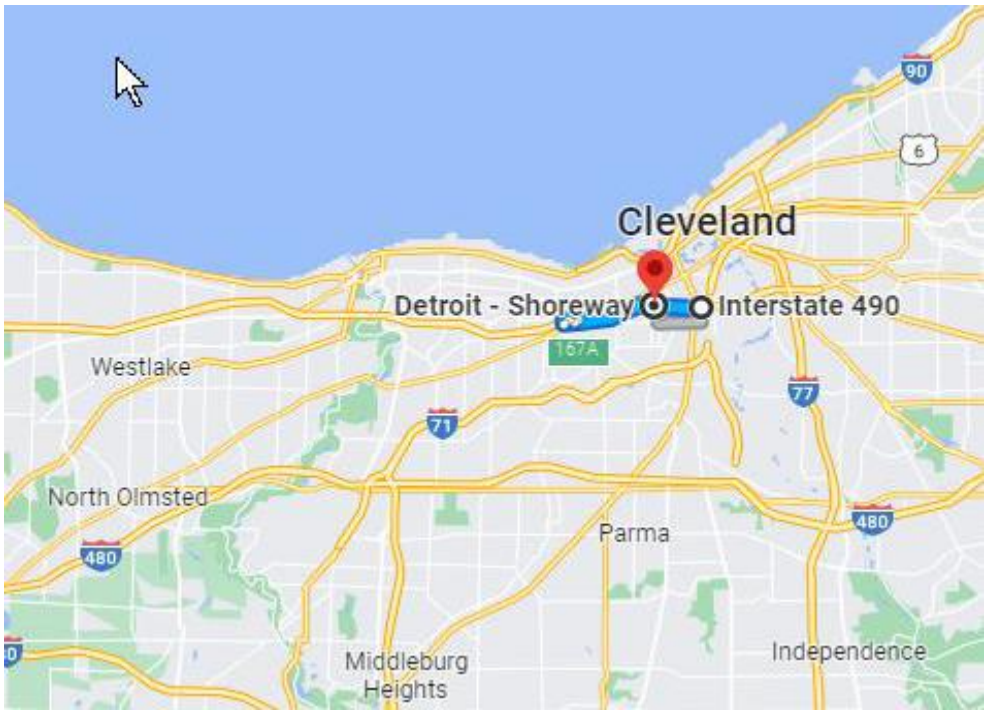
Design Exception Request

CUY-90-6.83

PID: 76779; Request 13

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 12:02:14 EST

Jim Sima
(Engineer of Record)

J.S.

Engineer of Record Seal

Approved by:

E-SIGNED by Adam Koenig
on 2023-06-01 13:53:38 EST

Adam Koenig

Approval Date: 3/3/2023

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Controlling Criteria Identification			
Section: I-90; 6.84-14.94			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width			
Shoulder Width	8 feet	8 feet	4.8 ft 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

From IR 90 EB Sta. 732+44 to Sta. 734+05 along the Ramp 117-7 acceleration lane, the required shoulder width per L&D Volume 1 Figure 303-1 is 8 feet. Proposed shoulder width adjacent to the south W. 110th Street abutment is 4.8 feet due to the shifting of the pavement section to allow for the bus on shoulder lane

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 inside shoulder is 12 ft minimum at underpasses. This required modifying the alignment of the Ramp 7 (W. 117th St. SB to IR 90 EB) entrance loop to maintain the existing 1000 ft 40:1 acceleration lane taper.

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