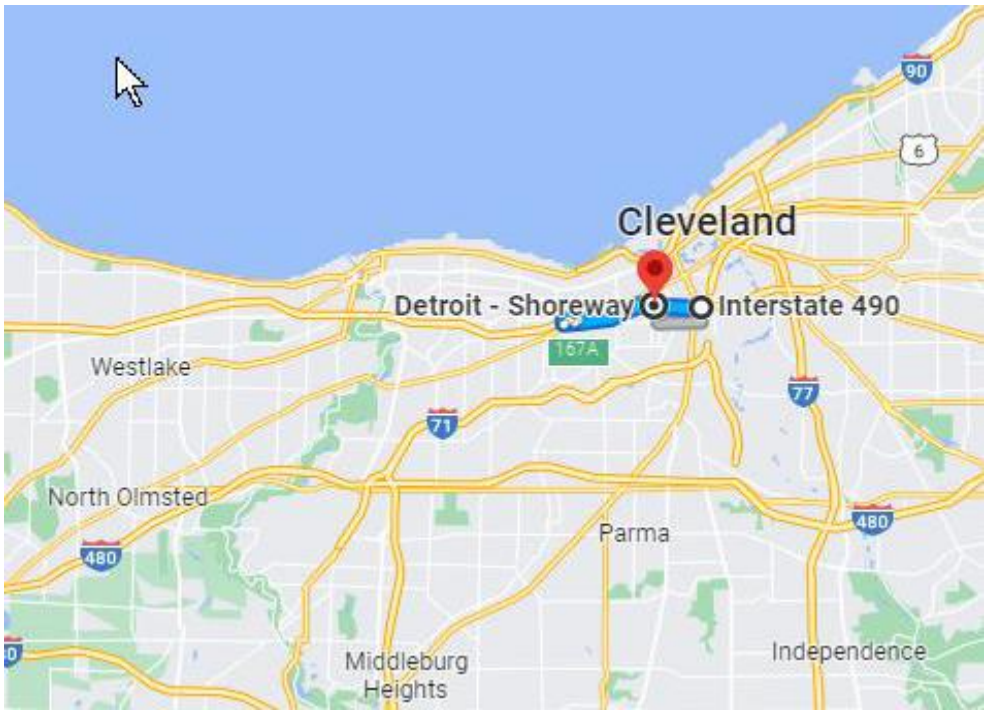
Design Exception Request

CUY-90-6.83

PID: 76779; Request 03

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 11:25:35 EST

Jim Sima
(Engineer of Record)

J.S.

Engineer of Record Seal

Approved by:

E-SIGNED by Adam Koenig
on 2023-06-01 13:59:45 EST

Adam Koenig

Approval Date: 3/14/2023

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Controlling Criteria Identification			
Section: I-90; 6.84-14.94			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width	12 feet	12 feet	11 feet
Shoulder Width			
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

Four of the five proposed westbound lanes from the confluence of Ramp NW, Ramp SW and IR 490 WB to the W. 44th Street entrance ramp (Ramp 44-27) do not meet the minimum lane width requirement per L&D Volume 1 Figure 301-4.

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.):

This proposed design will eliminate the existing inside merge as noted in the attached Safety Report Supplement. One 12' wide is being provided and the other four lanes will be 11' wide. There is not enough available width on the mainline bridge over Fulton Road to provide five 12' lanes and minimum width shoulders. Grading, geometry, drainage and existing retaining walls were considered in the decision to provide one 12' lane and four 11' lanes instead of five 12' lanes.

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