NORTHWEST NANOOSE RESIDENTS ASSOCIATION MADRONA SERVICE AREA SANITARY SEWER INFORMATION MEETING NOTES

January 22, 2007

HEAD TABLE

Kirke MacMillan:	NNRA President
Ryan Pettersen:	NNRA Sewer Committee Chairman
Martyn Green:	NNRA Sewer Committee Vice-Chairman
John Finnie:	General Manager Environmental Services, Regional District of Nanaimo
Wayne Moorman:	Manager Engineering Services, Regional District of Nanaimo

GUESTS

George Holme	Area 'E' Director, Regional District of Nanaimo
Frank Van Eynde	Alternate Area 'E' Director, Regional District of Nanaimo

(Note: This meeting was an informational meeting only and formal minutes were not taken. These notes represent the major talking points of the meeting)

1. CALL TO ORDER

- The meeting was called to order by Kirke MacMillan at 7:35 PM.
- The Head Table, NNRA Directors and Guests were introduced by Kirke
- Kirke stated that the meeting was scheduled to provide residents with as much information as possible on the sanitary sewers and to provide an opportunity for residents to ask questions and make up their own minds on whether they supported the installation of sanitary sewers. He pointed out that the NNRA Directors and Water & Waste Committee have been working closely with the Regional District of Nanaimo (RDN) and that the RDN has undertaken to prepare an application to obtain Federal/Provincial funding under the Municipal Rural Infrastructure Fund. The application is a complex 11-page document that will require significant effort to complete.

2. OPENING REMARKS – RYAN PETTERSEN

- Ryan thanked the members of the Water & Waste Committee who had volunteered to distribute the meeting notices.
- He told residents about the Canada-British Columbia Municipal Rural Infrastructure Fund under which the federal and provincial governments would each commit \$51 million, with participating local governments expecting to match this amount for a total provincial benefit of over \$150 million.
- He told residents that the Madrona Area Sanitary Sewer Project was classified as a Green Project and would qualify for up to 66% funding if we were successful.
- Ryan explained that the process would be:
 - The RDN would submit our funding application by January 31st
 - A decision on who received the grants would be announced in the summer
 - If we were successful the RDN would send out a petition to each of the 317 property owners. We would need 50% support and 50% of the assessed property value to succeed.
 - Once approved the project would go out to tender and construction would start in 2008 and be finished before 2010.

- Ryan advised residents that he felt that if your system was 25-30 years old it was reaching the end of its life, but cautioned residents not to think it works fine just because your toilet flushes.
- Ryan stated that, in his opinion, at Wall Beach and other low lands, groundwater levels were at historic highs and that groundwater was running through our septic fields on its way to the ocean.
- Ryan referred to the 1996 Craig Bay Sewer Extension Agreement that allowed Madrona Service Area residents the right to connect to the sewer system that has a treatment plant in French Creek.
- He informed the residents that they were limited to 5 minutes on their questions and that Anne Voshall would let residents know when they had 1 minute left.
- He requested that residents hold their questions until the speakers had finished as he expected that the speakers would answer a lot of their questions.

3. SEWER SYSTEM COST ESTIMATES – KIRKE MACMILLAN

• Kirke reviewed two cost related slides. The first slide summarized the "Initial One Time Cost Estimate" and the "Annual Cost Estimate" under No Grant, 50% Grant, and 66% Grant scenarios. The second slide covered various cost estimates associated with the resident's costs of connecting to the RDN sewer. Copies of the slides are attached to these notes as Attachments #1 & #2.

4. REGIONAL DISTRICT OF NANAIMO REMARKS – JOHN FINNIE, WAYNE MOORMAN

Wayne noted that the sewer along the foreshore to Pacific Shores Resort was sized for the Madrona/Wall Beach areas and that servicing was permitted in the RDN/City of Parksville servicing agreement. Wayne explained the group A, B, and C lands. San Pareil, being group A, cannot get sewer unless they join the City of Parksville. Madrona/Wall Beach are group B lands and they can be connected to the City of Parksville sewer and ultimately the French Creek Plant. Group C lands are the lands currently being subdivided on the south side of Northwest Bay Road and can only be connected to community sewer if both the RDN and the City agree to the connection. At this time, the City of Parksville will not permit the sewering of these lands and thus the lots were made bigger to support on-site sewer disposal.

5. QUESTIONS AND COMMENTS FROM THE AUDIENCE

(Note: The names of audience members who asked questions were not recorded. The actual questions and answers in this document are paraphrased and not all audience questions were recorded)

Comment by a Resident: After expressing concern about other aspects of local pollution, particularly backyard burning, this resident commented that his support for this project would depend on two factors:

- That the roads be completely repaved after the installation rather than simply being patched.
- That he be allowed to dictate the location along the roadway where the sewer connection in installed, in order to avoid cutting his driveway.

Question:

How would be the annual costs to residents change over time?

Answer: (Kirke MacMillan):

The financing costs would remain steady for their duration. Operating costs would rise according to inflation and other factors. At this time it is unknown whether or not the City of Parksville would impose charges for the use of their sewer pipes or pumping stations. Latecomer fees for Madrona Service Area connection to the sewer, if they ever were applicable, have expired.

Question:

How will the sewer system deal with BC Hydro power failures, which have become all too frequent lately?

Answer: (Wayne Moorman):

Main sewer lift stations would be provided with back-up diesel generators. The main sewer lift stations are designed so that their visual impact is minimized and noise suppression equipment is installed on the back up diesel generators.

For residents who have pump chambers installed on their property, the pump chamber is designed with excess storage capacity that will serve for a period of time when there is no power. However, residents will have to reduce their sewage effluent output during periods of power outage.

Question:

What are the criteria for the petition to pass?

Answer: (John Finnie):

The petition must have the support of 50% of the residents (approximately 158 in this case) whose property value represents 50% or more of the total assessed value of the properties in the area to be served by sewers. (We have attached a copy of the Local Government Act, Part 24 –Regional Districts, Section 797.4(3), Referendums regarding services, to these notes for reference.)

Question:

How many properties will require individual pumps on their property?

Answer: (Wayne Moorman):

There are approximately 131 properties that will require individual grinder pumps. In order to ensure consistency, these pumps will all be supplied as part of the main installation contract.

Question:

There is a 9-lot subdivision being constructed near Wall Beach Road. How will this property owner get to vote on the project?

Answer: (Wayne Moorman):

This property owner at this time will have one vote as there is one registered property. Naturally, if the property is subdivided at the time of petitions, then each property owner will get a petition allowing them to vote.

Question:

What would be the time limit for residents to hook up to the sewer?

Answer: (John Finnie):

The infrastructure grant funds would be awarded with the expectation that residents would hook up to the system in a fairly short time frame, probably in the order of one year. An extension may be granted, but it is likely that all residents would have to be hooked up within two years of completion of the sewer. (Subsequent to the meeting, the RDN has advised that they have a collection bylaw that provides for mandatory connection if required.)

Question:

In subdivisions serviced with sewers, the minimum lot size is much smaller than the current lot sizes in Madrona. Will there be a proliferation of smaller lots when the sewers are installed?

Answer: (Wayne Moorman):

Some lots within the Madrona area may be suitable for subdivision with the installation of sewers. This may result in the number of sewer connections increasing from the initial 317, to approximately 370. The system would be able to accommodate this.

Question:

Where there is already a pump installed, will it be able to be re-used?

Answer: (Wayne Moorman):

If the pumps are liquid only as the septic tank settles out the solids, then the pump would not work unless we used the principle of STEP systems; a grinder pump does just that, it grinds up the solids so they can flow in a small diameter force main.

Question:

A number of residents in the area are currently deferring their property taxes. What portion of the costs for this project could be deferred in the same manner?

Answer: (John Finnie):

The one-time charges could not be deferred. It is unlikely that the annual operating charges would be deferred. Possibly, the financing charges could be deferred.

Question:

What would the sewer lift stations look like?

Answer: (Wayne Moorman):

Most of the sewer lift station is constructed underground and would not be visible. Each lift station would have an electrical kiosk and breather pipes that would be above ground. As well, there would be a yard light (for security), a flashing light to indicate station trouble and (possibly) an audible alarm.

Question:

As a part of the sewer project, can something be done about the hill on Beaver Creek Wharf Road?

Answer: (John Finnie):

No, roads are not the responsibility of the RDN.

Question:

If the Federal and Provincial Governments are both (possibly) going to provide grants for this project, will the RDN be providing a grant as well?

Answer: (John Finnie):

No, the RDN individual service area budgets are supported entirely by taxes and taxes collected from one service area of the RDN cannot be used in another area.

Question:

What is the standard of sewage treatment at the French Creek Plant? **Answer: (Wayne Moorman):**

The French Creek plant provides secondary treatment for the sewage.

Question:

A quick calculation shows that a referendum will cost approximately \$60 per resident. If a petition is estimated to cost \$25 per resident, why can't the RDN conduct a referendum, since it is not that much more money compared to the other costs facing the residents?

Answer: (Ryan Pettersen)

We believe that \$25 is better than \$60. (Subsequent to the meeting, the NNRA Directors were of the opinion that the question of a referendum verses a petition would best be resolved after further discussion at a subsequent sewer information meeting.)

Question:

Where it is possible to do so, can a group of residents combine their sewers together on the beach side of their house and have only one pump up to the road?

Answer: (Wayne Moorman):

The current design is preliminary in nature. If the project proceeds to detailed design, then back lot servicing situations and other configurations would be considered. Many of these would require right of way dedications on private property.

Question:

What are the options for a resident whose septic tank fails between the time of sewer system approval and the time that the system becomes operational?

Answer: (Wayne Moorman?):

If that situation arose, the RDN would look favourably on allowing an interim pump and haul from the residence at a reduced rate until the sewers were completed.

Comment by a Resident:

- Been in the area since 1955.
- General soil conditions are a porous layer over impervious rock or clay, a situation similar to a sponge on a sheet of glass
- Water or effluent percolates down to the impervious layer and travels out to the ocean
- Has seen this happen with a garden hose running into a hole in the ground. After a short while water can be seen flowing out of the bank nearby.
- Some areas of the subdivision are swampy, which create their own disposal problems.

Note: The NNRA felt that the comments made by Mr. Vern Dombrowski were relevant to the discussion. Subsequent to the meeting, we approached Mr. Dombrowski and asked him if he would be prepared to provide us with his comments in writing. We have attached his comments to the notes as Attachment #3.

Comment by a Resident:

One resident, who lives on Strougler Road, stated he was extremely upset about the method used to clear the newly cleared lot on Strougler.

Comment by a Resident:

One resident claimed she spoke to a biologist who told her that the green slime on the beach was an indicator of a healthy beach.

6. STRAW VOTE

Just prior to the end of the meeting Ryan Pettersen asked for a straw vote to indicate support for the installation of sewers. There were approximately 100 people still left in the meeting at this time and it appeared that a large majority was in favour (too many to count). When those not in favour of the project were asked to show hands, about 11 people raised their hands.

7. ADJOURNMENT

The meeting was adjourned at approximately 9:30pm.

8. ACTION ITEMS FOR FOLLOW-UP

- Obtain confirmation from the City of Parksville in writing confirming they would not charge fees for the use of their sewer system pipes or pumping stations.
- Confirm if the financing charges for the project may be deferred (similar to property tax deferral).

9. PREPARATION OF NOTES

We believe that these notes capture the essence of the information presented and the questions and responses provided at the above meeting.

Greg Field, Secretary, NNRA Kirke MacMillan, P. Eng. President, NNRA

ATTACHMENT #1:

Sanitary Sewer Extension Madrona Service Area Cost Estimates

A) Initial One Time Cost Estimate No Grant 50% Grant 66% Grant

RDN Capital Charge RDN Building Permit	\$1,795.00 400.00	\$1,795.00 400.00	\$1,795.00 400.00
RDN Recovery of Petition/ Advertising Costs	25.00	25.00	25.00
Connection to RDN Sewer Septic Tank Pump Out/ Decommissioning	3,00 <u>300.00</u>	00.00 3,0 <u>300.00</u>	000.00 3,000.00 <u>300.00</u>
Total	\$5,520.00	\$5,520.00	\$5,520.00

B) Annual Cost Estimate

Annual Parcel Tax	\$1,540.00	\$770.00	\$525.00
Annual Operating Costs	<u>430.00</u>	<u>430.00</u>	<u>430.00</u>
Total	\$1,970.00	\$1,200.00	\$955.00

ATTACHMENT #2:

January 16, 2007

Lewis Vermeulen,

Ditching approx 100', easy digging.
100' of 4" sewer line from the dwelling to the RDN hook-up where gravity permits.

Pump-out existing tank and fill with sand. Estimated cost\$2500.00

- As above but ditching 250' Estimated cost.....\$3200.00
- Sewage pump, high and low level alarms installed in existing tank. Ditching approx 100' to RDN hook-up, Estimated cost......\$3500.00
- Rock breaking runs in the vicinity of \$250-400 per hour. Time depends on depends on density of the rock and in most instances rock would have to be hauled away. In 2-3 hours a machine can break quite a bit of rock.

Some sewer lines may come out on the far side of the building, which means bringing the sewer hook-up line around the dwelling. This may involve a little more time.

None of the above estimates include landscaping or the permit fee.

Dave Bedard & Sons Excavating 250 468 9113 res 250 248 1416 cel

ATTACHMENT #3:

Vern Dombrowski 1456 Madrona Drive Nanoose Bay, B.C. V9P 9C9

January 24, 2007

To whom it may concern:

Re: Madrona/Wall Beach Area Sewer Disposal System

I have been asked by the Northwest Nanoose Residents Association to give a brief history of my 27 year involvement and observations concerning septic systems in the Madrona/Wall Beach area.

I grew up and have lived in this area since 1955. During this time, I have seen the changes to the beaches and rock banks – from clean, bare rocks to brown/green slime covered banks.

I started building homes in 1972, moved to Madrona Drive in 1979 and have built many homes in the subdivision since then. I was concerned immediately that we had a septic problem on Madrona Point (Madrona Dr). I noticed that, usually within a week of people occupying their homes, water would start running down the rocks to the beach.

When we excavated for a foundation, we would hit a one foot thick layer of broken pieces of sandstone/conglomerate rock on top of solid smooth rock which sloped to the beach. The layer of sandstone/conglomerate rocks acted just like drain rock – water was able to run freely through it. On top of this fractured rock layer was approximately a two foot layer of dirt and pebbles. At one project site, the neighbours were watering a fruit tree, which was located above and to one side of the excavation. They forgot to shut the hose off - it ran all night. In the morning when we started work we saw water running out of the fractured rock at the top side of the excavation. It crossed the smooth rock to the other side of the excavation, into another fracture and down to the beach.

In some of the earlier fields, the drain rock was less than a foot above the fractured layer. When these fields became operational, the water ran through this fractured layer directly towards the beach. Later, as the rules changed, the septic fields were built with a gravel base which leveled the field out. With the slope of the land, the upper back line of the septic field was still close to the fractured layer.

Also, some of the earlier fields were located on the ocean side of the house. After another rule change, the fields had to be placed at the road side of the house. The water then ran through the fractured layer, to the drain tile, around the house and to the beach.

In the early years, on my own, I did a couple of dye tests and found that the dye would come through to the beach in about six hours. In 1983-1984, I contacted the Health Inspector - Peter Lowden. He agreed that there was a problem but the fields were being installed to the regulations at the time and therefore he could do nothing. His analogy was – take a flat piece of glass, put a sponge on it, saturate the sponge with water and watch as the water runs off the piece of glass.

A few years later, after Peter left the area, I contacted the next Health Inspector. He came to a property on the east side of Madrona Drive, had a look, and took a sample of the salt water - from about 10 feet off shore on a south east windy day. To my mind, he was testing water flowing on to the shore from the Beachcomber direction. I pointed out to him that the seaweed was moving in towards the shore which meant the water was coming towards the shore. I asked him if he could take a sample of the water running down the bank – he said they don't do that. He had the sample tested and said there was nothing harmful in it – which was no surprise to me. It was obvious to me that he wasn't interested in pursuing this issue and I let it drop.

The Ballenas/Douglas Crescent area used to be a swamp (a friend of mine used to duck hunt there when he was a kid). When the area was developed, the health requirements for the developer were to dump approximately 8-10 loads of pit-run gravel on each lot. Once purchased, some of the owners brought in any cheap fill they could get and then let it sit for a few years before they sold the lot. The new owners did perk tests in the summer. Since then, the winter assessment rule came in. I purchased one of the driest lots, did a perk test 8-10 years ago and it failed. This proves to me that these others lots would never have passed a winter assessment. For example, one of the recently built on lots were required to have pump and haul. Our lot barely passed 3 years ago and last year we had to put in a full treatment plant. There have been problems with fields in this area.

Other lots on the upper side of Madrona Drive have about two feet of dirt over about one foot of sloppy clay over glacial till. In the past, some lots have experienced some seepage into the roadside ditch.

This is only a brief outline of what I have noticed over the years. Please feel free to call me at my home (468-7038) or on my cell (248-7511) if you wish any further information.

Yours truly,

Vern Dombrowski, President Dombrowski Construction Ltd.