Clallam County selected BergerABAM to design a replacement structure for an aging and deficient bridge over the Elwha River. The original bridge, listed on the National Register of Historic Places, was 550 feet long with two 210-foot-long decked truss spans and timber end spans. At the northernmost crossing of the Elwha River, the bridge is located approximately 1 mile north of State Route 112. The bridge crosses the river in a very scenic and wooded area with the roadway located approximately 70 feet above the river.

During the type, size, and location study, BergerABAM updated the load rating of the existing steel truss bridge. The recommendation resulted in new load postings on the original structure until the replacement bridge was constructed. The replacement bridge consists of a three-span, cast-in-place, post-tensioned concrete box girder bridge. The total bridge length is 580 feet, with a 255-foot-long center span. In order to minimize environmental impacts, the bridge was constructed using the balanced cantilever method minimizing shoring and excavation in the river and along its banks.

BergerABAM worked with the Design Advisory Committee composed of local citizens and the County’s funding partners to demonstrate a cost savings by providing pedestrian/bicycle access below the roadway bridge. This, in turn, allowed the Olympic Discovery Trail to cross the Elwha River at this location and opened a number of other funding opportunities for the project. A walkway is suspended from the bridge soffit, which separates pedestrian traffic from vehicles, allowing full access to views of the scenic river valley by travelers crossing the bridge.

Construction of the bridge met with significant challenges because of the extreme terrain and sensitive environment. With the creativity used on the under-bridge pedestrian walkway, a stronger, narrower road bridge was possible.

BergerABAM’s success collaborating with project advisory groups led to cost-effective solutions that accommodated minimal impact on the environment with a strong, aesthetically pleasing structure that accentuates the scenic nature of the site.