

Design Exception Request

FRA-71/270-28.27/25.99A

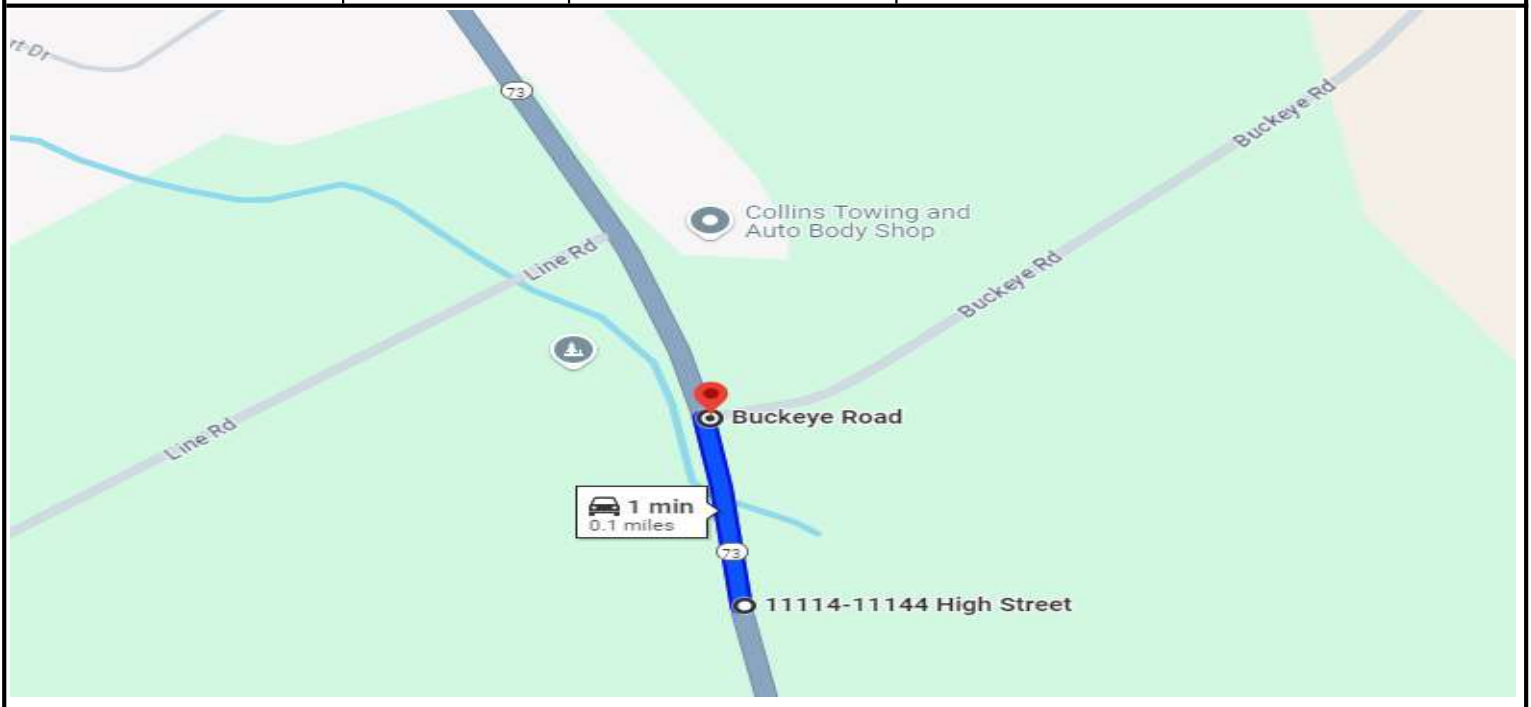
PID: 105435; Request 05

Letting Type: ODOT-Let

Design Designation

IR-270; -

Current ADT (2023)	179,980	Td	0
Design Year ADT (2043)	210,980	Design Speed	70
Design Hourly Volume (2043)	20,790	Legal Speed	65
Directional Distribution	50%	Design Functional Class	1 - Interstates
Trucks (24hr B&C)	20%	Functional Class Area Type	Urban
		NHS Project	No



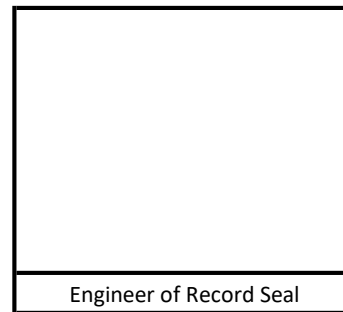
Submitted By:

Gail H. Massie
(Engineer of Record)

Approved by:

Adam Koenig

Approval Date: 11/18/2022



Engineer of Record Seal

Design Exception Request

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Controlling Criteria Identification

Section: IR-270; -

Controlling Criteria	Standard	Existing (a.)	Proposed
Lane Width			
Shoulder Width	10'	6'	5.9'-6'
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

Widening of the IR-270 EB Exit ramp to include a second dedicated lane to NB IR-71. Reconstruction of bridges Ramp K over IR-71 and Ramp O over IR-71 and Ramp K over Ramp O. Work includes widening IR-71 from I-270 NB to the Polaris Parkway Exit Lanes.

Section Description

Ramp P (I-270 EB to I-71 NB) is being widened from a single lane ramp to a two lane ramp. The shoulder requirements for the two lane ramp are different from the requirements of a single lane ramp. Outside the limits of the bridge over I-71, the shoulder will be the standard of 10'. However, in advance of the existing flyover bridge and just after it the shoulder goes from 10' @ 1010+42.67 to 6' @ 1011+44.38 and 5.9' @ 1018+16.90 TO 10' @ 1019+19.71.

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.):

In order to meet the shoulder requirements, the flyover bridge would have to be widened its entire length by 4'. This is a very complex bridge and it would be cost prohibitive to widen the structure.

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