King Salman International Airport

CLIENT: Foster & Partners **LOCATION:** Riyadh, Saudi Arabia **YEAR OF COMPLETION:** Ongoing

We are supporting Foster + Partners in the design of a new international airport being developed in Riyadh, Saudi Arabia. The airport is planned to be the largest in the world, with six runways and an expected capacity of 100 million passengers by 2030.

Our involvement includes concept design development for the terminal drop-off viaducts, and the preliminary and detailed design of an approximately 3km automated people mover (APM) system to transport passengers around the iconic terminal development.

The APM comprises prestressed concrete box-girder viaducts supported on concrete substructures, bearing on the terminal structure below. The viaduct runs between four stations integrated with the terminal buildings.

Key design challenges include:

• Coordinating the superstructure to align with the architectural vision of the project while maintaining an efficient structure.

• Coordinating the substructure with the various layers and interfaces of the surrounding buildings.

• Developing a consistent and uniform design approach that can accommodate the differing requirements of the viaduct, stations, staging areas, and depot.

KEY FACTS:

- Concept design
- Preliminary and detailed design