

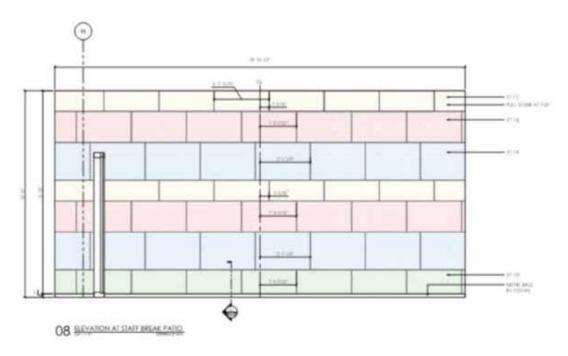
# Stone Assembly Systems

(Stone modeling, BIM & VDC Coordination services)

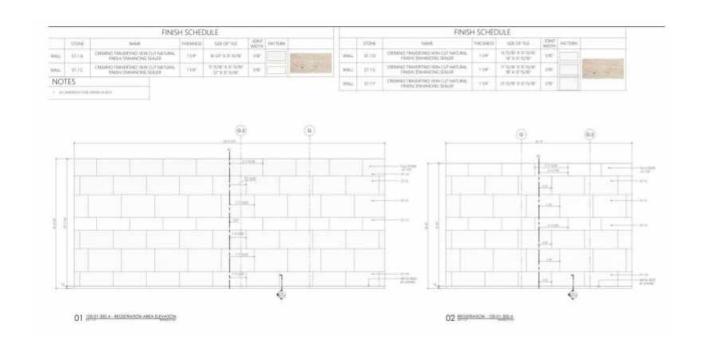
CASE STUDY







Client	: General Contractor	<b>Team Size</b> : 5 Nos. ( Architects, Design Coordinators & BIM Coordinator)
Disciplines	: Architecture	<b>Duration</b> : 1 Month
Туре	: Commercial	<b>Software</b> : Autodesk Inventor. Autodesk Revit & AutoCAD
		Location : California, USA





# **Project Overview**

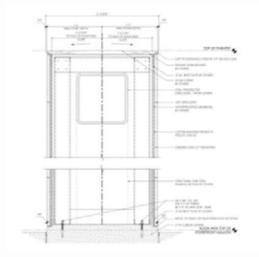
This project involves Architectural BIM modeling of stonework at LOD 400 using Autodesk Inventor. The scope includes detailed modeling of individual stone pieces, integration with structural elements, and connection detailing. The project also covers site development coordination, generation of fabrication and shop drawings, and creation of ticketing/delivery drawings to ensure accurate installation on-site.

## Scope & Deliverables

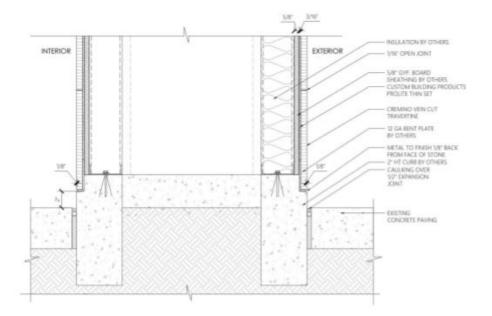
- Develop LOD 400 stone models using both Revit and Inventor.
- Model stone façades in Revit using custom families created from received inputs.
- Generate comprehensive shop drawings, including plans, elevations, sections, and detailed profiles.
- Produce detailed tickets for individual stone pieces in Revit, Inventor, and CAD.
- Create and document 3D connection details for both modeling and shop drawings.
- Coordinate the architectural model with construction details to accurately develop the stone façade.

# Challenges

- Coordinating complex design requirements from the architect with the constraints of the building's structural and MEP systems.
- Managing frequent design markups and revisions, which required continuous updates to the millwork model and shop drawings.
- Maintaining a high level of quality control to ensure all details met both drafting standards and fabrication requirements.







# **Techture Approach**

- Maintain clear and consistent communication on project details to ensure high-quality deliverables. Address potential issues proactively and highlight any queries even beyond our scope.
- Implemented Automation with dynamo scripts
- Checklists were created for modeling, detailing, and documentation to ensure submissions met the expected quality standards.
- Utilized Custom Parametric families to adapt quickly to design modifications.
- **○** Established a new workflow in Inventor and efficiently adapted to ensure consistent delivery of high-quality project standards.

### **Benefits**

- Ensures high-quality deliverables, reduces rework, and promotes early issue resolution through proactive and transparent communication.
- Time saving and minimizing errors using Automation.
- Improved consistency and accuracy across all deliverables by using checklists to maintain quality standards in modeling, detailing, and documentation.
- Enabled faster response to design changes and improved efficiency by using custom parametric families for flexible and adaptive modeling.