The first two legs attached on the outside knuckle, adjacent to the “sister” bridge.
Note: cooling pipes at the top of the formwork for the lower half of the cap
Typical Lower Portion of Pier Cap While Placing Concrete

Note: cooling pipes at the top of the formwork both left and right; pump discharge near concrete surface; personal protective equipment.
As the top ½ is being placed in this picture, notice both the cooling pipes for thermal mass control and the grout tubes attached to the bottom of the grout envelope.
PT Bars, Grout Tubes and Cooling Pipes

Top ½ of cap with grout tubes surrounding the PT bars and cooling pipes running thru the base
Pumped Water Feed Down Into Cap
To match the cross slope on the deck five pedestals are cast on the cap surface.
Delta Knuckle Delivered to Site

Delivery of a “knuckle” base section of a delta assembly
Cast Pedestal Where Knuckle Will Sit

The PT bars pass thru the knuckle then leave room to tension, bolt, verify, and grout the bars.
The base section erected prior to grouting the base pad.
Non-shrink grout BASF type Master-Flow 928 used to make the grout pad.
Grout fill placed as a bearing pad supporting the “knuckles”
PT Bar Pressure Grouting Equipment

Some of the equipment used to mix and place the grout used on the deltas.
The Post Tensioning Hydraulic Pump

Post tension the PT bars to “lock down” the delta knuckles prior to further erection.
“Leg” to be Attached to Knuckle

A delta “leg” extension delivered to the site – note the red pick points bolted to the top.
The first two legs attached on the outside knuckle, adjacent to the “sister” bridge.
Erection of Delta, Two Girder Lines

The top tie member, wind braces, cross braces are installed then to stabilize the legs.
Attaching the tie bar requires three cranes and extraordinary communication and cooperation.
Bearing Assembly Placed on Delta Legs

Bearing set on delta and bolted in place ready for girders.
A pair of girders with cross frames attached is guided into position.
Pair of beams with several frames in place for stability as they are walked into place
Top Plate of Bearings Welded to Beam

Bearing in place being welded to the beam flange
Before you know it....(Fall 2016)
How To Stay In Touch: Social Media

- **Facebook:** Facebook.com/Innerbelt
- **Twitter:** @ODOT_Innerbelt
- **Flickr Photostream:** Flickr.com/Innerbelt
- **Instagram Photostream:** @ODOT_Innerbelt