



# STADIUMS & ARENAS



# METLIFE STADIUM

East Rutherford, NJ

Home to the New York Football Giants and Jets, MetLife Stadium is an 82,000-seat, open-air stadium constructed within the Meadowlands Sports Complex. The project was challenged by poor subsurface conditions, numerous site utilities, proximity to an existing stadium and racetrack, and the need to construct the proposed stadium while operating the existing Giants Stadium and Meadowlands Sports Complex.

## Team

New Jersey Sports and Exposition Authority  
New York Football Giants  
New York Jets  
HOK  
EwingCole  
Skanska  
Thornton Tomasetti





# CHASE CENTER

San Francisco, CA

Chase Center, home of the Golden State Warriors, features seating for 18,000 fans, a viewing deck, two public plazas, and 580,000 square feet of office, retail, and restaurant space with underground parking. Langan coordinated regulatory approvals for the removal of hazardous materials and soil management, modeled groundwater for design and dewatering during construction, and addressed poor soil conditions by recommending the most appropriate foundations, shoring systems, and construction methods.

## Team

Golden State Warriors  
Magnusson Klemencic Associates  
Mortenson Clark Joint Venture  
MANICA Architecture  
Kendall/Heaton Associates





# HARD ROCK STADIUM

Miami Gardens, FL

Langan was the geotechnical engineer for the original stadium construction in 1986, and all subsequent additions. For this recent project – a 16-acre, 17,000-ton canopy structure – Langan also provided site/civil engineering, permitting, environmental, and construction dewatering consulting services for improvements at the home of the Miami Dolphins. Subsequently, Langan provided services to support construction of the new tennis complex, which hosts the Miami Open, and a new training facility.

## Team

Miami Dolphins Limited  
HOK  
Arquitectonica  
Hunt Construction Group (AECOM)  
Stiles Construction  
Bliss & Nyitray  
Thornton Tomasetti  
ROSSETTI  
Moss & Associates





# PRUDENTIAL CENTER

Newark, NJ

In the heart of downtown Newark, the Prudential Center is home to the New Jersey Devils and Seton Hall University Pirates, and an exciting venue for major concerts and events. Langan provided site/civil, geotechnical, and environmental engineering services for “The Rock.” The site was complicated by old building foundations, a cemetery, and remnants of a rail yard that once existed over a large portion of the site.

Team

Populous  
Gilbane  
Thornton Tomasetti  
CAA ICON





# MERCEDES-BENZ STADIUM

Atlanta, GA

Langan was retained as the geotechnical and environmental Engineer of Record for Mercedes-Benz Stadium, home of the Atlanta Falcons and Atlanta United. The 1.8-million-square-foot multi-purpose, 71,000-seat retractable roof stadium opened for the 2017 NFL Season. Langan continued its role throughout construction by providing foundation and ground improvement construction observation, vibration monitoring within an adjacent MARTA commuter rail tunnel structure, and environmental consulting services.

Team

Darden & Company  
HOK  
Goode Van Slyke Architecture  
EYP / Stanley Beaman & Sears  
tvdsdesign  
BuroHappold  
Sykes Consulting





# STADIUMS & ARENAS

Lincoln Financial Field Stadium Expansion, Philadelphia, PA



AmericanAirlines Arena, Miami, FL



Levi's Stadium, Santa Clara, CA



Banc of California Stadium, Los Angeles, CA



Allegiant Stadium, Las Vegas, NV



Barclays Center, Brooklyn, NY



Oracle Park, San Francisco, CA





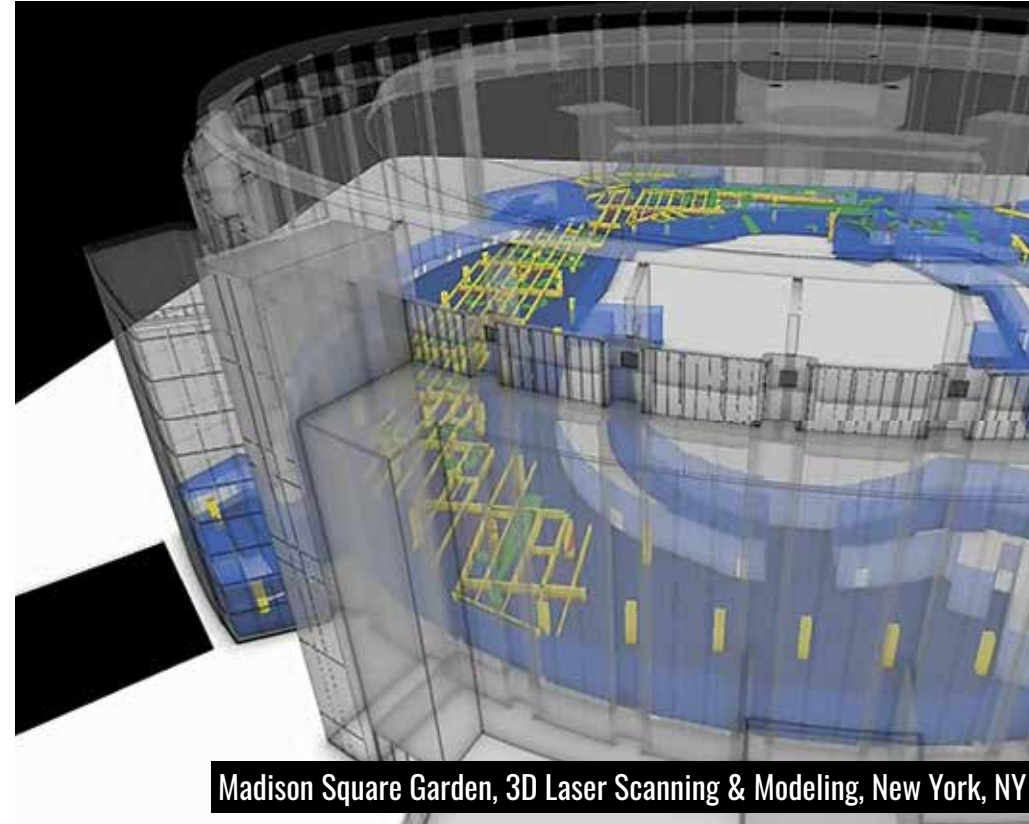
# STADIUMS & ARENAS



PPL Center, Allentown, PA



Basra Sports City, Basra, Iraq



Madison Square Garden, 3D Laser Scanning & Modeling, New York, NY



Los Angeles Chargers: Hoag Performance Center, Costa Mesa, CA



New York Jets: Atlantic Health Training Facility, Florham Park, NJ



Heinz Field, Game Day Operations, Pittsburgh, PA



Avaya Stadium, San Jose, CA



New York Football Giants: Quest Diagnostics Training Center, East Rutherford, NJ



# CREDITS

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|      |  |
|------|--|
| 250: | MetLife Stadium, East Rutherford, NJ   Skanska   |
| 252: | Chase Center, San Francisco, CA   Mark DeFeo   |
| 253: | Chase Center, San Francisco, CA   Jason O'Rear   |
| 257: | Prudential Center, Newark, NJ   Benjamin Clapp/Shutterstock.com  |
| 260: | Lincoln Financial Field Stadium, Philadelphia, PA   Frank Romeo/123RF.COM  |
|      | Allegiant Stadium, Las Vegas, NV   MANICA Architecture   |
| 261: | Banc of California Stadium, Los Angeles, CA   LAFC   |
|      | Barclays Center, Brooklyn, NY   Bruce Damonte  |
| 262: | PPL Center, Allentown, PA   User:Atwngirl/CC-BY-SA-4.0 -<br><a href="https://creativecommons.org/licenses/by-sa/4.0/legalcode">https://creativecommons.org/licenses/by-sa/4.0/legalcode</a> (image edited/retouched) |
|      | Basra Sports City, Basra, Iraq   HOK   |