Dancefloors’ Create a Safe Place for Column Pier Cap Construction

Once the segment construction is complete for the approach columns, then a pier cap is cast-in-place (CIP) to complete the support base for the superstructure spans. We install a ‘dancefloor’ on top of a completed column, which is used as a staging area to build the pier cap. Most ‘dancefloors’ are modified and retrofitted according to the size of the column and installed using a wedge system for stabilization. The caps are created using a mold built with interlaced rebar. Depending on the size of the cap, there can be from 4 to 24, 1-3/4 inch post-tension (PT) bars installed during this complex process of creating the pier cap frame. Once the rebar cage is built into a rhombus shape, then the concrete is poured and cured. After this CIP process is complete, 1-3/4 inch post-tension (PT) bars are stressed using a hydraulic jack and large nuts to tighten from end to end. This compression process gives the cap all of its strength.

Pier cap construction on the HBP involves the expertise of up to 25 skilled craft workers, engineers, and superintendents. We have just surpassed 50% completion of the 101 approach column pier caps.