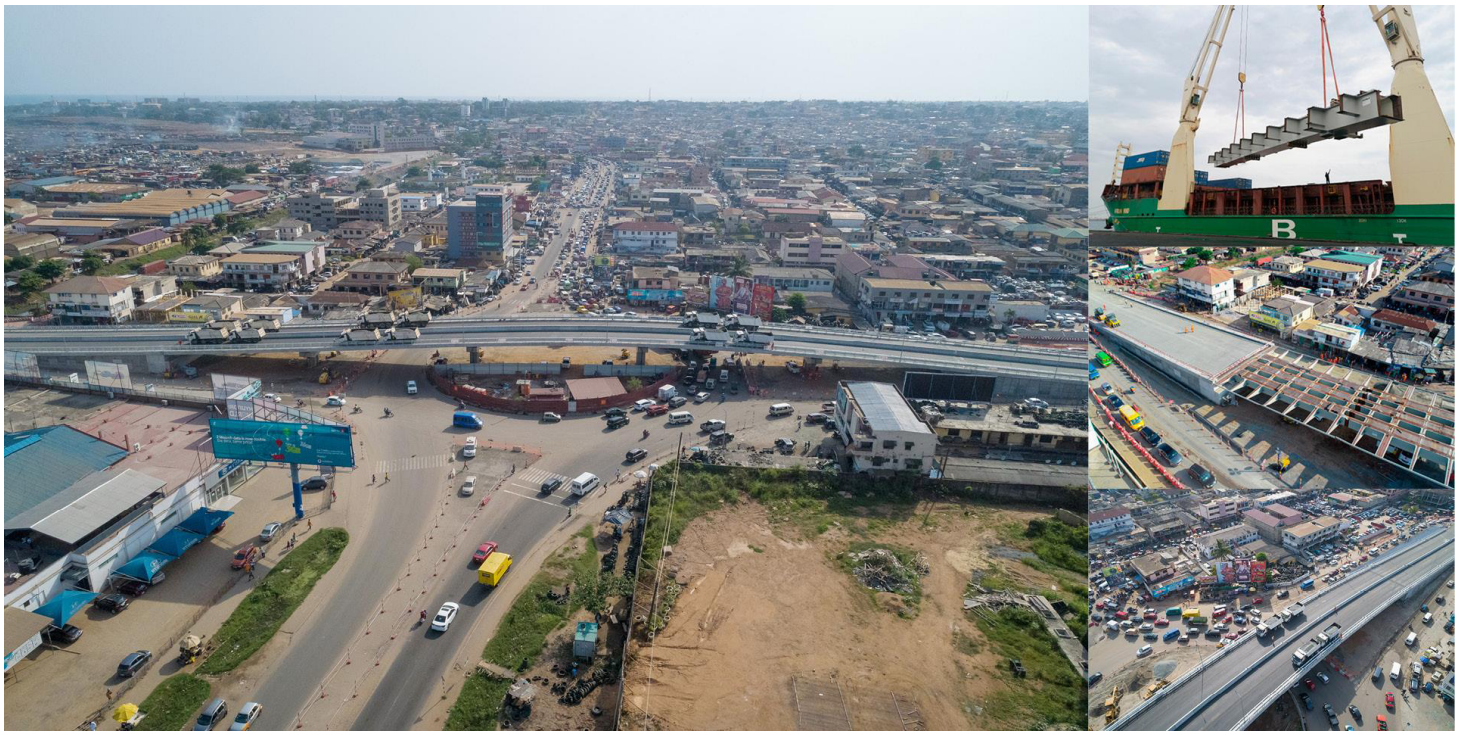
Phase 1 - Viaduct over the Obetsebi Lamptey Interchange

Accra, Ghana / 2020

Structural type	Composite viaduct
Characteristics	169 m in total length. Maximum span length: 37.0 m. 18.5 m wide. Cross section with three composite box girders.
Owner	Ministry of Roads and Highways of Ghana. Department of Urban Roads
Client	QGMI
Constructor	QGMI
Scope	detailed design and construction support



The Phase 1 viaduct over the Obetsebi Lamptey Interchange in Accra is the first and shorter structure of the three viaducts projected as part of the Interchange entire redesign, which is very congested at present.

The viaduct (bridge and approach MSE walls) is 313 meters long, connecting Winneba Road (Dr. Busia Highway) and Graphic Road. The bridge elevates 8 meters above the roundabout and has an approximate length of 169 m between the abutments, divided into five spans of 29.0, 37.0, 37.0, 37.0, and 29.0 meters.

The cross-section consists of a composite deck with three steel box girders with intermediate diaphragms, and cantilever beams separated 3.70 m max. The total width of the deck is 18.50 m (two lanes each way). The depth of the steel box girders is 1.70m (min), and the concrete slab thickness is 0.25 m.

FHECOR Ingenieros Consultores has been in charge of the construction project's design, developed in collaboration with SESTRA. Dizmar has fabricated the steel girders entirely in Spain, and they have been shipped to Accra afterward.

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