

# 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

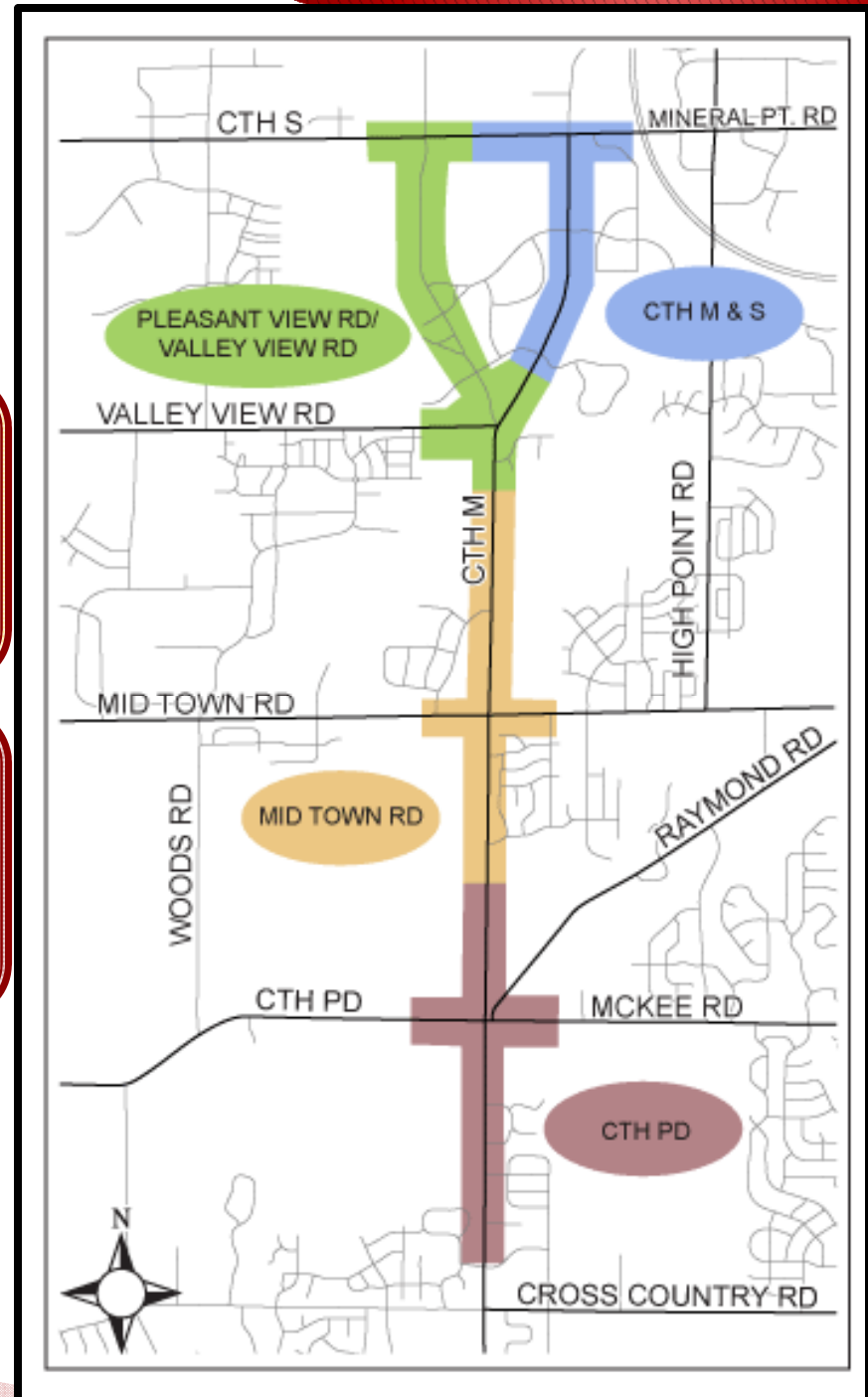


- ▶ Dane County
  - Pam Dunphy, P.E. Assistant Highway Commissioner

# Project Location

▶ Flagstone Drive to  
Prairie Hill Road

▶ Cross Country Road to  
Flagstone Drive

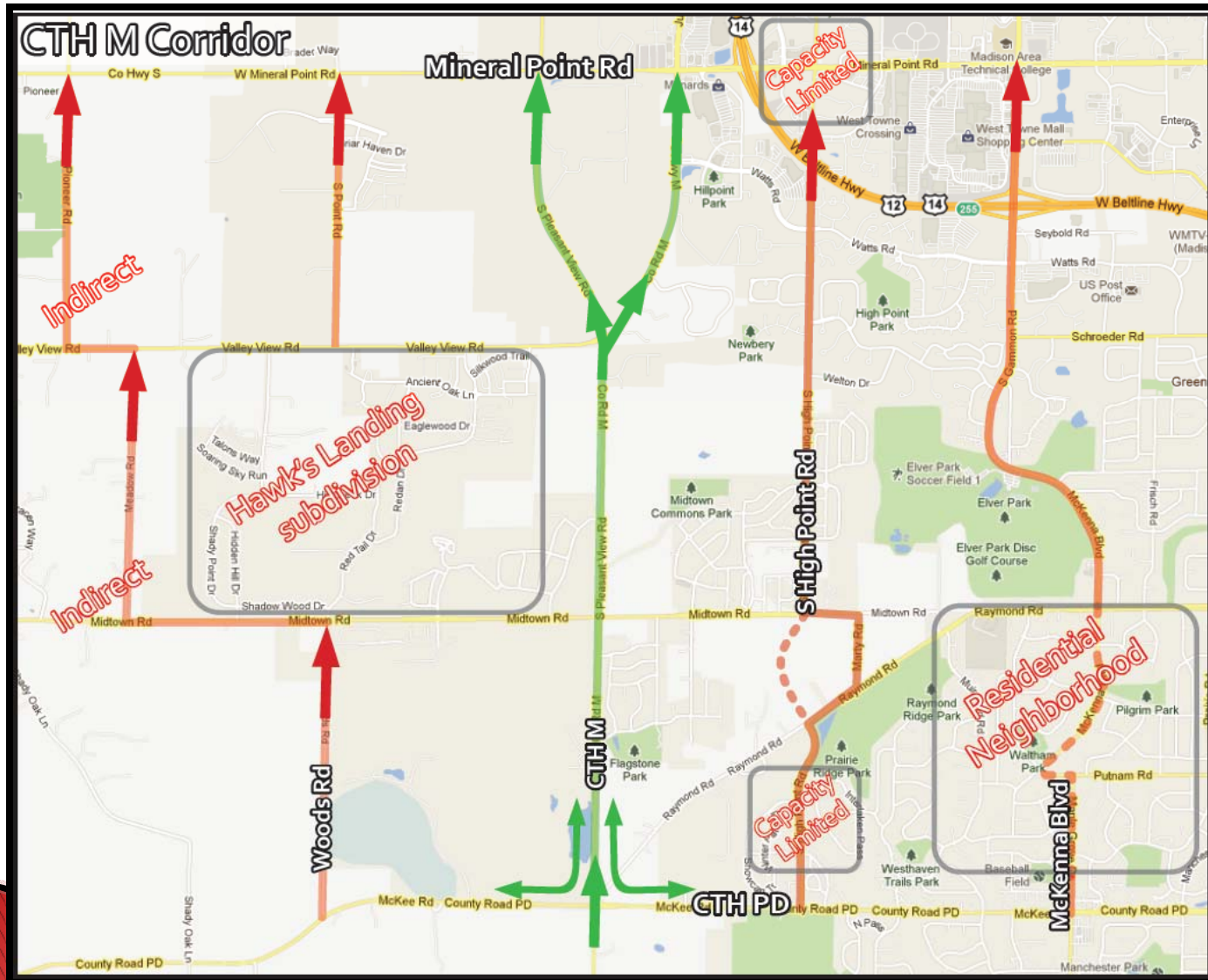


# Project Goals

- 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



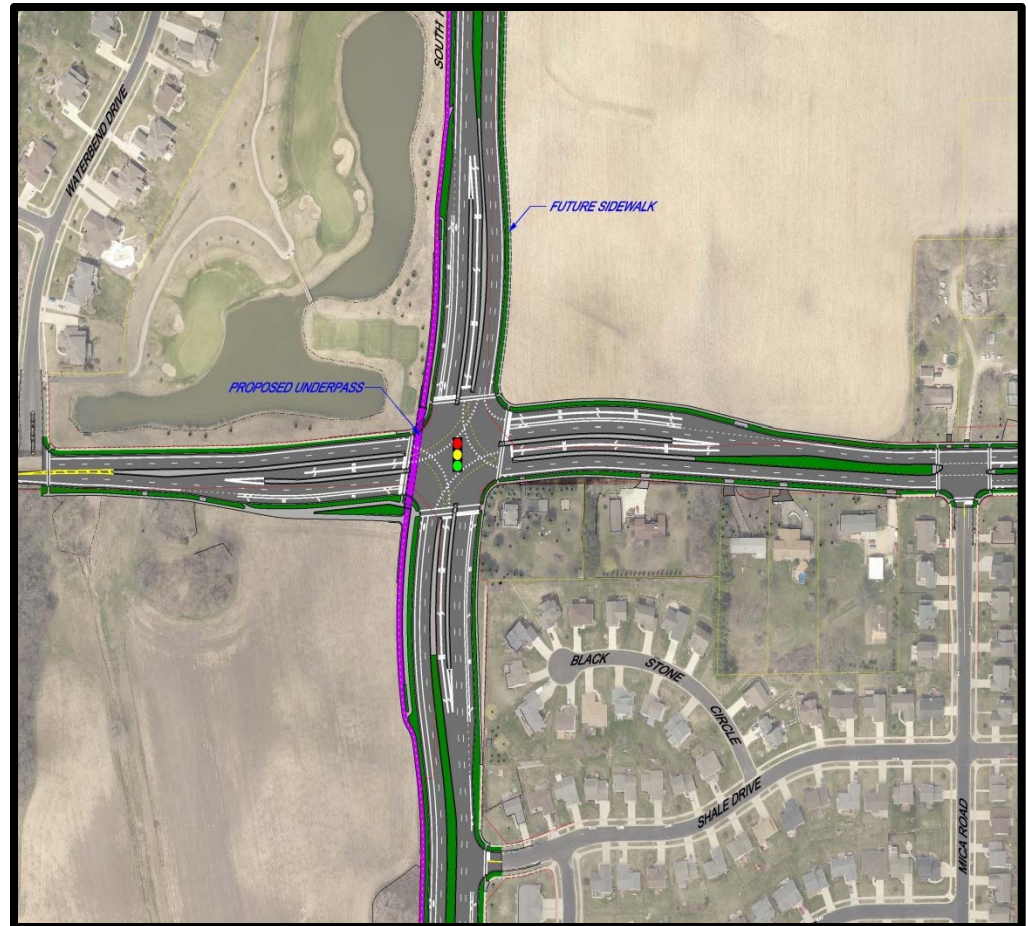
# Corridor Importance



# 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.



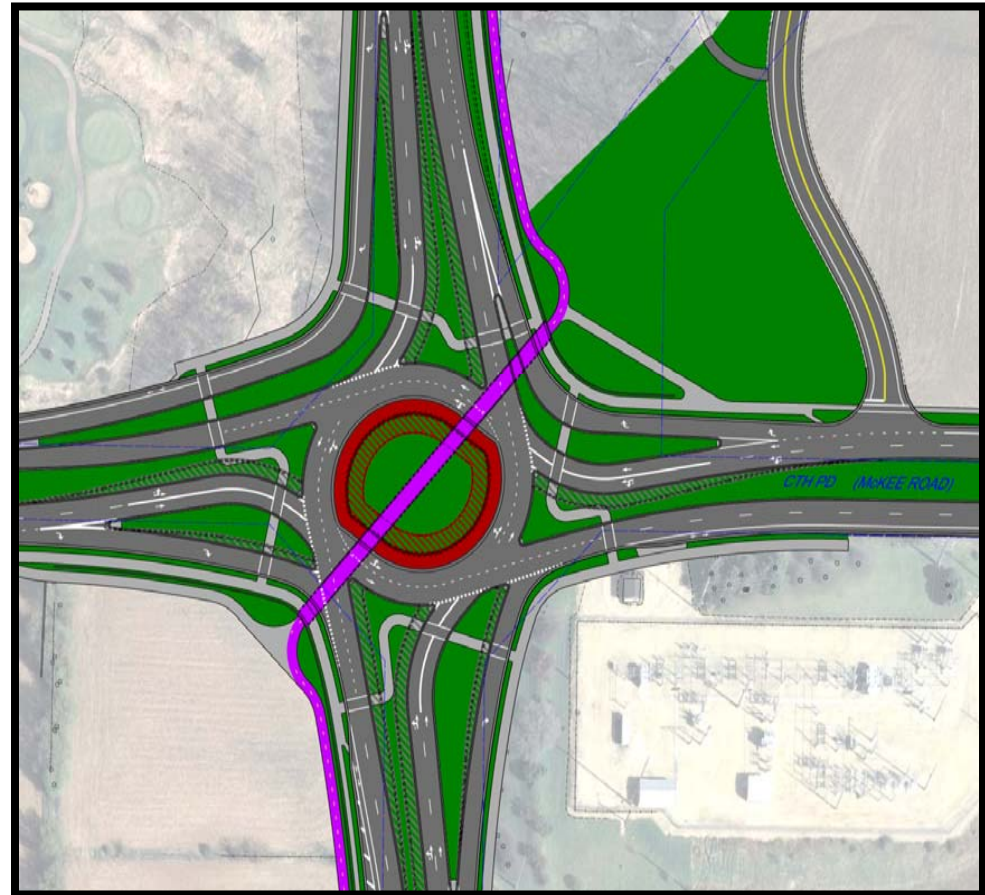
Traffic Signal Alternative - Mid Town Road



# 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



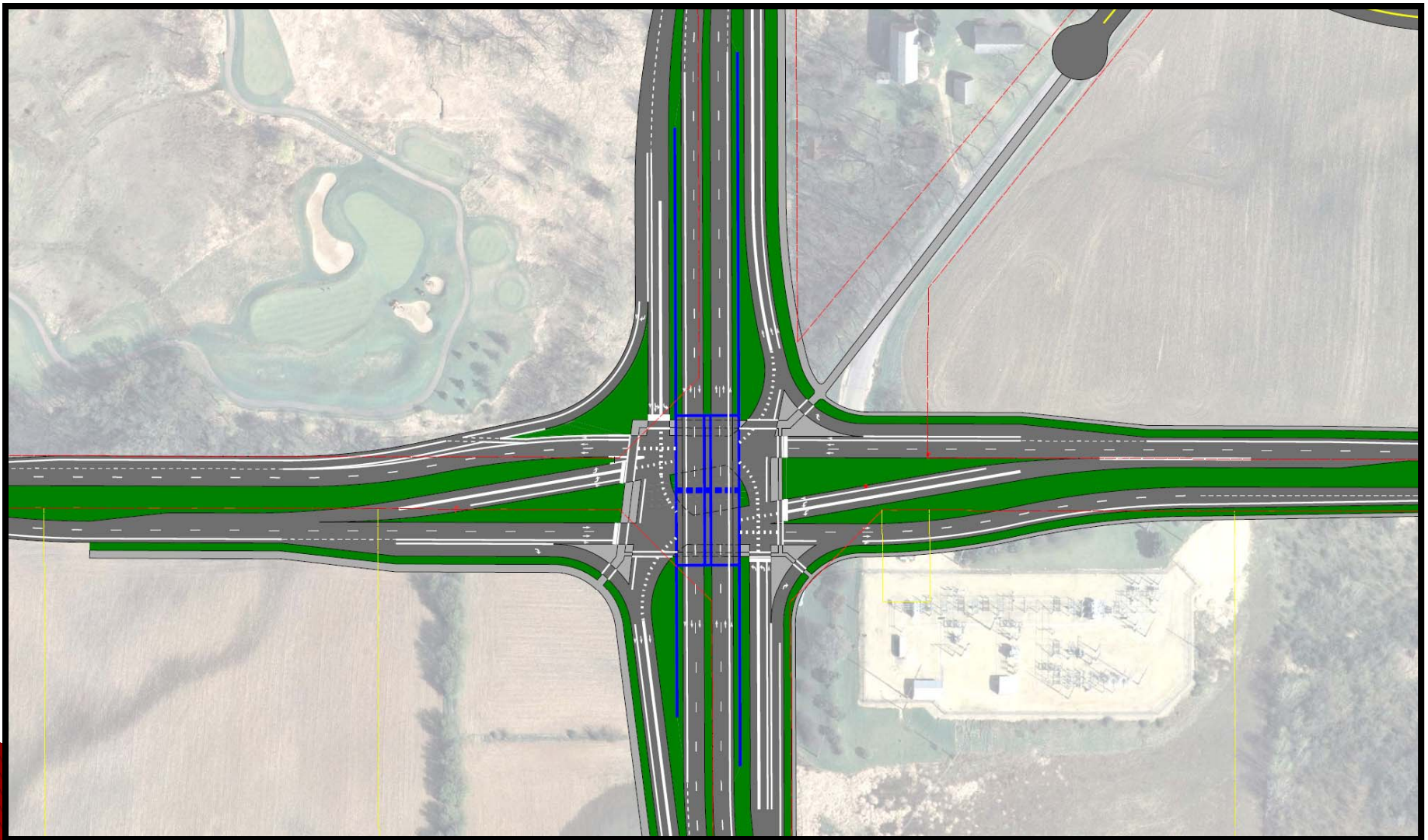
# County PD (McKee Road)

## *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.

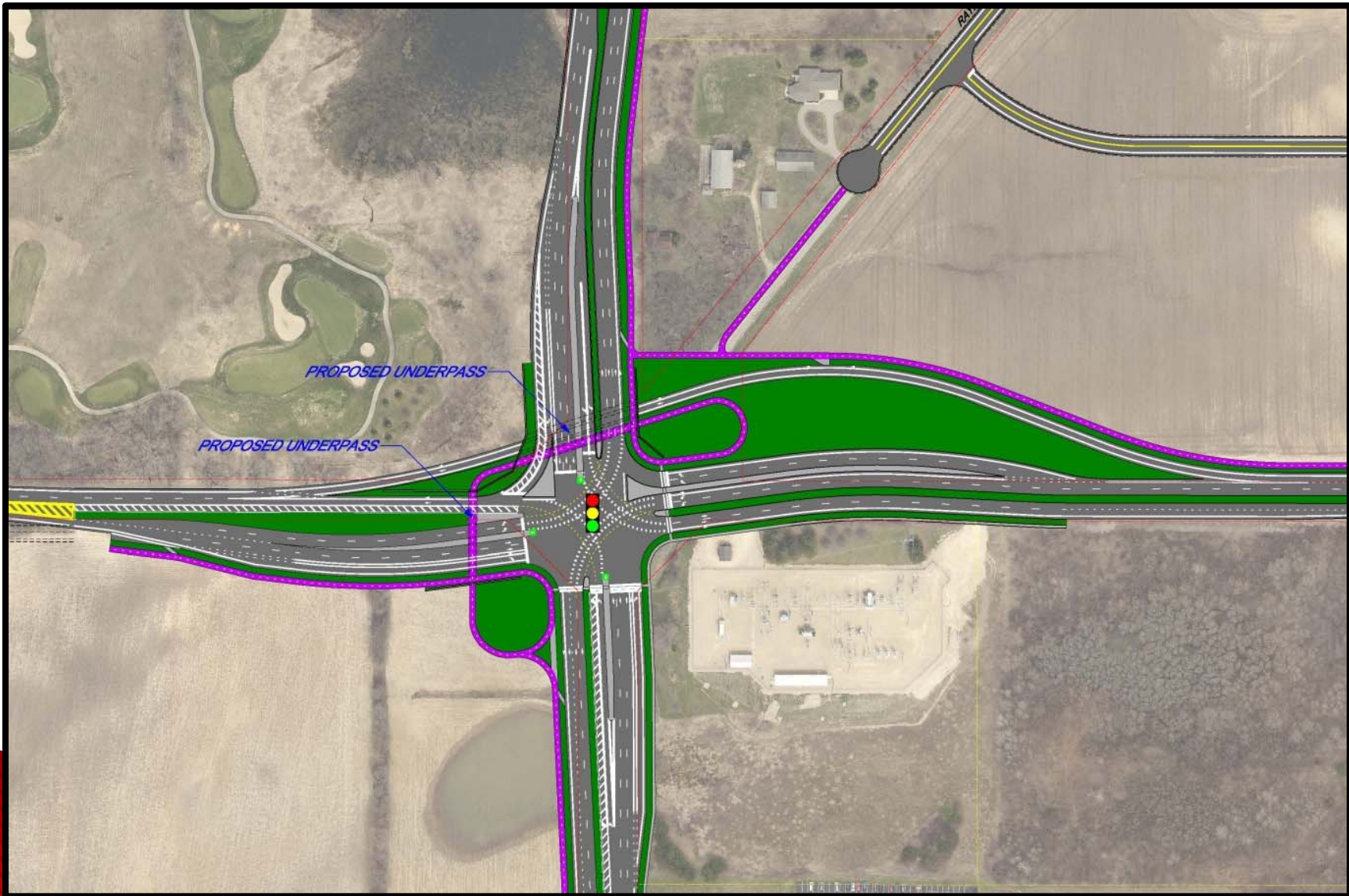
### ▶ Disadvantages

- 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

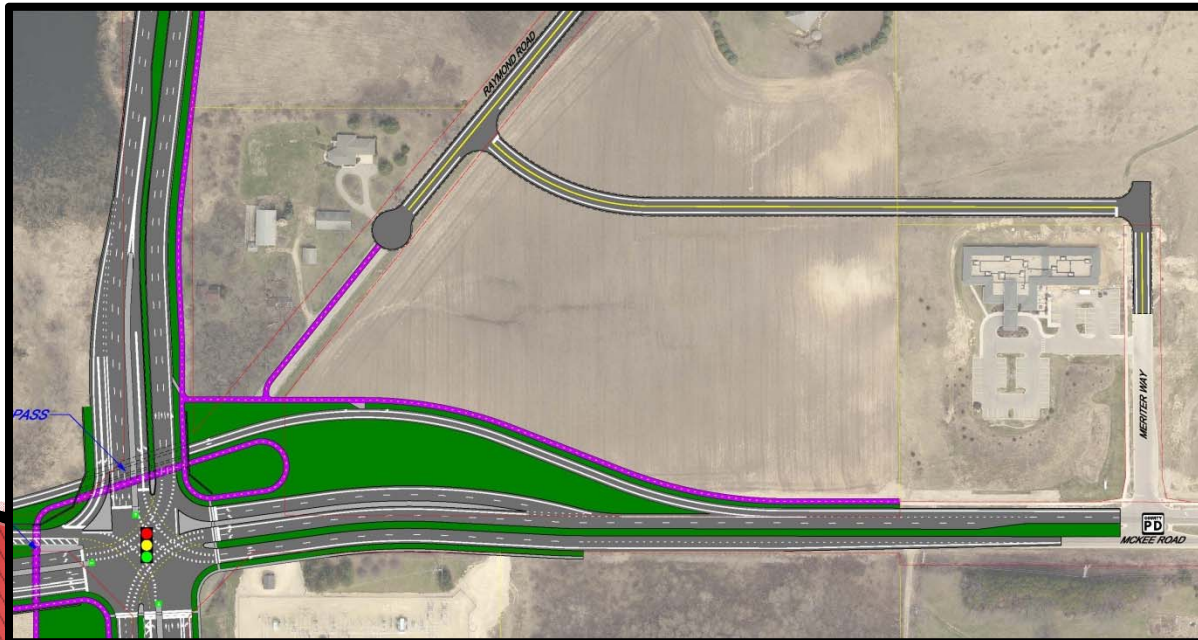
- Greater right-of-way needs than the roundabout.
- Greater construction cost and visual impact than the roundabout.



# 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

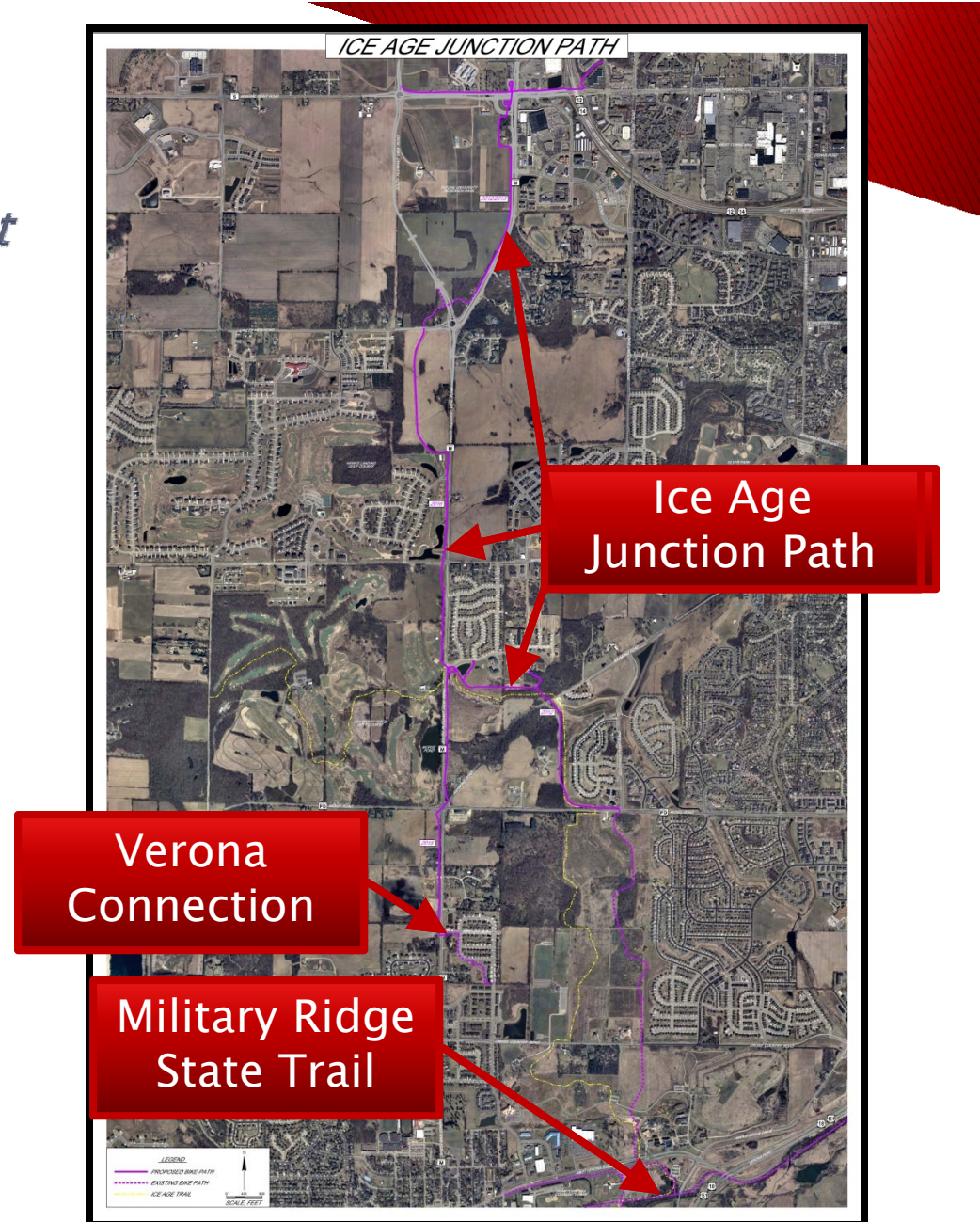




# Bicycle Facilities

*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