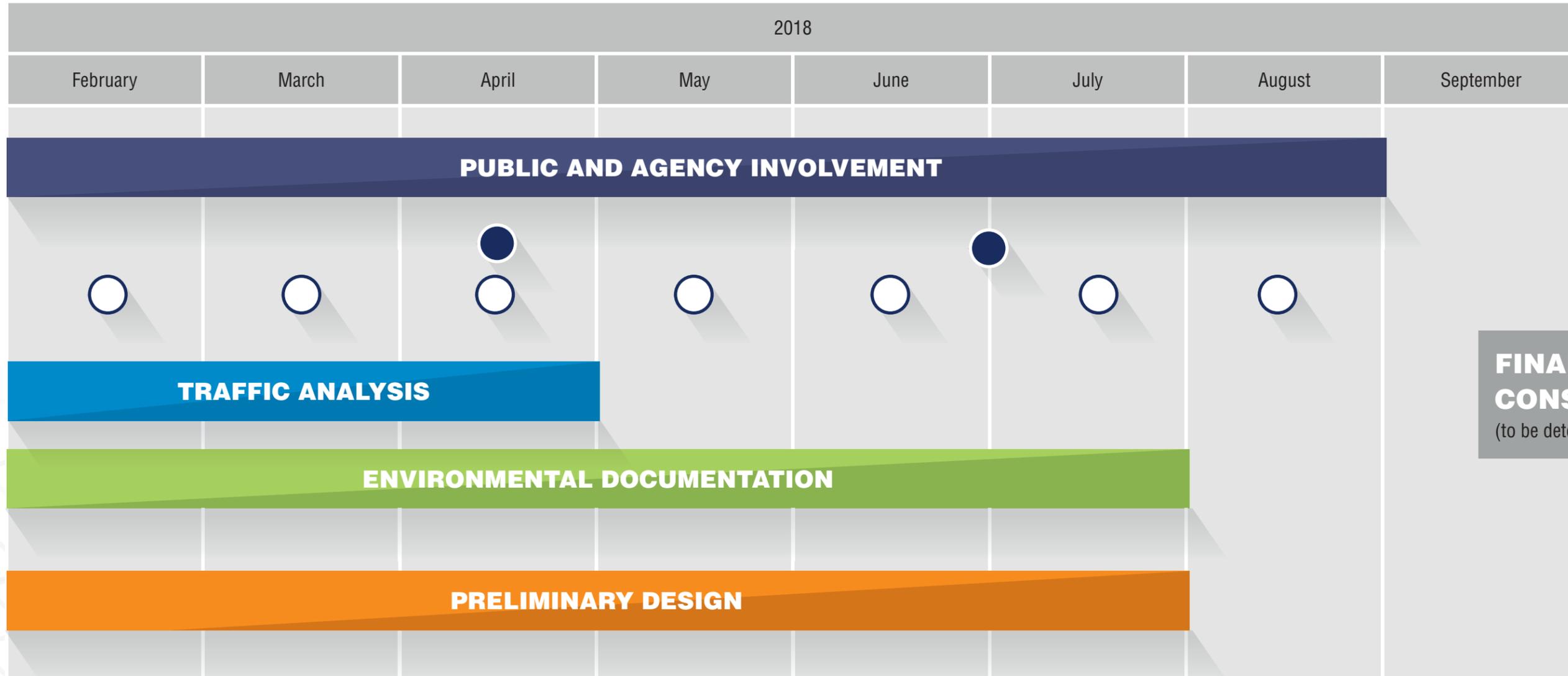


Welcome!

County Road 9 (Rockford Road) Bridge Project Public Open House



Project Schedule



FINAL DESIGN & CONSTRUCTION
(to be determined based on funding)

● Open House ○ Agency Meeting



County Road 9 (Rockford Road) Bridge Project

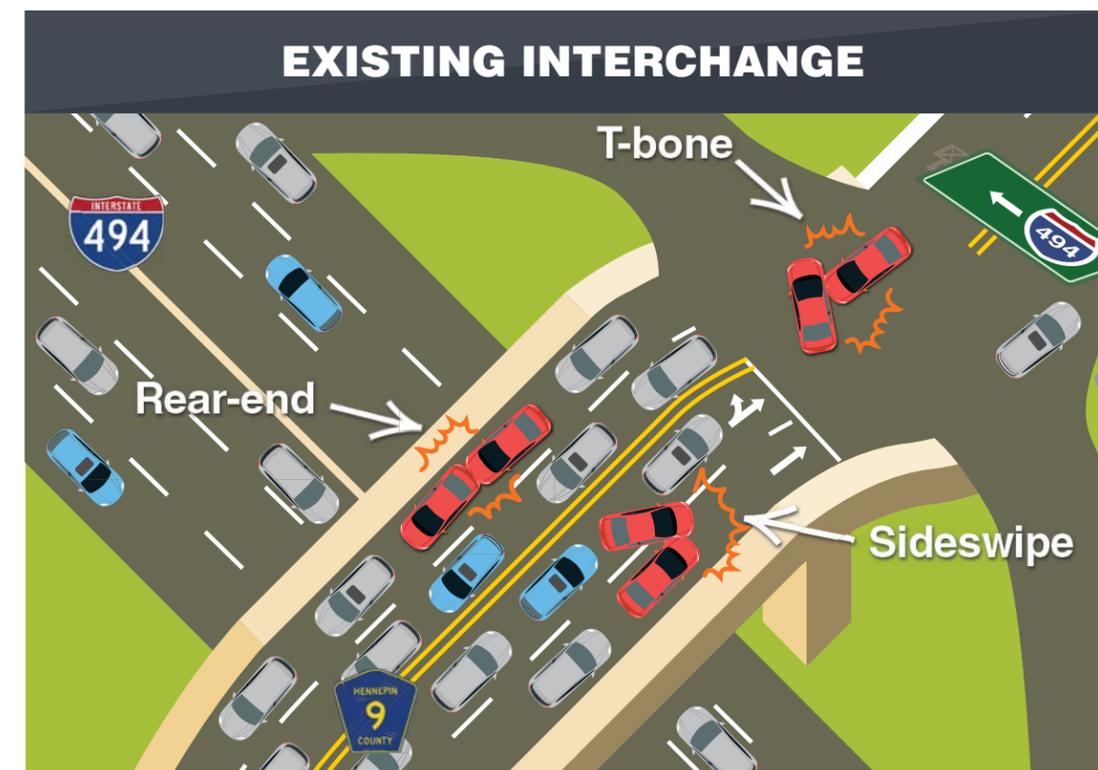
Project Background



1965

2018

- The City of Plymouth, Hennepin County, and MnDOT are studying improvements for the County Road 9 (Rockford Road) bridge over Interstate 494.
- Built in 1965, the bridge is approaching its life expectancy and does not provide enough capacity to accommodate existing traffic and turning movements.
- While development in Plymouth continues, the County Road 9 (Rockford Road) interchange handles an average of more than 39,000 vehicles per day, approximately 26 times the traffic levels than when initially constructed.
- To address the condition of the bridge, along with existing and future concerns about traffic safety and mobility, the City and its partners are evaluating potential improvements for the bridge and working to secure funding to make the identified improvements.
- This study will identify the improvements that will ultimately be built.



Without dedicated left turn lanes, drivers must often wait for breaks in oncoming traffic to turn left onto I-494. Crashes occur when drivers veer from the left lane into the right through lane to avoid waiting. Rear-end and T-bone crashes are also common.

Full funding for the project has not yet been secured. Some funds have been allocated to the project through MnDOT. Timing of construction has not been determined.

Environmental Documentation

A formal environmental document will be completed that describes the need for the project, the alternatives considered, and the preferred alternative. The preferred alternative will have impacts to social, economic and environmental resources documented. Avoidance of these resources will be the first priority, and if they cannot be avoided, will be minimized to the greatest extent practical.

Items to be studied and noted in the environmental document include:



Safety: crash rates, types of crashes and severity of crashes



Wetlands: locations of wetlands and types of wetlands as well as potential impacts and mitigation



Environmental Justice: disproportionate impacts to low income or minority populations – none anticipated



Traffic: existing and future traffic volumes and existing and future congestion



Threatened and Endangered Species: state and federal species – none anticipated



Property Impacts: right of way process



Contamination: locations of potential contamination or regulated waste (asbestos, lead paint, etc.)



Historic and Archaeological Resources: none anticipated



Project Costs: anticipated project costs and potential funding sources

Existing and 2040 No Build (If We Do Nothing) Traffic Volumes and Intersection Operations

Intersection 1: Annapolis Lane/Berkshire Lane	
AM Peak Hour Level of Service	
Existing	2040 No Build
B	B
PM Peak Hour Level of Service	
Existing	2040 No Build
E	F

Intersection 2: I-494 East (Southbound) Ramps	
AM Peak Hour Level of Service	
Existing	2040 No Build
B	C
PM Peak Hour Level of Service	
Existing	2040 No Build
D	E

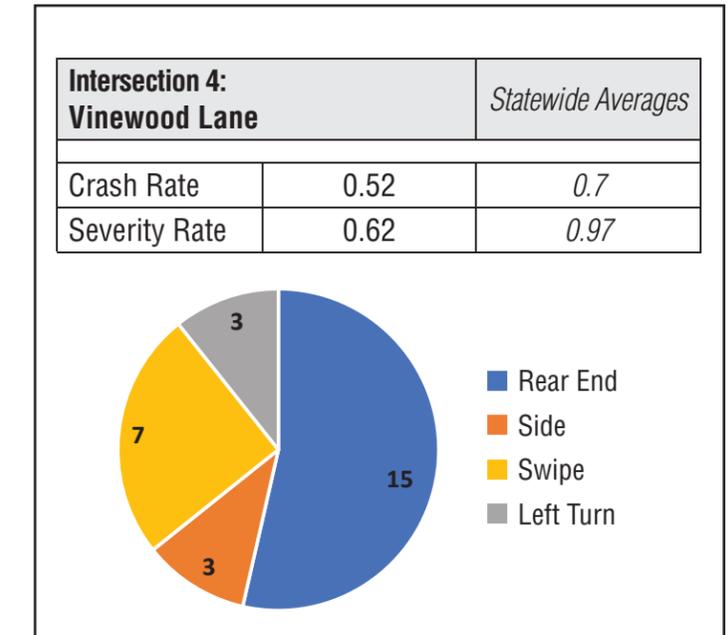
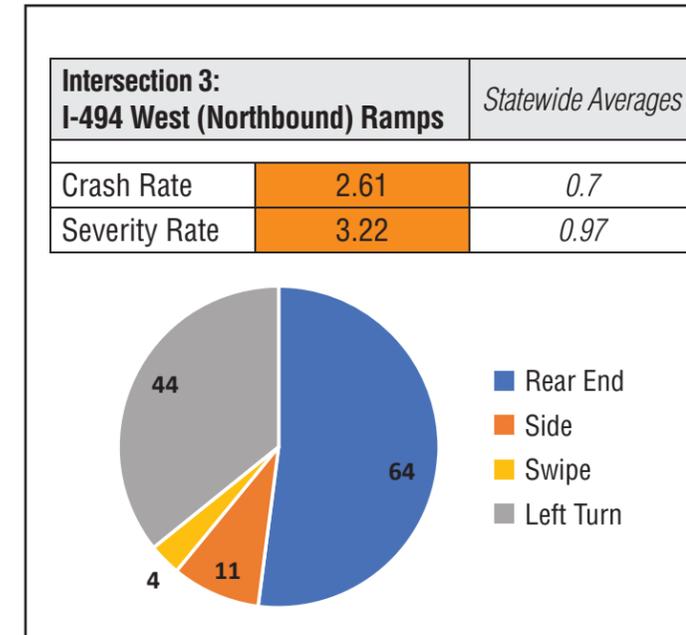
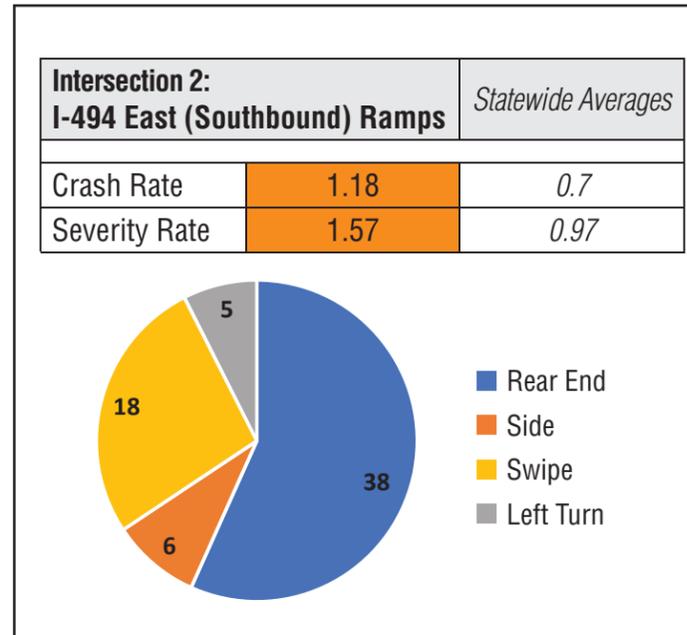
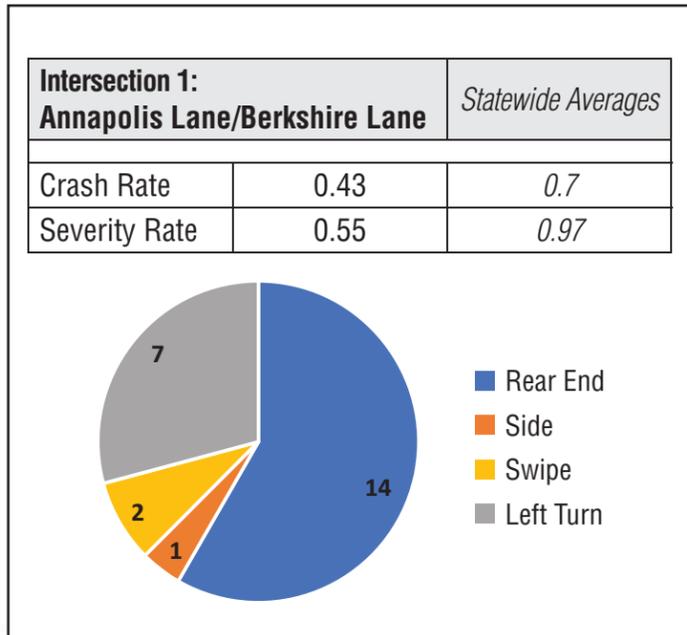
Intersection 3: I-494 West (Northbound) Ramps	
AM Peak Hour Level of Service	
Existing	2040 No Build
C	D
PM Peak Hour Level of Service	
Existing	2040 No Build
F	F

Intersection 4: Vinewood Lane	
AM Peak Hour Level of Service	
Existing	2040 No Build
B	B
PM Peak Hour Level of Service	
Existing	2040 No Build
D	E



Level of Service	Delay (seconds per vehicle)	Description
A	≤ 10	Free Flow
B	> 10 - 20	Slight Delay
C	> 20 - 35	Acceptable Delay
D	> 35 - 55	Tolerable Delay
E	> 55 - 80	Intolerable Delay
F	> 80	Congested

Safety



Size of circle is reflective of number of crashes from 2011-2015 (listed inside the circle).

Orange circles represent intersections with crash rates and critical crash rates higher than the statewide averages.

Crash rates at intersections are determined by calculating the number of crashes occurring per million entering vehicles per year. **Severity rates** refer to crash rates that are weighted by the severity of crashes that occur at an intersection.

Statewide average crash rates and severity rates represent an average of rates for similar types of intersections (signalized intersections with similar volumes and speeds) throughout the state.

Alternative 1: Diamond Interchange

Intersection 1: Annapolis Lane/ Berkshire Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 1
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 1
F	C

Intersection 2: I-494 East (Southbound) Ramps	
AM Peak Hour Level of Service	
2040 No Build	Alternative 1
C	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 1
E	C

Intersection 3: I-494 West (Northbound) Ramps	
AM Peak Hour Level of Service	
2040 No Build	Alternative 1
D	C
PM Peak Hour Level of Service	
2040 No Build	Alternative 1
F	D

Intersection 4: Vinewood Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 1
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 1
E	C



PROS

- Similar design to existing bridge with additional dedicated dual left turn lanes in each direction
- Provides for acceptable traffic operations
- Minimal wetland impacts
- Limited right of way impacts
- Significant crash reduction compared to existing
- Can be constructed one half at a time if needed
- Lower construction costs compared to Diverging Diamond (Alternative 2) and Single Point (Alternative 3)
- Shortened construction period compared to Diverging Diamond (Alternative 2) and Single Point (Alternative 3)
- Consistent with other interchanges along corridor

CONS

- Wider bridge than a Diverging Diamond (Alternative 2)

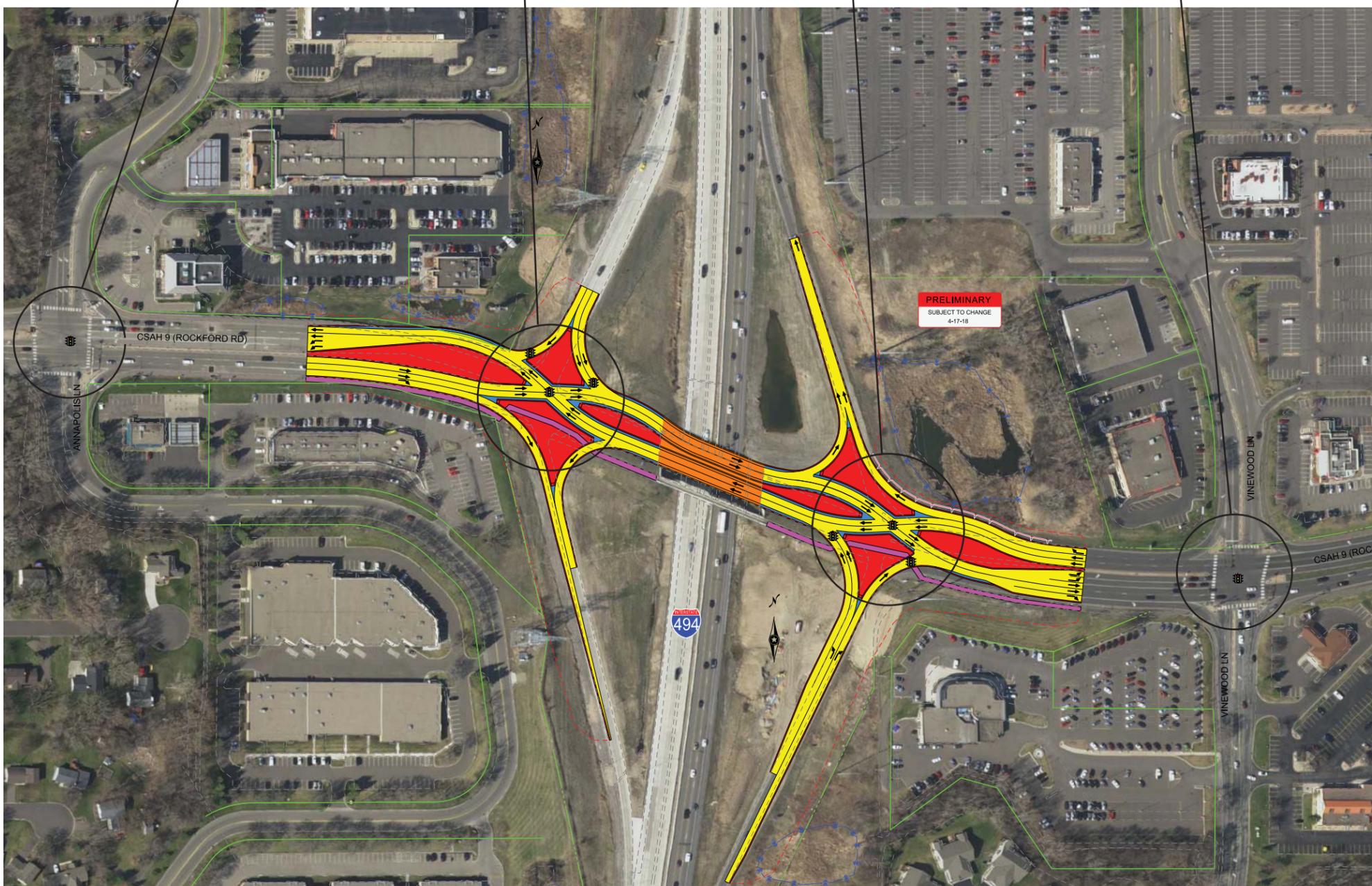
Alternative 2: Diverging Diamond Interchange

Intersection 1: Annapolis Lane/ Berkshire Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 2
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 2
F	C

Intersection 2: I-494 East (Southbound) Ramps	
AM Peak Hour Level of Service	
2040 No Build	Alternative 2
C	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 2
E	B

Intersection 3: I-494 West (Northbound) Ramps	
AM Peak Hour Level of Service	
2040 No Build	Alternative 2
D	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 2
F	B

Intersection 4: Vinewood Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 2
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 2
E	C



PROS

- Greater crash reduction than Diamond (Alternative 1) and Single Point (Alternative 3)
- Provides for acceptable traffic operations
- Narrower bridge
- Construction costs lower than Single Point (Alternative 3)
- Significant crash reduction compared to existing

CONS

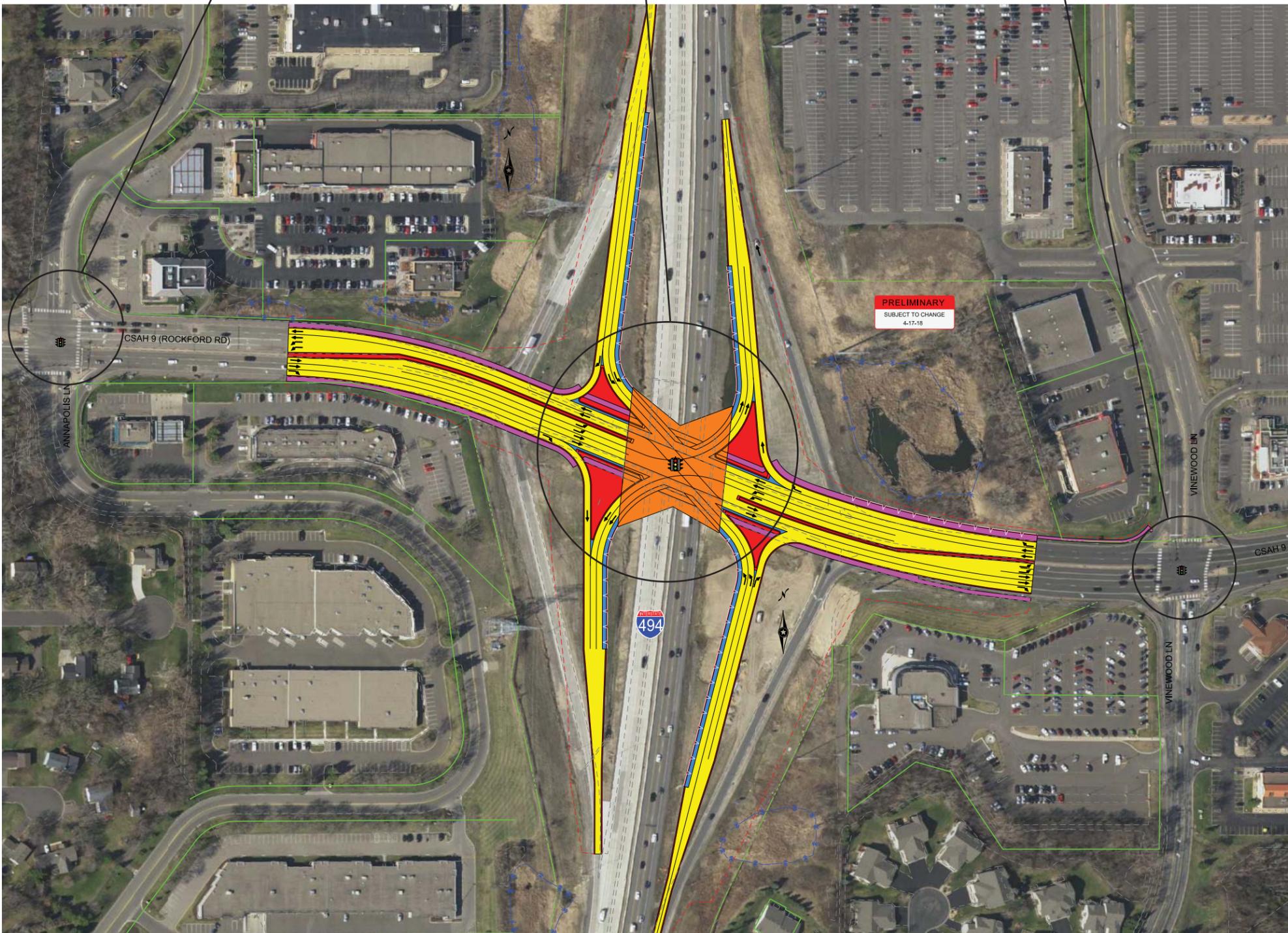
- Potential issues with spacing to and operations at adjacent intersections
- Potential right of way impacts near the southbound ramp intersection
- Potential for wetland impacts
- Construction staging is more complicated than tight diamond; cannot be constructed one half at a time
- Requires closure of Rockford Road for construction
- Less pedestrian-friendly (only crossing on south side of bridge)

Alternative 3: Single Point Interchange

Intersection 1: Annapolis Lane/ Berkshire Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 3
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 3
F	C

Intersections 2/3: I-494 East and West Ramps		
AM Peak Hour Level of Service		
2040 No Build		Alternative 3
C	D	C
PM Peak Hour Level of Service		
2040 No Build		Alternative 3
E	F	C

Intersection 4: Vinewood Lane	
AM Peak Hour Level of Service	
2040 No Build	Alternative 3
B	B
PM Peak Hour Level of Service	
2040 No Build	Alternative 3
E	C



PROS

- Significant crash reduction compared to existing
- Provides for acceptable traffic operations
- No wetland impacts

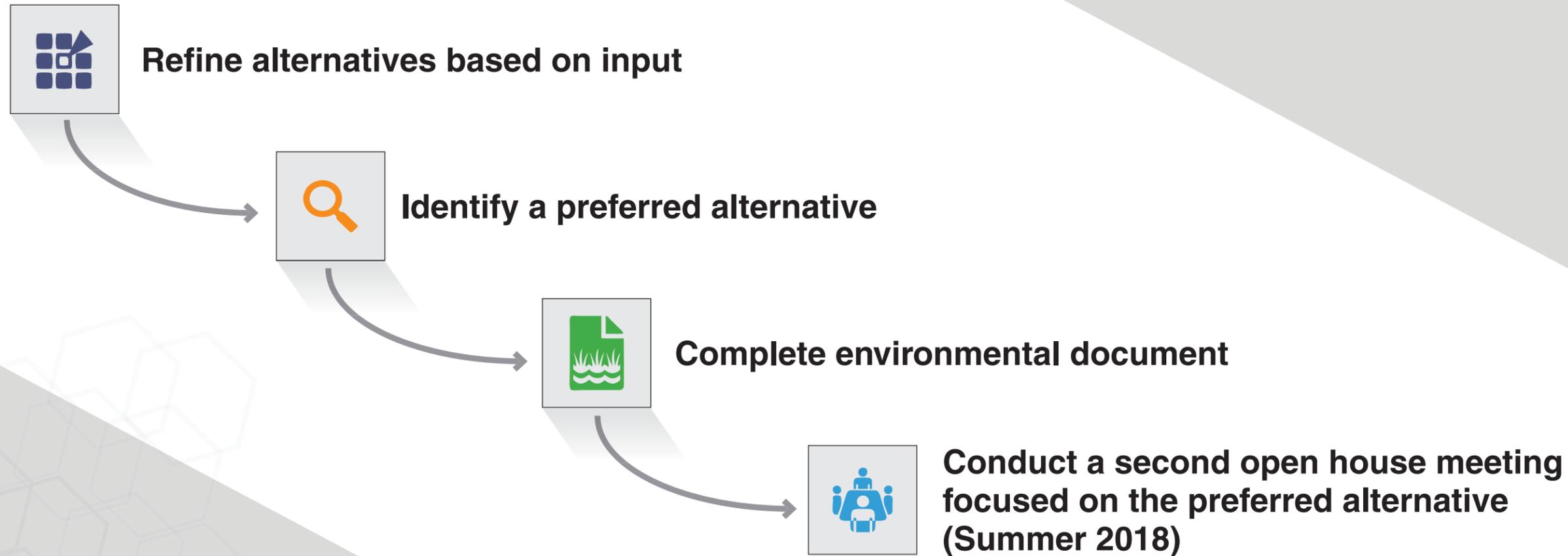
CONS

- Wider bridge
- Moderate right of way impacts
- Requires reconstruction of ramps and stormwater ponds
- Construction staging is more complicated than Diamond (Alternative 1); cannot be constructed one half at a time
- Requires closure of Rockford Road for construction
- Requires removal of pedestrian bridge; pedestrians would be routed onto new bridge
- Highest construction costs

Summary of Alternatives

	Alternative 1: Diamond Interchange	Alternative 2: Diverging Diamond Interchange	Alternative 3: Single Point Interchange
Safety	Provides proper crash reduction	Provides proper crash reduction	Provides proper crash reduction
Operations	Provides acceptable traffic operations	Provides the best traffic operations	Provides acceptable traffic operations
Pedestrian Accommodations	Pedestrian bridge remains in place; sidewalk added along the north side of County Road 9 (Rockford Road)	Non-standard design for pedestrians, no sidewalk proposed along the north side of County Road 9 (Rockford Road). Alternative 1 is safest option.	Non-standard design for pedestrians, Alternative 1 is safest option.
Right of Way Impacts	Limited right of way impacts	Some right of way impacts near southbound ramp intersection	Some right of way impacts
Wetland Impacts	Minimal wetland impacts	Minimal wetland impacts	No wetland impacts
Construction Costs	Lowest construction costs	Low-medium construction costs	Highest construction costs; requires reconstruction of ramps and stormwater ponds
Construction Staging	Shortened construction period compared to other alternatives; can be constructed one half at a time if needed	More complicated than Alternative 1; requires closure of County Road 9 (Rockford Road) for construction	More complicated than Alternative 1; requires closure of County Road 9 (Rockford Road) for construction
Legend	Good outcome relative to other alternatives	Fair outcome relative to other alternatives	Poor outcome relative to other alternatives

Next Steps



Visit the City's website for further information and updates:
plymouthmn.gov/CR9BridgeProject