

# **University Building**

(ASI & Landscape Modeling, BIM & VDC Coordination Services)









Client	: General Contractor	<b>Team Size</b> : 5 Nos. ( Architects & ASI BIM Coordinator)
Discipline	<ul> <li>and Landscape</li> </ul>	<b>Duration</b> : 8 Months
Scale	: 3,70,000 Sq. ft.	<b>Software</b> : Revit, Revizto, Procore, Open Space
Туре	: Educational	Location : Ontario, Canada





## **Project Overview**

Techture was engaged to deliver tailored BIM solutions for a 3,70,000 sq. ft. university campus, encompassing Architecture, Structure, Interiors, and Landscape. Deviations identified in the scan data were carefully incorporated into the model to ensure alignment with on-site conditions. The model was regularly updated with the latest scans throughout the execution phase, enabling accurate downstream modeling and generation of precise shop drawings. The scope included LOD-400 development and end-to-end multi-disciplinary coordination with all subcontractors.

# Scope & Deliverables

- Develop Architecture, Structure, Interiors, and Landscape BIM models to LOD-400 standard.
- 🗊 Update As-Built models using Point cloud Scans.
- 🗘 Generate Coordinated Shop Drawing sheets based on client-provided markups.
- Integrate all models using a federated Revit workflow, ensuring model alignment and discipline coordination.

#### Challenges

- Multidisciplinary Coordination Coordinating models across multiple trades including architectural, structural, interiors, and landscape within a shared digital environment.
- Tight Timelines and Budget Constraints The project had a fixed timeline, requiring efficient delivery with minimal rework.
- Frequent Design and Scope Changes Evolving client inputs and stakeholder-driven changes created frequent design updates.





## **Techture Approach**

- Weekly clash detection sessions were conducted using Revizto to identify and resolve conflicts early in the design stage, improving model accuracy and reducing coordination delays.
- To meet the tight timeline, the team implemented automation tools and Dynamo scripts to streamline repetitive modeling tasks and boost overall efficiency.
- Federated BIM models were used in Revit to integrate frequent design and scope changes across disciplines. Clash detection was automated in Revizto post-revision to maintain coordination integrity.

#### Benefits

- Techture's collaborative workflows allowed early identification of inter-trade conflicts, reducing coordination errors and site disruptions.
- Automation tools accelerated modeling and documentation, enabling the team to meet strict deadlines without compromising quality.
- Centralized data environments helped maintain version control and transparency across the project team, fostering efficient communication and accountability.

