Highways, bridge and tunnel

VolkerLaser

Tay Road Bridge

VolkerLaser has completed restoration works to Tay Road Bridge, a key transport link connecting Fife to Dundee, on behalf of VolkerStevin and the Tay Road Bridge Joint Board.

Since its construction in 1966, the bridge has faced decades of wear and tear, and exposure to the harsh Scottish elements, and the time had come for its deck to receive a well-earned refurbishment.

The project was split into two phases due to weather concerns, with the scope of works including deck concrete repair, soffit concrete repair, waterproofing, new surface and sub-surface drainage, kerb installation, resurfacing, expansion joint installation, and refreshed road markings.

The first phase focussed on works to the northbound carriageway. The restoration process began with the removal of the existing surfacing, with the 2.3km deck being scraped and kerbing removed. The next stage involved fine milling and captive blasting to ensure the surface was ready for the new waterproofing application.

After successfully removing the existing surfacing, thorough hammer tests and visual inspections were conducted to determine the extent of the repairs needed, prior to concrete works commencing. During the first phase of repairs, our team completed approximately 32m³ of concrete repair work, with a total of 46m³ scheduled for the entire project.

The team returned to site in early 2024, to complete the same scope of work to the southbound carriageway, with the addition of resurfacing the entrance and exit ramps towards Dundee. For the first time since the bridge was built in 1966, the surface on both carriageways has been completely removed down to the concrete bridge deck, with waterproofing applied and a new asphalt surface laid on top. In addition, 92 new expansion or movement joints have also been installed.

Following the completion of the works, the bridge was fully re-opened in September 2024.

