



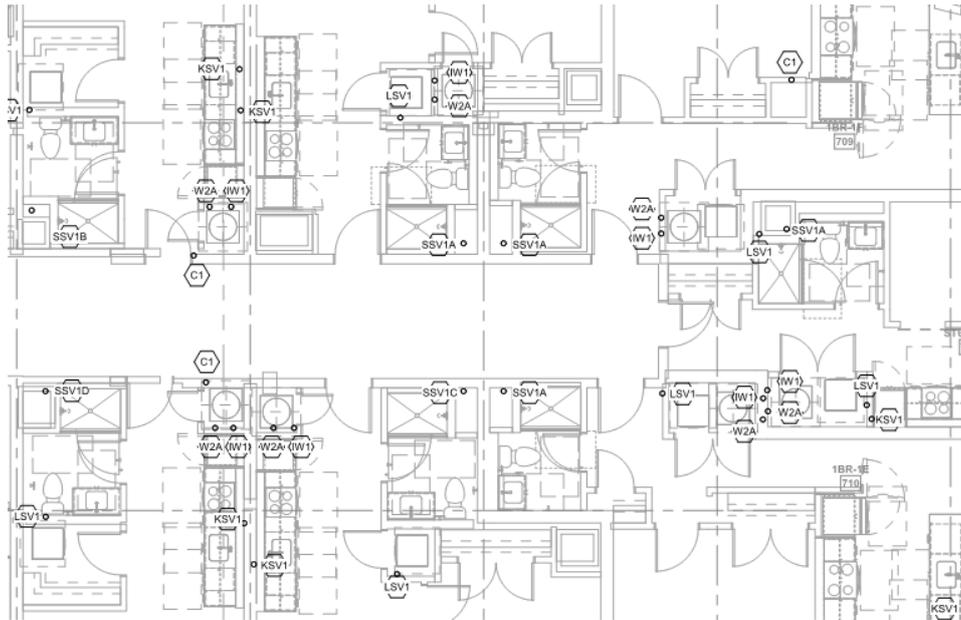
LOD 350 MEPF Coordination for Commercial Development

(Mechanical, Electrical and Plumbing Modeling, BIM & VDC Coordination Services)

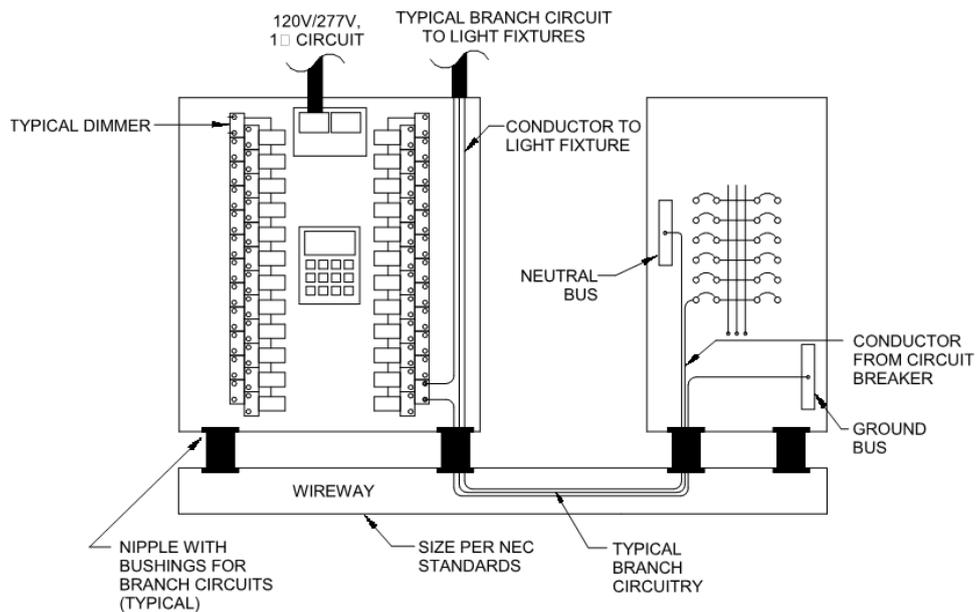
CASE STUDY



TECHTURE



Client : Mechanical Contractor	Team Size : 6 No.s (BIM Engineers, BIM Coordinators & BIM manager)
Disciplines : MEPF	Duration : 2 Months
Scale : 1,41,800 Sq. Ft.	Software : Autodesk Revit & Naviswork
Type : Commercial	Location : New York, USA



Project Overview

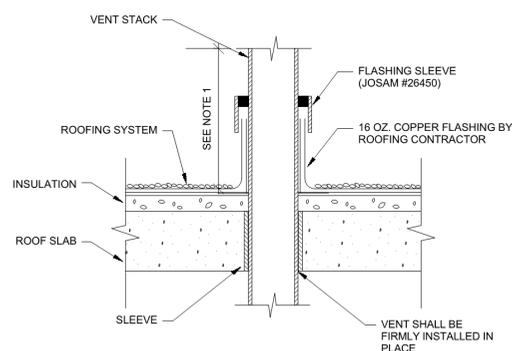
Techture delivered LOD 350 MEPF BIM coordination for a 1,41,800 sq. ft. commercial development using Autodesk Revit and Navisworks. The project involved enhancing an existing MEPF model and developing missing elements based on client-provided drawings and laser scan data. Through clash detection and BIM coordination with architectural and structural models, Techtur ensured a clash-free, constructible MEPF model. This approach enabled precise installation planning, minimized on-site conflicts, and provided a reliable base for construction and facility management.

Scope & Deliverables

-  Develop LOD 350 MEPF model using the provided base model and client drawings, including HVAC, plumbing, electrical, fire, and associated components
-  Model any missing equipment or elements from drawings into the Revit model
-  Perform multidisciplinary clash detection against architectural, structural, and laser scan data
-  Generate constructability/deviation reports detailing issue nature, location, and impact
-  Update and deliver a clash-free, coordinated MEPF model based on BIM coordination meetings and client feedback

Challenges

-  Integrating missing equipment into an existing MEPF model without disrupting existing geometry
-  Ensuring model accuracy against laser scan data for a large-scale commercial development
-  Coordinating multiple MEPF systems within dense ceiling and service spaces
-  Prioritizing and resolving clashes efficiently across basement to upper levels
-  Maintaining model constructability while adhering strictly to client-approved drawings



Techture Approach

- Enhanced the existing Revit model while maintaining a single-source workflow for all disciplines
- Used Navisworks for clash detection, issue reporting, and prioritization based on construction sequencing
- Created or adjusted standard Revit families as needed for missing equipment
- Conducted regular BIM coordination meetings to incorporate feedback and ensure constructibility
- Verified model accuracy against scan data and prepared detailed deviation reports

Benefits

- Reduced on-site coordination conflicts and rework
- Improved accuracy and reliability of MEPF installation plans
- Clash-free model ensured seamless integration with architectural and structural elements
- Enhanced collaboration between disciplines through structured BIM workflows
- Provided a dependable base for construction sequencing and future facility management

