

# What's happening?

## Best Practice at *Blackfriars* Prefabricated Units

### Overview:

The Blackfriars project has been able to benefit from the use of prefabricated units. The units are able to be constructed off site, in controlled environments, and then delivered to site. A large part of the new bridge is made up of prefabricated components:

- **Steel Bridge Deck and Ribs – 5625t**
- **Steel Roof Vierendeels – 931.2t**
- **Concrete Pier Ends – 14m<sup>3</sup>**
- **Concrete Platform Units and Walls – 2425m<sup>3</sup>**
- **Network Rail and London Underground station escalators on the North Bank were also installed as single unit assemblies.**



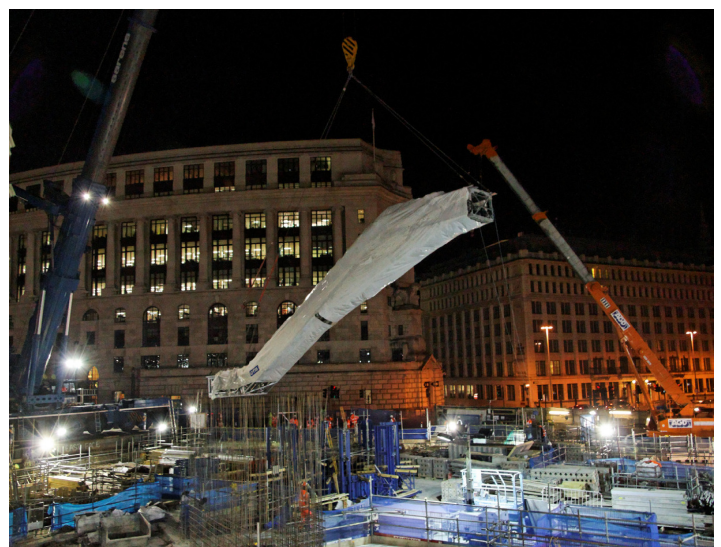
Photograph 1: Prefabricated platform units being delivered to the Blackfriars site via marine transport

### Benefits of Prefabricated Units:

Prefabricated units offer a number of advantages for the construction teams at the Blackfriars project.

- Reduces material use, waste and the risk of pollution due to the units being created off site in a controlled environment (Environmental).
- Benefits to the programme through a reduction in the installation period (Economical).

- Quieter - Reduction in the site activity as there is limited/no construction only installation of the units (Social).
- Higher level of quality as constructed in a factory environment (Economical).
- Reduces congestion on the roads as the prefabricated units require fewer deliveries and the project team have been able to take advantage of the projects marine transport (Environmental & Social).
- Reduces double handling of materials as materials go straight from factory to installation on site (Economical & Environmental).



Photograph 2: One of Four LU escalators being lifted into position.

### Meeting our objectives & targets:

The Blackfriars project are fulfilling the sustainability objectives provided by the client, Network Rail, as well as meeting targets outlined in Balfour Beatty's Sustainability Roadmap:

- Profitable markets
- Restrict carbon emissions
- Protect land and minimise pollution
- Support health and amenity