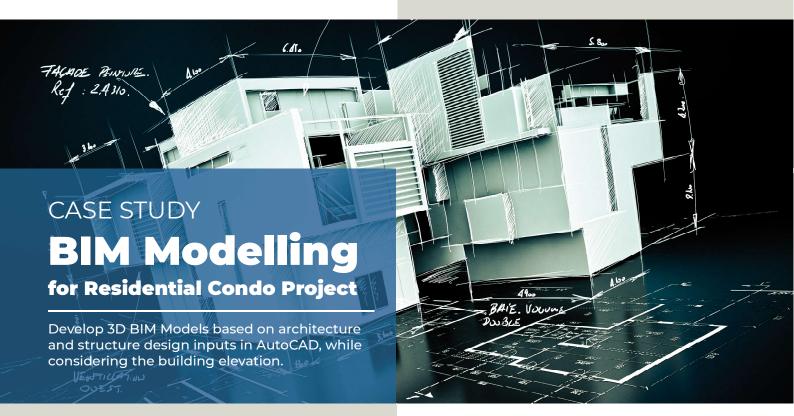


We are experts in Master Planning, Structural, Mechanical, Electrical & Plumbing Engineering services for the AEC industry including a variety of Greenfield as well as Brownfield projects.

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OVERVIEW

The Client is a UAE based Construction Design & Contracting firm.

The client is recognized as a global leading Design & Build company with over 30 years of extensive knowledge and experience in delivering superior quality and turnkey solution projects.

The client manages projects from inception to completion, including comprehensive feasibility studies, conceptualization, architectural and engineering design to state-of-the-art civil & Electro-mechanical construction, financing including complete procurement, equipping, furnishing & installation, and to facilitate operational management services.

CHALLENGES

The Client used 2D drawings for most of their construction projects, which posed challenges such as:



2D Construction design lacks visualization capability.



20% chances of demolition & reconstruction.

The initial engagement is to **Implement BIM** as a pilot on their Premium Residential
Condominium Project of **1,25,000 Sq.Ft.**

An important task from the project is the integration of Architectural, Structural, Mechanical, Electrical, Plumbing, and Firefighting Designs with 3D BIM at the conceptual stage to as-built conditions.



SOLUTION

The Premium Residential condominium had to provide for 35 exclusive units, from one to five-bedroom condos, including nine exclusive two-story sky villas with outdoor living rooms. Positioned on a 2,240 square meter site and with a total built-up area of 11,700 square meters, the 12-story high-rise tower stands 69 meters tall.

The facilities were to include an intimate lobby, with a sculpture court at the ground floor and an array of amenities at the rooftop.

- 3D BIM Model based on AutoCAD design inputs for architecture and structure considering elevation.
- Proposed 300 mm in the mezzanine floor for ease of routing other service lines in the building

BENEFIT

Enventure was able to provide clash-free 3D Model and construction drawings with quick turnaround time and competitive cost.

- The project took 20% lesser time to build.
- 2 Estimated a whopping 10% savings in cost of construction.

Enventure was able to provide the client with 4D Planning & Scheduling, 5D Costing, and 6D Facility Management details in BIM; leading to costs and time-saving on this project.

- Enventure proposed conceptual drainage system that was above the living space of the apartment
- Developed LOD 300 model for highlighting the conflicts in the design

SOFTWARES USED

- AutoDesk REVIT
- Navisworks

FUTURE PLANS

The client is extended contract to develop 3D BIM for an upcoming hospital project. This includes complete detailing BIM LOD 450 model.



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