Port of Miami Tunnel
Miami, FL

The Port of Miami Tunnel (POMT) is a Design-Build road infrastructure project, which was built by MAT Concessionaire, LLC in partnership with the Florida Department of Transportation (FDOT), Miami-Dade County, and the City of Miami.

Bouygues Civil Works Florida was responsible for the full design and construction of the project. (Noteworthy to this project was that the design of the structural elements was such so as to achieve the durability objectives and required service life of 150 years.)

The Port of Miami Tunnel is a 4,200 feet bored, undersea tunnel in Miami, Florida. It consisted of constructing two parallel tunnels, two-lanes each, 4,200 feet long in extremely challenging ground conditions which necessitated the relocation of a major highway, expansion (addition of 4 travel lanes) of the existing MacArthur Causeway Bridge and reconfiguration of the road network at PortMiami.

By connecting SR A1A/MacArthur Causeway to Dodge Island, the Port of Miami Tunnel (POMT) project provides direct access between the seaport and highways I-395 and I-95. It creates another entry to the Port of Miami besides the Port Bridge, and keeps the Port of Miami, the community’s second largest economic generator, competitive.

Additionally, the Port of Miami Tunnel improves traffic flow in downtown Miami by reducing the number of cargo trucks and cruise related vehicles on congested downtown streets, and aids with ongoing and future development in and around downtown Miami.

INNOVATIVE APPROACHES

Steelworks Rebar Fabricators was challenged with the task to be the first Fabricator to supply, assemble and install the reinforcing steel (rebar) for this project. (The first of its kind in Florida and much bigger in diameter than many of the preexisting ones.)

The main challenge for Steelworks was the assembly of the 12,000 segments that had to be pre-assembled and delivered to the Precast Facility. Due to the strict FDOT requirements they only had 1/4 of an inch tolerance in the final product. This not only required extreme precision in the fabrication process but also more so in the assembly of each segment cage. There were 8 unique types of segments that made up each ring and therefore precise machine calibration was needed to ensure maximum quality.

The 12,000 precast segments are one of the most reinforced in any tunnel structure ever made before.