

## Abobo Tunnel: improving accessibility and traffic in Abidjan

The Abobo Tunnel project, situated in the bustling city of Abidjan in Ivory Coast, symbolises how strategic infrastructure development can enhance urban mobility and accessibility. Officially inaugurated on January 10, 2024, this project is a part of the larger Abobo Town Hall roundabout initiative, designed to improve traffic flow in this major residential and commercial area inhabited by over one million people.

### Improving traffic and safety

Under the initiative of PFO Construction and representing the Ivorian Ministry of Public Works and Road Maintenance, BESIX Ivory Coast was awarded the contract in September 2021 for the project management and execution of this critical infrastructure. The works began in March 2022 and, demonstrating the commitment and efficiency of BESIX's teams, were completed by June 2023, ahead of schedule.

The project involved the construction of a 560-metre-long infrastructure that includes the Abobo Tunnel, the roundabout, and access ramps. The tunnel itself stretches 210 metres and, along with the ramps, accommodates the A1 national road which now passes beneath the roundabout with three lanes in each direction. This key route links the districts of Abobo, facilitating smoother connections to the East and North-East of the country.



**The construction of the Abobo tunnel confirms our strong presence in Ivory Coast and the quality of our partnership with PFO Construction. The Abobo site allows us to introduce one of BESIX's other major areas of expertise, infrastructure, to Ivory Coast. And we are particularly proud to participate, under the aegis of PFO Construction, in the realisation of this first-class project for the benefit of Abidjan and the country.**

Philippe Dessoy, General Manager Business Development at BESIX Group.

### Cut-and-cover

The construction of the Abobo Tunnel utilised the 'cut-and-cover' method. This technique involves excavating a large trench, constructing the structure within it, and then covering it. Specifically, the project required the excavation of 130,000 m<sup>3</sup> of earth, the placement of 2,200 tonnes of reinforcement, and the pouring of 20,000 m<sup>3</sup> of structural concrete. To ensure the tunnel's durability against weathering and leaks, a waterproofing membrane was meticulously applied over the concrete cover slab, following a thorough cleaning to remove all impurities and secure optimal adhesion. The tunnel is also equipped with state-of-the-art operational facilities, including a gravity system for efficient drainage of rainwater, ensuring that it remains functional under all weather conditions.

#### Project details

### Abobo Tunnel

#### Location

Abidjan, Ivory Coast

#### Client

PFO Construction on behalf of the Ministry of Public Roads and Road Maintenance of Ivory Coast

#### Contract type

Build

#### Construction period

2022 - 2023

#### Contract value

€17.132 million

### Strong partnership

In past years, BESIX has participated in four significant projects in Ivory Coast.

- In 2021, BESIX successfully delivered the largest drinking water treatment plant in the Abidjan region, located in La Mé, serving the greater Abidjan area.
- The same year, BESIX started works on the F Tower, designed by architect Pierre Fakhoury, located in the heart of Abidjan and the sixth tower of the city's Administrative City. BESIX is in charge of the project management, as well as the execution of the structural works. The project is a partnership with PFO Construction, supported by the Ivorian Ministry of Construction, Housing and Urban Planning.
- The Abidjan Exhibition Centre, also designed by architect Pierre Fakhoury, was inaugurated in 2023. BESIX was in charge of carrying out the structure, concrete shell, and the installation of the roof and its cladding. The complex has a multi-purpose area surface of 12,000 m<sup>2</sup> and the flexibility to extend through modular spaces. It has a capacity of 11,000 people, offering seating for 5,000 people. The exhibition centre officially opened its doors in July 2023 and will host trade fairs, cultural and sporting events, and international conferences. It will also help boost business tourism thanks to its conference centre.
- The Abobo Tunnel completes the circle. As the longest tunnel in Ivory Coast, its delivery marks a significant milestone in the region's ongoing development and commitment to improving the safety of the countless commuters navigating this vital junction daily.

### Builders of a symbol

At the beginning of 2023, the Prime Minister of Ivory Coast, Patrick Achi, honoured the Abidjan Exhibition Centre with his visit, together with several ministers of his government. They witnessed the commitment of BESIX's teams, whom they called the 'builders of a symbol'. They also underlined the remarkable quality of the construction.

