WELCONE

McAndrews Road Trail Study OPEN HOUSE





Project Purpose

To evaluate the future design of McAndrews Road between 140th Street and Galaxie Avenue in Apple Valley, including trail infrastructure, retaining walls, and roadway configuration.

REASON FOR EVALUATION

SCOPE OF PROJECT



TRAIL INFRASTRUCTURE

Dakota County's 2040 Transportation Plan identifies the need for a multimodal trail along the south side of McAndrews Road (between Garden View Drive and Galaxie Avenue). Having trails on both sides of County Highways allows for easy pedestrian and bicycle access and reduces need to cross these high speed roadways.

This project will evaluate the feasibility of adding a multimodal trail on the south side of McAndrews Road between 140th Street and Galaxie Avenue.



RETAINING WALLS

The existing retaining walls along this segment of McAndrews Road are deteriorating and/or damaged. The County has programmed these walls for repair or replacement within the next 5 years.

This project will identify a cost-effective rehabilitation or replacement plan for the existing retaining walls along McAndrews Road.



ROADWAY CONFIGURATION

Dakota County's 2040 Transportation Plan identifies this stretch of McAndrews Road for evaluation of a through-lane reduction. A through-lane reduction would provide improved vehicular safety, operations benefits, and allow space for a potential multi-use trail.

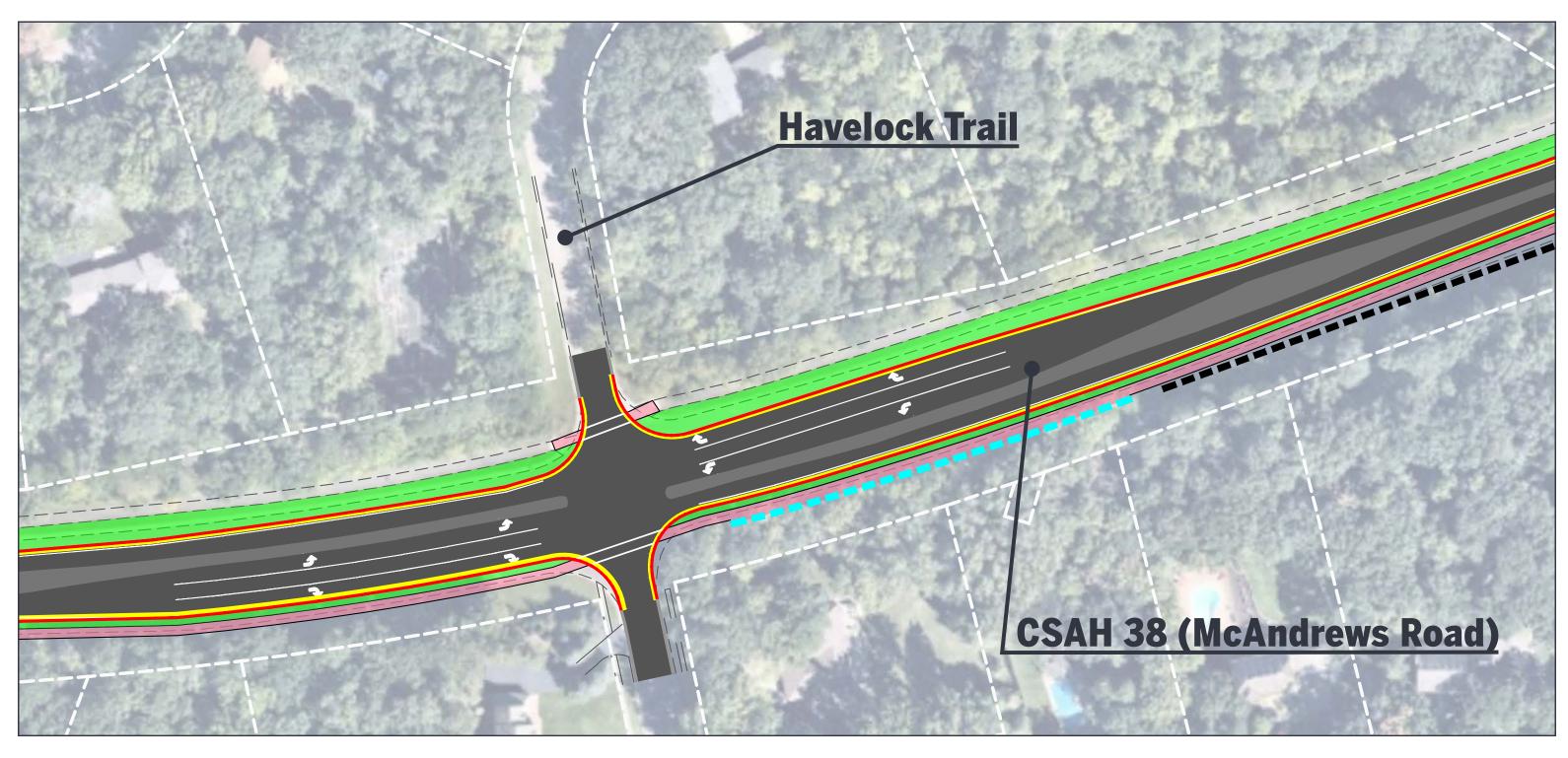
The project will evaluate a through-lane reduction along McAndrews Road between 140th Street and the Highway 77 Interchange.





Why Consider a Through-Lane Reduction Along McAndrews Road?

TYPICAL MCANDREWS ROAD THROUGH-LANE REDUCTION LAYOUT

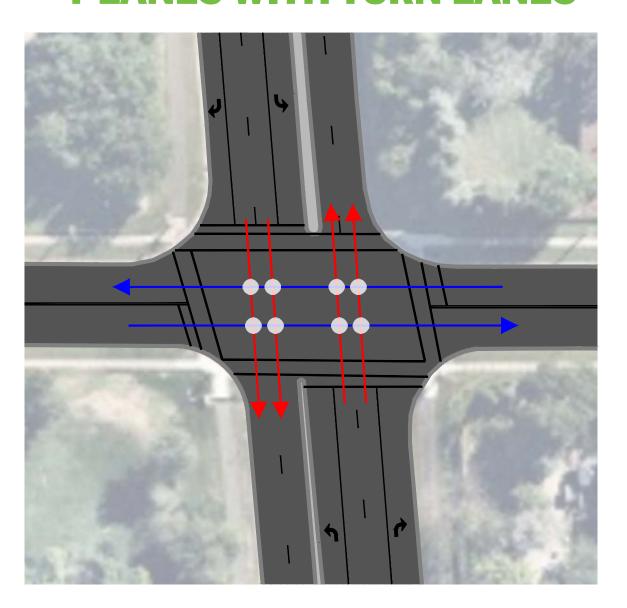


Benefits of a through-lane reduction:

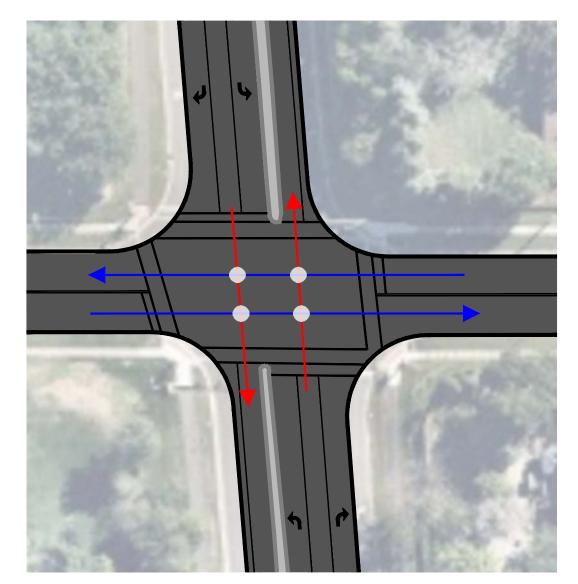
- Would have a minimal impact on traffic operations. A single through-lane with turn lanes in each direction would be correctly sized for future traffic volumes.
- ▶ Shortens side street crossing distances at intersections, compared to a 4-lane roadway.
- Provides space for other uses, such as trails.
- ▶ Reduces the number of conflict points. (see below)

REDUCING CONFLICT POINTS

4-LANES WITH TURN LANES



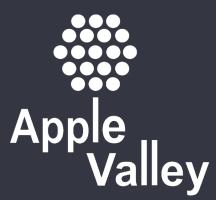
2-LANES WITH TURN LANES



Lane reductions reduce the number of conflict points by reducing the number of lanes vehicles need to intersect to make turns or cross the roadway. Fewer conflict points along a section of road ultimately reduces risk of future crashes.

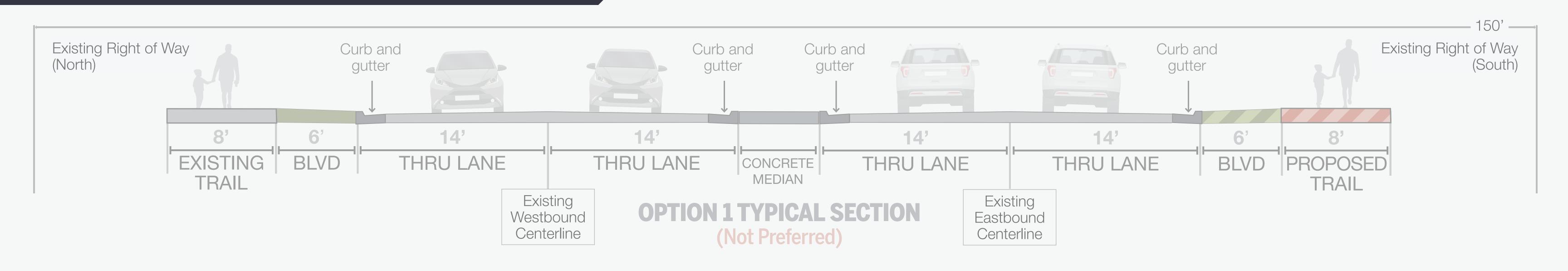
Note: McAndrews Road only being reviewed for a through-lane reduction between 140th Street and the Highway 77 interchange. Traffic volumes East of Highway 77 warrant a 4-lane section.

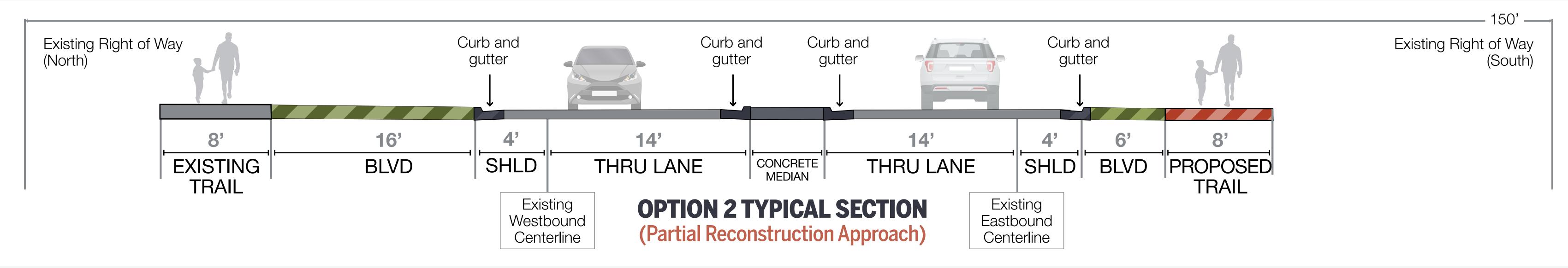


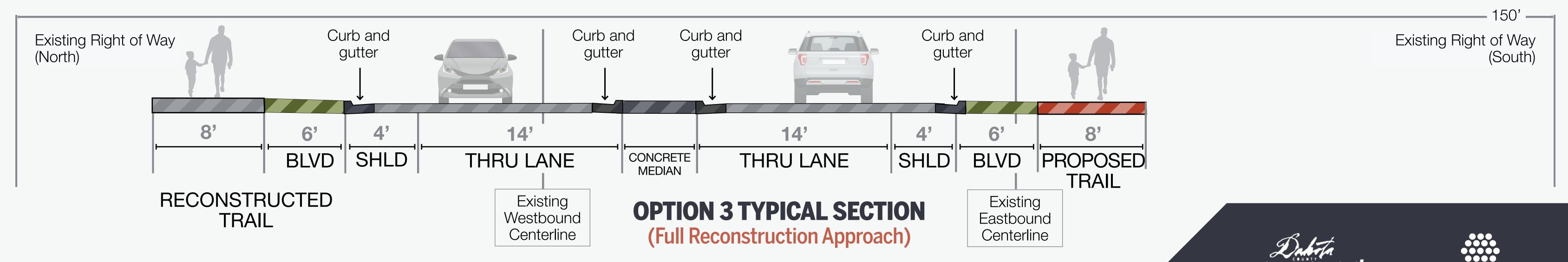


McAndrews Road (CR 38) Trail Options

GARDEN VIEW DR. TO CEDAR AVE











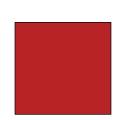
McAndrews Road (CSAH 38) Trail Options Evaluation Matrix

NOT PREFERRED				
Evaluation Criteria		Off-Street Trail (No Through Lane Reduction)	Off Street Trail with Through Lane Reduction	Off Street Trail with Through Lane Reduction
		Option 1	Option 2 (Partial Reconstruction Approach)	Option 3 (Full Reconstruction Approach)
Traffic Operations	Vehicle Operations and Safety	No change to existing conditions	Through lane reduction provides a safety benefit	Through lane reduction provides a safety benefit
	Pedestrian/Bicycle Safety	Provides off-street trail and crossings at controlled intersections	Provides off-street trail and crossings at controlled intersections	Provides off-street trail and crossings at controlled intersections
Tree Clearing/Screening Impacts		Significant tree clearing required	Reduces tree clearing	Reduces tree clearing
Retaining Walls		Requires many new retaining walls and impacts existing walls	Requires new retaining walls and existing wall reconstruction	No new retaining walls required. May allow for removal of existing walls.
Temporary and Permanent Easement Needs		Temporary easements needed from multiple properties	Reduces temporary easement needs	Reduces temporary easement needs
Trail Implementation Approach		Allows for a standalone trail construction project	Implementation requires partial McAndrews Road Reconstruction	Implementation requires full McAndrews Road Reconstruction
Construction Cost		Higher than average construction cost for new trail construction	Similar construction cost to Option 1	Highest construction cost option





ACCEPTABLE



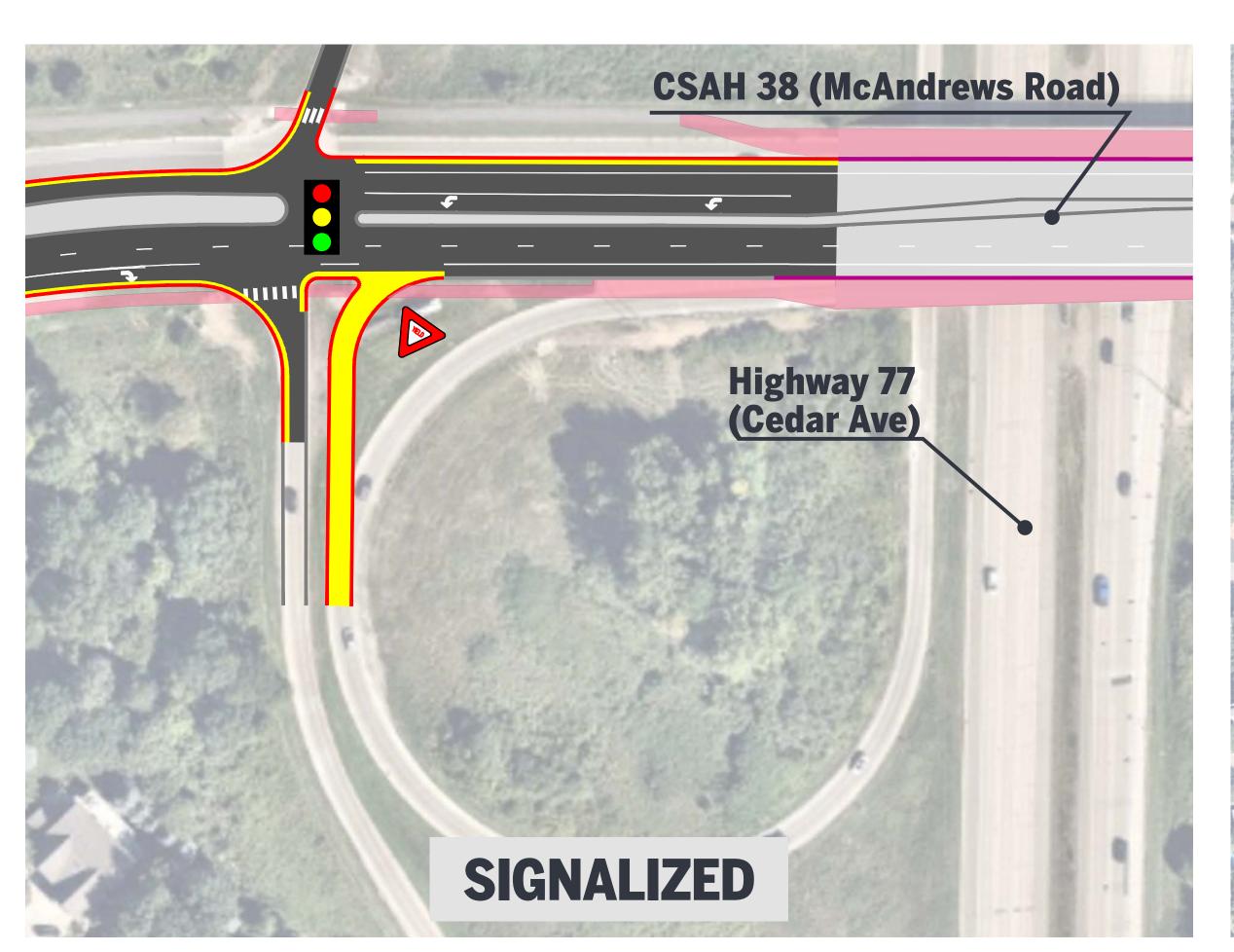
NOT PREFERRED

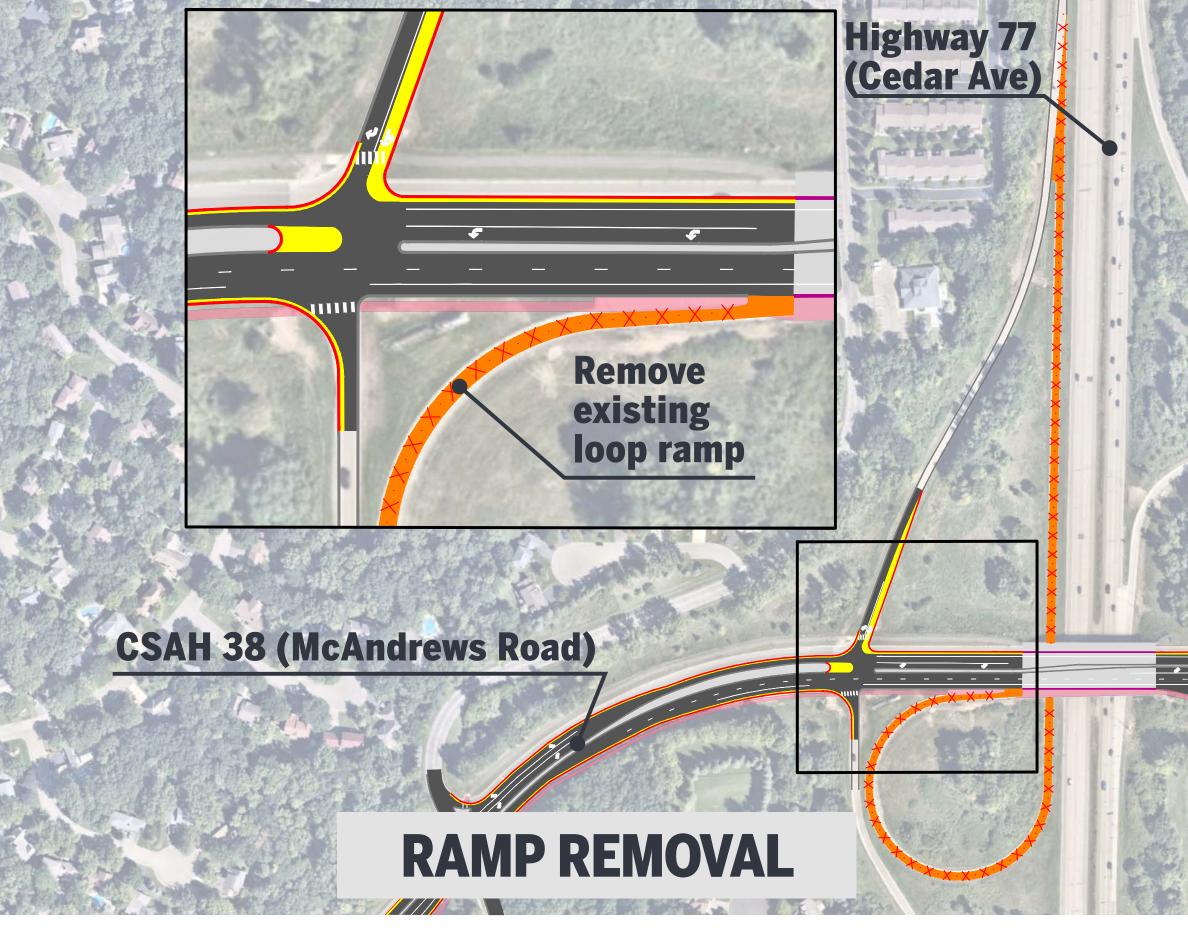


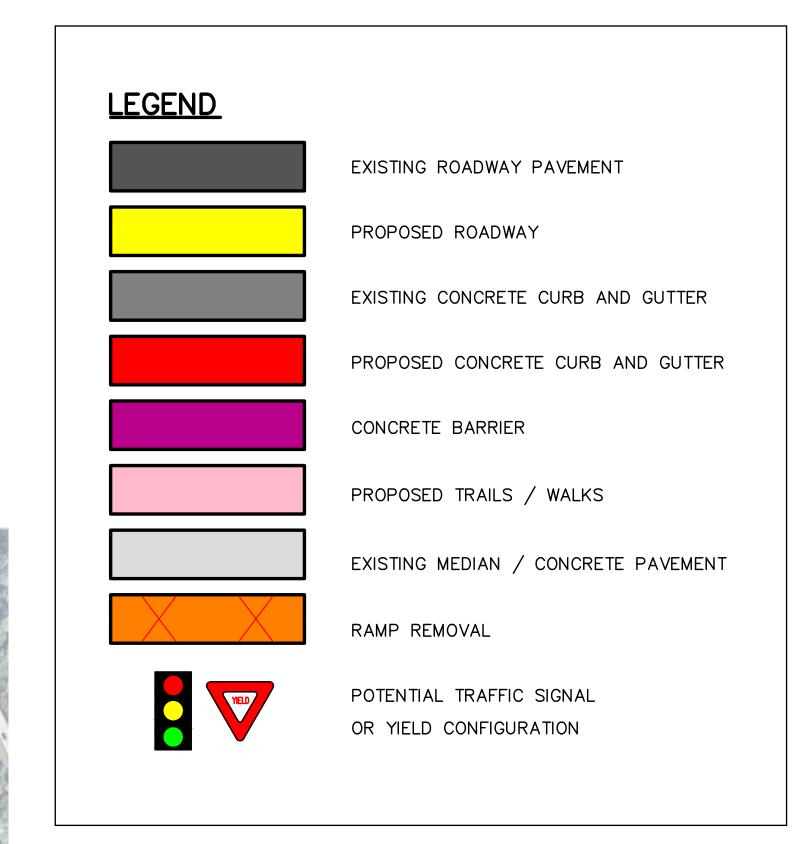


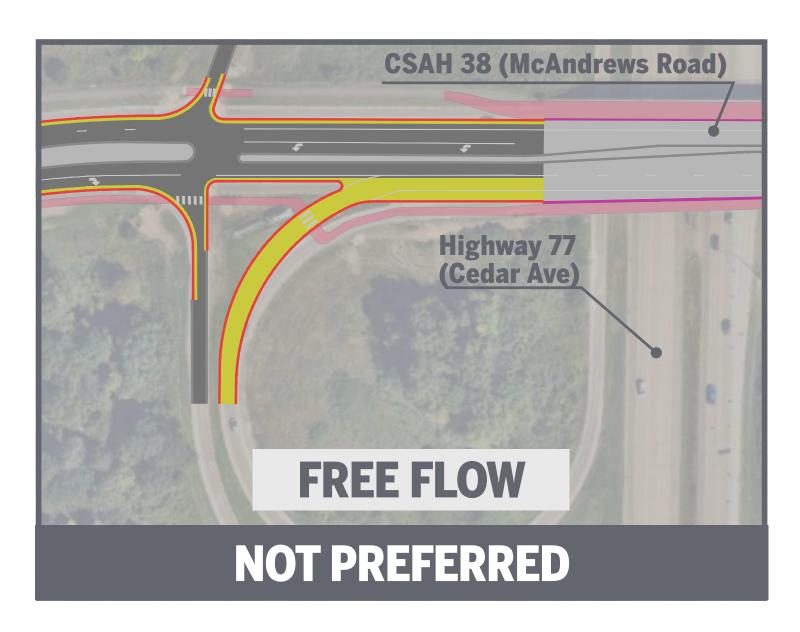
Highway 77/McAndrews Road Interchange

- ► Free Flow interchange configuration not preferred due to sight distance and pedestrian safety constraints
- ▶ Final recommendations for interchange modifications to be determined during a future project phase









POTENTIAL INTERCHANGE MODIFICATION CONFIGURATIONS

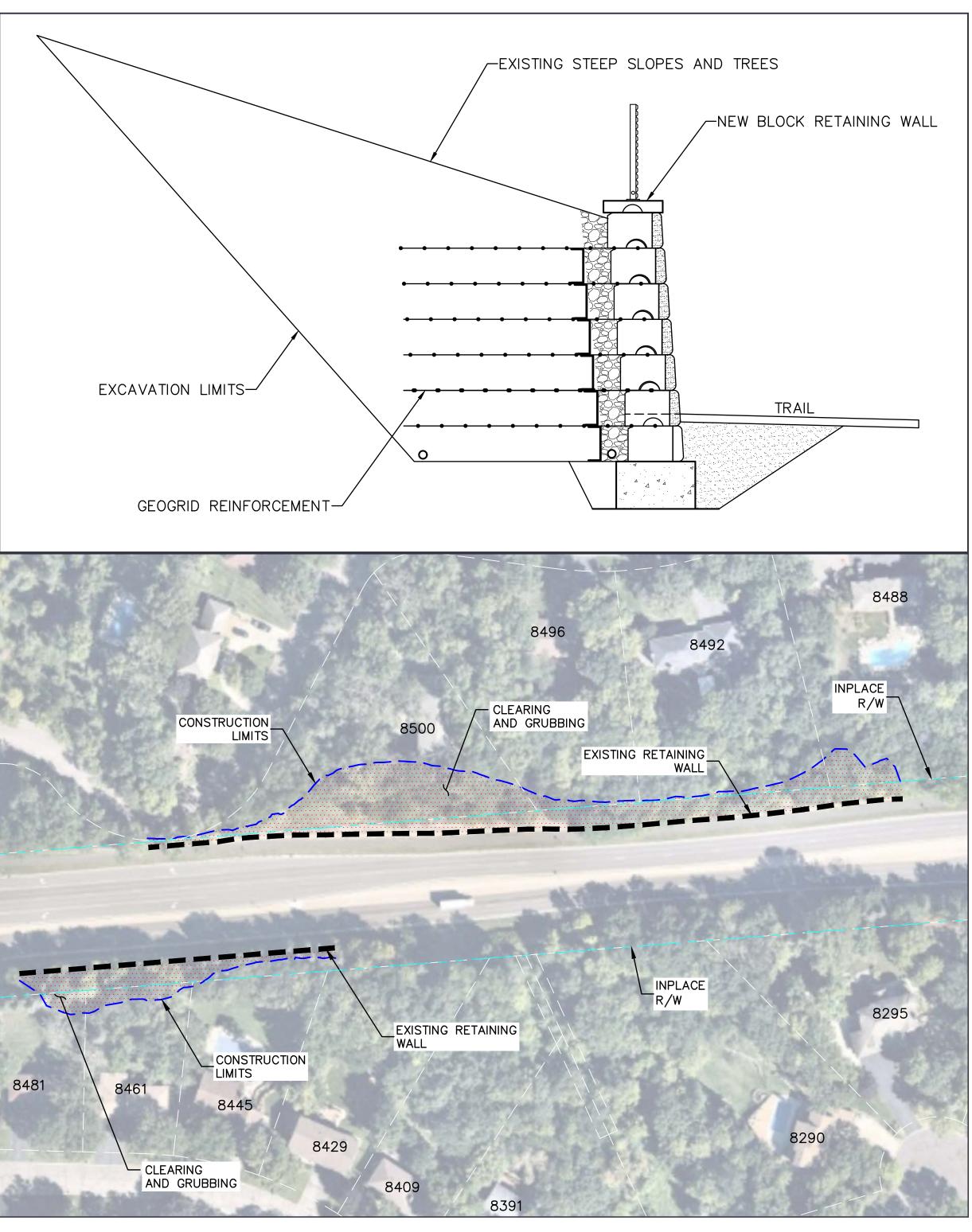




Retaining Wall Rehabilitation/Reconstruction

- ▶ 3 existing retaining walls were constructed in 1991
- ▶ Typical useful life for small block wall is 25 years
- Wall options are being evaluated based on cost, constructibility, property impacts, tree clearing impacts, and aesthetics
- These walls are programmed for replacement within the next 5 years
 - Wall replacement recommendations to be finalized with preferred trail alternative selection
- Eliminating existing walls as a part of the through lane reduction and reconstruction of McAndrews Road are being considered with Trail Option 3

STANDARD BLOCK WALL RECONSTRUCTION

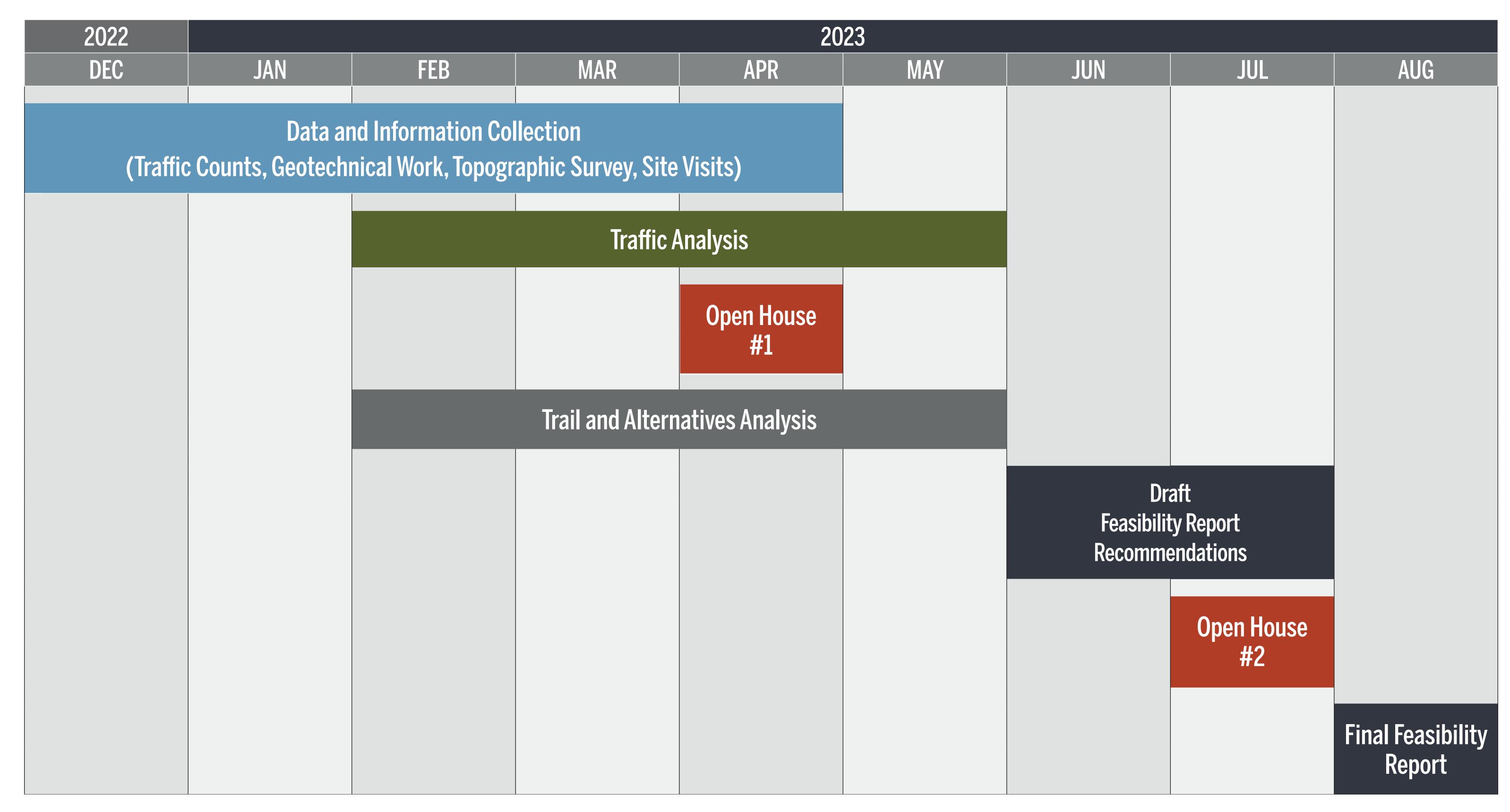


Typical Wall Reconstruction Impacts





Schedule/Next Steps



^{*}The timing of any future design or study phase is not determined



