LEGEND

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

SCALE:
1" = 400'

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

OVERALL LAYOUT

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SR 10

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.

346'

767'

100'

US 31

100'

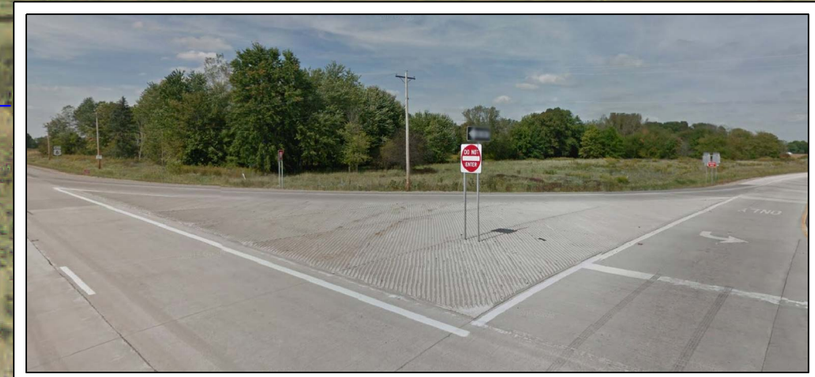
980'

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

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

BP/McDonald's

SR 10/INDIANA AVE.

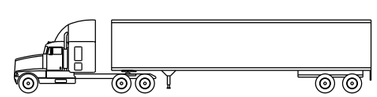


Raised Corrugated Island at US 31-US 6 Interchange
NW Corner

LEGEND

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

TURNING MOVEMENT VEHICLE



Interstate Semi-Trailer (WB-67)

SCALE:
1" = 100'

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

SR 10 INTERSECTION

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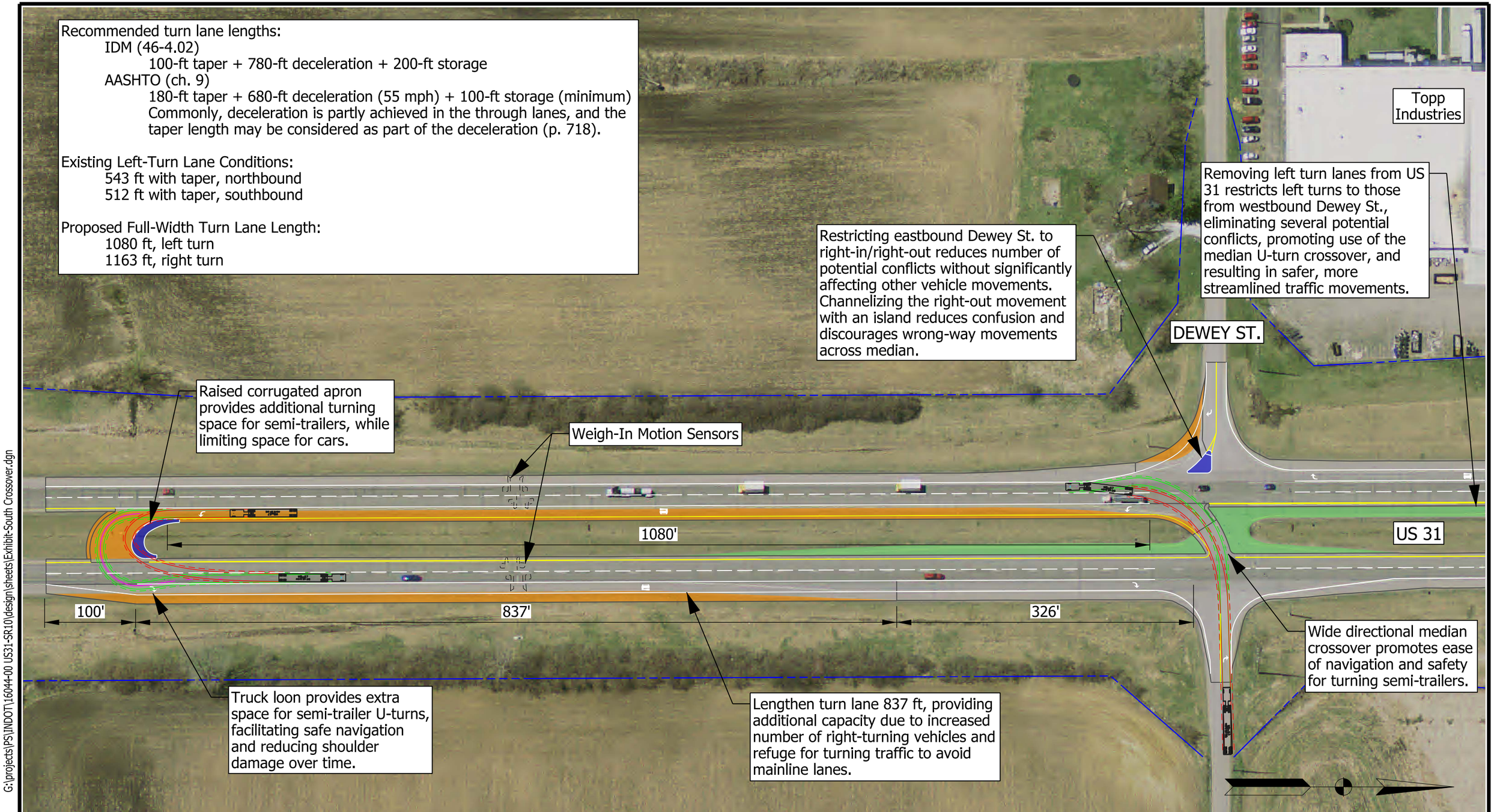
Recommended turn lane lengths:
- IDM (46-4.02)
  - 100-ft taper + 780-ft deceleration + 200-ft storage
- AASHTO (ch. 9)
  - 180-ft taper + 680-ft deceleration (55 mph) + 100-ft storage (minimum)
  - Commonly, deceleration is partly achieved in the through lanes, and the taper length may be considered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

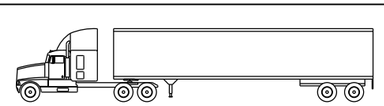
Existing Left-Turn Lane Conditions:
- 543 ft with taper, northbound
- 512 ft with taper, southbound

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



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

TURNING MOVEMENT VEHICLE



Interstate Semi-Trailer (WB-67)

SCALE:
1" = 100'

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

DEWEY ST. INTERSECTION

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