



Multi-disciplinary BIM Consulting for a Mega Residential Asset



Building Information Modeling (BIM)

AT A GLANCE

CLIENT CHALLENGES

- Integrate separately built models into a single model
- Preparation of a Revit model to LOD 400
- Preparing detailed shop drawings along with tags and annotations while extracting the material take-offs

CLIENT BENEFITS

- Ensured coordination and integration with teams was seamless and structured with dedicated onsite project coordinators
- Saved time and cost through quicker resolutions

Business Need

The project was a prestigious greenfield residential asset with a podium, ground floor, three basements, and 18 upper floors.

RAMTeCH was responsible for using the design drawings and establishing the Building Information Modeling (BIM) from scratch. As a part of the BIM consulting scope, architectural, structural, and MEPF models were to be separately built and finally integrated into a single model at LOD-300, eventually building the model to LOD-400 as-built construction stage.

RAMTeCH Solution

To ensure a smooth seamless workflow, a BIM Execution Plan (BEP) was developed and all critical project elements along with milestones were identified and planned. Our scope of work included the preparation of a Revit model to LOD 400 and preparing detailed shop drawings along with tags, annotations, and extracting the material take-offs for architectural, structural, HVAC, electrical, telecommunications, TV, Internet, fire fighting (protection and detection), plumbing and soil disposal, gas supply, security and surveillance systems, and waterproofing. These include the whole of the building along with its basements, foundation, stilt floors, residential floors (flats and common areas), terrace floor, and podium slab attached to the building.

On receiving the preliminary design from the client, the base Revit models as per disciplines were created simultaneously. Multiple teams were established to ensure quicker throughput and coordination between different trades were achieved through weekly coordination meetings with the client and other service contractors. The model was developed up to the LOD-400 stage and detailed shop drawings were extracted for approval purposes. Based on the client and contractor updates, as-built drawings were prepared for the construction phase.

Results

Appointing RAMTeCH as a single, multi-trade, BIM consultant for the project, the client ensured project seamlessness and saved time and cost through quicker resolutions for clashes and conflicting trades. Onsite resourcing also helped the client in quick and immediate responses to changes and updates which were time critical.