

A 750t-capacity mobile crane lifts the bridge into position.

Bridge creates new transportation link

A weathering steel footbridge will provide a direct and safe link for both pedestrians and cyclists between Stockport's new bus interchange and the town's railway station.

Due to open in 2024, Stockport Interchange forms a core part of the Town Centre West regeneration district, a 130-acre site that will see new housing, leisure, workspace and amenities delivered alongside major transport and infrastructure improvements.

The new Interchange will act as a welcoming gateway into Stockport as it will have improved facilities for bus users and improved connectivity between the town centre, the Trans Pennine Trail and the railway station.

Once complete, the Interchange will be a key transport hub and part of the Bee Network – the vision for a fully-integrated transport network bringing together trams, buses, walking, cycling and eventually trains in Greater Manchester.

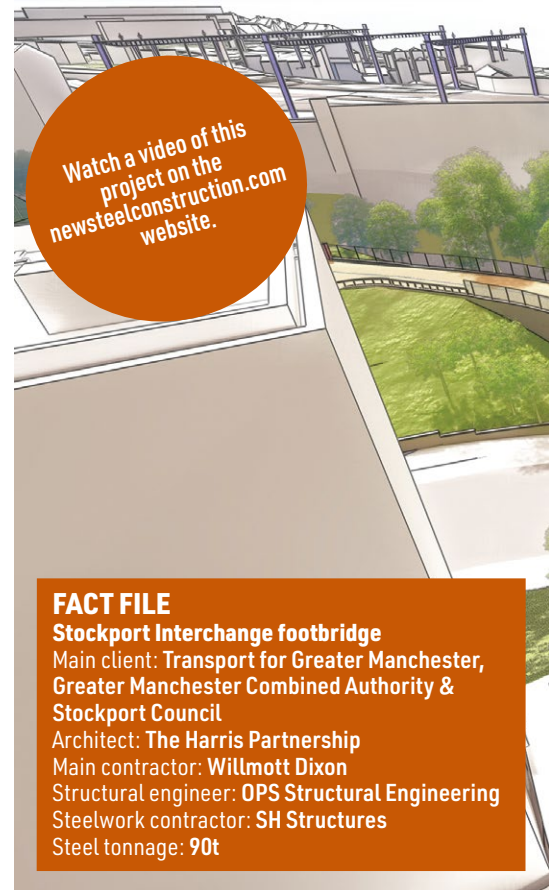
Construction of the new transport

interchange has been underway since August 2021, and will include a two-acre 'podium park' on the roof of the building and 196 high-quality residential apartments.

Another key element of the scheme is a 40m-long footbridge connecting the Stockport Interchange development to the town's train station. The structure was recently lifted into place, marking a key step in the transformative scheme.

Andy Burnham, Mayor of Greater Manchester, says: "The installation of the new bridge above Daw Bank is a major feat of engineering and marks an exciting milestone in the ongoing development of Stockport Interchange.

"The bridge is a key link connecting the new interchange to the railway station and will significantly enhance how residents and visitors access the town centre, whether they are walking,



Watch a video of this project on the newsteelconstruction.com website.

FACT FILE

Stockport Interchange footbridge

Main client: Transport for Greater Manchester, Greater Manchester Combined Authority & Stockport Council

Architect: The Harris Partnership

Main contractor: Willmott Dixon

Structural engineer: OPS Structural Engineering

Steelwork contractor: SH Structures

Steel tonnage: 90t

wheeling or cycling.

Working on behalf of main contractor Willmott Dixon, SH Structures fabricated the 6m-wide footbridge from faceted weathering steel plate and delivered it to site in two pieces.

Placed on temporary works, the bridge sections were welded together onsite and then moved into place, in readiness for the lift, using SPMT's. The 90t bridge, complete with its deck, was then installed using a 750t-capacity mobile crane.

As the bridge's final position is surrounded by a number of existing buildings and narrow streets, Jonathan Skinkis, Senior Build Manager for Willmott Dixon described the bridge lift as: "A logistically challenging operation made to look very easy."

According to the project design team, steelwork was chosen for the footbridge as the material offered the most efficient method to form a shallow structure that would not be too intrusive, within its surroundings.

"Detailed analysis was carried out into the dynamic behaviour of the bridge to ensure the design is safe, as well as achieving the desired architectural design intent," explains OPS Engineer Simon Ho.

"Weathering steel was used in the design as the material develops a warm orange-brown industrial feel, which will help the bridge blend with the many nearby redbrick buildings."

The Harris Partnership Associate Paul Stafford, adds: "The bridge spans diagonally across a four-way junction and will forge a new pedestrian and cyclist connection.

"Weathering steel is durable and malleable, and has allowed us to achieve a striking piece of geometry that complements the modern aesthetic of the new interchange and is an elegant addition to an area of historical heritage.

"And, importantly, the weathered nature of



The elegantly-designed bridge spans over a four-way junction.



The use of weathering steel will allow the new bridge to develop a similar hue to the adjacent railway viaduct.

"Weathering steel was used in the design as the material develops a warm orange-brown industrial feel, which will help the bridge blend with the many nearby redbrick buildings."

the steelwork reduces the life cycle maintenance strategy for the client."

While, increasing the longevity of the structure, weathering steel also has the advantage of reducing operational carbon emissions over a comparable painted steel structure.

Once the scheme is open, the bridge will merge into a 195m-long cycling and walking path with two seated rest areas along the route, providing a seamless and dedicated link for users to walk, wheel or cycle.

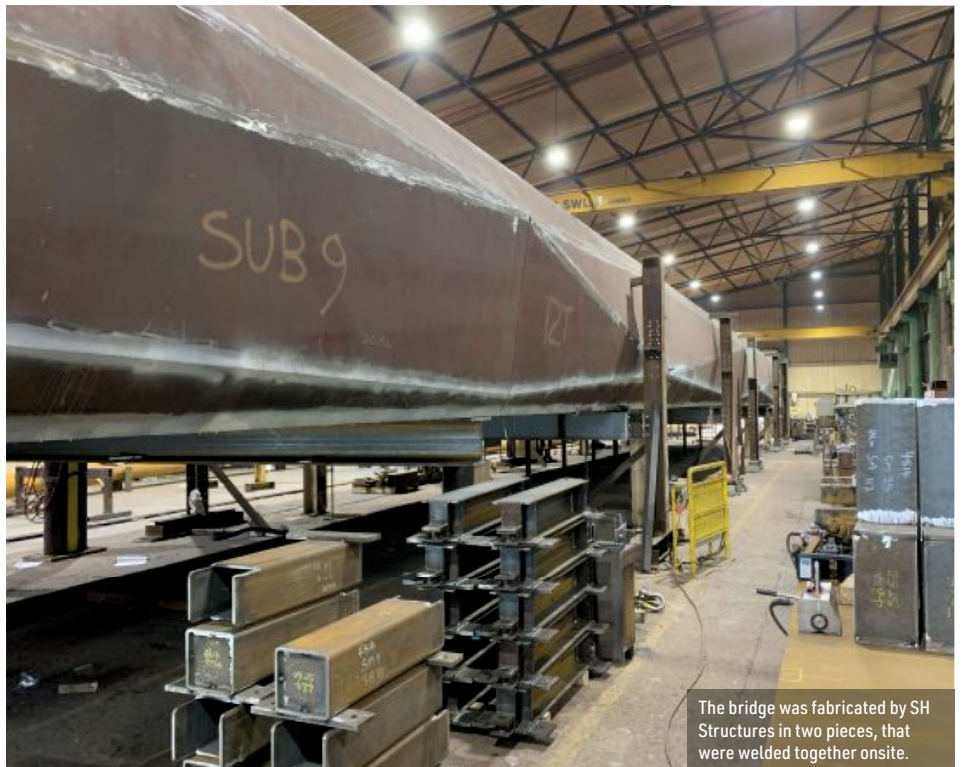
The route will be open 24 hours, with lighting and CCTV providing additional security and reassurance to passengers using the connection between the two transport hubs.

Cllr Mark Hunter, Leader of Stockport Council, adds: "The new bridge will ensure everyone can travel from Stockport Exchange and the train station to the Interchange, on to our brand-new two-acre Podium Park and then onwards to the town centre in a car-free environment.

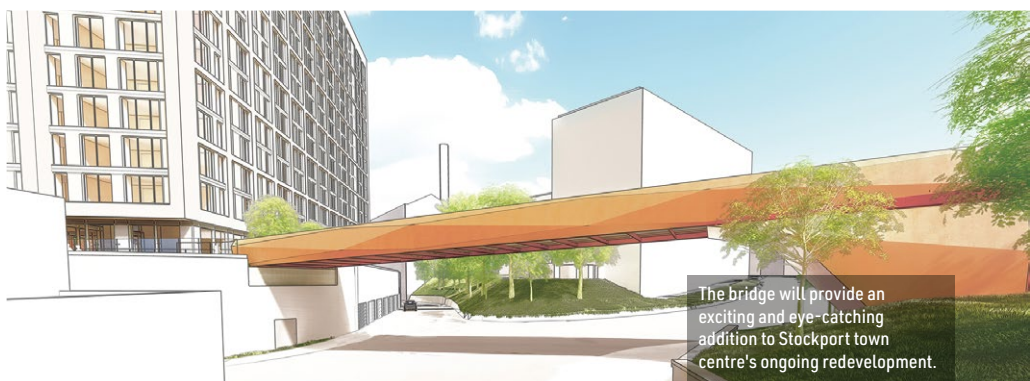
"It's an incredibly exciting time for Stockport and I'm really looking forward to more milestones taking place at the Interchange development in the coming months."

Summing up, Lord Bob Kerslake, Chairman of the Stockport Mayoral Development Corporation (MDC), said: "Over the recent months, we have seen huge progress made across the regeneration sites in Stockport. In just a matter of weeks, we have announced a contractor partner to deliver the historic and sensitive Weir Mill redevelopment into a new mixed-use district, and launched a new eight-acre neighbourhood to market.

"The Stockport MDC, in partnership with organisations such as Transport for Greater Manchester, is delivering rapid, ambitious change for Stockport with a focus on creating one of the most sustainable, connected and liveable town centres in Greater Manchester." ■



The bridge was fabricated by SH Structures in two pieces, that were welded together onsite.



The bridge will provide an exciting and eye-catching addition to Stockport town centre's ongoing redevelopment.