





LEGEND	
	App. Ex. R/W
	Proposed Asphalt Removal
	Proposed Asphalt Addition
	Proposed Concrete Addition

SCALE:
1" = 400'

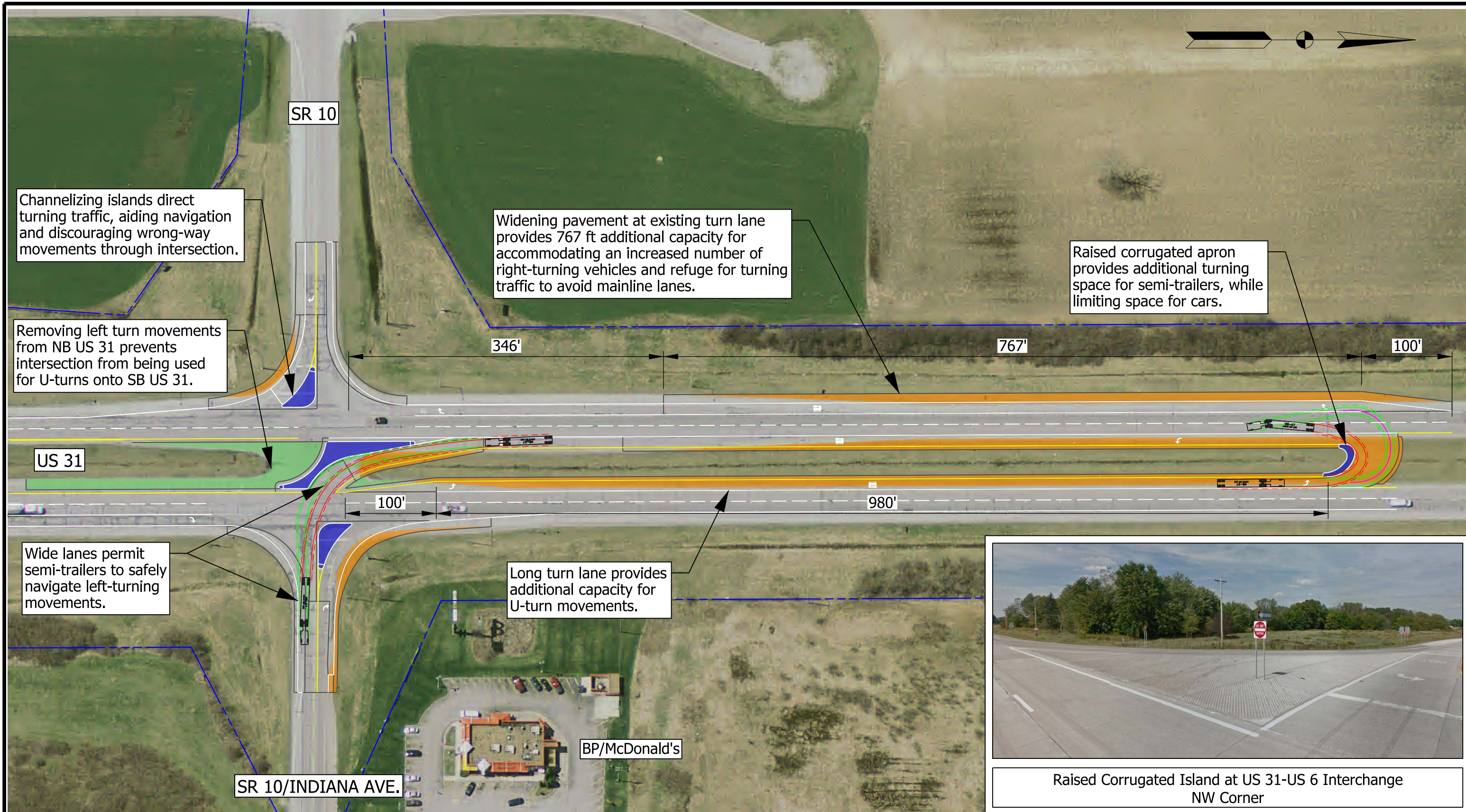


US 31 AT SR 10
INTERSECTION IMPROVEMENT
DES. NO. 1383618

OVERALL LAYOUT

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Channelizing islands direct turning traffic, aiding navigation and discouraging wrong-way movements through intersection.

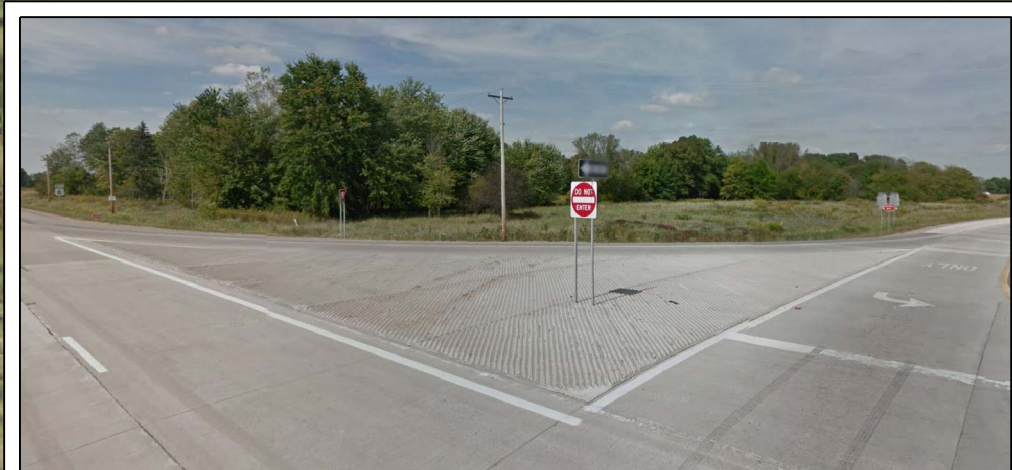
Widening pavement at existing turn lane provides 767 ft additional capacity for accommodating an increased number of right-turning vehicles and refuge for turning traffic to avoid mainline lanes.

Raised corrugated apron provides additional turning space for semi-trailers, while limiting space for cars.

Removing left turn movements from NB US 31 prevents intersection from being used for U-turns onto SB US 31.

Wide lanes permit semi-trailers to safely navigate left-turning movements.

Long turn lane provides additional capacity for U-turn movements.

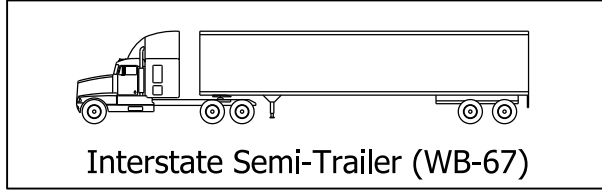


Raised Corrugated Island at US 31-US 6 Interchange NW Corner

LEGEND

- App. Ex. R/W
- Proposed Asphalt Removal
- Proposed Asphalt Addition
- Proposed Concrete Addition

TURNING MOVEMENT VEHICLE



SCALE:
1" = 100'



US 31 AT SR 10
INTERSECTION IMPROVEMENT
DES. NO. 1383618
SR 10 INTERSECTION

Recommended turn lane lengths:
 IDM (46-4.02)
 100-ft taper + 780-ft deceleration + 200-ft storage
 AASHTO (ch. 9)
 180-ft taper + 680-ft deceleration (55 mph) + 100-ft storage (minimum)
 Commonly, deceleration is partly achieved in the through lanes, and the taper length may be considered as part of the deceleration (p. 718).

Existing Left-Turn Lane Conditions:
 543 ft with taper, northbound
 512 ft with taper, southbound

Proposed Full-Width Turn Lane Length:
 1080 ft, left turn
 1163 ft, right turn

Topp Industries

Removing left turn lanes from US 31 restricts left turns to those from westbound Dewey St., eliminating several potential conflicts, promoting use of the median U-turn crossover, and resulting in safer, more streamlined traffic movements.

Restricting eastbound Dewey St. to right-in/right-out reduces number of potential conflicts without significantly affecting other vehicle movements. Channelizing the right-out movement with an island reduces confusion and discourages wrong-way movements across median.

DEWEY ST.

Raised corrugated apron provides additional turning space for semi-trailers, while limiting space for cars.

Weigh-In Motion Sensors

1080'

US 31

100'

837'

326'

Wide directional median crossover promotes ease of navigation and safety for turning semi-trailers.

Truck loon provides extra space for semi-trailer U-turns, facilitating safe navigation and reducing shoulder damage over time.

Lengthen turn lane 837 ft, providing additional capacity due to increased number of right-turning vehicles and refuge for turning traffic to avoid mainline lanes.



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LEGEND

- App. Ex. R/W
- Proposed Asphalt Removal
- Proposed Asphalt Addition
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TURNING MOVEMENT VEHICLE

Interstate Semi-Trailer (WB-67)

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 troyergroup.com | Together, We Will

US 31 AT SR 10
 INTERSECTION IMPROVEMENT
 DES. NO. 1383618
 DEWEY ST. INTERSECTION

SCALE:
 1" = 100'