LOD 300 Architectural BIM Modeling for Healthcare Surgery Center

(Architectural 3D BIM Modeling services)

CASE STUDY

TECHTURE

Client	: Design Consultant	**Team Size**	: 1 No. (BIM Architect)
Disciplines	: Architecture	**Duration**	: 1 Weeks
Scale	: 13,000 Sq. Ft.	**Software**	: Autodesk Revit
Type	: Healthcare	**Location**	: Texas, USA

Project Overview

Techture delivered LOD 300 Architectural BIM modeling for a 13,000 Sq. Ft. healthcare surgery center, based on reference Revit files and hand-drawn sketches. The scope focused on developing a spatially accurate architectural model to support early-stage planning and visualization. Due to limited input details, standard assumptions were applied and validated with the client. The model enabled clear representation of internal layouts for design coordination.

Scope & Deliverables

- Develop LOD 300 architectural BIM model from reference files and hand sketches.
- Model internal elements including walls, floors, and corridors.
- Apply standard assumptions for heights and wall thickness (validated with client).
- Use standard Revit families for basic element placement.
- Deliver a one-time model based on initial inputs.

Challenges

- Working with limited design inputs and hand-drawn sketches.
- Defining assumed parameters like heights and wall thickness.
- Exclusion of façade and elevation details from scope.

Techture Approach

- Interpreted sketches into a structured BIM model workflow.
- Validated assumptions with client before modeling execution.
- Maintained scope clarity to ensure accurate LOD 300 delivery.
- Ensured proactive communication for data gaps and clarifications

Benefits

- Clear BIM representation of surgery center layout.
- Improved design understanding despite limited initial inputs.
- Faster decision-making through visual model outputs.
- Reliable base model for future design development.