

3.6.1.2 DESIGN VEHICULAR LIVE LOAD

3.6.1.2.1 General

NEW CONSTRUCTION

Bridges and concrete culverts, which carry traffic on Interstates & Ramps, US, State Primary, and State Secondary highways, shall be designed for HL93 loading using the LRFD Design Code.

Metal pipes or precast concrete arches that carry traffic on Interstates & Ramps, US, State Primary, and State Secondary highways, shall be designed for HL93 design loading and standard gage tridem axle load of 120k (40k per axle with 4.5' spacing) using the LRFD Design Code for Strength II. Larger design loads may be required for metal pipe arches and precast concrete arches with a span over 25 feet. Contact the ITD Group Leader for guidance.

Local and Off-System bridges shall be designed for HL93 loading using the LRFD Design Code.

MODIFICATION OF EXISTING STRUCTURES

Where economically feasible, the modifications to structures carrying US, State, Interstate, and Local traffic should be designed for HL93 loading using the LRFD Design Code. When HL93 loading will require extensive upgrading to other structural elements, the live load used shall be determined by the Bridge Engineer.

Commentary:

Refer to Article 0.0 Commentary.

Revisions:

April 2008

Deleted 17th Edition Design for Local and Off System bridges.
Added Commentary.

Oct 2023

Added loading for metal pipe arches and precast concrete arches.