<u>Debra M. Butchart</u> <u>BR</u> From:

To:

Subject: Bridge Advertisement (DSI 22-040) Dowel Bars in Drilled Shafts

Date: Tuesday, February 4, 2025 1:10:23 PM

Attachments:

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
<u>Feb. 2025</u>	EPG:	Updated EPG 751.37.1.1, 751.37.1.6 and 751.50 to clarify
	751.37.1.1; 751.37.1.6 ;	column and drilled shaft connection details so contractors do
	751.50 (G8)	not insert column reinforcement or dowel bars into drilled
	Bridge Standard	shaft's wet concrete. Place standard note G8.8 and G8.9
	Drawings:	when lap is required at top of drilled shaft between
	NA	column/dowel reinforcement and drilled shaft reinforcement.
	MicroStation Cells:	
	NA	The following guidance has been added to EPG 751.37.1.6:
	Std. Specifications:	When difference between drilled shaft and column diameter is
	NA	6" a single reinforcement cage is typically used for the socket
	Standard Plans:	and shaft and the vertical reinforcement extends into the
	NA	column. A separate column steel cage is then placed around
	Bridge Special	the protruding shaft reinforcement without requiring an
	Provisions:	adjustment to minimum cover for drilled shaft or column
	NA	reinforcement. When difference between drilled shaft and
		column diameter is 12" either the vertical column steel or
		dowels will need to be extended into the shaft or the cover in
		the socket and shaft will need to be increased to allow the
		shaft reinforcement to extend into the column. In the former
		scenario an optional construction joint is recommended as
		discussed in note 4 for oversized shafts. In the latter scenario
		the same number of vertical bars should be used in the shaft
		and column to allow the shaft bars to be tied to the column
		cage. Any reduction in cage diameter required for fit-up shall
		be considered in design.
		When difference between drilled short and column diameter is
		When difference between drilled shaft and column diameter is
		greater than 12" (oversized shaft generally 18" to 24" larger than column), show "Optional construction joint" at bottom of
		column/dowel reinforcement in the drilled shaft and use
		standard notes G8.8 and G8.9 with optional construction
		joint.
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Follow links above for more information (internal only).

751.50 Standard Detailing Notes

G8. Drilled Shaft

(G8.7)

The tip of casing shall not extend into the rock socket elevation range reported in the Foundation Data table without approval by the engineer.

(G8.8) Use the following note when non-contact or contact lap is required at the top of drilled shaft between column/dowel reinforcement and drilled shaft reinforcement.

Column or dowel reinforcement shall be placed prior to pouring drilled shaft concrete in the area of the lap. Dowel bar or column reinforcement shall not be inserted after drilled shaft pour is complete.

[G8.9] For oversized shafts, use the following note in conjunction with callout for optional construction joint near top of drilled shaft.

Remove sediment laitance and weak concrete to sound concrete prior to setting column/dowel reinforcement if optional construction joint is used.

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