RAMTeCH

Construction Documentation for a Leading Architectural Practice

Building Information Modeling (BIM)

AT A GLANCE

CLIENT CHALLENGES

- Adhere to key critical delivery schedules to assist the developer in progressive construction
- All incorrect data is repopulated with accurate families and elements to ensure complete working drawings

CLIENT BENEFITS

- Significantly reduced the quality checking time
- Ability to work simultaneously on the model at separate geographic locations
- Substantial cost and time savings

Business Need

The client is a world-leading architectural studio, appointed as the Chief Architect for developing the masterplan and designing the infrastructure for one of the largest estates in Africa. RAMTeCH was appointed to complete a full set of construction BIM models along with construction drawings.

The key element of the project was to strip out the incorrect information from the models and repopulate them with the correct families and elements, then bind them together in order to create a correctly modeled, cohesive set of linked models in order to produce the full set of completed working drawings to issue for construction.

RAMTeCH Solution

The first task involved the verification of all the data and drawings received. The 3D modeling process was then started with LOD 300/350 (level of development). Then simultaneously, by reviewing the data and documents, the model was further developed which was used for estimation, construction coordination as well as clash detection.

Post the modeling phase, the coordination process was carried out in the Naviswork Manage. All the clashes in the model were identified and a clash detection report was made and sent to the client for resolving all the clashes with other project stakeholders.

By collecting all the specific assemblies that are accurate in terms of their quality, quantity, shape, size, orientation, and location, LOD-400 modeling was carried out with complete information on fabrication, assembly, and detailing. From this model, the shop drawings were then released which in turn were utilized at the various construction sites.

Results

A unique model was adopted by RAMTeCH using BIM360 as a collaboration tool. All critical delivery schedules were met which enabled streamlined construction at the site.