



Office of Engineering  
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Bridge Design Section  
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John Bel Edwards, Governor  
Shawn D. Wilson, Ph.D., Secretary

## MEMORANDUM

TO: ALL CONSULTANTS  
ALL BRIDGE DESIGNERS

FROM: PAUL FOSSIER, P.E.  
BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO.81 (BDTM.81)  
DESIGN OF LADDERS AND ACCESS SYSTEMS

DATE: June 11, 2018

### Ladder Design:

Effective immediately, ladders on all new bridges and rehabilitation projects shall not be designed with a cage or well system. For ladders that extend more than 24 feet above a lower level, an OSHA and ANSI A14.3-compliant ladder safety system shall be specified, along with a minimum of four (4) safety harnesses for District use. All ladders shall be designed in accordance with OSHA 1910.23 and ANSI A14.3.

On all new bridges and where feasible to retrofit on existing structures, designers shall provide OSHA-compliant stairs or alternating tread stair systems to minimize the use of ladders for access.

Specification Note for Ladder Safety System shall be included in project plans:

Furnish and install an OSHA and ANSI A14.3-compliant complete ladder safety system for each ladder run, consisting of a stainless steel vertical rail that affixes to the ladder rungs with stainless steel clamps and fasteners. A cable-based ladder safety system is not acceptable. Ladder safety system shall come complete with an end stop and stainless steel fall arrester that slides within the vertical rail and can be installed or removed from the rail at any location. Furnish and supply a total of four (4) compatible safety harnesses with system.

See a sample ladder safety system in the attachment.

### Access Systems:

Walking and working surfaces, handrails, and stairs shall be designed in accordance with OSHA 1910.21, 1910.22, 1910.23, 1910.25.

Effective immediately, plan sheets for access systems (ladders, walkways, platforms, etc.) shall be reviewed at the earliest available milestone and at 95% Final Plans by the LA DOTD Mechanical Design Section.

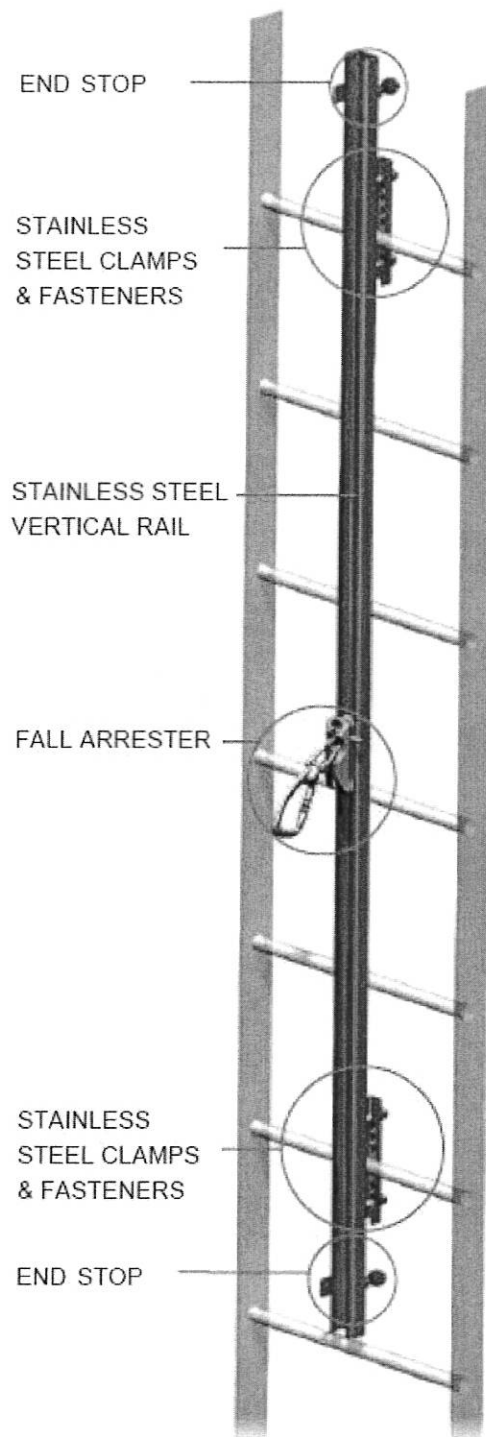
This technical memorandum is posted on the LA DOTD Website under Inside La DOTD > Divisions - Engineering > Bridge Design > Technical Memoranda – BDTMs.

Please contact Ms. Zhengzheng “Jenny” Fu (225-379-1321, [zhengzheng.fu@la.gov](mailto:zhengzheng.fu@la.gov)) if you have questions or comments.

PF/zzf/abl

Attachment

Cc: Chris Knotts (Chief Engineer)  
Chad Winchester (Chief, Project Development Division)  
Edward Wedge (Deputy Engineer Administrator)  
Vince Latino (Assistant Secretary of Operations)  
David Miller (Chief Maintenance Administrator)  
Nick Fagerburg (Bridge Maintenance Administrator)  
Michael Vosburg (Chief Construction Division Engineer)  
Brian Kendrick (Project Management Director)  
Chris Nickel (Pavement and Geotechnical Engineer Administrator)  
David Smith (Road Design Engineer Administrator)  
Art Aguirre (FHWA)  
District Administrators, ADA Engineering, ADA Operations, and District Bridge Engineers and Area Engineers



BDTM. 81 Attachment: Sample Ladder Safety System (For Information Only)