

Environmental Assessment Report Summary for the Intersections of CKL Rd 36 (East St N), Duke St, Cedartree Lane and Helen St

March 5, 2024



Background

2012 Transportation Master Plan (TMP)

- In general, a TMP outlines long range infrastructure requirements for existing and future land use using environmental assessment planning principles.
- 2012 TMP identified the intersection of East St N (CKL Rd 36) and Cedartree Lane/Duke St in Bobcaygeon as needing future intersection improvements such as a traffic signal.
- Timing and type of improvements depend on traffic growth.

Now

Planning for the Improvements

- Traffic levels have reached appropriate levels to initiate the design process for a traffic signal.
- Concept Dash Engineering was retained for the design of traffic signals.
- After analyzing turning movement and collision data, Concept Dash noted a potential major safety concern.

Potential Safety Concern

Helen St

- Concept Dash indicated that the proximity of Helen Street to the intersection presents a potential collision probability that is expected to increase at least two to three folds once the traffic signal is operational.
- At this time it was appropriate to initiate an assessment using the Municipal Class Environmental Assessment (MCEA)– Schedule A+ framework.

Collision Analysis



Municipal Class Environmental Assessment

MCEA Key Principles

- Identify problem and opportunity
- Consultation with affected parties
- Consideration of a reasonable range of alternatives
- Systematic evaluation of alternatives in terms of the advantages and disadvantages associated with each
- Documentation of the process followed

Municipal Class Environmental Assessment

Public Information Centre (PIC)

- A key component of the framework is performing a Public Information Centre (PIC) outlining various design options.
- PIC was held on November 20, 2023.
- It was well attended with lively discussion.
- Comments were received and considered (outlined in MCEA Report).

Alternatives Presented at PIC

Option 1 Do nothing

- Cost effective but not recommended

Option 1 - Do Nothing

PROS

- Cost effective
- No changes to the intersection layout

CONS

- Traffic operational challenges
- Increased safety concerns
- Traffic flow issues

Kawartha Lakes

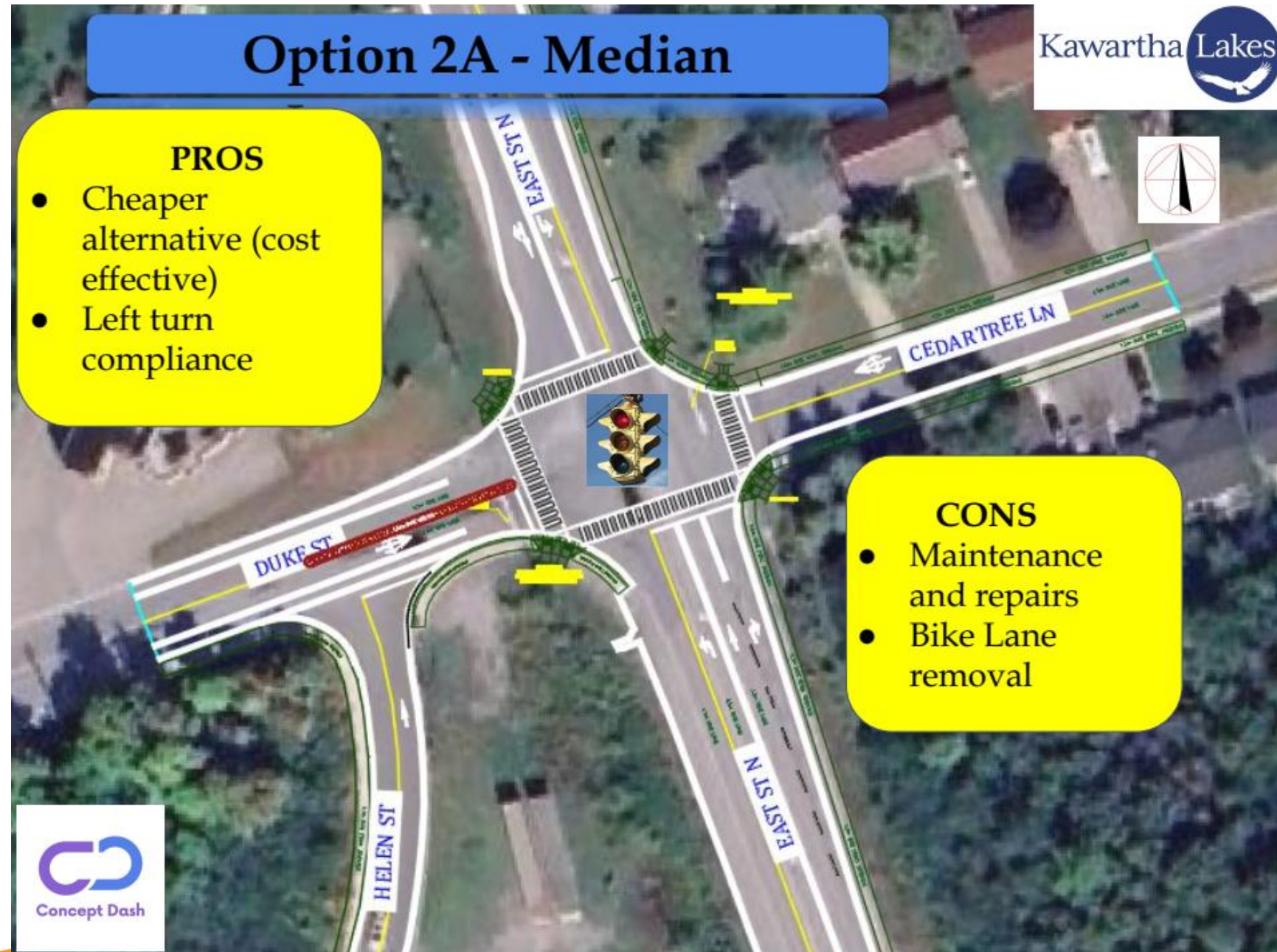
Concept Dash

Alternatives Presented at PIC

Turning Restrictions

Option 2A –Median

- Cost effective but presents potential compliance issues
- Reduces, but does not eliminate the new safety concerns



Alternatives Presented at PIC

Turning Restrictions

Option 2B –Island

- Cost effective but presents potential compliance issues
- Reduces, but does not eliminate the new safety concerns

Option 2B - Pork chop island

PROS

- Increase safety for motorists
- Improve traffic operations
- Reduce conflicts between vehicles

CONS

- Restrict left turn movements
- Additional travel time and inconvenience to motorists
- Compliance/Enforcement
- Additional signage
- Increase of U turns (3 point turn)

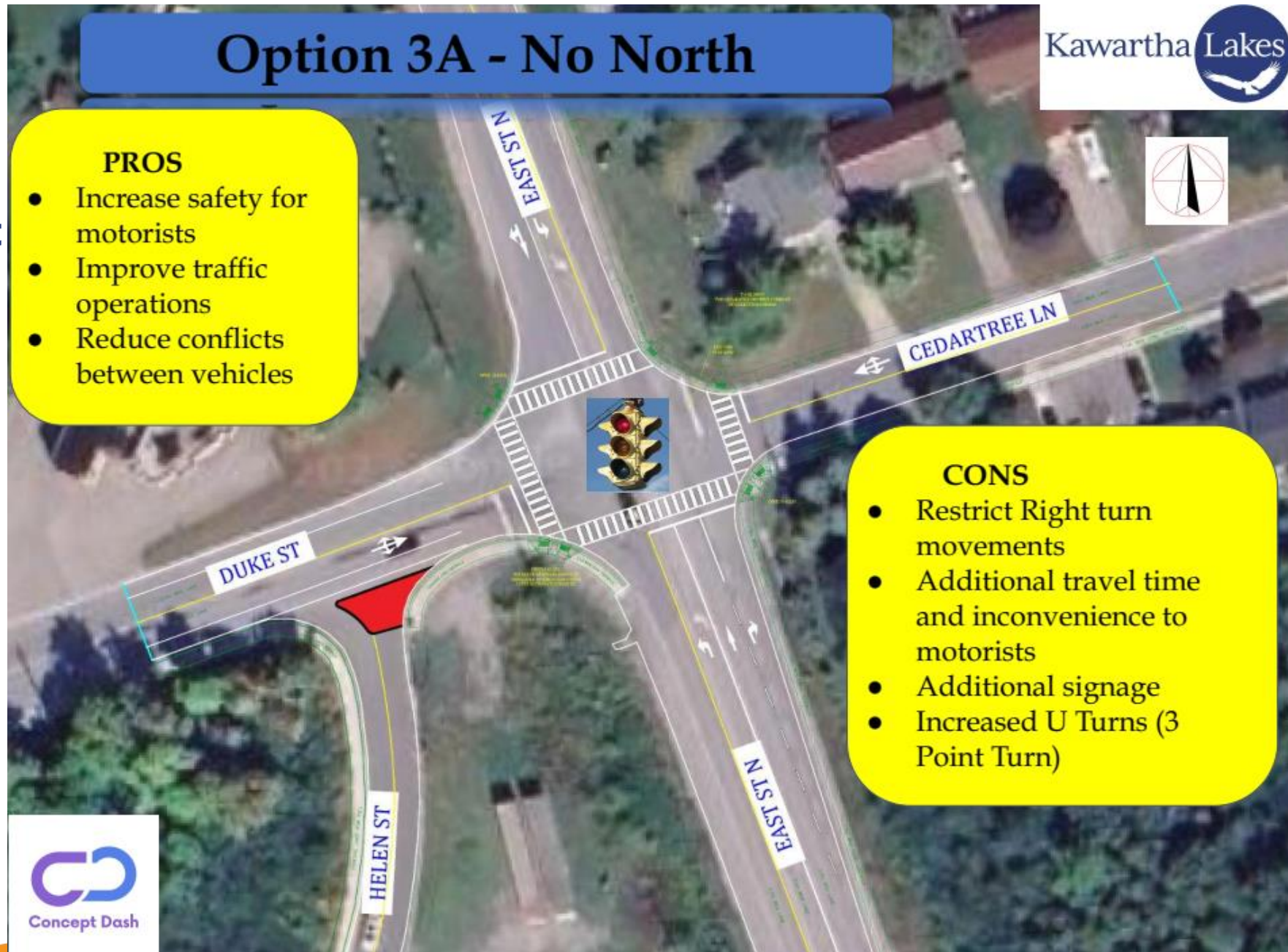


Alternatives Presented at PIC

Prevent Access to Helen St

Option 3A – No North

- Address the safety issue at the cost of increased travel time and inconvenience to motorists
- Potential to add new conflicting movements

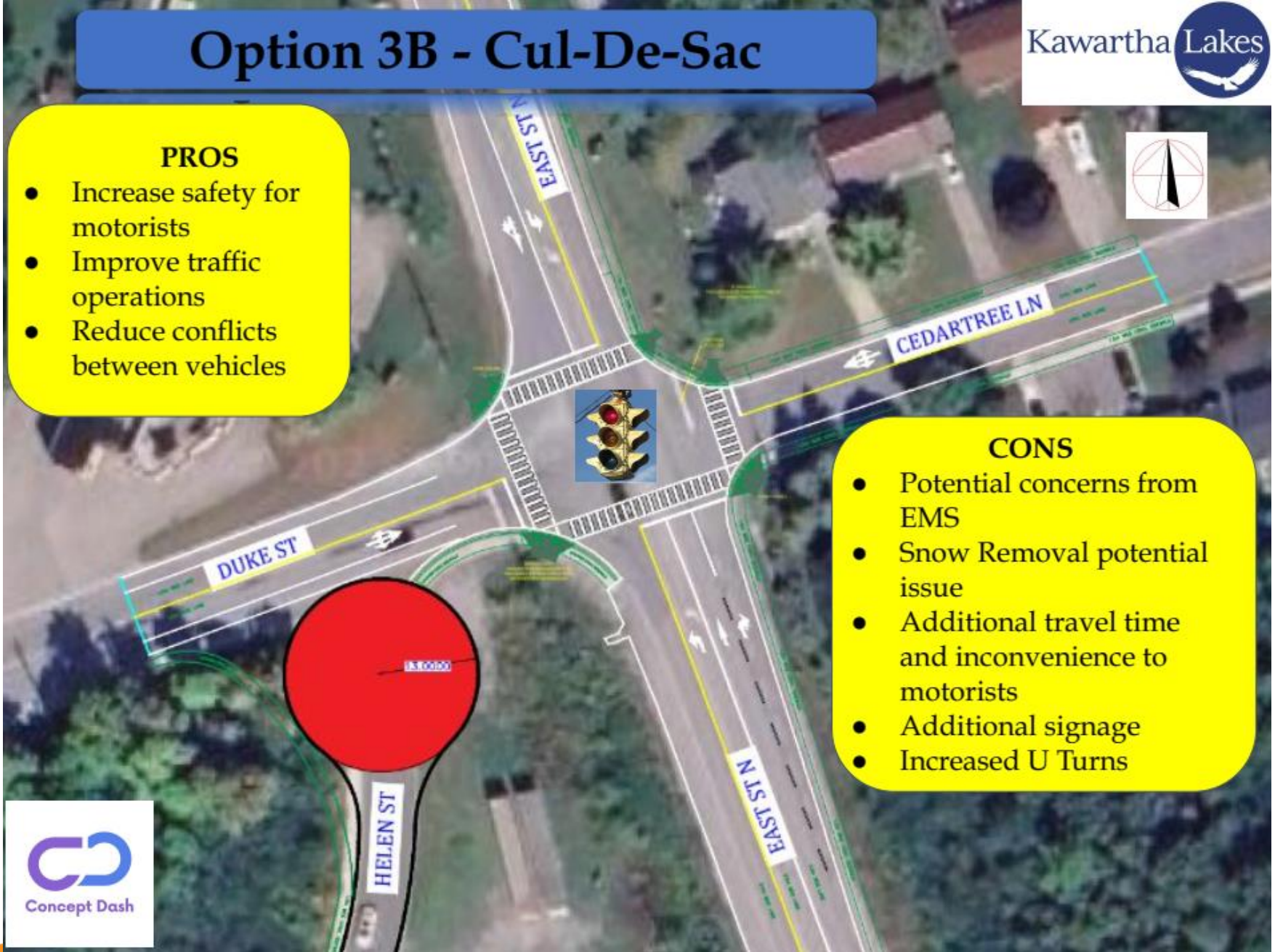




Option 3B - Cul-De-Sac

- PROS**
- Increase safety for motorists
 - Improve traffic operations
 - Reduce conflicts between vehicles

- CONS**
- Potential concerns from EMS
 - Snow Removal potential issue
 - Additional travel time and inconvenience to motorists
 - Additional signage
 - Increased U Turns



Alternatives Presented at PIC

Prevent Access to Helen St

Option 3B – Cul-De-Sac

- Address the safety issue at the cost of increased travel time and inconvenience to motorists
- Possible land purchase requirements



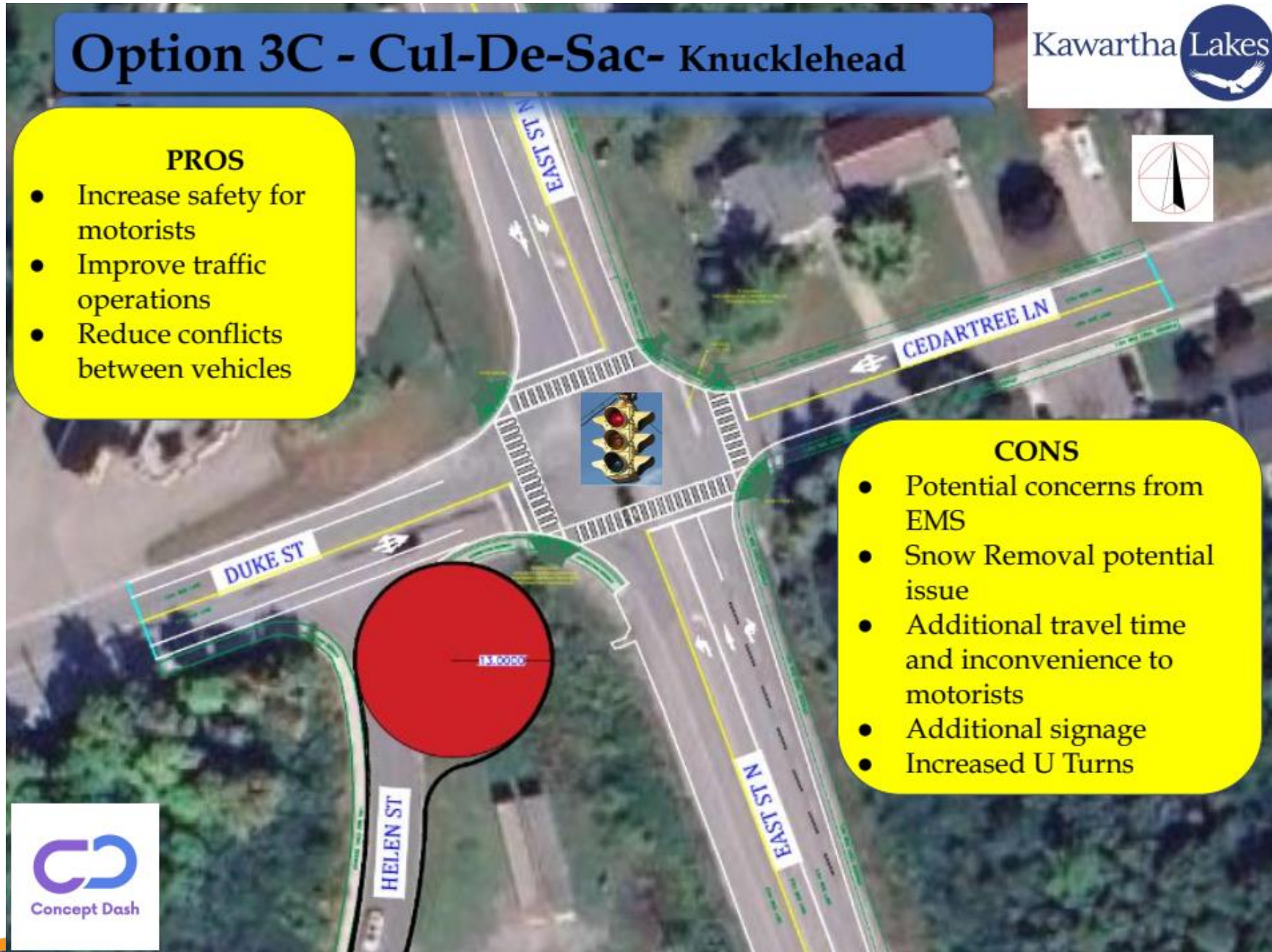
Option 3C - Cul-De-Sac- Knucklehead

PROS

- Increase safety for motorists
- Improve traffic operations
- Reduce conflicts between vehicles

CONS

- Potential concerns from EMS
- Snow Removal potential issue
- Additional travel time and inconvenience to motorists
- Additional signage
- Increased U Turns



Alternatives Presented at PIC

Prevent Access to Helen St

Option 3C – Cul-De-Sac (Knucklehead)

- Address the safety issue at the cost of increased travel time and inconvenience to motorists



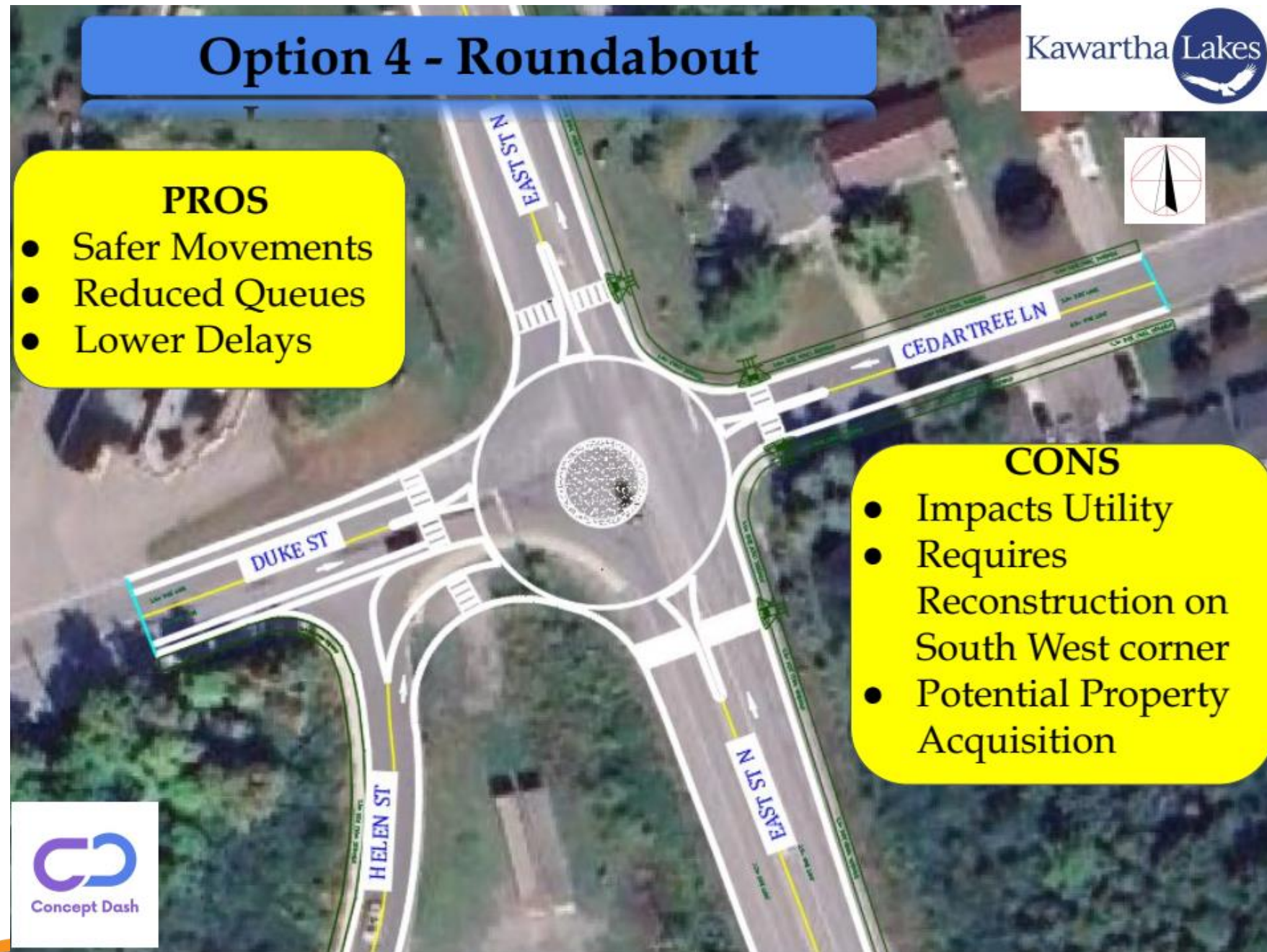
Option 4 - Roundabout

PROS

- Safer Movements
- Reduced Queues
- Lower Delays

CONS

- Impacts Utility
- Requires Reconstruction on South West corner
- Potential Property Acquisition



Alternatives Presented at PIC

Option 4 – Roundabout

- Safer Movement
- Reduced queues and delays
- Overwhelmingly disliked by public

PIC Comments Summary

Strong Opinions on Roundabouts

- Those in favour felt strongly about the improved traffic flow and decreased delay in the summer but...
- Outnumbered by “anything but a roundabout” comments indicating they were very fearful of the crossing complexities

Helen St Residents

- Generally in support of a cul-de-sac option
- Commented that closing Helen St would make it “quieter and safer”

Summary of the Comments Received						
Options	2A	2B	3A	3B/3C	4 Preferred	4 Not Preferred
Number	6	9	5	18	6	10
Remarks	MAJORITY OF THE PEOPLE CHOSE 3B/3C (CUL-DE-SAC) OPTION					
Rank	4	3	6	1	4	2

General Cost

Option	Estimated Cost
Do Nothing*	\$314 000
2A – Median*	\$380 000
2B – Island*	\$340 000
3A – North Lane Closure*	\$370 000
3B Cul-de-sac*	\$465 000 plus unknown land costs
3C – Cul-de-sac (knucklehead)*	\$465 000
4 – Roundabout**	\$650 000

* Includes cost of traffic signal installation

** In replacement of signal installation costs

Recommendations

All options other than do nothing are viable options.

Concept Dash and CKL Staff recommend fully eliminating the safety issues at Helen St/Duke St introduced by the new traffic signal by closing the north access of Helen St via a knucklehead style cul-de-sac (Option 3C).

If endorsed, a by-law for the closure of Helen St will be brought to Council for approval at the time of construction.

Thank you