



Memo

TO: Mayor and Council

SUBJECT: Cost-sharing Agreement with the Ts'uubaa-asatx First Nation

DATE: May 24, 2024

FROM: Chief Administrative Officer

Background

The Town has had a long-standing arrangement with the Ts'uubaa-asatx First Nation for the provision of municipal services in the form of water and sewer utilities and fire protection. In 2019 the Town explored the option of cost-sharing with the First Nation the upgrade of the booster station on River Road which would have cost more than \$1.2 million. The First Nation decided to withdraw from that arrangement as it was in the process of incorporating additional lands within its borders and its engineering consultants also saw some potential flaws with the booster station upgrade option.

The First Nation then engaged the services of True Engineering to explore alternate options to the upgrading of the booster station on River Road. True Engineering came back with the following:

An options analysis reviewing construction of a fire pump booster station at the River Road booster station or construction of a potable water reservoir was completed in 2022 by the TFN. The potable water reservoir was selected. Key criteria used in the analysis included:

- i. Operation and maintenance (O&M)
 - a. Total annual O&M costs for a fire pump booster station are typically 4 to 5 times that of a storage reservoir.
 - b. Fire pump booster station has a higher time demand on public works staff for daily operations and maintenance.
- ii. Social measures
 - a. Risk of damage or failure of the fire pump booster station was a concern.
 - b. In discussion with the Town Fire Department, Town, and TFN, it was agreed that a reservoir was preferred.

Update

Discussions ensued between Town staff and representatives of the First Nation on the question of ownership of the reservoir and the Town's appropriate contribution to the project on the premise that this was a project benefiting both parties. At our last meeting on April 30th, 2024, a consensus was reached based on previous discussions and these are detailed in the attached documents.



Summary

- Ownership of the reservoir is to remain with the First Nation.
- The Town's direct share of the reservoir project is \$731,000 out of a total of \$2,605,000.
- The Town will ensure the operations and maintenance of the project meets the required water quality standards.
- In addition, the Town agrees to waive the connection fees for 25 units with the Ts'uubaa-asatx First Nation as the First Nation's community core is built out over a 30-year term.
- The First Nation will allocate annually in its budget the replacement cost of the reservoir.
- The First Nation will fund the balance of the capital cost.








Note: The reservoir will vastly improve the residual psi in zone 2. Copies of the relevant drawings provided by our consultants, GeoAdvice, are attached.

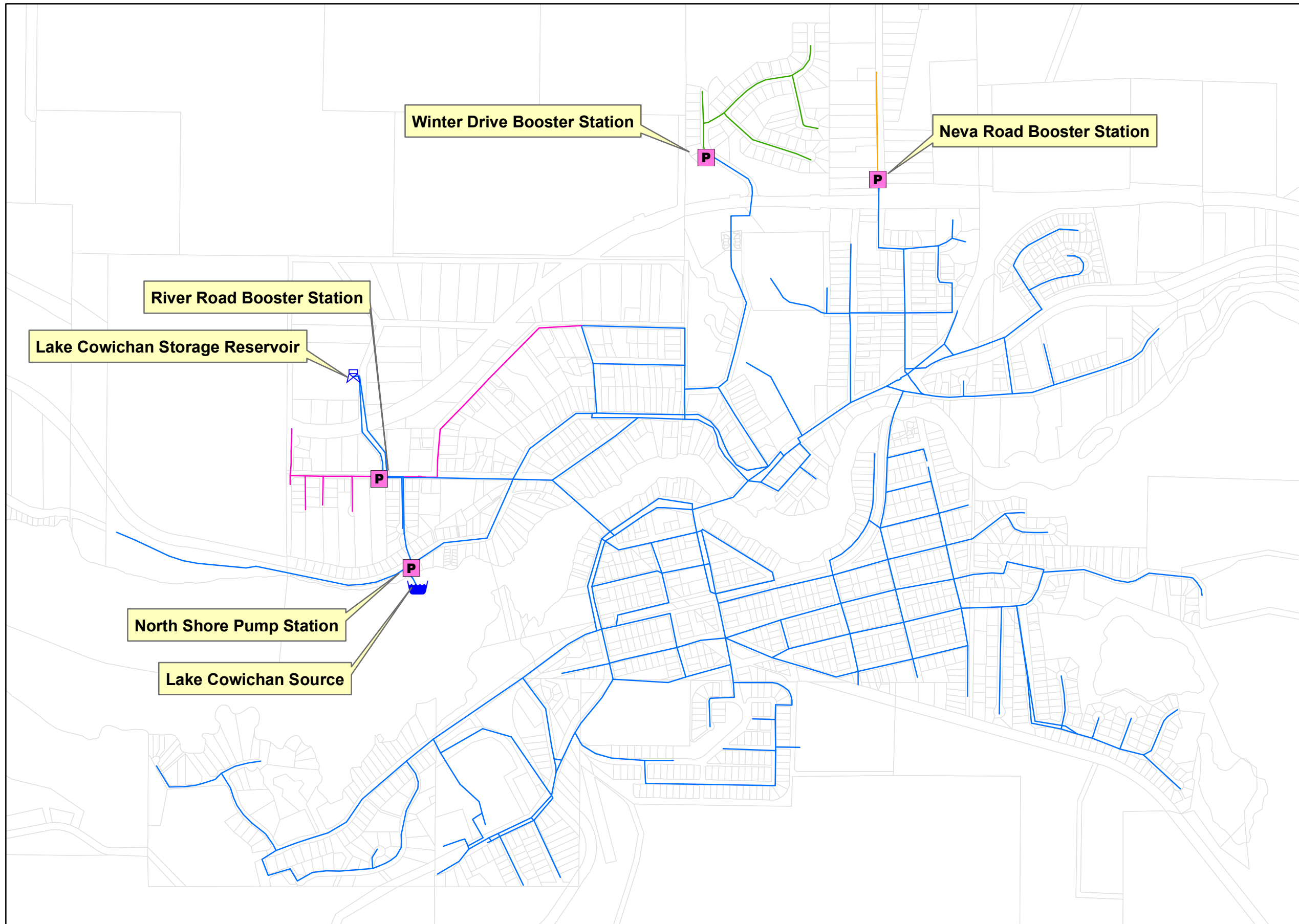
Recommendation

that the Town confirm to its share of the capital cost of \$731,000 and will commit to monitoring the operations of the proposed reservoir and will waive the connection fees to a maximum of 25 units within the First Nation's Community Core that serve's the Nation's residents.

Joseph A. Fernandez

Legend

-  Storage Reservoir
 -  Pump Station
 -  Lake Cowichan Water Source
- Water Main - Pressure Zone**
-  1
 -  2
 -  3
 -  4



Existing Water Distribution System



Project: Water Distribution System Model Update and Capacity Analysis
 Client: Town of Lake Cowichan, BC
 Date: July 2019
 Created by: AKd'A
 Reviewed by: WdS

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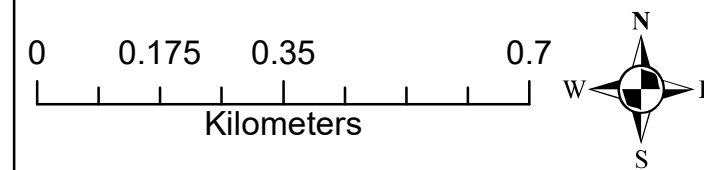


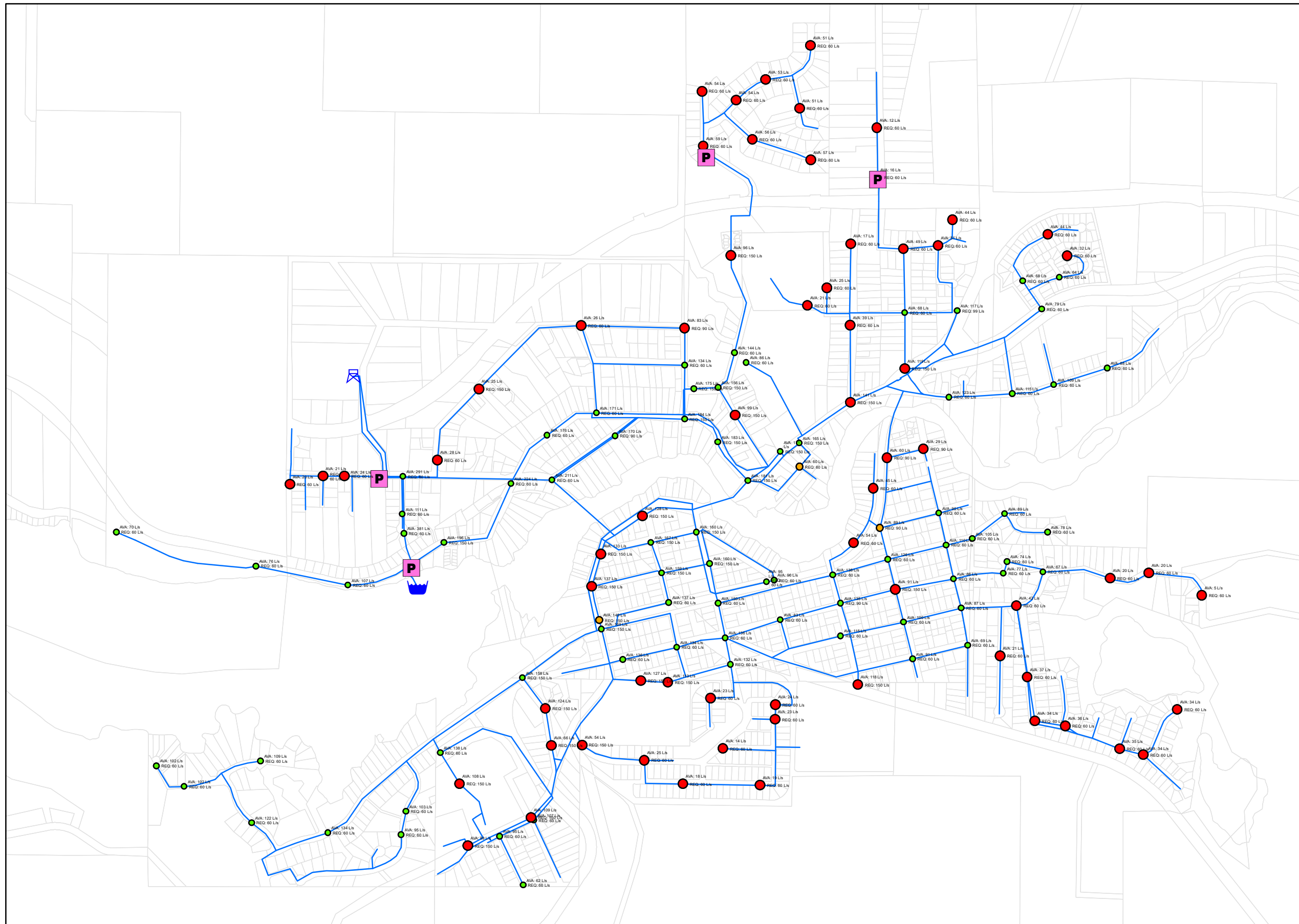
Figure 1.1

Legend

- Storage Reservoir
- Lake Cowichan Water Source
- Pump Station
- Water Main

Residual Pressure

- < 20 psi
- 20 psi - 22 psi
- > 22 psi



AVA = Available Fire Flow
REQ = Required Fire Flow

Existing MDD+FF Residual Pressure Modeling Results



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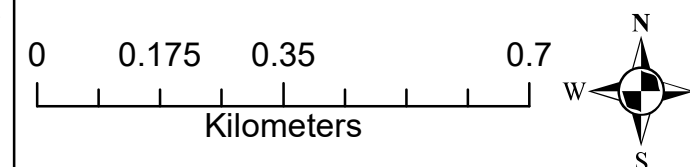


Figure 4.3

Following review by the Town's Mayor and Council, the Nation would like to establish a kick-off meeting in June 2024 to undertake the items listed above.

Regards,


Natalie Alteen, P. Eng.

Enclosures

NA/slf



May 24, 2024

Total Capital Project Cost: \$2,359,000

Detailed Design to Date: \$246,000

Total: \$2,605,000

Introduction:

The Nation would like the Town to confirm their contribution by June 1, 2024 c/w Town Council resolution.

Overview:

- Total capital contribution is \$731,000 (28% of project capital cost).
- Town in-kind contribution \$375,000.
- Total Town contribution (capital and in-kind): \$1,106,000.

- All structures in pressure zone 2 will have fire protection.
- Water can be pressure reduced to pressure zone 1 and service the entire Town.
- O&M costs are less than the asset management and renewal costs.
- The Nation has completed all feasibility and detailed design costs to date.

Proposed Reservoir - Class A Cost Estimate & Cost Sharing			
			Reservoir
Class A Capital Cost Estimate			
i. Contingency 5%			
ii. Engineering and Construction Mgmt. 5%	\$		2,359,000
		Detailed Design	\$ 246,000
Total Project Cost			\$ 2,605,000

Proposed Capital Cost Sharing			
Town Total Capital Contribution	\$		731,000
Ts'uubaa-asatx Total Capital Contribution	\$		1,874,000
Total Capital Contribution			\$ 2,605,000
Town In-Kind Contribution			\$ 375,000

Estimate O&M, Asset Replacement Costs		
Town Annual O&M Cost	\$	41,000
Ts'uubaa-asatx Annual Asset Renewal/Replacement Cost	\$	120,000

Pressure Zone 2 - Population Served		
	Population	% of Balancing Storage
Ts'uubaa-asatx Population Served	89	0.33
Town of Lake Cowichan Population Served	181	0.67

River Road Booster Station (2019 McElhanney Cost Estimate)	\$ 1,219,000
ENR 2019 Avg.	11281
ENR 2024 April	13532
	120%
Updated 2024 Cost River Road Booster Station	\$ 1,462,000
50% of Booster Station Upgrades	\$ 731,000

Summary:

- The Nation has submitted the final detailed design report to ISC in April 2024.
- The Nation will cover the \$375,000 for initial capital contribution with cost recovery through future band housing connections within their Ts'uubaa-astax Community Core.

We look forward to working with the Town on next steps and action items.

Thank you,

Ts'uubaa-asatx First Nation