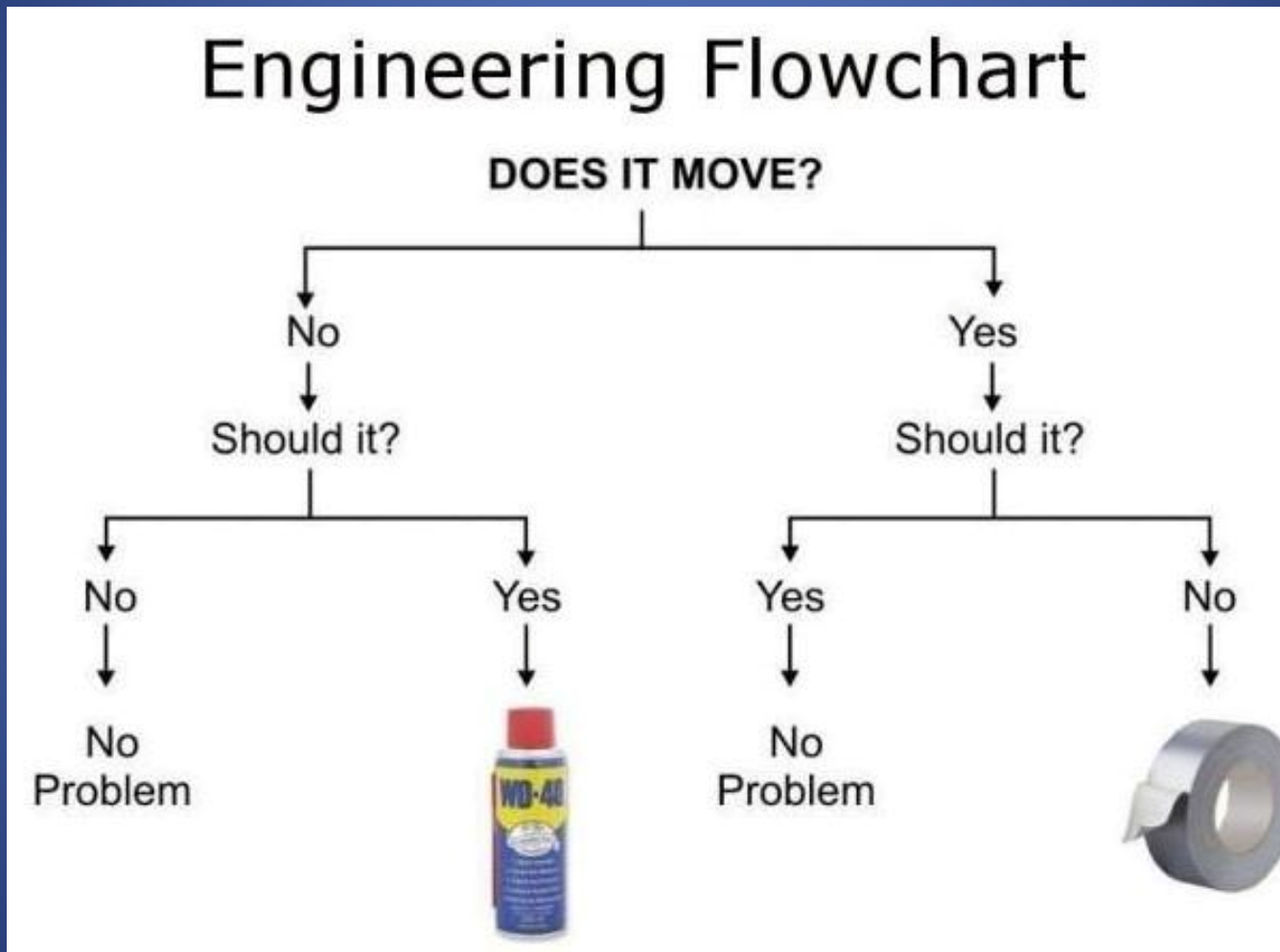


SD50 Divided 4 Lanes

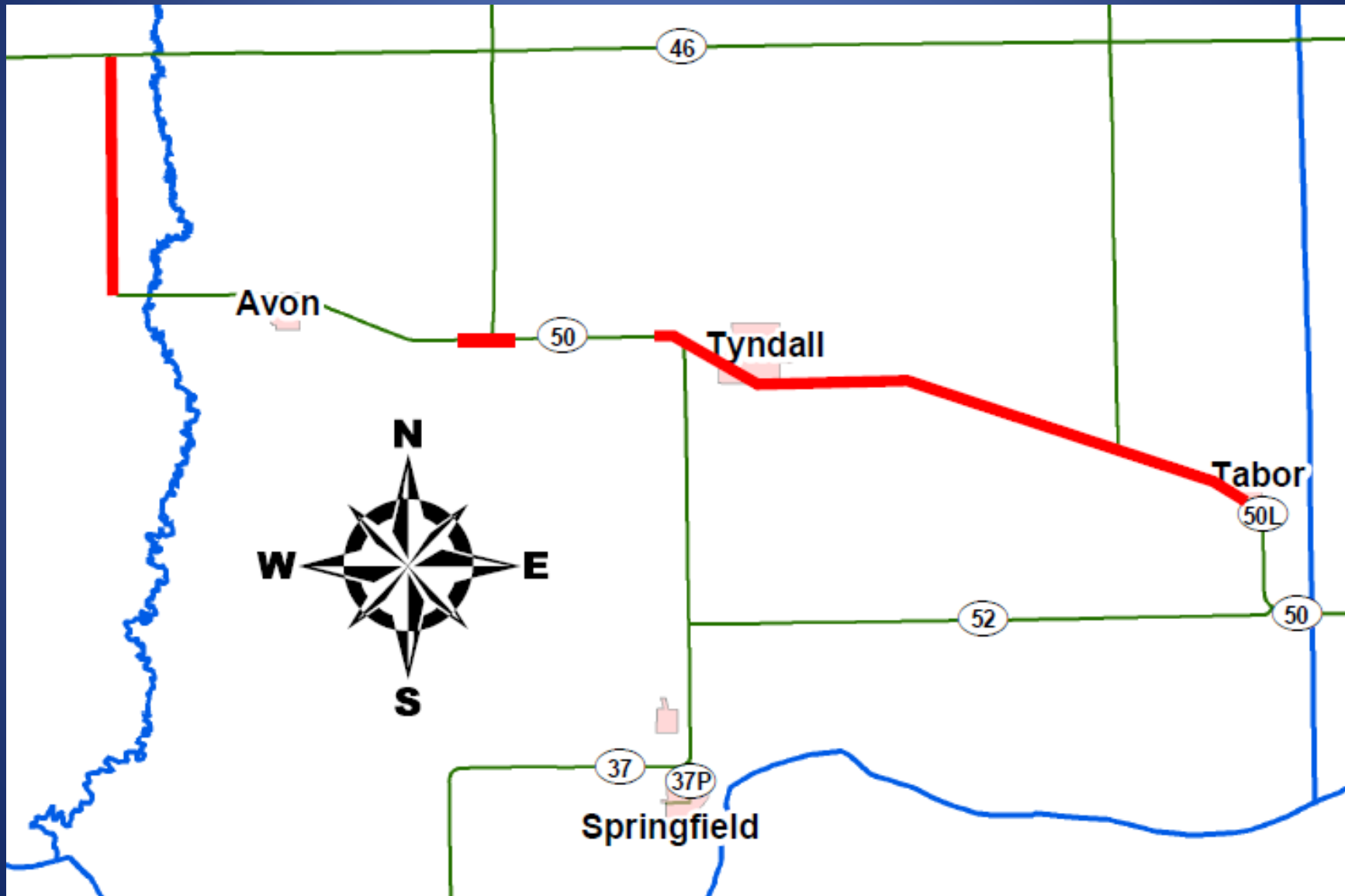
Engineering Flowchart



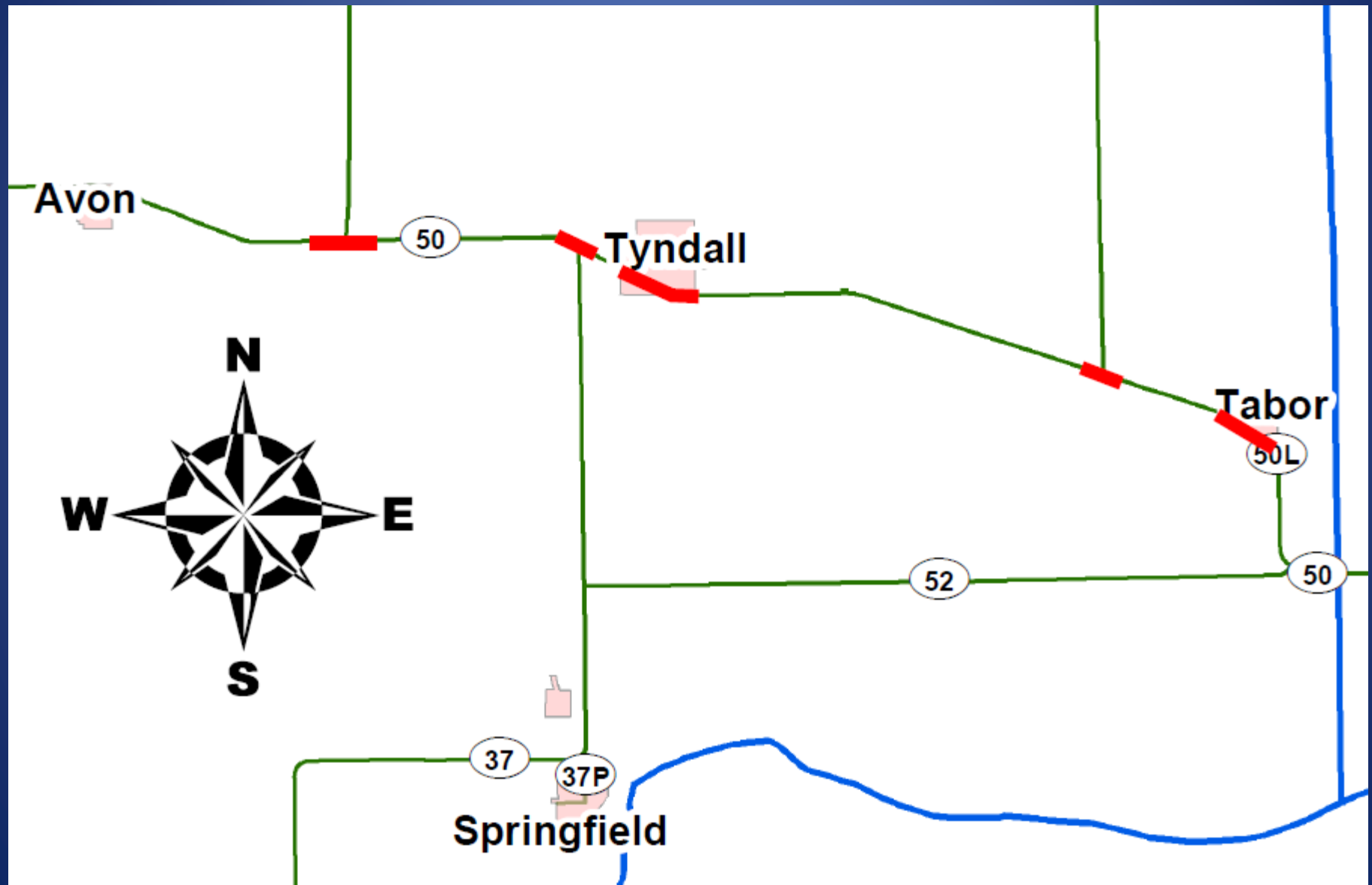
Mark Malone, PE

SD DOT

Project Limits



Reconstruction Limits



Why are we here?

- To involve public in the design process
- Exchange ideas – listen and discuss concerns
- To discuss the divided highway segments of SD50
 - ✓ Traffic Impacts
 - ✓ Right of Way Impacts
 - ✓ Safety Impacts



Crash numbers – 2005-2014

- SD37W, SD37E, SD25 – 32 crashes
 - ✓ 16 Injury
- Tyndall – 18 crashes
 - ✓ 10 Injury
- Tabor – 5 crashes
 - ✓ 3 Injury



Intersection Fatalities 3 at or near Tyndall



CARD

FATAL

STATE OF SOUTH DAKOTA INVESTIGATOR'S
MOTOR VEHICLE TRAFFIC ACCIDENT REPORT

Please Type or Print

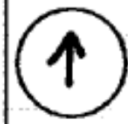
117 Fatality

Submission

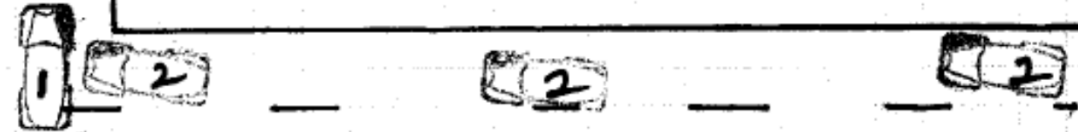
Date of Accident (MM/DD/YY) 09/25/04	Time of Accident (HHMM) 0757	County BON HOMME	City
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ACCIDENT DIAGRAM

Indicate North



Ford Ave



SD 50 WB Lanes



Yield sign

median

SD 37 EB Lanes



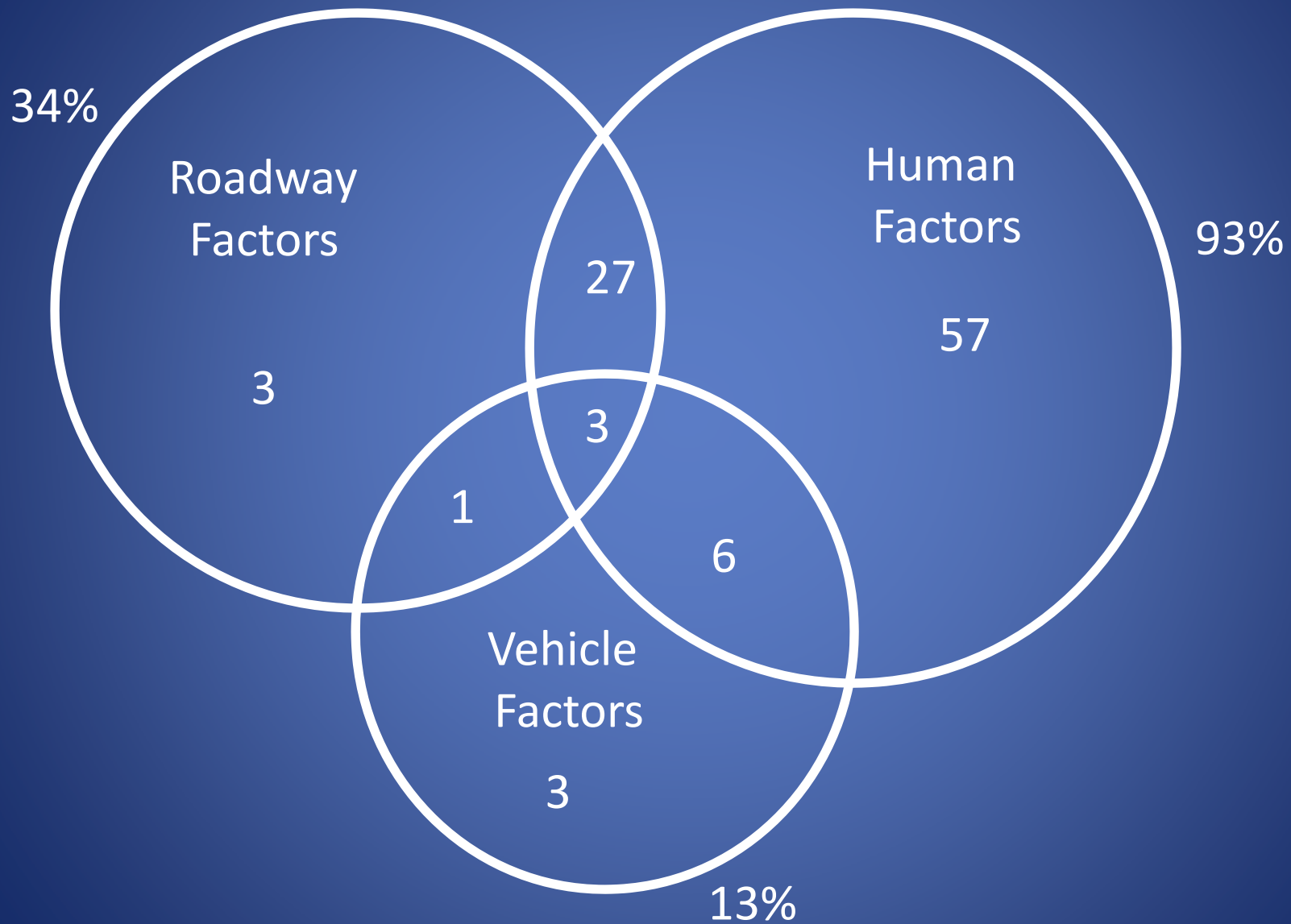
T stop sign

SD 37

ACCIDENT NARRATIVE: Describe What Happened

VEHICLE #1 WAS NORTHBOUND ON SD 37. VEHICLE #2 WAS WESTBOUND ON SD 50. THE DRIVER OF VEHICLE #1 FAILED TO YIELD AFTER STOPPING FOR THE STOP SIGN AT THE SD 37/50 JUNCTION. VEHICLE #1 WAS STRUCK ON THE PASSENGER SIDE BY VEHICLE # 2 AND PUSHED INTO THE DITCH ON THE NORTH SIDE OF THE ROAD. VEHICLE #2 SUSTAINED FRONT END DAMAGE FROM THE IMPACT AND ALSO CAME TO REST IN THE NORTH DITCH.

Crashes - Contributing Factors



Intersection Safety Study

- By Felsburg, Holt & Ullevig
 - Lincoln NE
- 12 Divided 4 lane intersections in SD
- Reviewed and discussed many alternatives
- These intersections had:
 - Lowest traffic volumes of intersections reviewed
 - Lower end of Crash & Severity Rates (1 exception)
 - E Jct SD37
 - Highest crash rate of all intersections reviewed
 - 2nd Highest Severity Rate

SDDOT Intersection Review



Traffic



Crashes

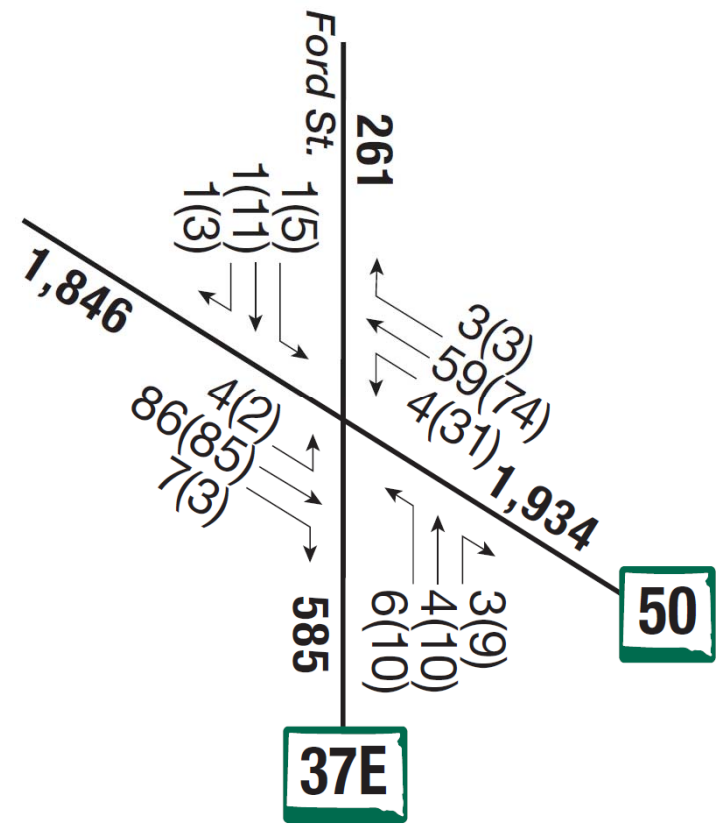
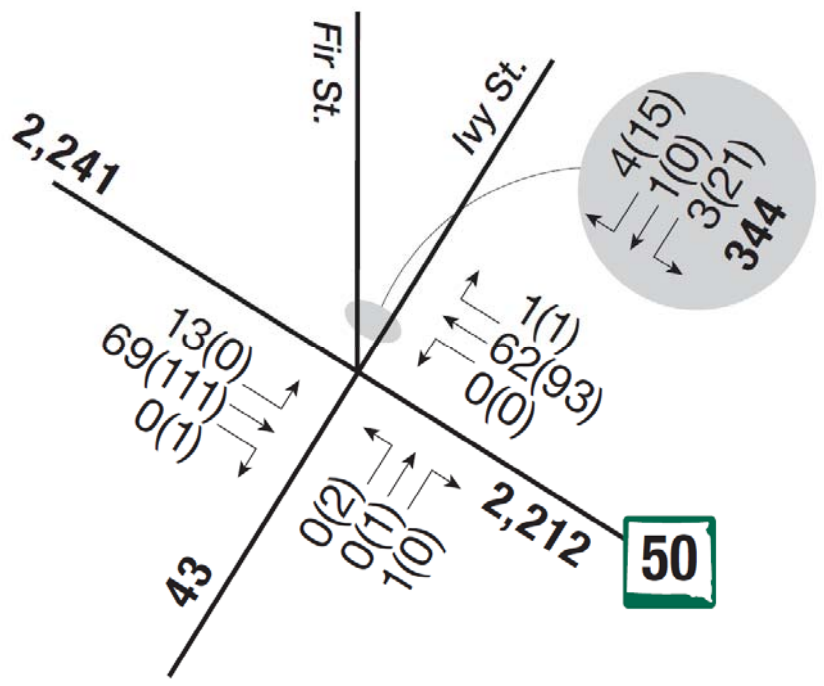


Costs

Evaluate Alternatives



Traffic Data



LEGEND

- xxx(xxx) = AM(PM) Peak Hour Traffic Volumes
- XXXX = Daily Traffic Volumes

Why remove 4 lane divided?

Table 15-10 Estimated Number of Lanes

Total Number of Lanes	Total Design Year ADT (vpd) ¹	
	Rural Level	Urban
2	< 8,000	< 2,500
3	²	2,500 to 16,000
4	8,000 to 20,000 ³	³
5	²	16,000 to 30,000
6	> 20,000 ⁴	> 30,000 ⁴

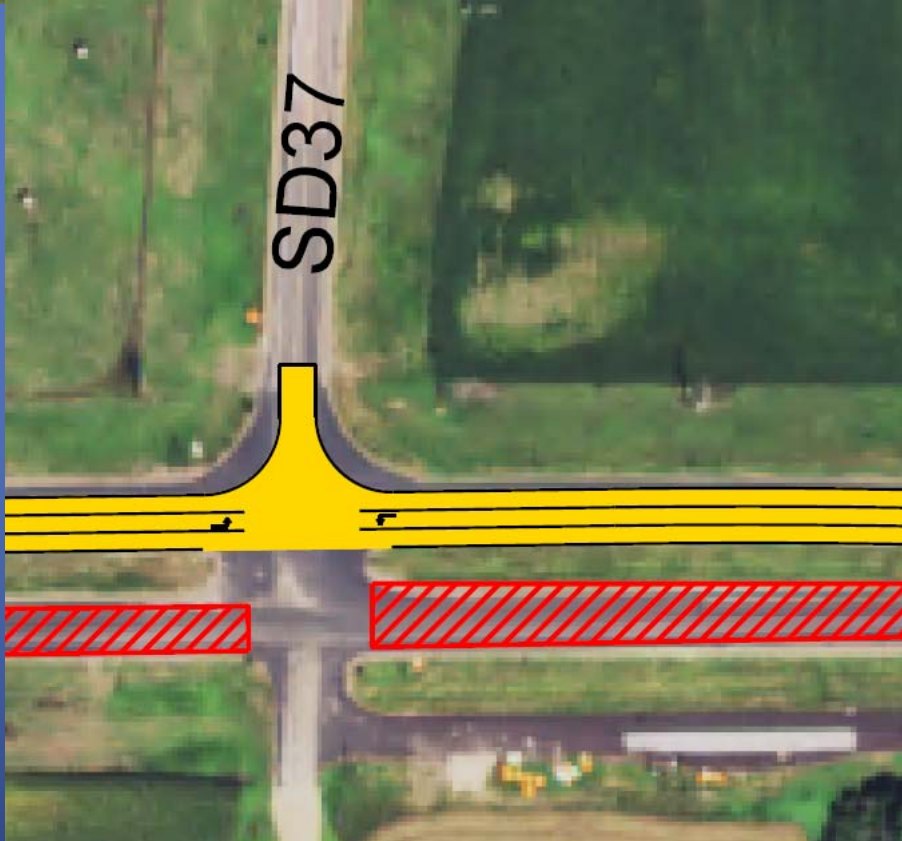
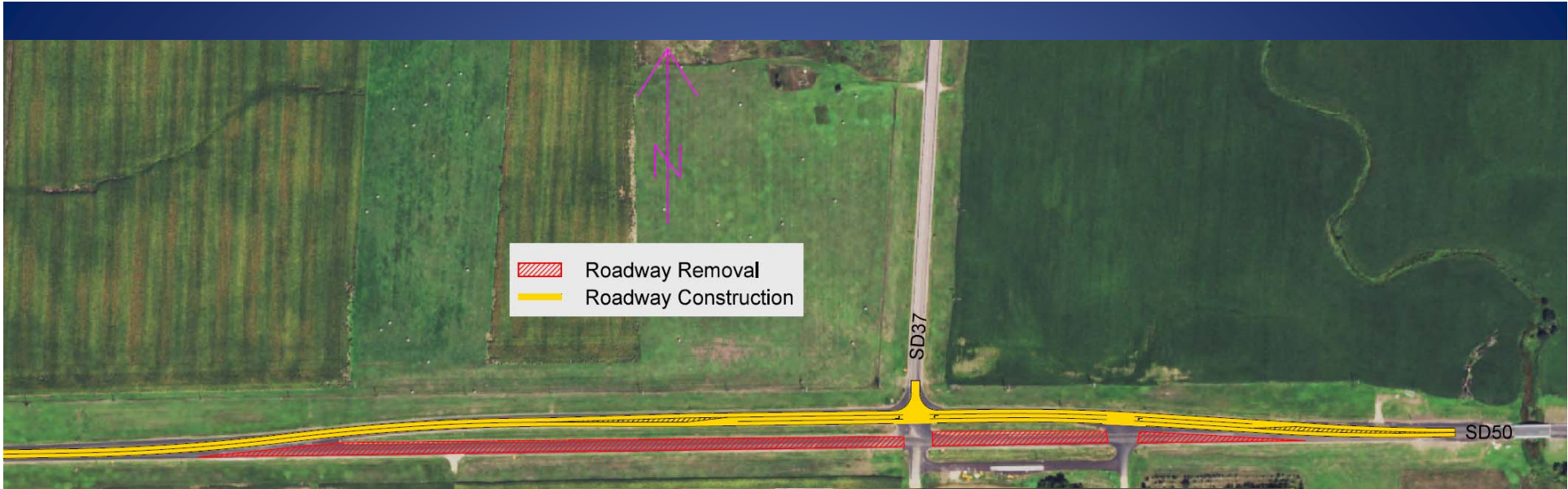
- ¹ Construction/Reconstruction projects are designed based on a typical 20 year ADT projection beyond the anticipated year of project construction.
- ² Continuous left turn lanes may be considered based on left turn volumes and/or when intersections and/or approaches are closely spaced together.
- ³ Undivided sections may be used if left turn movements are low and there is no crash history, otherwise consider installing a median or 5 lane section.
- ⁴ Medians should be used.

- Dell Rapids - 3 lanes: 3,655 ADT

Roadway Safety Audit Review

- Independent review
 - ✓ Clay County Sherriff, Yankton County Deputy, Highway Patrol, Highway Safety Engineer, Traffic Engineers, FHWA, etc.
- August 26, 2014
- Recommendation: Eliminate 4 lane divided highway and provide 2 lanes with a center turn lane

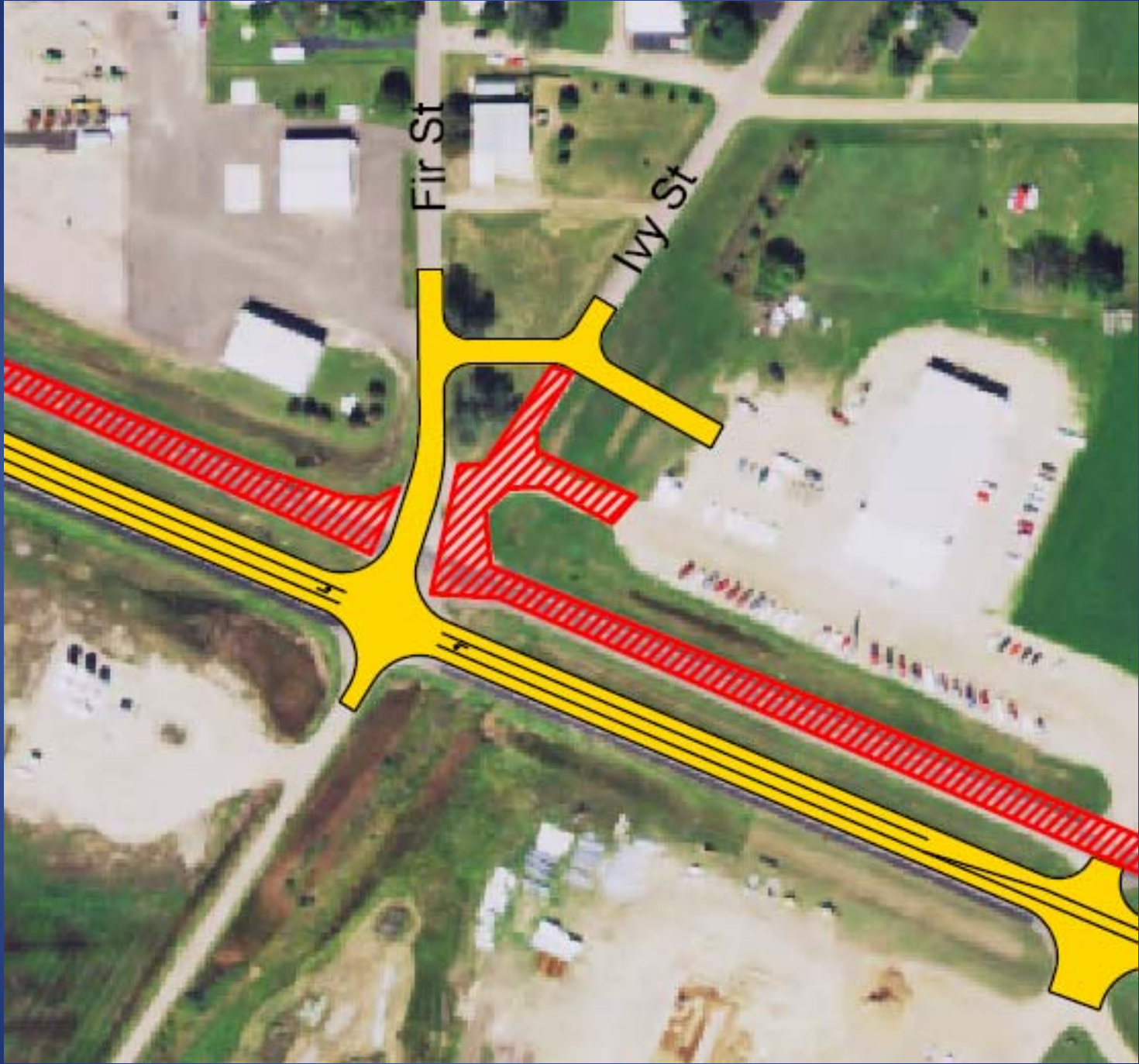


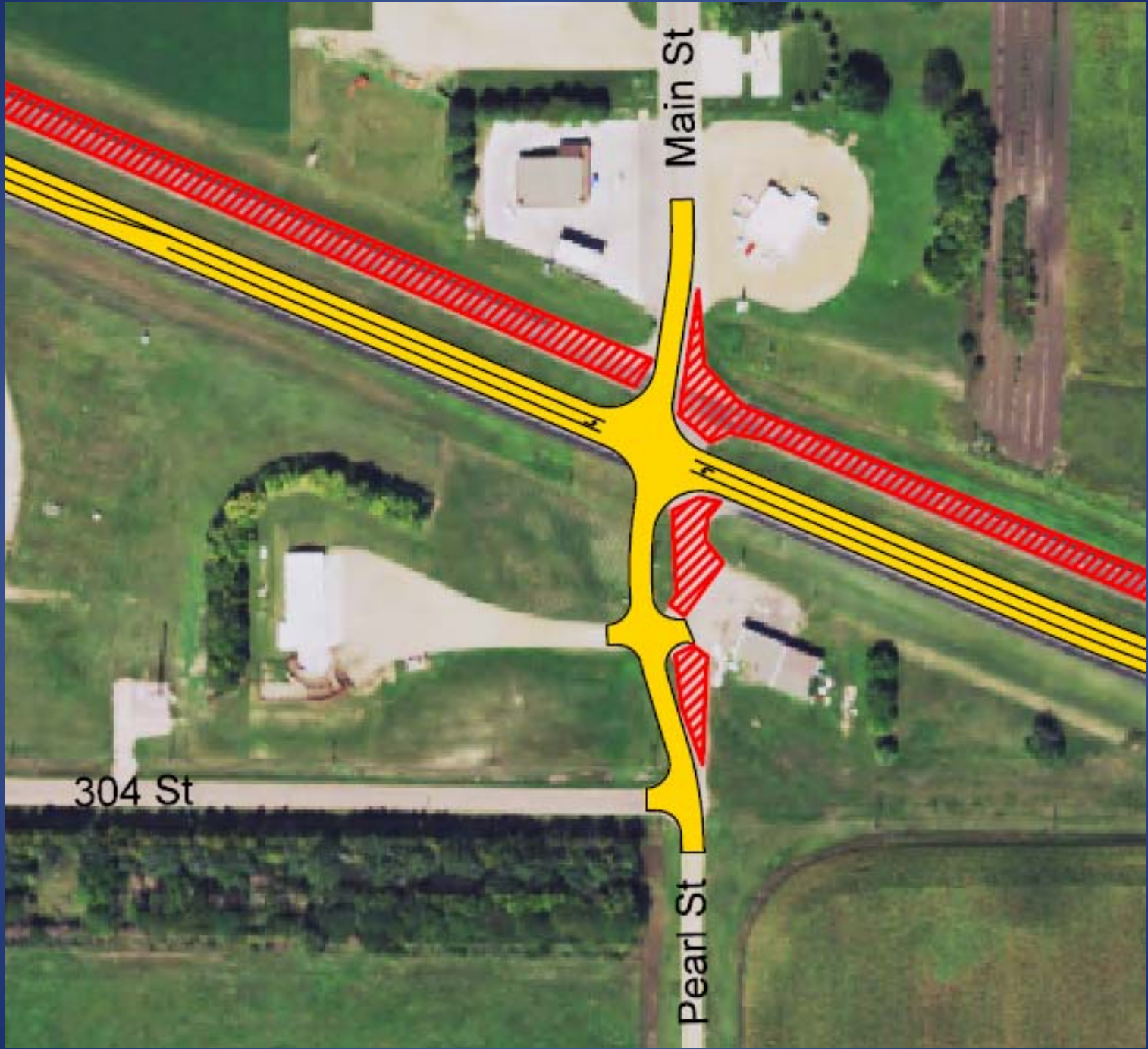














Tabor

- Roadway Removal
- Roadway Construction

Bent Kottma St

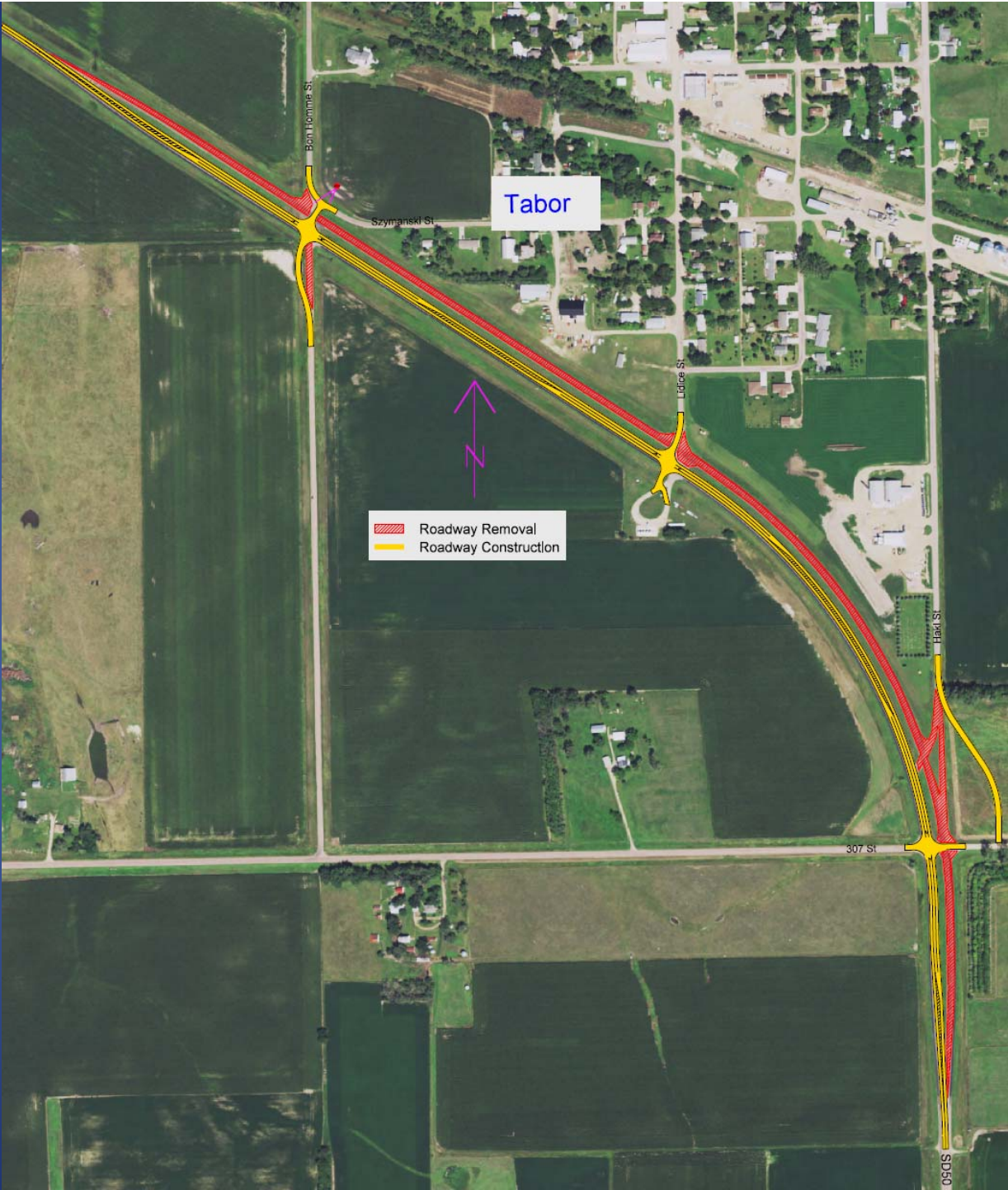
Szymanski St

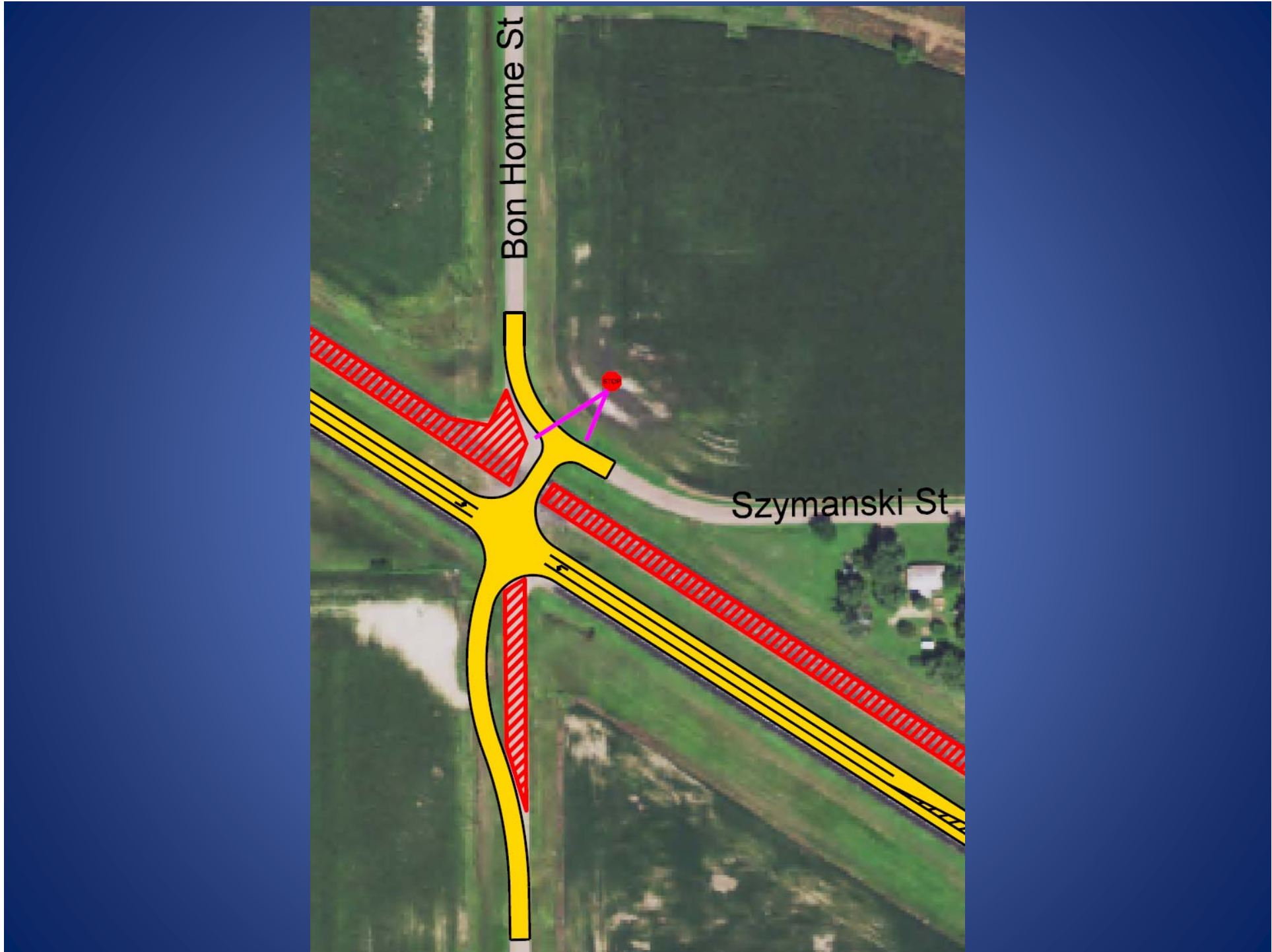
Lidre St

Haki St

307 St

0505

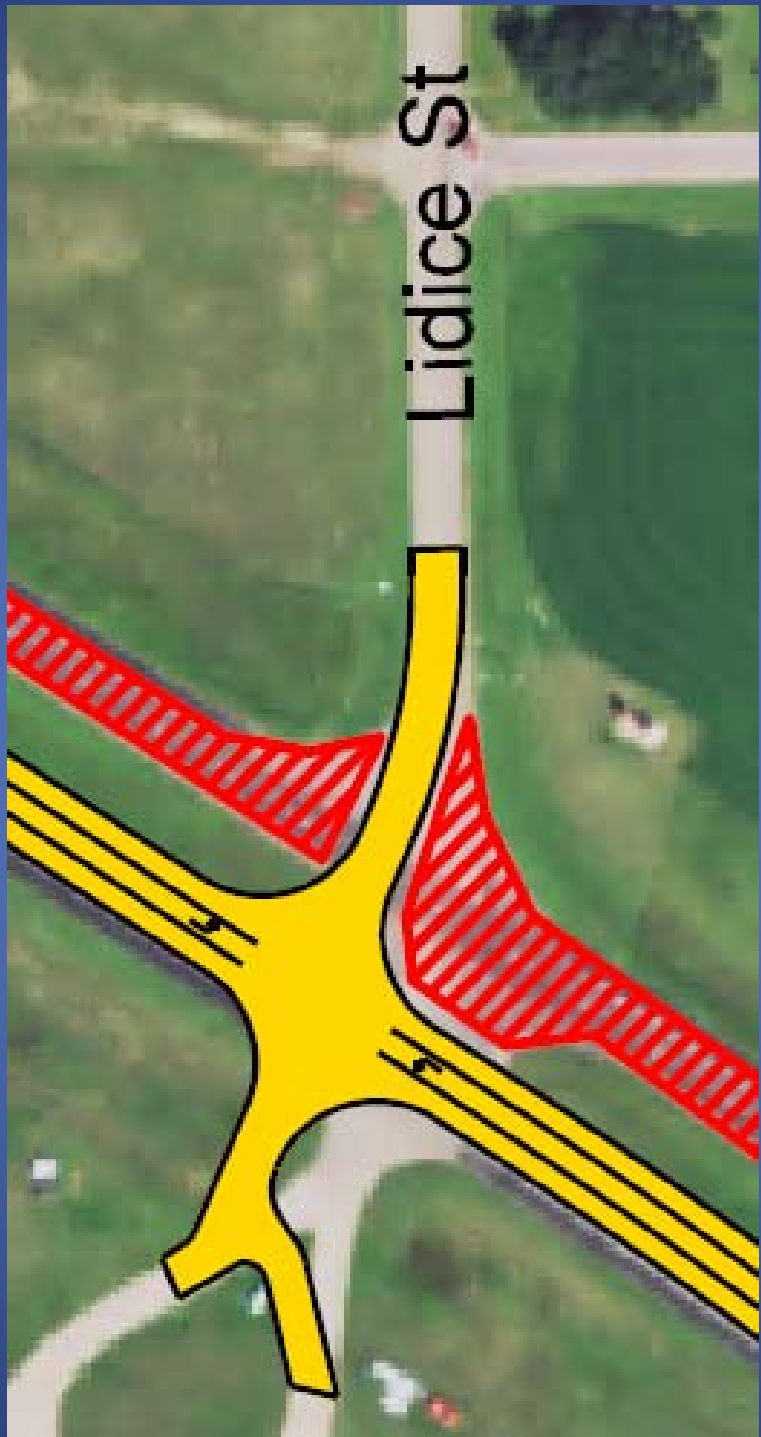




Bon Homme St

Szymanski St

Lidice St





➤ Another Option



Speed limit proposals

- SDDOT will conduct speed study following construction
 - ✓ Preliminary thought of 45mph-50mph
 - ✓ Burke is 40 mph
 - Observed speeds 45mph-50mph



Project Construction

- Construction currently scheduled for 2020 or beyond
 - ✓ Developmental STIP
 - ✓ Pending Funding & Scheduling
 - ✓ 1 construction season





- Projected Cost - \$14.17 M
 - ✓ Reconstruction - \$8.33 M (3.5 mi)
 - ✓ Resurfacing - \$5.84 M (12.9 mi)

Traffic During Construction

➤ Area/Region Offices currently reviewing options

✓ 1 Construction Season

✓ Minor Impacts

✓ Access to homes & businesses will be maintained






- Design will meet with affected landowners
 - ✓ Schedule is yet to be determined
 - Right of Way Impacts

➤ Written Comments Due Mon. Aug 17, 2015

- ✓ Mail - 700 E Broadway Ave Pierre, SD 57501
- ✓ Email – mark.malone@state.sd.us
- ✓ Here - Now



Comments
encouraged!

➤ Website (project information)

- ✓ <http://sddot.com/dot/publicmeetings>

Q&A

You have

Questions

We have

Answers