

An aerial photograph of a large cable-stayed bridge spanning a wide river. A large container ship is positioned beneath the bridge, and a semi-truck is driving across it. The surrounding area includes a residential neighborhood on the left and a body of water with other vessels in the distance. The word "INFRASTRUCTURE" is overlaid in white capital letters on the right side of the image.

INFRASTRUCTURE

RION-ANTIRION BRIDGE

Corinthian Straits, Greece

Langan served as the overall Lenders' Technical Advisor for this €1 billion multi-span cable-stayed bridge spanning the Gulf of Corinth in Greece. It consists of a record-breaking 3.2-kilometer-long continuous suspended deck supported on pylons constructed in deep-sea waters (65 m+) and on marginal soils, in an area of high seismicity. Construction involved dry docks, wet docks, deep dredging, underwater high-voltage cable relocation, soil improvement, tension-leg barges, and off-shore techniques for the float-out and final positioning of the 90-meter-diameter pylon bases.

Team

GEFYRA (VINCI-led concession consortium)
Bank of America
Bank of Tokyo-Mitsubishi (UK)



PORTMIAMI TUNNEL

Miami, FL

The PortMiami Tunnel project is the first large-diameter tunnel constructed in Florida's challenging soft sedimentary geology using a tunnel boring machine (TBM). Langan evaluated the subsurface data to develop the geotechnical engineering parameters required for design of the bored tunnel and the TBM, the largest ever used in North America at the time.

Team

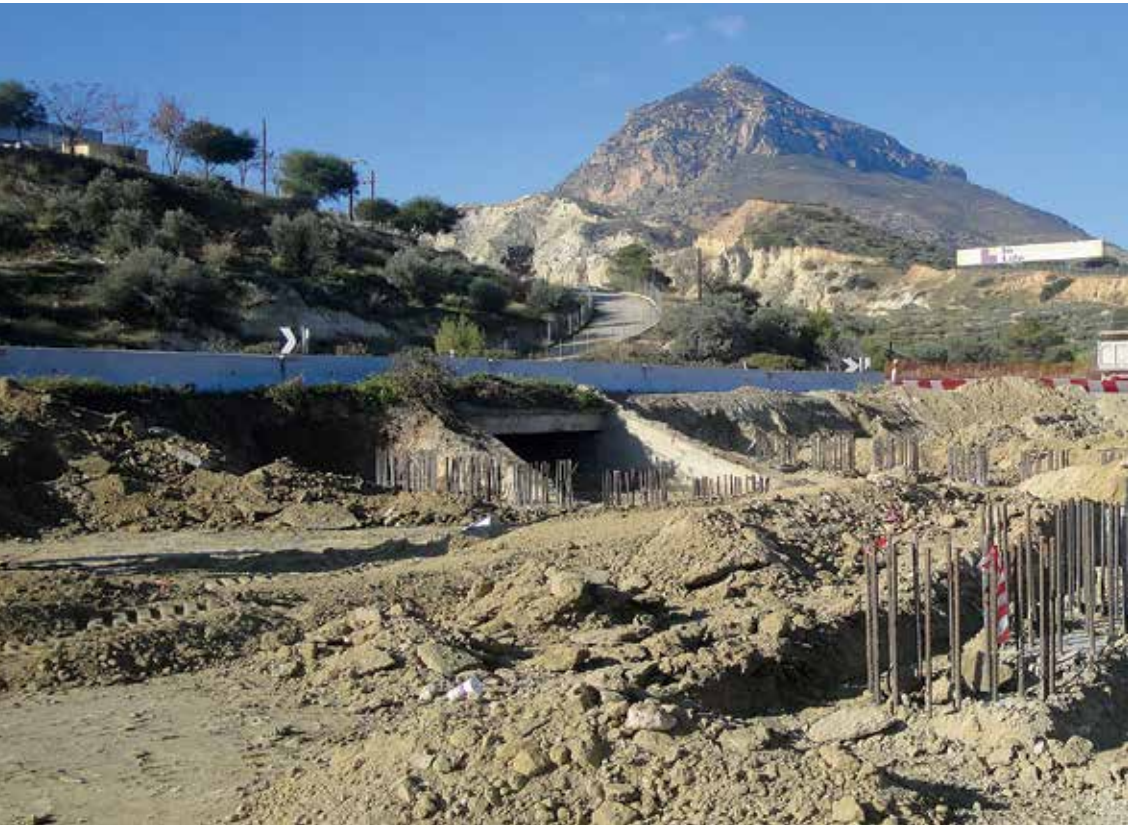
Bouygues Travaux Publics
Meridiam Infrastructure
Bouygues Civil Works of Florida
Jacobs Engineering Group
Miami Access Tunnel Concessionaire
Florida Department of Transportation
Miami-Dade County
City of Miami



EKPPT MOTORWAY

Greece

Langan has been serving as Lenders’ Technical Advisor for the design, construction, financing, operation, maintenance, and use of the Elefsina-Korinthos-Patras-Pyrgos-Tsakona (EKPPT) motorway in Greece, built by a trans-European concession consortium led by VINCI. The 202-kilometer motorway links Athens to Patras on the western end of the Peloponnese peninsula, including the Rion-Antirion Bridge, and significantly improves the safety of the existing road between Korinthos and Patras.



Team

- | | |
|---|-----------|
| Olympia Odos
(VINCI-led concession consortium) | VINCI |
| Crédit Agricole | AKTOR |
| Natixis | HOCHTIEF |
| Alpha Bank | J&P-ETETH |
| Eurobank | TENZA |



WMATA SHEPHERD PARKWAY BUS GARAGE

Washington, DC

Langan provided geotechnical and environmental services for this design-build bus garage facility, which includes a maintenance and administration building. The facility design is the model for all future WMATA bus garages.

Team

Washington Metropolitan Area Transit Authority (WMATA)
SYSTRA Consulting
Hensel Phelps Construction



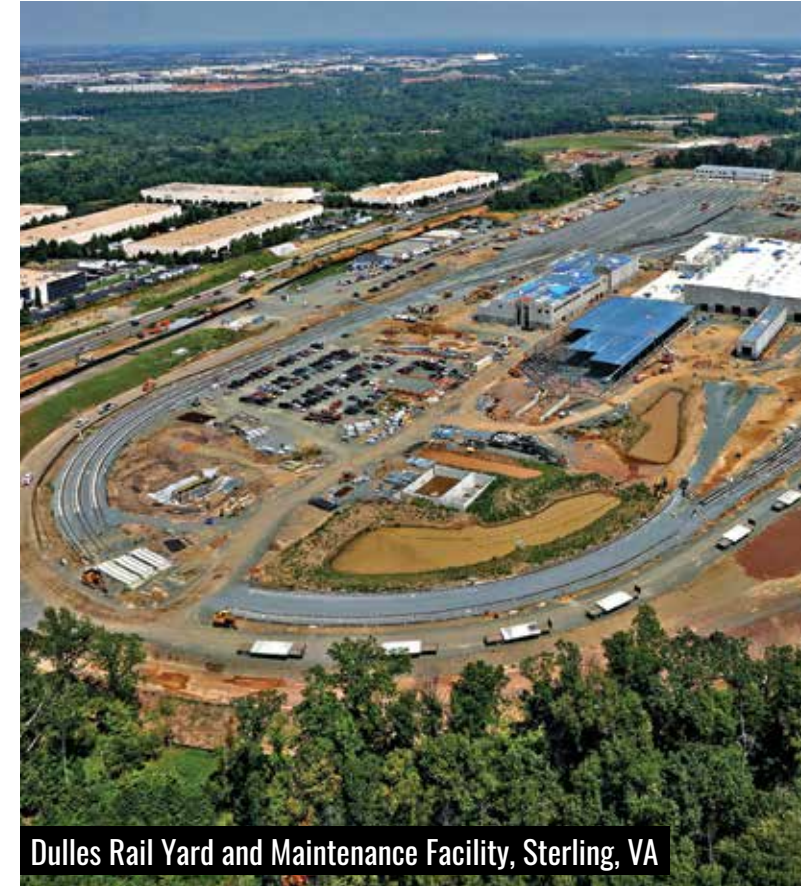
INFRASTRUCTURE



Moynihan Station Redevelopment, New York, NY



Chalmette Loop Levee, New Orleans, LA



Dulles Rail Yard and Maintenance Facility, Sterling, VA



4th Bridge Over the Panama Canal, Republic of Panama



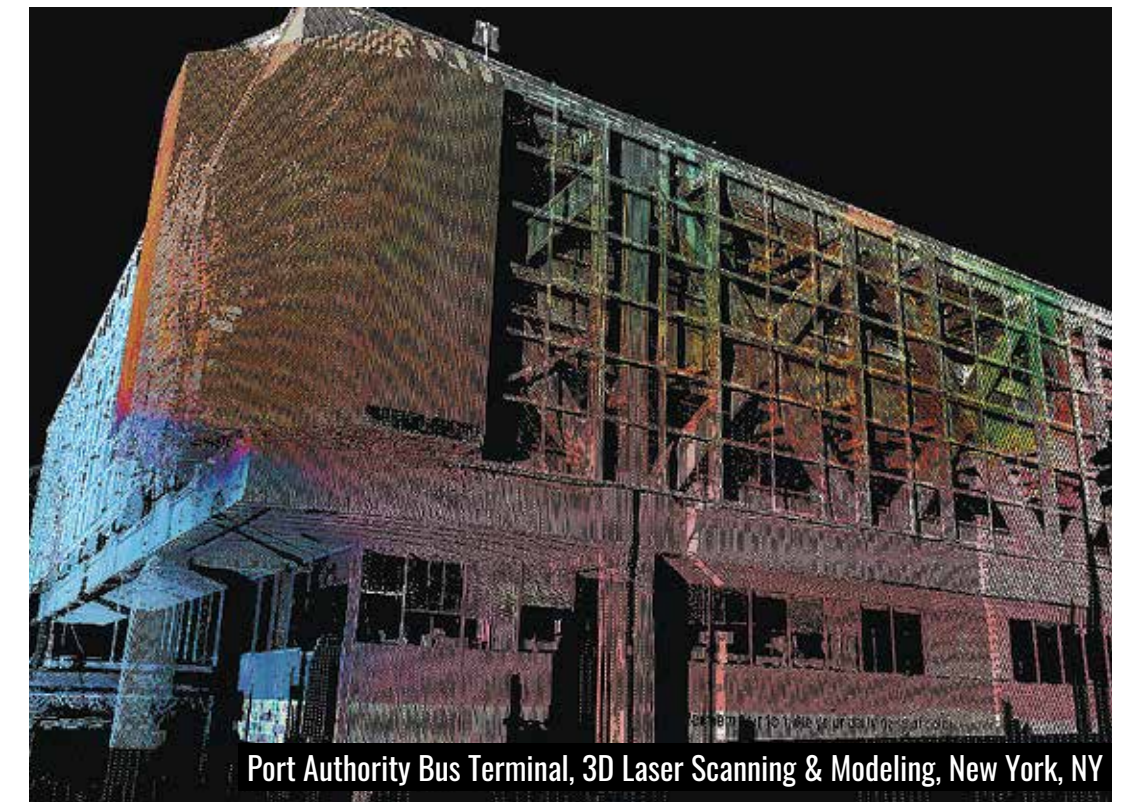
Goethals Bridge, Elizabeth, NJ to Staten Island, NY



Confidential Refinery – New Berth and Seismic Upgrade, CA



Route 33/Main Street Interchange, Easton, PA



Port Authority Bus Terminal, 3D Laser Scanning & Modeling, New York, NY

CREDITS

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181:	WMATA Shepherd Parkway Bus Garage, Washington, DC Duane Lempke, Sisson Studios
182:	Moynihan Station, New York, NY Empire State Development, Courtesy of SOM/Volley
	Goethals Bridge, Elizabeth, NJ to Staten Island, NY NYNJ Link Partnership
183:	Dulles Rail Yard and Maintenance Facility, Sterling, VA Duane Lempke, Sisson Studios
	4th Bridge Over the Panama Canal, Republic of Panama T.Y. Lin International Group