SPOTLIGHT ON

MORRISON STREET BRIDGE

HUMIDUR APPLICATION

VolkerLaser has completed its first project using an innovative one coat paint system on site in Edinburgh.

Morrison Street Bridge was identified as needing a series of essential refurbishment works in order to extend the lifespan of the structure and bring it back into good repair. One of the key concerns for the client, The City of Edinburgh Council, was in terms of how to achieve these works with minimal disruption, as the structure is located on one of the busiest roads into Edinburgh.

Initially only given a six-week programme, and having to phase the works to help traffic management and reduce disruption, the team quickly realised a traditional paint system would not be suitable for this project. The major projects steel team and senior business development manager, Mike Hodkinson, presented the client with Humidur – a one coat paint system, supplied exclusively by VolkerLaser within the infrastructure market in the UK.

Humidur is an environmentally friendly protective coating solution for all types of steel structures, with only a single layer application required and the ability to cure in extreme conditions, including underwater. With a significant reduction in curing time, the team were confident in changing from the originally specified paint to Humidur, which would allow them to achieve the required works within the six-week time frame.

Work began on site in early January, under a half road closure, with the team maintaining two-way traffic whilst scaffolding was erected and fully encapsulated, due to the existing bridge steelwork paint containing lead. The team very quickly identified an issue with the gullies which ran above the structure. Serious water ingress, caused by blockages in these gullies, was causing water to run off the structure into the steelwork and encapsulated scaffolding. These wet conditions would have caused the works to have been aborted if a traditional steel paint had been used; however, Humidur can be applied in adverse conditions where moisture is present, meaning the team were able to progress with the works against the odds.

Throughout the course of the project, additional refurbishment work was added to the scope, with the team completing all original and additional works in March, demobilising the site and handing it back to the client four days before the COVID-19 pandemic closed sites in Edinburgh.

Renata Wilson, engineer for structures and flood prevention for The City of Edinburgh Council said:

"The Morrison Street Bridge project was a challenging refurbishment. The goal was to carry out all essential works to the structure without unnecessary prolonged disturbance to the city centre traffic. I decided to use the Humidur system based on the ability of it being a single coat paint rather than a 3-part system, the surface tolerance and also the ability to successfully apply in difficult climatic conditions. The system also has a good and reputable long-term performance, as well as the offshore accreditations.

"All points mentioned above allowed us to carry out these essential works on Morrison Street Bridge without any major delays in programme. The works were carried out in winter and we did experience difficulties, which would have normally resulted in major delays and, possibly additional cost, if we had used the original 3-part system. Using Humidur was cost and time effective and the finished result is aesthetically pleasing to the eye.

"Although I cannot say for sure that using Humidur was a success until 12-20 years have passed, I am pleased with the result so far and I am really pleased with the VolkerLaser team who are proactive and problem solving. Their attitude on this job was outstanding."

WORKS ON MORRISON STREET BRIDGE, EDINBURGH.

VolkerLaser