This is a letter that was provided to the Ross Haven Council by Mr. Vic Danzo. Council has added some comments in *{blue}*. These comments have been <u>vetted and confirmed with the North 43 Lagoon Commission and their contracted engineers</u>.

AN OPEN LETTER TO THE RESIDENTS OF ROSS HAVEN RE: THE PROPOSED SEWER SYSTEM

Dear friends and neighbors;

My name is Victor Danzo, and I have owned 837 Ross Haven for the last 30 years. I am writing this letter to you in regards to the Village of Ross Haven's proposed sewer system and specifically as a reply to the December 30, 2021 letter that we received from Council.

Firstly, I would like to thank Council for preparing and circulating their letter on December 30, 2021 – having written this reply I can appreciate how much time and research went in to it.

That said, below you will see that I am not a proponent of the sewer system and that I take issue with many aspects in Council's letter which I found to be biased in favor of the proposed sewer project. Overall, I found Council's letter to be misleading and to have selectively omitted many important details that you, the lot owner and taxpayer, should know about before you can make an informed decision. As such, I encourage you to read my reply and to consider my counterpoints before completing the survey which Council has circulated.

By way of background on myself:

- I am a retired electrical tradesman with 40 years' experience in the maintenance field, with 2 years specializing in Project Review for the City of Edmonton
 - Specifically, I have worked on many major projects proposed to the City of Edmonton and have experience and training in: reviewing complex engineering reports, troubleshooting potential issues, and making recommendations to the engineers about practical issues with their proposed designs
 - o As a ticketed electrician, I have also changed countless electrical pumps, motors, and controls (and I can tell you first hand that they are more tedious to maintain than has been suggested and that their operational life is typically far less than 10 years)
- I have taken time to review the proposed sewer project at Ross Haven, including the Engineering report prepared by Stantec and I would like to share my opinion with Council and the Village.

AN OVERVIEW OF MY POSITION

Like many of you, my cabin is seasonal and has been used primarily as a summer vacation destination with little to no use during the winter months. I have a self contained holding tank on my property to manage wastewater, and during this time I have never had an issue with it or with the current vacuum truck service available. The current system is more than adequate for my present (and future) intended use of my lot and the cost for me to maintain and operate this system is reasonable. I feel that going ahead with this new sewer project would cost us a lot of money and solve only a few (if any) perceived problems.

I take issue with Council spending approximately \$1,100,000 of tax-payer money (approx. \$800,000 of saved money and approx. \$300,000 of borrowed money) and an additional (estimated) \$80,000/year in maintenance to implement this sewer system. I believe that there are far better uses that Council could put this money towards (for instance: paving the roads or beautification of the community). Personally, I believe that the (approximately) \$1,100,000 of our tax dollars that will be used to fund this project is not a proper or justifiable use of our collective money.

As a lot owner who does not intend to tie-in to the system (even if it is approved), I find it unfair that I am being asked to heavily subsidize the few lots that do elect to tie-in. Should the system go ahead, I would prefer to see that it be fully "user-pay" and "user-funded" much like the electrical and natural gas utilities presently available in the Village - in short, no portion of the costs of this project should be borne by the lot owners that choose not to connect their seasonal cabins to it.

{Council: Utility companies do charge for the distribution systems available to their users. Even if you produce power and sell it back to the Electrical Utility, you are charged for the distribution system. You only save on the amount of power used.}

MY SPECIFIC ISSUES WITH THE DECEMBER 30, 2021 LETTER

In *italics* below, I have restated a few points that Council has expressly stated in its December 30, 2021 letter, and to each I have written my response to same below in RED:

- 1) If a high number of lot owners tie into the system, the benefits to the village include reduced smells while vacuum trucks are in the village, a safer community given fewer large trucks travelling in the village, and reduced maintenance costs on our village roads and Range Road 34.
 - a) Vacuum trucks will still need to come in to the village to service all lots that do not connect as well as to occasionally pump out the solid waste of those that do connect (Tankage requires sludge clean-out once every 3 5 years. North Lagoon Commission, Appendix A, item 15).

{Council: You are correct. However, if we proceed with the project, the people that are currently getting their tanks pumped out frequently will only need to call them once every 3-5 years! Vacuum trucks will only be needed to service those that do not connect. We will see a reduction of vacuum trucks in the village if we proceed with this project.}

b. This means that there will only be a small (if any) change in road use and its wear and tear. {Council: We believe this will reduce the volume of vacuum trucks in the village if we proceed with the project.}

- 2) For lot owners that create a higher volume of effluent, this will be more economical than utilizing vacuum trucks. Emergency pump outs will not be an ongoing concern.
 - a. This will, of course, vary lot by lot and based on seasonal or full-time use, but when considering the economical efficiency of the sewer system project compared to vacuum trucks, the cost of the lot owner's electricity and operational maintenance also must be considered.
 - i. The exact cost to each lot owner will vary depending on use, but these costs need to be factored in and considered before a lot owner can make an informed decision.
 - ii. This system also requires the lot owner to pay for, maintain, and operate a pump at the lot owner's sole cost

- b. In addition, many lots do not have a suitable electrical panel to handle the increased load and draw that this pump and system will require. These upgrades will require proper permits and high initial costs in upgrading electrical services (panel is full).
- c. Overall, I dispute that there will be any cost savings for the average lot owner, and if there are some cost savings for a select few lots that produce high amounts of effluent, these savings will be relatively minor in comparison to the current system and will only be realized because the true costs of the entire system are being heavily subsidized by the rest of us

{Council: The recommended pump is a ½ HP pump that is 120 volt and uses single phase power. At a power cost of \$0.10 per kilowatt-hour the estimated cost of pumping 833 Imperial gallons is \$0.03. Average wastewater generation is 80 Imperial Gallons per person per day, therefore the pump power costs are estimated at \$12 per person per year.}

- 3) For lot owners that do not immediately connect to the system, your annual fees payable to the village will only increase by \$125 annually (\$10.42 per month).
 - a. This is a true statement, in that your annual taxes will only increase by \$125/year but it fails to account for the \$175/year we are already paying (for a total of \$300/year that we otherwise wouldn't have to pay). As such, the converse is also true in that if we elect not to proceed with the system, this effectively amounts to a tax decrease of \$300/year.
 - i. Similar to my point above, even if I elect not to tie in, I will be paying \$300/year to subsidize those that do and I would still need to pay a vacuum truck to remove my effluent in addition to this \$300/year

{Council: You are correct that your fees, if we proceed and you don't connect, will be \$300 / year. However, if we do not proceed, the Water and Sewer Levy of \$175/year will remain on your tax bill. This levy will be for the annual membership of the lagoon, and future cash calls of the North 43 Lagoon Commission.}

b. Also keep in mind that this \$300/year amount is also subject to increase and/or to be varied if a new Council is elected

{Council: You are correct, this amount could increase. Costs could also increase if lagoon operating costs increases, or if a cash call comes for lagoon expansion. This amount could decrease once the loan is paid off, or if the North 43 Lagoon Commission is able to reduce their operating costs.}

c. Like many of you, I would prefer to put this \$300/year towards my vacuum truck fees as this amount approximates what I have historically been paying to have my septic tank pumped out each year

{Council: See our comment under point 3(a)}.

- d. Lastly, while this Council has stated that lot owners will not be required to connect to the system, once it is built a future Council may mandate that we all have to tie into the system at a future time
- 4) Access to a sewer system should reduce illegal dumping of grey or black water into water bodies or surrounding areas.

a. Elimination of illegal grey water dumping requires a lot owner to inspect and (where required) re-plumb their a sewer system. If the lot owner does not re-plumb their home, a new sewer system will not reduce grey water in or around the village. Only proper inspections and maintenance can do this – not a new system

{Council: You are right. It is illegal to dump sewer water into water bodies or surrounding areas. The hope is that if there is a sewer system available, that if anyone is dumping sewage illegally, they would connect and allow the sewage to be treated properly. The village or other authorities may inspect a property, with sufficient notice or authority, if there is suspicion of illegal dumping.}

- 5) Having access to a sewer system makes your property and the village more attractive to potential purchasers.
 - a. No evidence has been adduced to support this point and in my experience potential purchasers looking for a summer cabin are not expecting to have a sewer system in the first place

{Council: Recent sales in the Summer Village of Castle Island have indicated that new buyers were motivated to this village due to the ability to connect to a wastewater system. The issue of "added value" can be determined by a certified assessor. As of the writing of this response, we have not had time to reach out to our assessor to discuss.}

- 6) [paraphrasing] Council has also stated that they do not anticipate the need for a lift station (which would add significant cost and potential for issues)
 - a. Contrary to the above, the Engineer's report prepared by Stantec expressly states: Should community growth take up significant capacity in the system, it may facilitate the need for future lift station installation [at Page 14 para 5].

{Council: There is no need for a lift station to serve the Summer Village of Ross Haven given that the recommended system will be a "low pressure wastewater system". This low-pressure system can be expanded to allow for additional development and/or developments in the Ross Haven and Gunn areas. The overall system is designed to handle approximately double the number of current lots in Castle Island, Yellowstone, Ross Haven, and Gunn area.}

OTHER GENERAL CONCERNS THAT I HAVE:

1) Lot owners Operation and maintenance is crucial to prevent breakdowns which could cause faults on the private property and in the main system. Specifically, page 5 (para 5) of Stantec's engineering report states that:

The homeowner must ensure that no deleterious materials go down their drains, as they can damage and/or clog the pump or clog the check valve at the end of the pump, and potentially cause sewer backups. Items such as wet wipes, sanitary napkins, floss, and other hygiene products are known to clog and damage pumps, with repair costs often potentially exceeding \$2,000, and pump replacement costs being in the order of \$5,000. A two-compartment holding tank is recommended so that these or other materials have the chance to settle out prior to entering the pump, thereby reducing the risk of pump failure.

- 2) The home owners operation and maintenance can have a direct impact on the operation of the whole system. For example an improperly installed filter could cause problems with deleterious entering the system.
- 3) In my experience, these pumps are prone to breaking and costly (and time consuming) to maintain. I have noted that the Orenco pump on display at the village shed will pump between the on and off floats (approximately 30 gallons), this means to pump out 900 gallons of effluence the pumps and controls will operate approximately 30 times reflecting to a higher cost in maintenance (unexpected breakdown repair). There is also the noted issue of freezing and/or line failure and a chance that if your pump fails your cabin may become flooded with effluent. These problems do not exist with the current system.

{Council: The volume of wastewater to be pumped is stored in the holding tank and not the 30 gallons tank as viewed by the homeowner. This pump system would still need to be connected to the holding tank. We acknowledge that pumps can break, like any mechanical piece of equipment. We have heard from some owners of similar systems that their effluent pumps, that pump out in a similar manner and in a similar system as proposed for Ross Haven, have not had problems for over 10 years. Further, your pump is NOT the mechanism that prevents your cabin from becoming flooded with effluent. The check valves prevent your cabin from being flooded.}

4) The \$80,000/year cost associated with operation and maintenance of the sewer system (which is likely to increase yearly) is only adding an additional (and permanent) yearly expense to our Summer Village that we do not need to incur.

{Council: Part of the \$80,000/year includes the Lagoon O&M costs}.

5) The Village spending approximately \$1,100,000 of tax-payer money when this money could be put towards better use. Further, keep in mind that the \$2,400,000 of the project that is being covered by the federal and provincial governments is also our tax money that we pay for each and every year when we do our income taxes – this is not "free" money

{Council: You are correct, it is not free money. However, the grant offered will be given to other communities if Ross Haven does not use it. It will not be given to Ross haven for our discretionary use or refunded back to rate payers.}

6) The fact that this system will only benefit a few lot owners, but that the costs will be bourn by all of us – whether we tie in to the system or not. Taxpayers that do not tie in to the system will receive no benefit at all for their \$300/year contributions

{Council: If we proceed with the system, and you do not connect, \$175 of the \$300 can be attributed to the lagoon O&M and future expansions that we would need to contribute to. The remaining \$125 could be viewed as your contribution to the infrastructure of the village.}

- 7) Possible breakdowns with the system that the 43 Lagoon Commission (the village) would be accountable for and responsible to repair.
 - a. According to the Stantec Engineering Report (item 5 page 14) Flushouts are used as part of semi-annual to annual maintenance procedures in which clean water is pumped

through the system at relatively high velocities to clear buildup of sediment and prevent potential blockages. The flushouts are installed at the branched line ends and are spread over the span of the system, spaced approximately 200-300 meters apart. In addition to flushing, the flushouts can also assist with emergency repairs of broken lines by providing a temporary release point in which a collection truck can temporarily relieve sewage for areas that are upstream of the system outlet and outside of the zone in which the repair is being made.

b. With a small percentage of lot owners connecting and if this proper maintenance is not performed, the lines could fail. The engineer has included this possible prediction of a breakdown.

{Council: The North 43 Lagoon Commission currently contracts the County of Lac Ste. Anne to perform all the maintenance that is required for the existing systems. This would be the same for the system in Ross Haven if the village moves forward with the sewer system. These maintenance costs are included in the fees previously mentioned. As well, the Lagoon O&M budgets provides for funds for possible main line fund repairs.}

- 8) The possibility of home owner service lines freezing. The December 30 letter from council (Home owner questions item 4) states the home owner should undertake a Risk Assessment, is the average home owner capable of completing this Risk Assessment?
 - a. The Stantec Engineering Report (Item 5 page 14) states:

The line is designed to have a depth of cover that meets or exceeds 2.70 meters below ground surface to avoid frost penetration and reduce the risk of freezing during the winter.

The service connection line at the top of the Orenco pumps in most cases is not below 2.7 meters.

b. The Stantec Engineering Report (page 23) states:

Freezing; All service lines, collections lines, and transmission lines are recommended to be installed below the frost line in the area. In cases where lines need to be installed in the frost area, these lines should be protected from freezing.

Extra installation operation and maintenance costs to the lot owner for heat tape.

{Council: A 2.7m depth is typically applied where frost can be driven into the ground. Because there won't be regular traffic going over the service or transmission lines, we feel the 1.5m for taping, if desired as a preventative measure by the homeowner, is sufficient. The yearly cost for heat tape is minimal. Stantec is aware of a similar system installed 10 years ago adjacent to Sylvan Lake, where it has recently come to light that the Contractor who connected many of the houses installed the service line at ~1m and these lines were not taped. There have not been freezing issues in that case.

We have been advised that most residents that connected in Yellowstone, Castle Island and other areas did NOT use heat tape within their connection points within their septic tank riser and line from the pump to the service or transmission line. It is recommended that the riser and lid are insulated. This will keep the heat generated from the decomposition of the wastewater from freezing. HOWEVER, there are many variables that could cause this to freeze – such as removing snow cover above your tank, placing objects

above your tank, or frequently parking above your tank. These variables could drive the frost line down and may cause freezing issues. Homeowners, in conjunction with their certified installer, should assess this risk and make the decision that is right for them.}

CONCLUSION

It is important for all lot owners to complete the survey whether they are for or against the sewer project so that Council will have all of the information that it needs to make a decision that best reflects what our community wants. My objective in this letter was to provide you with some additional information and a few counterpoints that will allow you to complete the survey in a more meaningful way. Regardless of your position on this proposal, a decision of this magnitude must be made with your input and your say as it will significantly impact all lot owners.

I truly hope that you found the above to be informative and beneficial in your individual decision making processes. Should you have any specific questions about this project I encourage you to contact Council directly by completing the comments section of the survey.

{Council: It should be noted that the wastewater collection and transmission system provides a service that will be in place for the "long-term". In the "long-term", the cost of truck haul of wastewater will continue to rise. Reasons for this rise include increased labour costs, fuel prices, road restrictions, and other levies that may be placed. Disposal rates at the lagoon are increasing on an annual basis. Environmental concerns of lake water quality are constantly being reviewed by Alberta Environment and existing standards may be upgraded.}