

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



BUREAU OF BRIDGE DESIGN



Precast Concrete Deck Panel Detail Sheets - REVISION HISTORY

Date of Revision	Name of Detail Sheet	Revision Description	Background
7/31/2023	Precast Concrete Deck Panel - Steel Girder	Converted from MicroStation V8i to MicroStation Connect. Changes made are shown with highlights on this Detail Sheet .	
6/4/2020	Precast Concrete Deck Panel - Steel Girder Precast Concrete Deck Panel - Concrete Girder	<p>Steel Girder Sheet: Revised Detail: "Steel Girder Overhang Detail" Revised Note on "Steel Girder Haunch Detail": To: <i>**5" min. for 12" flange</i> From: <i>**5" min. for 12" flange and grout bed ≥ 2.5"</i></p> <p>Concrete Girder Sheet: Revised dimension on "Bulb Tee Overhang" detail To: <i>10" (TYP)</i> From: <i>7 1/2" MIN. (TYP)</i></p>	<p>Revised overhang detail for overhangs less than 2.5' to show a curb hoop bar with both legs that extend to the bottom of the deck to closely match the crash testing of the bridge railing. The 1st leg of the hoop bar is hooked since there is no room for the leg extension near the precast panel. The additional straight reinforcing bar tied to the top mat is needed for all overhangs with a precast panel to match the area of steel in the deck overhang for the bridge railing crash test since the bottom mat of reinforcing doesn't develop into the deck due to the deck panels. Revised Steel Girder Haunch Detail note since the wording of a grout bed greater than 2.5" wasn't required if the flange is 12". A min. 1" grout dam is needed for any size flange.</p> <p>Concrete Girder Sheet: Revised the curb hoop bar leg dimension to the typical length of 10". The Steel Girder Sheet shows an 8" length for overhangs less than 2.5' because the 10" doesn't fit. Otherwise, 10" length should be used.</p>
5/23/2018	Precast Concrete Deck Panel - Steel Girder	Added note to Steel Girder Overhang Detail: "Detail shown for deck overhang less than 2'-6". Curb hoop bar shall be tied to the bottom longitudinal deck bars when possible."	Clarified hoop bar shall be tied to bottom longitudinal deck bars when possible to meet bridge railing crash test requirement.
12/12/2017	Precast Concrete Deck Panel - Steel Girder Precast Concrete Deck Panel - Concrete Girder	<p>Made separate sheet for steel and concrete girder.</p> <p>Table A redesigned using new PCI design example.</p> <p>Notes updated.</p> <p>Overhang detail added.</p> <p>Staggered stud detail added.</p> <p>Skewed dek panel detail added.</p> <p>Grout bed width set at 1.5".</p> <p>Top plain reinforcing bars increased from #3 bar to #4 bar</p>	The standard sheet was redesigned with the new PCI design example. A maximum skew of 15 degrees was set for a precast panel. Deck overhang reinforcing detail was added to clarify reinforcing required. Shear stud detail added to clarify how to space studs when flange is narrow. Additional notes added for guidance. Top plan bar reinforcing designed for a cip deck. Typical min. reinforcing for cip is #5 bars at 12". #5 bar is too large for 3.5" panel, so decided to use #4 @ 6" ($A_s=0.44 \text{ in}^2/\text{ft}$ which is greater than #5 at 12").