

# LOADTEST

## O-cell Technology in Manila, Philippines



Project: **Green Residences**  
Location: Taft Avenue, Manila, Philippines  
Client: Bauer Foundations Philippines, Inc.  
Consultant: CMG Solutions, Inc.

### Project Description:



Artists Rendering

Situated on Taft Avenue, adjacent to the De La Salle University, the Green Residences condominium is another exciting and distinctive landmark by SM Development Corporation to hit the skyline of Metro Manila. The residential building will rise 50 storeys above ground level and includes six levels of parking.

Fugro Loadtest was engaged by the foundation contractor to carry out a proof load test to twice working load on a working pile using O-cell bi-directional maintained load test method. This was the preferred method by the Consultant and Client for a test load of 28MN, on a congested site and a tight program.

The 2.0 m diameter working pile was excavated under bentonite to a depth of 60 m. The test pile was fitted with a single level 20 MN capacity O-cell assembly with a gross load test capacity to 40 MN.

The test adequately proved the bearing capacity of the pile to twice working load. It also demonstrated that the O-cell method was an excellent solution for the maintained load testing of a working pile at this site as the foundation contractor continued with pile installation even on the day of testing itself!



Attaching O-cell Assembly to Cage



Post Testing Grouting Operations



Testing in Progress

Since the test pile is required to carry structural loading, the O-cells and annular void created as a result of the expansion of the O-cell were grouted to reinstate the structural integrity.

