

Board of Public Works

May 7, 2014

County Highway M
Cross Country Road to Prairie Hill Road



Project Team



- ▶ City of Madison
 - Rob Phillips, P.E. City Engineer
 - Chris Petykowski, P.E. Principal Engineer
 - Brian Smith, P.E. Traffic Engineer



- ▶ City of Verona
 - Ron Rieder, Director of Public Works
 - Bill Burns, Administrator
 - Adam Sayre, Director of Planning & Development

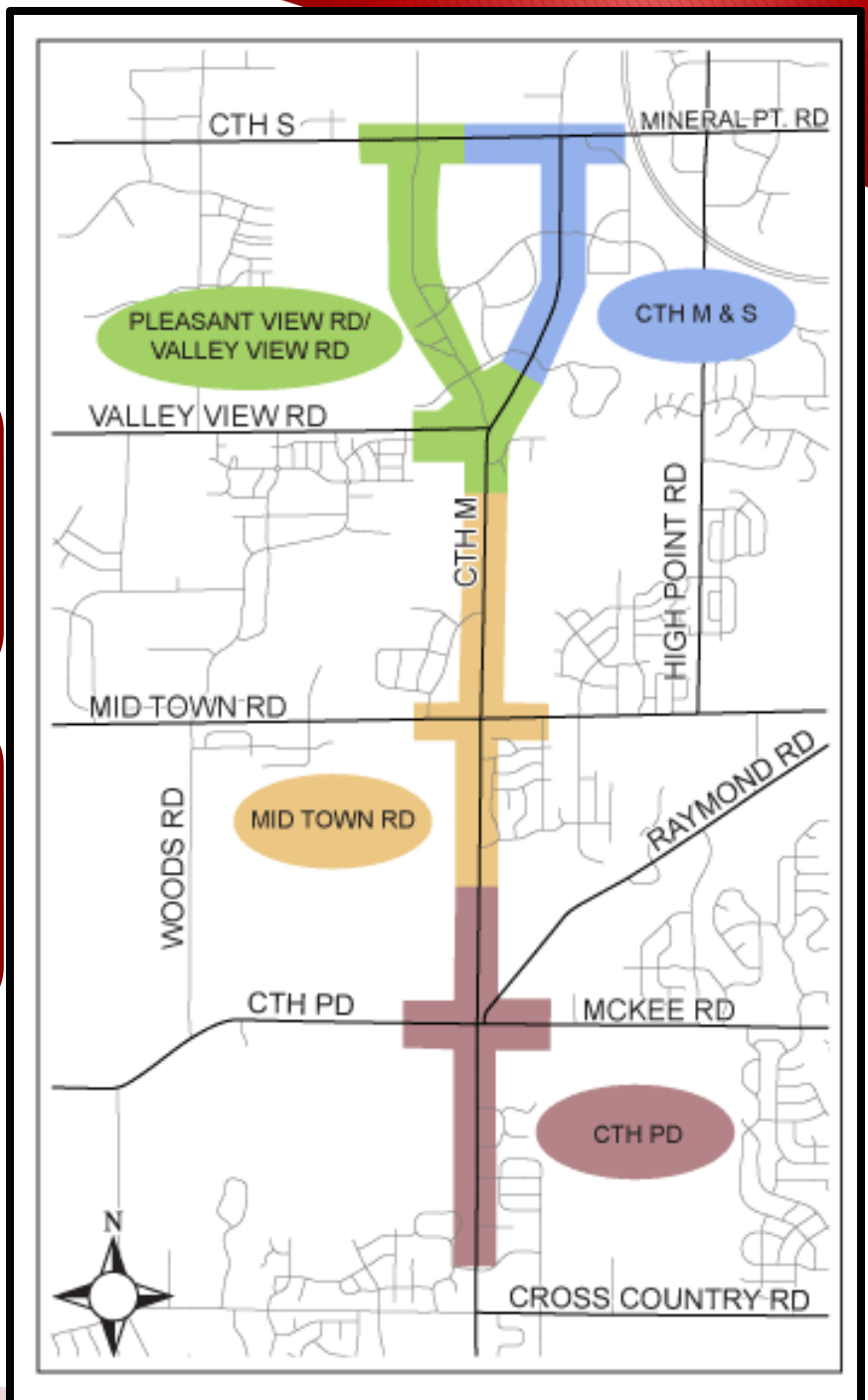


- ▶ Dane County
 - Pam Dunphy, P.E. Assistant Highway Commissioner

Project Location

▶ Flagstone Drive to
Prairie Hill Road

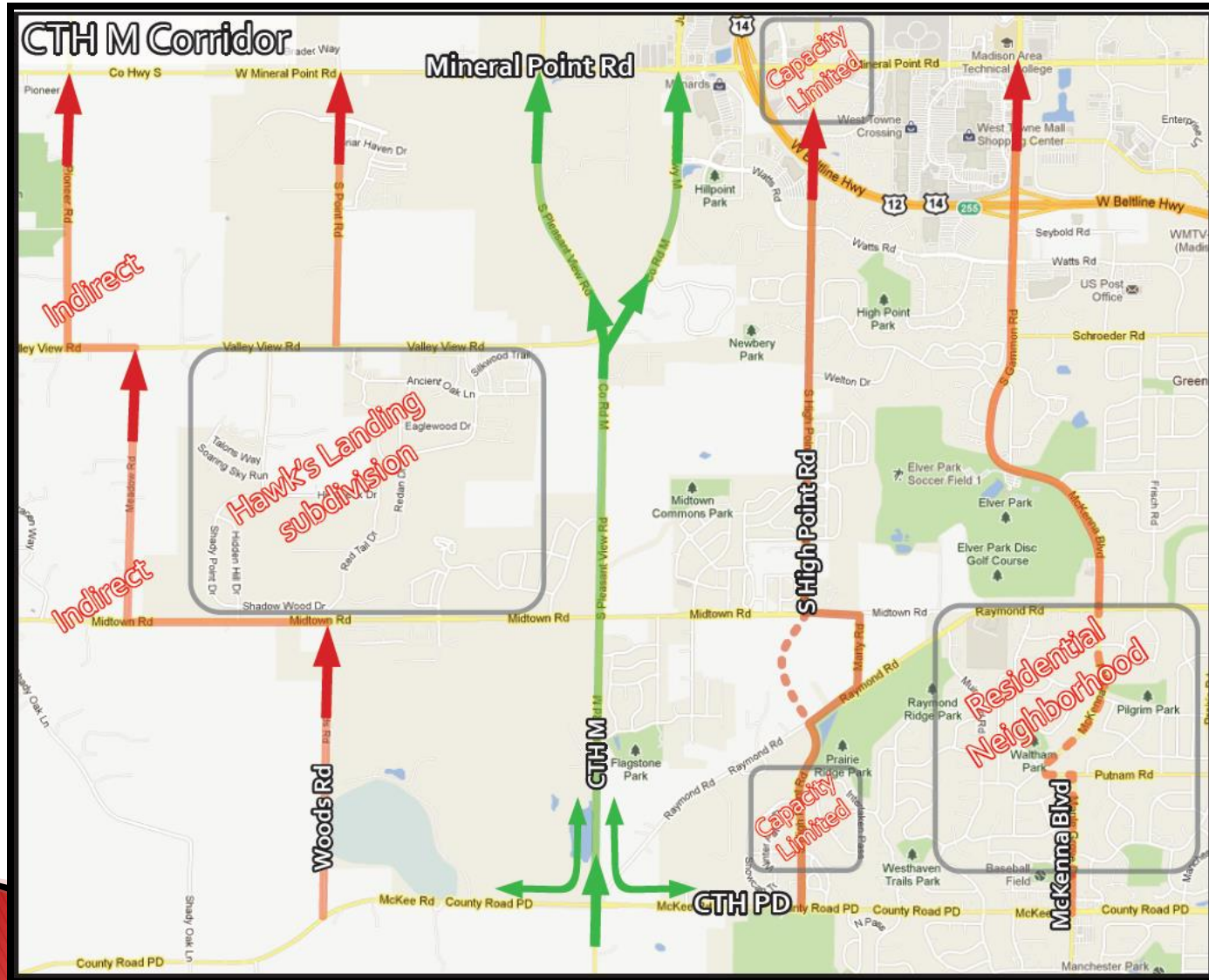
▶ Cross Country Road to
Flagstone Drive



Project Goals

- Provide a safe and convenient corridor for all users, including:
 - Pedestrians
 - Bicyclists
 - Motor vehicles
 - Transit
- Provide acceptable operating conditions for existing and future traffic volumes
- Accommodate planned growth in the area
- Provide well designed intersections that minimize impacts

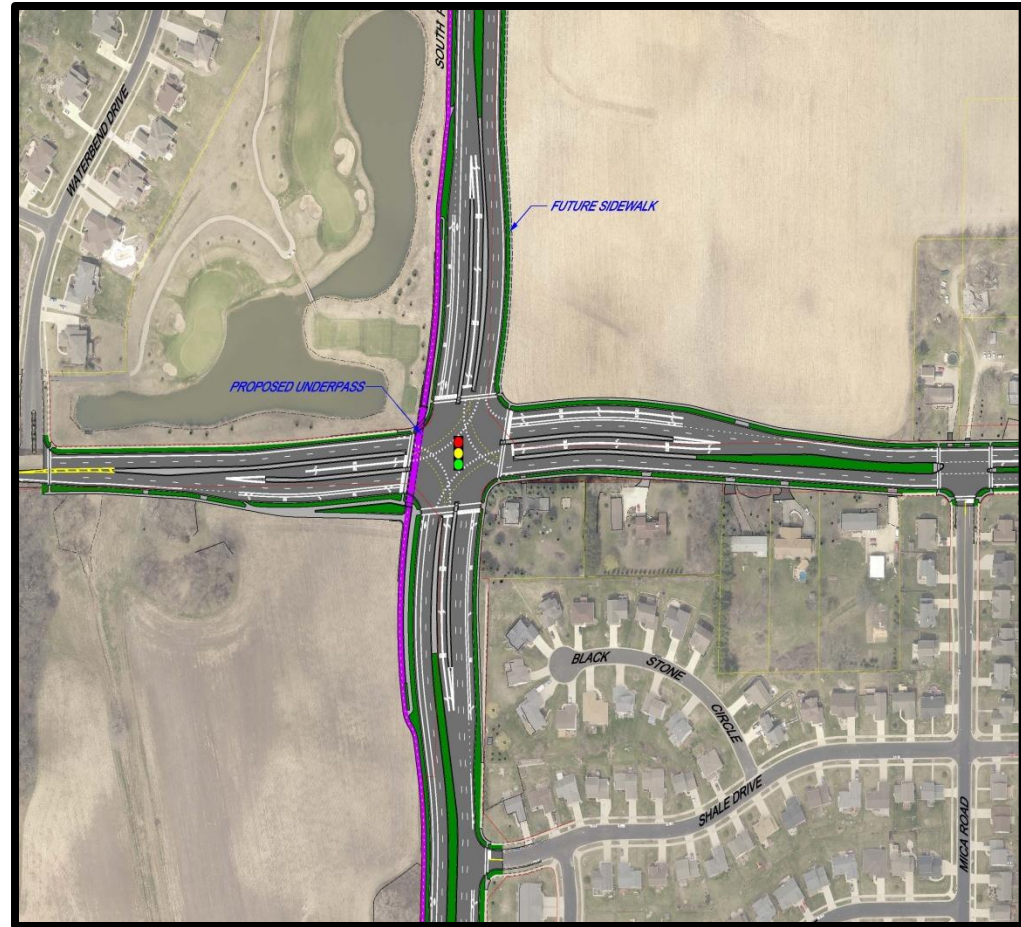
Corridor Importance



Intersection Improvements

Provide well designed intersections that minimize impacts

- ▶ **Mid Town Road**
 - Traffic Signal
 - 2 lane Roundabout (expandable to 3 lane)
- ▶ **Preferred alternative: Traffic Signal**
 - Selected & approved after consideration of stated project goals and public comment.



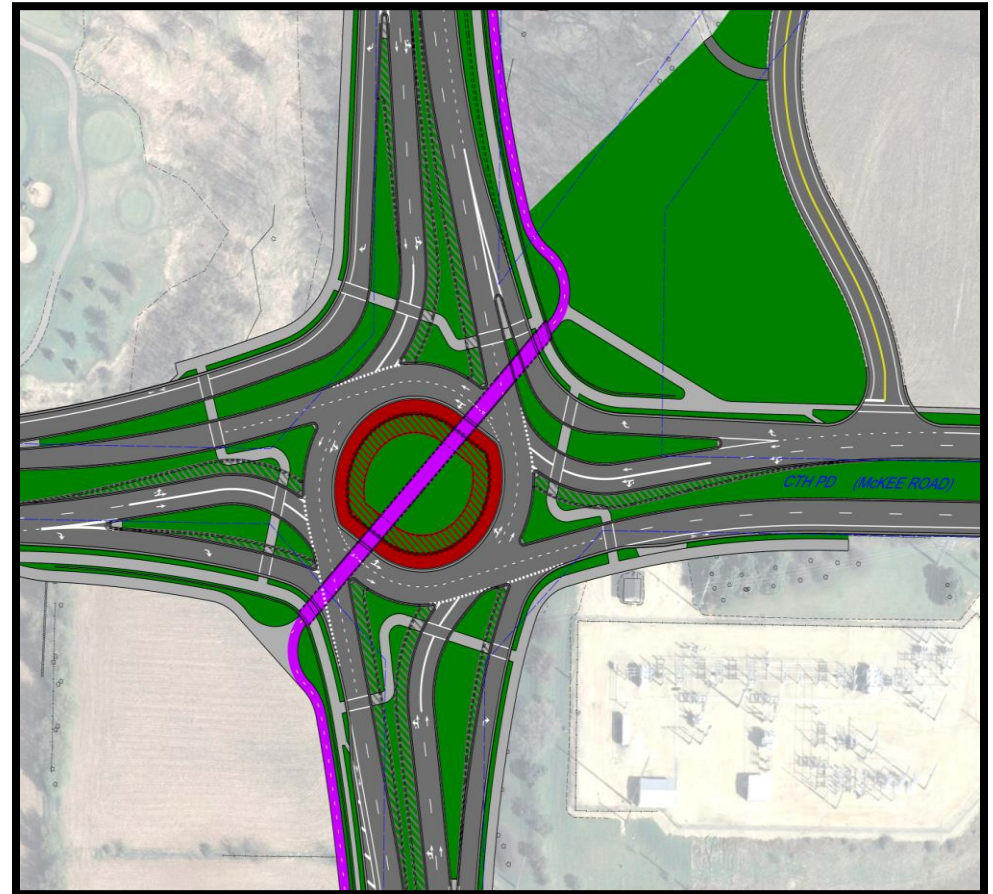
Traffic Signal Alternative - Mid Town Road

Intersection Improvements

Provide well designed intersections that minimize impacts

- ▶ **County PD (McKee Road)**
 - Traffic Signal
 - 2 Lane Roundabout (expandable to 3 lane)
 - Grade Separated Jug Handle

- ▶ **Preferred alternative**
 - Roundabout was selected & approved after consideration of stated project goals and public comment.



Roundabout Alternative – CTH PD

County PD (Mckee Road)

Roundabout

- ▶ New operations analysis tools available
 - Proposed County PD roundabout was reanalyzed.
 - Analysis showed excessive queuing and delay in the evening peak travel hour.
 - Potential for poor operations could result in neighborhood impacts (cut through traffic).
- ▶ Updated & higher traffic volume projections
 - Epic expansion
 - Verona North Neighborhood planning

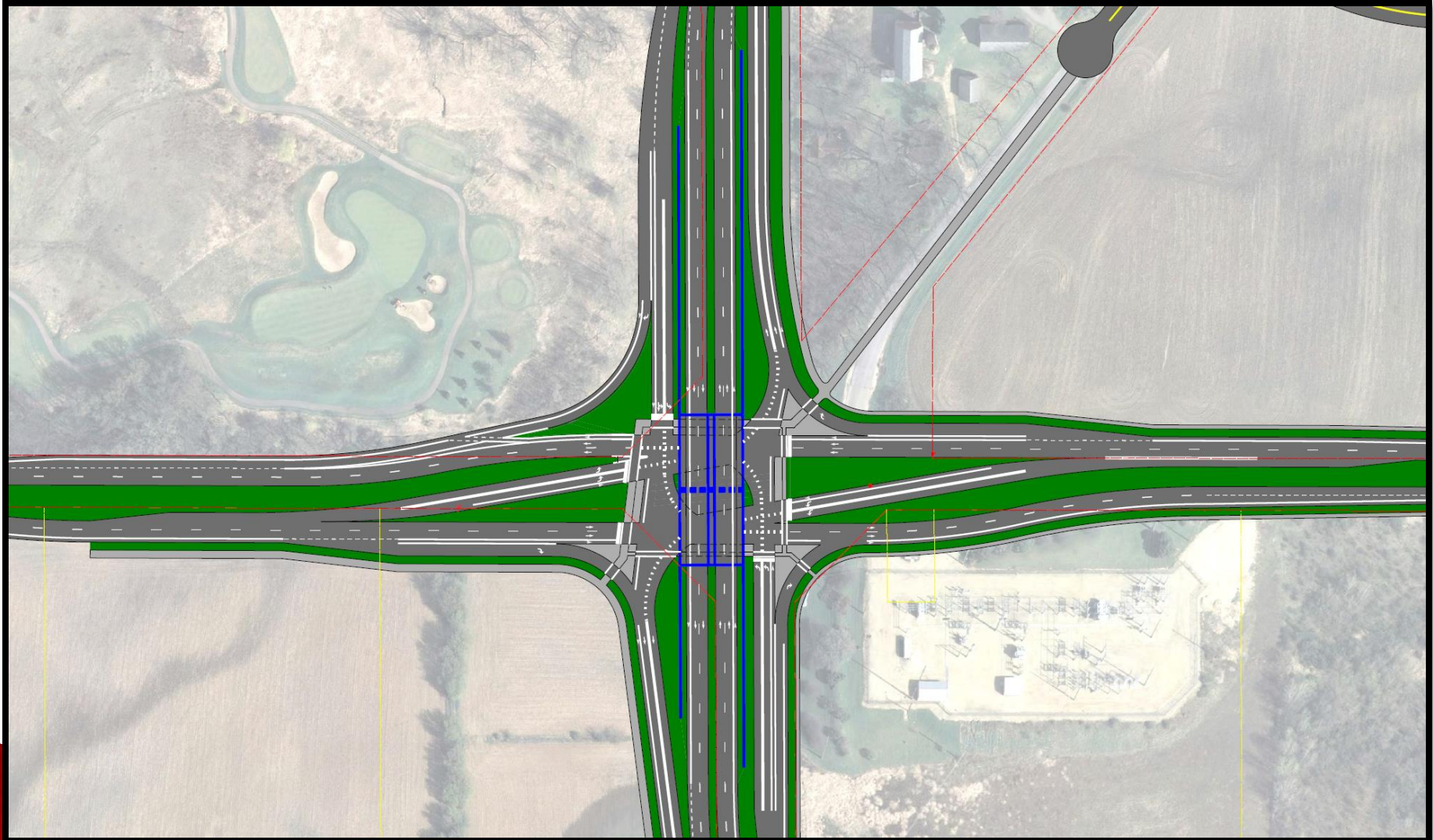
County PD (McKee Road)

New Alternatives

- ▶ Full Interchange (Tight Diamond)
 - County M – 4 lane bridge over the intersection.
 - 4-lane County PD intersection below the bridge.
- ▶ Westbound Underpass – Recommended
 - At-grade traffic signal intersection – no westbound County PD through movement.
 - 6-lane County M and 4-lane County PD.
 - Westbound County PD bypasses intersection under a bridge for County M.

County PD (McKee Road)

Full Interchange



County PD (McKee Road)

Full Interchange

▶ Advantages

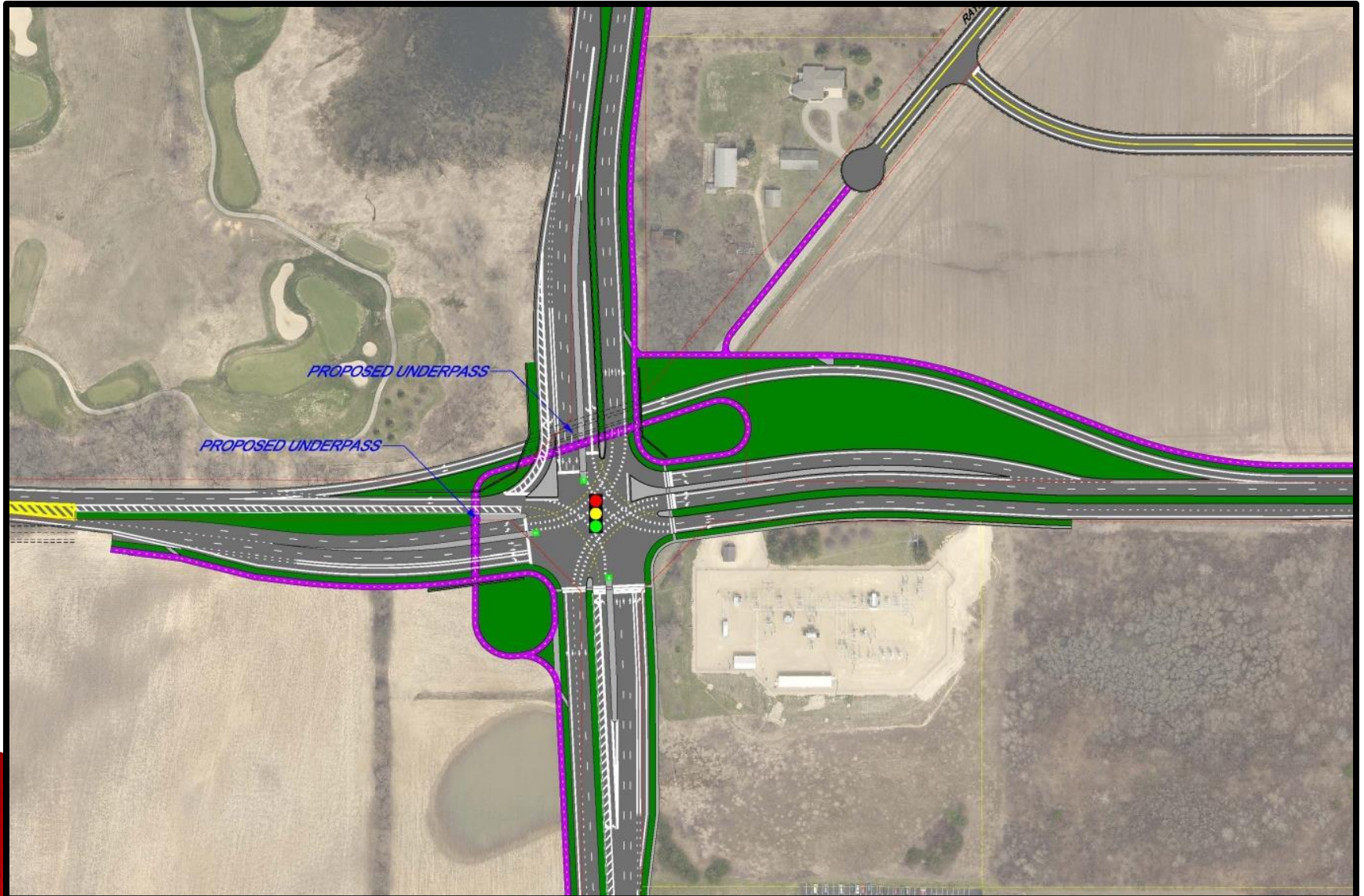
- Accommodates design year traffic volumes.
- Capacity to accommodate increases in volume beyond the design year.
- Familiar design for drivers.

▶ Disadvantages

- Merge conditions north & south will impact future access.
- Large bridge – high construction cost & visual impact.
- Multi-use path crosses intersection at-grade.
- Greater right-of-way needs than the roundabout.

County PD (McKee Road)

Westbound County PD Underpass – Recommended



County PD (McKee Road)

Westbound County PD Underpass – Recommended

▶ Advantages

- Accommodates design year traffic volumes.
- Underpasses for multi-use path.
- Signal controlled crosswalks with countdown timers for pedestrians.
- Familiar design for drivers.

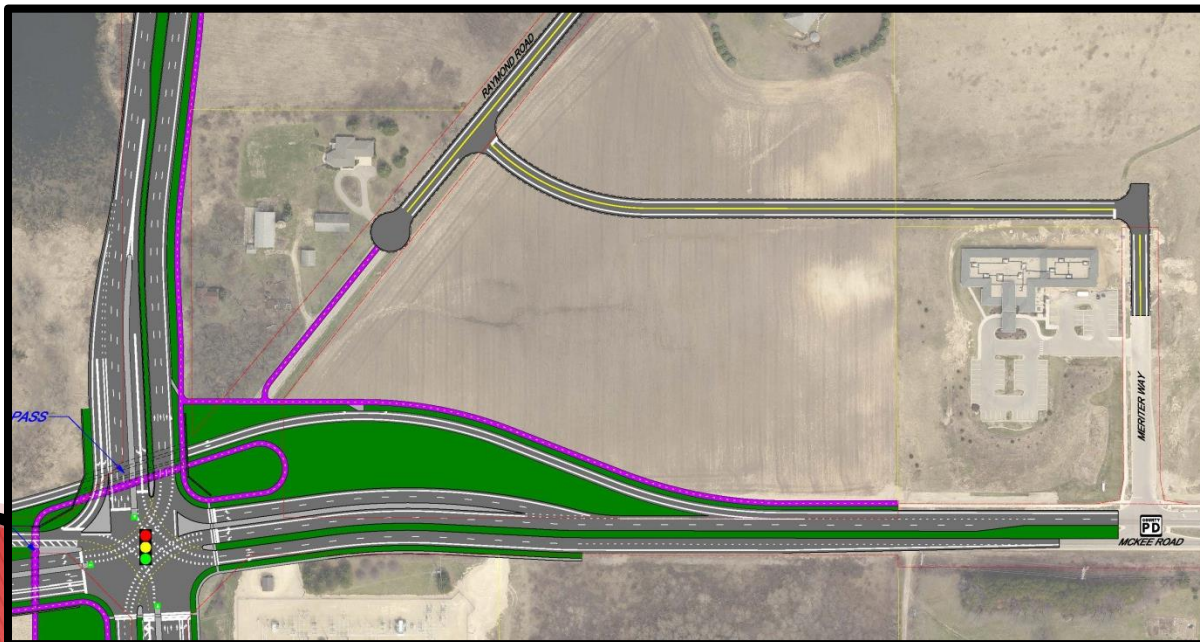
▶ Disadvantages

- Greater right-of-way needs than the roundabout.
- Greater construction cost and visual impact than the roundabout.

Raymond Road

Accommodate planned growth in the area

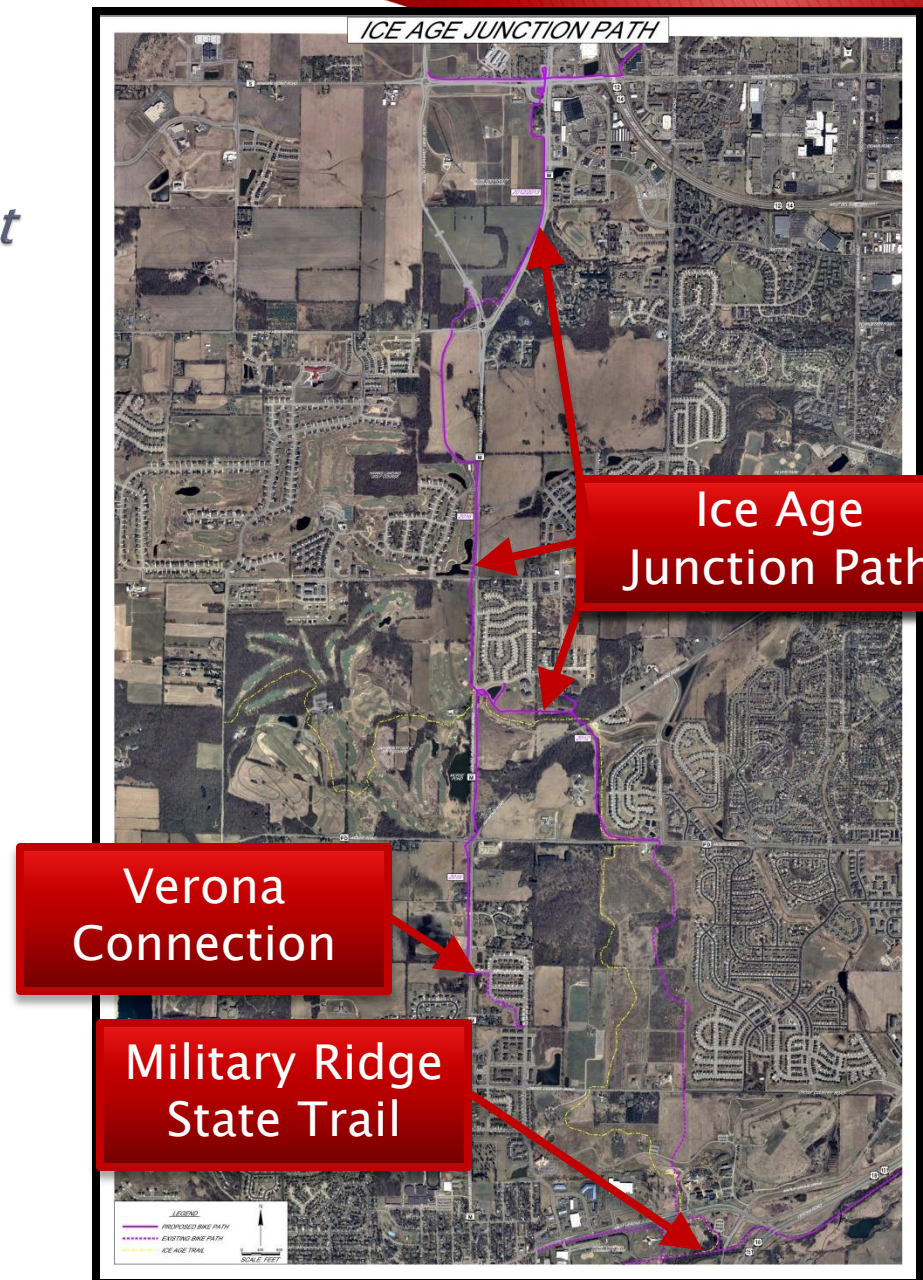
- ▶ CTH PD intersection
 - High traffic volume limits safe and efficient connection
- ▶ Neighborhood plan
 - Under review with planned revisions
 - New connections to CTH M and CTH PD considered
- ▶ Reconstruction to Hickory Ridge Road
 - New storm and sanitary sewer will follow Raymond Road



Bicycle Facilities

Provide a safe and convenient corridor for all users:

- ▶ Bike lanes
 - All arterials
- ▶ Multi-Use Path
 - Ice Age Junction Path
 - Military Ridge Trail to West side of Madison
 - Verona Connection
 - Tie Verona North Neighborhood into Ice Age Junction Path



Project Schedule

- ▶ **Current Status**
 - Preliminary design
- ▶ **Next Steps**
 - Finalize the environmental review
 - Develop final plans based on the preferred alternative
 - Complete final plans: Late 2014/Early 2015
 - Begin construction: Late 2015/2016

Construction Costs

- ▶ 2014–2018 TIP
 - Flagstone to Prairie Hill – 11.8 M
 - Cross Country to Flagstone – 10.8 M

- ▶ Cross Country to Flagstone
 - Increase to 12.8 M