

Mississippi River Bridge at Lansing

We are closing in on the end of 2024. Even though we are in the winter months things are not slowing down at the construction site for the new Mississippi River Bridge at Lansing. Work is happening on both sides of the river, as well as in the river. We'll start on the Wisconsin side and work our way west to Iowa.

During our last update the contractor, Kraemer, NA, had just started the upper portion of pier 3. This is the pier closest to the shoreline in Wisconsin. The portion of the pier above the footing consisted of three concrete pours. All three of those pours have been completed, including the top of the pier, otherwise known as the cap. The picture gives you a look at pier 3 as the concrete for the cap cures. This pour was done in colder temperatures, so several different steps are taken to make sure the concrete cures to give us the best product. The forms for the concrete pour are heated as the concrete is placed. Once the pour is done the heat is no longer needed. The curing process produces its own heat. The pier is also wrapped in blankets to keep the heat inside the forms. The temperatures are monitored and controlled as necessary to get the strongest concrete possible. The forms will be taken off late this month or sometime early next year.



Pier 3 final pour

Now to pier 2, the only pier that is in the river itself. All three of the drilled shafts that will support the footing and the pier have been poured. The contractor is currently removing the template that was needed to install these 11.5 foot wide and approximately 140-foot-deep drilled shafts. Once that is done, they will build a coffer cell around the shafts. This will give them a dry place to work out in the middle of the river. That is when they will start work on the footing for pier 2. This footing is being built strong enough to withstand a barge hit, which hopefully never happens. That means we will be removing the two round concrete structures, called dolphins, just north of the bridge in the river originally built to protect the old piers from any possible barge strikes.



Pier 1 cofferdam clean up

Let's jump to pier 1 on the Iowa shoreline. A cofferdam is needed here as well to give the contractor a dry place to work. That cofferdam is already in place and is currently being cleaned out. Once it is fit for construction, work will start on the drilled shafts for the only pier in Iowa. Like the drilled shafts for piers 2 and 3, as well as the abutment in Iowa, casings will be vibrated into the ground, cleaned out and filled with concrete. These drilled shafts will go more than 44-feet into the ground and be 11-and-a-half feet wide.

Now to the Iowa end of the new bridge and the concrete structure that supports it, the bridge's west abutment. The 3-drilled shafts for the abutment are in place. While they don't compare to the drilled shafts for piers 2 and 3, they are still quite large. The shafts are six-feet wide and approximately 44-feet deep. They will support the footing for the abutment.

Before that footing can be built the crews have to build a retaining wall, or as known in the construction of bridge abutments, a mechanically stabilized earth, or MSE wall. This wall, as well as the sand used behind the wall, will give a stable surface for the contractor to build the abutment for the west end of the new bridge. The picture gives you a look as the MSE wall starts to take shape.

Over the next few months more and more of the footprint of the new bridge will take shape. That not only includes the piers but also bridge beams being set in place. We'll keep you updated as the project keeps moving forward.

Don't forget to check out the project Facebook page at <https://www.facebook.com/LansingBridge>. You do not have to be a Facebook member to check out the site. And you can get a look at what's happening by looking at the live webcam at the project website at <https://iowadot.gov/lansingbridge>.



MSE wall in Lansing