Brussels, Belgium

The project was a complex design-build-construct tender on a constrained site in and around Brussels mid-Station. SNCB's objective was to consolidate their operations by selling five prime sites around the station to help fund the creation of a new unified 'state-of-the-art' headquarters building on the site of a disused postal facility on Fonsny Avenue.

As architects, we have a duty to lead the way in climate regenerative architectural design. We must consider the holistic building process as a whole includingsite demolition and the construction of the new buildings. This integrative approach allowed us to develop an innovative low-carbon method, whereby weretained the existing historic building and then increased its area by extending it in a Lightweight Timber structure. We also developed a low-carbon fitout and a holistic green energy strategy for the entire lifecycle of the building. The site is in the heart of the city, with extreme constraints and limited access. Constructability was, therefore, a critical generator for the project.

As a result, Foster + Partners came up with several innovative constructability ideas:

- 1. A phased constructability strategy that allowed the 300m length of building to be broken down into three individual construction sites.
- 2. All the materials were brought into the site using the adjoining rail tracks to avoid disrupting the busy local road network.
- 3. The temporary tower crane structure was designed to be a permanent atrium structure which allowed the new building to be built around it, encasing it within the existing building form.

he project became more than a just a new headquarters for SNCB; it emerged as a masterplan for the whole station. Brussels is a city that has a proud history of Rail Transport Infrastructure that is supported by an extensive Bus and Tram network.

As an interconnection hub between the European network, the regional network and the local network, the station functions as an interface between the local and the global. It is a place of transition that is strongly rooted in its neighbourhood by its articulation of the urban fabric of Brussels, and carefully demonstrates the architectural character of the site.

The existing building suffered from poor connectivity and accessibility despite being located opposite the Eurostar entrance and benefiting from a recent renovation that brought thriving new businesses and increased foot traffic. This had isolated Fonsny Avenue, which was unwelcoming and offered a limited range of services. This limitation was exacerbated by the fact that only three streets through the station led to Fonsny Avenue.

Underneath the Fonsny Avenue buildings urban passages extend beyond the inputs. A large hallway connects the inputs to the main hall of the station, creating a natural flow for travellers. Side lobbies pass under the Fonsny buildings and railways, and continue to the north side of the station, providing an important connection between the street and the railway station and excellent connections between the station and the two sides of its immediate environment.

The South Station is a key trigger and a vital element in the urban dynamic of the neighbourhood. The proposed ground floor benefits from increased permeability through the creation of new links

between the two sides of the station, stitching together the urban context under the tracks. The connection between the east and west

of the station allows it to remain at its current location while taking advantage of improved integration in this neighbourhood.

The station will become a destination. A place where all functions of urban life coexist, encompassing work, relaxation, residential, services, trade, culture, social life, and economic life. The community experience is enhanced by a rebalancing of inputs that will better respond to the dynamics of the area and in terms of pedestrian movements, restructuring the ground floor will reconnect all modes of public transport. Fonsny Avenue will benefit from a new character and become a more welcoming place with the enlargement of the pedestrian area, its landscape, and its new restaurants and shops. The variety of functions of the station and its improved permeability will draw people in and encourage them to use the new services.