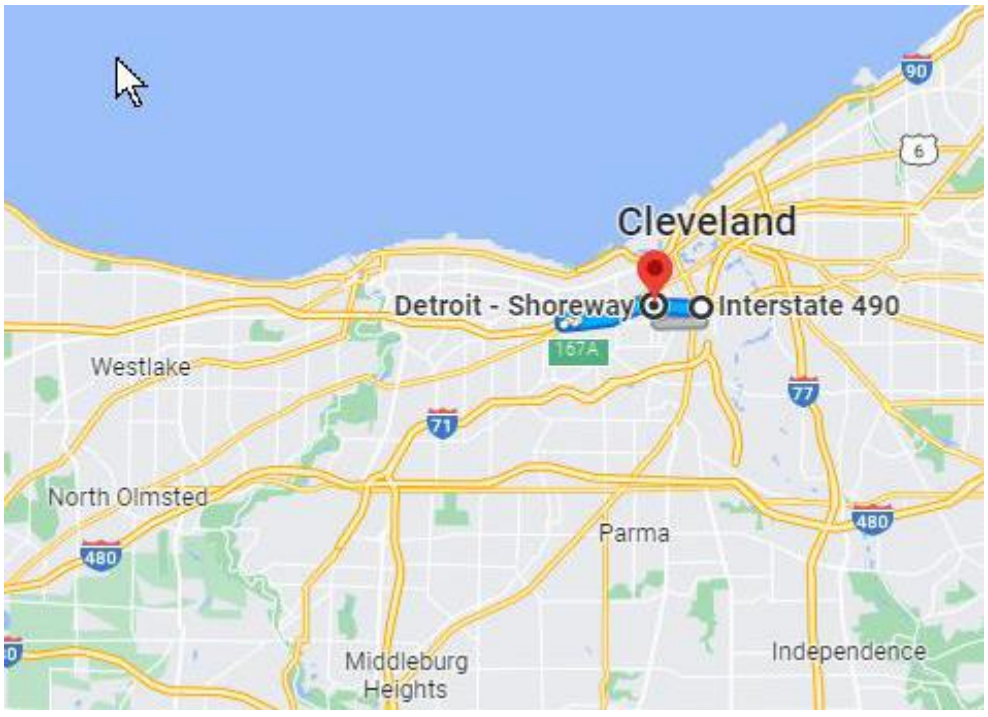
Design Exception Request

CUY-90-6.83

PID: 76779; Request 19

Letting Type: ODOT-Let

Design Designation			
I-90; 6.84-14.94			
Current ADT (2025)	163,000	Td	0
Design Year ADT (2045)	217,000	Design Speed	60
Design Hourly Volume (2045)	21,500	Legal Speed	60
Directional Distribution	58	Design Functional Class	1 - Interstates
Trucks (24hr B&C)	6	Functional Class Area Type	Urban
		NHS Project	Yes



Submitted By:

E-SIGNED by Jim Sima
on 2023-06-01 12:26:08 EST

Jim Sima
(Engineer of Record)

J.S.

Engineer of Record Seal

Approved by:

E-SIGNED by Adam Koenig
on 2023-06-01 13:49:29 EST

Adam Koenig Approval Date: 6/29/2022

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Controlling Criteria Identification			
Section: I-90; 6.84-14.94			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width			
Shoulder Width	10 feet	10 feet	6.6 feet min
Horizontal Curve Radius			
Maximum Grade			
SSD (Horizontal & Crest Vertical)			
Pavement Cross Slope			
Superelevation Rate			
Vertical Clearance			
Design Loading Structural Capacity			
(a.) "Existing" may be N/A (i.e. New alignment or new ramp)			

Project Description

Full depth pavement reconstruction of Interstate 90 from the Hilliard Blvd to I-490 in the cities of Rocky River, Lakewood and Cleveland, OH. Project includes full depth ashpalt concrete pavement for mainline I-90, and full depth concrete pavement for service interchange ramps. Project also includes drainage upgrades including replacement of portions of storm sewer trunk line and laterals, signing, pavement marking and ITS upgrades.

Section Description

For IR 90 EB from Sta. 905+46 to Sta. 908+60, the required outside shoulder width per L&D Volume 1 Figure 301-4 is 10 feet. In order to provide 12 feet of width to carry the bus on shoulder lane across the Fulton Road bridge, the outside shoulder is narrowed to a minimum of 6.6 feet. Widening of the Fulton Road bridge is not part of the project.

Proposed Mitigation

none

Support for Deviation (Benefit-cost, R/W, Environmental, Constructability, Coordination with Other Projects, Relationship between any crash patterns and proposed design exception, etc.):

The eastbound lanes are shifted to the south to accommodate the bus on shoulder lane on the median side. The existing width of the mainline structure over Fulton Rd. is not wide enough to accommodate the full 12 ft wide bus lane on the inside shoulder and a 10 ft outside shoulder.

Does the requested Design Exception location fall within a Safety Integrated Project (SIP) Map Location?

Yes, Red Location

Does the crash analysis (GCAT and CAM Tool) show any patterns that would be adversely impacted by the proposed Design Exception?

No