

WELCOME

Udora Gravel Roads Upgrade Project Public Information Centre

June 28, 2023

6:00 PM to 8:00 PM

Udora Community Hall
24 Victoria Road, Udora, ON L0C 1L0

Please Sign In



Jacobs

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Agenda

6:00PM – 7:00 PM

Presentation

Introduction

Project Status

Background

Common Issues (Road, Drainage & Property)

Northwest Quadrant

Southwest Quadrant

Southeast Quadrant

Northeast Quadrant

7:00PM – 8:00 PM

Question and Answer (To Be Audio Recorded)

You are encouraged to comment on this project by submitting comment sheets.

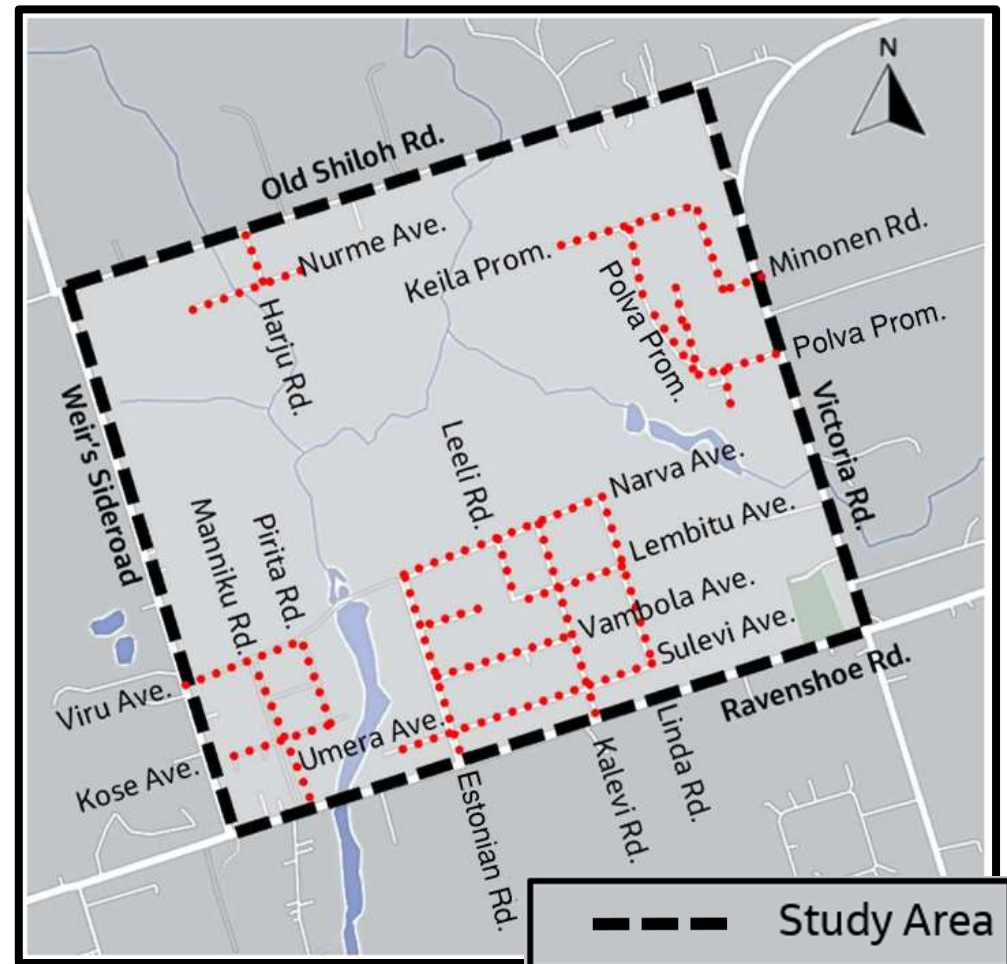
Members of the Public may also request to add their name and contact information to the mailing list to receive all future project communications.

Purpose of the Public Information Centre (PIC)

The Town of Georgina has identified the need to improve the road segments totaling approximately 7 km in length in the Hamlet of Udora. The objective is to upgrade the gravel roads and improve safety ride quality and drainage.

The purpose of this PIC is to present:

- General project status update and information
- Study area/identify and assess alternative solutions
- Solicit public feedback that will be considered in the design
- Next steps

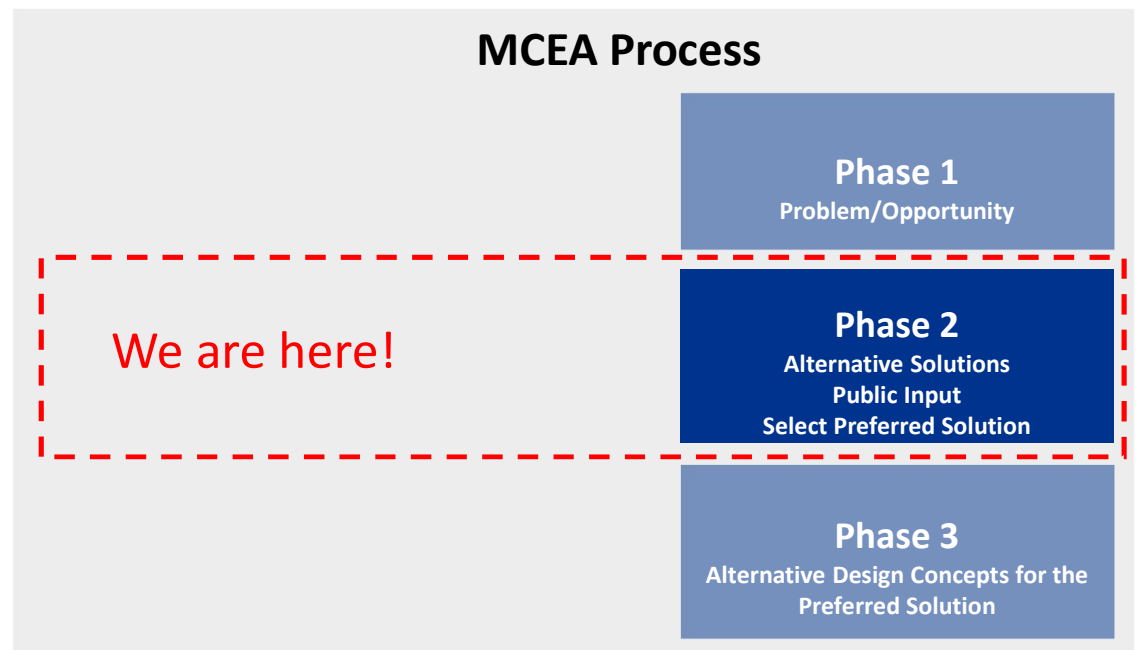


Municipal Class EA Process

This project is being completed as a Schedule A+ Class Environmental Assessment (EA)
It will follow Phases 1, 2 and 3 of the Municipal Class EA process

- Public feedback is vital for determining the preferred design
- Opportunity for residents to provide input on alternative solutions

Note: Alternative design shown in this presentation is not final



Project Status Update

What Are We Doing?

WE
ARE
HERE



Fall 2022 / Winter 2023

Field Investigations,
Legal & Topographical
Survey, Drilling
Geotechnical Boreholes,
Site visit
Utility Consultation
Design Criteria



Winter/Spring 2023

Commencement of the
identification of
problems and
opportunities, identify
areas of immediate
concerns, evaluation of
possible solutions



Spring/Summer 2023

Public Information Center,
select preferred solutions
based on evaluation
criteria



Summer/Fall 2023

Future detailed design
and construction is
subject to Council
direction and approval.

Background Information

1960s

- Plans of Subdivisions approved
- The roads were originally constructed consisting of gravel surface over free-draining, frost susceptible soils
- Original owners did not maintain roads to Town standards required for assumption

2021

- In June, Town of Georgina assumed the ownership of majority of the roads in the Estonian Summer Homes Association and Kova subdivision in Udora. This includes the maintenance of the roads and addressing deficiencies.
- In Fall, Town added 1,200 tonnes of Gran 'A' applied to the main roads

2022

- In June, The Town has identified the need to assess and upgrade forty-eight (48) gravel road segments located within the Hamlet of Udora, totaling approximately 7 km in length.
- In October, Roads Division placed 9,000 tonnes of gravel on the existing roads to improve conditions



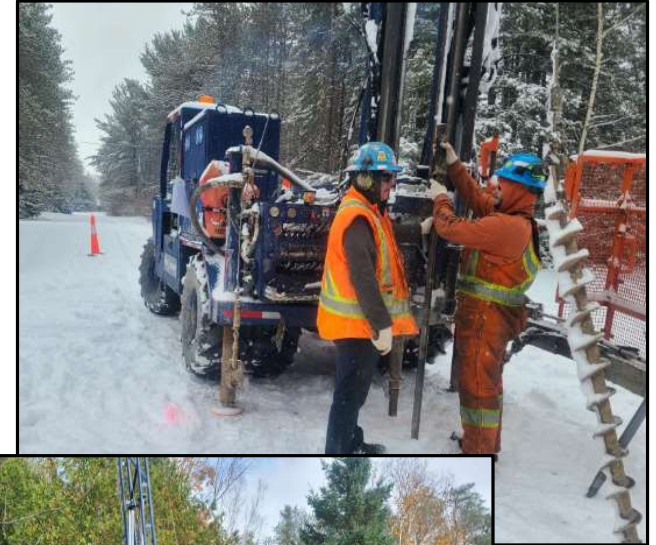
Roads Upgrades Project To Date

Fall 2022/ Winter 2023

- Jacobs conducted field studies
 - Topographic and legal surveys
 - Utility locates
 - Geotechnical field studies
 - Visual inspections and site walks

Spring 2023

- Jacobs completed desktop study including evaluation of options to determine the preferred stormwater management methodology, determine areas of immediate concerns, short-term and long-term solutions to the problem



Geotechnical Drilling

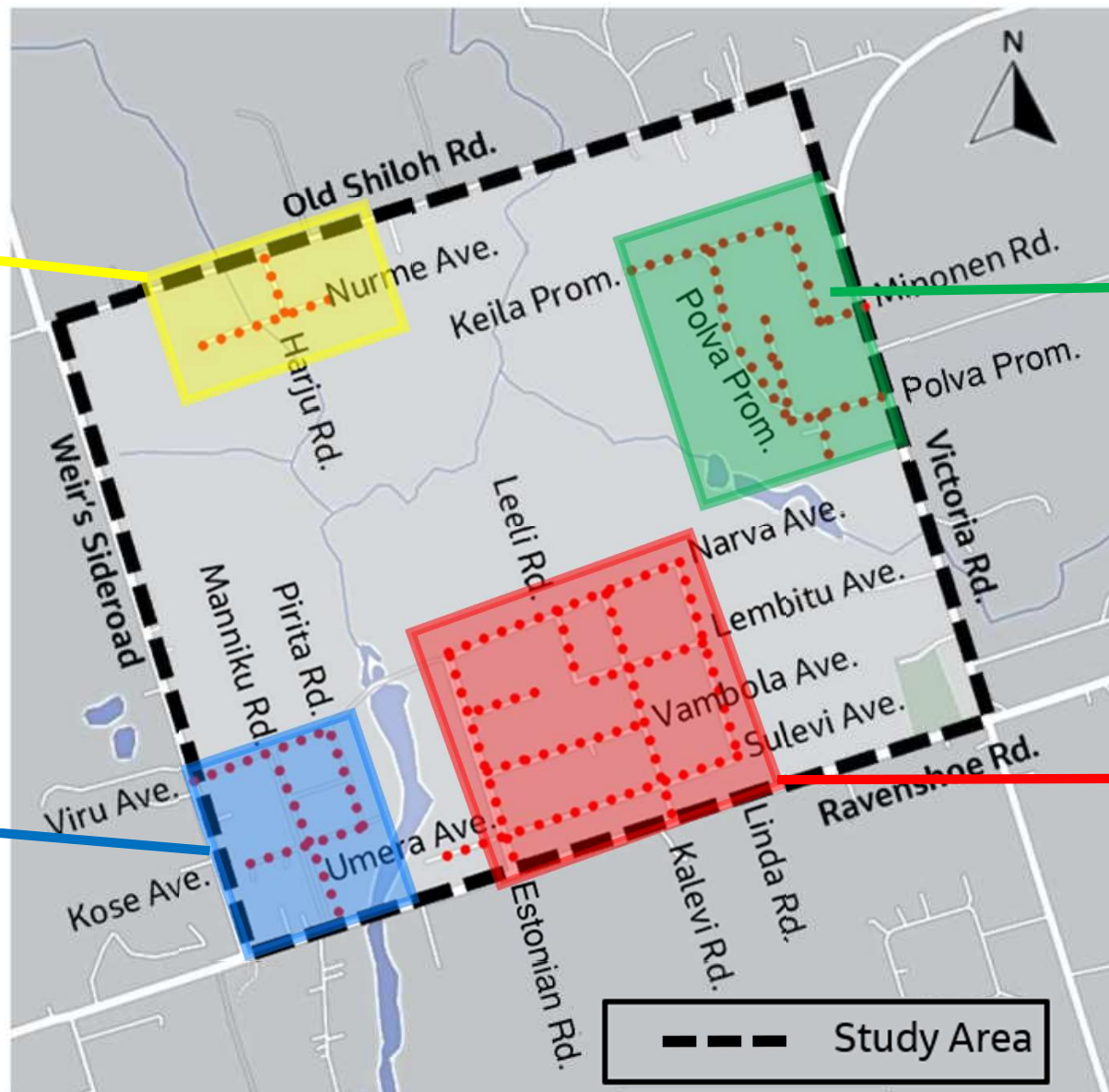
Study Area Breakdown

NORTHWEST
QUADRANT
(NW)

NORTHEAST
QUADRANT
(NE)

SOUTHWEST
QUADRANT
(SW)

SOUTHEAST
QUADRANT
(SE)



Summary of Road Issues

Type of Issue	Concern	Key Guiding Principles	Alternative Solutions
<ul style="list-style-type: none"> insufficient road crown high shoulder existing potholes 	<ul style="list-style-type: none"> failure of road to shed water away leading to increased moisture in the road in the spring, ground moisture is highest and freeze-thaw cycle damages the road surface 	<ul style="list-style-type: none"> Allow water to drain away from the road Minimize road repair needs 	<ul style="list-style-type: none"> Regrade gravel surface to maintain 2-4% cross-slope Fill existing potholes with gravel and compact as required
<ul style="list-style-type: none"> poor soil in road base total of 8 distressed areas 	<ul style="list-style-type: none"> frost susceptible soil, water can easily penetrate and soak the ground under the road and make the road soft uncompacted gravel surface will washboard easily and will leave loose gravel on the surface 	<ul style="list-style-type: none"> Safety and functionality 	<ul style="list-style-type: none"> Top off road gravel and compact as required Remove poor base material under the gravel and rebuild the gravel road
<ul style="list-style-type: none"> narrow lanes vegetation overgrowth 	<ul style="list-style-type: none"> vehicles drive in the middle of the road causes wheels tracking on shoulder lack of sight lines for turning movements 	<ul style="list-style-type: none"> Safety and functionality Traffic safety 	<ul style="list-style-type: none"> Maintain non-standard road width with roadside clearing for sightline Widen roadway to standard width
<ul style="list-style-type: none"> Small turning radius at intersection 	<ul style="list-style-type: none"> turning vehicle wheels track off road damaging the slope and damaging culvert lack of sight lines for turning movements 	<ul style="list-style-type: none"> Safety and functionality Traffic safety 	<ul style="list-style-type: none"> Clear vegetation to increase sightlines Larger turning radius at intersection

Summary of Road Issues

Type of Issue	Concern	Key Guiding Principles	Alternative Solutions
<ul style="list-style-type: none"> Lack of turning features at dead ends 	<ul style="list-style-type: none"> Difficult access for emergency and large service vehicles Vehicles using private driveways as turnaround facility 	<ul style="list-style-type: none"> Safety and functionality Compliance with Town Zoning By-law 500 and policies, and Ontario Building Code 	<ul style="list-style-type: none"> Install non-standard turning facility within road property Install standard cul-de-sac with property acquisition
<ul style="list-style-type: none"> Disconnected roadway 	<ul style="list-style-type: none"> Difficult access for emergency and large service vehicles 	<ul style="list-style-type: none"> Safety and functionality Compliance with Town Zoning By-law 500 and policies, and Ontario Building Code Minimize land acquisition needs 	<ul style="list-style-type: none"> Construct through road to connect dead ends within road property Construct turning facility at dead ends

Common Issues Encountered – Poor Soil and Gravel



Common Issues Encountered – Overgrowth



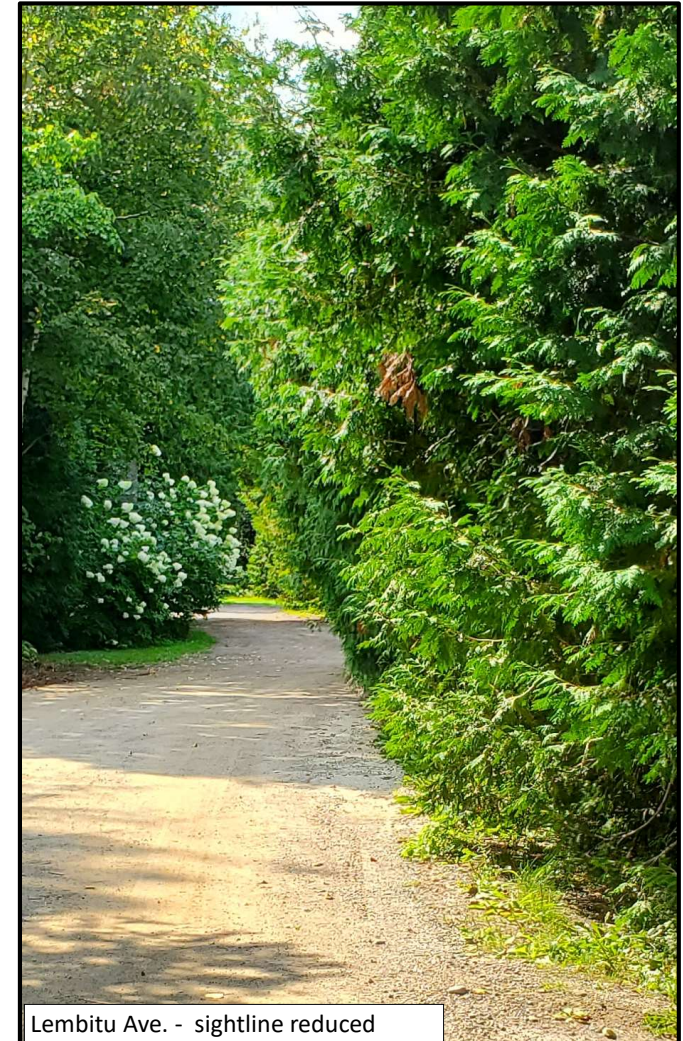
Polva Prom – overgrowth forces vehicle to drive in the middle of the road



Estonian Rd. – vegetation encroaching the road



Harju Rd. – sightline blocked by overgrowth



Lembitu Ave. - sightline reduced

Common Issues Encountered – Poor Geometry



Camp Entrance on Viru Ave. – wheels tracking over soft areas



Intersection of Estonian Rd and Lembitu Ave. – wheels tracking over shoulder, crushing the culvert



Intersection of Estonian Rd and Vambola Ave – wheels tracking over shoulder, crushing the culvert

Summary of Drainage Issues

Type of Issue	Concern	Key Guiding Principles	Alternative Solutions
<ul style="list-style-type: none"> • Partial or full blockage of culverts 	<ul style="list-style-type: none"> • Surface runoff is not conveyed efficiently 	<ul style="list-style-type: none"> • Convey peak flows and prevent flooding in accordance with the Town's design criteria and standards 	<ul style="list-style-type: none"> • Clear blockage and extend opening • Repair/replace culvert
<ul style="list-style-type: none"> • Shallow or undefined ditch/swale 	<ul style="list-style-type: none"> • Ponding at low areas, water overflowing onto roadway or adjacent property 	<ul style="list-style-type: none"> • Convey peak flows and prevent flooding in accordance with the Town's design criteria and standards 	<ul style="list-style-type: none"> • Clear ditch/remove blockage • Recut the ditch/define swale

Common Issues Encountered – Poor Drainage



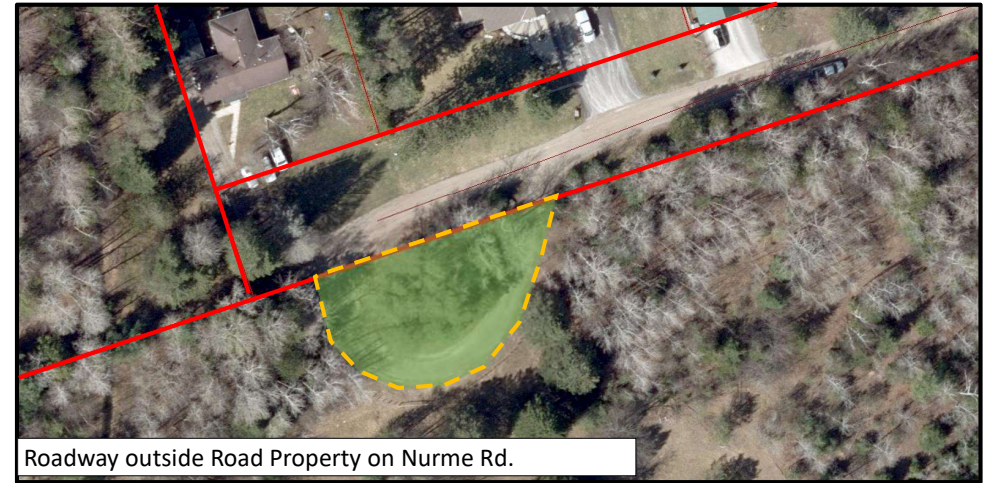
Common Issues Encountered – Poor Culvert Condition



Summary of Property Related Issues

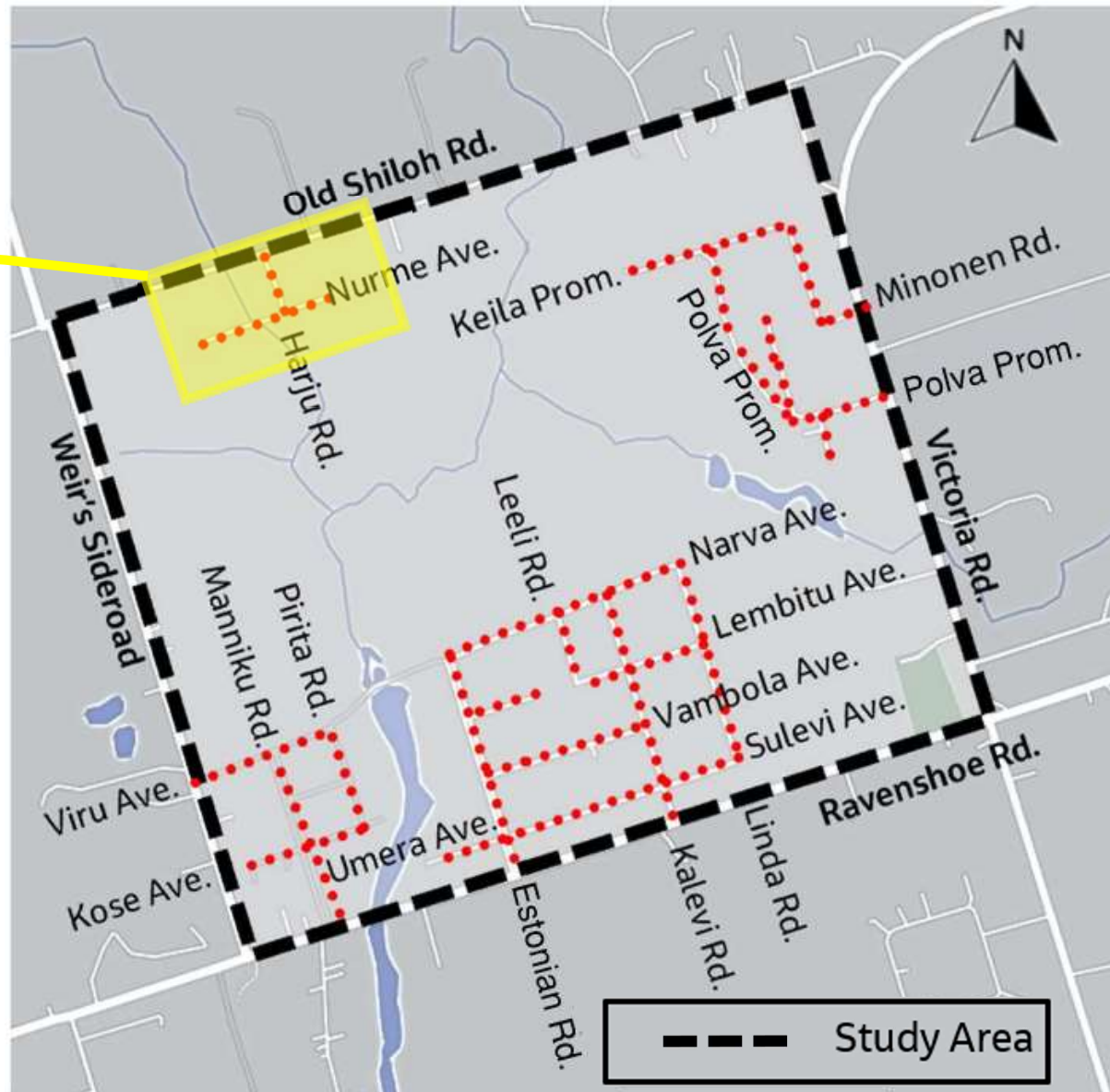
Type of Issue	Concern	Key Guiding Principles	Alternative Solutions
<ul style="list-style-type: none"> Roads located on private property 	<ul style="list-style-type: none"> Right of public access Town liability 	<ul style="list-style-type: none"> Town must own land on which public road resides Minimize land acquisition needs 	<ul style="list-style-type: none"> Do nothing Acquire land Reconstruct road within road property, no property acquisition
<ul style="list-style-type: none"> Private property encroaching onto Town right-of-way 	<ul style="list-style-type: none"> Private use of Town-owned lands Town liability 	<ul style="list-style-type: none"> Maintain existing use of land to the extent practical Reduce Town liability 	<ul style="list-style-type: none"> Do nothing Encroachment Agreement with Town of Georgina and maintain land use Remove private owned from road property
<ul style="list-style-type: none"> Lack of sight triangles at major intersections 	<ul style="list-style-type: none"> Lack of sight lines for turning movements Required by York Region but not included in original Plan of Subdivision 	<ul style="list-style-type: none"> Traffic safety Minimize land acquisition needs 	<ul style="list-style-type: none"> Do nothing Review with York Region as case-by-case basis Acquire property and clear land for sight triangle

Common Property Issues



Northwest Quadrant

NORTHWEST
QUADRANT
(NW)



Northwest Quadrant – Areas of Deficiencies



NORTH END OF HARJU RD.



WEST END OF NURME RD.

OVERGROWTH AT THE
INTERSECTION
NO DAYLIGHT TRIANGLE

OLD SHILOH RD.

NON-STANDARD
GEOMETRY

HARJU RD.



EAST END OF NURME RD.

TURN-AROUND
OUTSIDE THE TOWN
PROPERTY

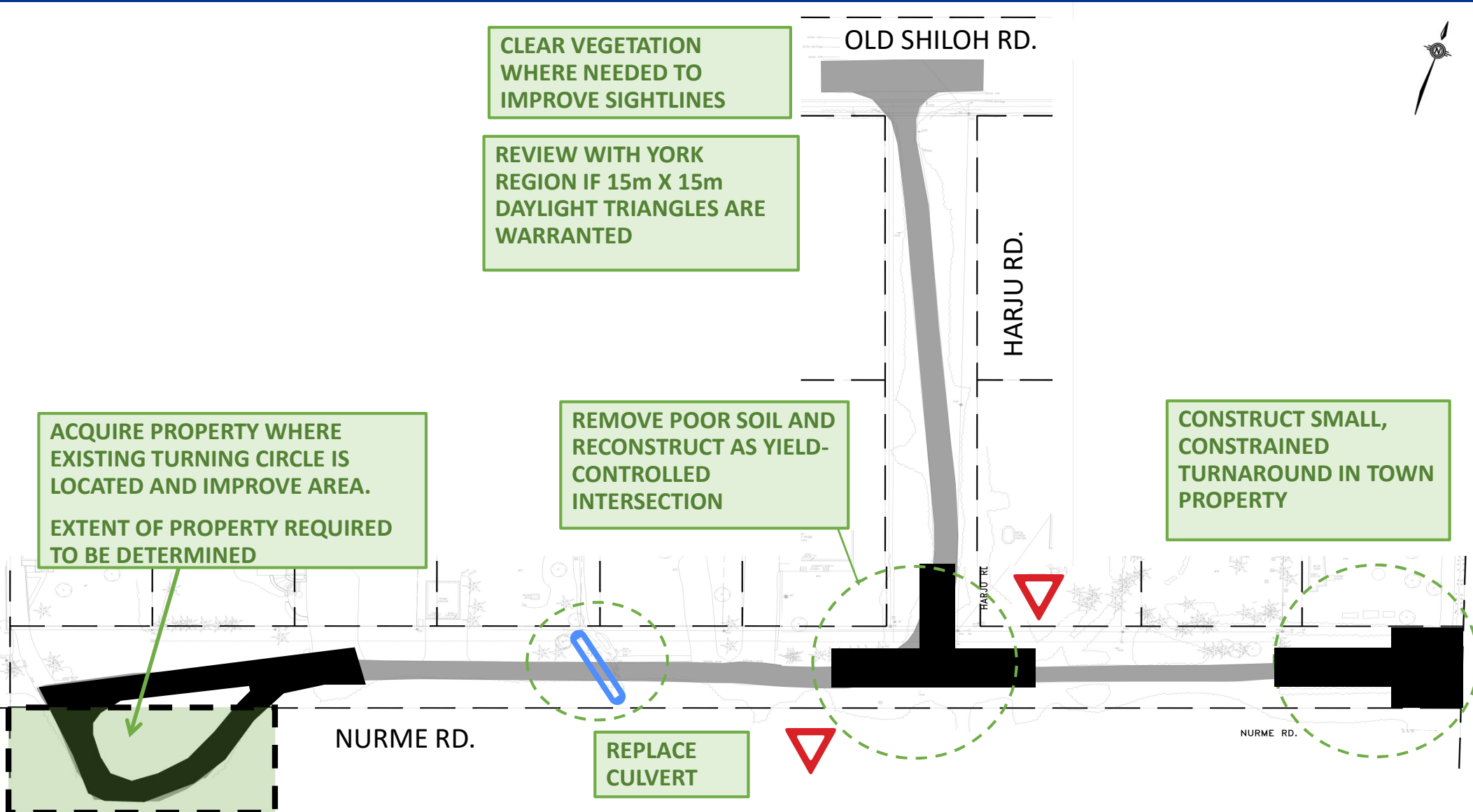
DISTRESS AREA
VERY POOR SOIL UNDER
THE GRAVEL ROAD

DEAD-END NO
TURN-AROUND

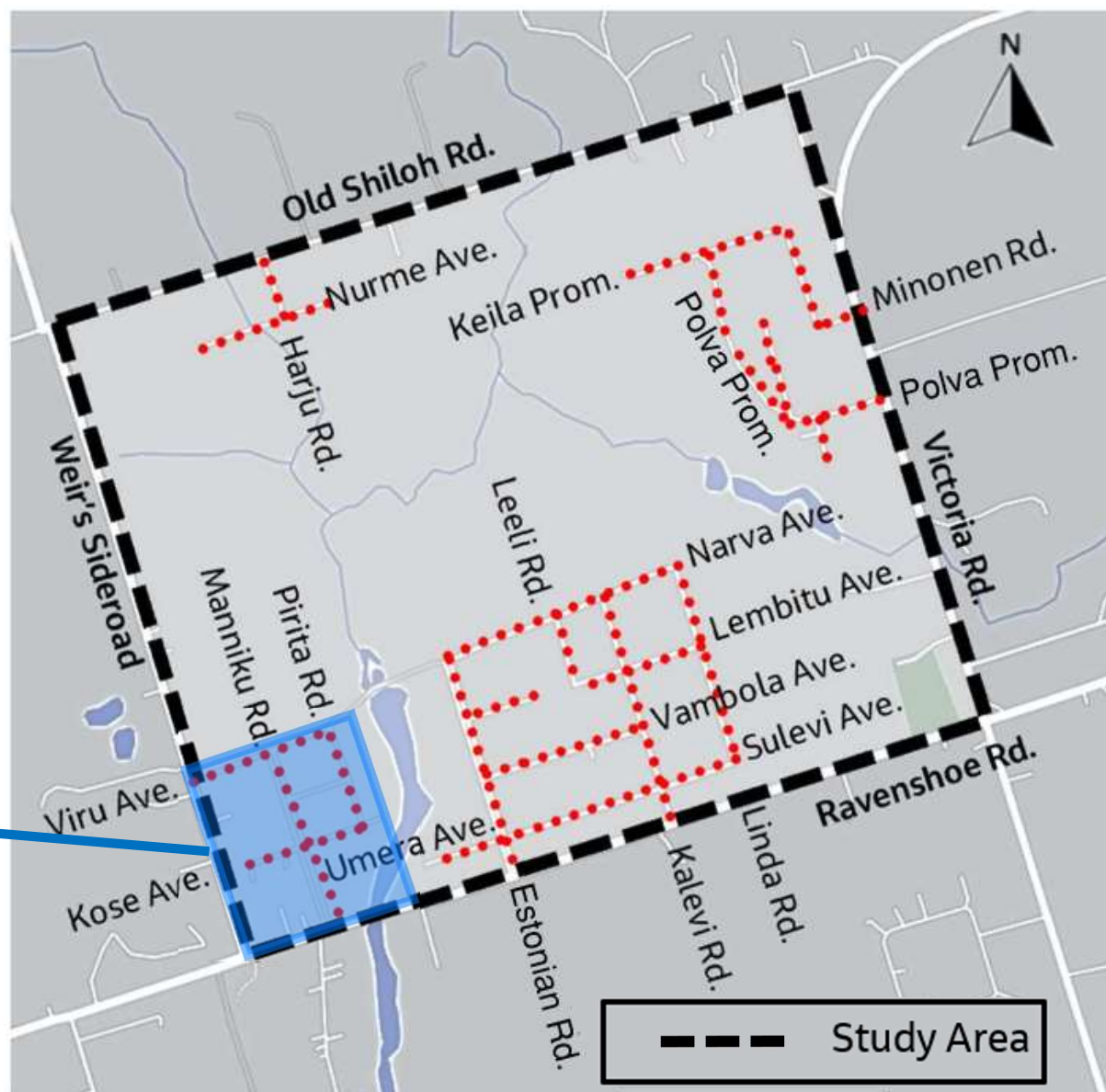
NURME RD.

NURME RD.

Northwest Quadrant – Recommended Repairs and Reconstruction

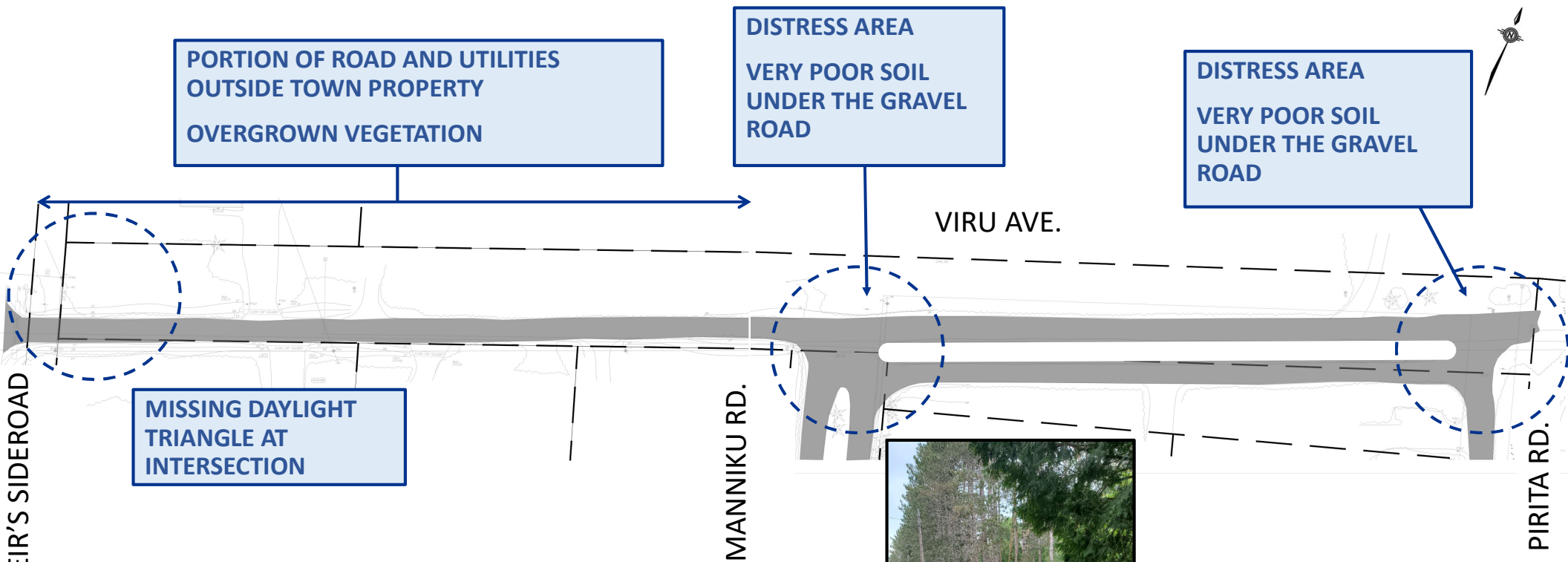


Southwest Quadrant



SOUTHWEST
QUADRANT
(SW)

Southwest Quadrant – Areas of Deficiencies



VIRU AVE./WEIR'S SIDEROAD INTERSECTION



SOUTH SIDE OF VIRU AVE. LOOKING WEST

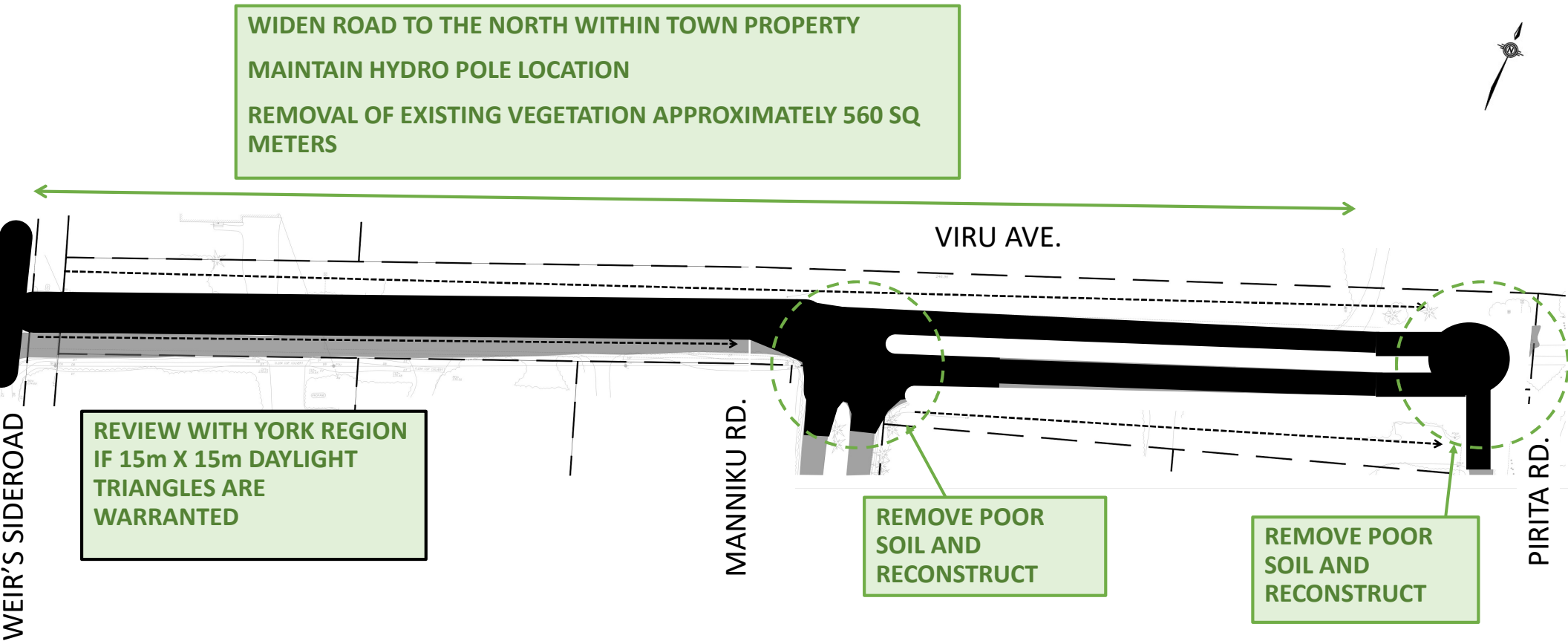


VIRU AVE./MANNIKU RD. INTERSECTION

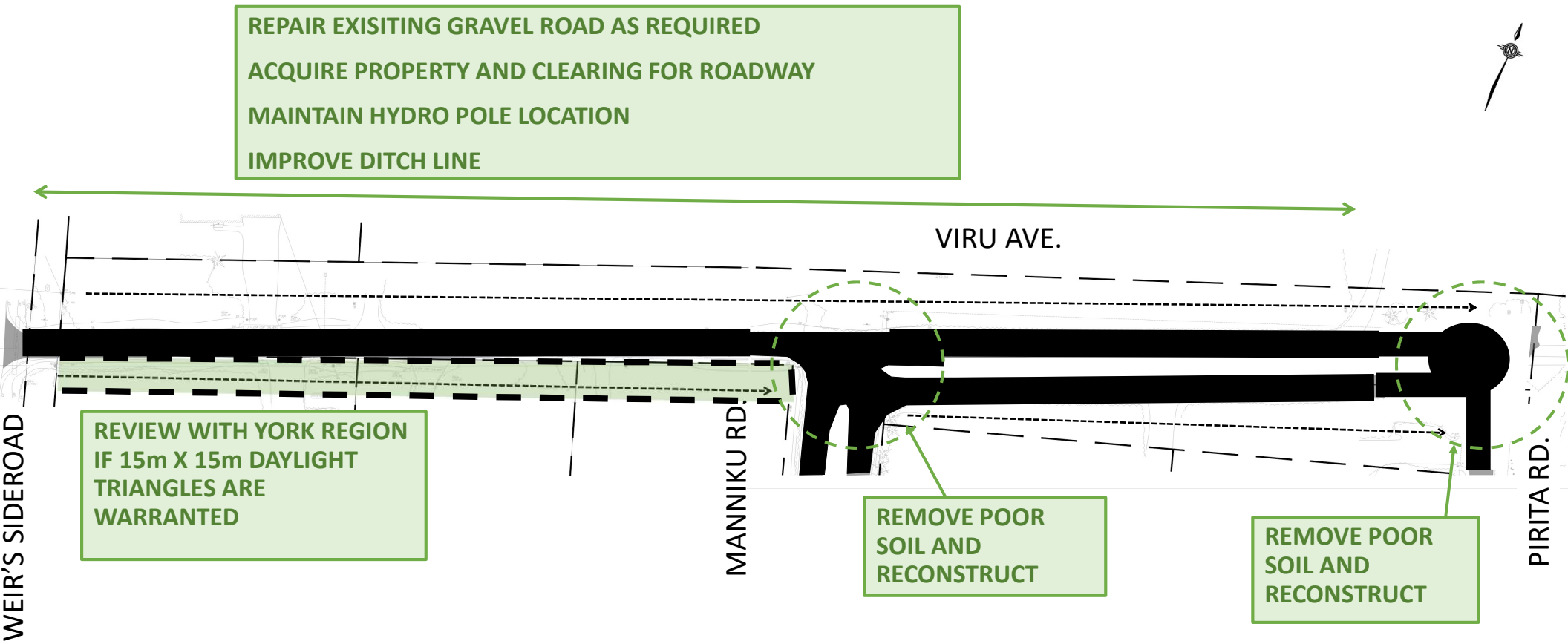


VIRU AVE./PIRITA RD. INTERSECTION

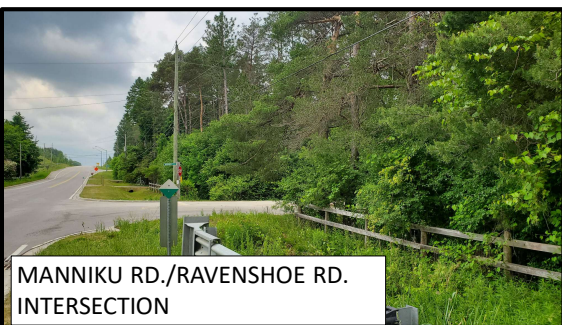
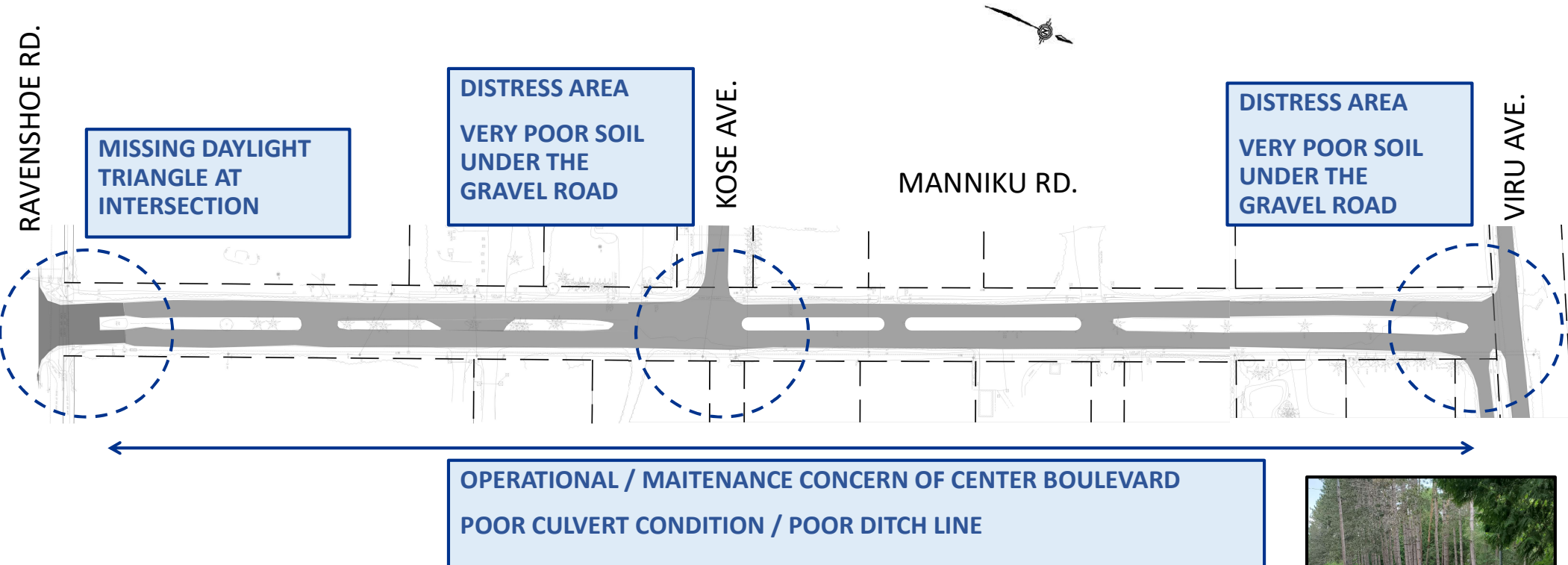
Southwest Quadrant – Recommended Repairs and Reconstruction Option A



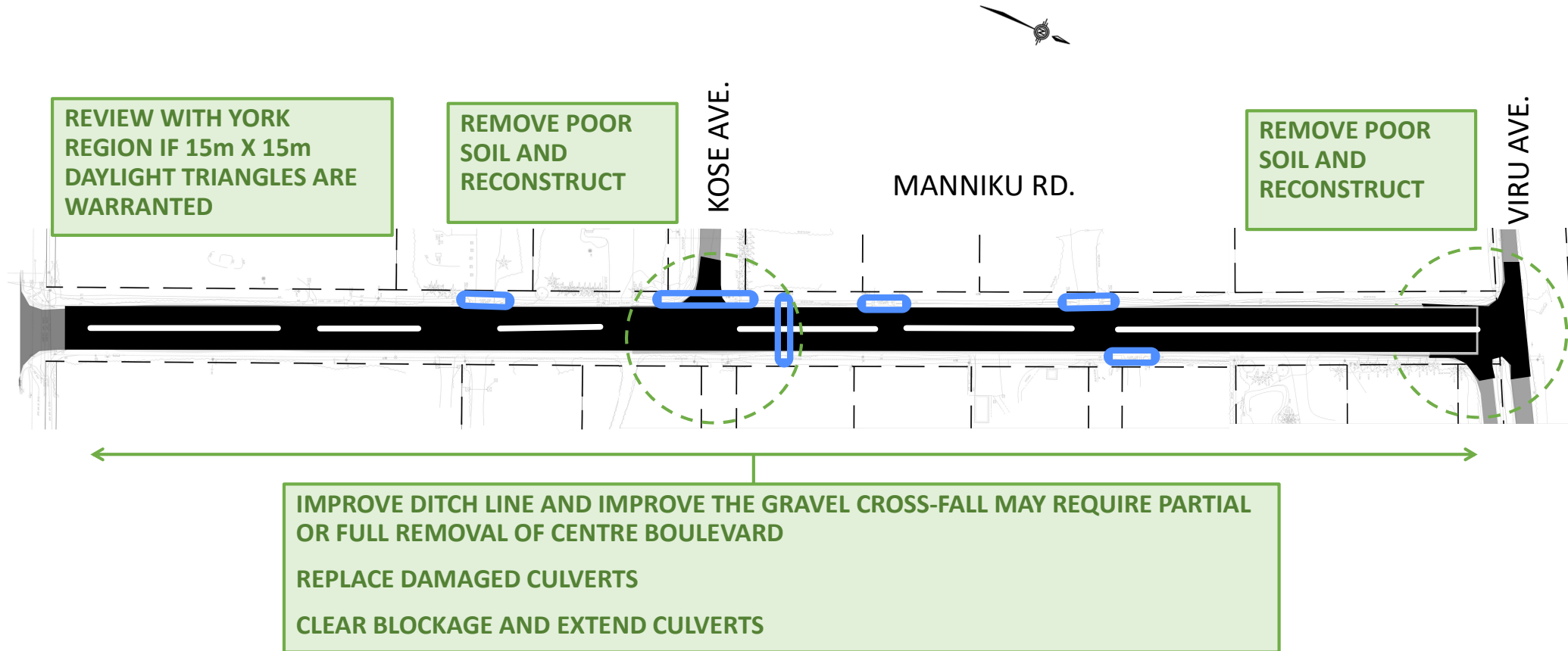
Southwest Quadrant – Recommended Repairs and Reconstruction Option B



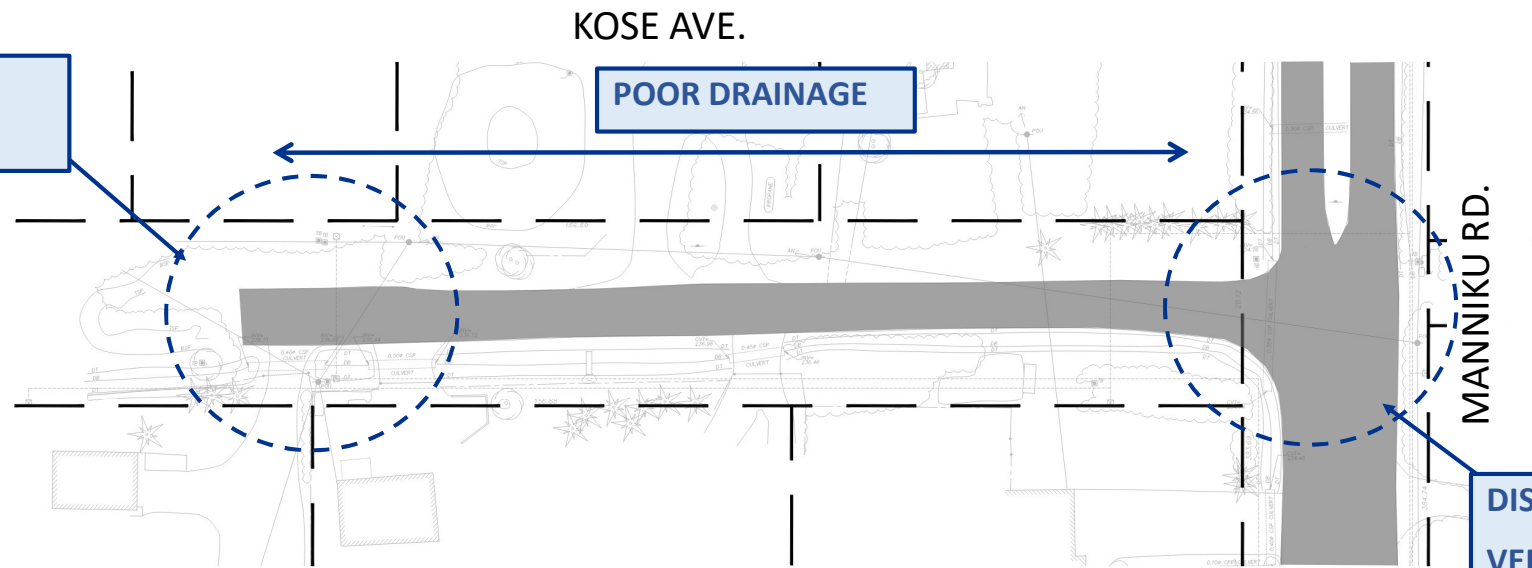
Southwest Quadrant – Areas of Deficiencies



Southwest Quadrant – Recommended Repairs and Reconstruction

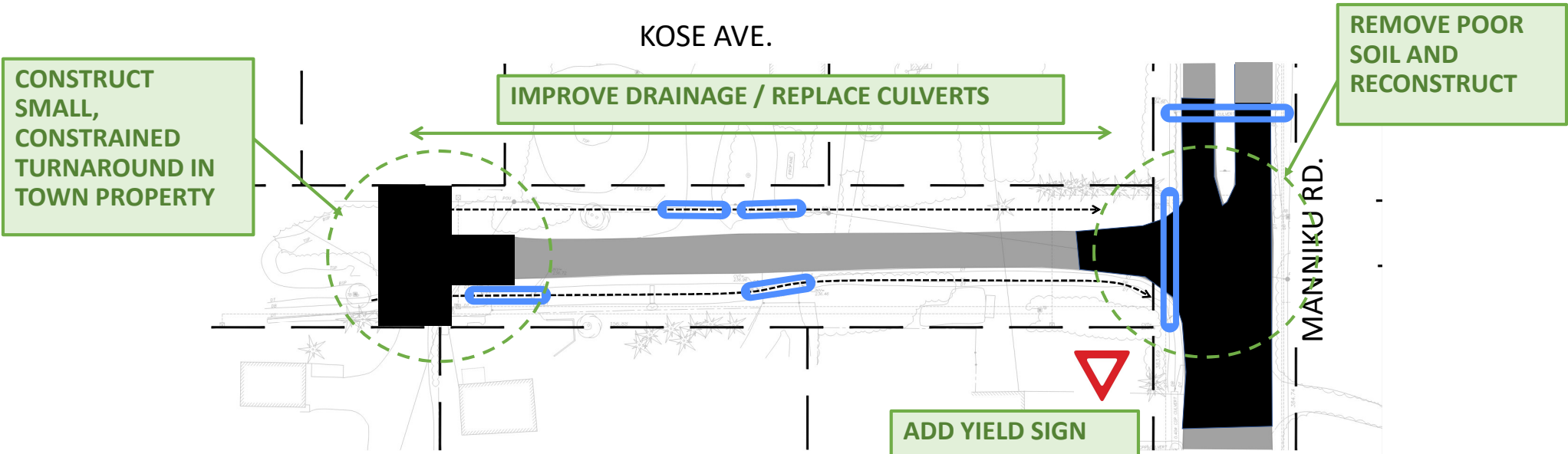


Southwest Quadrant – Areas of Deficiencies

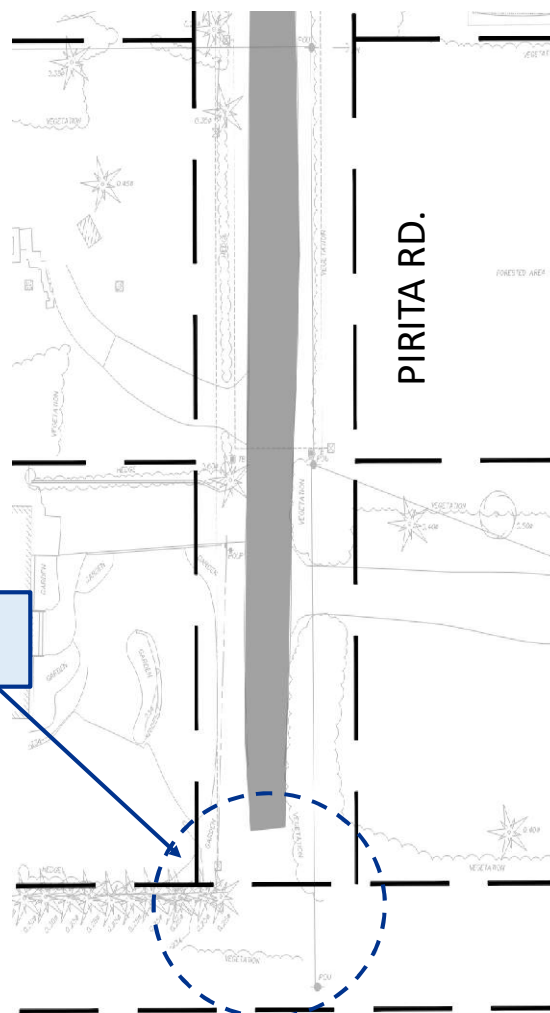


WEST DEAD END AT KOSE AVE.

Southwest Quadrant – Recommended Repairs and Reconstruction



Southwest Quadrant – Areas of Deficiencies

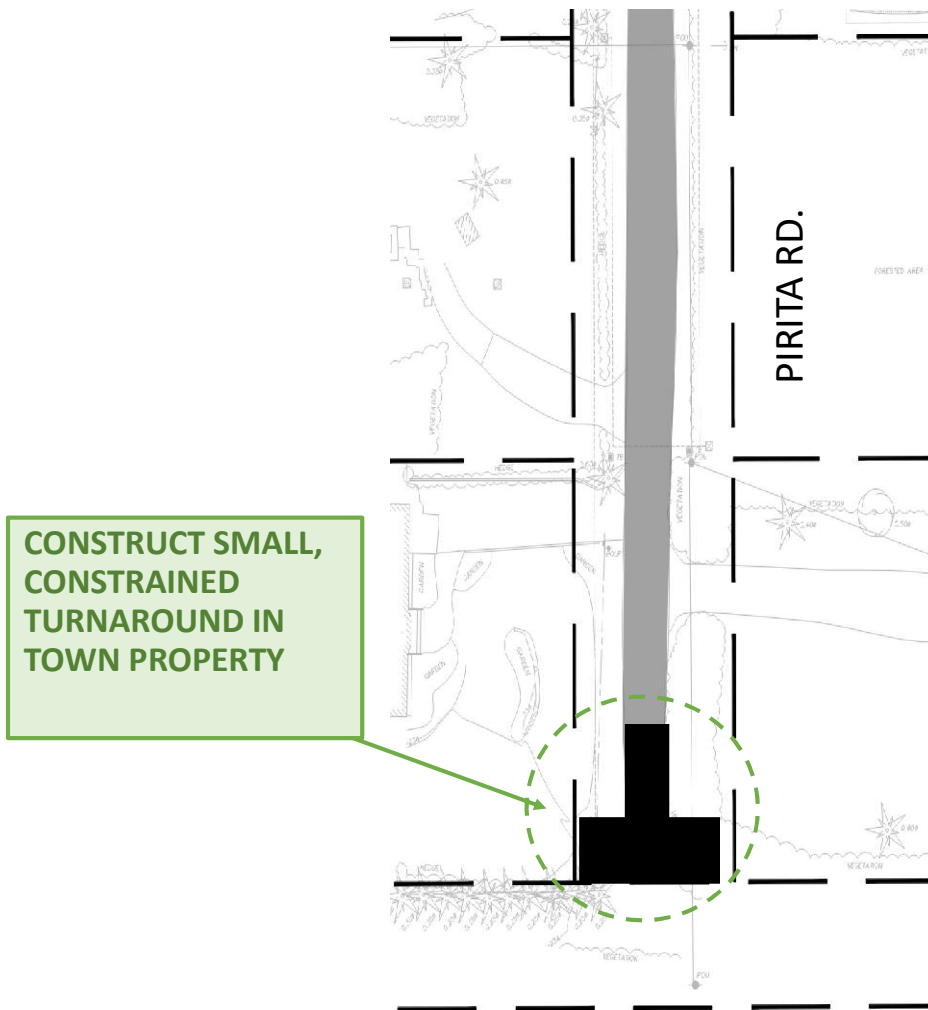


**DEAD-END NO
TURN-AROUND**

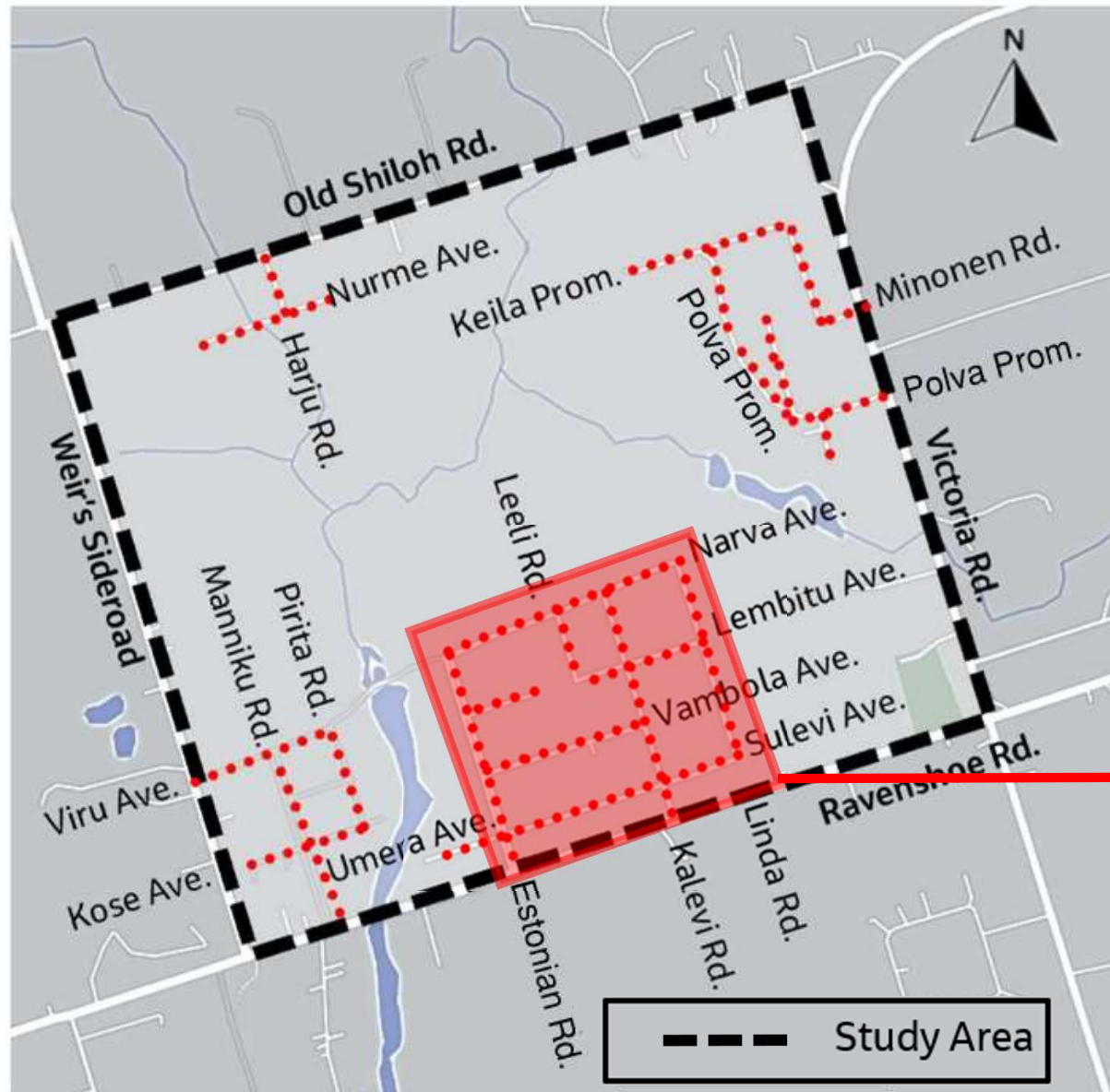


SOUTH DEAD END AT PIRITA RD.

Southwest Quadrant – Recommended Repairs and Reconstruction

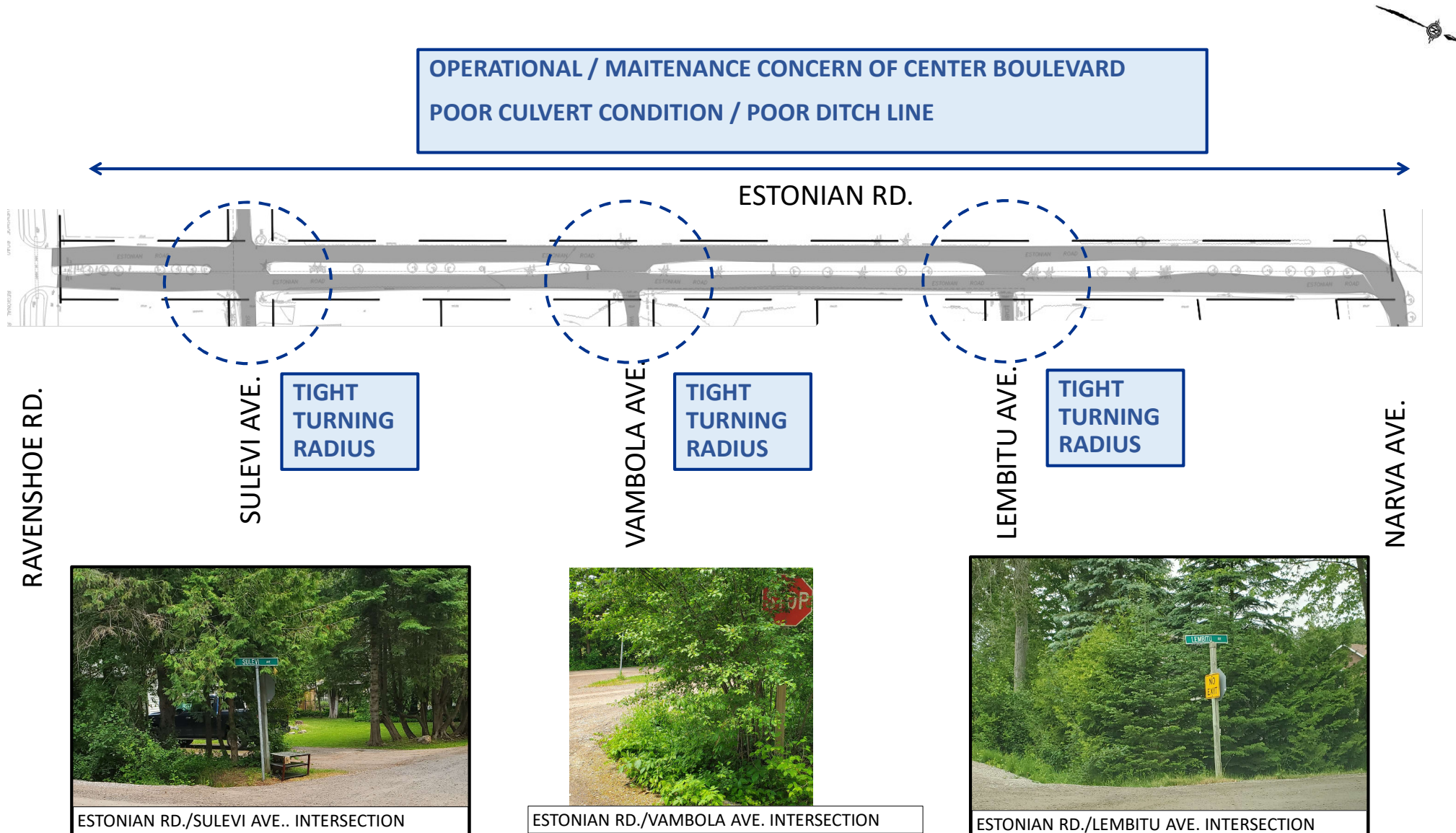


Southeast Quadrant



SOUTHEAST
QUADRANT
(SE)

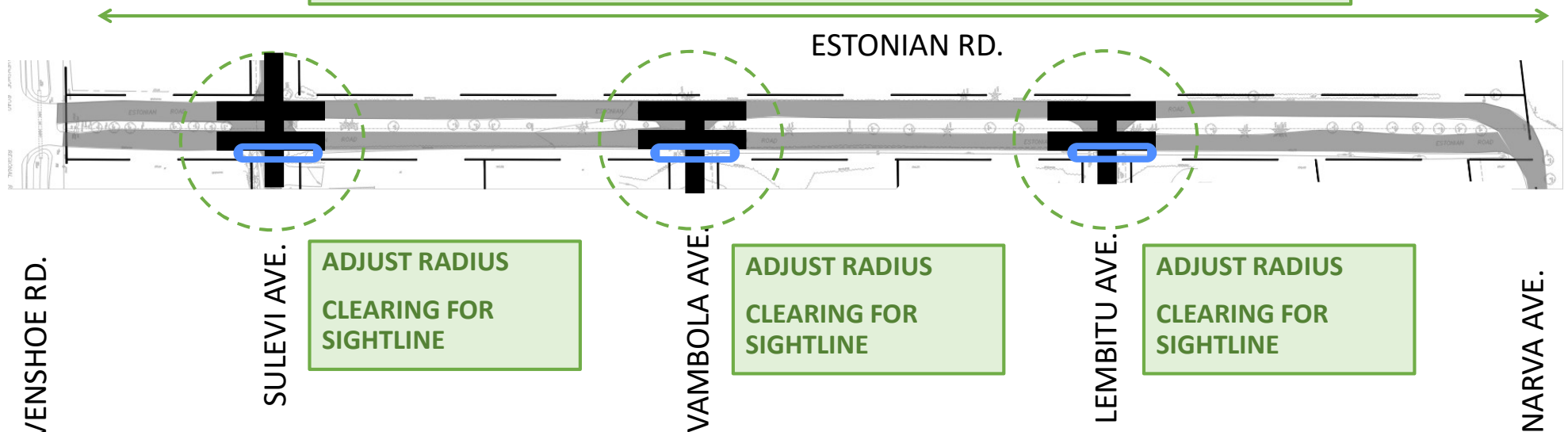
Southeast Quadrant – Areas of Deficiencies



Southeast Quadrant – Recommended Repairs and Reconstruction

IMPROVE DITCH LINE AND IMPROVE THE GRAVEL CROSS-FALL MAY REQUIRE PARTIAL OR FULL REMOVAL OF CENTRE BOULEVARD

REPLACE DAMAGED CULVERTS / CLEAR BLOCKAGE AND EXTEND CULVERTS



ESTONIAN RD./SULEVI AVE.. INTERSECTION

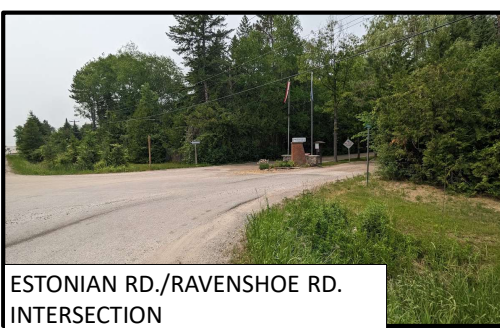
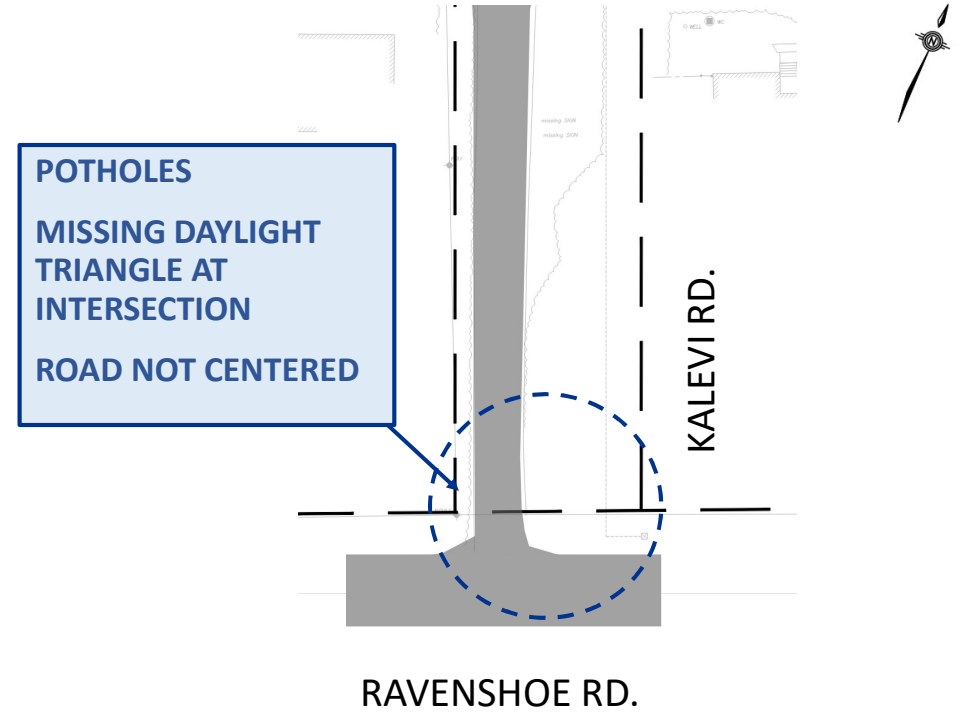
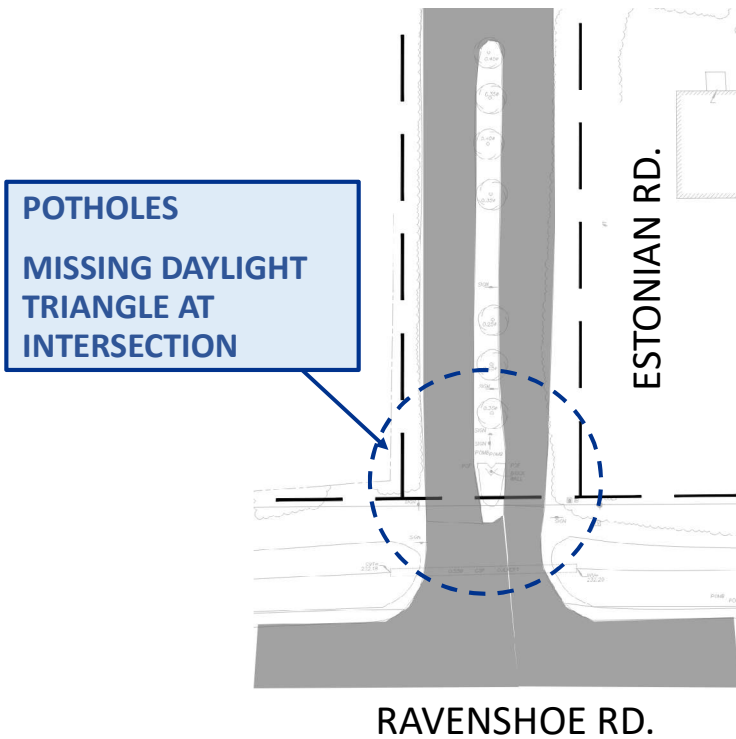


ESTONIAN RD./VAMBOLA AVE. INTERSECTION

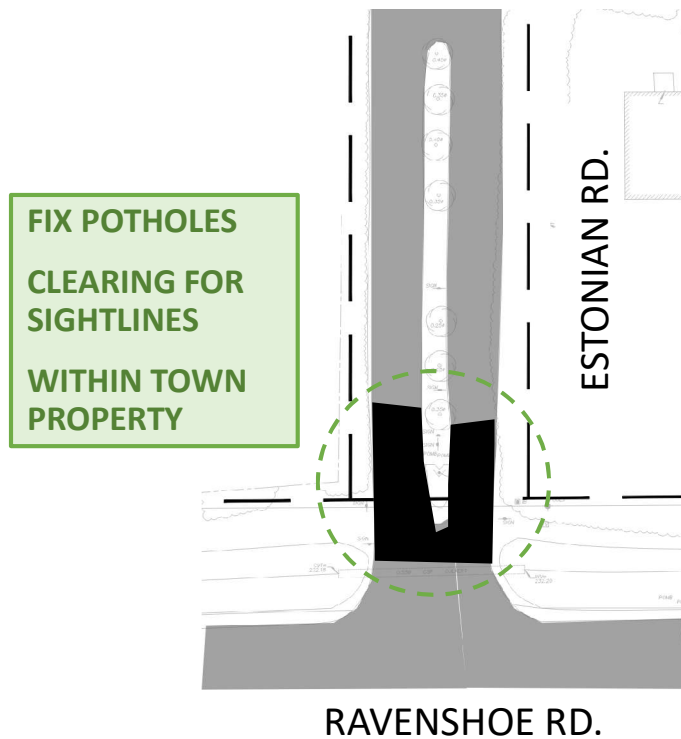


ESTONIAN RD./LEMBITU AVE. INTERSECTION

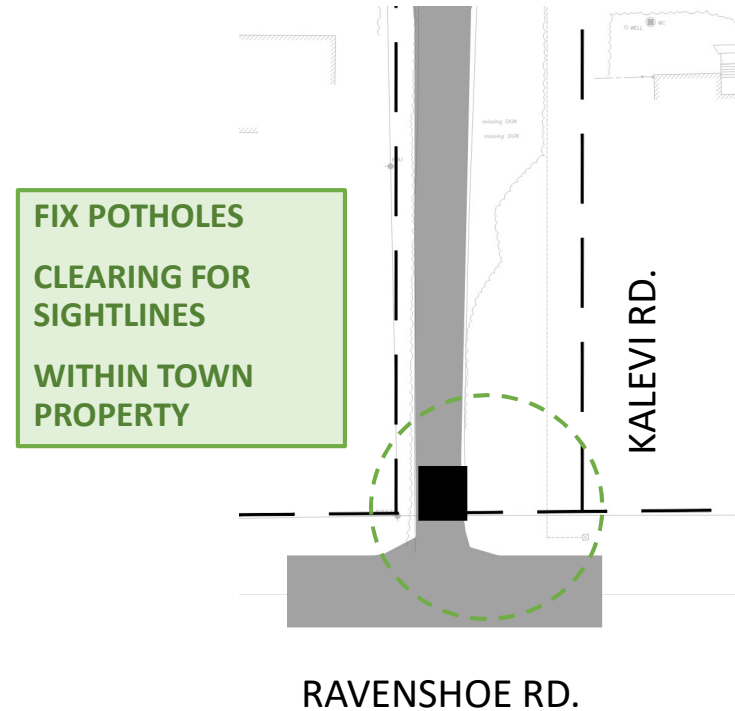
Southeast Quadrant – Areas of Deficiencies



Southeast Quadrant – Recommended Repairs and Reconstruction



REVIEW WITH YORK REGION IF 15m X 15m DAYLIGHT TRIANGLES ARE WARRANTED



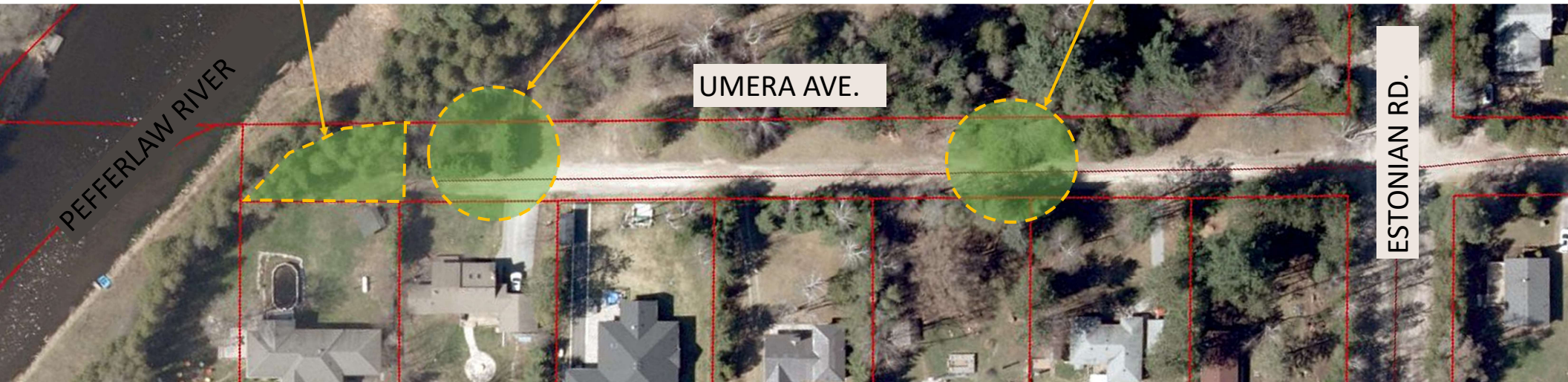
REVIEW WITH YORK REGION IF 15m X 15m DAYLIGHT TRIANGLES ARE WARRANTED

Southeast Quadrant – Areas of Deficiencies

PRIVATE PROPERTY
ENCROACHING ON TOWN
PROPERTY

DEAD-END NO TURN-
AROUND

DISTRESS AREA
VERY POOR SOIL
UNDER THE GRAVEL
ROAD



VIEW OF PEPPERLAW RIVER TOWARDS
RAVENSHOE RD.



GATED AREA WEST END OF UMER AVE.

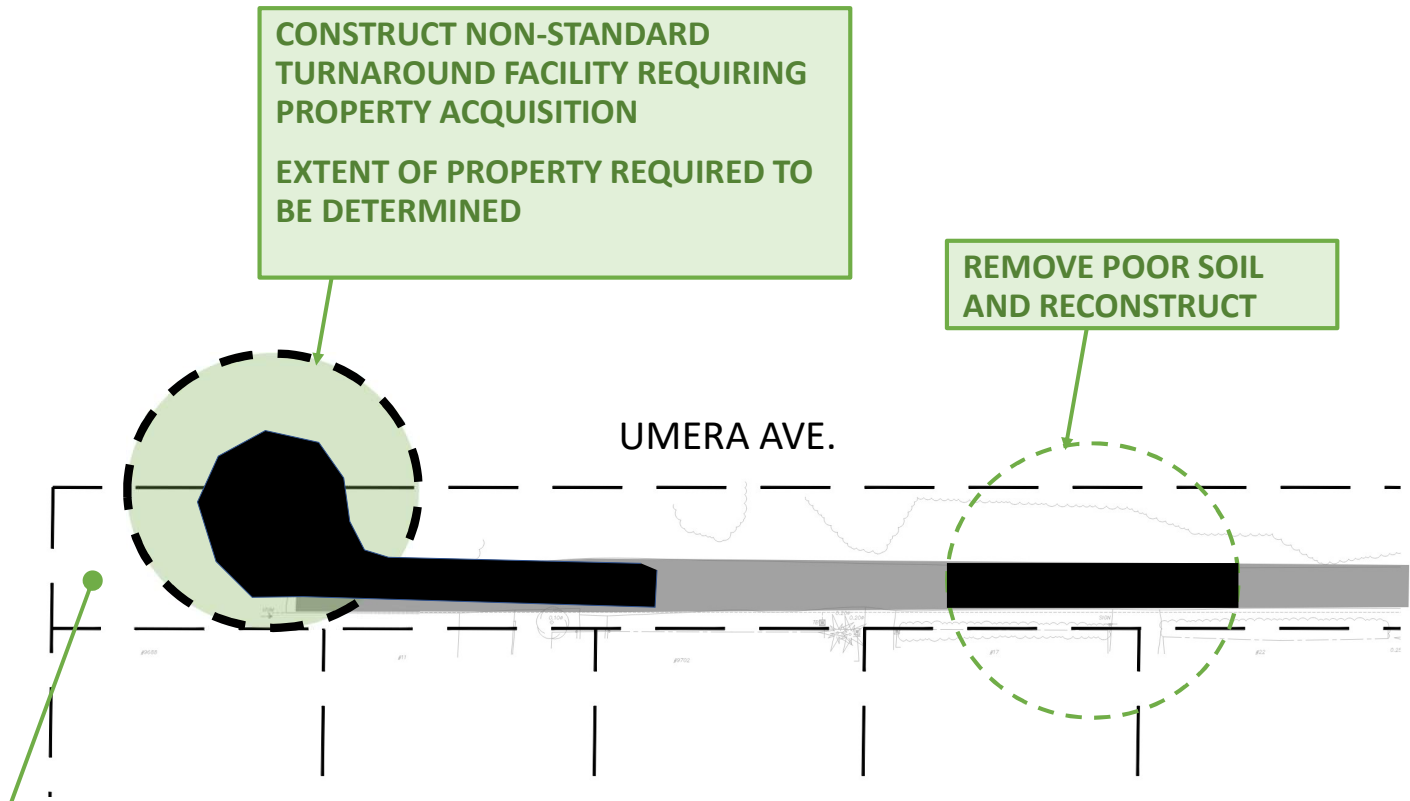


WEST DEAD END UMER AVE.



UMERA AVE.

Southeast Quadrant – Recommended Repairs and Reconstruction



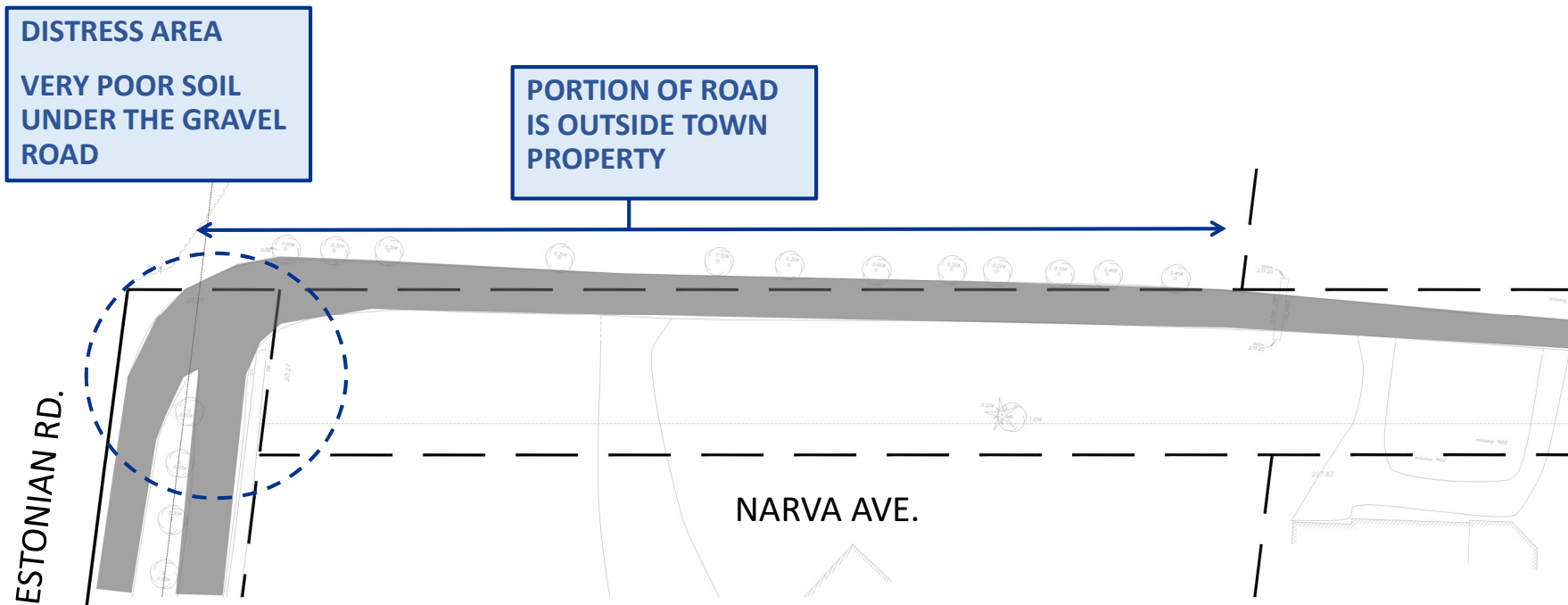
OPTION A

TOWN TO RELOCATED PRIVATE FENCE TO PROPERTY LINE

OPTION B

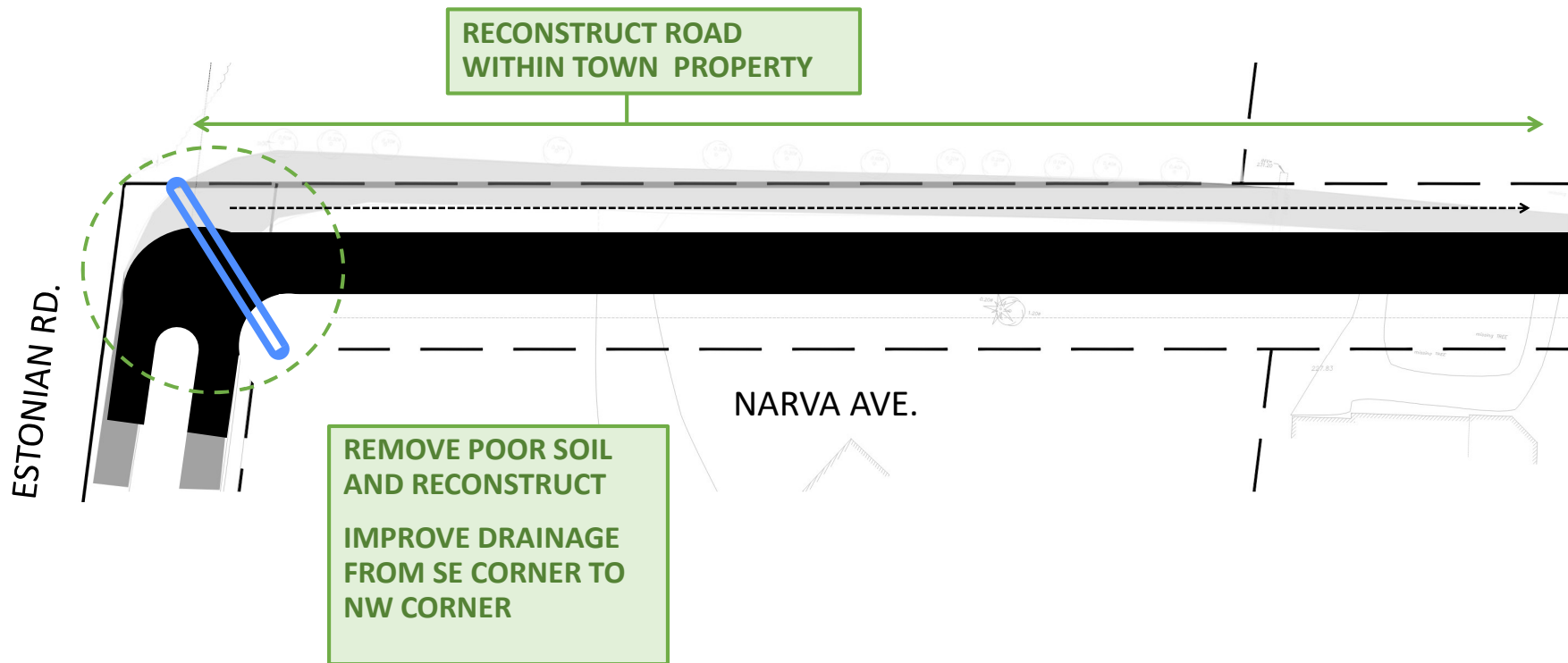
OWNER TO ENTER INTO ENCROACHMENT AGREEMENT WITH TOWN IN ORDER TO HAVE FENCE ON TOWN PROPERTY (MAINTAIN EXISTING USE OF LAND)

Southeast Quadrant – Areas of Deficiencies

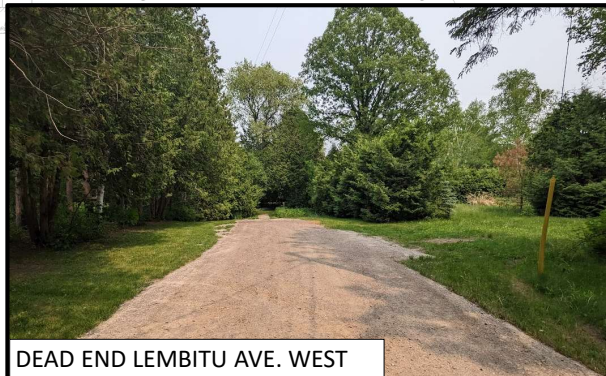
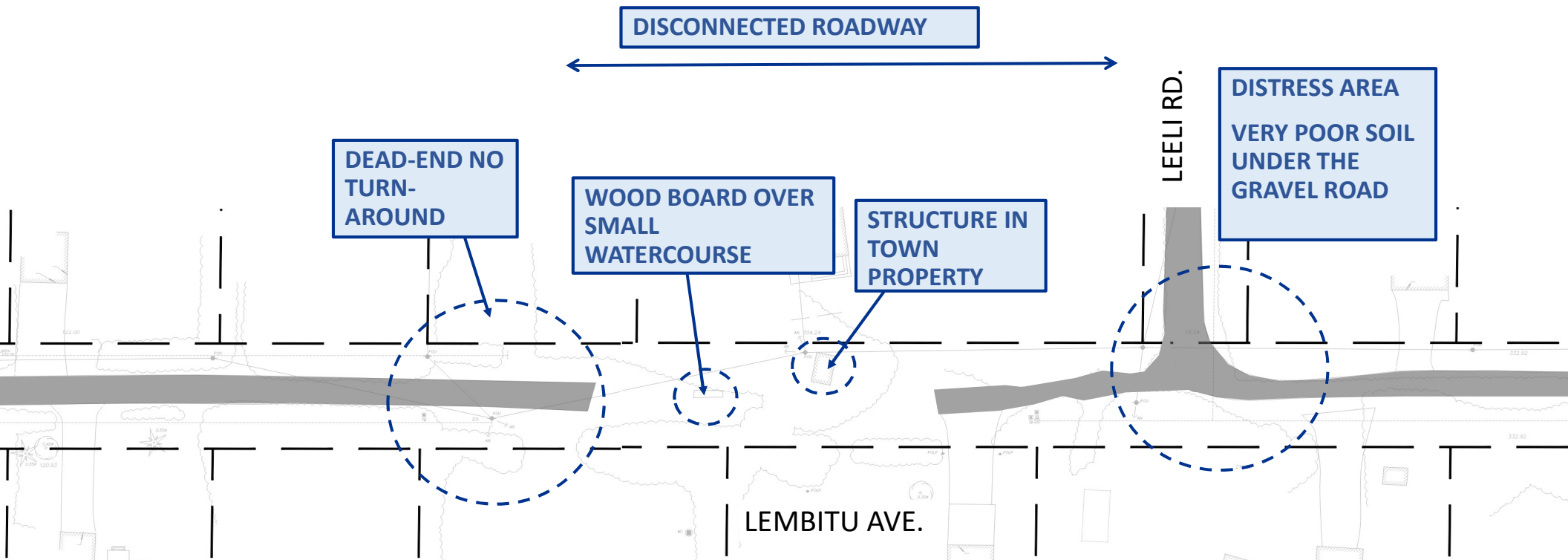


ESTONIAN RD./NARVA AVE. ROAD BEND

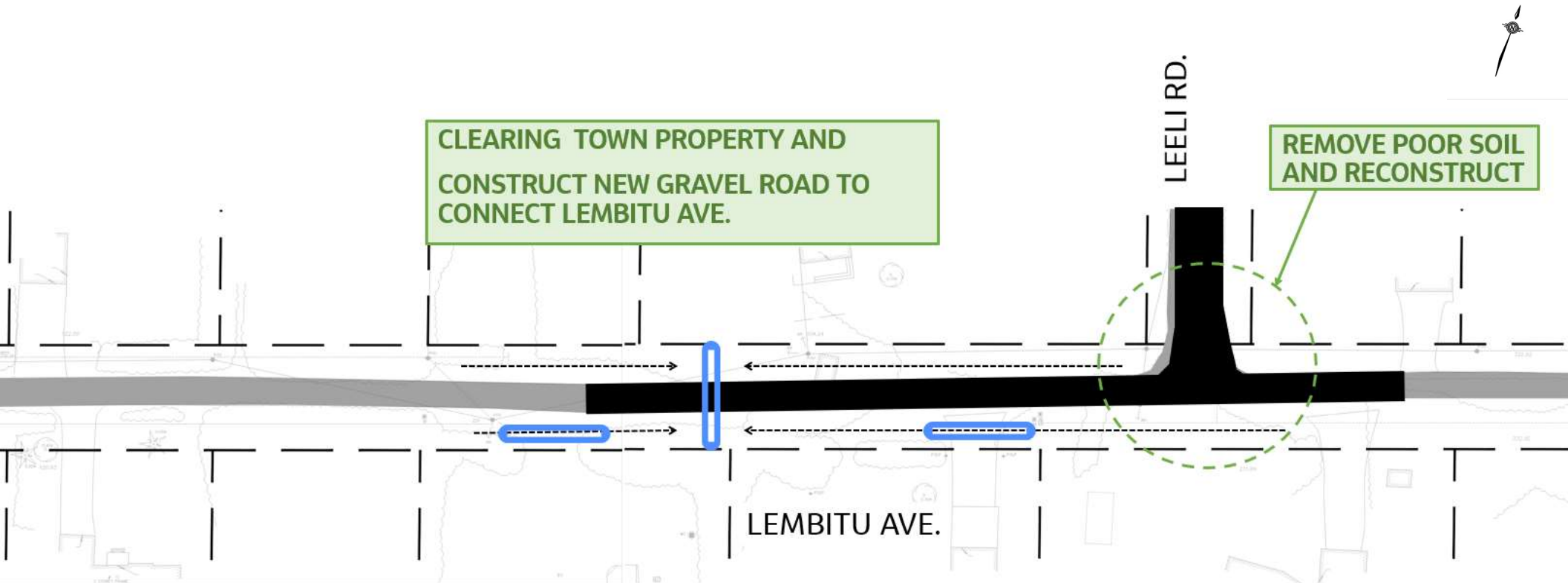
Southeast Quadrant – Recommended Repairs and Reconstruction



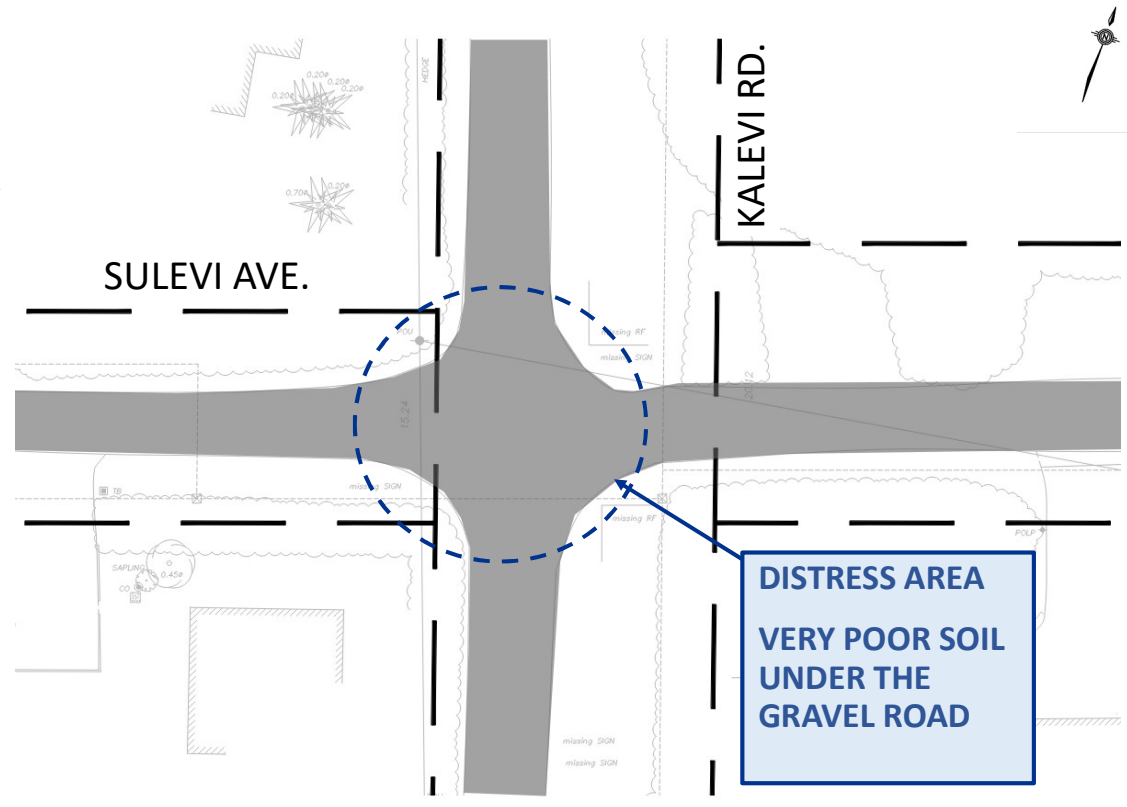
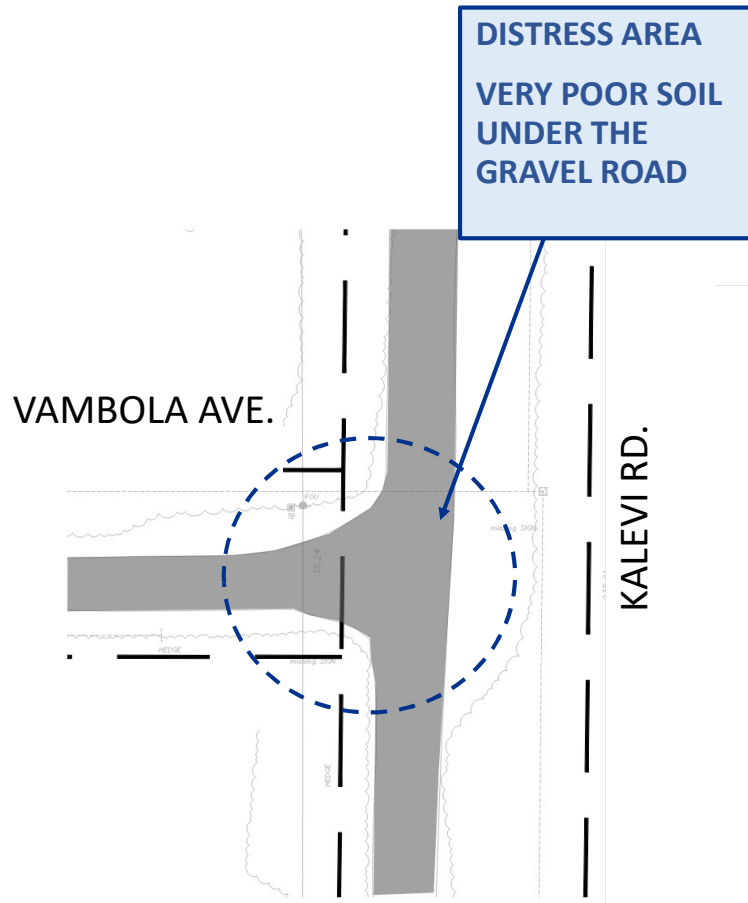
Southeast Quadrant – Areas of Deficiencies



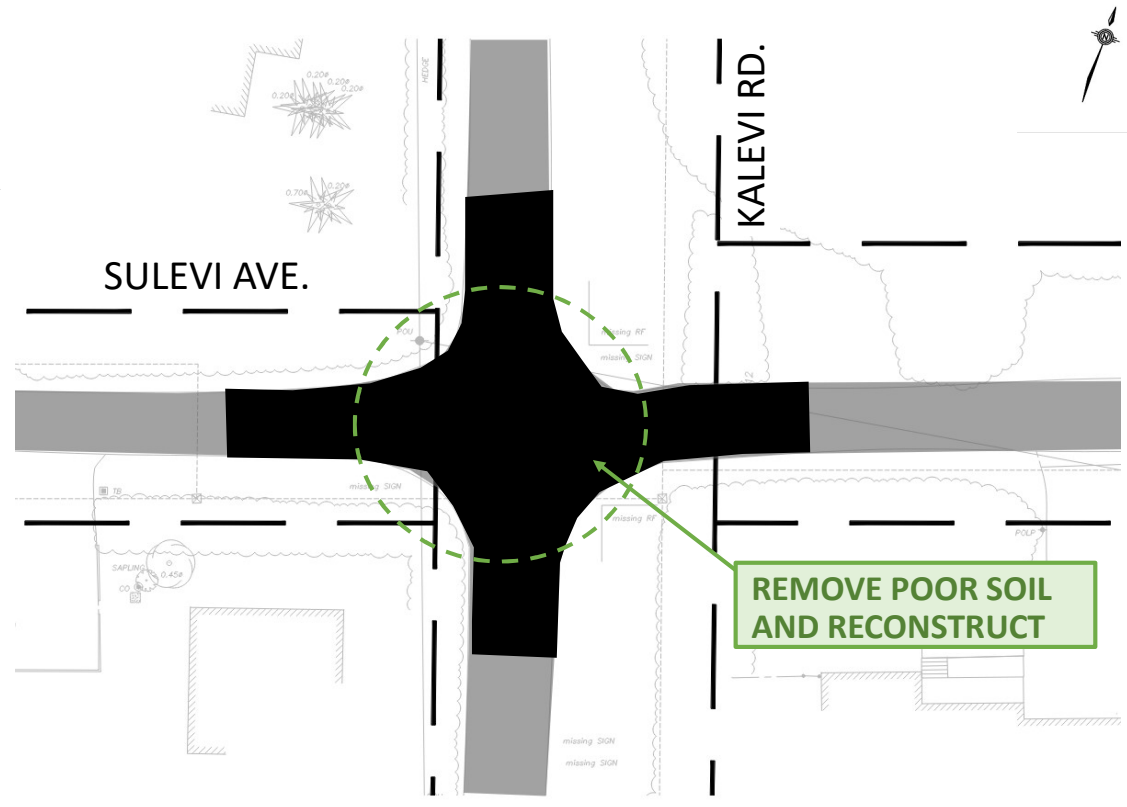
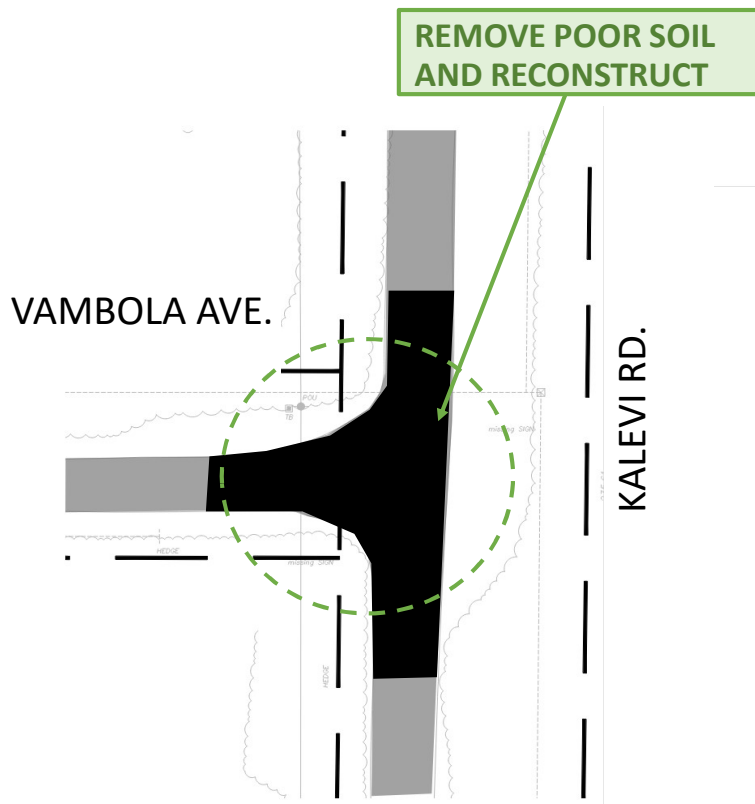
Southeast Quadrant – Recommended Repairs and Reconstruction



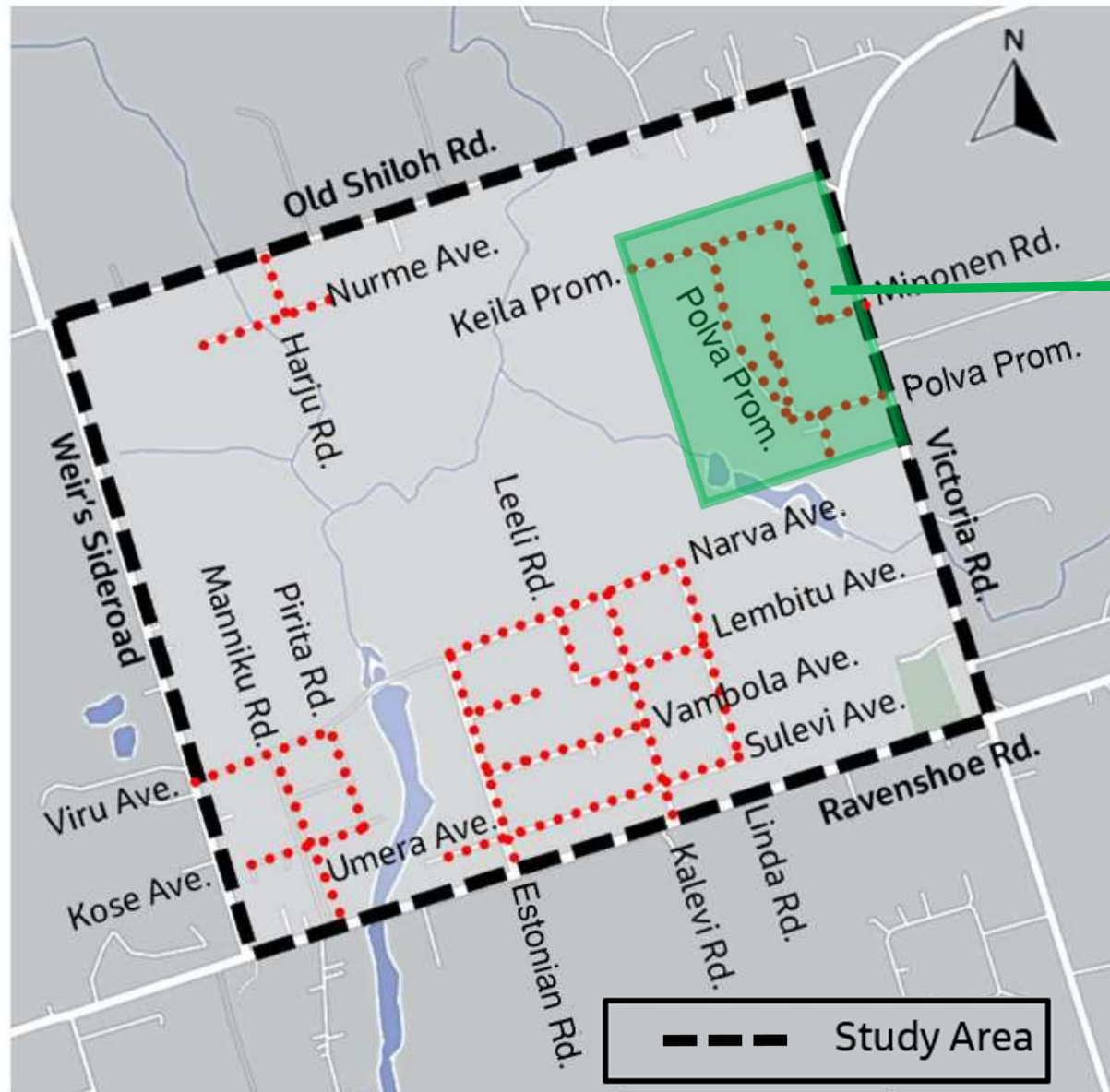
Southeast Quadrant – Areas of Deficiencies



Southeast Quadrant – Recommended Repairs and Reconstruction



Northeast Quadrant



NORTHEAST
QUADRANT
(NE)

Northeast Quadrant – Areas of Deficiencies



DRIVEWAY TO 118 VICTORIA RD.
CROSSES 0.3m RESERVE ON
MINONEN RD.



Northeast Quadrant – Recommended Solution



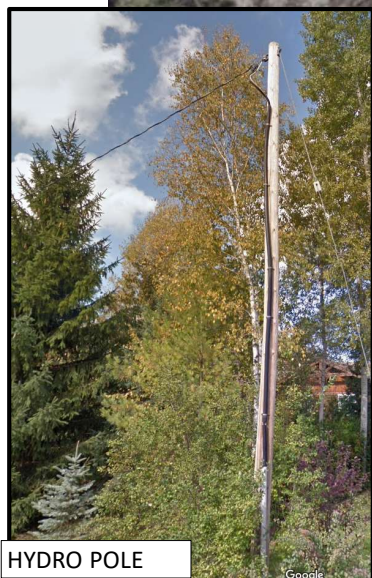
PASS BY-LAW TO DECLARE 0.3m RESERVE AS A PUBLIC HIGHWAY (MAINTAIN EXISTING LAND USE)

REVIEW WITH YORK REGION IF 15m X 15m DAYLIGHT TRIANGLES ARE WARRANTED

Northeast Quadrant – Areas of Deficiencies



HYDRO POLE ENCROACHING
INTO PRIVATE PROPERTY



HYDRO POLE



ABOVE GROUND POOL AND
FENCE LOCATED ON TOWN
PROPERTY

Northeast Quadrant – Recommended Solution

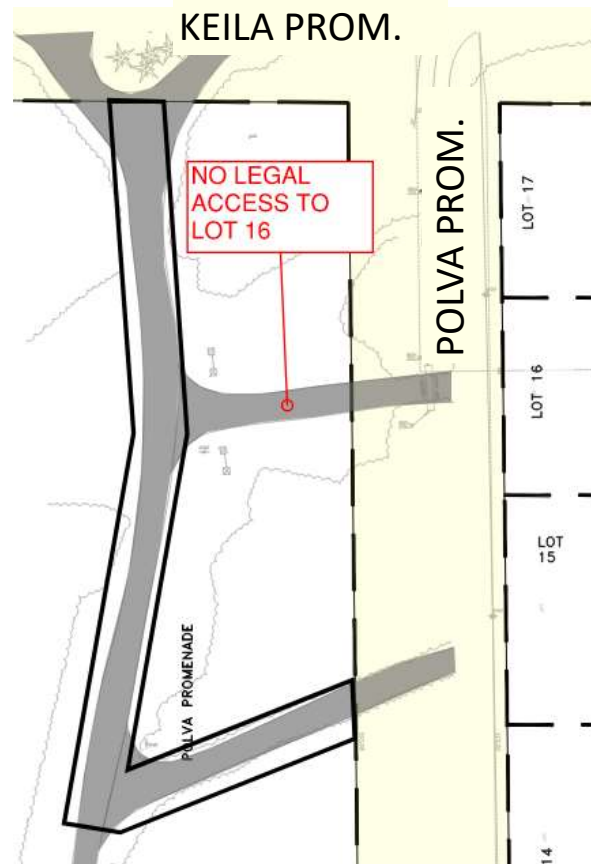


DO NOTHING, MAINTAIN EXISTING LAND USE
AND EXISTING HYDRO SERVICE POLES



OWNER TO ENTER INTO ENCROACHMENT
AGREEMENT WITH TOWN IN ORDER TO KEEP
FENCE AND POOL AT CURRENT LOCATION
(MAINTAIN EXISTING LAND USE AND REDUCED
LIABILITY)

Northeast Quadrant – Areas of Deficiencies



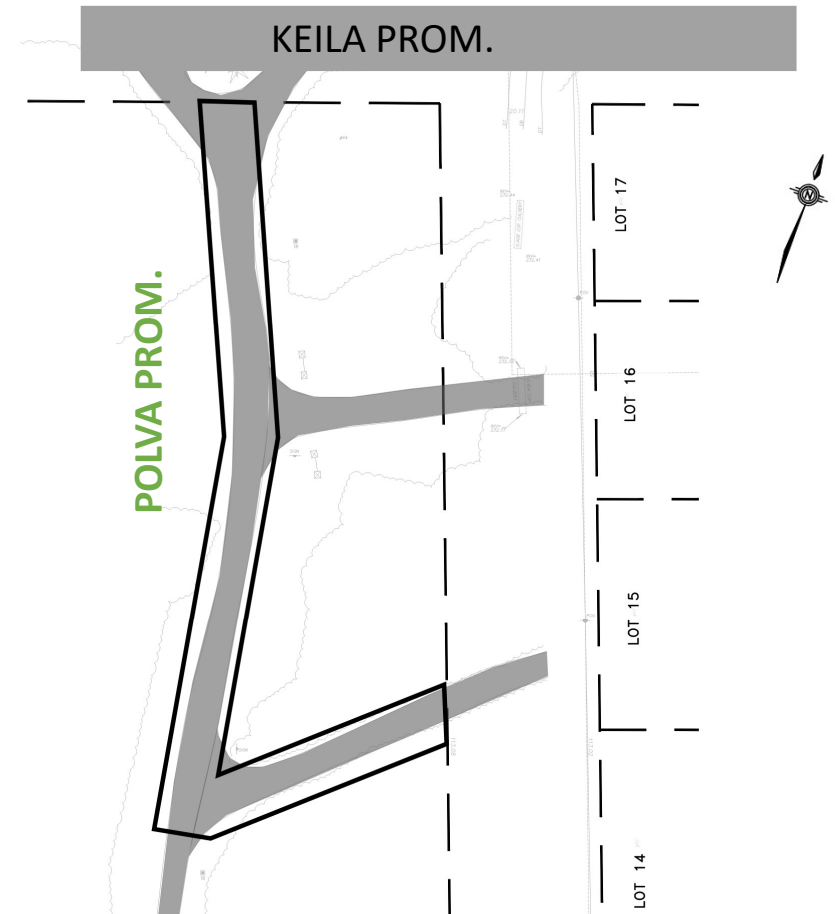
- EXISTING POLVA PROM IS LOCATED OUTSIDE OF TOWN RIGHT-OF-WAY ON ADJACENT PRIVATE PROPERTY
- LOT 15 (97 POLVA PROM) HAS LEGAL ACCESS VIA DEVELOPMENT AGREEMENT REGISTERED ON TITLE.
- LOT 16 (95 POLVA PROM) DOES NOT HAVE LEGAL ACCESS
- POLVA PROM IS NOT CONTINUOUS WITH OTHER SECTION OF POLVA

Northeast Quadrant – Alternative



OPTION A

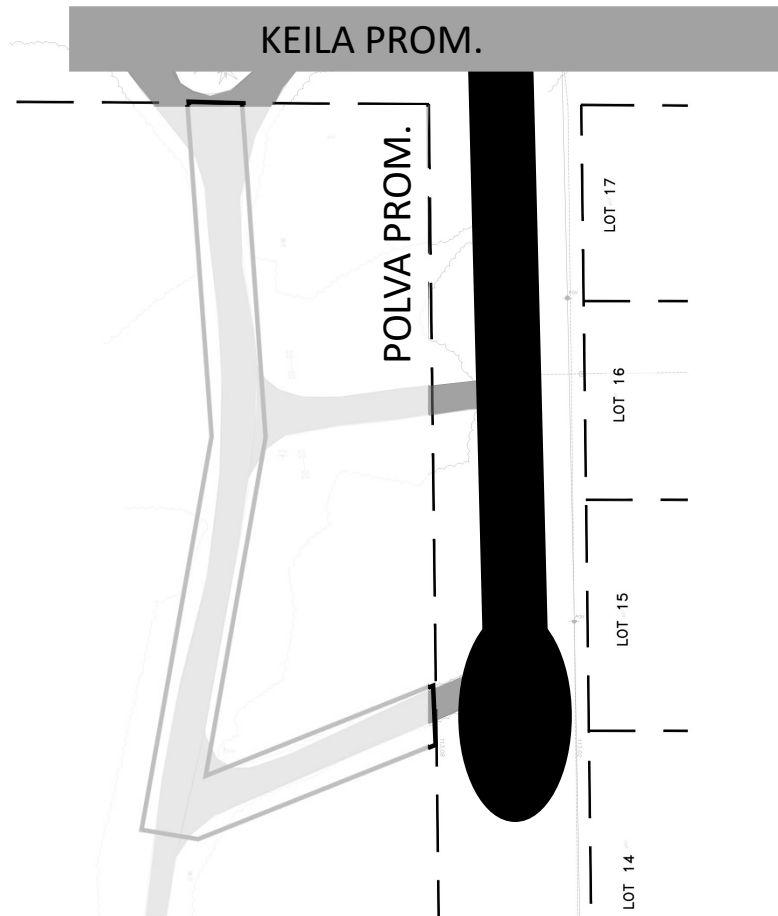
DO NOTHING (TOWN HAS NOT ASSUMED THIS ROAD)



OPTION B

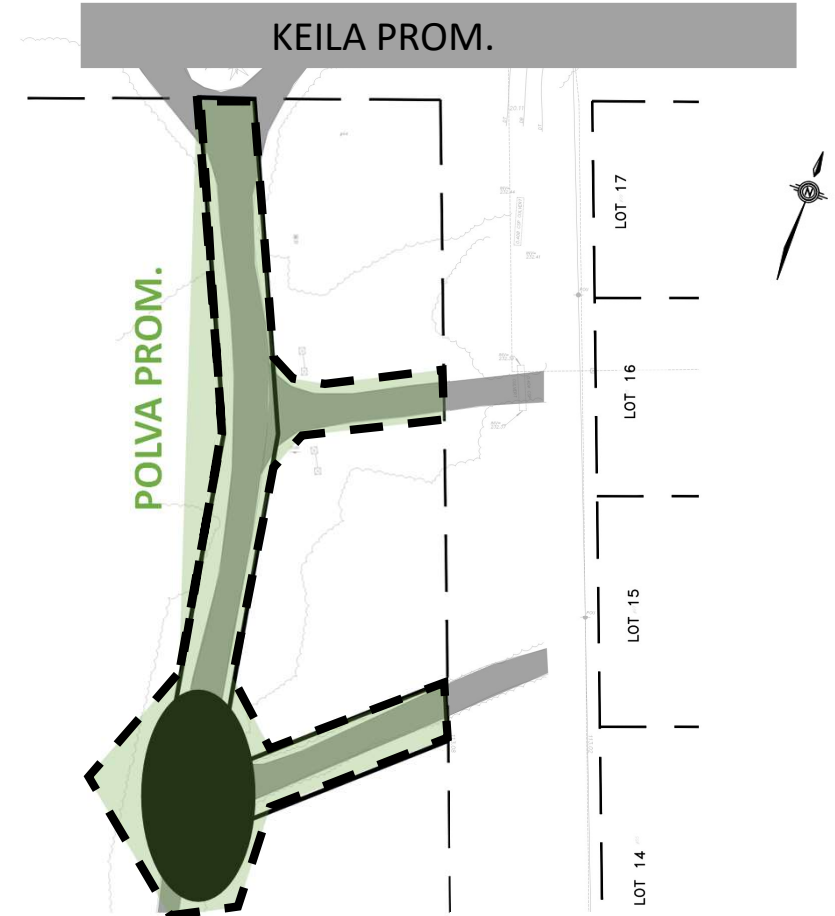
RENAME THIS PORTION OF POLVA PROM TO PREVENT CONFUSION FOR EMERGENCY VEHICLES (SAFETY)

Northeast Quadrant – Alternative



OPTION C

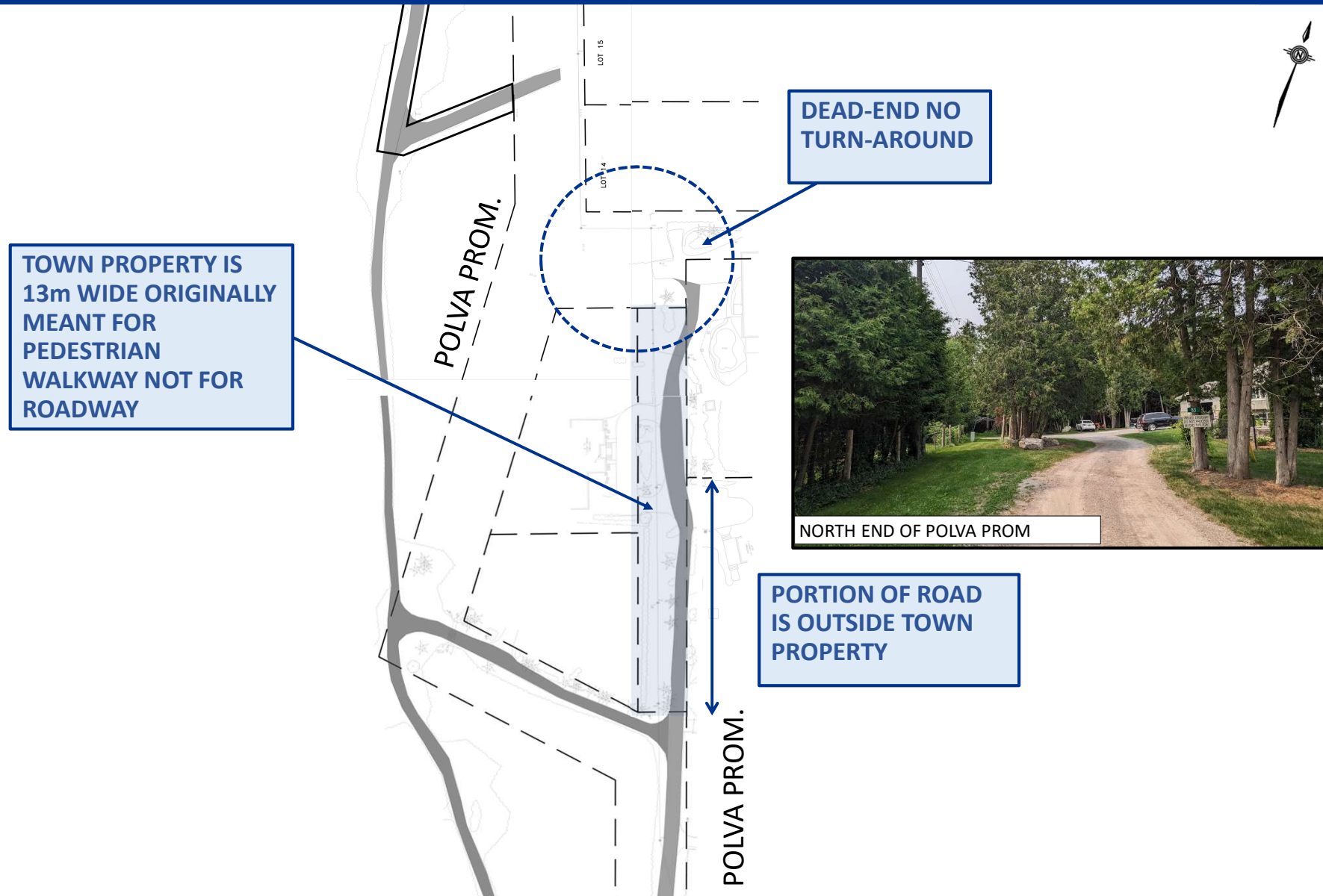
RECONSTRUCT POLVA PROM ON TOWN RIGHT-OF-WAY
CONSTRUCT SMALL, CONSTRAINED TURNING FEATURES
WITHIN RIGHT-OF-WAY



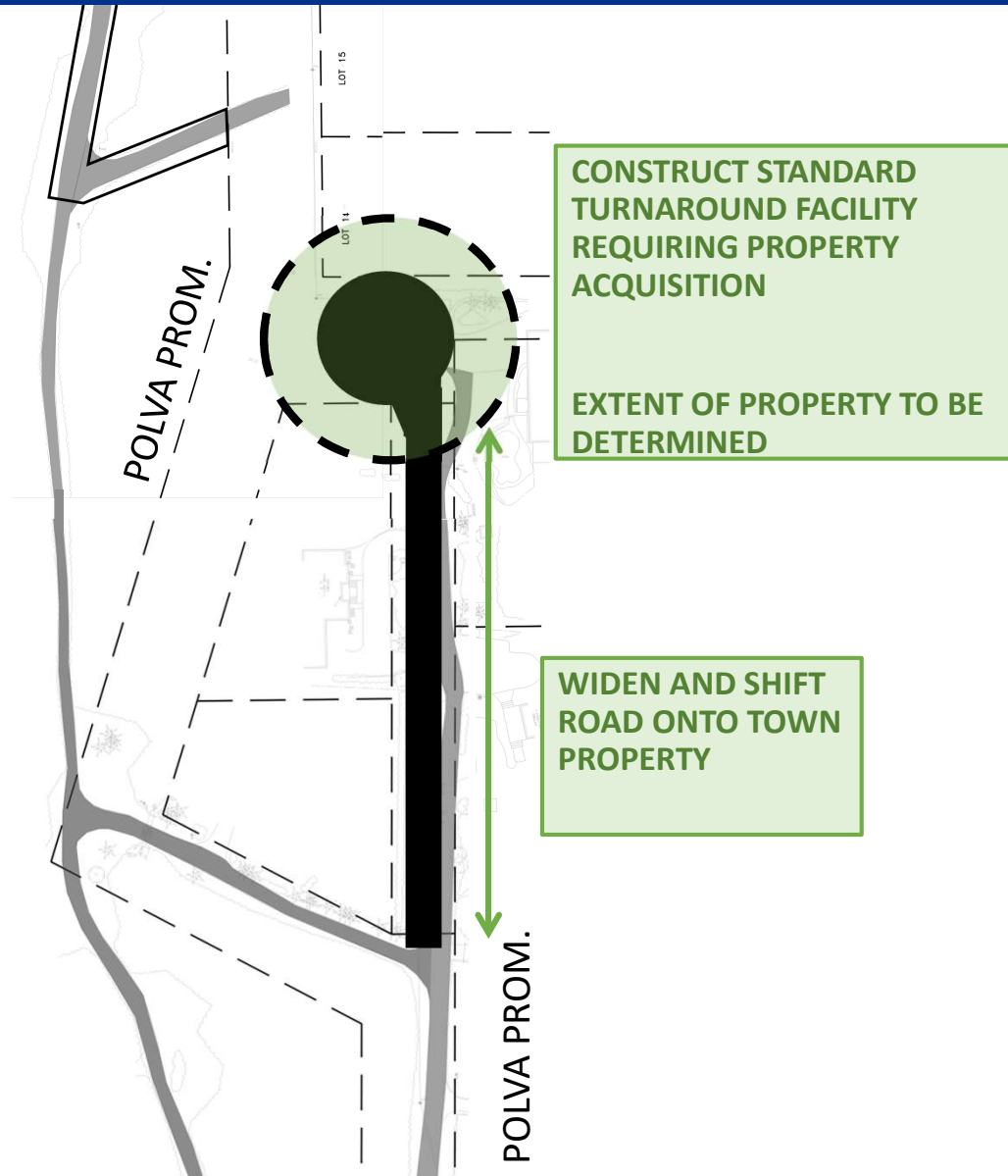
OPTION D

ACQUIRE LANDS WHERE EXISTING POLVA PROM IS LOCATED,
PROPERTY EXTENT TO BE DETERMINED
CONSTRUCT SMALL, CONSTRAINED TURNING FEATURES

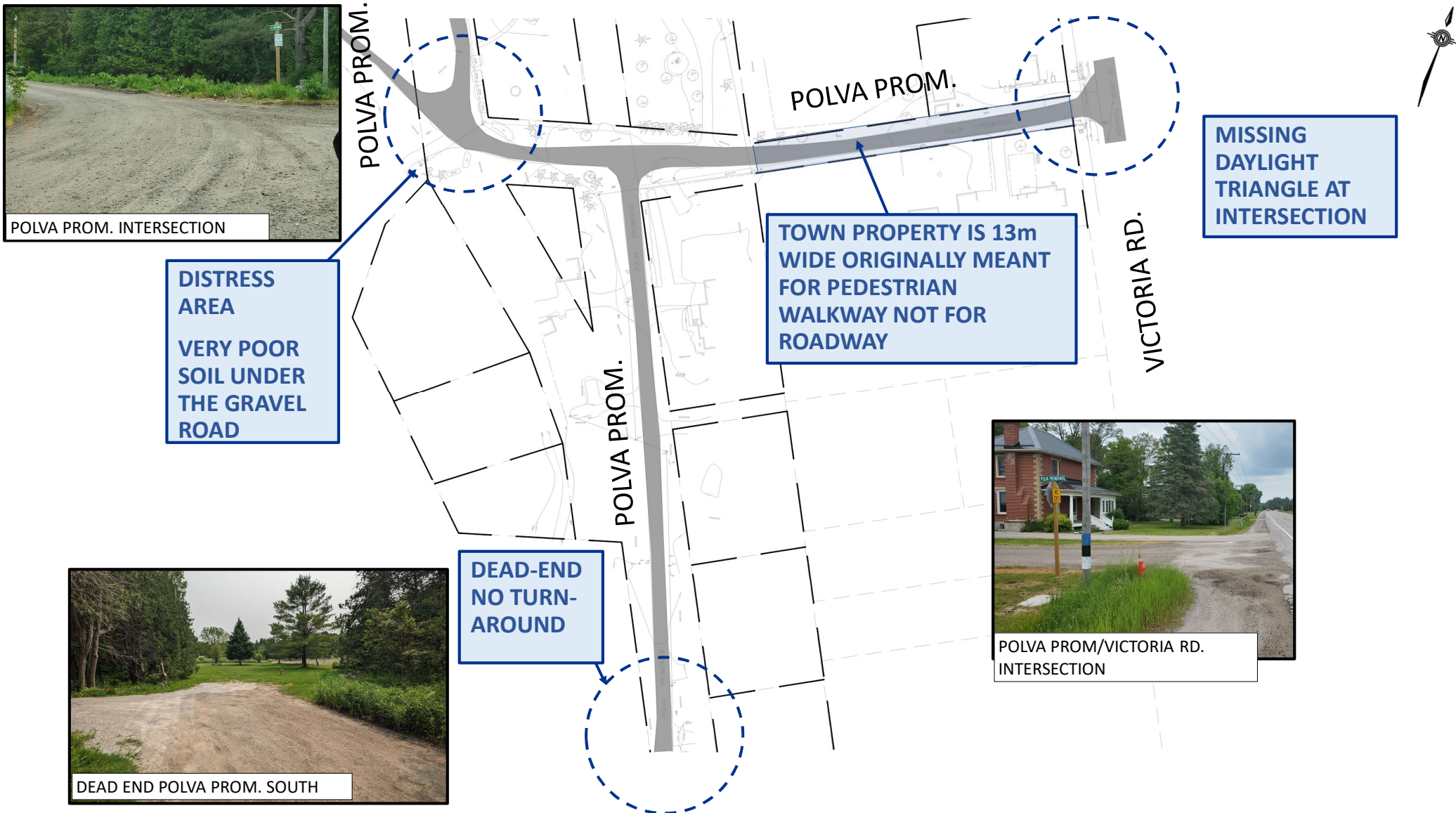
Northeast Quadrant – Areas of Deficiencies



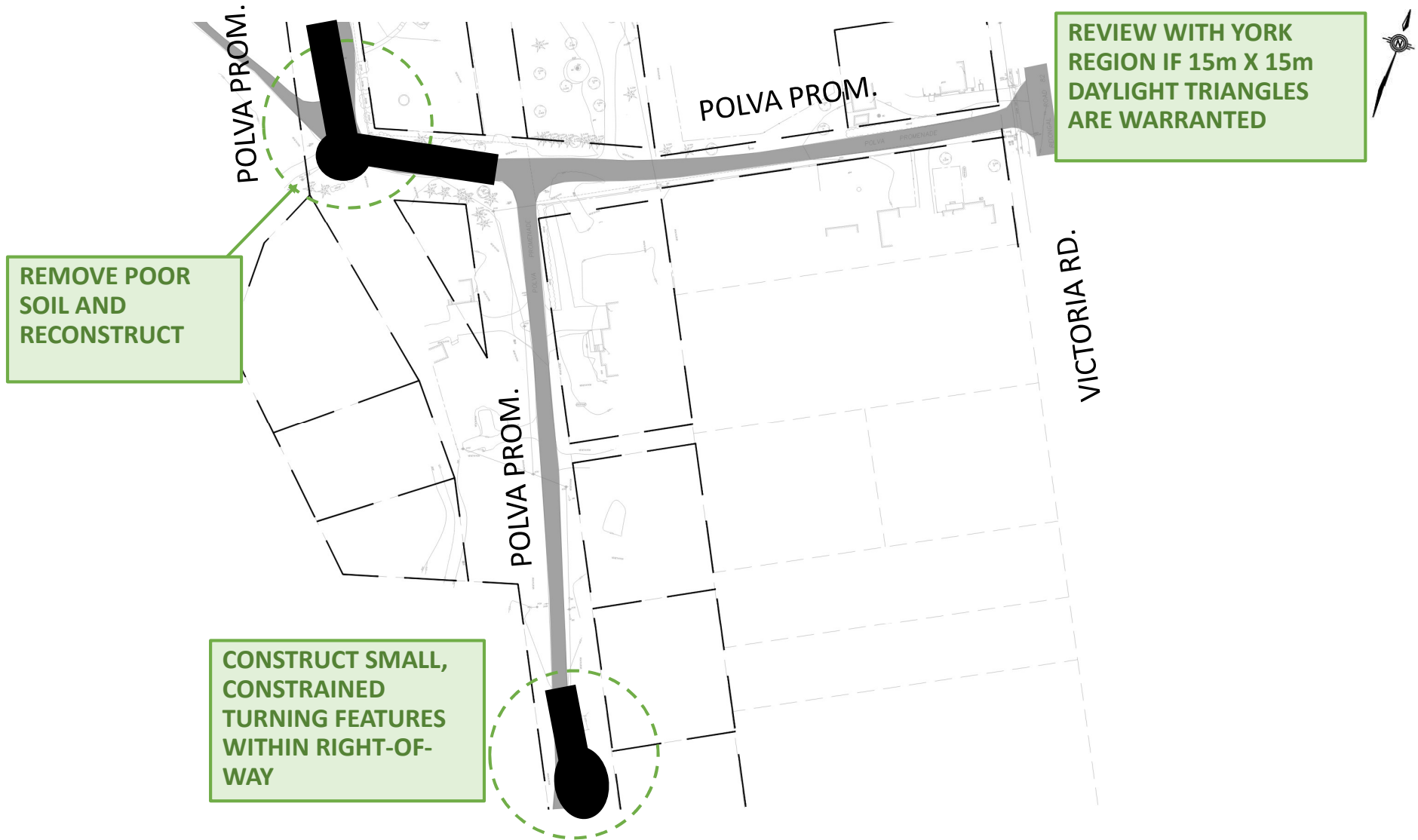
Northeast Quadrant – Recommended Repairs and Reconstruction



Northeast Quadrant – Areas of Deficiencies



Northeast Quadrant – Recommended Repairs and Reconstruction



Drainage Improvements – Recommended Repairs and Reconstructions

DITCH RE-GRADING AND CULVERT EXTENSION / UPGRADE

IMPROVE WATER FLOW AND REDUCE PONDING AT LOW AREAS



Sample Regrading Ditch



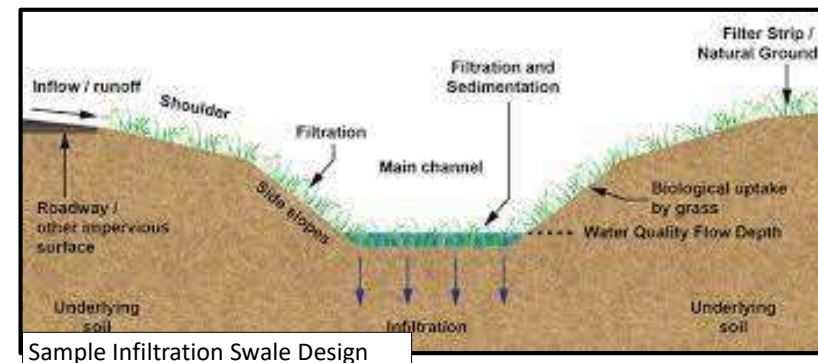
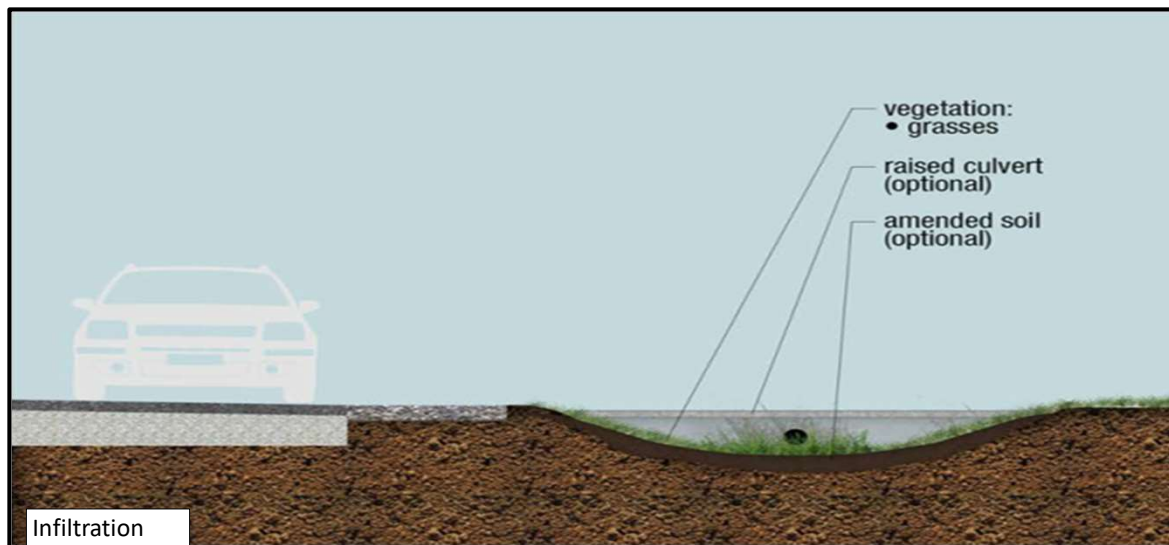
Sample Culvert Extension



Sample Grass Swale

Drainage Improvements - Infiltration System

1. RUNOFF VOLUME CAPTURE AND MODERATE WATER QUALITY CONTROL VIA INFILTRATION
2. INFILTRATE SURFACE RUNOFF INTO THE GROUND AT SELECT LOCATIONS WHERE GROUNDWATER LEVEL IS NOT HIGH
3. PROMOTE INFILTRATION, PROVIDE WATER BALANCE BENEFITS, AND REDUCE DOWNSTREAM FLOODING

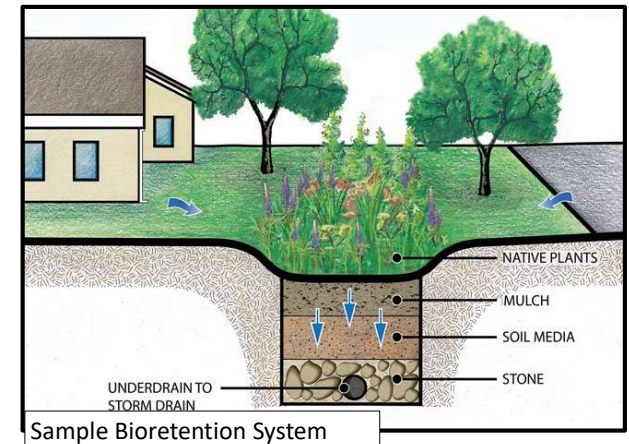
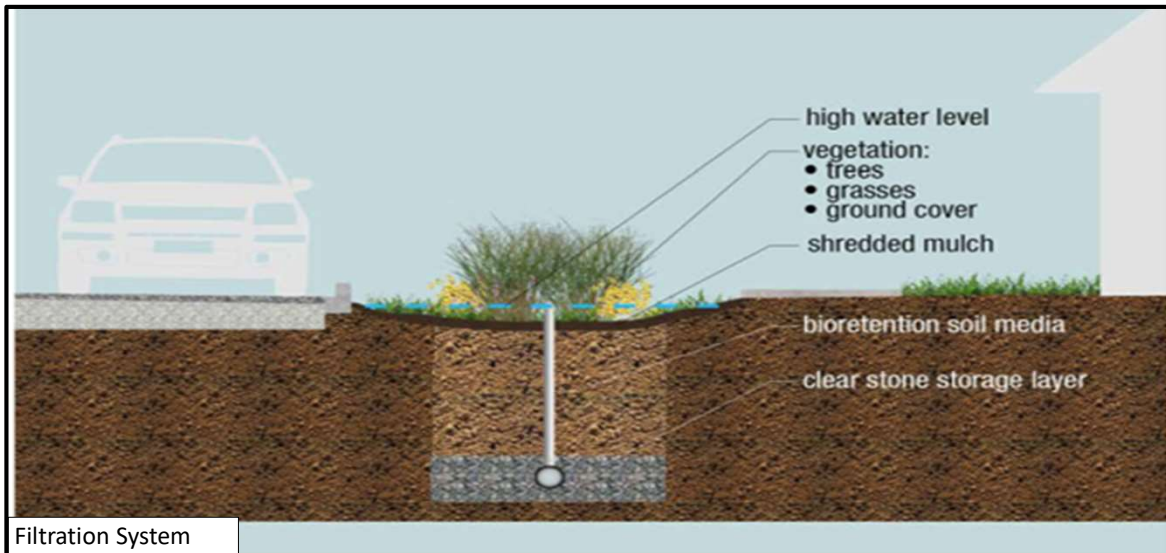


Sample Infiltration Swale Design



Drainage Improvements - Filtration System

1. RUNOFF VOLUME CAPTURE AND SIGNIFICANT WATER QUALITY CONTROL VIA FILTRATION SYSTEM
2. LEAD SURFACE RUNOFF INTO A FILTRATION SYSTEM (e.g. BIORETENTION UNITS)
3. PROVIDE WATER QUALITY AND WATER BALANCE BENEFITS, AND REDUCE DOWNSTREAM FLOODING



Next Steps

You are encouraged to comment on this project by submitting comment sheets by July 31st.

Members of the Public may also request to add their name and contact information to the mailing list to receive all future project communications.

Following this Public Information Centre, Town of Georgina will review the comments received.

Next steps include:

- Review and address stakeholder questions and concerns
- Select the Preferred Design
- Presentation of Preferred Preliminary Design to Council Summer 2023
- Implement the Preferred Design

Thank you for attending the Public Information Centre.

If you have any remaining comments, questions, or concerns regarding the project, please contact the Udora Project Email: info.udora.roads@jacobs.com

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THANK YOU

Udora Gravel Roads Upgrade Project Public Information Centre

June 28, 2023

6:00 PM to 8:00 PM

Udora Community Hall
24 Victoria Road, Udora, ON L0C 1L0



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Question and Answer

TO BE AUDIO RECORDED