G.Muttrah Commercial & Residential Complex

Building G. Muttrah Commercial & Residential Complex

Location Muscat, Sultanate of

Oman

Occupants Residential, Offices and

Retail

<u>Size</u> 25900 SQM

Stories 8 Floors + Basement

Parking

Owner Salim Alshanfari

Jamal Alshanfari

Project Team

Architect: Engineering Studies Office

Engineers: Engineering Studies Office

CM: Al Rawahi International Company LLC

Geotechnical: Oman Drilling and Soil Technology Co. LLC

Architecture

G.Muttrah Commercial & Residential Complex is a mixed use building in a commercially developing region in the city of Muscat. Previously known as a tourist attraction, the Great Muttrah area has developed into one of the city's busiest commercial district. The G.Muttrah Commercial & Residential Complex is one of the many mixed used building in construction at moment. The building will include retail in the ground floor, offices in the second floor and 96 apartments in the rest of the 6 floors. A parking garage in the basement will serve 115 slots for the tenants due to the limited parking spaces in the area. Tenants on the 8th floor can be lucky enough to get a view of the ocean.



Construction

The project delivery method is a designbid-build. The project cost is estimated at around \$15.5M. Excavation is scheduled to start in September 2009 and the construction phase is expected to last 24 months.

MEP System

- Horizontal Fan Coil units ranging from 750 cfm to 4400 cfm.
- (2) 2.5m x 8.5m chillers connected to (3) chiller pumps.
- Wall or duct mounted split air units.
- 11KV line from main power feeds 11kv RMU's in (2) substations.
- (5) 100KVA, 11KVA/433V transformers connected to (15) distribution boards.

Structural

- Reinforced concrete building
- Two way flat plate concrete floor for the second and third floors, typical 140 to 200mm slab for the rest of the floors.
- Concrete columns range from 200mm x 400mm to 700mm x 1200mm.
- Perimeter & interior shear wall lateral system with a 1.2m deep mat foundation.

Samir Al-Azri Structural Option

http://www.engr.psu.edu/ae/thesis/portfolios/2009/ssa5024/index.html