



**INFRASTRUCTURE COMMITTEE MEETING  
OF THE VILLAGE OF LIONS BAY  
HELD ON THURSDAY, NOVEMBER 16, 2023 AT 6:00 PM  
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY  
AND VIA ZOOM VIDEO CONFERENCE**

TO JOIN THE MEETING, CLICK HERE: <https://us02web.zoom.us/j/2780145720>  
TO JOIN VIA PHONE, DIAL 778-907-2071 AND ENTER MEETING ID: 278 014 5720

## AGENDA

1. **Call to Order**
2. **Appointment of Recorder**
3. **Approval of the Agenda**  
THAT the agenda be approved as submitted.
4. **Public Questions & Comments**
5. **Approval of Minutes**
  - A. Infrastructure Committee Meeting Minutes – October 19, 2023 (*page 4*)  
THAT the Infrastructure Committee Meeting Minutes of October 19, 2023 be approved as circulated.
6. **Business Arising from the Minutes**
7. **Unfinished Business**

Identifier	Description	Responsible	Status
23081	Search Village records for any more recent I.C. meeting minutes.	NTA	
23086	All members to review the Consolidated Project List and rank in terms of priority.	All	Partial
23087	Locate previous PWM's update report to the IMP indicating the projects that are completed.	PWM	
23088	Distribute the Vancouver Coastal Health Drinking Water Inspection Report.	ASG	

## Agenda – Infrastructure Committee – November 16, 2023

Village of Lions Bay

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23092	Solicit Village resident technical expertise for each working sub group.	All	
23093	Determine when working sub groups' project lists are due for submission to I.C.	All	
23094	Prior to the I.C. working sub groups' first meetings, schedule a meeting between main I.C. and PWM.	NTA/KB	✓
23095	Prepare a resident volunteer recruitment piece for the 01 September Village Up-date.	NTA	
23101	PWM to meet with NTA and ASG to determine the level of assistance required by the PWD from the I.C. on select PWD projects.	PWM NTA/ASG	
23102	I.C. Project Coordinators accept the projects tentatively assigned to them and to source and select their teams to provide the input the PWM has requested.	All	
23103	PWM to distribute his presentation of 16 October, the revised IMP, the AMP (Asset Management Plan) and any other library documents he feels will assist the I.C.	PWM	
23104	Adjust the ToR clause 2.4, to reflect the change in date for the I.C. Meetings from the 3 <sup>rd</sup> Monday of the month to the 3 <sup>rd</sup> Thursday of the month.	NTA/KB	

**8. New Business**

- A. Revised Terms of Reference attached for reference (*page 9*) Meeting schedule change.
- B. Discussion on communication to residents regarding next steps.
- C. Confirm member responsibilities for short and long term projects, advise status updates by members.
- D. BCWWA - Are Our Water Systems at Risk - receive & open for discussion.

 [BCWWA - Are Our Water Systems at Risk - 0923..pdf](#)

- E. Infrastructure Committee library – update/ access / comments. KB/NTA
- F. Public Works Manager Requests.

i) Numerical techniques to analyse OLDER (Overnight Leakage Determination) non-summertime datasets.

- ii) Review 2022 Water Report as basis for salient points to come in the 2023 report
- iii) Conceptualise skimmer/separator for Mag Intake (or full rebuild) emulate/improve on Harvey Intake; proof of concept with full-scale model
- iv) SCADA: update, remote nodes (mostly zone water metering), UI/security
- v) Highway Tank replacement in 2024: breakhead tank or PRV?
- vi) Dates for infrastructure tour: intakes, one plant, WWTP, Yard, drainage

**9. Public Questions & Comments**

**10. Adjournment**

**11. Next Meeting – TBD**



**INFRASTRUCTURE COMMITTEE MEETING  
OF THE VILLAGE OF LIONS BAY  
HELD ON THURSDAY, OCTOBER 19, 2023 AT 6:00 PM  
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY  
AND VIA ZOOM VIDEO CONFERENCE**

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**MINUTES**

In Attendance: Neville Abbott – Chair

Ken Berry

Jaime Cunliffe (via Zoom)

Anthony Greville

Hilary Monfared (Via Zoom)

Brian Ulrich

PWM – Karl Buhr.

Absent with regrets:

Absent:

**1. Call to Order**

The Infrastructure Committee Meeting was called to order at 18:10.

**2. Appointment of Recorder**

ASG was appointed recorder this meeting.

**3. Approval of the Agenda**

THAT the agenda be approved as submitted.

**4. Public Questions & Comments**

No public comments or delegation were forthcoming.

**5. Approval of Minutes**

A. Infrastructure Committee Meeting Minutes – August 21, 2023

THAT the Infrastructure Committee Meeting Minutes of August 21, 2023 be approved as circulated.

Approved unanimously.

**6. Business Arising from the Minutes**

See Below in Unfinished Business.

**7. Unfinished Business**

## Agenda – Infrastructure Committee – October 19, 2023

Village of Lions Bay

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23092	Solicit Village resident technical expertise for each working sub group.	All	
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23101	PWM to meet with NTA and ASG to determine the level of assistance required by the PWD from the I.C. on select PWD projects.	PWM NTA/ASG	
23102	I.C. Project Coordinators accept the projects tentatively assigned to them and to source and select their teams to provide the input the PWM has requested.	All	
23103	PWM to distribute his presentation of 16 October, the revised IMP, the AMP (Asset Management Plan) and any other library documents he feels will assist the I.C.	PWM	
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**NOTES:**

- 23087 PWM Karl Buhr to take a second look in his records regarding IMP updates and a list of completed or partially completed project items.
- 23088 ASG still awaiting to be informed that HM has signed the Village NDA prior to completing this action step.

**8. New Business**

- A. Approved Terms of Reference attached for reference  
Approved ToR received.
- B. Non Disclosure for non-council members to confirm acceptance send to Staff.  
**Action Step - HM still to sign Village NDA – KB to forward a copy for signature.**
- C. Discussion on communication to residents regarding next steps
- D. Recap on Infrastructure Project Priority Ranking & confirm member responsibilities  
HM raised a personal note that she is not qualified to offer an opinion on the physical integrity of Village bridges to be fit for purpose. Such work will be done by an external registered Engineer on the recommendation fo either the I.C. or PWM to Council.
- E. PWM reprioritise project list.  
PWM delivered a presentation entitled *Infrastructure Committee Preliminary Briefing*. This report is to be kept confidential under contractual, personnel, and legal criteria; before circulation, all I.C. committee members will be required to sign the Village NDA.

The PWM opened by stating the supply of potable water is the prime function of the Public Works Department. Stormwater and drainage present the greatest danger to the Village infrastructure, with the roadways already found to be “decambering” by 0.5 cm/year. More recently, the fuel loading in the forestlands, in and surrounding the Village, has become a major concern and will need the support of higher level governments to address.

**Action Step - PWM to distribute his presentation of 16 October, the revised IMP, the AMP (Asset Management Plan) and any other library documents he feels will assist the I.C. in their work.**

The PWM outlined the following projects where assistance from the I.C. could be beneficial. Based on previous broad subject assignments, the specific projects have been given assigned I.C. Coordinators who will build their teams and interact with the PWD as appropriate.

**Action Step - PWM to meet with NTA and ASG to determine the level of assistance required by the PWD from the I.C. on select PWD projects.**

**Action Step - I.C. Project Coordinators accept the projects tentatively assigned to them and to source and select their teams to provide the input the PWM has requested.**

BU - Review the reservoir tanks fill and drain protocols. Can the current protocols be adjusted to a dynamic model to better utilize excess supply over storage capacity?

NTA - The 1960 vintage Highway reservoir tank has failed and needs to be replaced in 2024 – new tank, PVR, smaller “break tank? No grants available – project cost \$900K?

JC or BU - Residential water metering (551 connections) options in addition to proposed zone metering (recommended for enhanced and swift leak targeting/detection).

JC & BU - Implement OLDER (Overnight Leakage DetERmination) SCADA routine's numerical analysis.

NTA & JC - Creekview main replacement project from 2023, construction budget \$225k. Review need/options to add in local service metering.

BU - Determine the needs for SCADA up-grading, especially as it pertains to the water distribution system.

ASG - Automated and in-line water sampling and analysis, HMI, advantages – education of operators and other staff to show automation provides solid benefits and is in addition to, not a replacement of, the need for personal interaction with the systems.

All or none – Develop and present the case for a Village wide central sewer system. Certainly, a long term objective that needs a definite position/answer.

BU & ASG – Stormwater ingress into the Kelvin Grove WWTP collection system. Remediation of sewer I & I by sleeving or pressure grouting, particularly manhole barrels?

HM - Roads, and the watermains within, are decambering and creeping downhill at a rate 0.5 cm/year due to inadequate stormwater drainage. Review potential solutions, including vaults, pinning etc.

KB and Council - LBFR Training Facility pad upgrade required; historical garbage dump needs to be officially closed.

KB - Watershed management with higher level government bodies - Crown lands wildfire mitigation, watershed protection (mostly from forestry).

ASG & BU - To comply with VCH orders, there is a need to isolate the raw water intakes during times of high creek turbidity. May require power lines to intakes. Budget of \$500k for both plants' bypass piping and flush site.

ASG - Solar-powered video inspection of both raw water intakes at all times.

ASG - Implement enhanced potable water analysis by tracking additional parameters; HAAs, asbestos, caffeine.

ASG & BU - Reconstruct Magnesia Creek intake to reduce frequent blockages (new grate, reconfigurable clarifier/pond). Budget cost of \$350K.

KB & HM - To meet VCH requirements with regards to watershed protections; access road regrading, ditching, culverting; backcountry toilets etc. \$1-2m by OLOG.

ASG & JC - Support UBC hydrology modelling project to produce output we can use.

NTA - 2 – 5 year project; CUBB (Centre-Upper Bayview-Bayview Pl.) mains & drainage.

NTA - 2 – 5 year project; DWIP (Drainage & Watermain Infrastructure Project) mid-Bayview from Stewart to Mountain

NTA - 2 – 5 year project; LORD (Lower Oceanview Road Drainage): drainage is a water issue, because washout and creep damages mains.

JC - Feasibility of water pipeline to Metro (academic until leakage under control).

ASG - Water pH monitoring and control.

NTA & BU - One primary WTP on line during periods of sufficient raw water supply (some booster pumps may be needed); standby plant will need to continue to run to ensure adequate disinfection protocols are in place at all times.

HM - Highway safety and noise; point-to-point average speed over distance control.

All or Council contracts project out - Demonstration of micro hydro-project utilising Magnesia Creek's intake supply line as penstock.

JC - Longer term projects that need to be defined in the next 2 years - Treated water filtration. O & M double if we're leaking 50% of treated water volumes.

Peak-shaving desalination plant on municipal land at Brunswick Beach. O & M double if we're leaking 50% of treated water volumes.

KB - Longer term project that need to be defined in the next 2 years; Age-friendly housing.

## 9. Public Questions & Comments

No public comments or delegation were forthcoming.

## 10. Adjournment

Meeting was adjourned at 20:39.

## 11. Next Meeting

Next meeting of the Infrastructure Committee was determined 16 November, 2023.

The I.C. unanimously decided that the 3<sup>rd</sup> Thursday of the month was a better meeting date than the 3<sup>rd</sup> Monday since the 3<sup>rd</sup> Monday is the day before the regular Council Meeting.





## THE MUNICIPALITY OF THE VILLAGE OF LIONS BAY



# INFRASTRUCTURE STANDING COMMITTEE

## TERMS OF REFERENCE

### Establishment and Authority

The Infrastructure Standing Committee of Council is established and appointed by the Mayor. (*Community Charter*, SBC 2003, C. 26, s116 (1)(e) and s.141. At least half of the members of the Standing Committee must be Council Members. The role of the Committee is advisory to Council. The Committee shall report to the Council through its Chair. Committee Members shall be appointed by the Mayor for an initial 12 month period; after the initial 12 month period and subject to Mayor approval, extended for the remainder of the Council term. Should there be any questions or disputes, the *Community Charter*, SBC 2003, C. 26, s116 (1)(e) and s.141 will prevail.

### Committee Procedures

1. The procedures of the Committee are governed by the Council Procedures Bylaw. Should there be any questions or disputes, the *Community Charter*, SBC 2003, C. 26, s116 (1)(e) and s.141) will prevail.
  - 1.1. The Committee shall be comprised of an equal number of Council and an equal number of members of the public as appointed by the Mayor, for a fixed term after which a new call for volunteer members of the public, including sitting members, shall be advertised in the Village Update. One of

the Council members shall act as Chair of the Committee.

- 1.2. A quorum of the Committee shall be 50% plus 1 members and consist of at least one Council member and two non-Council members. The minutes of meetings of the Committee will be recorded and maintained either by a non-committee member from Staff, or by a member of the Committee appointed by the Chair. Each member shall have the opportunity to review and edit a draft of the minutes before they are approved by the Committee.
- 1.3. A sub-committee working group can be struck when specialized technical knowledge is required to address a specific issue. Such a sub working group will compromise of 1 or 2 main Committee members, only 1 of which should be a elected council member, with the balance being the subject matter experts drawn from a pool of qualified and interested residents. At the conclusion of their work, this sub-committee working group will report back to the main group and then can be either disbanded or else asked to address another issue.
- 1.4. The Committee will meet ~~on the 3rd Monday of~~ each month, subject to the Chair's ability to cancel meeting dates due to a lack of Agenda items to consider or to move meeting dates as necessary, in consultation with Committee members. Staff attendance at the request of the Chair is not mandatory and will be at their discretion.
- 1.5. The Committee Chair shall set the agenda items for each meeting and shall accept agenda item requests from members.

### **Purpose and Mandate**

2. The overall purpose of the Committee is to provide timely advice and recommendations to Council on matters affecting the integrity, safety, or legal/regulatory compliance of the Village's infrastructure with an intermediate to long-term (strategic) focus. With this long-term focus, the Committee shall be particularly interested and involved in infrastructure projects that span multiple council terms to ensure continuity of the project from once council to the next. Since

it is a technical body, the Committee shall work within the limitations of the BC Professional Governance Act and the regulations of Engineers and Geoscientists of BC (EGBC) which define what constitutes the Practice of Engineering and who is qualified to do it. Such advice includes, but is not limited to the following:

- 2.1. Insofar as the Committee is not authorized to perform engineering activities upon which the council will make decisions, the Committee shall advise council on which activities the Council will need to retain the services of an authorized engineering organization possessing a Permit to Practice, and it shall provide cost saving and innovative inputs to, and monitoring/reviewing of any engineering activities as they progress.
- 2.2. The Committee shall provide timely updates to Council regarding the state, condition and ongoing status of the infrastructure owned and operated by the Village of Lions Bay, namely, its physical structures, buildings, roads, bridges, water and power and related facilities and other built infrastructure owned and operated by the Village designed to serve the needs of the residents of Lions Bay. Actual inspections to identify the status of said infrastructure shall be the responsibility of Public Works Staff, although the Committee may be involved in or perform their own inspections at their discretion.
- 2.3. At the request of Council, to research, inspect, review and assess infrastructure issues and prepare a report for submission to Council with findings, consensus opinions and / or recommendations regarding the infrastructure matter or issue referred to it. If such activities involve the practice of engineering the Committee shall recommend to Council to retain the services of an authorized professional engineering organization to perform the activities and prepare an authenticated report
- 2.4. The Committee shall identify and recommend infrastructure items which require the development of maintenance standards, inspection regimes, management and maintenance protocols with a view to preservation of the infrastructure and the prevention of any unnecessary deterioration due to neglect or lack of proper or timely maintenance. The Committee shall

recommend to Council to retain the services of an authorized professional engineering organization to perform these activities and prepare an authenticated report.

- 2.5. The Committee shall call upon the expertise of resident volunteers or groups of resident volunteers to provide technical input to specific projects as appropriate.
3. The Committee shall immediately bring to the attention of the Council any aspect of the Village infrastructure that in the opinion of the Committee appears unsafe, non-compliant, or that is in need of urgent repair.
4. The Committee shall review and update the Infrastructure Master Plan on a 2-year rotation basis to remove completed tasks and add new tasks as required and re-rank all tasks in terms of priority.
5. The Committee shall have the opportunity to review all bids, tenders, RFP's and RFQ's for purpose and technical correctness before being issued to the public and shall have the opportunity to review all responses to the same for technical compliance and innovation before financial considerations are applied in the political level.
6. The Committee shall select, on an annual basis, items from the IMP priority task list to recommend to Public Works and Council to be included in the annual financial budget.
7. To develop and prepare an annual infrastructure maintenance and development plan, in cooperation with an authorized engineering organization if required, for review and consideration by Council.
8. To monitor the implementation of any Council-approved infrastructure maintenance and development plan and report to Council accordingly as the Committee sees fit.
9. The Committee will report quarterly, or as deemed appropriate to Council.

### **Administrative support**

10. The Committee will be provided with and have access to any municipal records that may assist it in the fulfilment of its purpose and mandate.

10.1. For the receipt and consideration of confidential municipal records the Committee must do so only in closed session and any related reports from the Committee to Council arising from its review of the confidential records must be received by Council in closed session only.

10.2. Non-elected members are required to sign a confidentiality agreement to reinforce the confidentiality requirement. Its non-disclosure provisions will continue after they no longer serve as members of the Committee. Non-elected members shall be allowed to review the confidentiality agreement prior to agreeing to serve on the committee.

11. Staff support will be provided by the Public Works Manager who will act as the liaison to the Committee to provide information and professional advice. The participation of the Public Works Manager at the Committee would be at his/her discretion or as required/invited by the Committee, subject to approval of such participation by the CAO.

12. Administrative support that is secretarial in nature will be provided to the Committee by the Village administration.

13. The Committee may also request of Council that another member of the administration provide information to the Committee to enable or assist it in fulfilling its purpose and mandate if the Committee provides specific reasons, related to its purpose and mandate, in support of such a request.

## **Adoption**

Adopted by Resolution of Council this \_\_\_\_\_ day of January 2023

Signed: \_\_\_\_\_

Mayor of Lions Bay

On the \_\_\_ day of \_\_\_\_\_ 2023 the original signed copy of this document was stored in the permanent file of Municipal records in the Village Office and on the \_\_\_ day of \_\_\_\_\_ 2023 the digitized copy of this document was saved and stored in the Village digital database.

Certified correct by: \_\_\_\_\_

Municipal Coordinator