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THE MUNICIPALITY OF THE VILLAGE OF LIONS BAY

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**INFRASTRUCTURE COMMITTEE MEETING  
OF THE VILLAGE OF LIONS BAY  
HELD ON MONDAY, MAY 28, 2018 at 7:00 PM  
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY**

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**AGENDA**

- 1. Call to Order**
- 2. Appointment of Recorder**
- 3. Approval of the Agenda**
- 4. Public Questions & Comments**
- 5. Approval of Minutes**
  - A. Infrastructure Committee Meeting – April 23, 2018 (Page 3)
    - i. Action Items from the Minutes
- 6. Business Arising from the Minutes**
- 7. Unfinished Business**
  - A. CWWF Projects
    - i. Harvey Tank Update
  - B. Magnesia and Harvey Condition
  - C. Bridge Inspections
- 8. New Business**
  - A. Oceanview Drainage
  - B. Proposed Infrastructure Survey (Page 7)
- 9. Public Questions & Comments**
- 10. Adjournment**
- 11. Next Meeting – June 25, 2018**

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**LIONS BAY INFRASTRUCTURE COMMITTEE MEETING  
MONDAY APRIL 23<sup>nd</sup> 2018 AT 7:00 PM  
COUNCIL CHAMBERS, 400 CENTER ROAD, LIONS BAY  
DRAFT  
MINUTES OF THE MEETING**

In Attendance:

Karl Buhr – Mayor  
Fred Bain – Councillor and Committee Chair  
Jim Mutrie – Resident  
Tony Greville – Resident  
Naizam Jaffer – Public Works Manager  
Norm Barmeier – Councillor  
Brain Ulrich – Resident  
Ron McLaughlin – Councillor  
Graham – AECOM engineer

Regrets: none

**1. Call to Order**

Meeting was called to order at 1900hrs.

**2. Appointment of Recorder**

Norm Barmeier volunteered to record

**3. Public Participation**

No Public Questions or comments

**4. Approval of the Agenda**

Additions to the Agenda:

- Karl added concept of “infrastructure survey” to New Business
- Fred moved to close Open Meeting and move up the Closed portion of the Agenda.

Open meeting was closed and group moved to discuss Closed Agenda at 7:04 PM

Closed portion of meeting was adjourned at 8:45 PM

Open meeting was re-convened at 8:46 PM

**5. Approval of the Minutes of November 27<sup>th</sup>, 2017**

Approved as circulated

**6. Business Arising from the Minutes**

- Karl raised questions around pressure and flow at pump used to clear Mag infiltration gallery
  - Understanding is that 250 GPM pump was used while firetruck pump could delivery 1500 GPM
  - Jim feels the system need to be re-engineered and revisited, cannot continue to work with a filter bed that plugs.
  - Norm re-stated questioning the media size in the filtration bed to Creus, larger voids may be beneficial in preventing fines from forming a plug.
  - Karl wondered whether Harvey wier profile replication would be beneficial at Mag. However discussion pointed out that Mag water velocities are much lower. Infiltration gallery top of screen is typically free of large debris however interstitial spaces within the screen become plugged. Furthermore, it is speculated that fines are plugging the interstitial spaces within the bed.
  - Discussion around larger “rocks” to see if larger void spaces could be cleared easier or would perhaps not plug altogether.
- Action: Nai will contact Creus and ask about filtration media upsizing as an option.
  - The media replacement would be considered a maintenance or repair.

## 7. Unfinished Business

- Bayview water main upgrade and coordination with shovel ready drainage work.
- Design for the improved drainage along Bayview is ready to go, but in order to avoid rework along that stretch consideration should be given to upgrading the main at the same time.
  - Water main upgrade from Soundview to the School has not been designed yet.
  - School should get 150 LPS and is currently getting ~70 LPS Based upon modeling work by AECOM, water main upsizing is the only way to get adequate fire flow from the Mag or Harvey supply sides to the School even if the school were to close, the existing fire flow would not likely support any development greater than RS1.
- Design cost for the water main is estimated at \$18,000 - \$20,000 and has been incorporated into the operating budget. Staff have applied for a \$10,000 infrastructure planning grant for this project.
- ACTION: Nai will go ahead with the above water main upgrade study.
  - Soul source design to ISL as they have the design completed for a portion of the roadway from Mountain Drive to Steward Road. Total construction costs are projected to be 1.2M and Karl feels we may not qualify for another grant. Some discussion suggested we had a case to ensure the school had adequate fire flow.
- Fred asked about what kind of pipe was in the ground along Bayview and Nai confirmed it was ductile iron.

## 8. New Business

- Infrastructure Survey

- Karl plans to circulate a draft survey for resident input.
- The goal is to gather data that will facilitate decisions around future infrastructure planning, such as a sewer network and help understand current fuel, water, energy consumption habits.
- The idea is to have a few survey media running in parallel, a mail in type survey as well as an online survey.

**9. Public Questions and Comments - none**

**10.** Reporting out – nothing to report out.

**11. Next Meeting**

February 26<sup>th</sup>, 2018

**12. Adjournment**

Meeting adjourned at 9:20 PM

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Help us plan the various future municipal infrastructure needs by telling us about your *own* infrastructure. Responses are anonymous (please do not provide identifying information). Complete only one survey per residence. Please return by email to [feedback@lionsbay.ca](mailto:feedback@lionsbay.ca), by fax to 604 *not yet found*, or by hand to the Village Office, by 30 June 2018 (all returns are anonymized). This survey is also available online at *not yet set up*.

HOUSEHOLD

1. Occupants (please check which apply)
  - a. c Single family residence, only owner-occupied
  - b. c Single family residence, only tenant-occupied
  - c. c Single family residence, joint owner and tenant occupancy
    - i. c Occupied secondary suite whether by related or unrelated party.
    - ii. c Occupied detached cottage, laneway house, carriage house
  - d. c Multi-family residence, only owner-occupied
  - e.  Multi-family residence, only tenant-occupied
  - f.  Multi-family residence, joint owner and tenant occupancy
2. \_\_\_\_\_ Number of adults living on property (including tenants)
3. \_\_\_\_\_ Ages of children (under 18) living here (including tenants)
  - a. At Lions Bay Elementary \_\_\_\_\_
  - b. At Gleneagles Elementary \_\_\_\_\_
  - c. At other SD-45 school \_\_\_\_\_
  - d. At other school districts or private schools
4. Cars in regular use by household
  - a. Parking on property \_\_\_\_\_
  - b. Parking on street \_\_\_\_\_
5. My household takes approx. \_\_\_\_\_ trips a month on TransLink.
6. My household regularly drives a personal vehicle
  - a. \_\_\_\_\_ roundtrips a month to Gleneagles/Caulfeild
  - b. \_\_\_\_\_ roundtrips a month to rest of North Shore
  - c. \_\_\_\_\_ roundtrips a month downtown
  - d. \_\_\_\_\_ roundtrips a month across the Ironworkers but not across the Fraser
  - e. \_\_\_\_\_ roundtrips a month across the Fraser
7. Intentions
  - a. I plan to install a compliant secondary suite  YES /  NO
  - b. I plan to decommission an existing secondary suite  YES /  NO
  - c. I plan on building a detached cottage  YES /  NO

HEATING & ENERGY

Help us understand the Village's energy needs by identifying how you heat your home (select all that apply, indicating your primary heat source (by total estimated BTU) with a "1" and secondary sources with higher numbers):

- 8. Electric resistance heating (baseboards, portable heaters, in-floor)  YES /  NO
- 9. Hot water in-floor radiant heating, supplied by...  YES /  NO
  - a. oil furnace
  - b. heat pump, air exchange
  - c. heat pump, geo exchange
  - d. other \_\_\_\_
- 10. Forced-air duct distribution, using...  YES /  NO
  - a. Electric heat pump, with air exchange
  - b. Electric heat pump, with geoexchange loop(s)
  - c. Oil-fired furnace, central
  - d. Other \_\_\_\_
- 11. Propane indoor portable heater and fireplace  YES /  NO (count \_\_)
- 12. Cordwood-burning open fireplace  YES /  NO (count \_\_)
- 13. Cordwood-burning fireplace with insert  YES /  NO (count \_\_)
- 14. Built-in or standalone woodstove/pellet stove)  YES /  NO
  - a. Non-airtight, drawing combustion air from inside (count \_\_)
  - b. Airtight, drawing combustion air from inside (count \_\_)
  - c. Airtight, drawing combustion air from outside (count \_\_)
  - d. Other \_\_\_\_
- 15. I use air conditioning in hot months  YES /  NO
- 16. Energy consumption
  - a. Typical 2-month Hydro bill
    - i. Winter \$\_\_\_\_\_.
    - ii. Summer \$\_\_\_\_\_.
  - b. Heating oil consumption is approx. \$\_\_\_\_\_ or \_\_\_\_\_ liters a year (excluding tank rental, purchase and servicing)
  - c. Propane consumption is approx. \$\_\_\_\_\_ or \_\_\_\_\_ liters a year (excluding tank rental, purchase and servicing)
  - d. Firewood \_\_\_\_\_ cords (a well stacked 4 X 4 X 8 pile)
- 17. My residence has a working backup electrical generator  YES /  NO
- 18. My residence has a bulk propane tank, used for (check all that apply)
  - a. Hot water

- b. Heating
- c. Stove/oven
- d. BBQ
- e. Clothes dryer
- f. Other  \_\_\_\_\_

19. My residence has \_\_\_\_\_ amp hydro service

20. Hot water supply

- a. Electric on-demand heater
- b. Propane on-demand heater
- c. Electric water tank 
  - i. Supplemented with electric preheater
  - ii. Supplemented with solar
- d. Other  \_\_\_\_\_

WATER

21. My water service line to the street shutoff valve has been replaced within the last 5-10 years  YES /  NO

22. My residence utilizes rainwater tank(s)  YES /  NO

23. My residence has the following outdoor municipal water uses (tick all that apply)

- a. Swimming pool
- b. Hot tub
- c. Fixed irrigation (select all that apply)
  - i. Lawn
  - ii. Ornamental garden and trees
  - iii. Food garden and trees
- d. Landscaping such as fountains and streams
  - i. Recirculating
  - ii. Once-through

24. My residence utilizes a groundwater well  YES /  NO

WASTEWATER

25. Number of toilet appliances in residence \_\_\_\_\_

(please circle the number of each that you have)

- a. Low flush     1 2 3 4 5 6
- b. Dual flush    1 2 3 4 5 6
- c. Regular flush 1 2 3 4 5 6
- d. Waterless     1 2 3 4 5 6

26. My residence utilizes a garburator (in-sink garbage disposal)  YES /  NO

27. Treatment

- a. My residence is on the Kelvin Grove sewer system     YES /  NO
- b. Onsite (used as a measure of potential demand for sewers to the central wastewater treatment plant)
  - i. My residence utilizes the house's original unmodified passive septic system (passive means some variant of settling tank and dispersal field)  YES /  NO
  - ii. My passive septic system has been installed and inspected after, or updated to, the 2005 BC Health Act standards  YES /  NO
  - iii. My residence utilizes an active septic system "miniplant" with aeration, maceration, mixing, etc., installed PRIOR to the 2005 Health Act standards  YES /  NO
  - iv. My residence utilizes an active septic system installed to the 2005 Health Act standards  YES /  NO
- c. If onsite
  - i. My septic tank is regularly pumped  YES /  NO
  - ii. I already know I need to remediate my septic system to the 2005 Health Act standards, within the next \_\_\_\_\_ years.

GARBAGE DISPOSAL

- 1. We regularly need to exceed the allowance of one large can of non-recyclables/composables per two weeks  YES /  NO
- 2. I produce a relatively large amount of yard waste and might be a candidate for a (say) quarterly roving chipping program  YES /  NO
- 3. Comments

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