

Udora Gravel Roads Upgrade Project

Presentation to Council

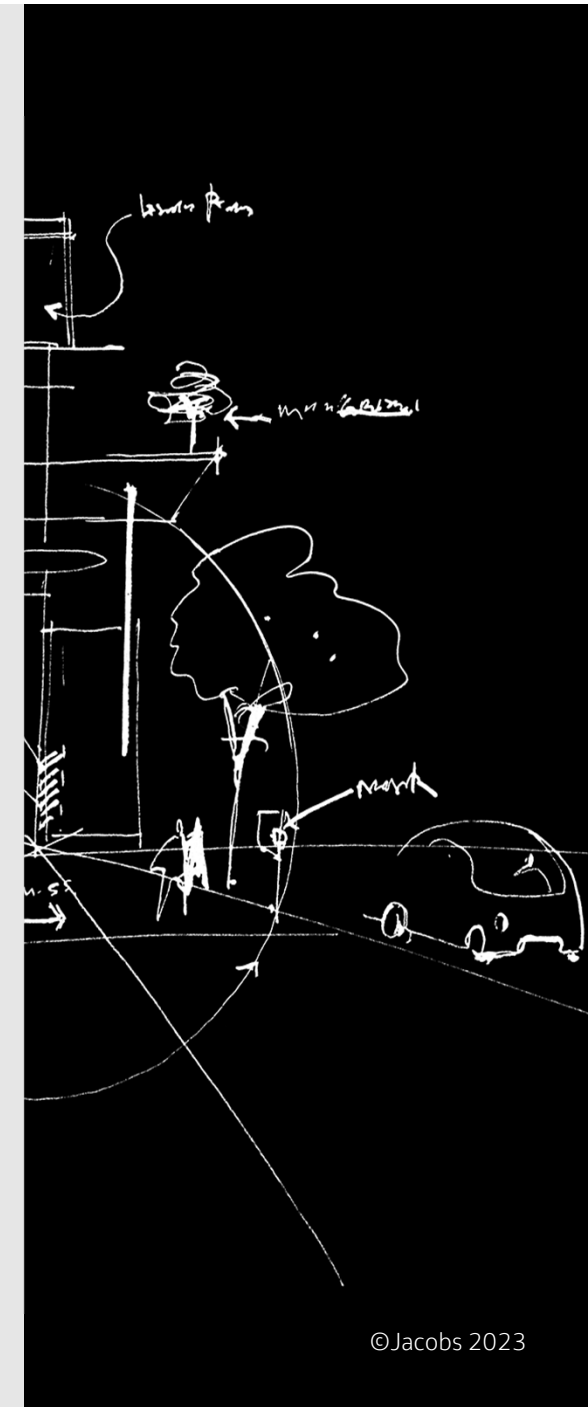


September 27, 2023

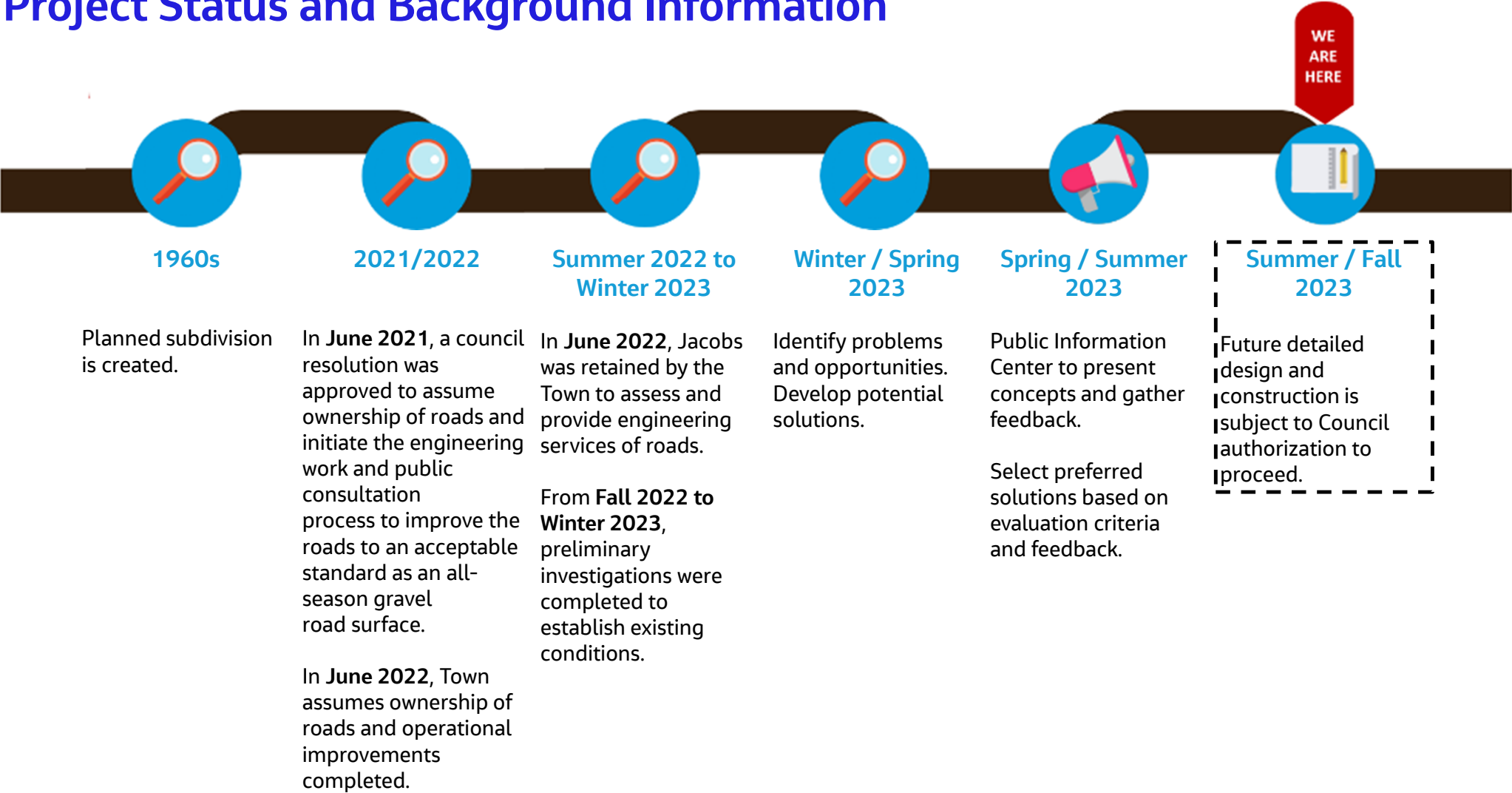
Agenda

- Project Status and Background Information
- Purpose
- Public Feedback
- Investigations and Studies
- Examples of Roadway Issues, Drainage Issues, and Property Impacts
- Recommendations
- Next Steps

On September 20th, 2023, presentation slides were posted on the Town's website for residents to view.



Project Status and Background Information



Purpose

■ Project:

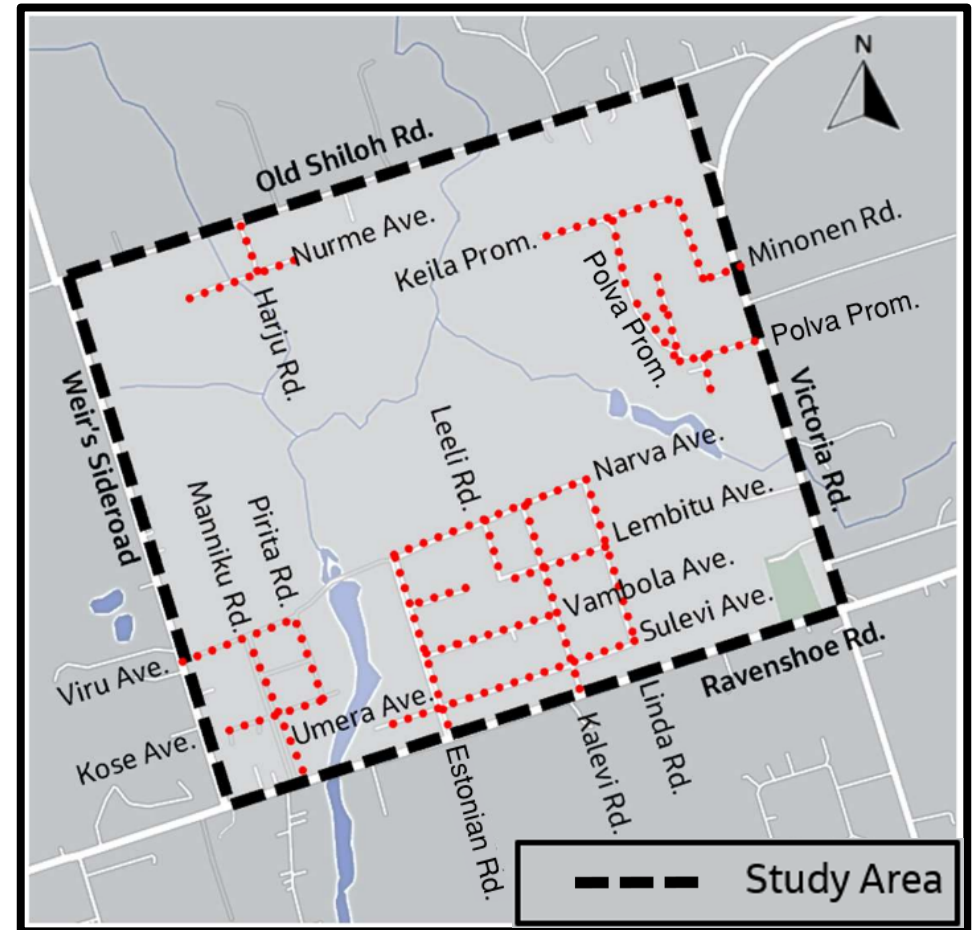
- The Town of Georgina assumed 6.8 km of roads in 2021 within the Hamlet of Udora and identified the need for improvement
- Road upgrades to remain consistent with rural/residential gravel road standard.

■ Key Guiding Principle

- Upgrade roads where necessary to be safe and manageable long-term by the Municipality while preserving the unique cultural and natural heritage of the area.

■ Today's Presentation

- Identify a set of preferred alternatives for improvement/remediation of various roads
- Obtain council approval to proceed with the next phase of the project, detailed design.



Public Feedback

- Project Newsletter (September 2022)
 - Newsletter to introduce the project, encourage resident participation
 - 13 comments received
- Site Walks (Fall 2022 to Spring 2023)
 - Site walks with project team and residents
- Property Owner Outreach (June/July 2023)
 - The Town contacted landowners to discuss potential property/right-of-way impacts
- Public Information Centre (PIC) (June 28th, 2023)
 - The purpose of this PIC was to present:
 - A project status update to the residents
 - Present alternative design solutions for necessary upgrades
 - Solicit public feedback to develop the preliminary design
 - Present next steps
 - 32 comments received



Investigations and Studies

- Topographic and Legal Surveys
- Geotechnical and Hydrogeological Investigations
 - Pavement condition evaluation
 - Borehole drilling and sampling
 - Laboratory testing
 - Groundwater level monitoring
- Utility Locates
- Stormwater Management Review
- Problem and Opportunity Identification



Examples of Roadway Issues

Roadway Potholes

Concern: Failure of road to shed water leading to more rapid deterioration of the road.

Solution: Remove poor material under the road and reconstruct.



Roadway Rutting

Concern: Water penetrates and soaks the material under the road leading to more rapid deterioration of the road.

Solution: Remove poor material under gravel road and reconstruct.

Examples of Roadway Issues

Vegetation Overgrowth

Concern: Vehicles forced to the middle of the road creating traffic conflicts.

Solution: Trim vegetation overhanging onto road.



Small Turning Radii

Concern: Turning vehicles track off the road and damage road slopes and culverts.

Solution: Reconstruct intersection with larger radii.

Examples of Roadway Issues

No Turnaround Facilities

Concern: Difficult for emergency and large service vehicles to access and maneuver.

Solution: Construct turning facility.



Lembitu Ave



Pirita Rd

Disconnected Roadway

Concern: Difficult for emergency and large service vehicles to access and maneuver.

Solution: Connect dead-ends of road.

Examples of Drainage Issues

Shallow or Undefined Ditches

Concern: Ponding and water overflowing onto road and private property leading to more rapid deterioration of the road.

Solution: Clear or recut existing ditches and define new swales.



Damaged Culvert



Leeli Rd

Damaged or Blocked Culverts

Concern: Surface runoff is not conveyed efficiently leading to more rapid deterioration of the road.

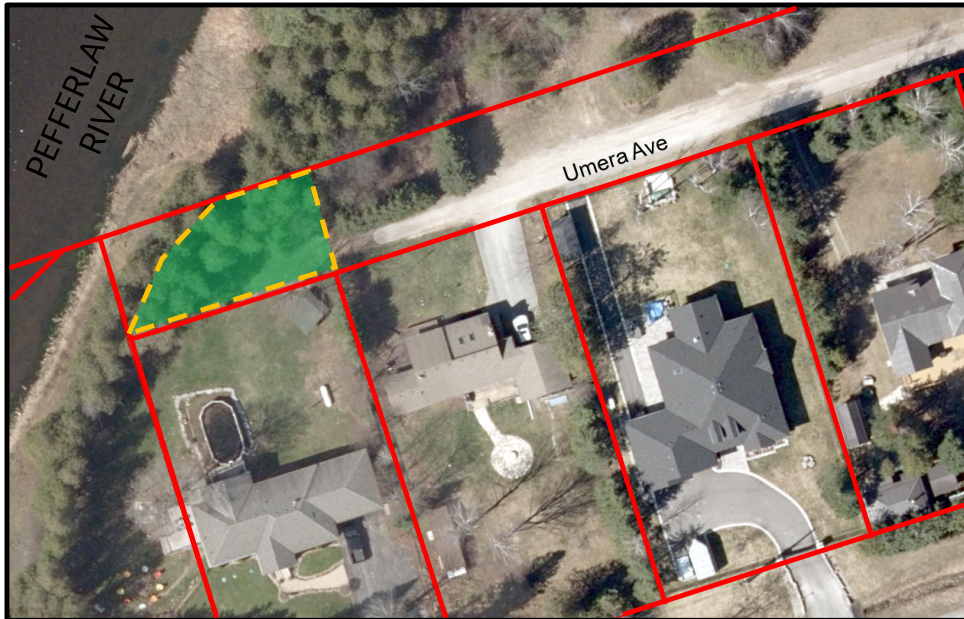
Solution: Cleanout, extend, or replace existing culverts.

Examples of Property Impacts

Road within Private Property

Concern: Right of public access and Town's liability for conducting public works on private land.

Solution: Reconstruct then realign road or contact affected residents to negotiate land acquisition or land swap.



Private Land Use within Town Right-of-Way

Concern: Town liability and private use of Town land.

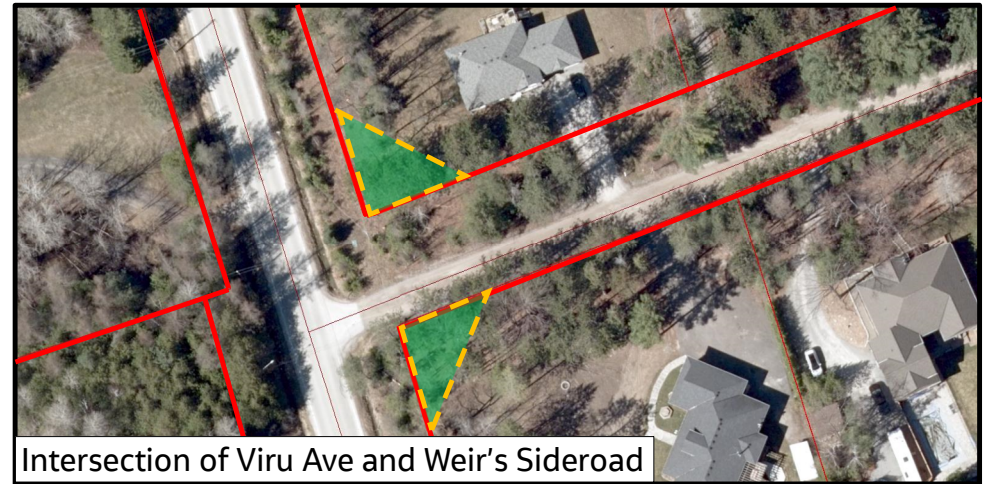
Solution: Remove private property from Town right-of-way or contact affected residents to negotiate encroachment agreement.

Examples of Property Impacts

No Sight-Triangles at Regional Roads

Concern: Required by York Region and inadequate sight distance for turning vehicles with potential safety concern.

Solution: Review with York Region on case-by-case basis. Clear land where implemented.



Unregulated Access to Private Property

Concern: No legal access to private property or access through reserved land.

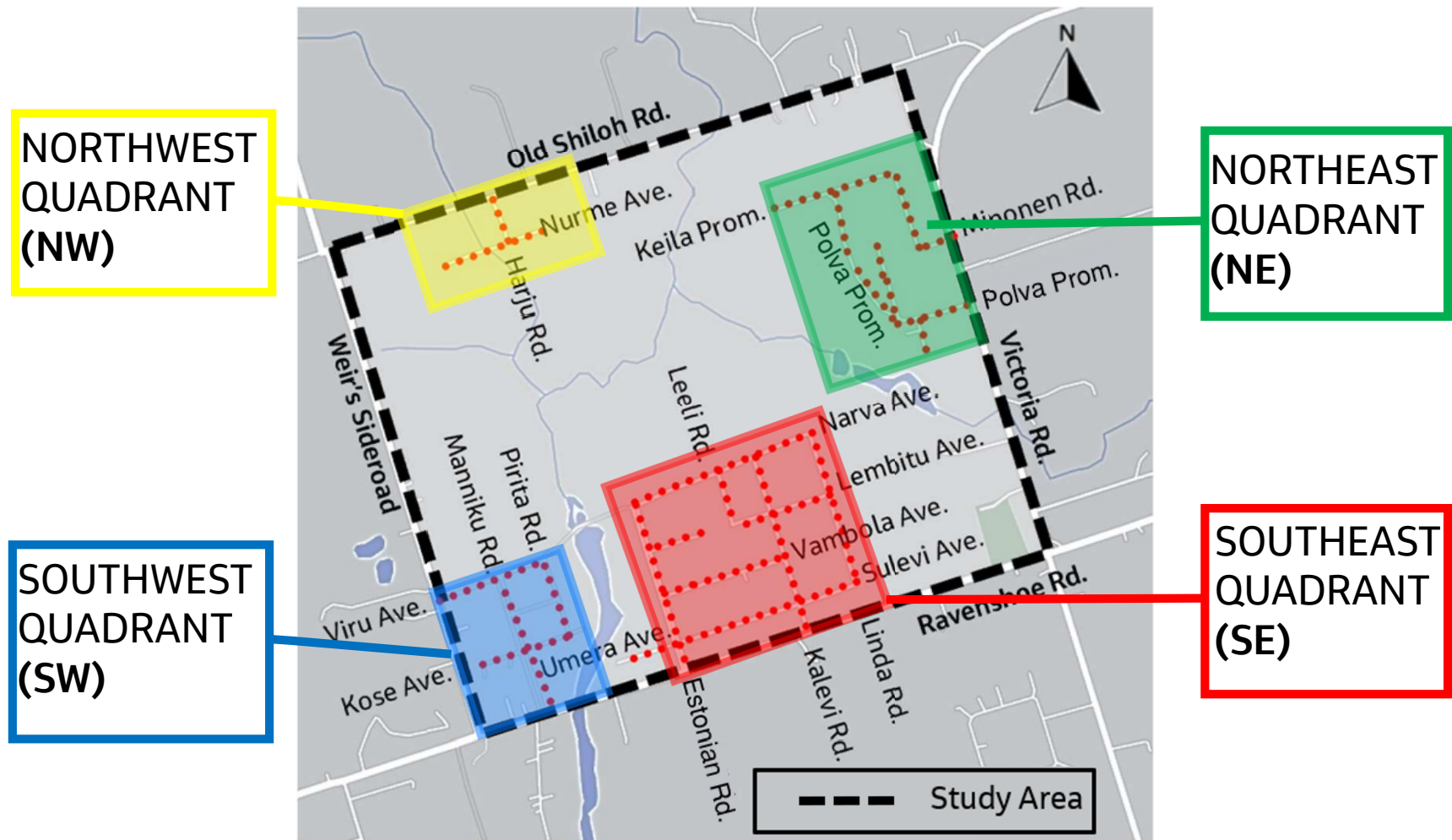
Solution: Provide access through Town right-of-way or pass by-law to maintain existing land use.

Key Guiding Principles

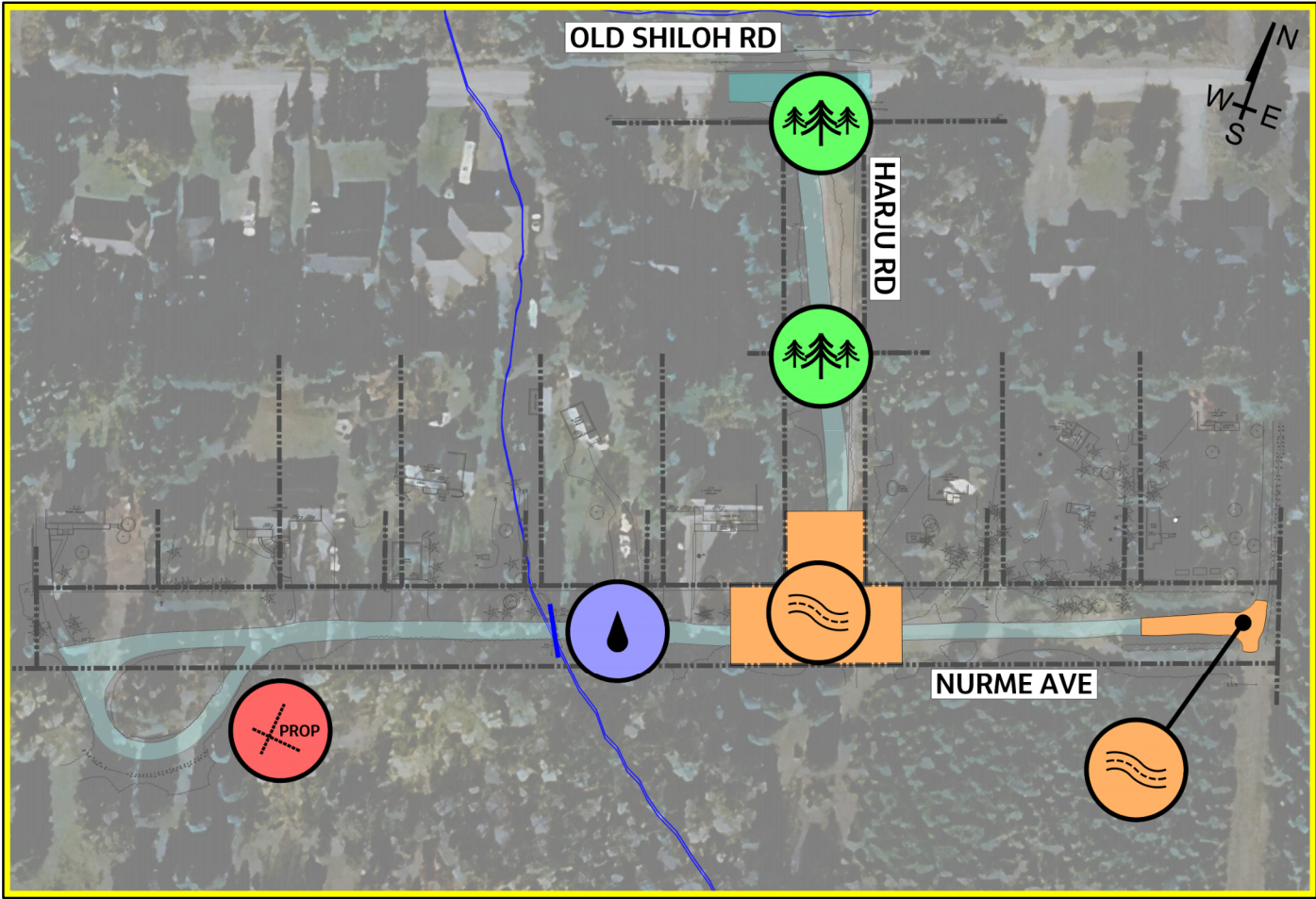
Various options for road upgrades were considered and evaluated, and recommendations for the preferred solutions were made based on the following guiding principles:

- Consultation with the community and Town staff
- Cost effective roadway improvements that address safety concerns and adhere to regulatory standards
- Allow long-term municipal maintenance and management
- Minimize impacts to unique nature of the community
- Minimize property acquisitions
- Minimize construction of new roads
- Minor maintenance level improvements (overgrowth clearing, culvert cleanout, etc) at a minimal level to maintain safety standards

Study Area Map

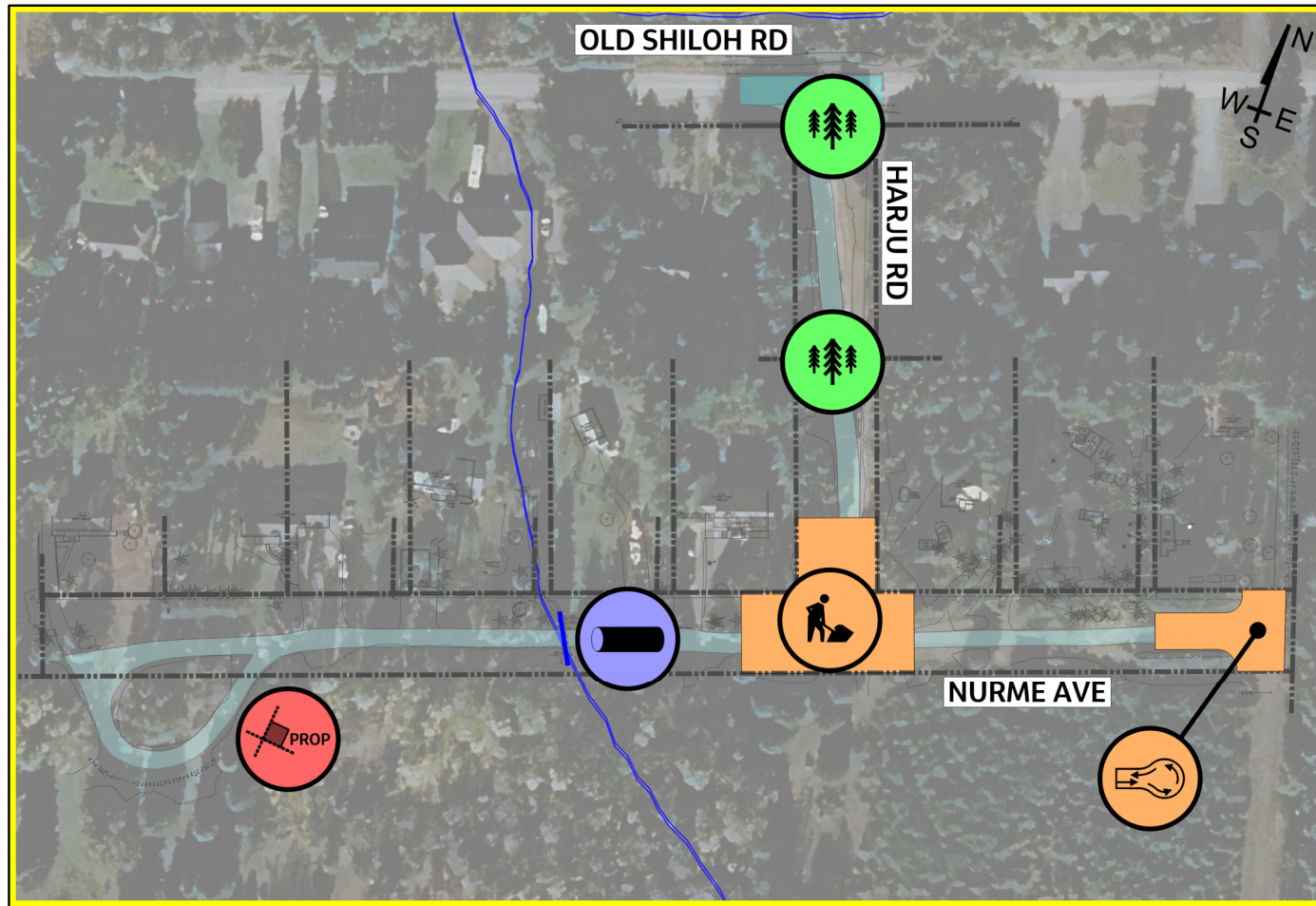


Northwest Quadrant – Key Issues



- LEGEND
- EXISTING PROPERTY LINE
 - WATERCOURSE
 - VEGETATION OVERGROWTH
 - ROADWAY ISSUE
 - DRAINAGE ISSUE
 - PROPERTY IMPACT

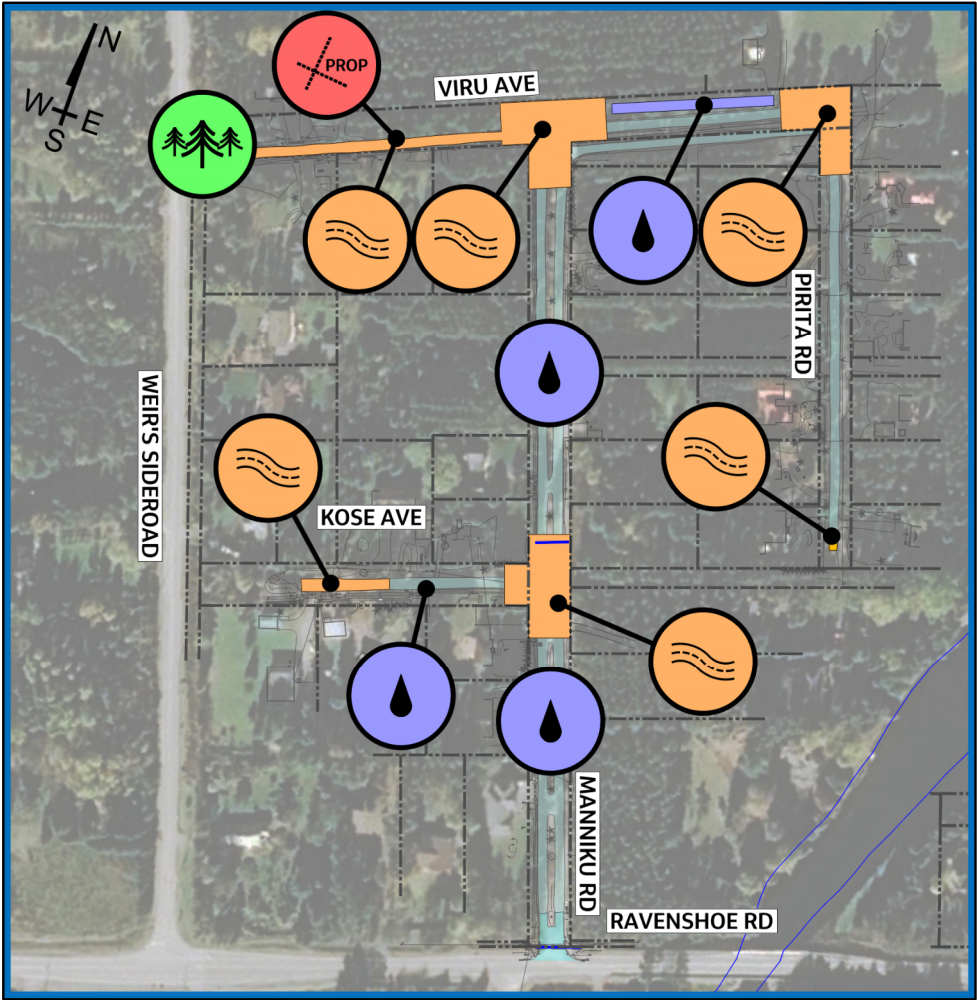
Northwest Quadrant – Recommendations



LEGEND

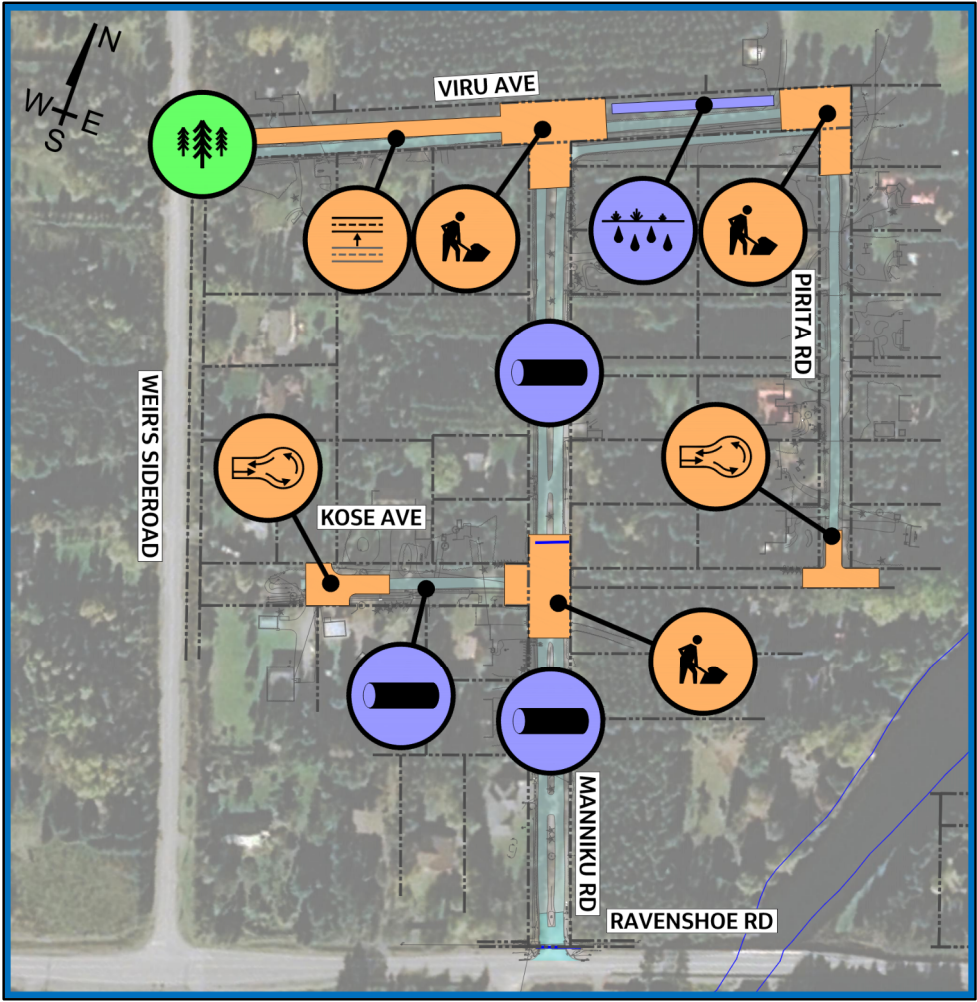
- EXISTING PROPERTY LINE
- WATERCOURSE
- TRIM VEGETATION
- REPAIR ROADWAY
- BUILD TURNAROUND
- REPLACE CULVERT(S)
- ACQUIRE PROPERTY

Southwest Quadrant – Key Issues



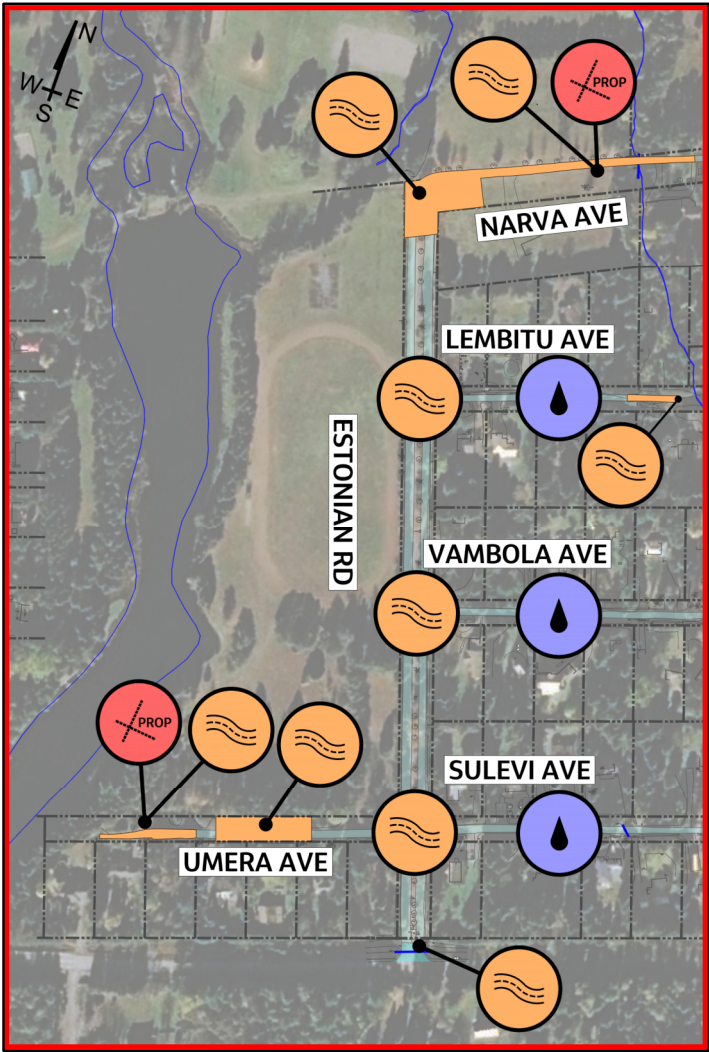
- LEGEND
- EXISTING PROPERTY LINE
 - WATERCOURSE
 - VEGETATION OVERGROWTH
 - ROADWAY ISSUE
 - DRAINAGE ISSUE
 - PROPERTY IMPACT

Southwest Quadrant – Recommendations



- LEGEND
- EXISTING PROPERTY LINE
 - WATERCOURSE
 - TRIM VEGETATION
 - REPAIR ROADWAY
 - BUILD TURNAROUND
 - REALIGN ROADWAY
 - REPLACE CULVERT(S)
 - BUILD GRASSED SWALE

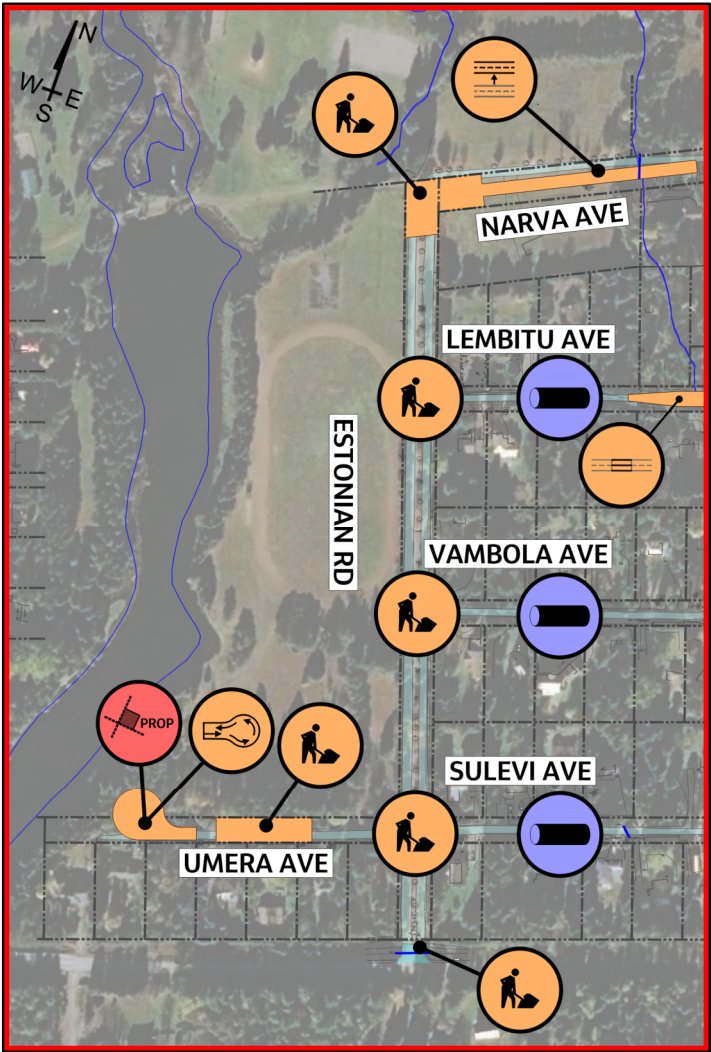
Southeast Quadrant – Key Issues (1 of 2)



LEGEND

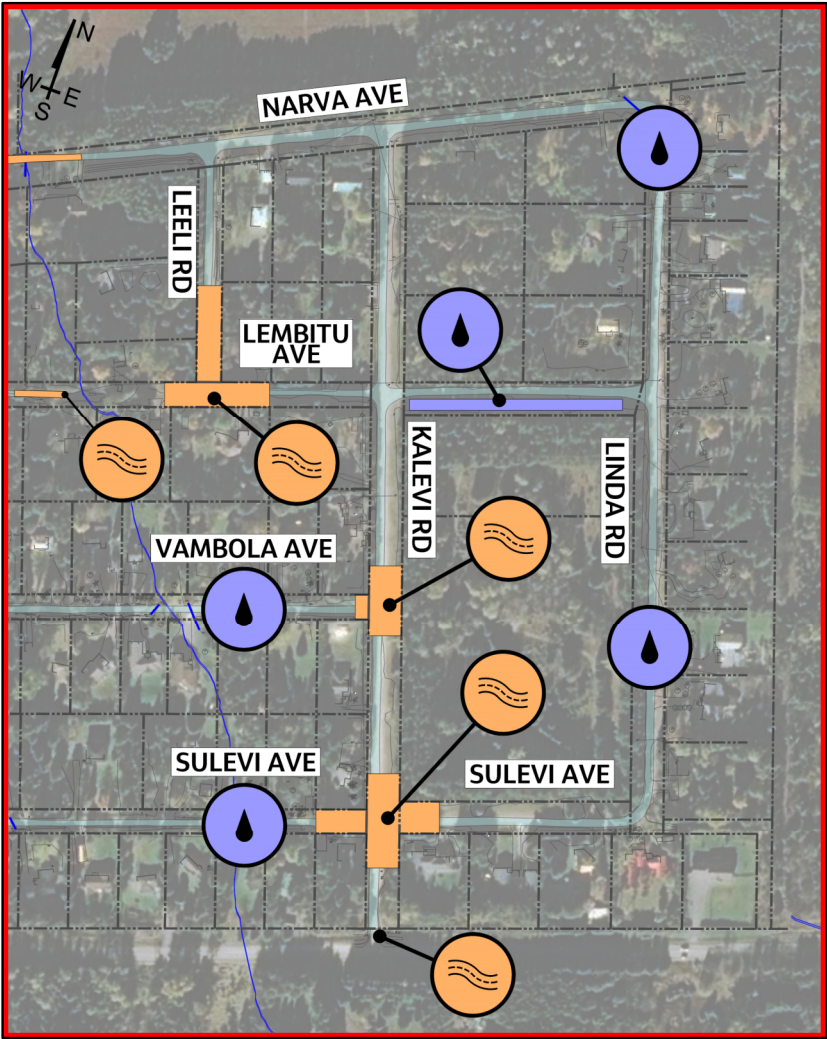
- EXISTING PROPERTY LINE
- WATERCOURSE
- ROADWAY ISSUE
- DRAINAGE ISSUE
- PROPERTY IMPACT

Southeast Quadrant – Recommendations (1 of 2)



- LEGEND
- EXISTING PROPERTY LINE
 - WATERCOURSE
 - REPAIR ROADWAY
 - BUILD TURNAROUND
 - REALIGN ROADWAY
 - CONNECT ROADWAYS
 - REPLACE CULVERT(S)
 - ACQUIRE PROPERTY

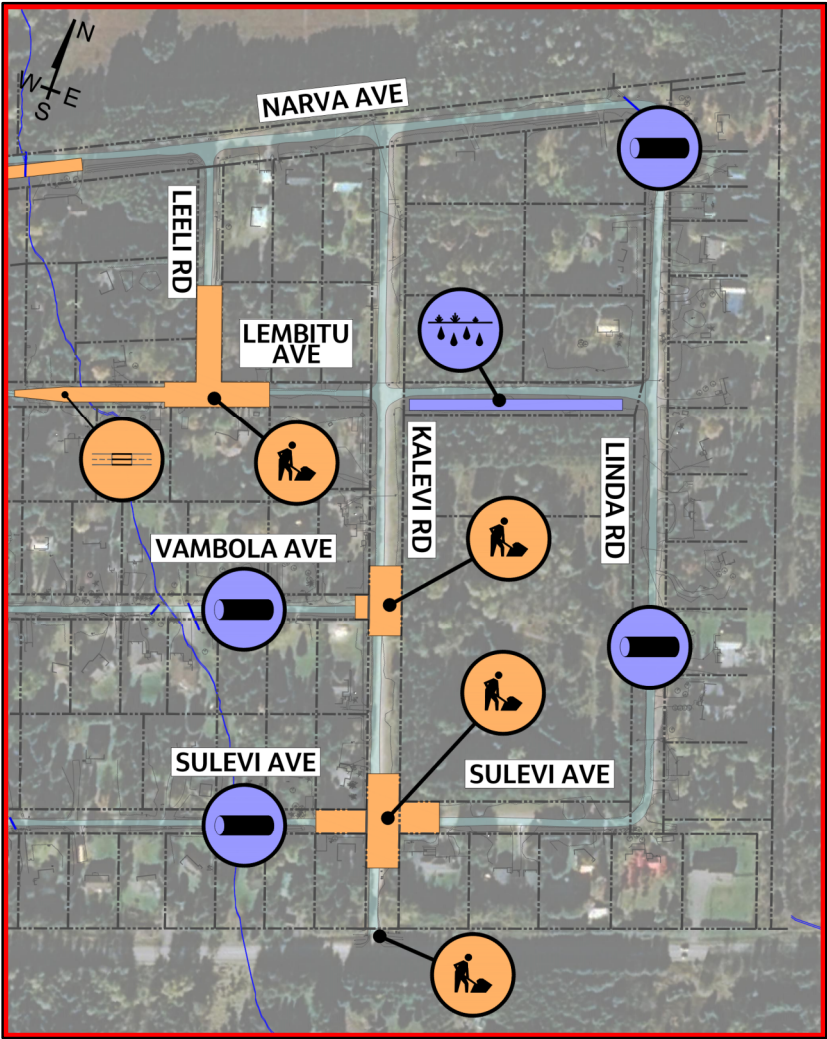
Southeast Quadrant – Key Issues (2 of 2)



LEGEND

- EXISTING PROPERTY LINE
- WATERCOURSE
- ROADWAY ISSUE
- DRAINAGE ISSUE

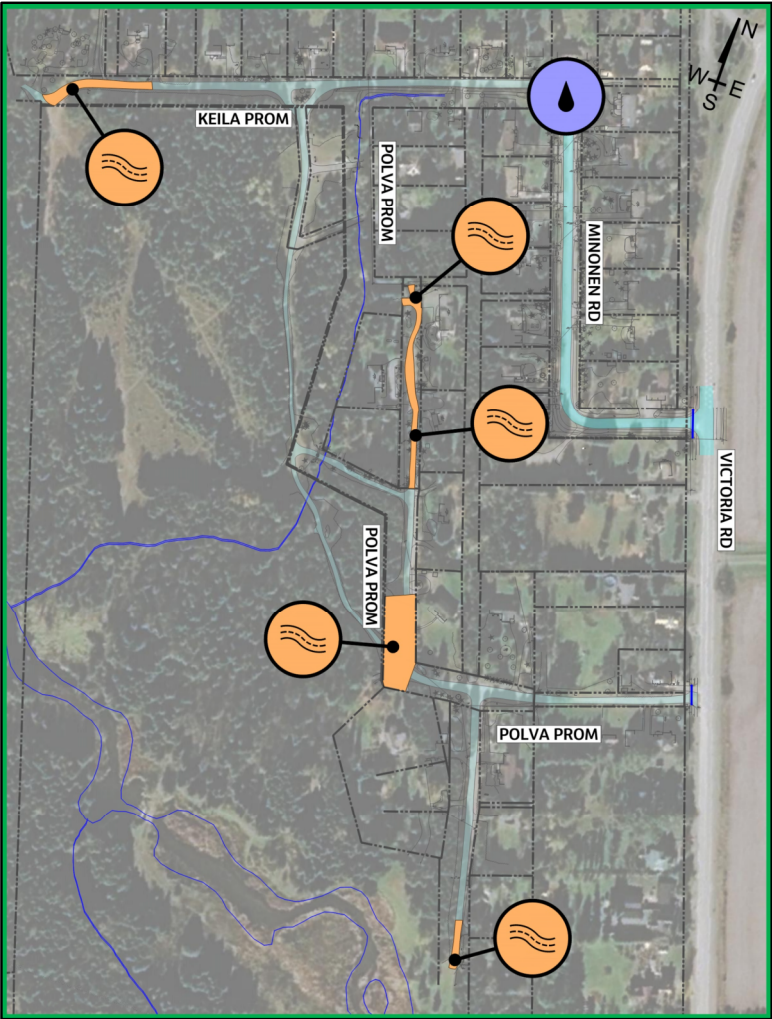
Southeast Quadrant – Recommendations (2 of 2)



LEGEND

- EXISTING PROPERTY LINE
- WATERCOURSE
- REPAIR ROADWAY
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- REPLACE CULVERT(S)
- BUILD GRASSED SWALE

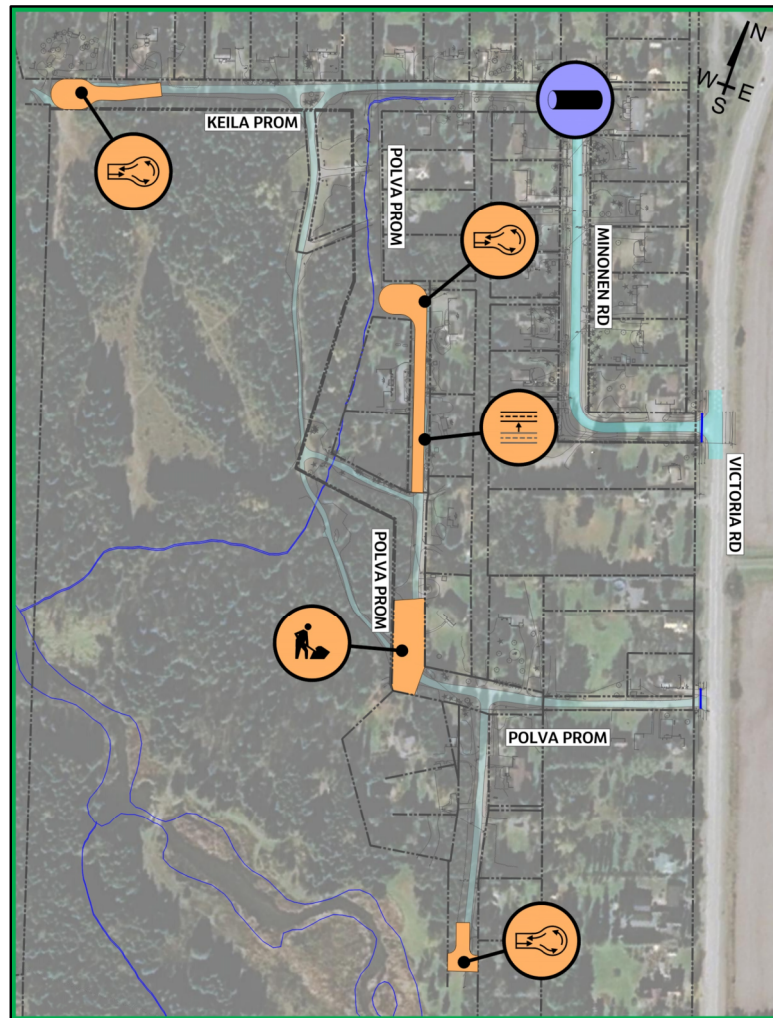
Northeast Quadrant – Key Issues





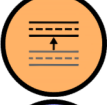
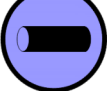
LEGEND

- EXISTING PROPERTY LINE
- WATERCOURSE
- ROADWAY ISSUE
- DRAINAGE ISSUE

Northeast Quadrant – Recommendations



LEGEND

- EXISTING PROPERTY LINE
- WATERCOURSE
-  REPAIR ROADWAY
-  BUILD TURNAROUND
-  REALIGN ROADWAY
-  REPLACE CULVERT(S)

Next Steps

- With council approval, we will proceed to next steps of this project.
 - Detailed Design and associated implementation procedures – Begins Fall 2023
- Construction – 10 Year Phased Implementation
 - Inclusion into 10 Year Capital Works Program
 - Inclusion into annual budgets when phases are proceeding
 - Notice of commencement prior to construction
 - On-going notices of disruption for specific construction activities
- On-going operational maintenance aligned with phased construction program

The End

Thank You