

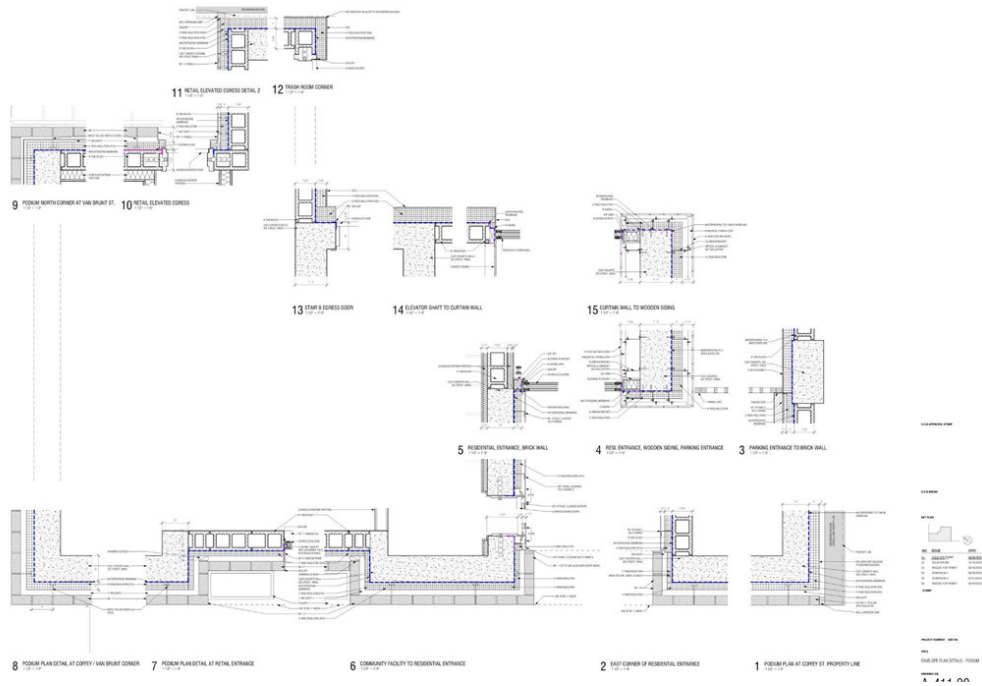
# BIM-Driven Wall cladding and material finishes

(Architectural Modeling & Walkthrough, BIM & VDC Coordination Services)

CASE STUDY



TECHTURE



**Client** : Architect

**Team Size** : 2 Nos. (BIM Architect & BIM Coordinator)

**Disciplines** : Architecture

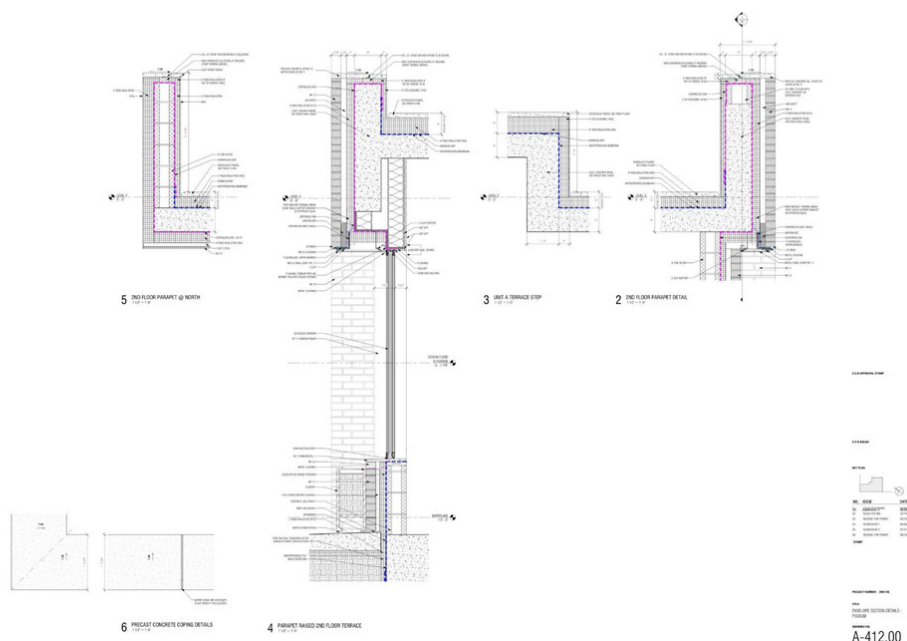
**Duration** : 2 weeks

**Scale** : 30,000 Sq. Ft.

**Software** : Autodesk Revit & Naviswork

**Type** : Commercial

**Location** : New Jersey, USA



## Project Overview

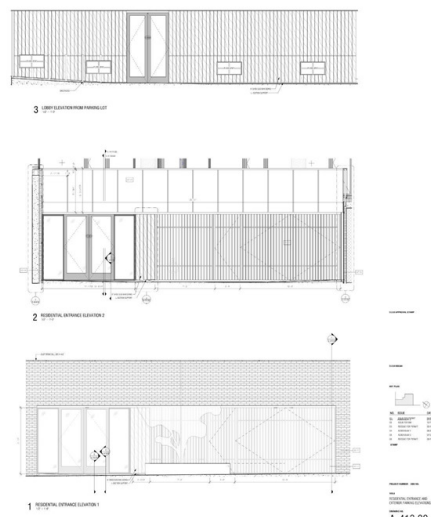
This 30,000 sq ft commercial façade upgrade project involved LOD 400 BIM modeling to update wall cladding and material finishes. Using Autodesk Revit and Navisworks, Techtur incorporated client markups and revised material schedules directly into the coordinated model. The updated layouts and finish swaps were validated against existing building geometry, ensuring accuracy and constructability.

## Scope & Deliverables

- ❏ LOD 400 BIM modeling of wall cladding panels and finish systems based on revised client markups
- ❏ Incorporation of updated material specifications and finish schedules into the coordinated model
- ❏ Extraction of fabrication-ready shop drawings and material quantity reports
- ❏ Clash checks and interface coordination between cladding layers, substrates, and existing structural surfaces

## Challenges

- ❏ Frequent design changes and markup-driven finish updates requiring rapid model revisions
- ❏ Maintaining accuracy in panel layout and geometry across multiple finish zones
- ❏ Ensuring material mapping consistency between drawings, schedules, and modeled elements
- ❏ Coordinating cladding interfaces with existing building geometry without field-level survey data



# Techture Approach

- Integrated client markups directly into Revit models to update panel layouts and finish locations
- Standardized material libraries and applied schedule-driven properties across all cladding elements
- Systematically ran Navisworks checks to validate alignment, thickness buildup, and interface tolerances
- Delivered coordinated drawing packages and finish maps with revisions tracked and documented

## Benefits

- Reduced design ambiguity through clear, model-based finish allocation
- Improved fabrication and installation efficiency with coordinated LOD 400 detailing
- Faster approval cycles due to precise markups reflected directly in drawings
- Minimized on-site rework by validating finish interfaces early in the BIM workflow

