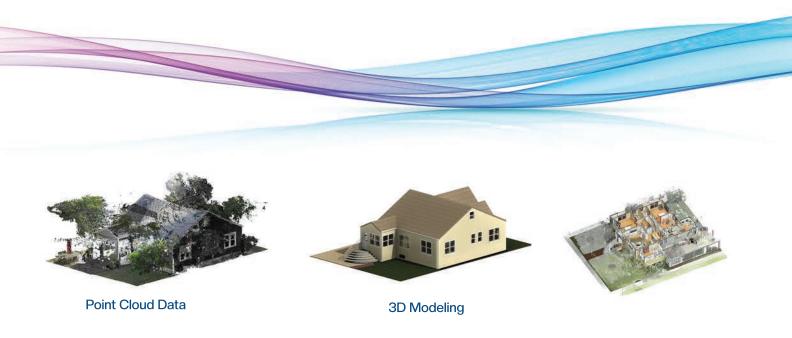# Introduction

Bimoffis has successfully delivered BIM Services for a 3500 sq. Ft. Single storied residential building project located in Australia. Our client requirement was to produce an accurate architectural BIM model of existing Building using the Scan Data for future renovation.

Point Cloud Data

3D Modeling

Project Facts at a Glance

- Project Name: Benjamin residence
- Project Location: Australia
- Client Company: Hickin Dun construction
- Project Type: Residential
- Trades Covered: Scan to Architecture
- Team Size of Bimoffis Pvt Ltd -1 BIM Engineers
- Unique Feature of the Project: Development of 3D Revit Model from Scan Data and Construction Drawing of Existing building.
- Levels of Building: 1
- Software Applications Used for the Project: Revit, Recap, AutoCAD

Scope of Project

- LOD 300 Architectural BIM Model Creation from Scan Data.
- Developing Drawings of exiting building.

Project Challenges

- 3D Scans shared by the client were inconsistent with missing information due to which recreation of some parts had to be done from scratch.
- Maintaining accuracy of the model up to +/-5 mm with the scan Data.
- Using accurate families & model component shown in the scan file.

Project Solutions

- Our team communicated with the client to provide exiting site information of the missing scan area & from the images & hand sketches provided by the client. We execute the modeling.
- Our highly skilled engineers used their expertise to maintain the required accuracy of model with the point cloud.
- As the existing construction being old some component information are not easily available, so our team created the component referring the scan data to fulfill the client's requirement.

Project Solutions

- Scan to BIM conversion process ensured a highly precise and detailed digital model of the building's architecture and structure.
- As-built model created from point cloud saved time and money for the project, notifying the management team about the development progress.
- The clients benefited from as-built drawings for having a detailed record of improvements during the construction process, making it easy to visualize the next steps