





MEDIA RELEASE

SACYR IMPROVES DESIGN AND LOGISTICS WITH BIM AT THE **NEW BELFAST TRANSPORT HUB (BTH)**

The infrastructure company uses BIM to assess the most fitting solutions in Health and Safety and to design models to help with the BTH's facility management.

Belfast, October 5, 2023.- The Farrans-Sacyr Engineering and Infrastructure joint venture is delivering the main construction works at Weavers Cross Belfast BTH in Northern Ireland. Works started in January 2022 and will span four years.

Use of Building Information Modeling (BIM) in this project is critical, as the models generated with this tool will help the client learn how to better manage the station and its facilities.

"Besides 3D models for project coordination, the client has asked for 4D models to show its stakeholders how project logistics work and find the best possible health and safety solutions", said Patricia Bonilla, BIM Manager at Sacyr Engineering and Infrastructure.

FSJV work on BIM models for the client's convenient use to plan the hub's operation and facility management.

BIM levels

The JV works with BIM at different project stages. Firstly, at the most basic level, analyzes conflicting construction elements. At a more advanced stage, the use 4D simulation to control construction risks, etc. Lastly, at an even more advanced stage, they apply BIM to facility management.

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Using the extracted data and models, the client can generate interactive simulations with a VR set to learn more about the project. Using Twinmotion and Unreal Engine computer graphics game engine, the JV transforms BIM models into interactive virtual realities. Sacyr has used these programs too in the Ulster University (Belfast, Northern Ireland) and Puerto Langosteira (A Coruña, Spain) projects.

Topping out of the structure

Weavers Cross Belfast BTH, awarded by Translink, will replace the current Europa bus centre and Great Victoria Street station on an 8-hectare site in Weavers Cross, a new neighborhood in the city center that will revitalize the area.

The project advances in schedule and the topping out of the structure was completed last summer.

Key takeaways

- The steel structure of the new building is 15-meters-tall.
- Over 2,600 tn of structural steel have been built in a span of 8 months.
- Once complete, the 8 platforms will be 1.3-km-long.
- Belfast Grand Central Station is approximately 10 times larger than the current Europa Buscentre and Great Victoria Street Train Station facilities.

BTH will be a multimodal transport hub with 26 bus stands and 8 railway platforms, plus enhanced cycling connectivity for a more sustainable mobility and will facilitate economic growth and urban regeneration.

https://www.translink.co.uk/corporate/media/improvementsandprojects/thehub

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