood
- falls within the OCP
- relations among neighbourhoods
- impact of construction duration and activities (e.g.: noise, dust, equipment)

Financial

- cheapest isn't necessarily the best (from the property purchase and design perspective)
- no fall out effects (e.g.: legal action)
- life cycle costs, up-front costs
- impact on tax payer
- impact on budget
- impact of doing nothing or delaying

Natural

- protection of aquifers
- environmental risk
- infrastructure design
- sound, odour
- tree removal puts other natural features at risk
- room for buffer zone
- maintain character of neighbourhood
- add benefit to environment

Physical

- accessibility for construction and maintenance
- large enough so building doesn't overwhelm site
- elevation can accommodate
- proximity to other required services

Technical

- depth of excavation at site – cost, size
- impact on other infrastructure
- proximity to other services (e.g.: water, power, access)
- elevation determines design

Memo To: CVRD

April 30, 2015

- 8 -

- location includes length and lift impact design
- other design considerations

3.4 Meeting 2, March 23, 2015 (In Camera) – Clarify Interests

Purpose

To clarify the important interests underlying the issues presented in relation to specific proposed sites.

Discussion

For some members of the AG, the selection of an alternative site to the Beech Street location continued to predominate. For others, the concern was for the potential for a delay in starting construction was the overarching issue. In order to address this concern, the meeting moved in-camera. The AG considered specific properties as potential alternatives to the proposed Beech Street site.

The in-camera session began with a presentation by K. Moysiuk, AECOM. He provided an overview of different options for siting of the two alternate sites proposed at the previous meeting including site elevation and depth of pumps. An explanation was provided on the impacts of elevation on construction and cost including:

- Given the elevation of the Hawkins property a very deep well would be required
- Boring or directional drilling might be possible but geology could impact the method selected and would require additional geotechnical information
- The potential for impacts on the forcemain would require further investigation
- Upgrades to other pump stations could be triggered depending on the elevation of the site
- There would be a significant increase in cost for deeper wells
- It was noted that currently available cost estimates are only accurate within a 50% margin
- Questions were raised about the long term capacity of existing infrastructure

The AG explored the benefits and limits of different sites based on engineering design considerations.

Members of the AG proposed a number of possible sites including:

- Alternate Croteau Beach neighbourhood
- Sites from the Heuristic report
- Sites that met elevation, property size and location
- Sites within parks
- Sites at Jane Place pump station

After considerable discussion, park options were again taken off the table based on the direction from the sewage commission and the importance of the environmental values to the community. As a result of the discussion three new sites were proposed. The AG also agreed that the Beech Street property would be included in the assessment.

Decision



Memo To: CVRD

April 30, 2015

- 9 -

There were no blocks to consensus: *The following sites are considered to locate Comox No. 2 Pump Station:*

1. *The road right of way at the foot of Croteau Road at Midden*
2. *█ Hawkins Road*
3. *Site # 7 (Heuristic) at 102 Stewart*
4. *Beech St. property owned by CVRD*

Furthermore it was agreed that properties 2 and 3 would be 'indicator' sites for other properties in the vicinity with the same or similar characteristics.

3.5 Meeting 3, April 13, 2015 – Explore Options

Prior to the meeting further work was conducted by AECOM to provide information on the proposed sites. In addition, several members of the AG requested that a presentation on zoning be made to the group as a whole. This item was included in the agenda.

A presentation was given by Martin Hagarty, a local architect. He presented his experiences and opinions on planning processes and zoning for public utility 'use' and public utility 'facilities'. Discussion ensued and as a result a request was made of the CVRD to clarify the interpretation of zoning requirements for a pump station. Mr. Hagarty's presentation was included in the minutes.

The AG continued to review and edit the list of criteria developed to date. Duplicates were eliminated and additional issues explored. In order to consider the criteria in relation to the proposed sites the meeting moved in-camera.

3.6 Meeting 3, April 13, 2015 (In-Camera) – Explore Options

The AG continued to discuss the criteria and a final list agreed upon. Members would evaluate each site based on the criteria developed by the group in preparation for the next meeting.

Ken Moysiuk presented further details on the four proposed sites (AECOM Technical Memo, April 2, 2015). Details were provided on both technical and financial aspects for each site. Technical and financial considerations are part of the criteria for assessing site options and these were further discussed by the AG. A proposal was made to include the existing Courtenay pump station as a possible alternative site. Discussion ensued with some expressions of concern that this was outside the scope of the AG.

Decision

There were no blocks to consensus: *That Courtenay pump station is included for consideration by the Advisory Group as an alternative to a second pump station.*

A request was made for a legal opinion regarding the definition of 'utility' and 'utility facility' from the CVRD prior to the next sewage commission meeting.

Memo To: CVRD

April 30, 2015

- 10 -

3.7 Meeting 4, April 20, 2015 (In Camera) – Select Options for Mutual Benefit

Preparation

In preparation for the meeting, members of the AG were sent a spreadsheet with the criteria for site selection as identified in the April 13 meeting. The intent was for each member to individually rank each criterion as to the significance, the likelihood for some type of impact, the consequence of impact and the perceived risk as a result of the combination of their evaluation.

Purpose

To rank proposed sites based on criteria developed and accepted by the AG.

Presentations

Prior to completing the ranking exercise, the group received presentations on technical, legal, and cost.

Technical and Financial Update

Ken Moysiuk provided an update (AECOM Technical Memo, April 17, 2015). This memo included financial and technical considerations for the Courtenay pump station as an alternative site. Each site option was evaluated from the perspective of technical feasibility and anticipated construction cost. This evaluation was not to be considered a detailed review and as such, cost estimates were prepared within an accuracy of $\pm 50\%$ for comparison purposes.

Site	Elevation	Cost
1. South-east corner of Docliddle Rd. and Beech St.	Approximate elevation of 16 m.	\$11,750,000
2. North-west corner of Croteau Rd. and Balmoral Ave	Approximate elevation of 26 m.	\$24,300,000
3. South-east corner of Croteau Rd. and Midden Rd.	Approximate elevation of 5 m.	\$11,600,000
4. North-east corner of Stewart St. and Beaufort Ave.	Approximate elevation of 13 m.	\$13,500,000
5. Courtenay Pump Station (would not require locating a second pump station)		\$22,930,000

Revision of Cost for Courtenay Pump Station

Michael Smit presented a cost interpretation to support the proposed Courtenay pump station site. The analysis was based on the CVRD's 15 year capital plan. The interpretation suggested that costs could be further reduced based on a reduction in operating costs. Discussion on the presentation included questions on how to put a value on existing infrastructure not planned for replacement for another 10 years. Concerns were raised by some members of the AG that the basis for costs prepared by the CVRD and those prepared by other consultants (including AECOM) was not known making it difficult to evaluate the cost comparison. This presentation was included in the minutes.

Memo To: CVRD

April 30, 2015

- 11 -

Legal Opinion on Zoning

Marc Rutten provided a copy, in confidence, of the CVRD's legal position on zoning for review by the AG. There remained some perspectives at the table that this could/would be challenged depending on the site selected.

Discussion

Some members expressed concern that the criteria as presented were expressed in negative and positive terms that made it difficult to rank sites. Different experiences with 'risk' language resulted in some confusion as to the purpose of this exercise which was to assess the significance and risk of each interest/criterion as a first step in using the criteria to rank the proposed sites.

The criteria were reviewed; four duplicates were eliminated and 2 were re-written or combined. A ranking process was proposed to provide members the opportunity to rank properties in confidence. This was declined. An alternate method was presented and the group proceeded to provide a value for each criterion for each site. The ranking was subjective with each member offering a value based on their support for or opposition to each criterion for each property. Support was rated as a \checkmark , $\checkmark +$ and $\checkmark ++$. Lack of support was rated as X, $\checkmark -$ and $\checkmark --$. The ranking process demonstrated both some common interests and some continuing differences of opinion.

A request was made that additional financial information be provided at the next meeting. Discussion ensued that this could be a lengthy process and would ultimately be part of the process once a final site was identified.

3.8 Meeting 5, April 27, 2015 (In Camera) – Recommendation

Purpose

To develop a consensus recommendation on the preferred option(s) to be forwarded to the sewage commission.

Discussion

The results of the ranking exercise were presented to the group. The group was reminded that the criteria were selected by the group. Both objective (quantifiable) and subjective (values based) criteria were included in the ranking. Decisions however, were based on each individual's assessment of the relative value of each criterion in relation to the subject property.

Discussions revealed ongoing differences of opinion on the preferred location. Concerns included:

- Impact on tax payers
- Impact on capital budgets
- Value of existing infrastructure
- Accuracy of cost estimates
- Ongoing public involvement
- Consistency of messages
- Impact on existing infrastructure



**Associated
Engineering**

*GLOBAL PERSPECTIVE.
LOCAL FOCUS.*

Memo To: CVRD

April 30, 2015

- 12 -

- Consideration for interim measures to protect the forcemain on Willemar Bluffs
- Increased cost due to delay caused by further study



Memo To: CVRD

April 30, 2015

- 13 -

The ranking results are as follows with the topic ranked property for each category in yellow:

Subject Property:		Beech	Balmoral	Midden	Stewart	Courtenay
Objective Criteria						
Human / Social		5	3	4	2	1
1	Neighbourhood interruption/quality of life	9	19	19	19	26
3	Viewscales protected, footprint for buffer zone	16	20	14	23	21
4	Number of households affected	14	18	18	16	24
6	Construction impacts can be mitigated	12	20	18	21	24
7	Community buy -in	0	9	16	8	24
Sub-total		51	86	85	87	119
Natural		5	3	4	1	2
8	Drinking Water Protection - Safe drinking water - protection of aquifer	3	13	8	24	24
9	Impact of construction on existing environment	24	24	24	24	24
10	Room for access, environmental benefit	12	21	15	21	24
11	Archeological impact	8	24	8	24	24
12	Meets or exceeds any regulatory requirements	18	18	11	24	17
Sub-total		65	100	66	117	113
Financial		2	4	1	5	3
13	CVRD 10 year Capital Plan	24	14	24	14	26
14	Project within budget	24	14	23	8	8
17	Cost to re-zone	15	2	15	2	12
18	Operation and maintenance costs	14	17	15	15	21
19	Cost of time delay	12	8	15	5	11
Sub-total		89	55	92	44	78
Technical		1	1	1	2	2
21	Elevation 12-17 m range accommodates design	24	24	24	24	24
22	Impact of location on forcemain	24	0	24	24	0
23	Site acceptable to multiple jurisdictions	16	32	16	0	16
24	Forcemain tie in	16	24	16	16	24
Sub-total		80	80	80	64	64
Physical		5	4	2	3	1
25	Services are accessible	14	18	14	18	18
26	Accessible for construction	20	24	21	23	28
28	Accessible and on desired route from foreshore	24	8	24	24	15
29	Conforms with OCP, zoning and by-laws and processes	12	2	9	9	18
Sub-total		70	52	68	74	79
Total combined		355	373	391	386	453

Memo To: CVRD

April 30, 2015

- 14 -

Negotiation

The ranking process demonstrated slightly more support for the existing Courtenay Pump station as a site option with the other three sites rating very close overall. The Beech street property ranked lowest. As there was no clear option, following some further discussion the members broke into smaller groups to discuss options going forward. The facilitator caucused with each group and invited the parties to consider the benefits and limits of either reaching or not reaching a consensus.

Several members of the AG felt that further study should be conducted in order to better evaluate the proposed options. CVRD expressed an opinion that this could take six months. Other members felt that a cost effective site for a pump station should be selected. In the end a compromise was agreed to by the group.

As a result a settlement agreement was proposed and agreed to by a consensus of the entire Advisory Committee.

4 SETTLEMENT AGREEMENT

The **Comox No. 2 Pump Station Site Advisory Group** recognizes that given:

The interests of the *community representatives* to identify an alternative solution to the proposed Beech Street site
And

The interests of the *elected officials and CVRD staff* to move forward with the finalization of a plan that respects the community at large and the urgency of addressing the state of current infrastructure;

The following be forwarded to the sewage commission

The Advisory Group recognizes that:

- Moving forward in a timely manner is critical in terms of the potential impact on the Willemar Bluffs
- The Courtenay pump station is nearing capacity
- Community support will be needed to borrow money to complete the project.

The Advisory Group agrees that the preferred option must consider both the potential impact on the foreshore and the potential impact on aquifers in the area. Furthermore the AG agrees that Croteau Road is the best location for the pipe to mitigate the impact on the Willemar Bluffs.

Therefore the Advisory Group recommends to the sewage commission:

1. That further financial and technical work be completed within the next 6 to 8 months so that from among the options considered a preferred option can be identified that considers the financial, environmental, social and technical considerations discussed at the table. This further study should be conducted to understand:
 - the Courtenay pump station as an alternative solution
 - the location at the south end of Croteau Road as an alternative solution

Furthermore the AG recognizes the need to start detailed engineering so that construction can be started in 2016.



Memo To: CVRD

April 30, 2015

- 15 -

2. That the public be provided with information on the rationale for the site selected by the Sewage Commission going forward.

The **Advisory Group** recognizes that it has not been possible to reach full agreement on the following issues:

- the selection of one preferred option; and
- whether or not the remaining sites considered during the process be removed from future consideration.

Signed this 27th day of April, 2015.

List names and provide signatures...

In witness thereof:

Kathleen Porter, Civil Mediator