



Delaware Department of Transportation



SR 1 Widening SR 273 to Roth Bridge

Public Workshop

April 8, 2013

5:00 PM – 8:00 PM

May B. Leasure Elementary School

Agenda

- ▶ Project Limits
- ▶ Project Purpose & Need
- ▶ Environmental (NEPA) Process
- ▶ Transportation Alternatives
- ▶ Summary

Purpose & Need

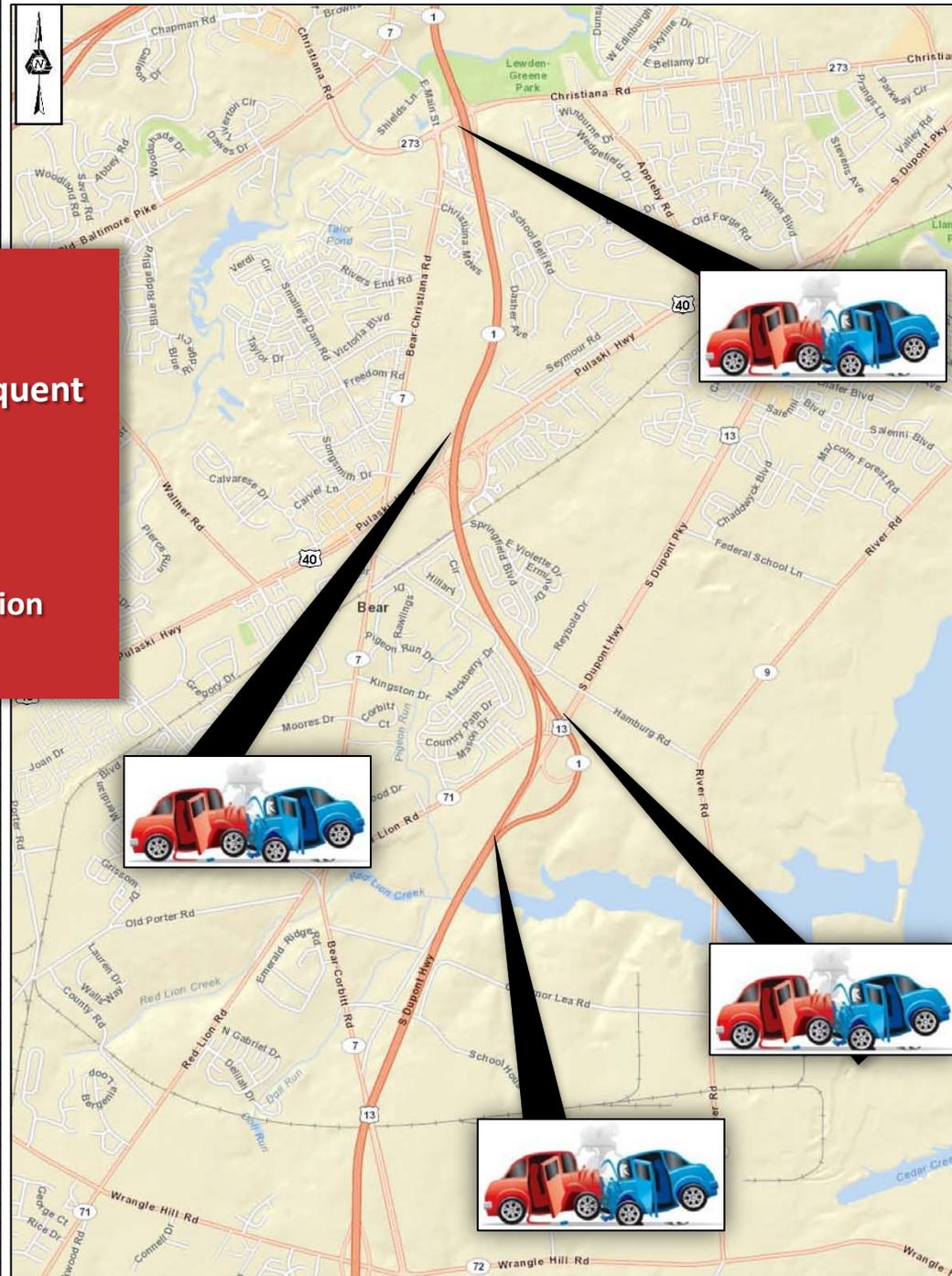
- ▶ Address congestion
- ▶ Improve system connectivity
- ▶ Improve local access
- ▶ Improve safety
- ▶ Ensure emergency access & evacuation



Purpose & Need

Existing Conditions (2011)

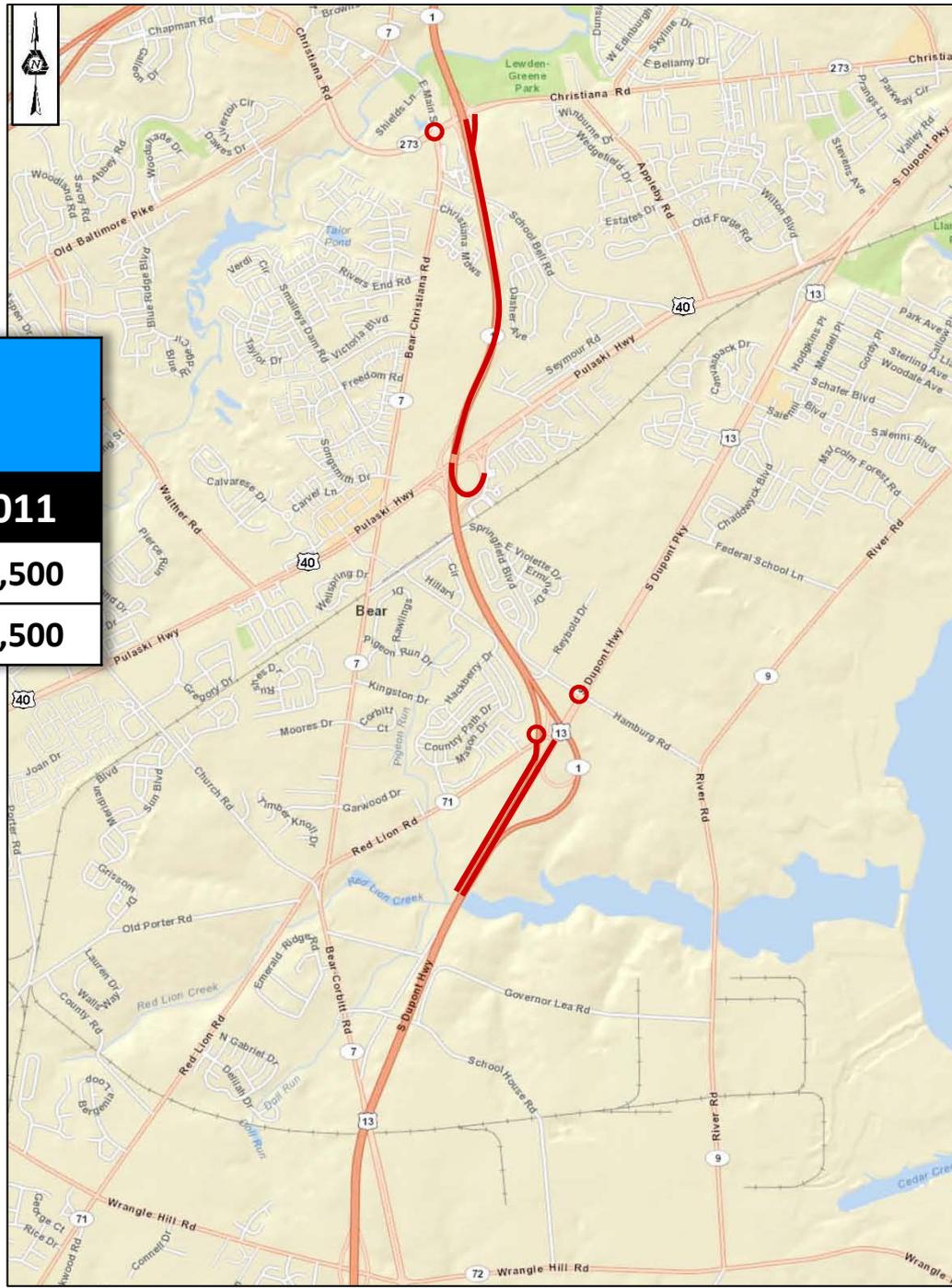
- ▶ A total of 284 reported crashes between January 2008 and December 2010
- ▶ DelDOT has identified 4 locations with frequent accidents requiring improvements (HEP):
 - SR 273 through the SR 1 interchange
 - US 40 through the SR 1 interchange
 - Hamburg Road through the US 13 intersection
 - SR 1 northbound near the diverge to US 13



Purpose & Need

Existing Conditions (2011)

Existing Traffic (based on actual traffic data collected)	
Location	2011
SR 1 between US 40 and SR 273	76,500
SR 1 between the Roth Bridge and US 13	79,500



Purpose & Need

Future Conditions (2040)

Projected Traffic

(based on WILMAPCO, NCC approved model)

Location	2011	2040	Increase
SR 1 between US 40 and SR 273	76,500	125,000	63%
SR 1 between the Roth Bridge and US 13	79,500	140,000	76%

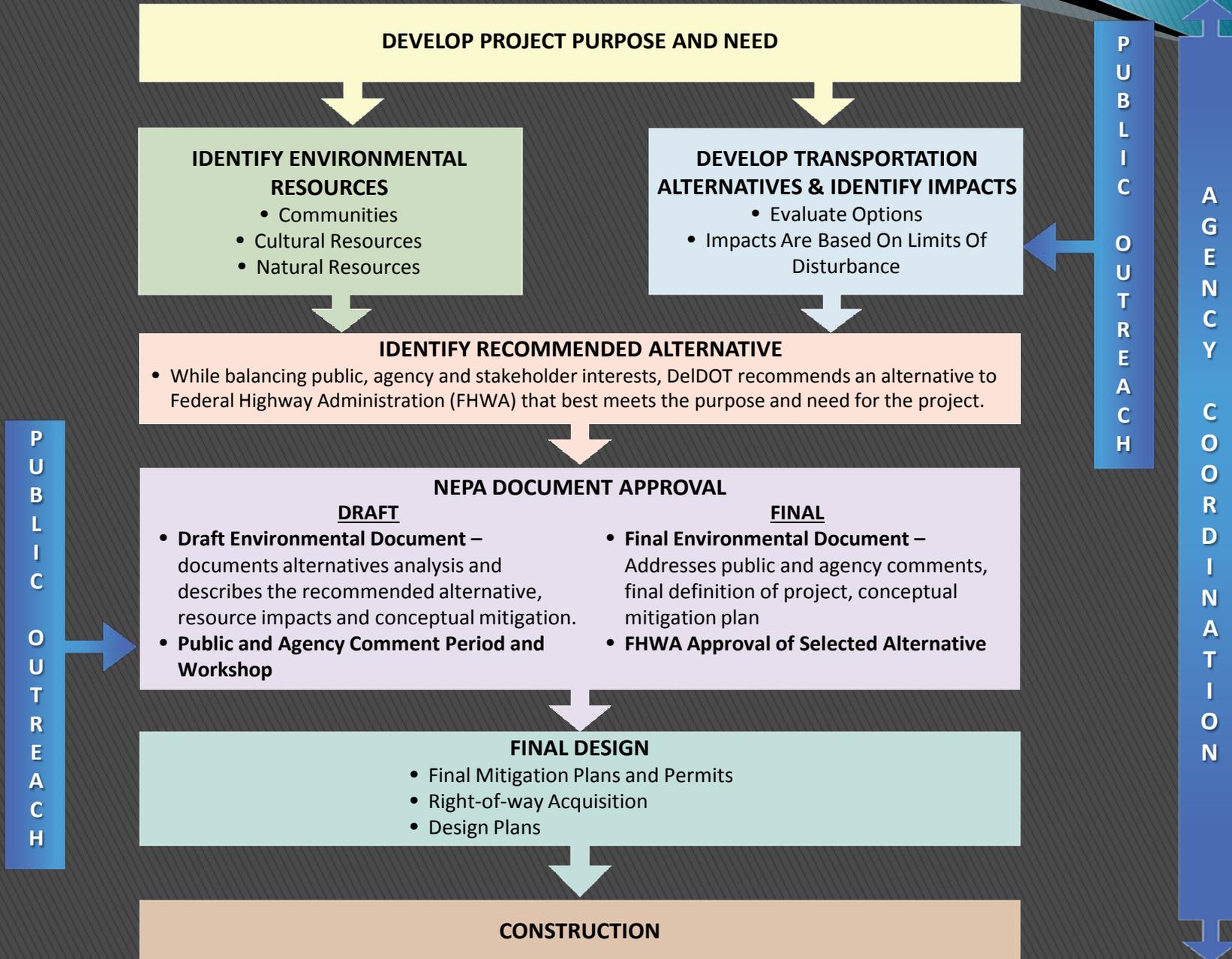


**How do we begin
to address these
transportation problems?**

???

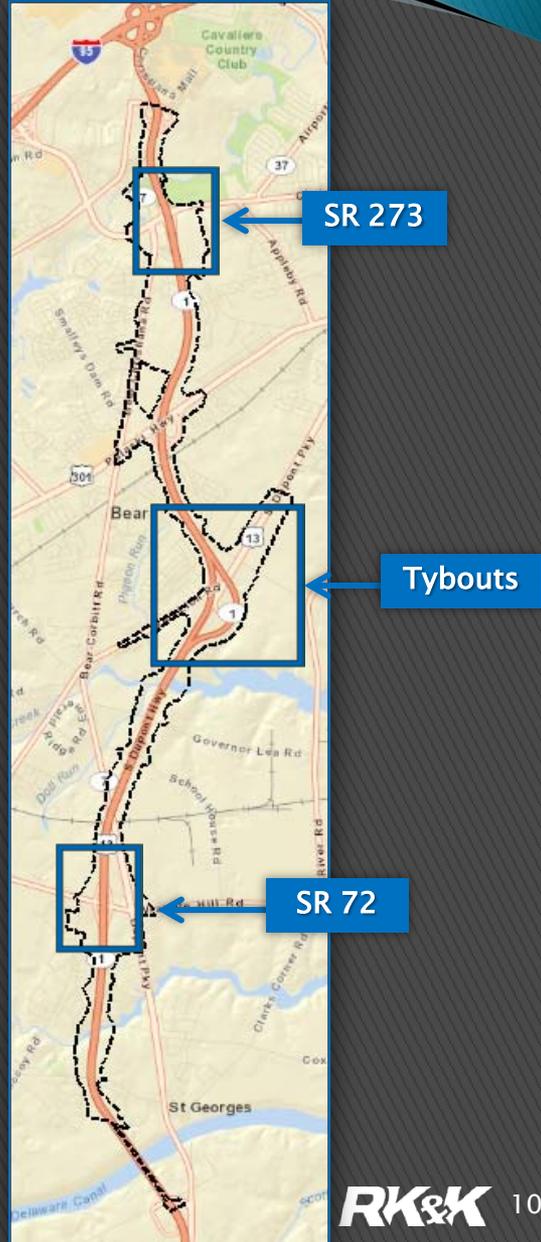


Environmental (NEPA) Process



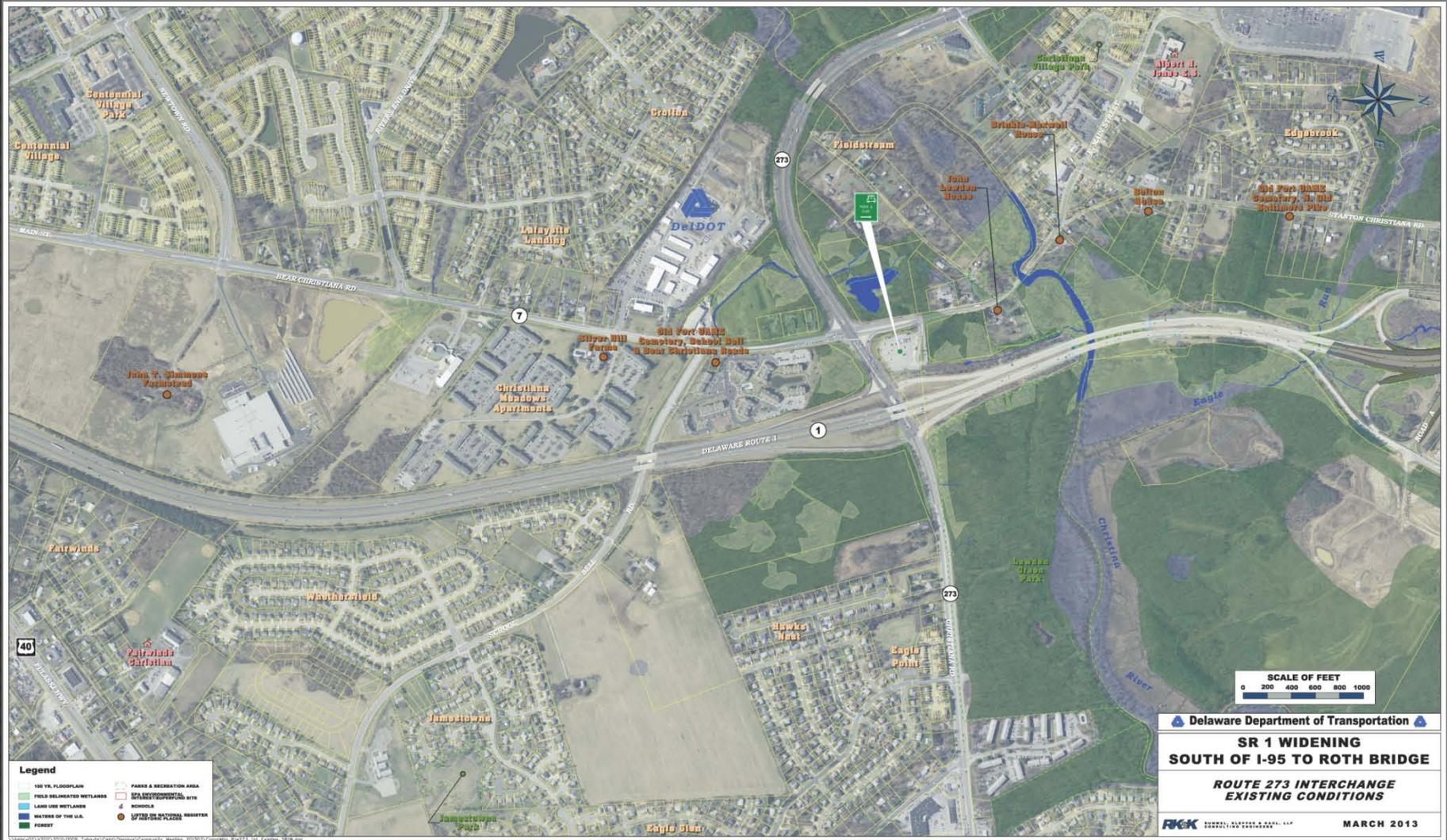
Transportation Alternatives

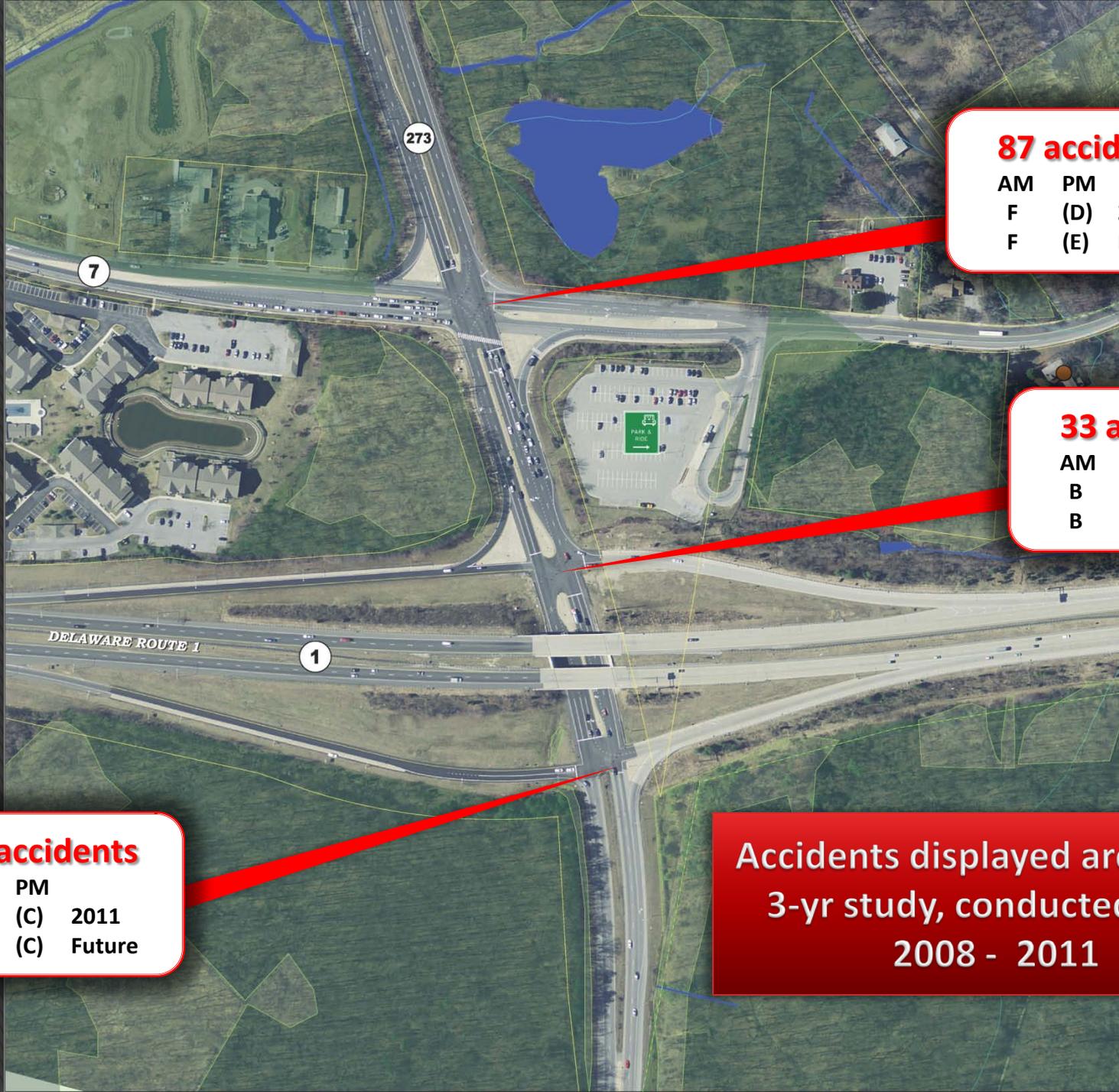
- ▶ Proposed Alternatives
 - Interchange Improvements Alternatives
 - SR 273
 - Tybouts
 - US 40 interchange – minor traffic flow improvements
 - SR 72
 - Mainline Widening – additional lane alternatives
 - Work within existing corridor
 - Meet current FHWA design requirements



SR 273 Interchange

Existing Conditions





87 accidents

AM PM
F (D) 2011
F (E) Future

33 accidents

AM PM
B (C) 2011
B (E) Future

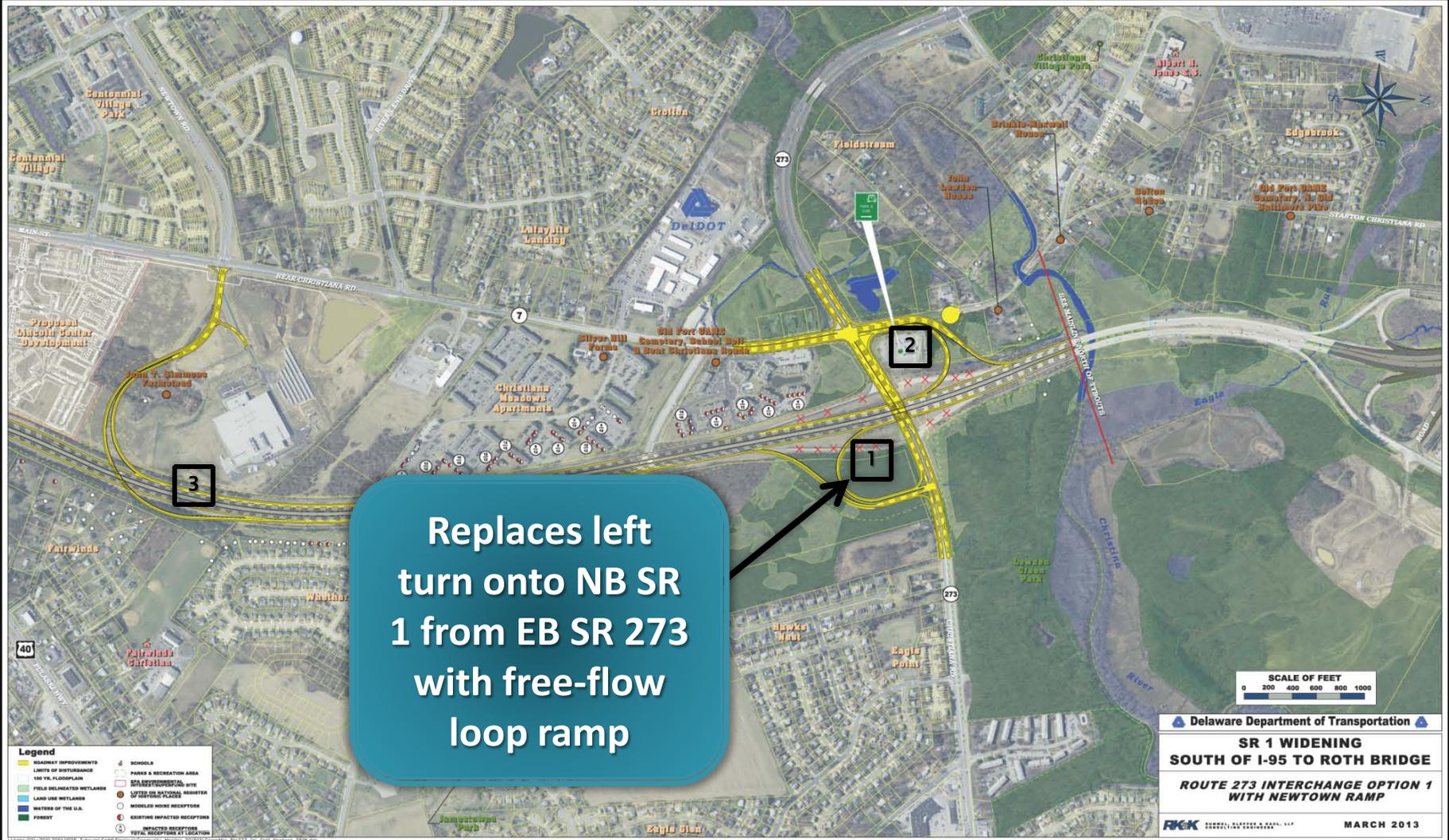
26 accidents

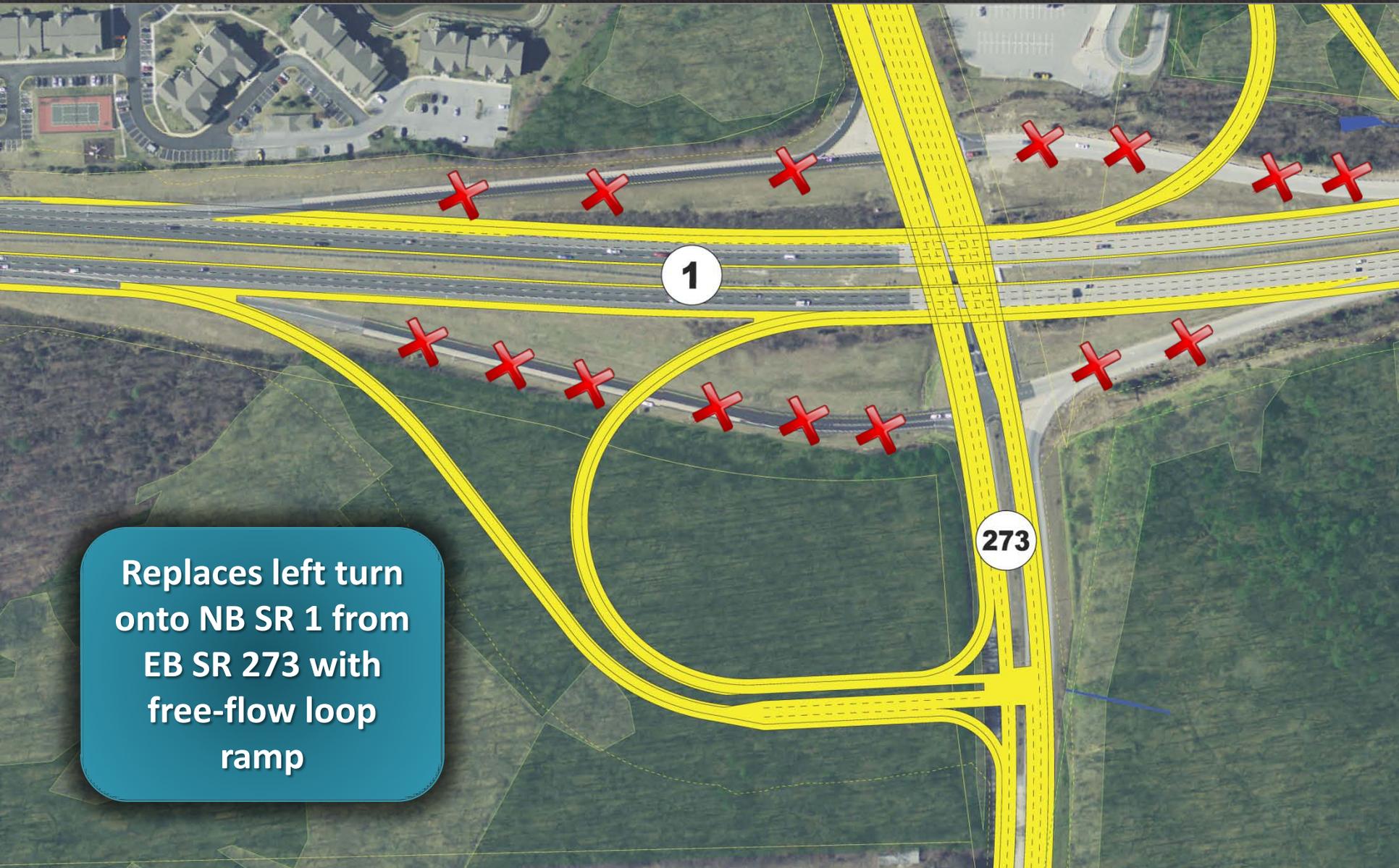
AM PM
C (C) 2011
C (C) Future

Accidents displayed are from a
3-yr study, conducted from
2008 - 2011

SR 273 Interchange

Option 1





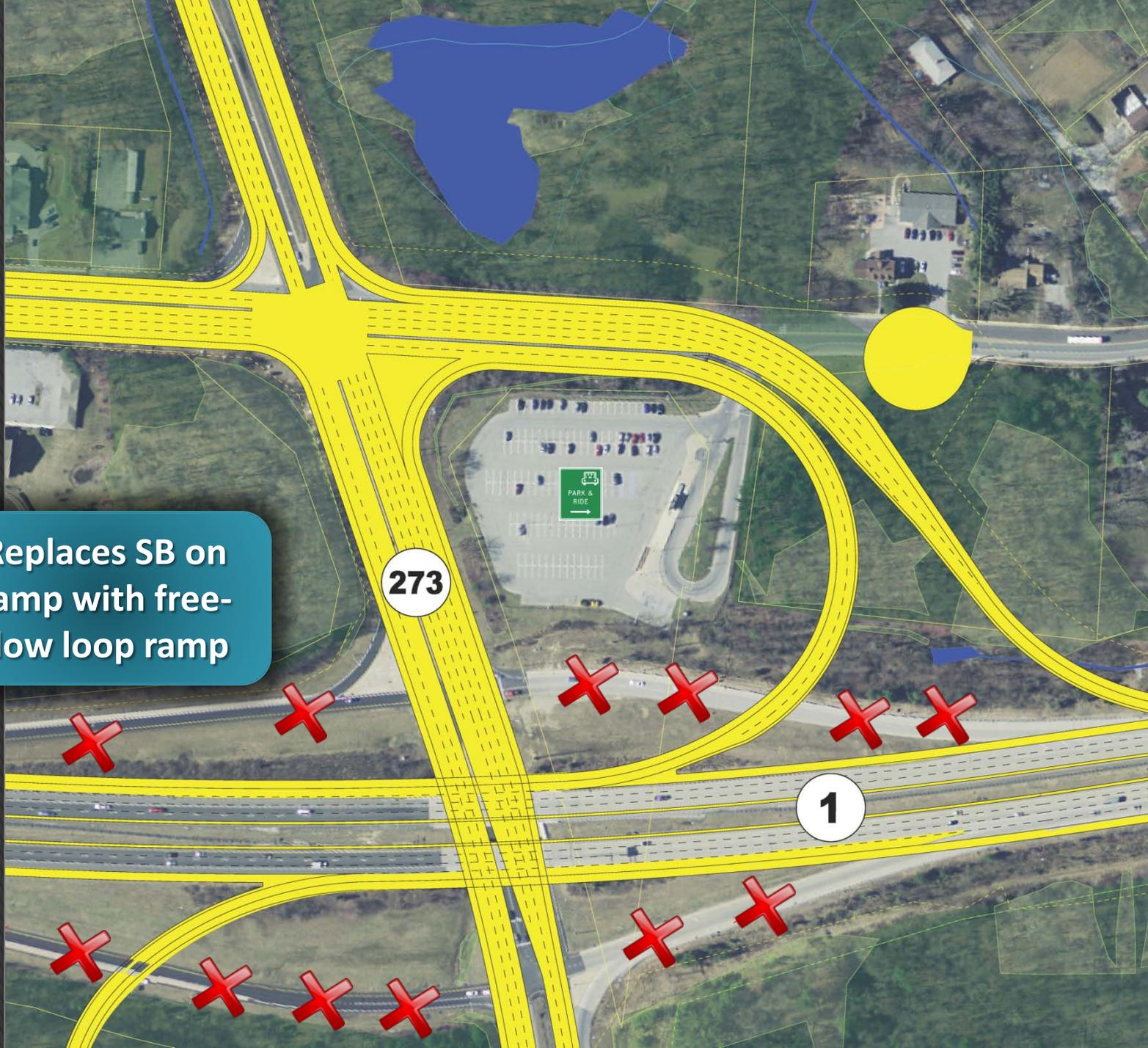
**Replaces left turn
onto NB SR 1 from
EB SR 273 with
free-flow loop
ramp**

SR 273 Interchange

Option 1

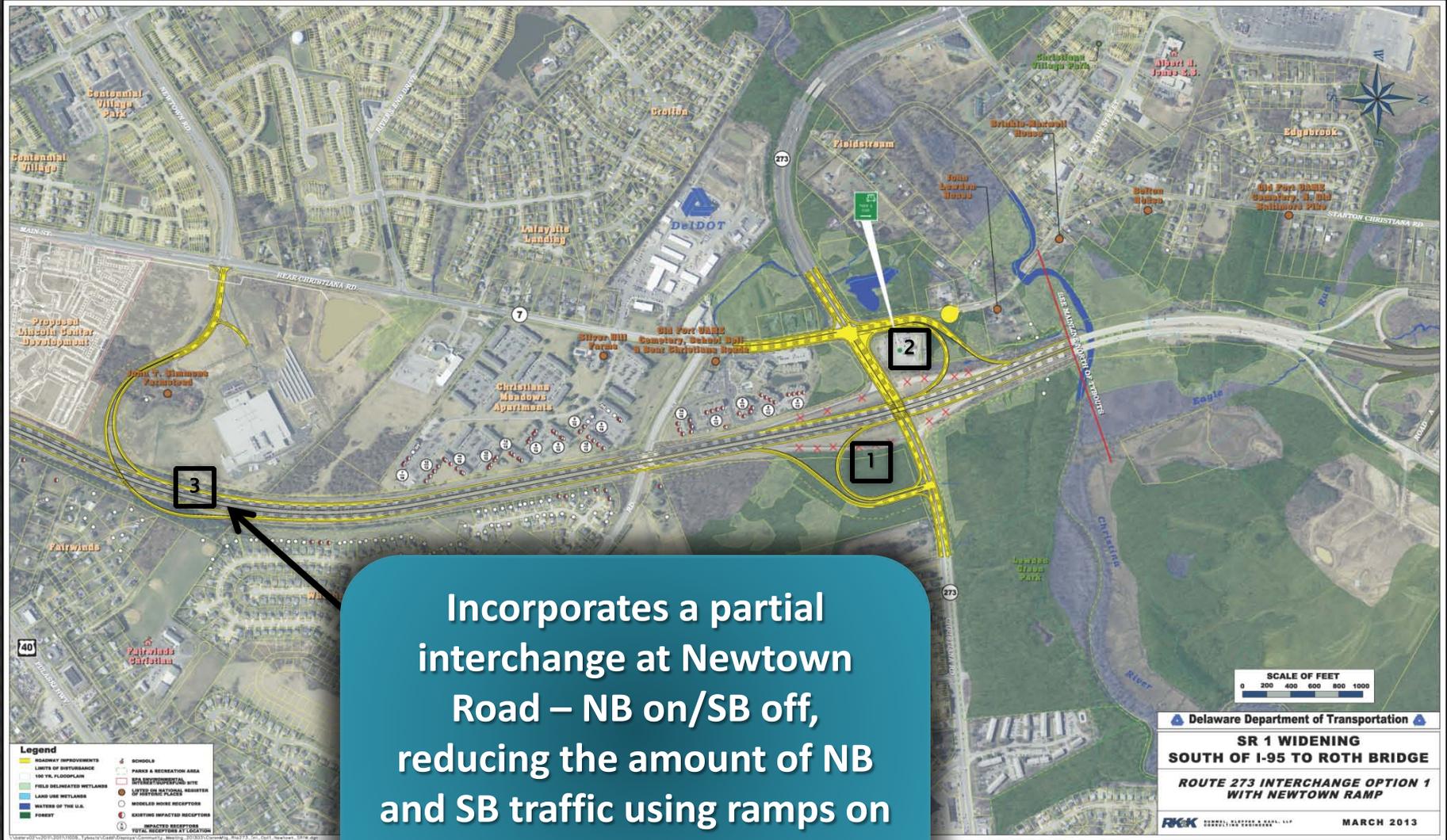


Replaces SB on ramp with free-flow loop ramp



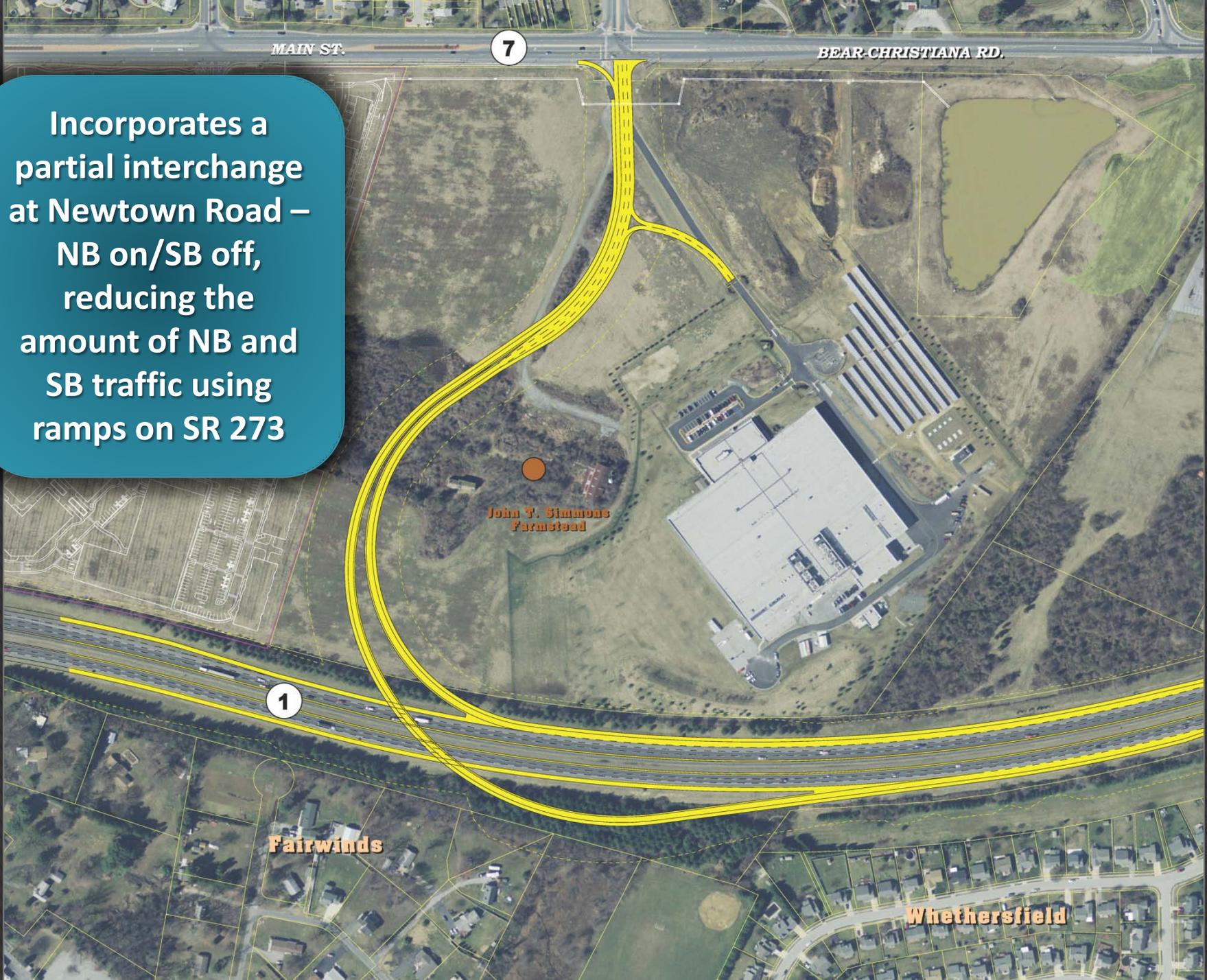
SR 273 Interchange

Option 1



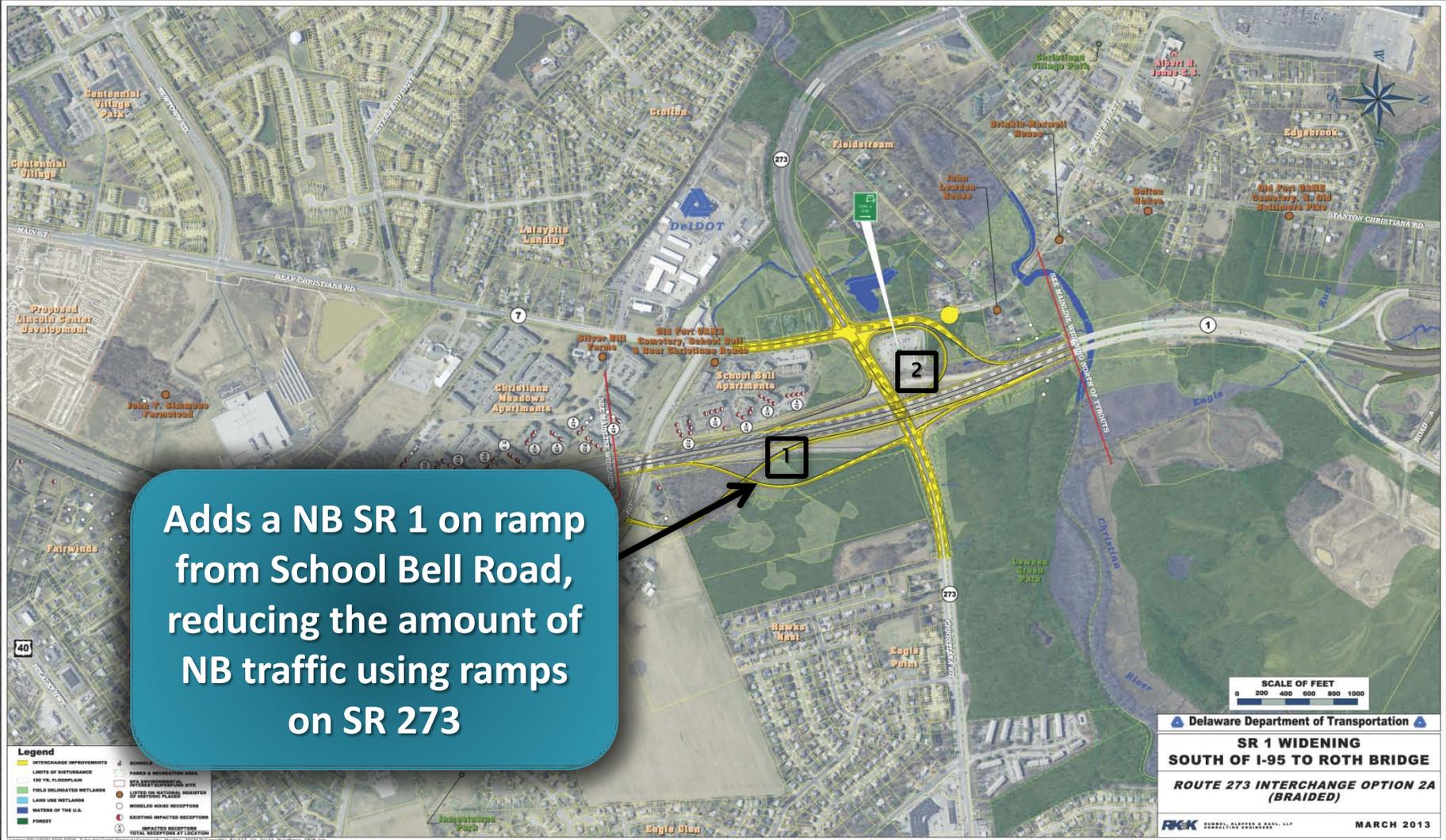
Incorporates a partial interchange at Newtown Road – NB on/SB off, reducing the amount of NB and SB traffic using ramps on SR 273

Incorporates a partial interchange at Newtown Road – NB on/SB off, reducing the amount of NB and SB traffic using ramps on SR 273



SR 273 Interchange

Option 2



Adds a NB SR 1 on ramp from School Bell Road, reducing the amount of NB traffic using ramps on SR 273



Adds a NB SR 1 on ramp from School Bell Road, reducing the amount of NB traffic using ramps on SR 273

SR 273 Interchange

Option 2





273

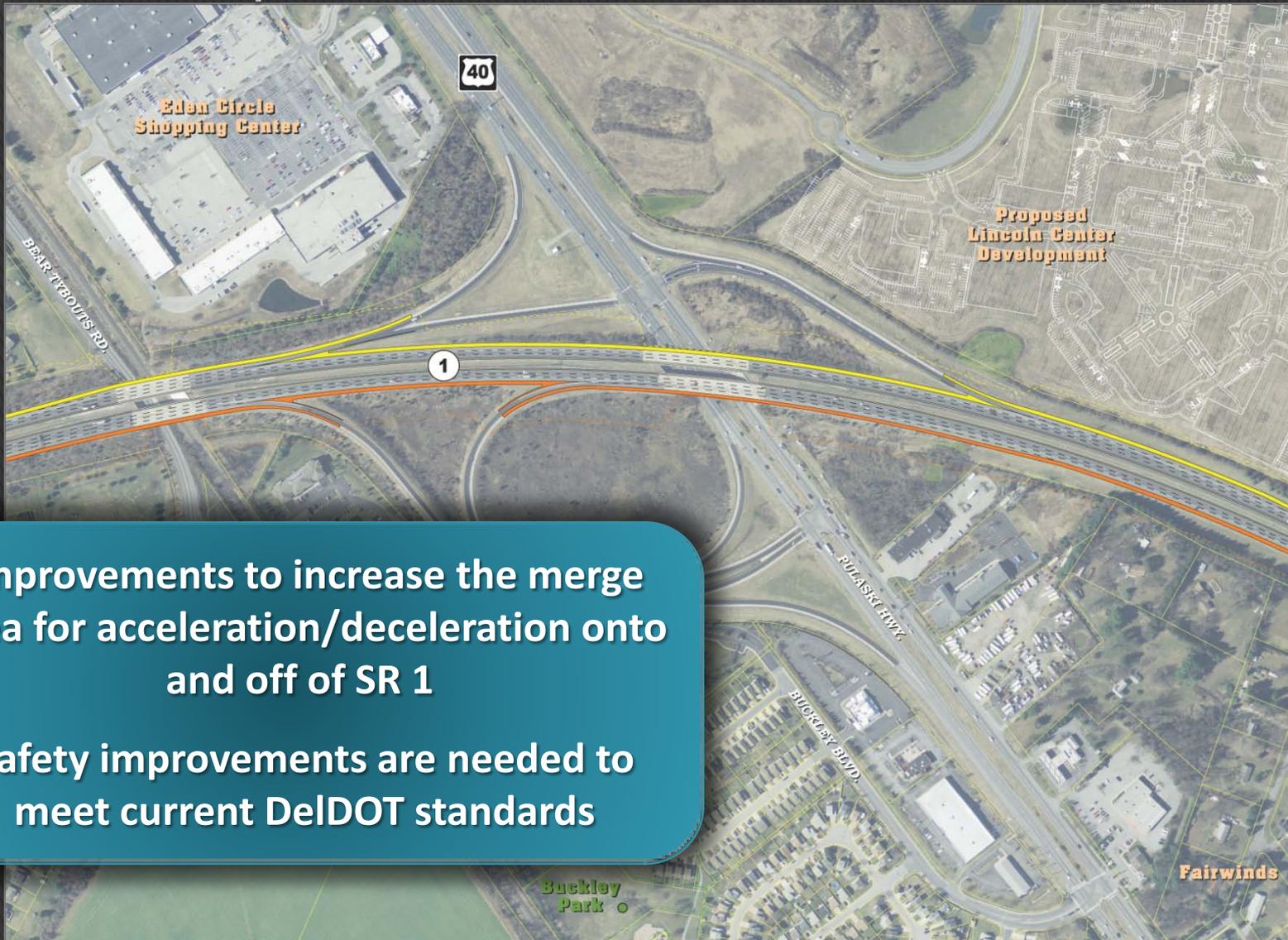
1

John
Lewden
House

Replaces SB on
ramp with free-flow
loop ramp

US 40 Interchange

Operational Improvements



- Improvements to increase the merge area for acceleration/deceleration onto and off of SR 1
- Safety improvements are needed to meet current DeIDOT standards

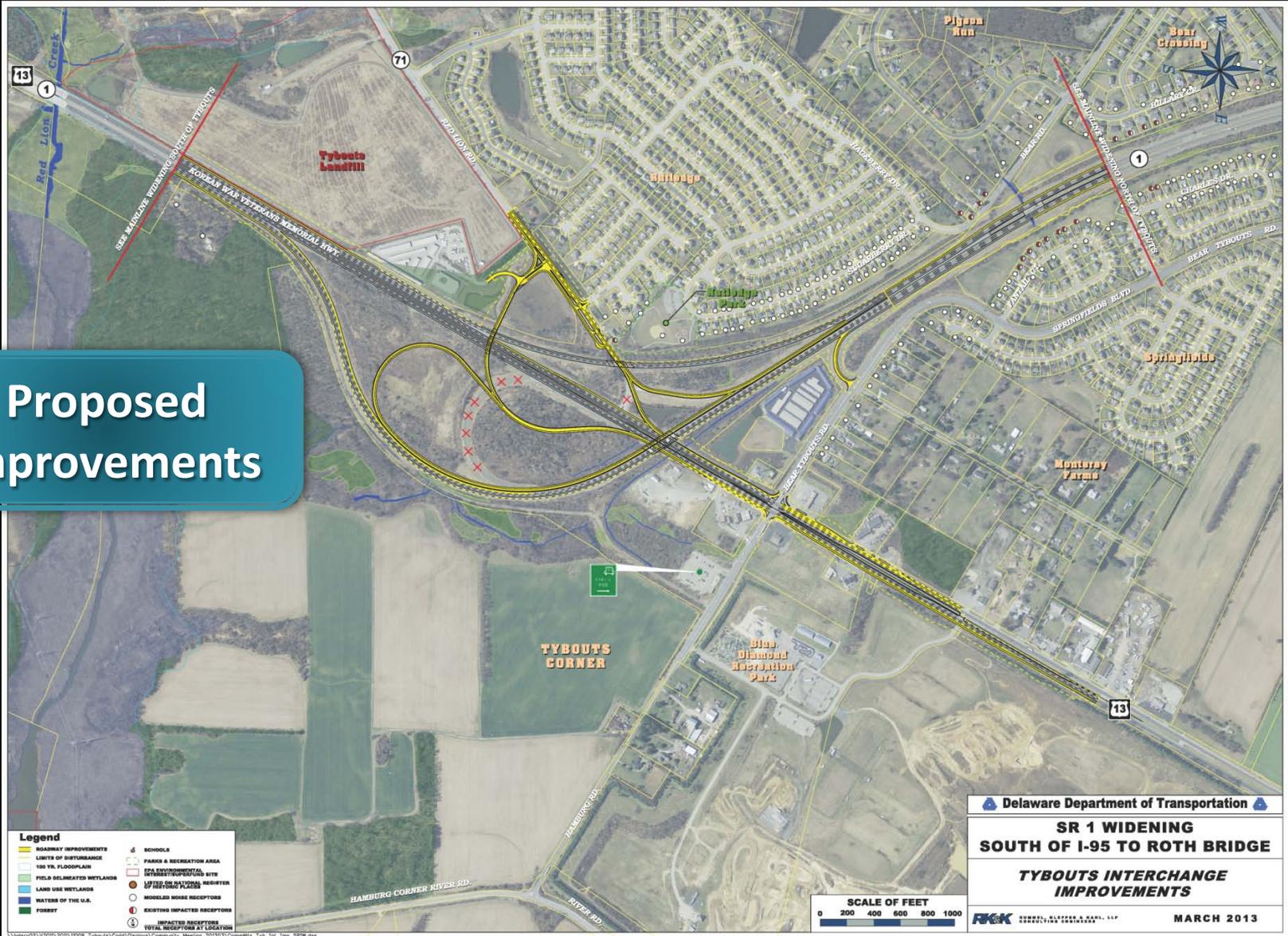
Tybouts Interchange

Existing
Conditions



Tybouts Interchange

Proposed Improvements

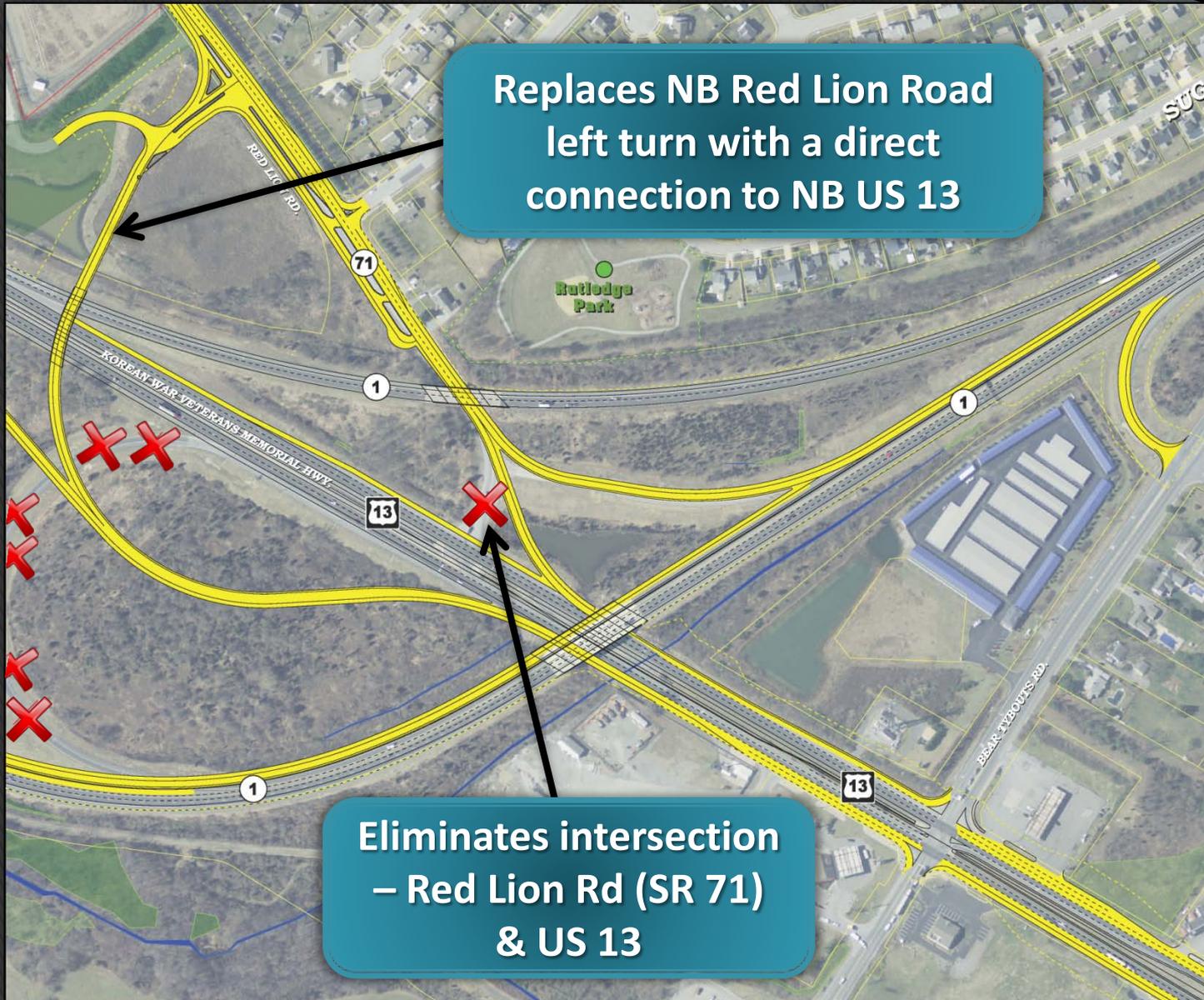


Tybouts Interchange



**Allows 2
continuous SB SR 1
lanes of traffic**

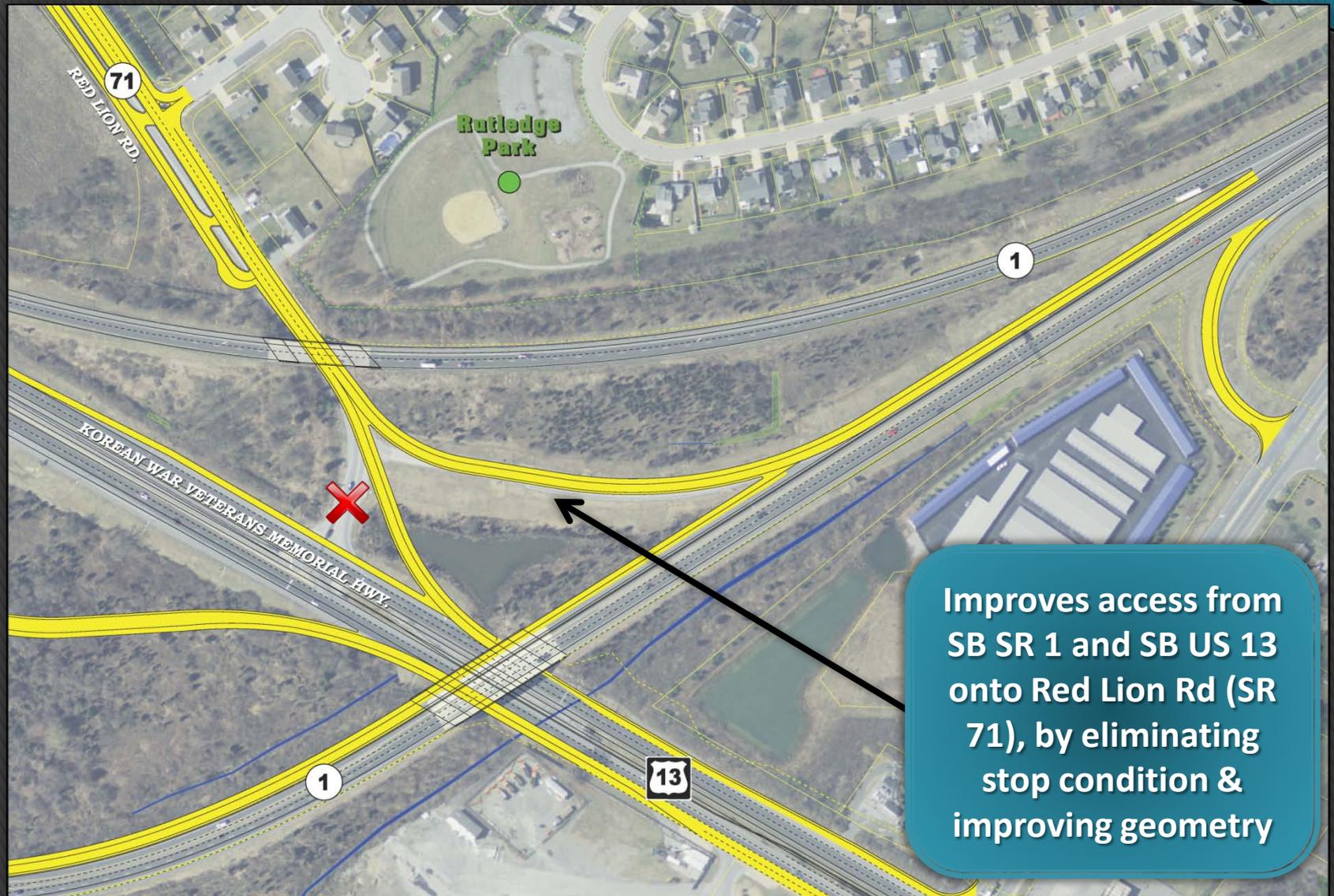
Tybouts Interchange



Replaces NB Red Lion Road left turn with a direct connection to NB US 13

Eliminates intersection - Red Lion Rd (SR 71) & US 13

Tybouts Interchange



Improves access from SB SR 1 and SB US 13 onto Red Lion Rd (SR 71), by eliminating stop condition & improving geometry

Tybouts Interchange



Improves
safety – US 13
& Hamburg Rd



Tybouts Interchange



Avoids Tybouts
Landfill
Superfund Site



SR 72 Interchange

Existing Conditions



SR 72 Interchange

Option 1



SR 72 Interchange

Option 1

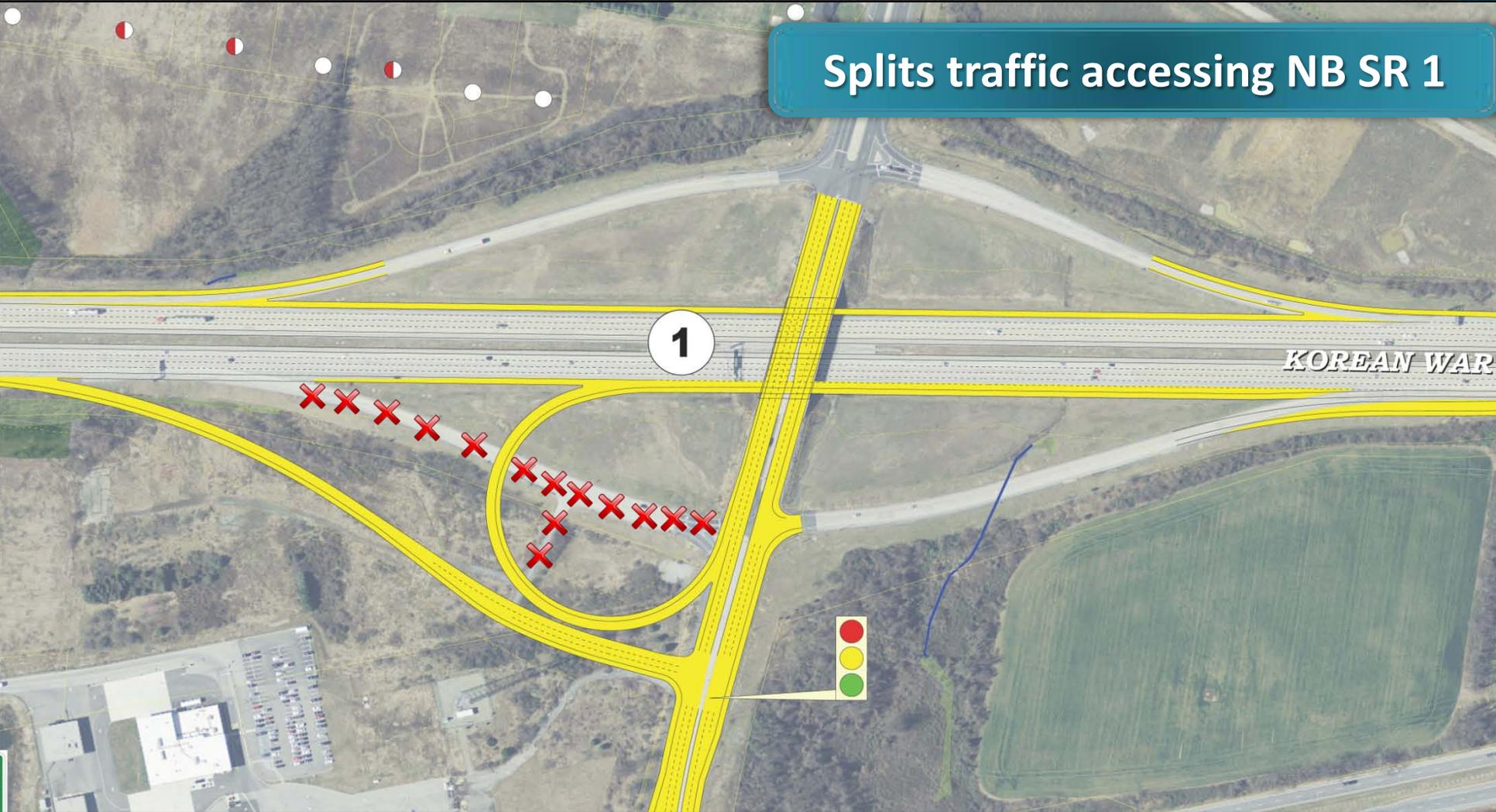


Replaces left turn onto NB SR 1
with free-flow loop ramp

SR 72 Interchange

Option 1

Splits traffic accessing NB SR 1



SR 72 Interchange

Option 1

Adds a new right turn lane on SB US 13



Stapleford Property

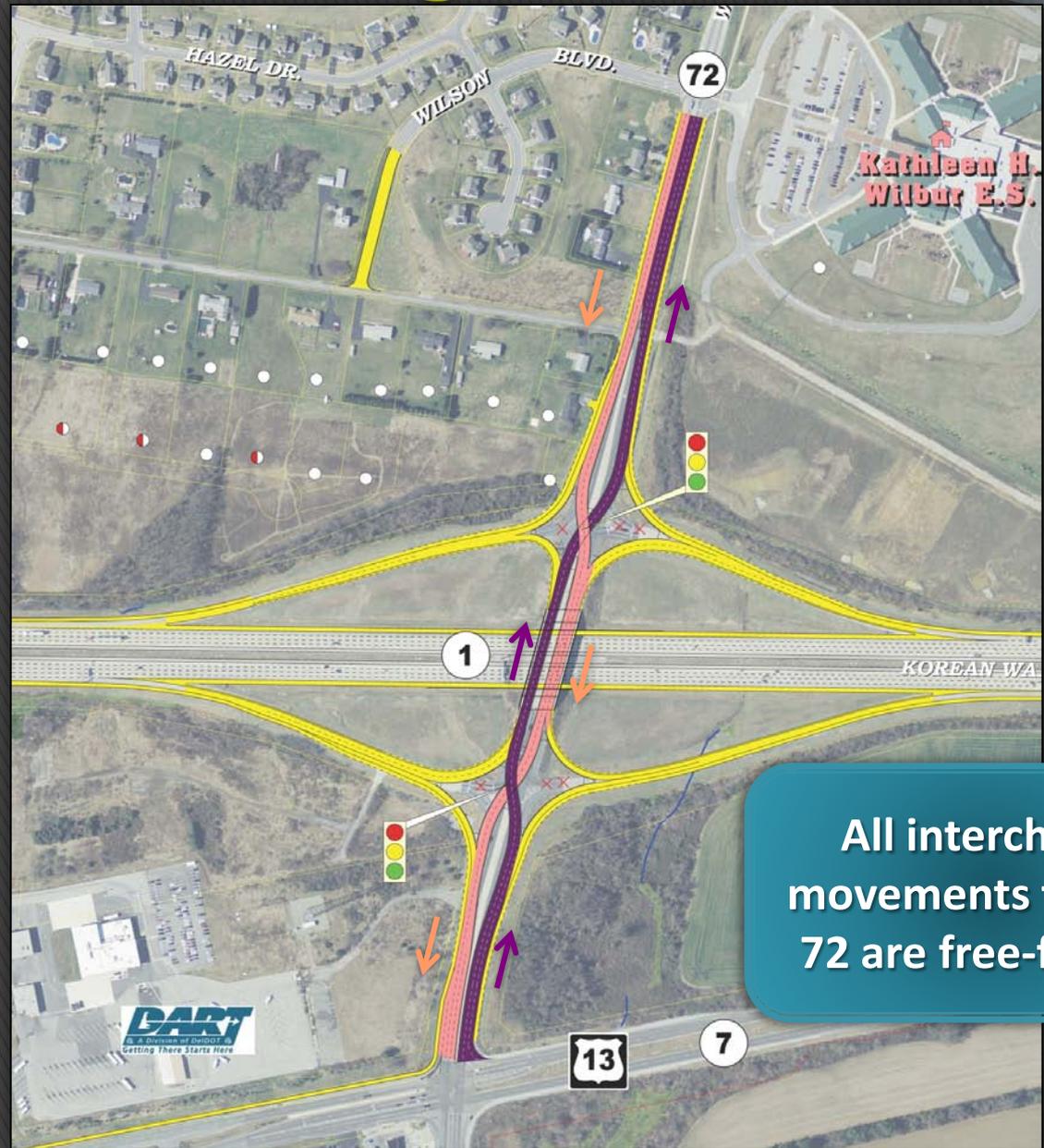
SR 72 Interchange

Option 2



SR 72 Interchange

Option 2



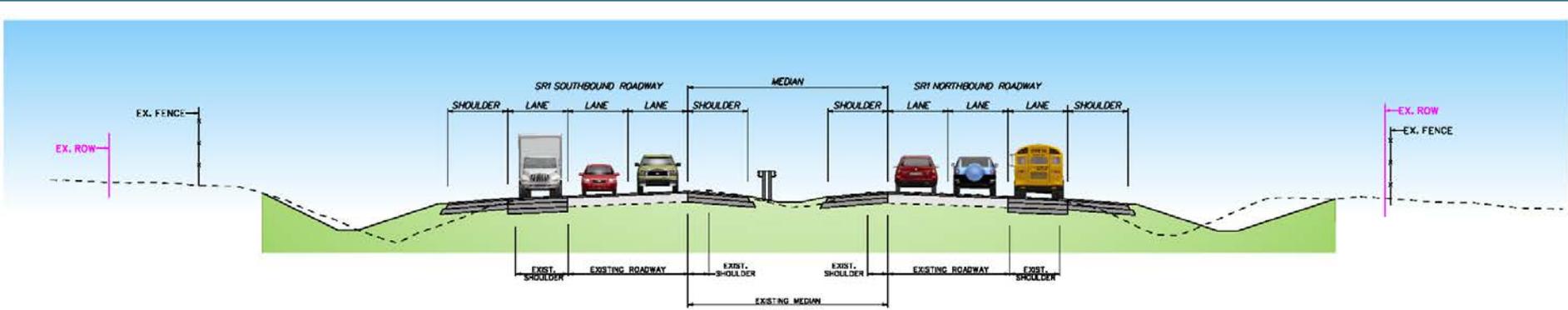
All interchange movements from SR 72 are free-flowing

Mainline Widening

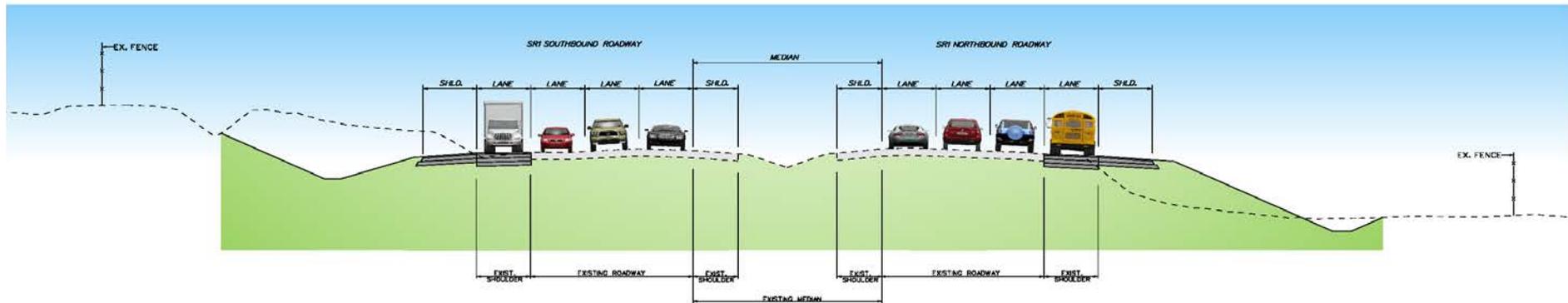
- ▶ Three Alternatives
 - Outside-Outside Widening
 - West Side Widening
 - East Side Widening

Mainline Widening

- ▶ Outside-Outside Widening Alternative



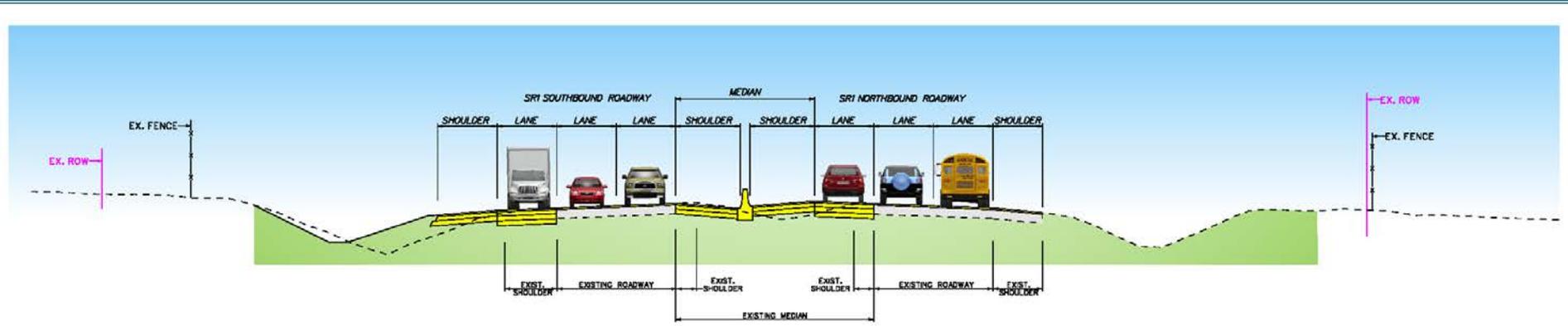
SR 273 TO TYBOUTS
OUTSIDE / OUTSIDE WIDENING



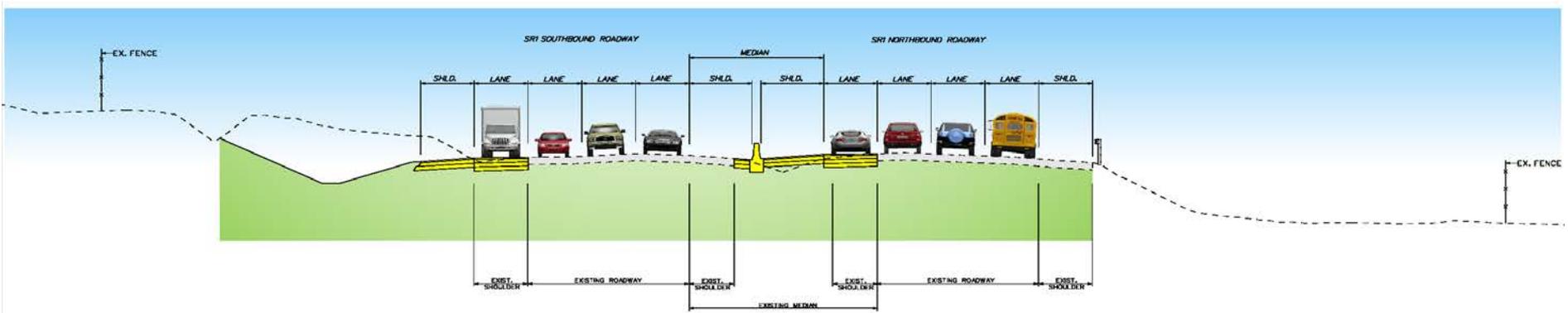
TYBOUTS TO ROTH BRIDGE
OUTSIDE / OUTSIDE WIDENING

Mainline Widening

West Side Widening Alternative



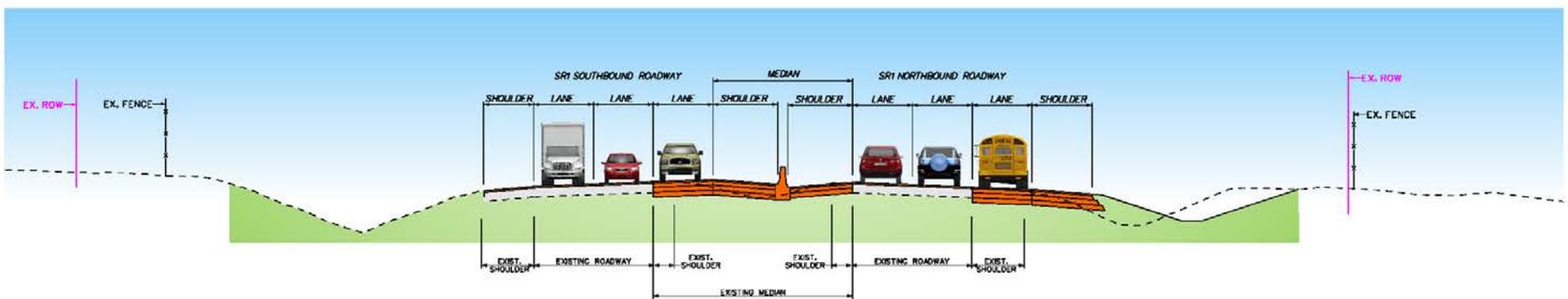
SR 273 TO TYBOUTS
WEST SIDE WIDENING



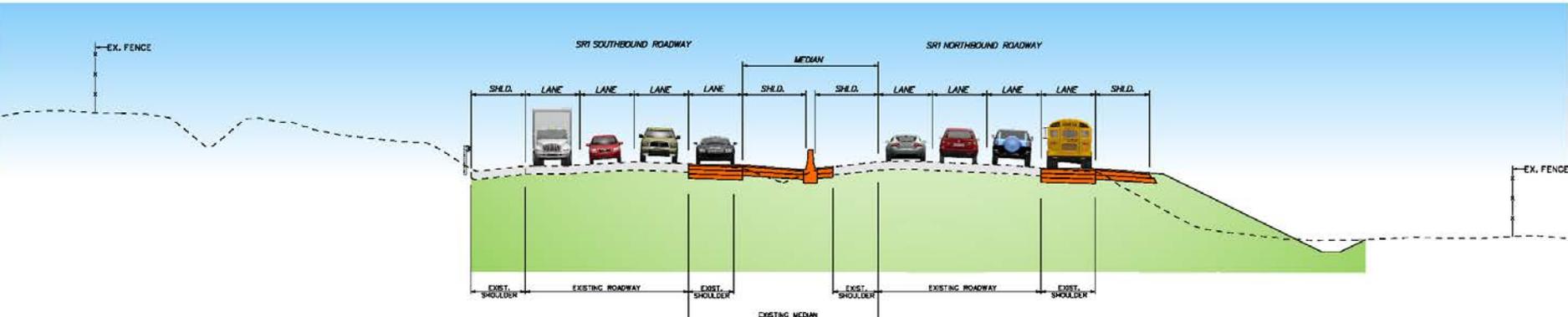
TYBOUTS TO ROTH BRIDGE
WEST SIDE WIDENING

Mainline Widening

▶ East Side Widening Alternative



SR 273 TO TYBOUTS
EASTSIDE WIDENING



TYBOUTS TO ROTH BRIDGE
EASTSIDE WIDENING

Summary

- ▶ Thank you for being part of our public workshop.
- ▶ Our Project Team welcomes your discussion and comments at the various display board stations.
- ▶ Your comments may be submitted by:
 - Completing the comment form provided at tonight's public workshop
 - Visiting the project website: sr1.deldot.gov
 - E-mailing DeDOT Public Relations: dot-public-relations@state.de.us
 - Writing to DeDOT Public Relations: 800 Bay Road, Dover, Delaware 19901
- ▶ Next Public Workshop:
 - April 18, 2013 (6:00 PM – 9:00 PM): Wilbur Elementary School
 - Summer 2013: Noise Analysis Results