



INFORMATION ONLY COUNCIL REPORT

To: Mayor and Council

Date: February 28, 2023

From: Paul Gipps, CAO

File No: 5600-19

Subject: **Rose Valley Water Treatment Plant Update**

Report Prepared by: Allen Fillion, Director of Engineering & Operations

STRATEGIC AREA(S) OF FOCUS

Invest in Infrastructure – We will invest in building, improving and maintaining quality infrastructure to meet the needs of, and to provide a high quality of life for, current and future generations.

BACKGROUND

The Rose Valley Water Treatment Plant is the largest construction project ever undertaken by the City of West Kelowna with a budget of up to \$75M. Once complete, the water treatment plant will provide clean drinking water to approximately 18,000 residents living within the Lakeview, Pritchard/Sunnyside and West Kelowna Estates Water Systems. This multi-year project consists of four project phases: design, earthworks, treatment plant and reservoir construction, and transmission mains construction. The design and earthworks phases are complete while the treatment plant and transmission mains construction is on-going.

Water Treatment Plant and Treated Water Reservoir Construction Update

The tender for the construction of the treatment plant and treated reservoir closed on February 18, 2021 and was awarded to Maple Reinders Constructors Ltd. Construction has continued since spring 2021 and the building envelope is now complete with work continuing on installing the electrical and mechanical systems. All City supplied equipment; including items from abroad, are now on site with only a few smaller contractor supplied items still to arrive.

The construction climate continues to be extremely challenging as there are COVID-19 related supply chain disruptions, a shortage of skilled labour, and inflation reached levels not experienced since the 1980s. City staff, our consultants, and contractor are all working together to minimize the impacts as best as possible as this project remains our top

priority, however, some delays have been unavoidable. The plant is now currently scheduled to be substantially complete early fall 2023. Substantially complete includes commissioning which will be an incredibly involved process for a plant of this size and will take months to complete. Once the plant is substantially complete, residents will receive drinking water that exceeds Provincial Guidelines for drinking water.



Figure 1. Water Treatment Plant (front)



Figure 2. Water Treatment Plant (back)



Figure 3. Chemical Storage Room



Figure 4. Dissolved Air Flotation Saturator Tanks



Figure 5. Electrical Room



Figure 6. Treated Water Reservoir

Transmission Mains Update

To provide the West Kelowna Estates and Sunnyside/Pritchard neighbourhoods with treated water from the future plant, two transmission mains are required to be installed. These large diameter mains, 450mm and 500mm, total nearly four kilometers in length and will deliver water from the new treatment plant to existing water storage reservoirs in the distribution system. These mains will deliver safe drinking water to approximately 7,100 users.

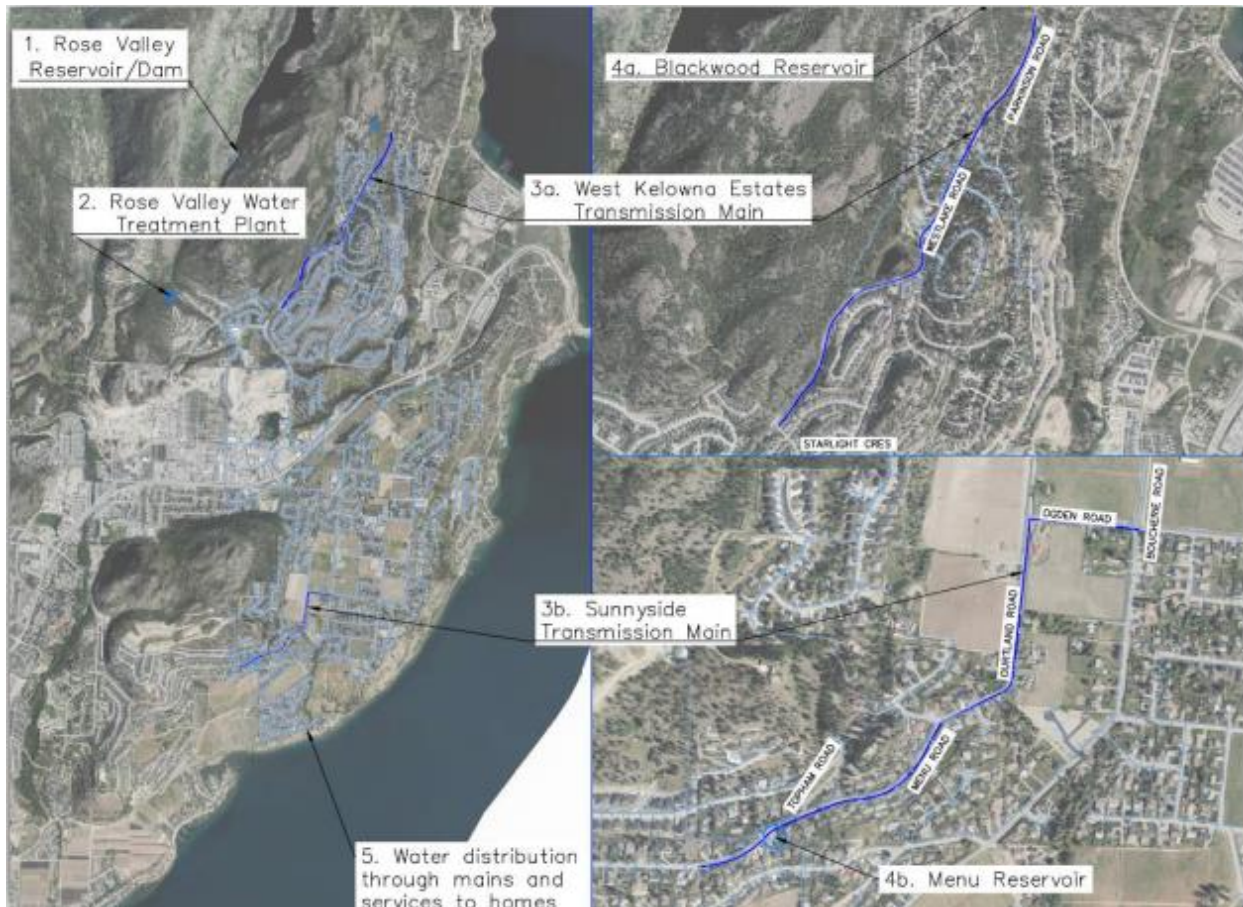


Figure 7. Transmission Mains Locations

The tender for the transmission mains closed on June 14, 2022 and was awarded to Bluepoint Construction Ltd. Construction started late summer 2022 concurrently on both the Westlake Road and Menu Road locations. Following a shut down for the winter months, work is scheduled to begin again on Westlake Road the week of February 27th. Westlake Road will be fully closed between Peak Point Drive and Horizon Drive for approximately six weeks. This will allow crews to work as quickly and efficiently as possible while ensuring public safety. Traffic will be detoured through Starlight Crescent and Horizon Drive.



Figure 8. Westlake Road Detour

Work on the Menu Road section is currently scheduled to begin again the week of March 13th. Letters will be sent to the community in late February and a public meeting will be held in early March to discuss a traffic management plan for the neighbourhood.



Figure 9. Transmission Mains Construction on Westlake Road



Figure 10. Transmission Mains Construction on Menu Road

Water Main Flushing

In anticipation of the new water treatment plant later this fall we will be conducting an extensive flushing program for all pipes within the Lakeview, Pritchard/Sunnyside and West Kelowna Estates Water Systems. It is important to flush as much material as possible out of the existing pipe network to avoid future advisories once the new plant is operational. Flushing will begin in early March as weather allows and will require localized water quality advisories as we move from block to block. Advance notice will be provided to the residents within the impacted areas.

FINANCIAL IMPLICATIONS

The total project budget for all associated works for the water treatment facility is up to \$75M. Despite challenges related to supply chain and labour shortages, the budget projects to be within this value.

REVIEWED BY

Corinne Boback, Legislative Services Manager / Corporate Officer

APPROVED FOR THE AGENDA BY

Paul Gipps, CAO

Powerpoint: Yes No