From: Debra M. Butchart

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Subject: Bridge Advertisement (DSI 24-027) Vibratory Screed Approval

Date: Friday, September 6, 2024 9:48:00 AM

Attachments: image001.png

The EPG has been updated as described below:

Implementation Statement: Effective immediately for all plans not yet submitted to Design.

(The Implementation Statement is a recommendation by the Development Section. The SPM is responsible for the level of implementation for any particular job.)

Revision Date	Items Revised	Description of Change
Sep. 2024	EPG:	EPG 751.10.1.15 has been updated to require approval from
	<u>751.10.1.15</u>	the SPM, SLE or owner's representative to use a vibratory
	Bridge Standard	screed for deck finishing for cases that lie outside the listed
	Drawings:	criteria. Removed language with respect to the "core team"
	NA	since that term is not adequately defined for design-build
	MicroStation Cells:	projects.
	NA	
	Std. Specifications:	
	NA	
	Standard Plans:	
	NA	
	Bridge Special	
	Provisions:	
	NA	

Follow links above for more information, or to view more details about this (or any) revision,

use the <u>Revision Index Database</u>, located under Completed Revisions on Development's Sharepoint page.

Under Tables (left-hand side) double-click on RevisionRecords.

Click on the link under the Effective Date to access documentation for the completed revision.

751.10.1.15 Deck Concrete Finishing

Bridge decks are normally finished with an approved mechanical finishing machine per Sec 703.3.5. The use of a vibratory screed in place of a finishing machine is allowed if the guidance below is satisfied or the core team determines it is applicablewith approval of the SPM, SLE or owner's representative for a particular bridge. Although vibratory screeds may contribute to an overworked concrete surface where durability of the deck may be reduced, there are applications where the weight and bulk of the finishing machine may not be practical. For instance, most re-decks consist of steel wide flange beams where the contractor may have to heavily brace the exterior beams for the finishing machine. Using a vibratory screed may allow the contractor to use less bracing and finish with much lighter equipment. In addition, a vibratory screed is useful when the finishing machine framework is too wide and would interfere with traffic or adjacent physical obstacles. If a vibratory screed is allowed for deck finishing, add note B3.25 (A2.14 for box culverts) on the bridge plans.

Guidance for allowing a vibratory screed:

- (1) Bridges with exterior steel beams with the web depth 30 inches or less and <u>all of</u> the following are met: Bridge is located on a minor road.
- Bridge width not greater than 32 feet.
- (2) Re-decks on thru trusses with roadway width less than 26 feet and limited horizontal clearance between truss members and edge of deck.
- (3) Bridges with staged pours less than 12 feet and limited available horizontal clearance. Modify note B3.25 to indicate applicable stage(s).
- (4) New box culverts with top slab used as the riding surface.
- (5) Widenings less than 12 feet wide or with limited available horizontal clearance.

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