Town of Erin

Town of Erin Council July 13, 2023

Erin Wastewater System Project Update

www.erin.ca

Nick Colucci, P.Eng. Director of Infrastructure Services and Engineer

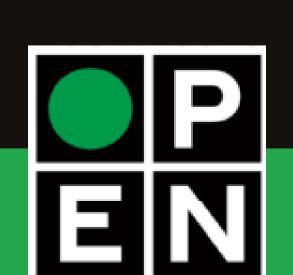


















#### AGENDA

- Construction Update
- Communication Strategy
- Future Work
- Questions







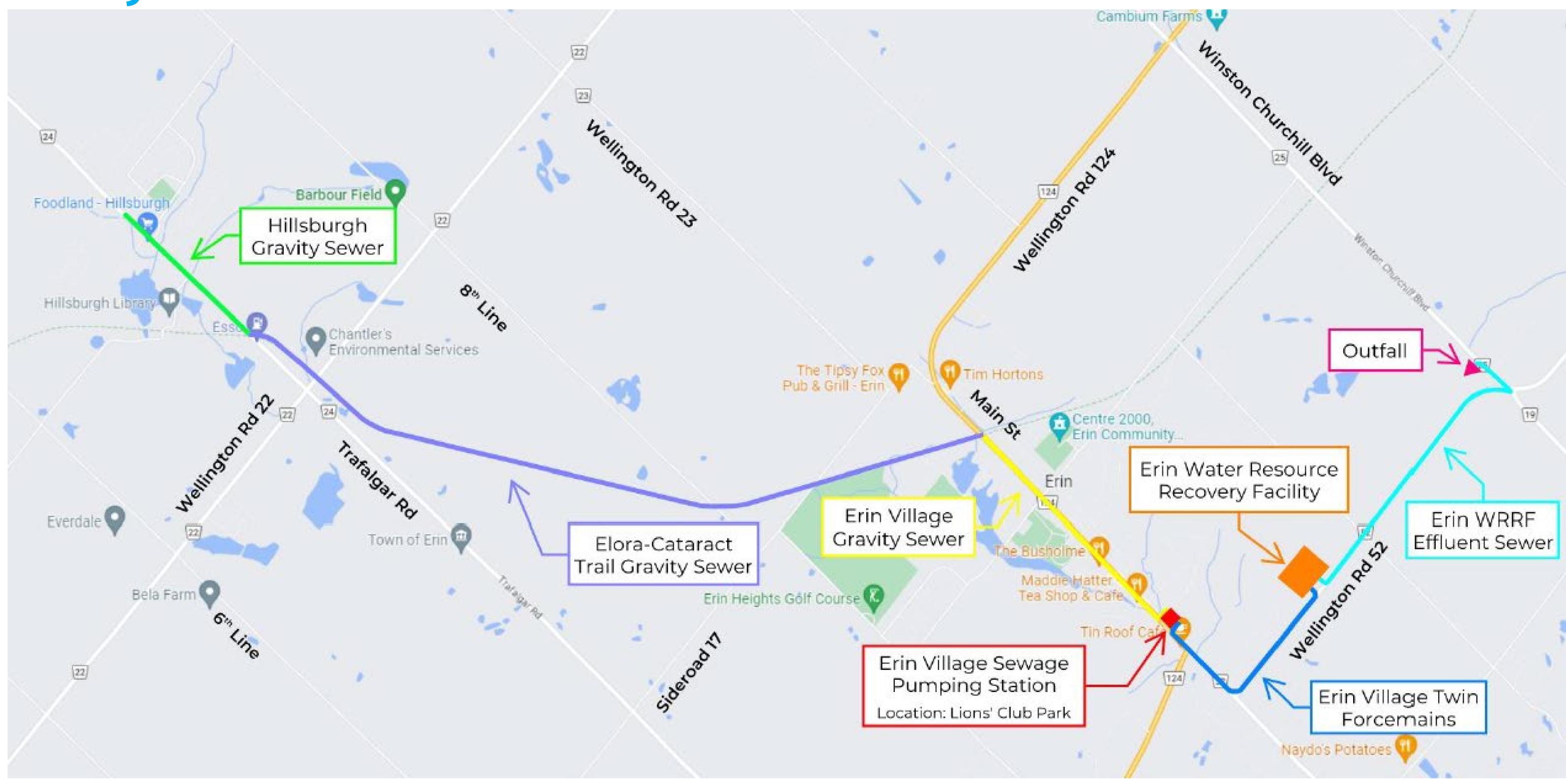




### Erin Wastewater System

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Project Overview







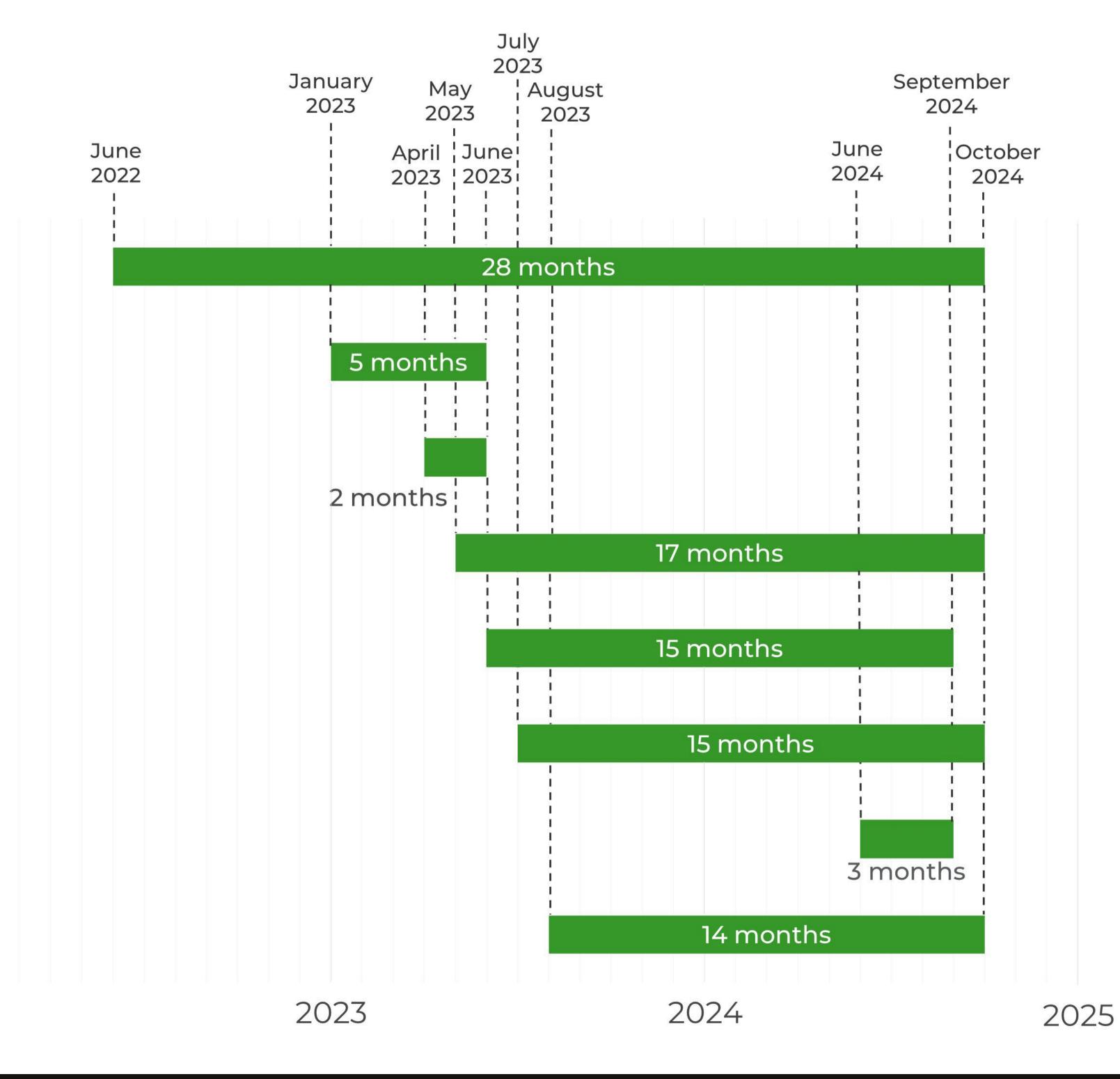






### Erin Wastewater System Anticipated Construction Schedule

Water Resource Recovery Facility Erin Village Twin Forcemains **Effluent Sewer** Hillsburgh Gravity Sewer **Erin Village Gravity Sewer Erin Village Sewage Pumping Station** Outfall **Elora Cataract Trail Gravity Sewer** 2022













## Erin Water Resource Recovery Facility Construction Ongoing







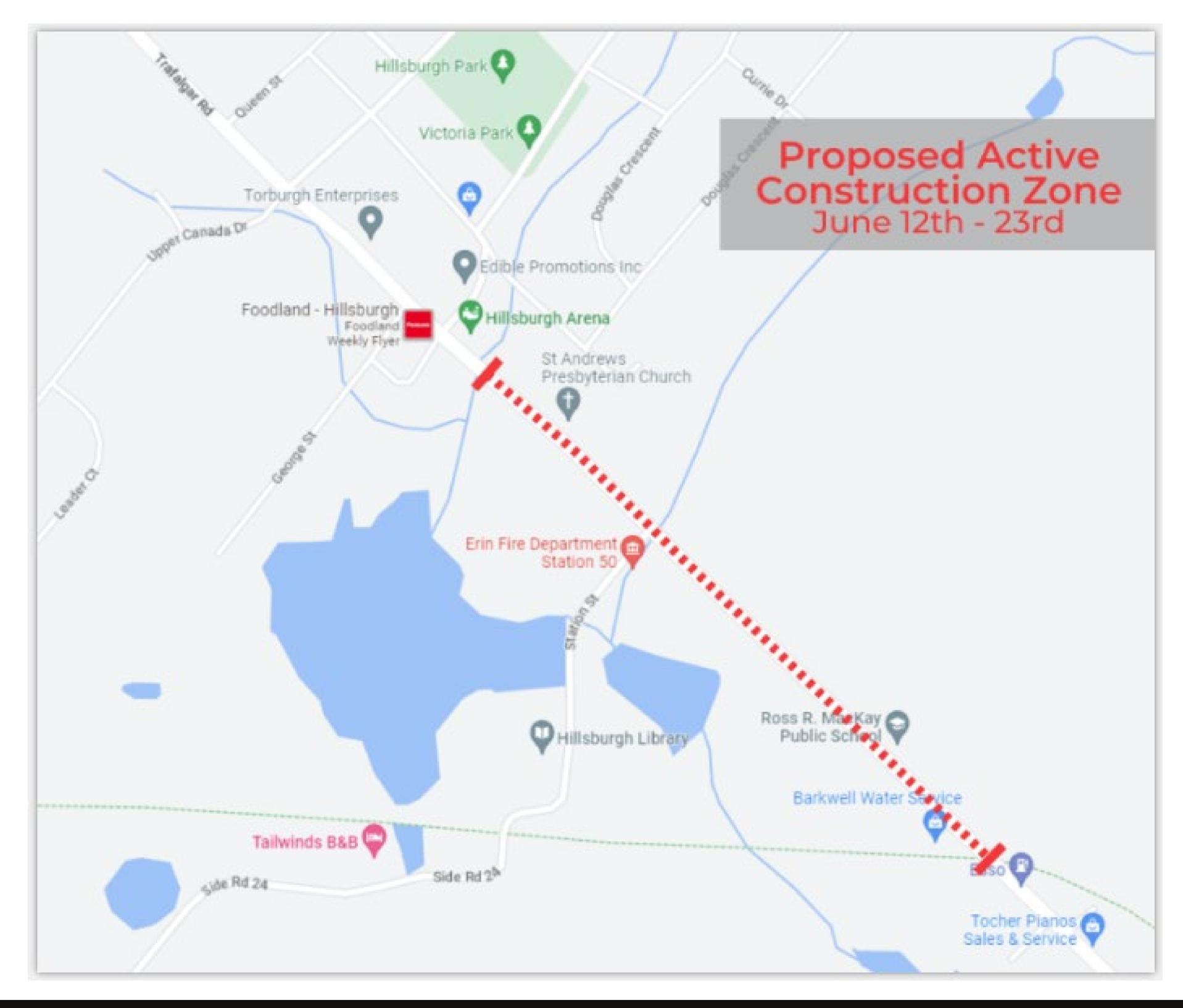


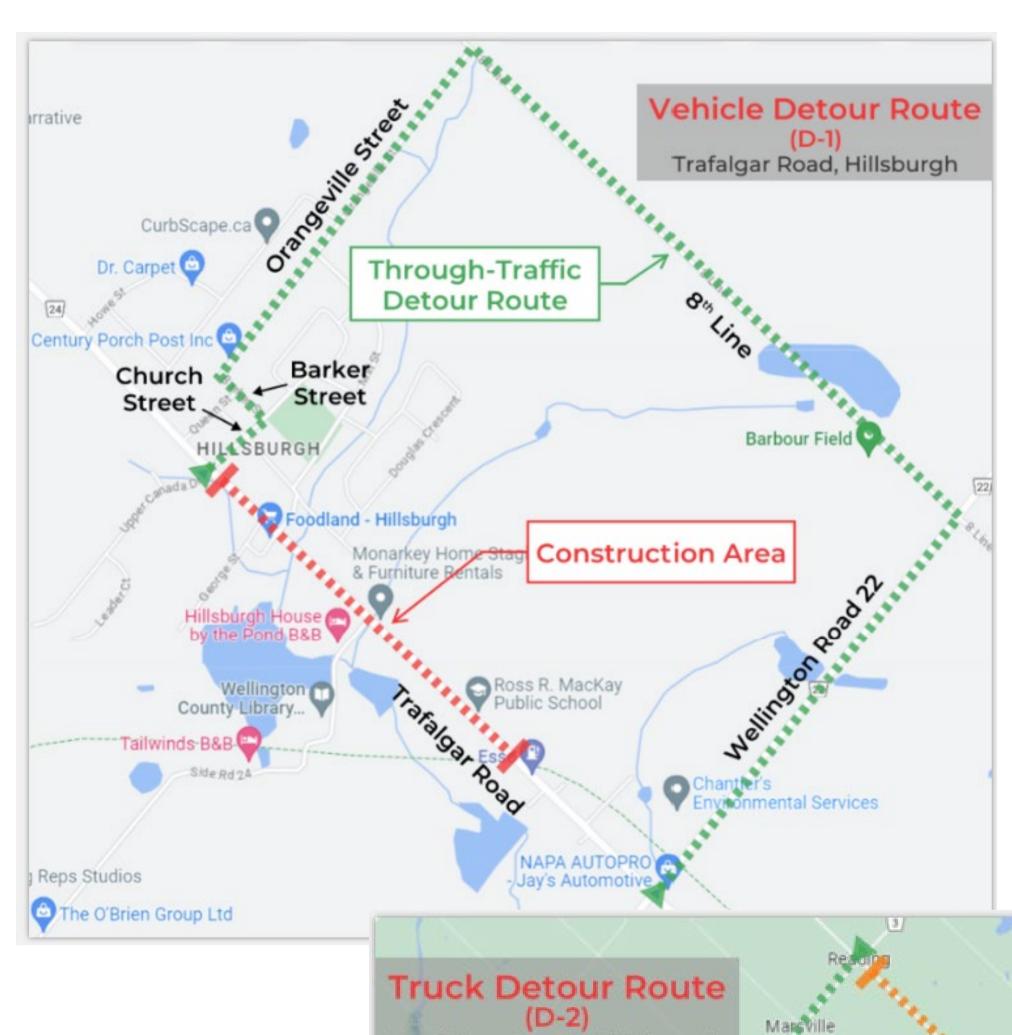


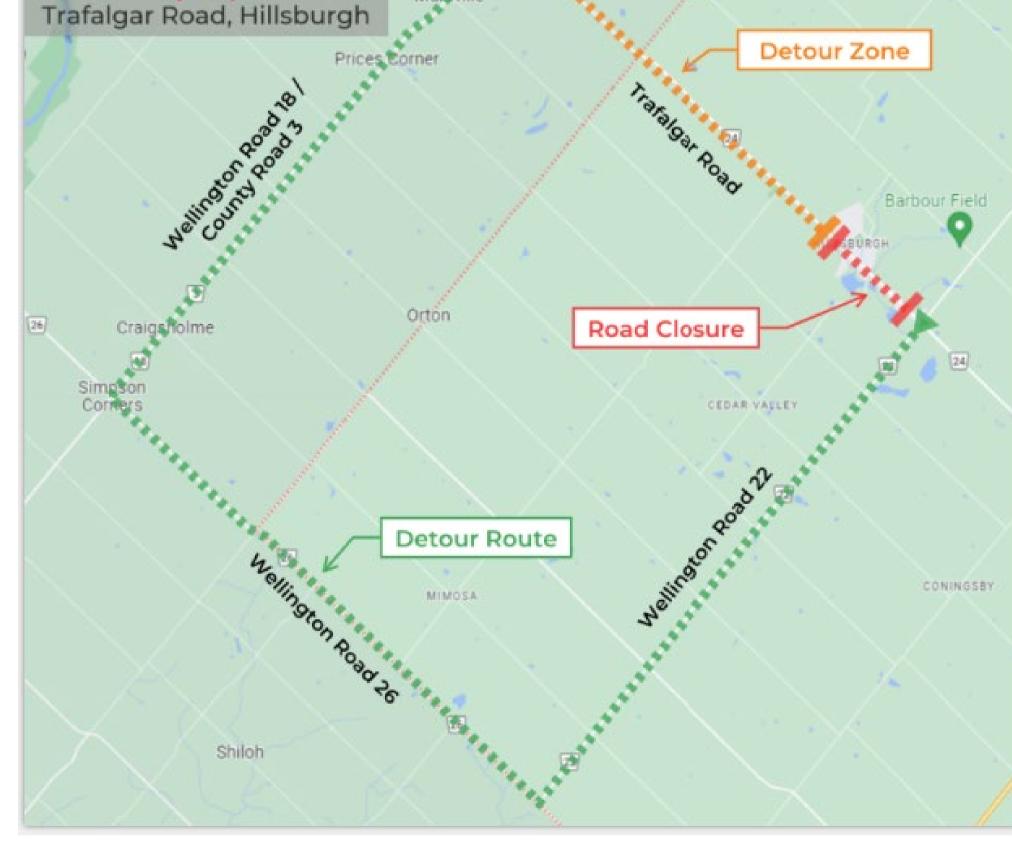




### Hillsburgh Gravity Sewer Construction Underway

















# Elora Cataract Trail Gravity Sewer Expected Start – August 2023 (pending CVC approval)











### Erin Village Gravity Sewer Construction underway





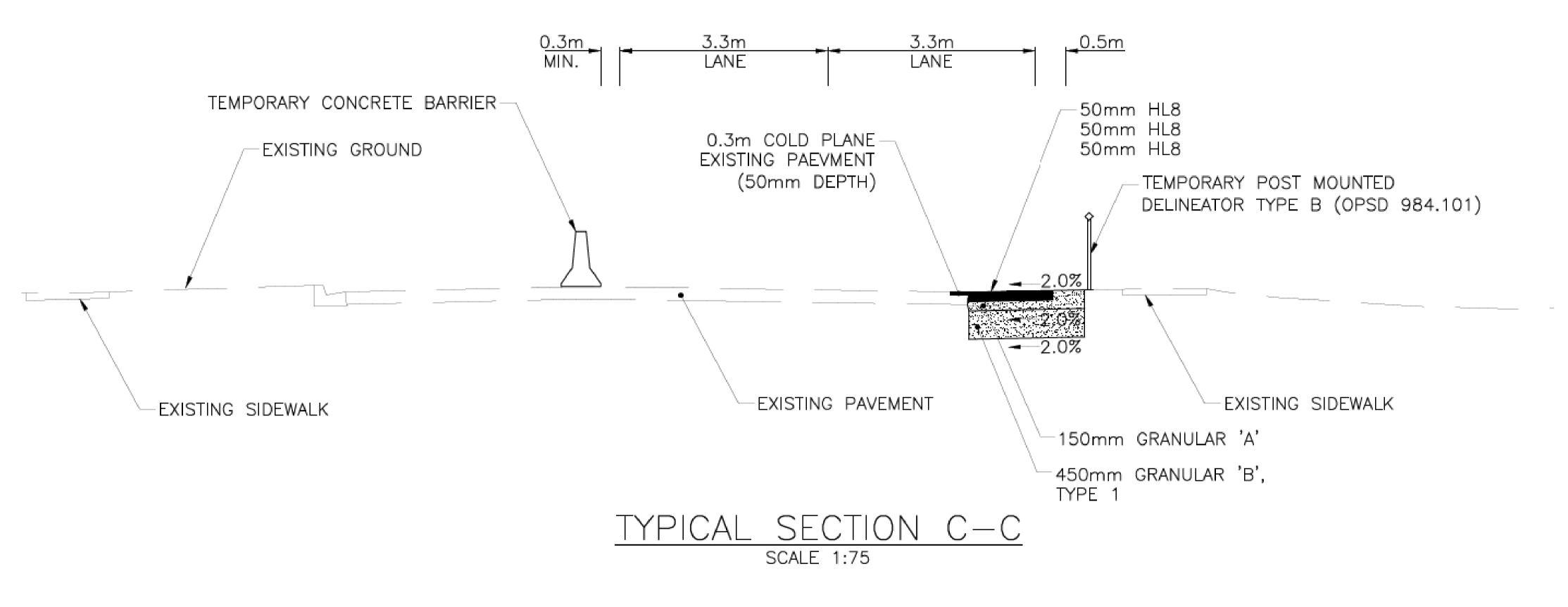








### Micro -tunneling Method



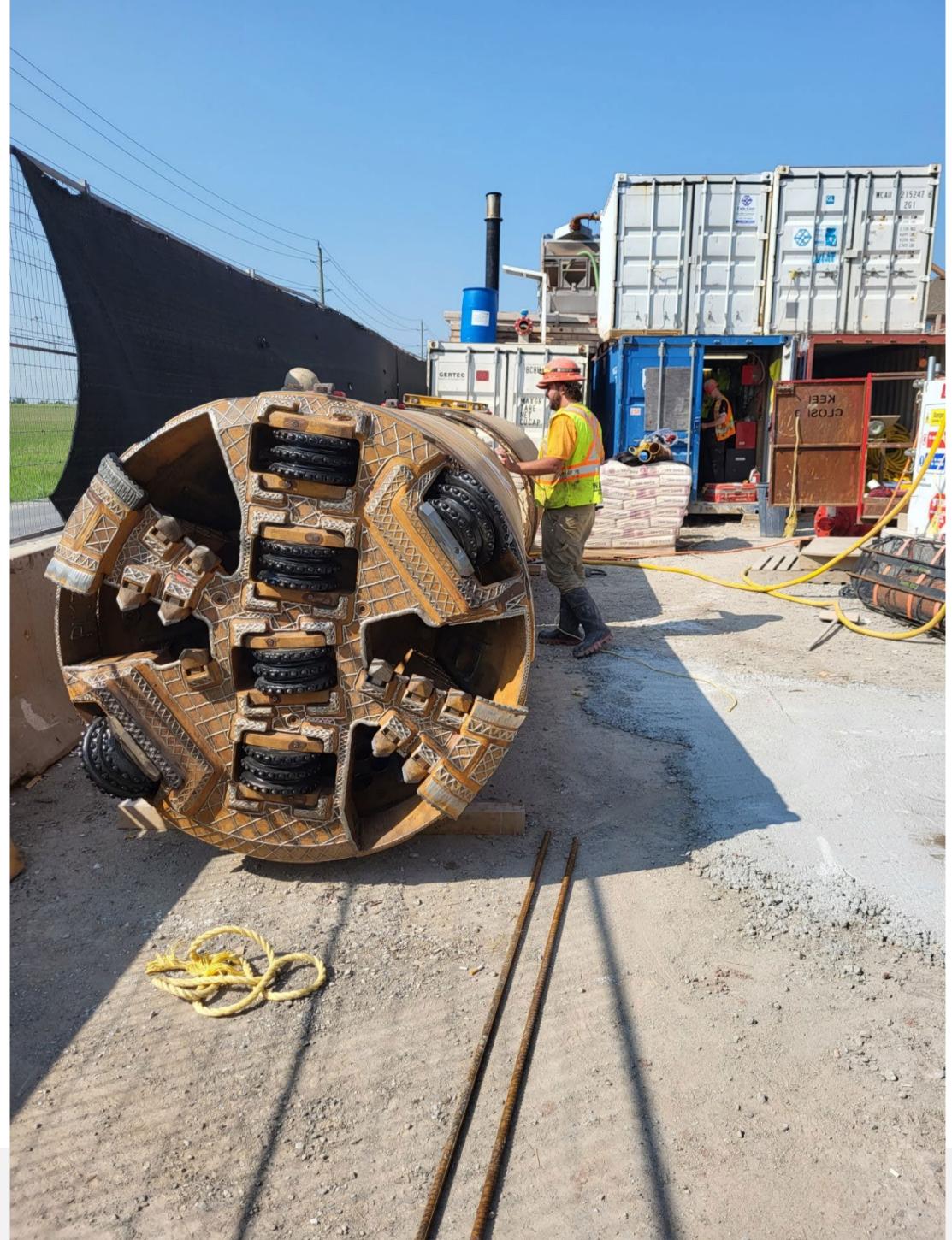






Micro -tunneling Method - Typical Compound

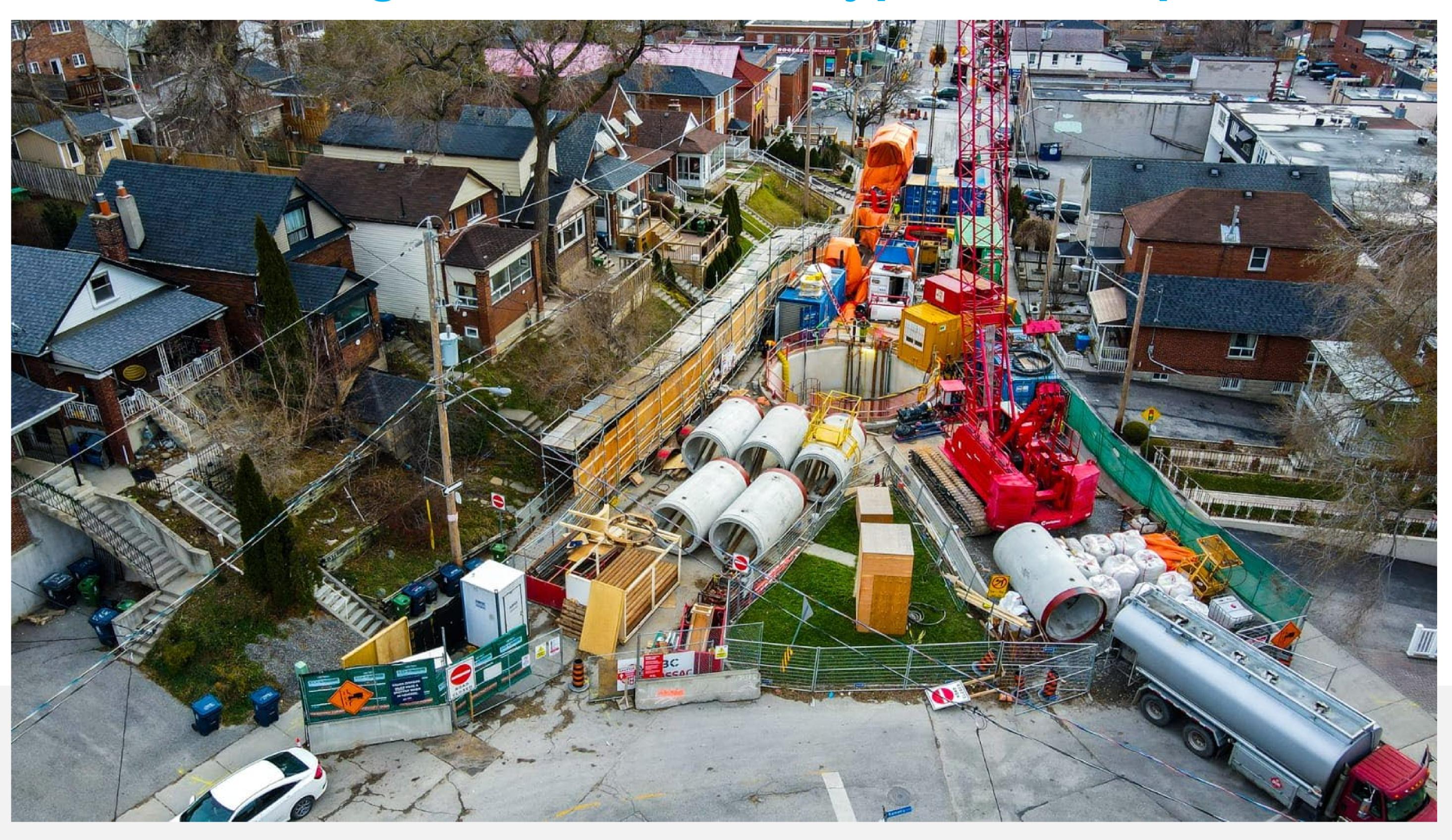






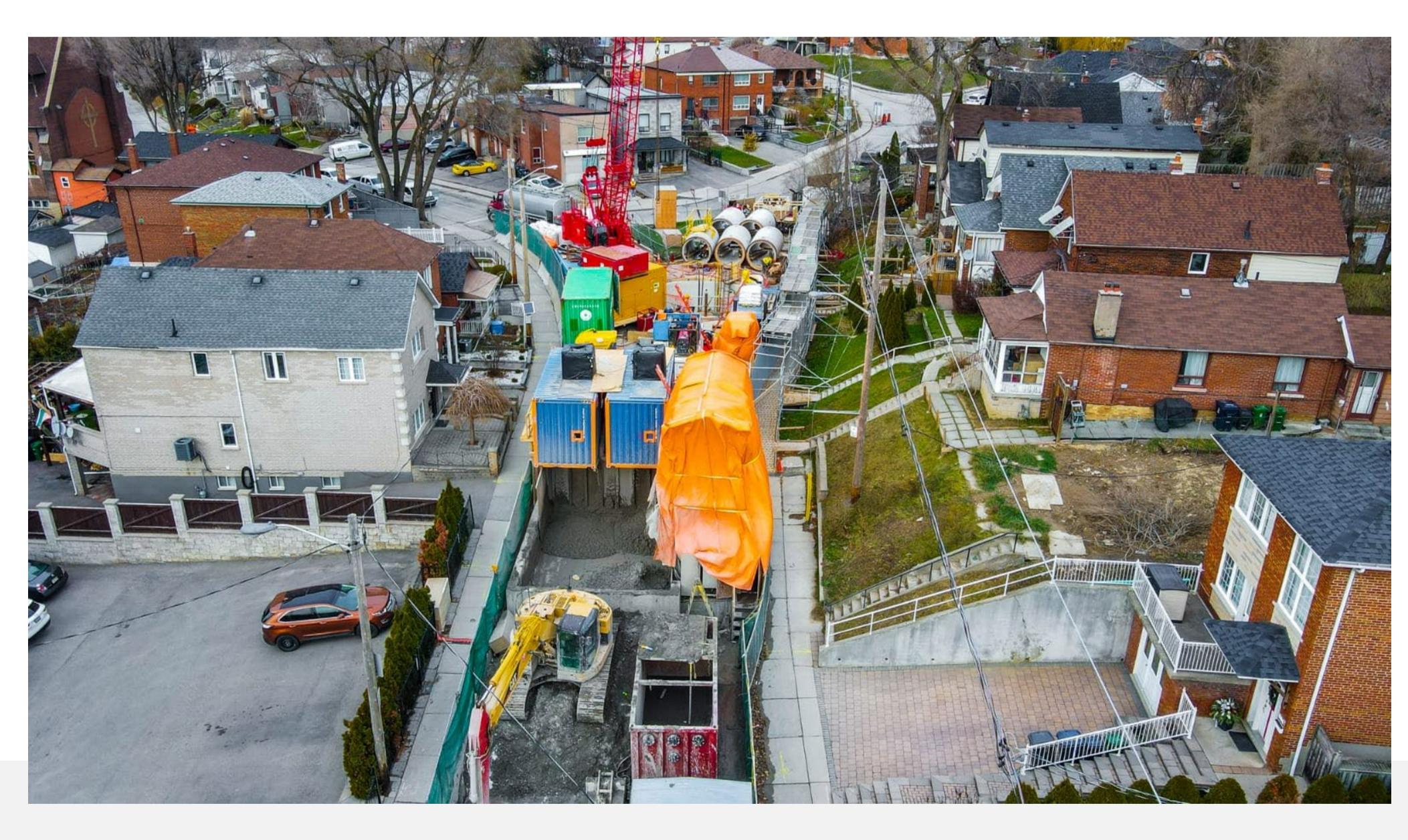


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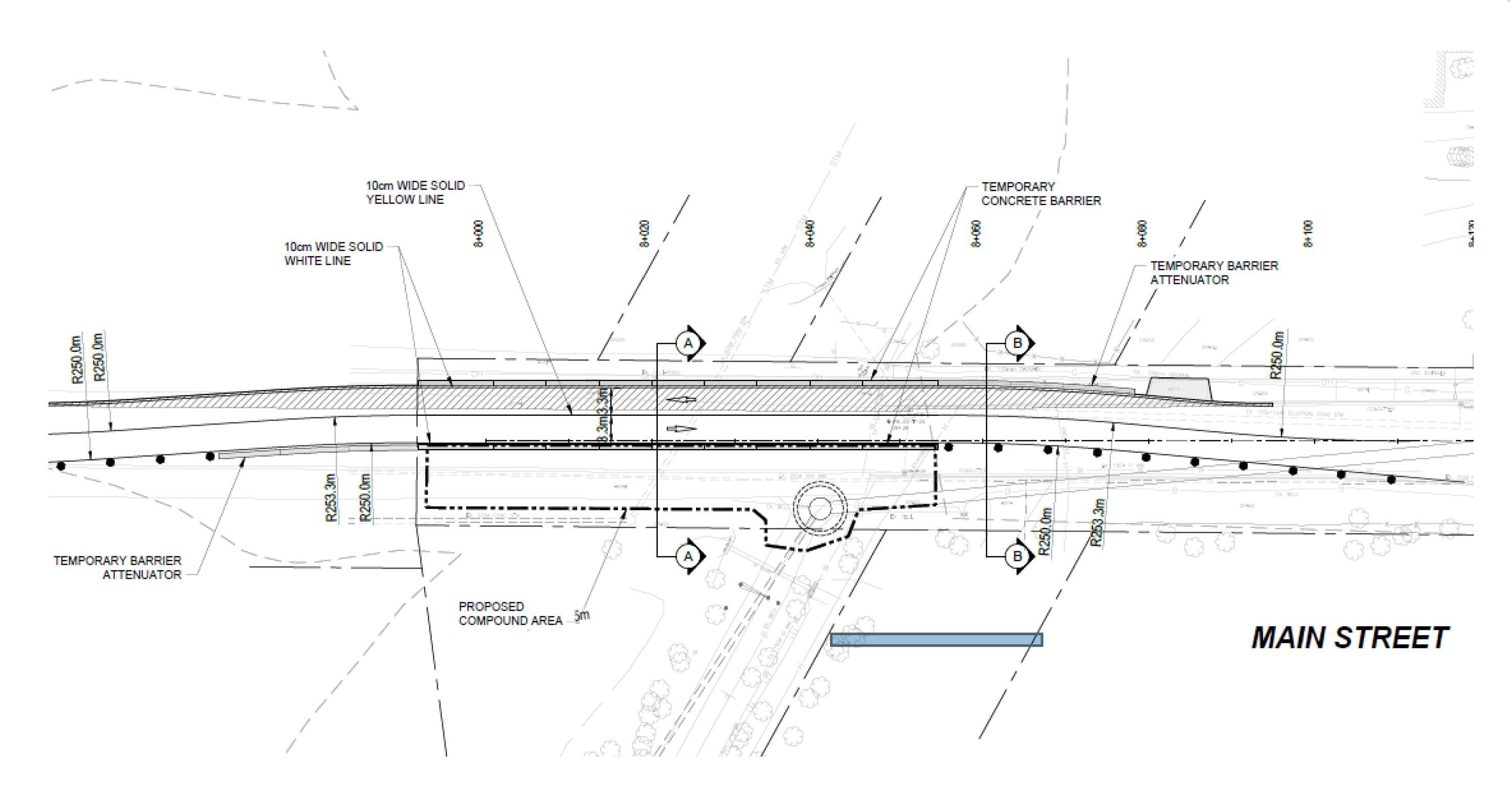


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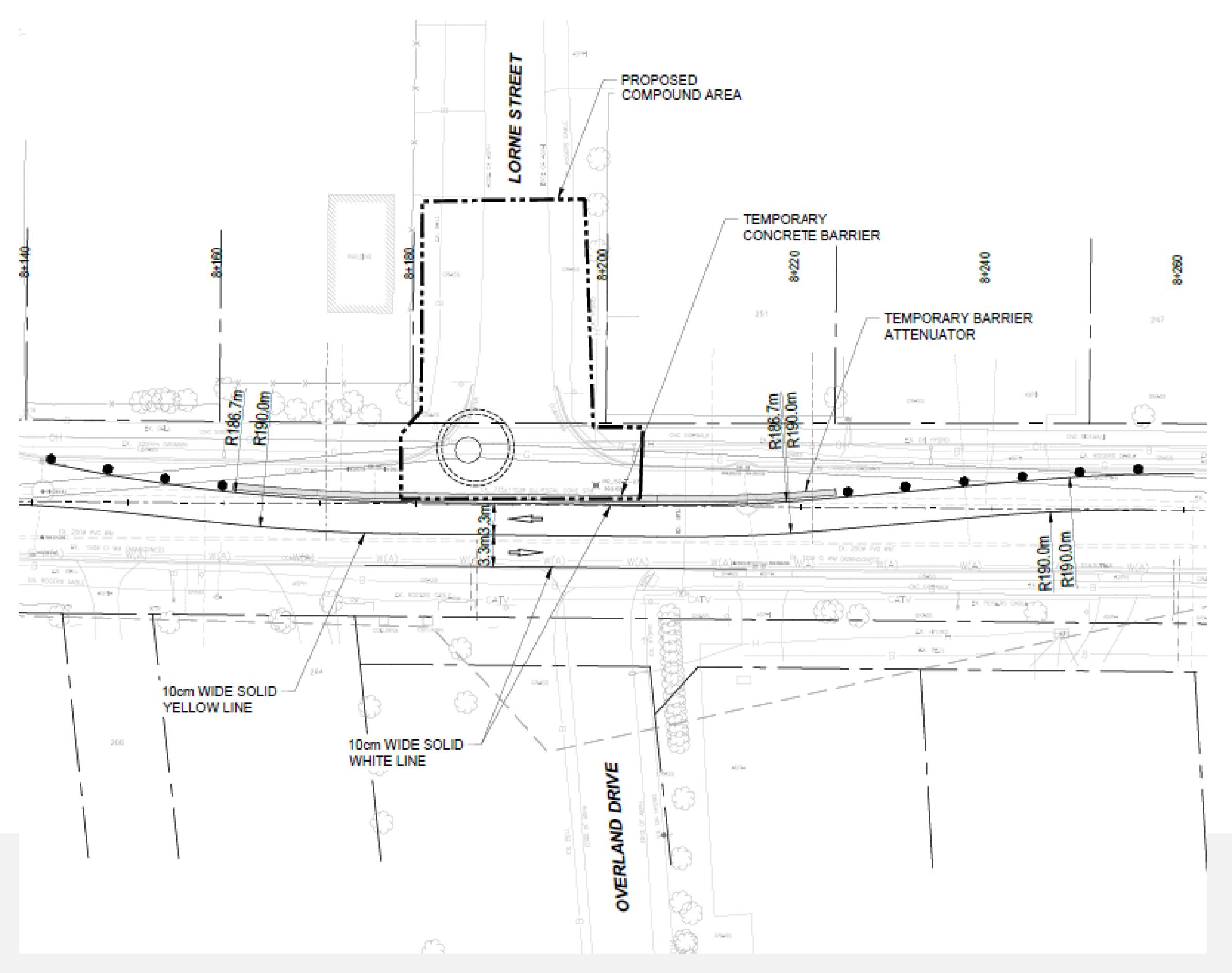




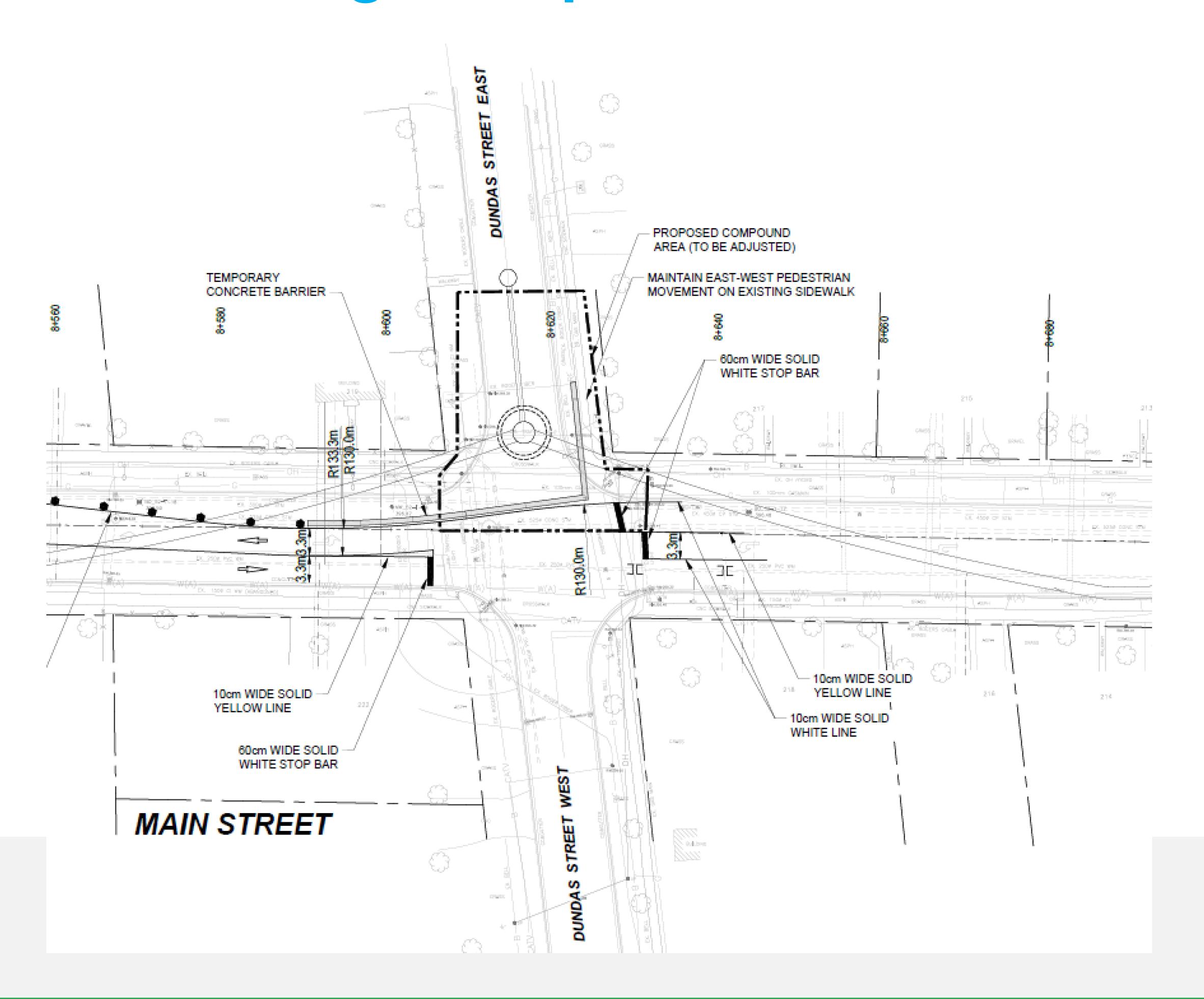




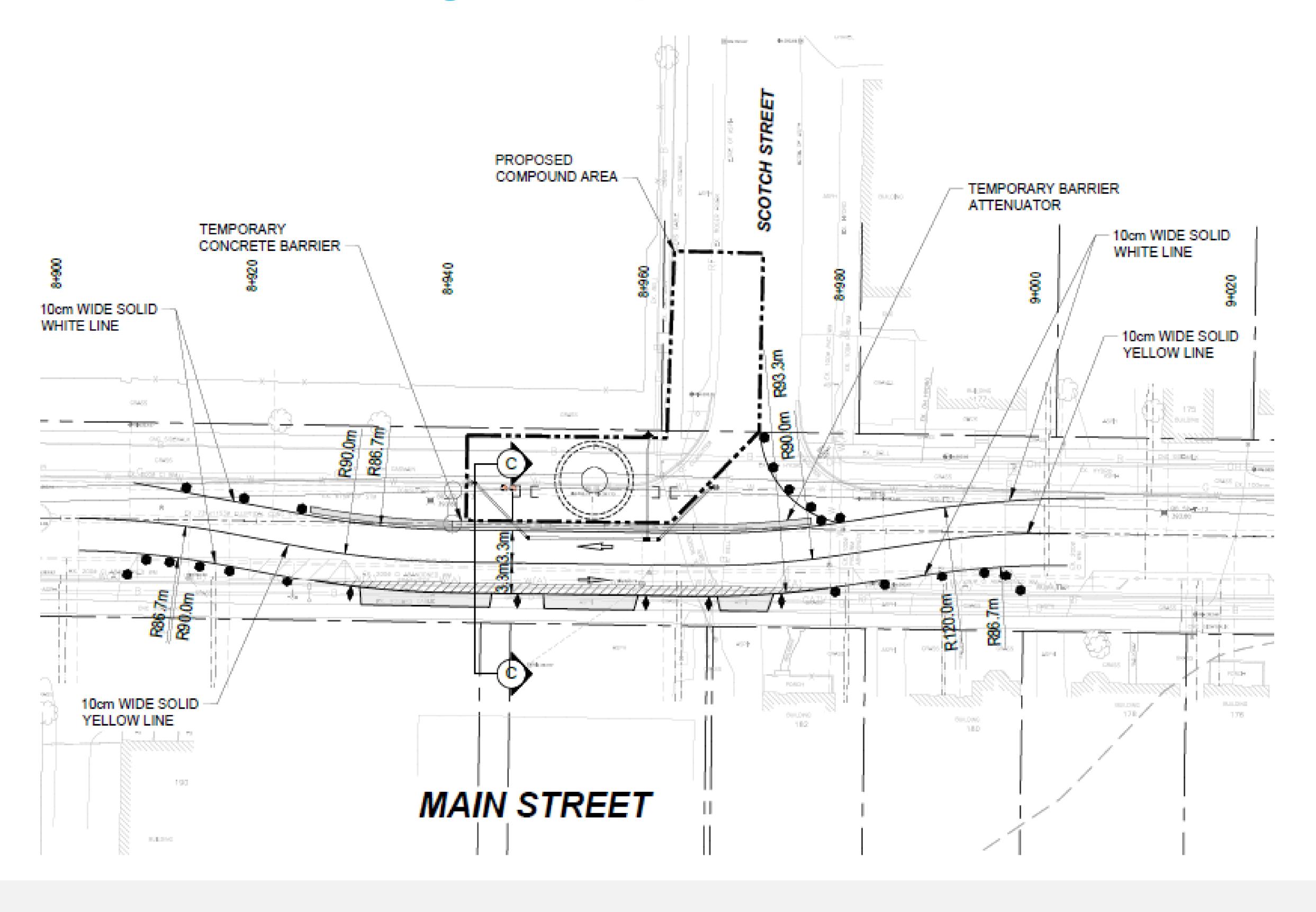




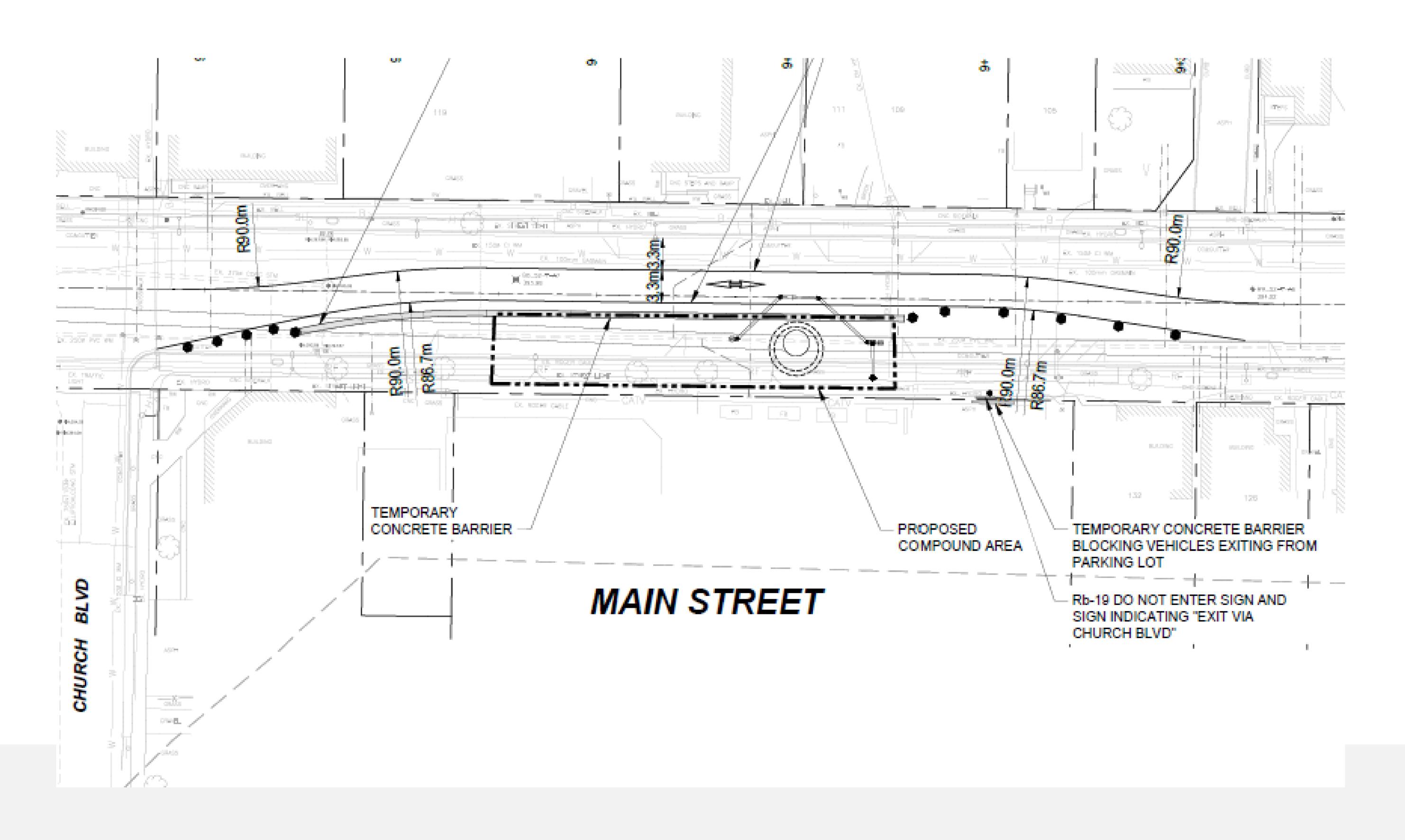








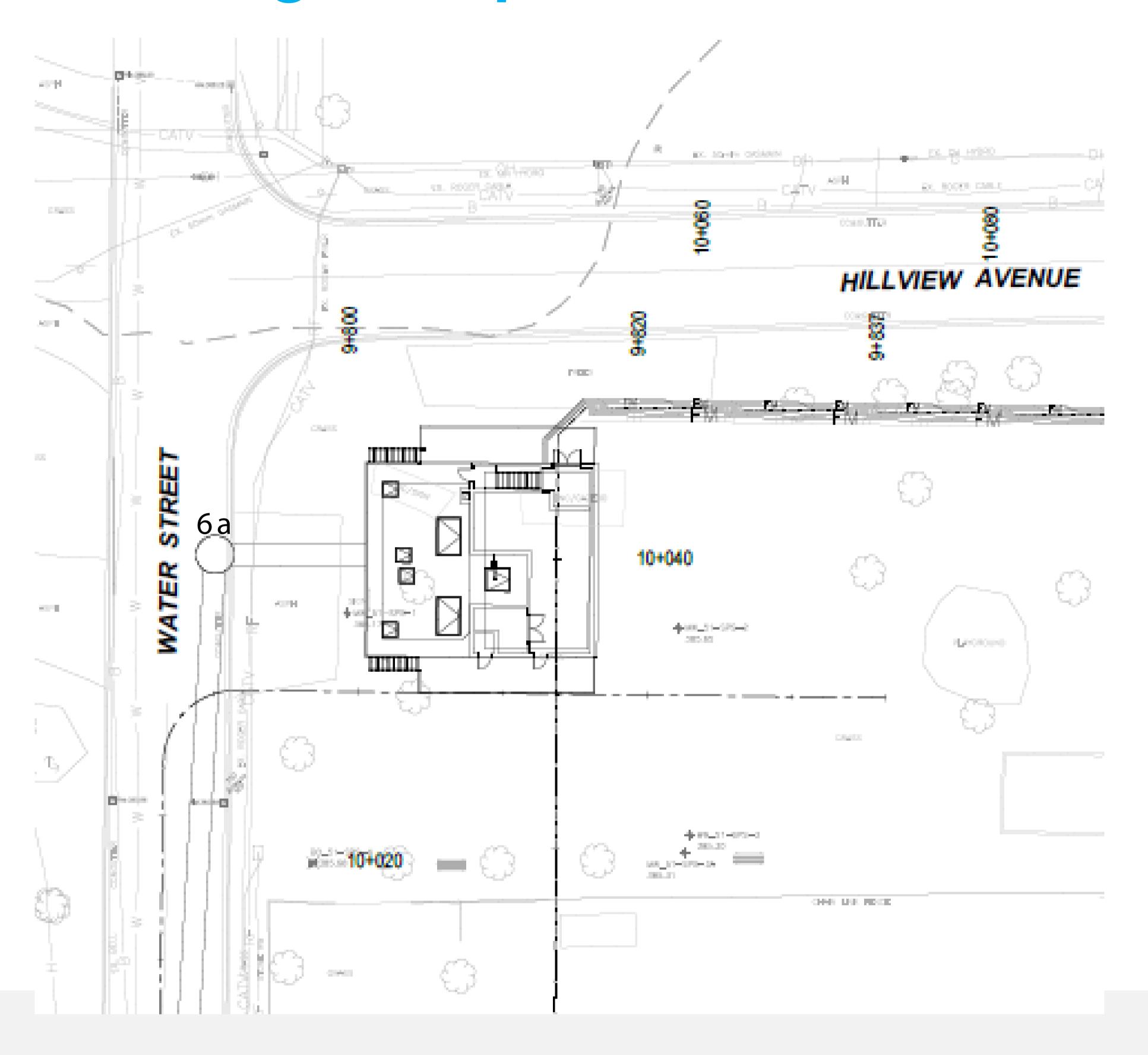




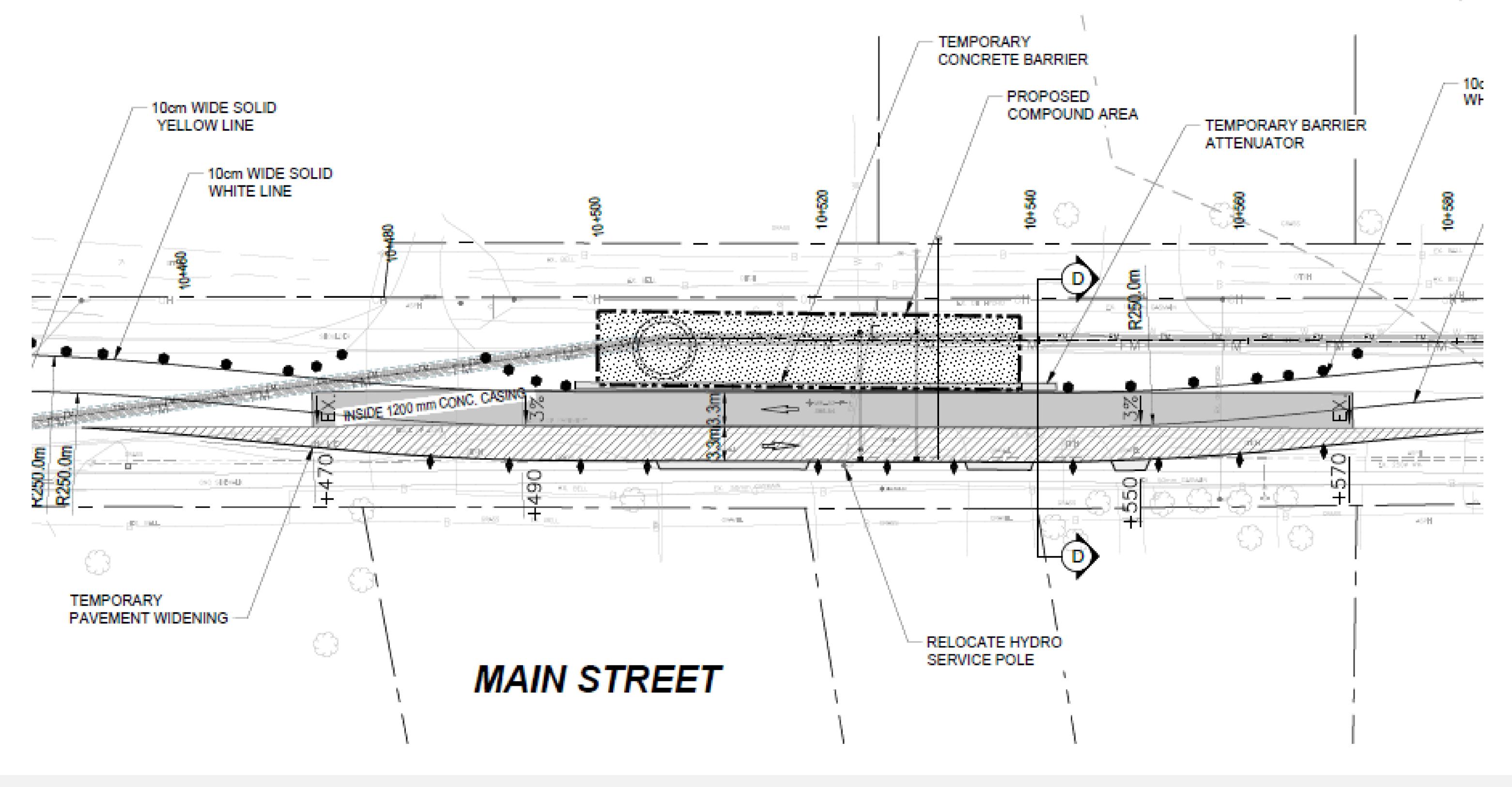


Water Street



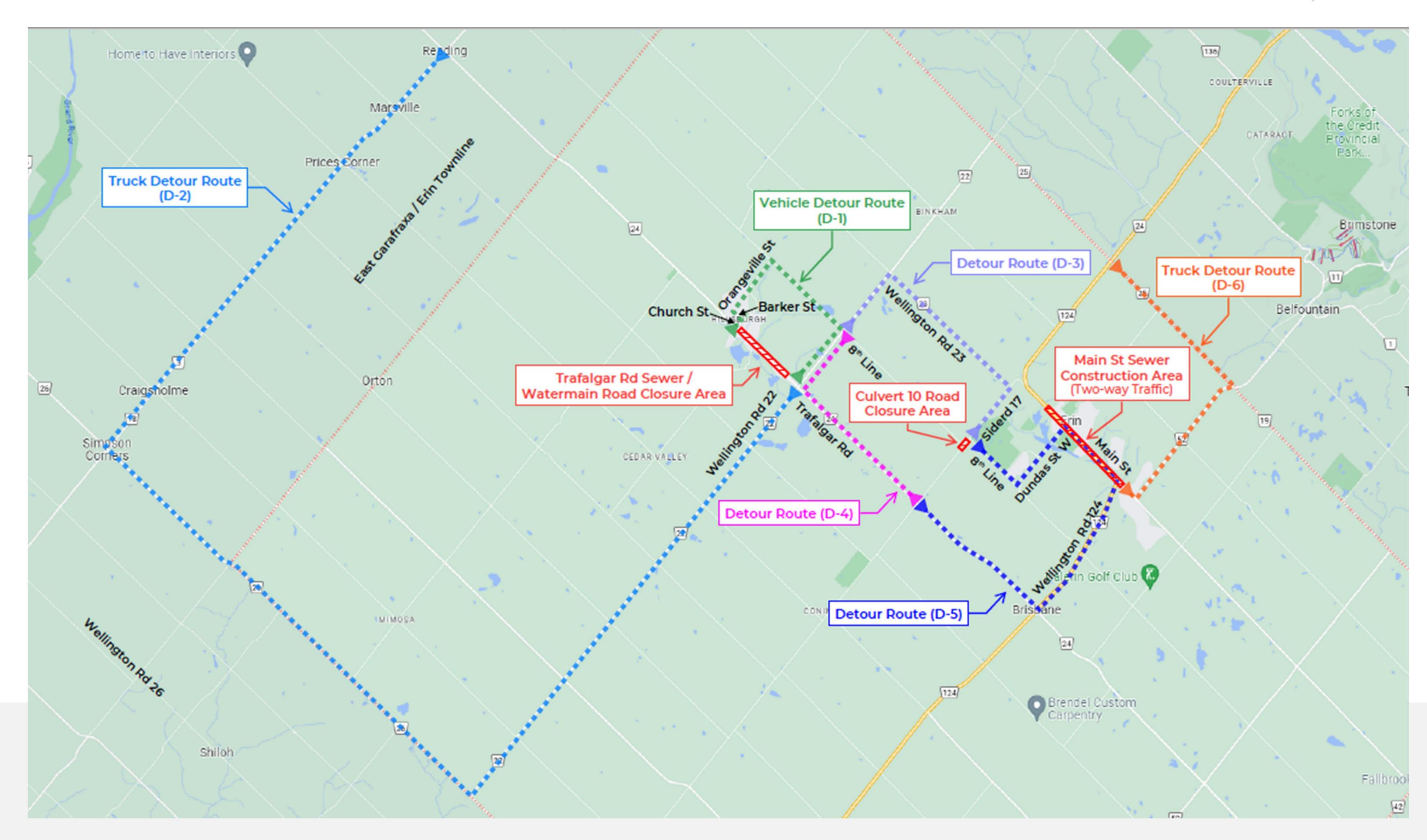






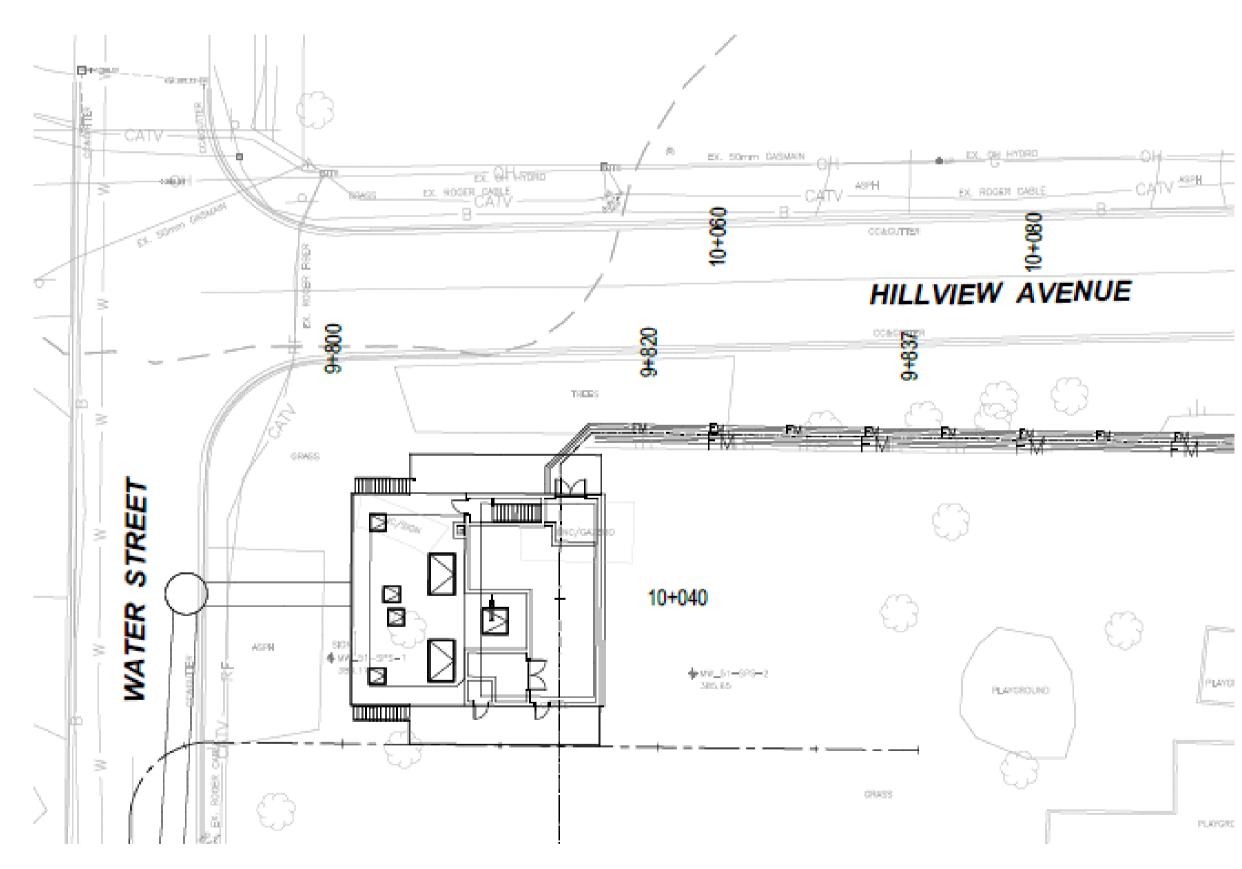
### Combined Detour Routes





## Erin Village Sewage Pumping Station MECP / CVC approvals received













### Erin Village Twin Forcemain Construction complete to Shaft 8 location











## Erin WRRF Effluent Sewer Construction complete to outfall manhole











## Erin WRRF Outfall Construction expected spring 2024











## Erin Wastewater System Effluent Cooling System

As per Environmental Compliance Approval #7877-CALRZU, Condition 11.1:

"Temperature in the final effluent (measured at the outfall in manhole #10) shall always be maintained at or below the objective of 19°C (4-day moving average) to ensure end of pipe lethal ammonia toxicity. If the 4-day moving average temperature exceeds 19°C, effluent cooling system shall be turned on to bring the effluent temperature to the objective of 19°C..."

MECP Regional Technical Support Suggestion (Email February 23, 2022):

"...when effluent temperature exceeds 19°C for 3 hours at the effluent quality monitoring station, an effluent temperature mitigation procedure (running the cooling system) shall be triggered to effectively return effluent temperature to 19°C within the following 3 hours. Therefore, the maximum design flow should be based on actual peak flow..."









### Erin Wastewater System

Cooling System - The cooling system design brief has been reviewed by the MECP and a detailed design is being completed.

### Cooling Alternatives

Recommendations



#### **Covers and Shades**

Secondary clarifiers should be covered to reduce the potential of solar gain.



#### Chillers

Vapour compression mechanical water-cooled chillers should be designed and implemented.



#### Pre-Treatment of Heat Loads in Influent Flow

The Town of Erin's bylaws should be amended to restrict the temperature of commercial/industrial discharges to the municipal sewer.









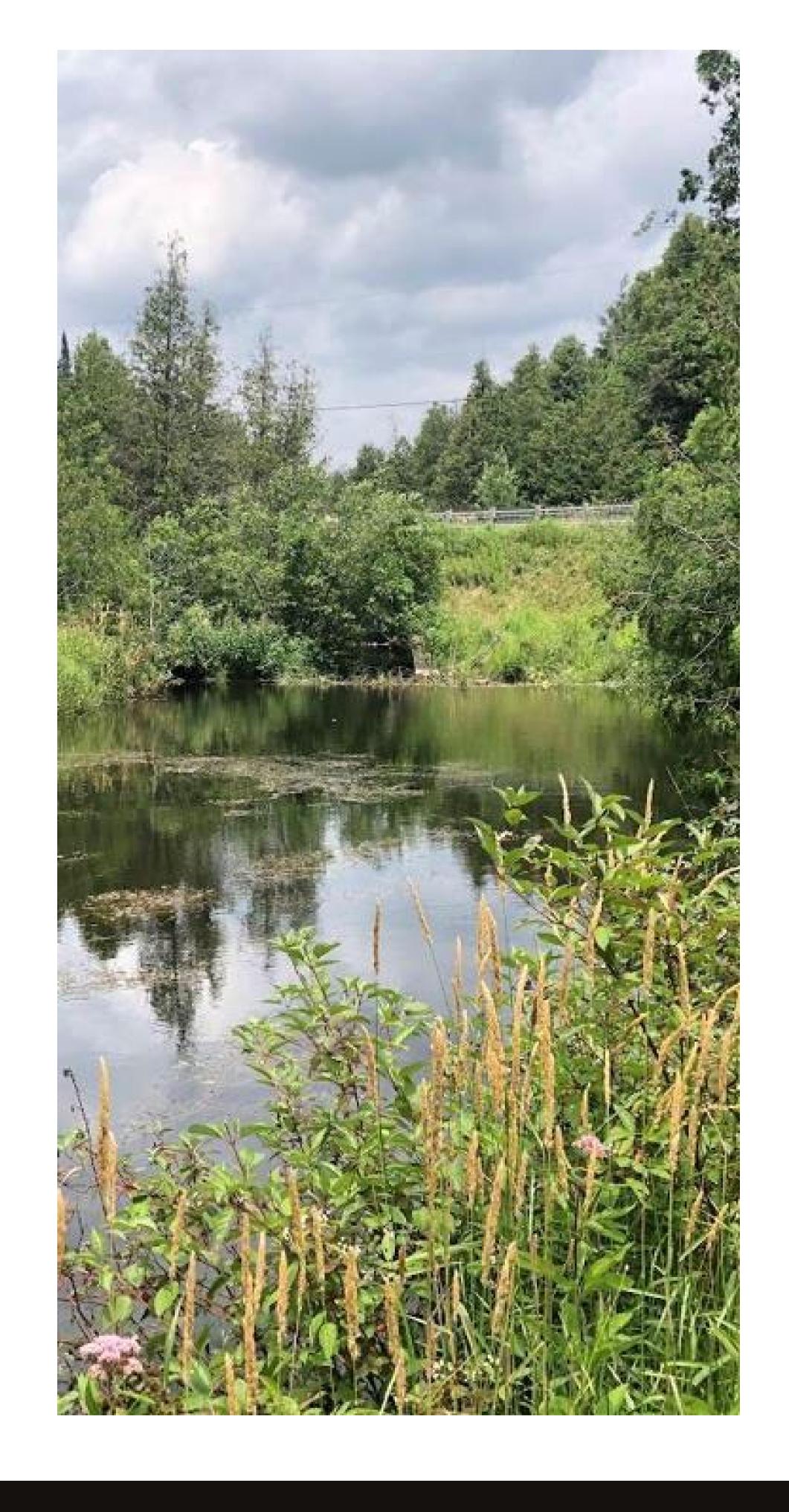


### Erin Wastewater System Receiver Monitoring Plan

RECEIVER MONITORING AND MITIGATION PLAN

ERIN WATER RESOURCE RECOVERY FACILITY











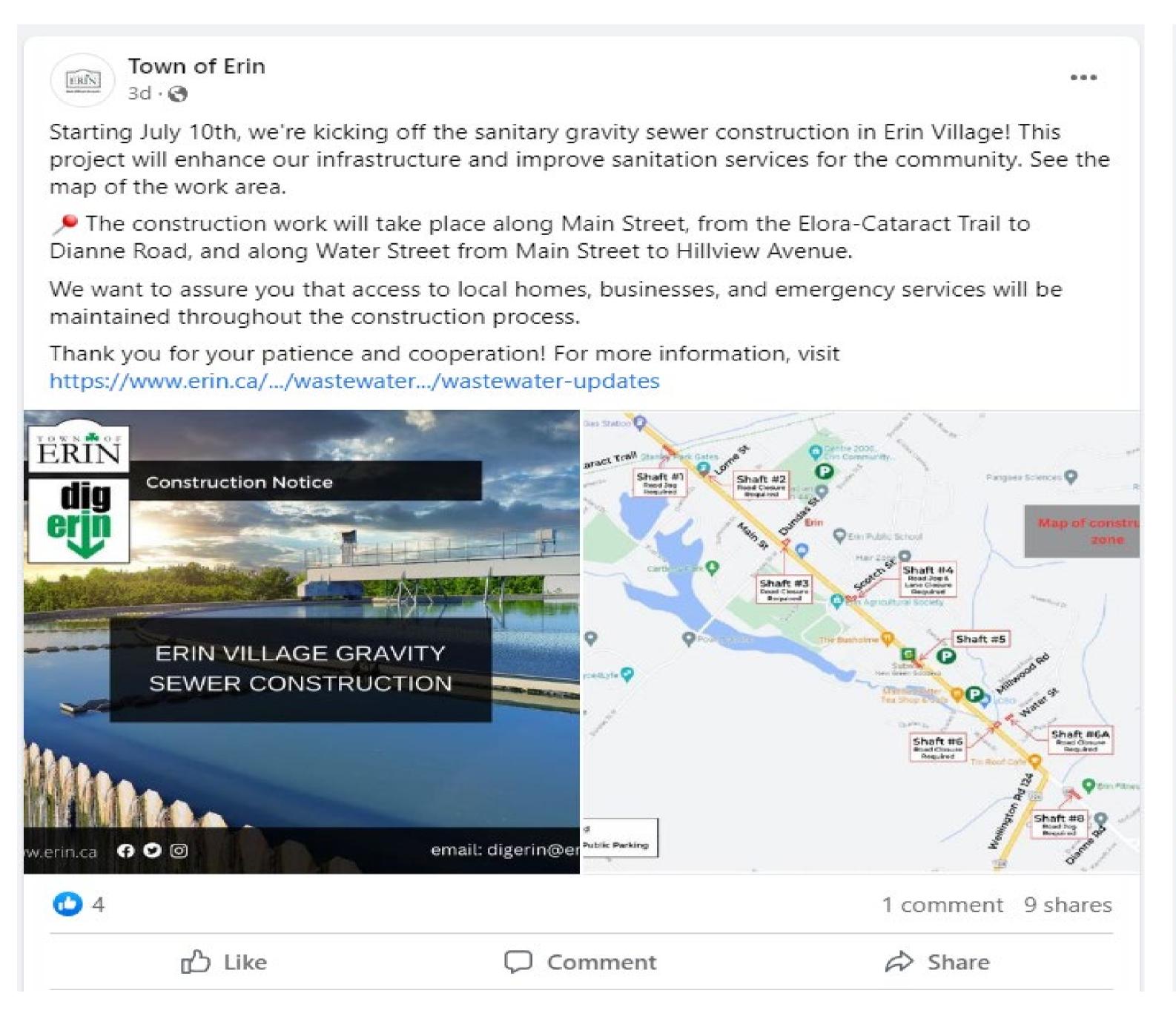


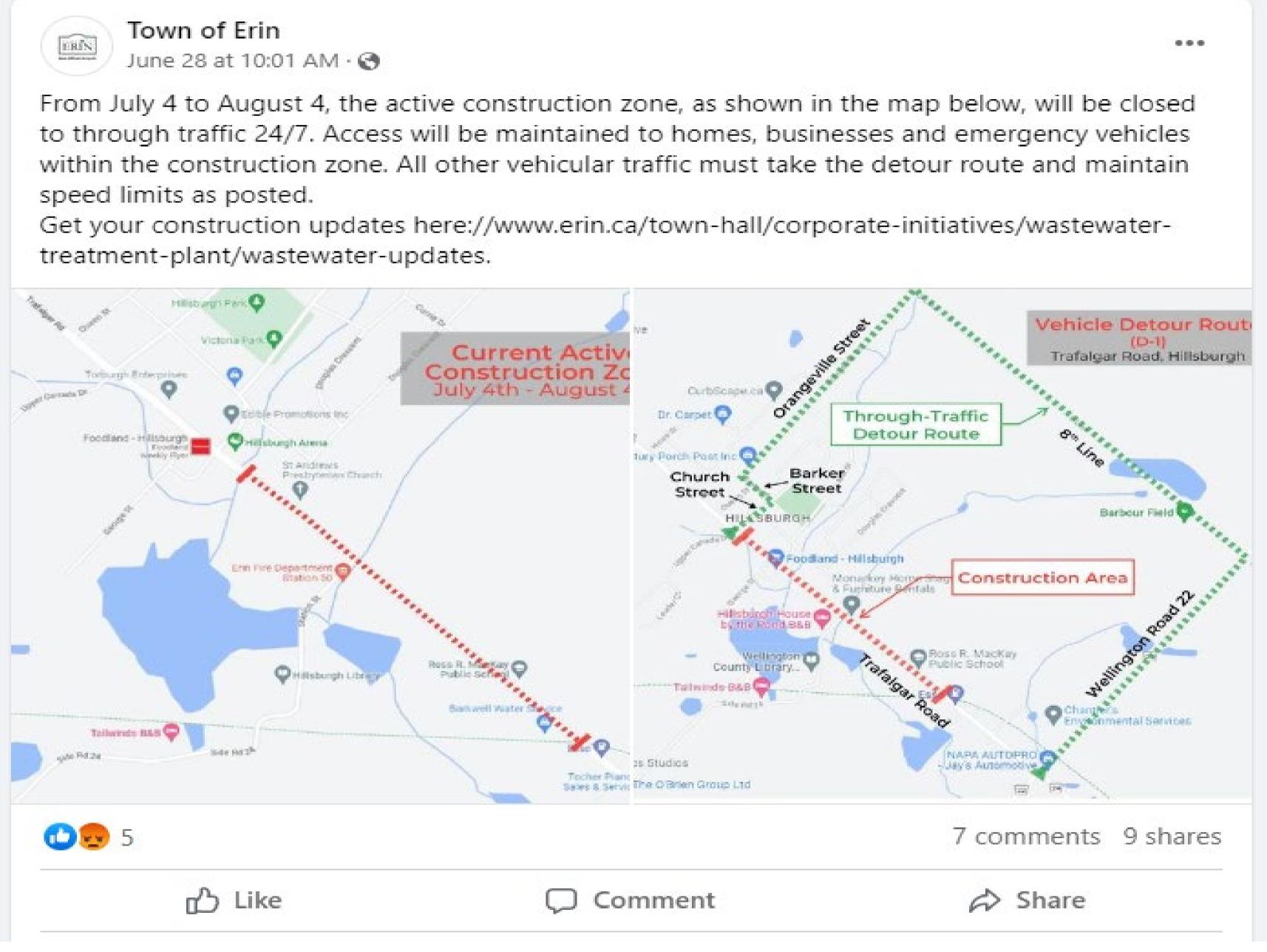


### Community Engagement

Facebook 1362 Reach – 12 Reactions Instagram 671 Reach – 30 Engaged Twitter – 73 Impressions – 19 Engaged

Facebook 664 Reach – 23 Reactions Instagram 671 Reach – 30 Engaged Twitter – 155 Impressions – 27 Engaged

















#### Community Engagement

### Drop In Sessions held bi-weekly

#### Attendance

Date	Hillsburgh	Erin
May 17	6	2
May 31	7	0
June 14	1	0
June 28	2	3
July 12	4	0
Total	20	5









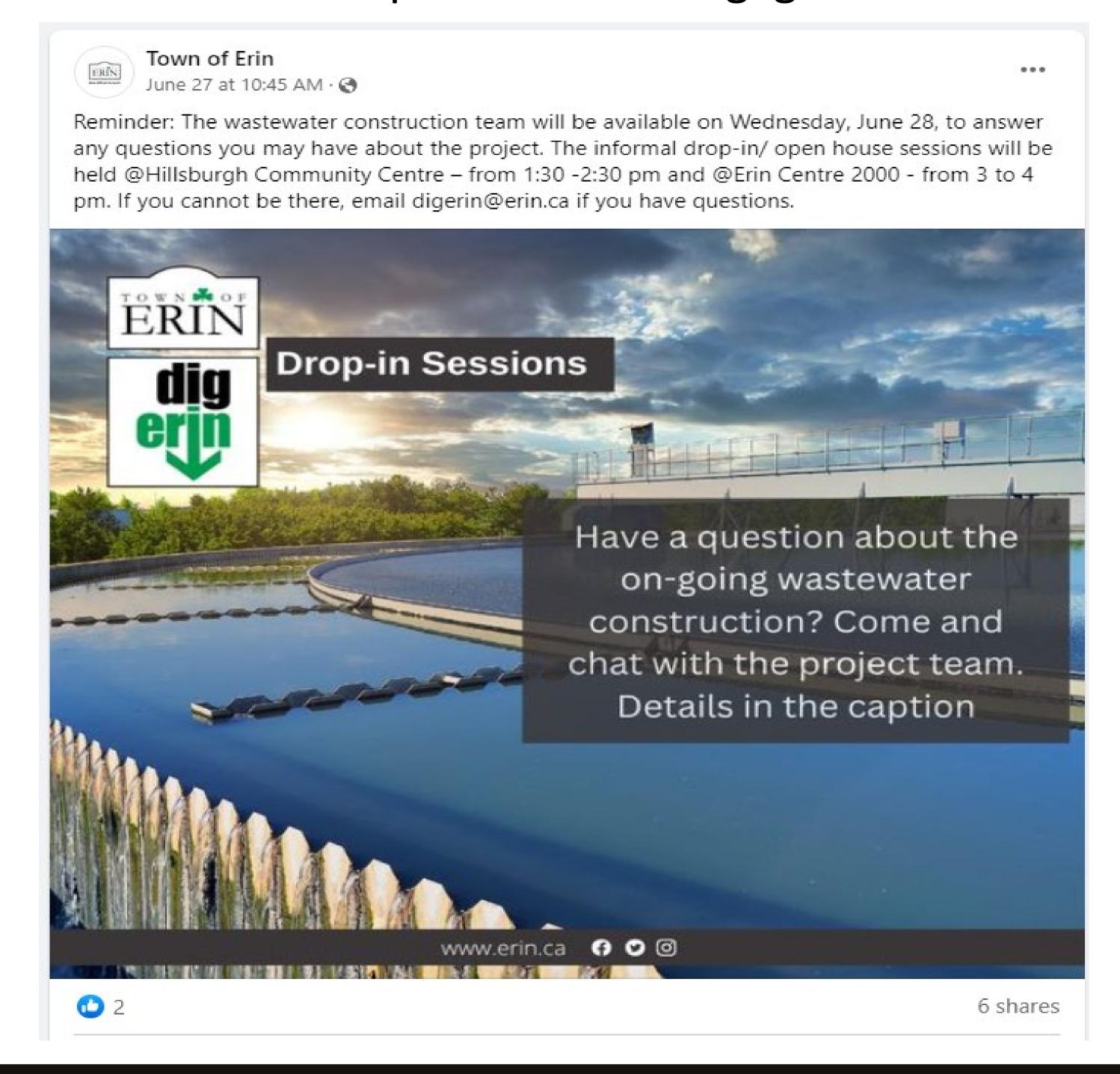


### Community Engagement Drop In Sessions

Facebook 620 Reach – 6 Reactions Instagram 190 Reach – 5 Engaged Twitter – 69 Impressions



Facebook 316 Reach – 7 Reactions Instagram 313 Reach –7 Engaged Twitter – 148 Impressions – 5 Engaged













### Community Engagement Drop In Session Newspaper Ads

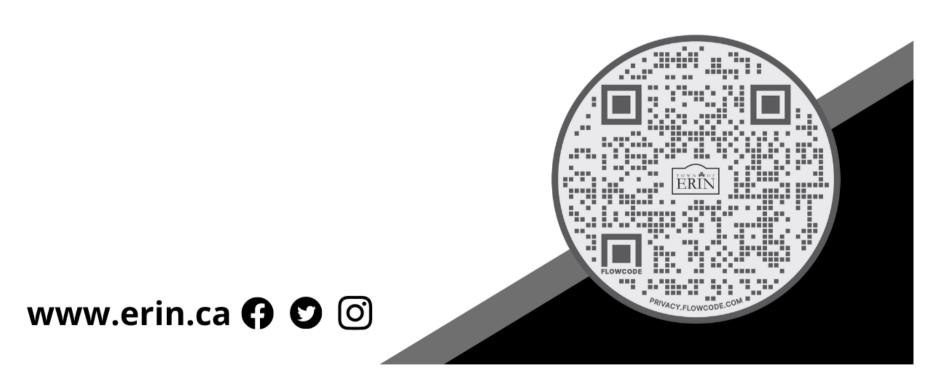
¼ page ad starting July 20 for 4 weeks



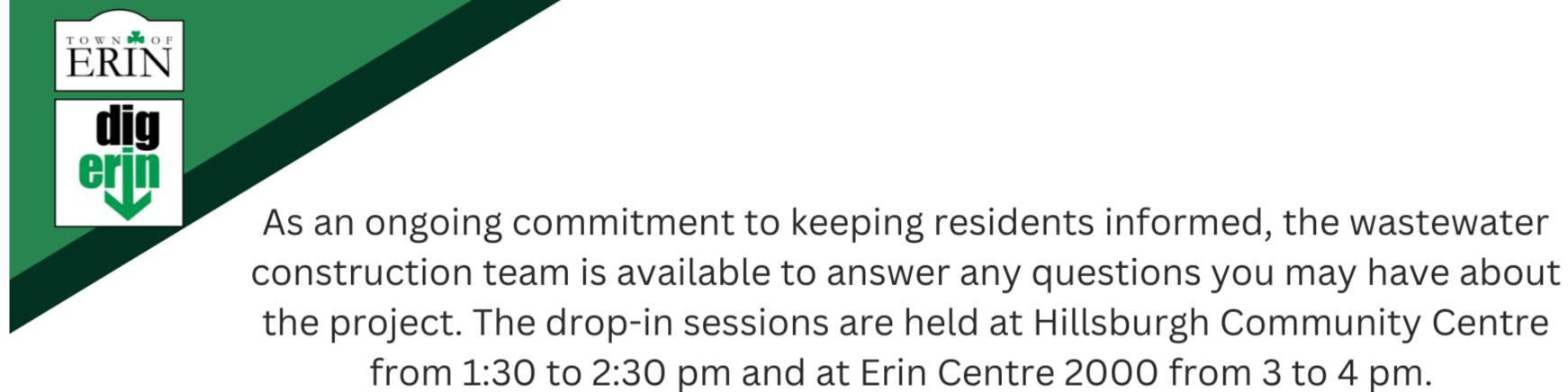
As an ongoing commitment to keeping residents informed, the wastewater construction team is available to answer any questions you may have about the project. The drop-in sessions are held at Hillsburgh Community Centre from 1:30 to 2:30 pm and at Erin Centre 2000 from 3 to 4 pm.

> **Upcoming Dates:** July 26, 2023 August 9, 2023 August 23, 2023 September 6, 2023

For construction updates, road closures and detour maps, please visit www.erin.ca

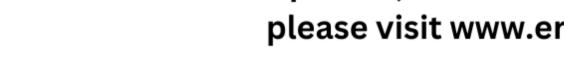


½ page ad in Erin Advocate

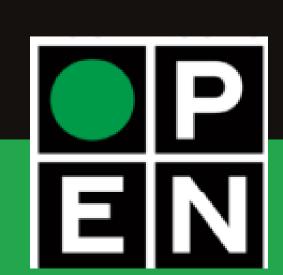


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### Project Construction Communication

Construction Signage



















### Project Construction Communication Project Signage









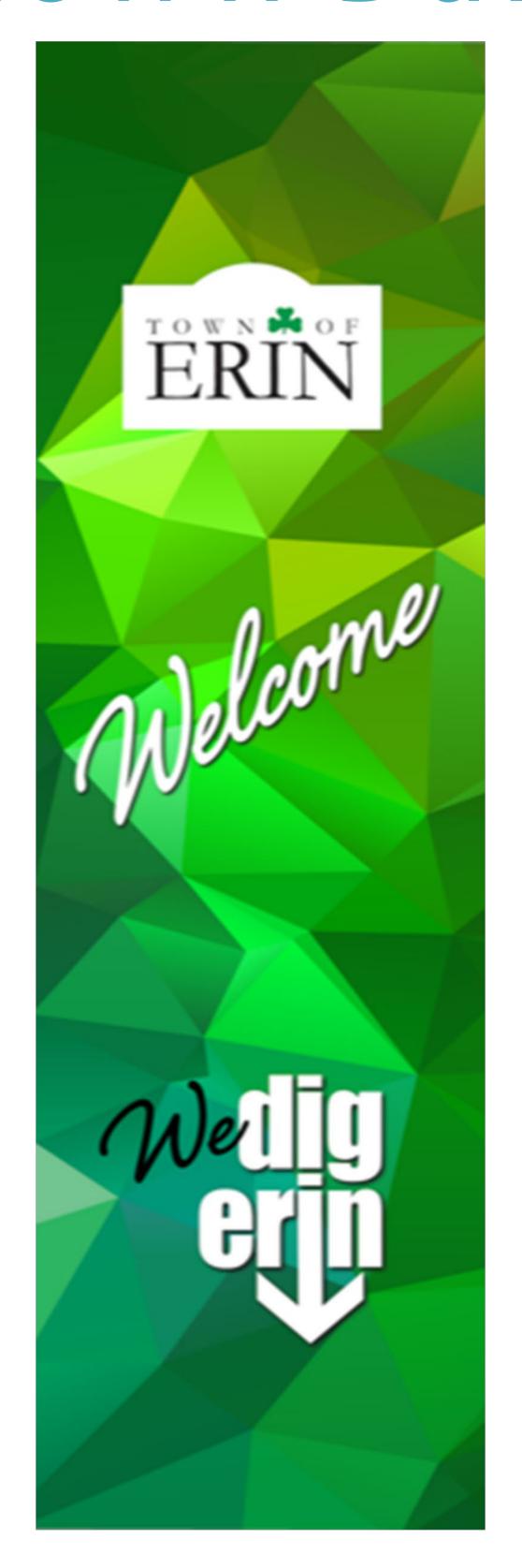






### Project Construction Communication Downtown Banners











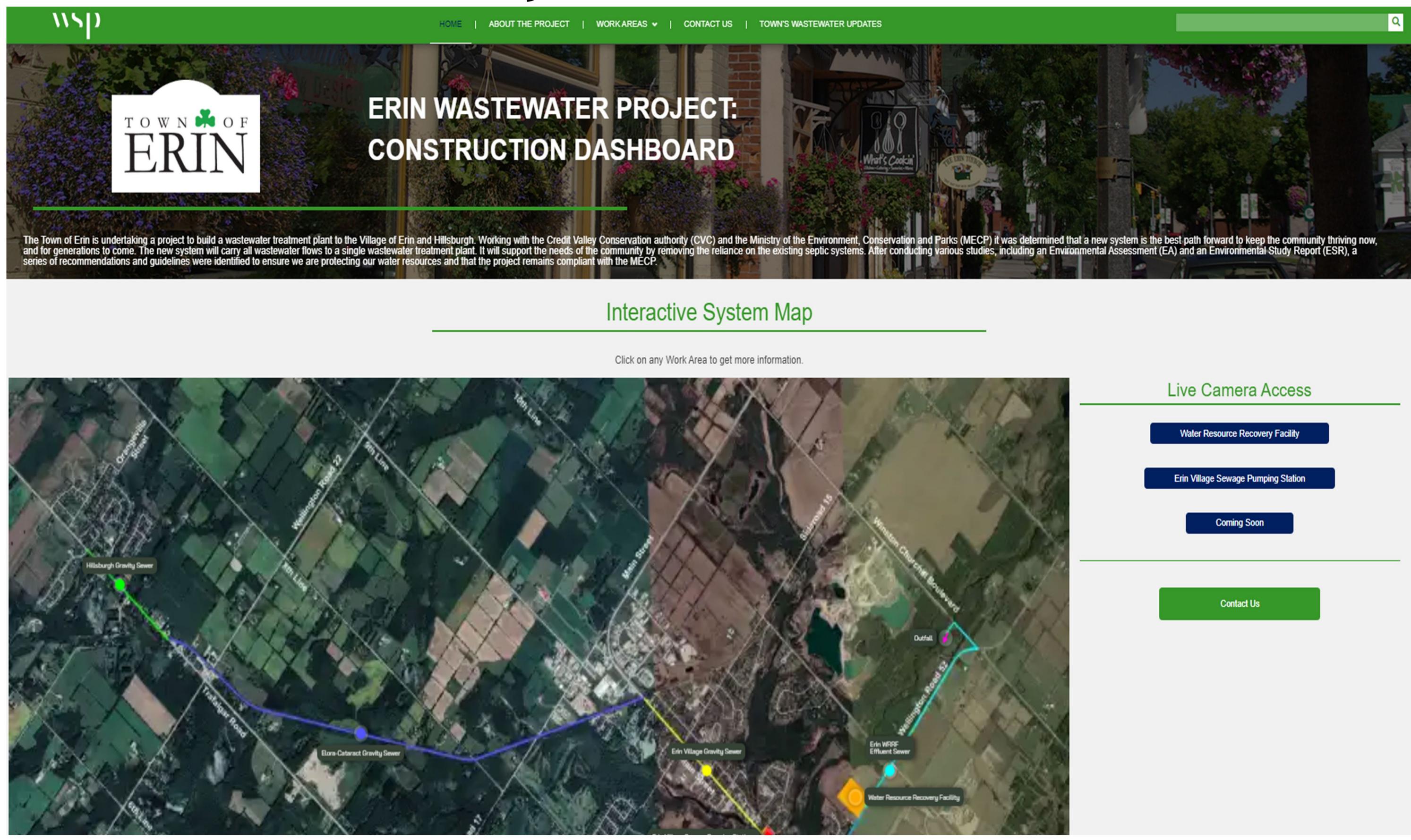








### Project Dashboard









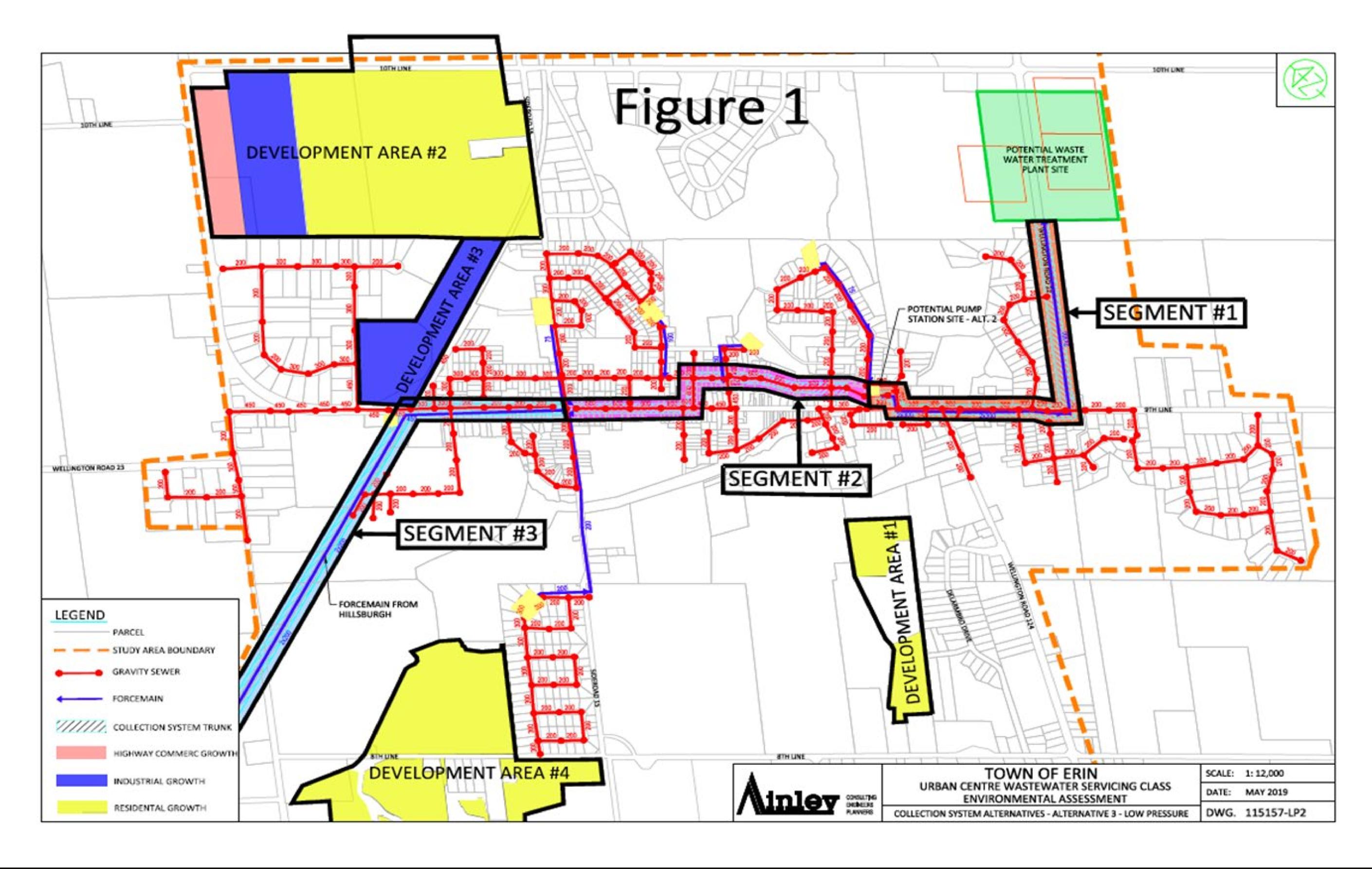






#### Future Work

Erin





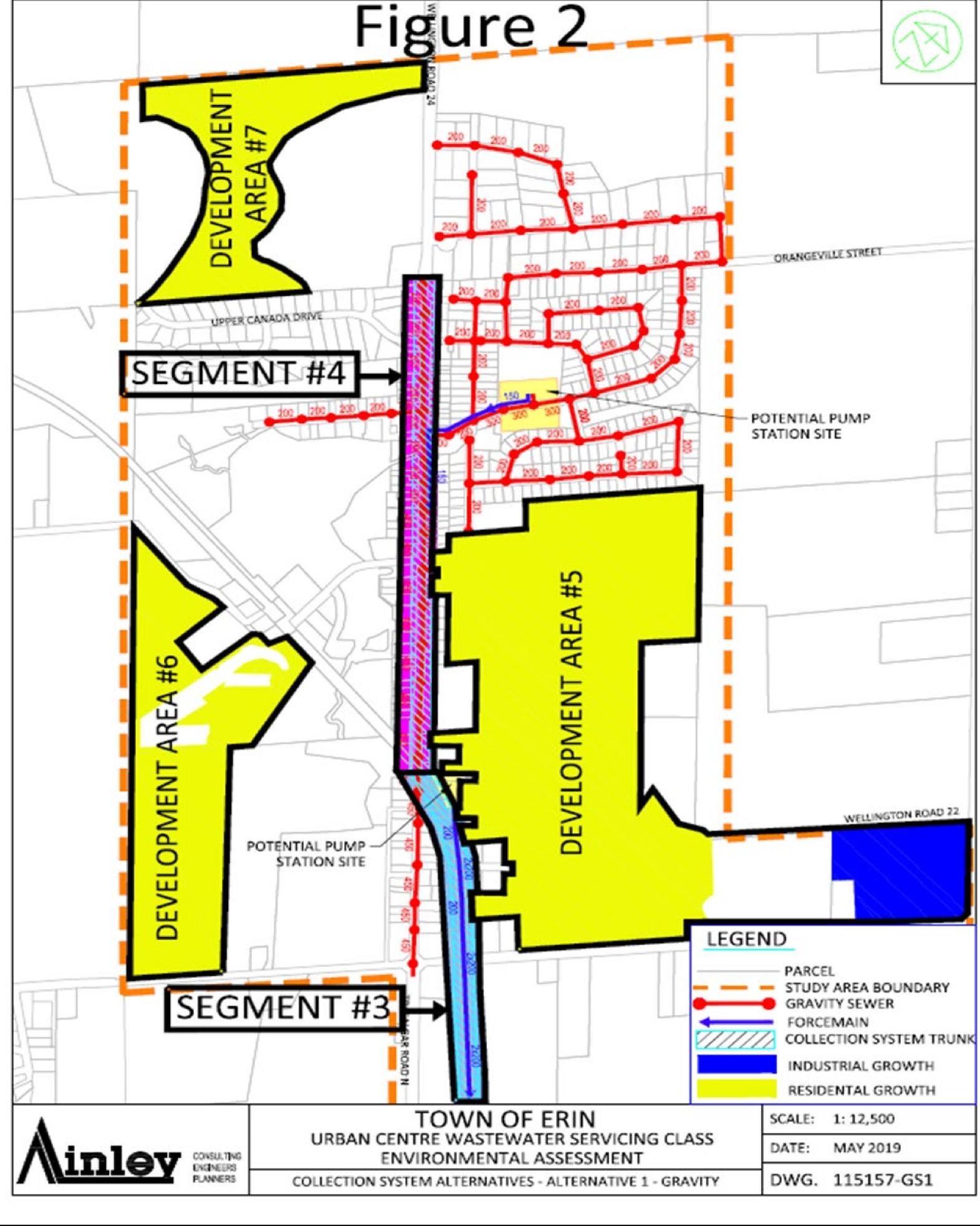








### Future Work Hillsburgh





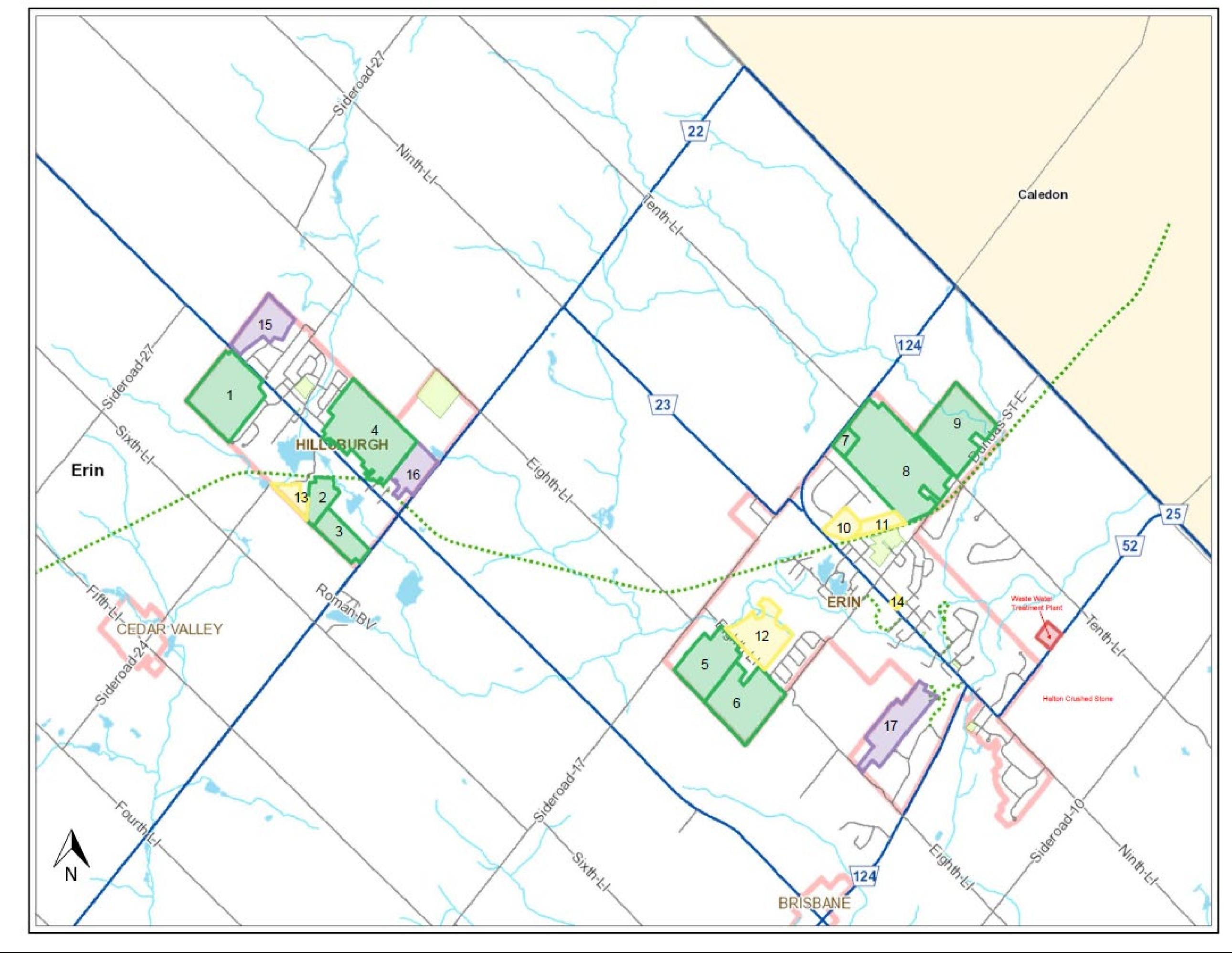








#### Future Work Development













## Thank you!

Questions?







