

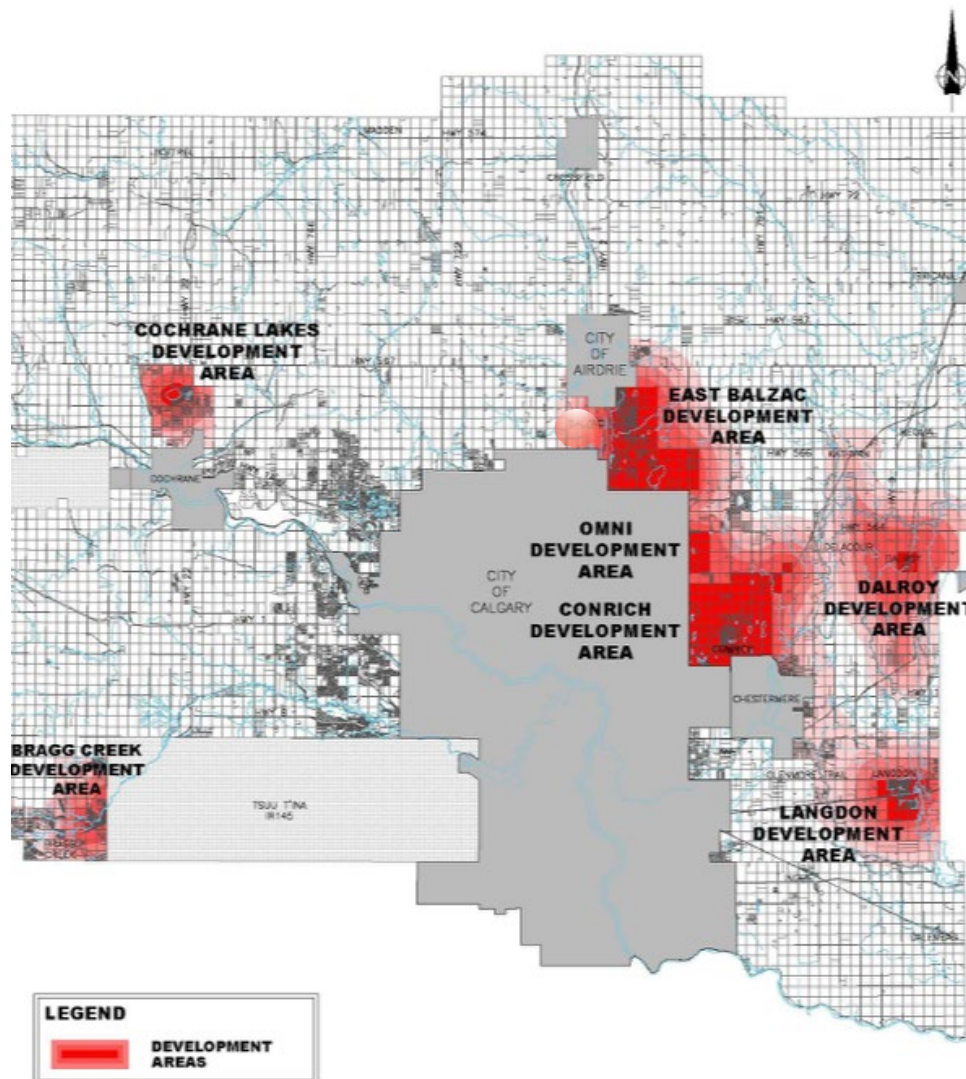
# Regional Water & Wastewater Off-site Levy Bylaw Proposed Updates

July 23, 2024

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Manager Capital & Engineering Services



# Scope of Work



## What's Changed Since 2020 Bylaw Adopted

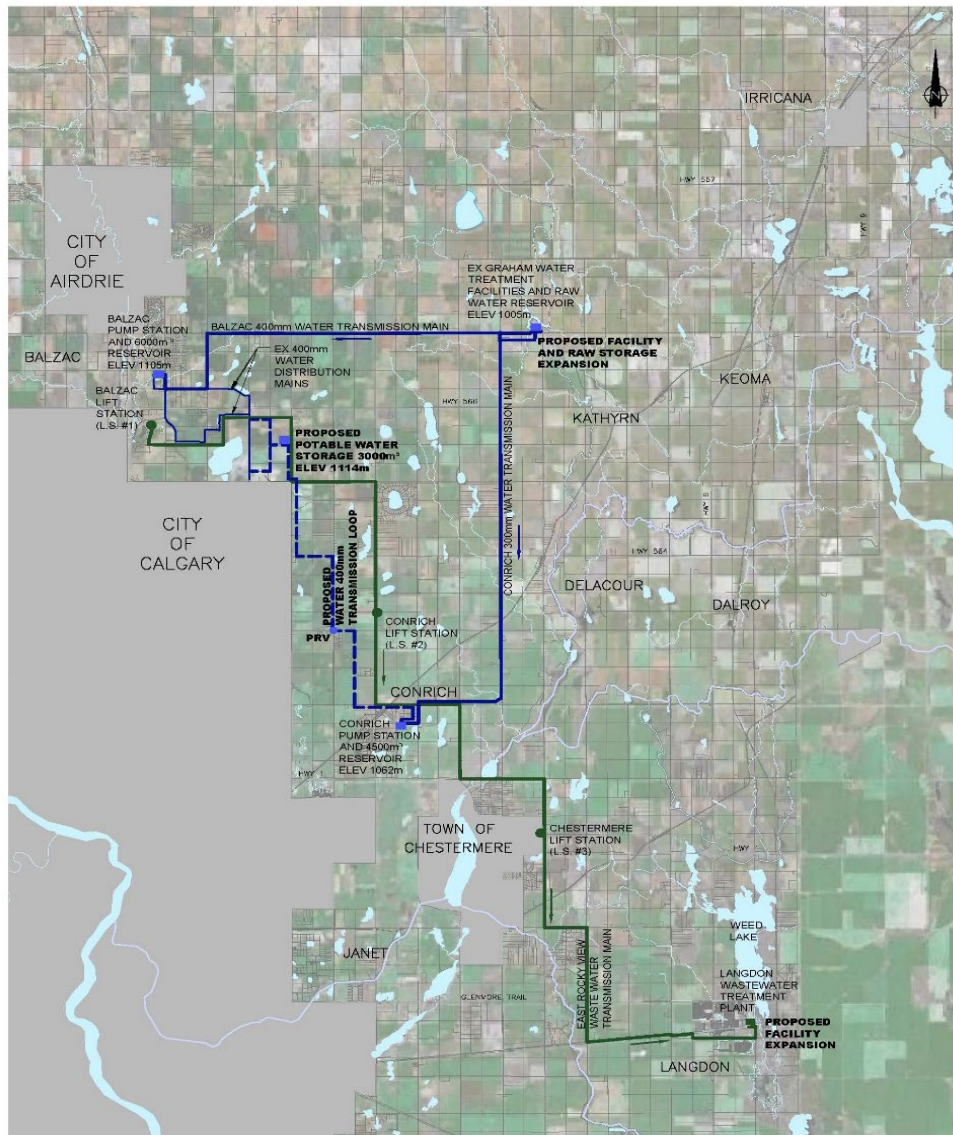
- Extension of services to West Balzac
- Completed the Stage 1 upgrade of the Langdon WWTP to a capacity of 5,850 m<sup>3</sup>/day
- Acquisition of the Blazer Water System
- Acquisition of the Bearspaw Wastewater System
- Acquisition of the Cochrane Lakes Water System

## Proposed Scope

- Update Langdon WWTP technology for Stage 2 upgrades to meet ultimate capacity of 8,000 m<sup>3</sup>/day
- Update Cost to Current Year in All Levy Schedules
- Review of Allocated Capacity of System Components
- Introduce West Balzac Servicing Area and schedule
- Assessment of the Blazer Water System
- Assessment of the Bearspaw Wastewater System
- Assessment of the New Cochrane Lakes Water Servicing Area



# East Rocky View Water & Wastewater



## Current Service Area Includes:

- Langdon (Wastewater Only)
- Conrich
- Omni
- East Balzac

## Main Facilities:

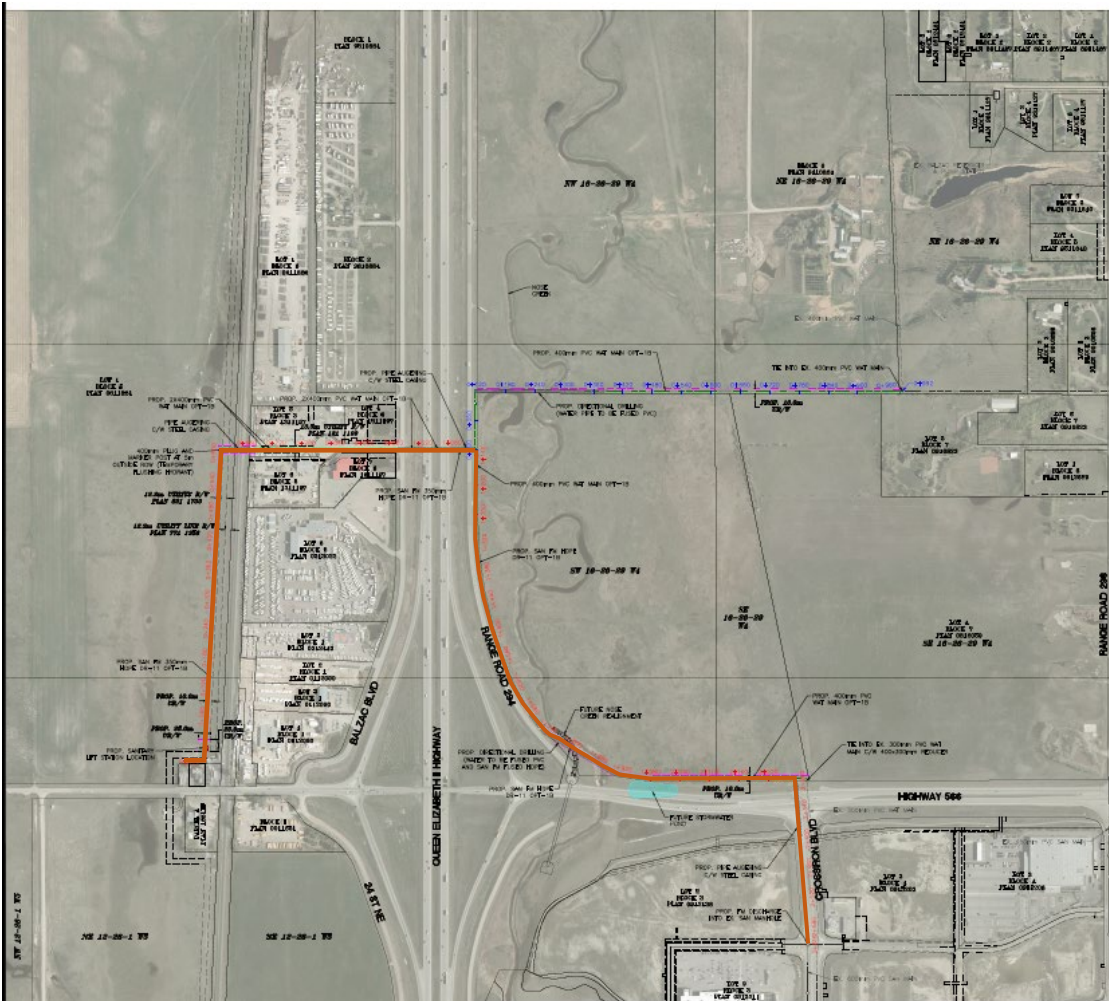
- Langdon WWTP
- Graham Creek WTP
- ERVWWTM & Regional Lift Stations
- Potable Reservoirs (Conrich & Balzac)
- Water Transmission Mains
- Back-up Loop

## Recently completed:

- Extension of water and wastewater services to West Balzac



# New West Balzac Wastewater Servicing



## Extension Wastewater Servicing:

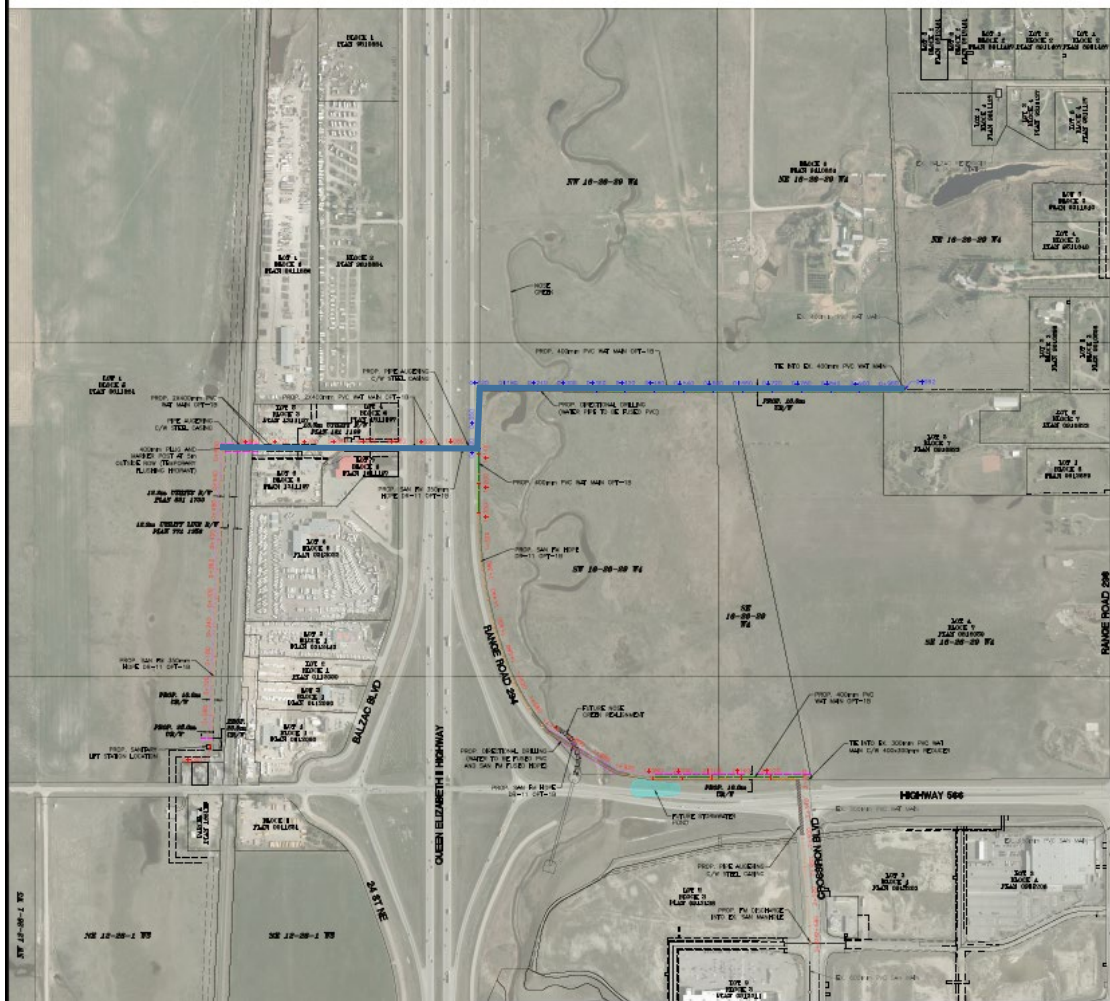
- 350 mm HDPE sanitary forcemain
- Lift Station
- Stage 1: Capacity of 1,000 m3/day
- Stage 2: Capacity of 2,240 m3/day

## Levy Calculation

Original Capital Budget:	\$5,084,547.00
Future Lift Station Pump Upgrade	\$ 300,000.00
Total Recoverable	\$5,384,547.00
Total Estimated Cost to Levy	\$5,384,547.00
Capacity (average day flow)	2,240 m3/day
Capacity Committed (average day flow)	0 m3/day
Remaining Capacity to Levy	2,240 m3/day
<b>Levy Cost Calculation</b>	<b>\$ 2,403.82/m3/day</b>



# New West Balzac Water Servicing



## Extension Wastewater Servicing:

- 400 mm water feeder main
- Target Capacity of 2,240 m<sup>3</sup>/day

## Levy Calculation

Original Capital Budget:	\$4,506,755.50
Total Recoverable	\$4,506,755.50
Total Estimated Cost to Levy	\$4,506,755.50
Capacity (average day flow)	2,240 m <sup>3</sup> /day
Capacity Committed (average day flow)	0 m <sup>3</sup> /day
Remaining Capacity to Levy	2,240 m <sup>3</sup> /day
<b>Levy Cost Calculation</b>	<b>\$ 2,011.94/m<sup>3</sup>/day</b>



# Langdon WWTP Schedule Update

What's changed since 2020 bylaw adopted?

❖ **Stage 1:**

- Introduction of new technology that resulted in a shift from the Continuous Flow, Constant Level SCR to a Moving Bed Biofilm Reactor (MBBR) system to increase capacity to 5,850 m<sup>3</sup>/day. This included the conversion of the existing SBR #2 to a MBBR system.

❖ **Stage 2:**

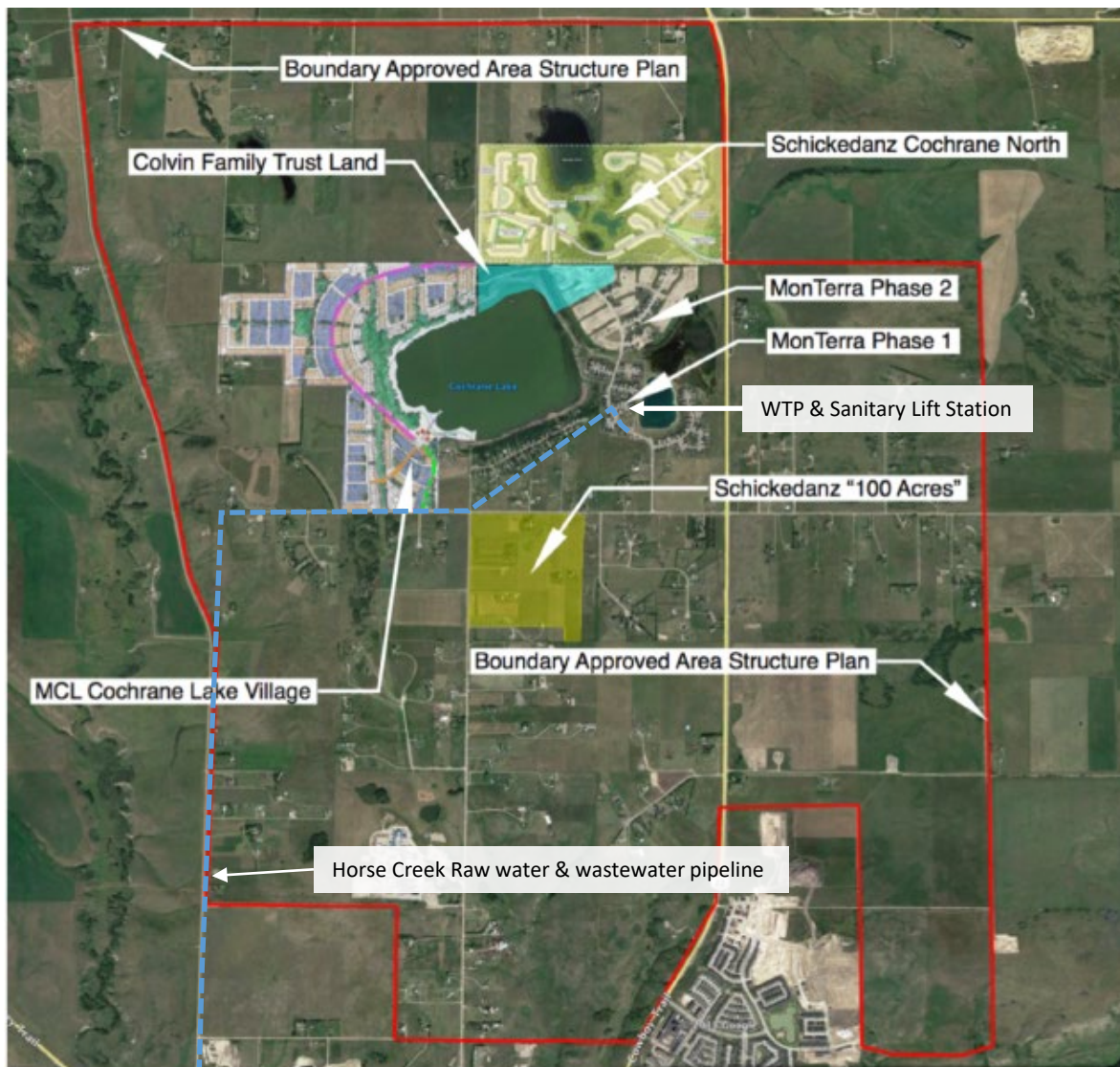
- Convert SBR 1 to a MBBR system to provide treatment for the ultimate 8,000 m<sup>3</sup>/day capacity.

Target Average Day Capacity	8,000 m <sup>3</sup> /day
Total Committed Flow	5,070 m <sup>3</sup> /day
Remaining Capacity	<hr/> 2,930 m <sup>3</sup> /day

Total Recoverable	\$19,736,195
Upgrade Cost Estimate	\$3,565,000
Total Levy Costs	<hr/> \$23,301,195
<b>Levy Rate</b>	<b>\$7,951.66 m<sup>3</sup>/day</b>



# New Cochrane Lakes Water & Wastewater Servicing



## Existing Horse Creek Water & Wastewater Servicing:

- WTP capacity is 2,488 m<sup>3</sup>/day
- Wastewater flow to the Town of Cochrane is limited to 48 l/s (4,233 m<sup>3</sup>/day) due to constraints within the Town's internal system.
- Cost Contribution and Connection Agreement with the developers within the area for yearly payments or contributions towards the water system's debt payment.
- Wastewater system schedule has been updated

Target Average Day Capacity	1,049 m <sup>3</sup> /day
Total Committed Flow	258 m <sup>3</sup> /day
Remaining Capacity	790 m <sup>3</sup> /day

Total Recoverable	\$2,073,487
Upgrade Cost Estimate	\$
Total Levy Costs	\$2,073,487
<b>Levy Rate</b>	<b>\$2,624.67 m<sup>3</sup>/day</b>



ATTACHMENT B: PRESENTATION

# Proposed Updated Schedule of Levy

Offsite Levy Schedule	Cost	Service Area Map
<b>WASTEWATER LEVIES</b>	per m <sup>3</sup>	
Schedule C-1: Langdon WWTP	\$8,437.88 <del>\$7,951.66</del>	B-1
Schedule C -2: ERVWWTM & Regional Lift Stations	\$7,599.49 <del>\$8,846.43</del>	B-2
Schedule C -3: Langdon Wastewater Utilities: Area 1: Area 2: Area 3:	 \$1,332.24 <del>\$2,003.30</del> \$1,063.76 <del>\$2,112.70</del> \$633.73 <del>\$690.74</del>	B-3
Schedule C -4: Dalroy Regional LS and Wastewater Transmission Main	\$26,359.42 <del>\$28,417.64</del>	B-4
Schedule C -5: Cochrane Lakes Wastewater	\$2,395.85 <del>\$2,624.67</del>	B-5
<b>POTABLE WATER LEVIES</b>		
Schedule C -6: Graham Creek WTP & RWR	\$9,715.50 <del>\$12,955.87</del>	B-6
Schedule C -7a: East Balzac Transmission Main (Base)	\$926.12 <del>\$1,071.86</del>	B-7a
Schedule C -7b: East Balzac Transmission Main (Oversize)	\$244.23 <del>\$323.55</del>	B-7b
Schedule C -8: East Balzac Pump Station & Reservoir and RR293 Loop	\$1,157.84 <del>\$1,353.20</del>	B-8
Schedule C -9a: Conrich Transmission Main (Base)	\$1,247.64 <del>\$1,916.34</del>	B-9a
Schedule C -9b: Conrich Transmission Main (Oversize)	\$141.92 <del>\$183.13</del>	B-9b
Schedule C -10: Conrich Pump Station & Reservoir	\$2,419.04 <del>\$3,725.73</del>	B-10
Schedule C -11: East Rocky View Back-Up Loop	\$3,613.97 <del>\$4,821.45</del>	B-11

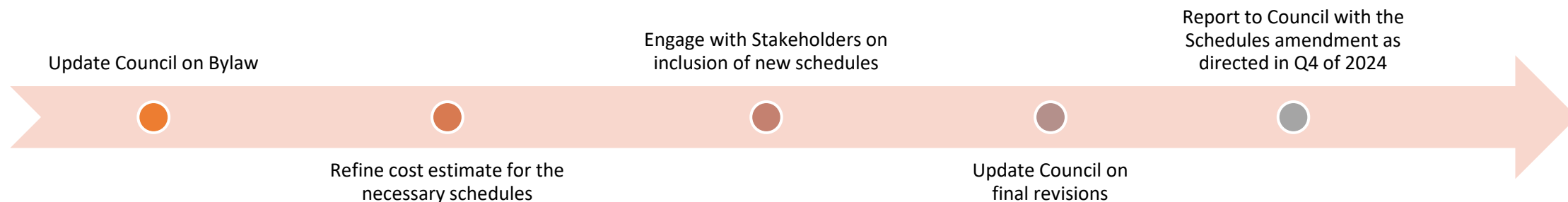
Offsite Levy Schedule	Cost	Service Area Map
<b>BRAGG CREEK LEVIES</b>		
Schedule C-12a: Bragg Creek Wastewater Treatment Plant	\$23,727.68 <del>\$24,313.63</del>	B-12a
Schedule C-12b: Bragg Creek WTP & PWR	\$22,600.90 <del>\$24,695.98</del>	B-12b
<b>WEST BALZAC LEVIES</b>		
Schedule C-13a: West Balzac Wastewater Lift Station and Forcemain	\$2,408.28	B-13a
Schedule C-13b: West Balzac Water Transmission Main	\$2,011.94	B-13b





# Next Steps....

- Stakeholder Consultation on Bylaw
- Website – Supporting Information
- Engage industry representatives and stakeholders on updates/changes
- Final Edits & Consolidate Feedback
- Prepare final bylaw package for Council consideration
- Bylaw would then apply to development after the date of adoption - 2025



# Comments and Questions

