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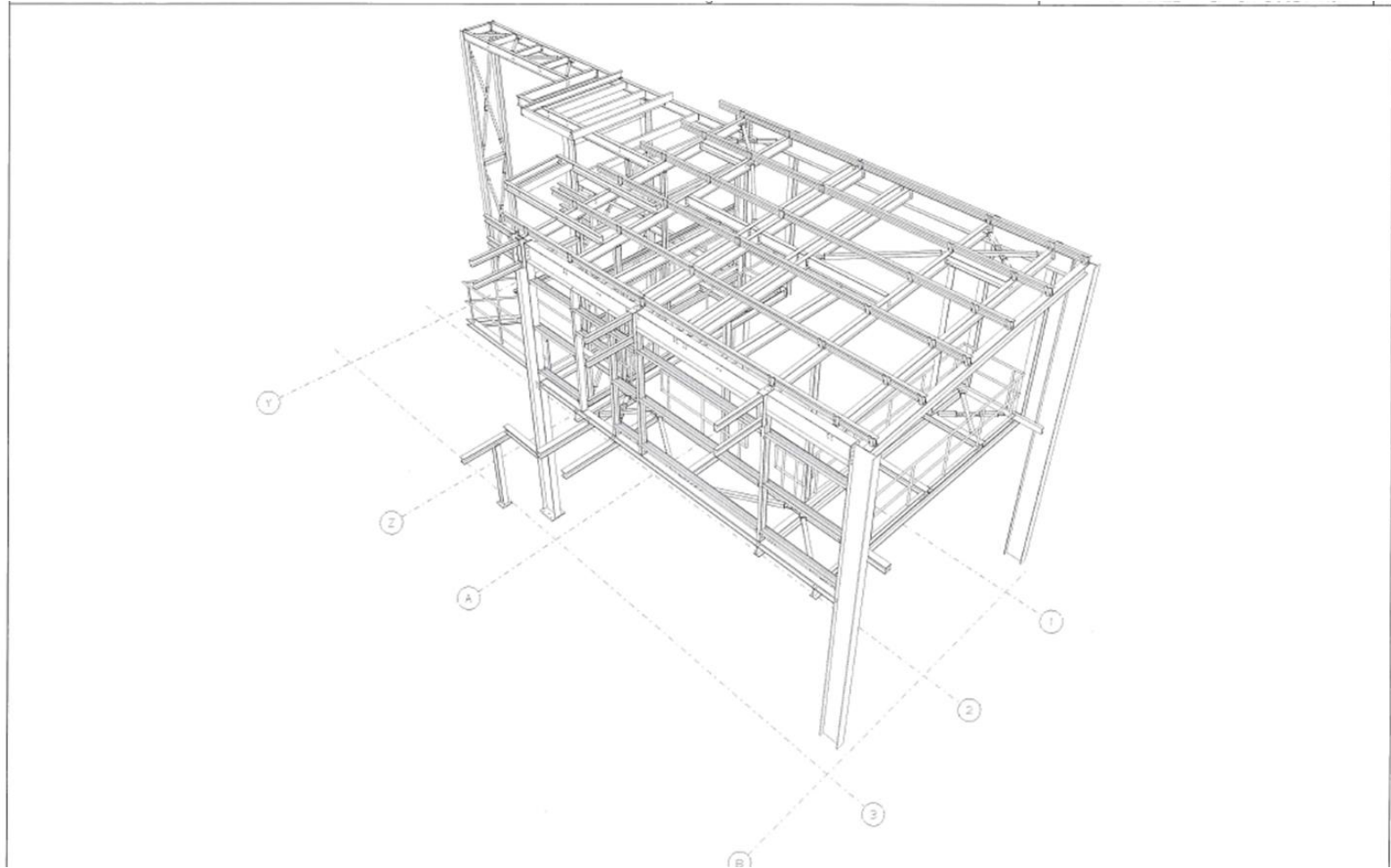
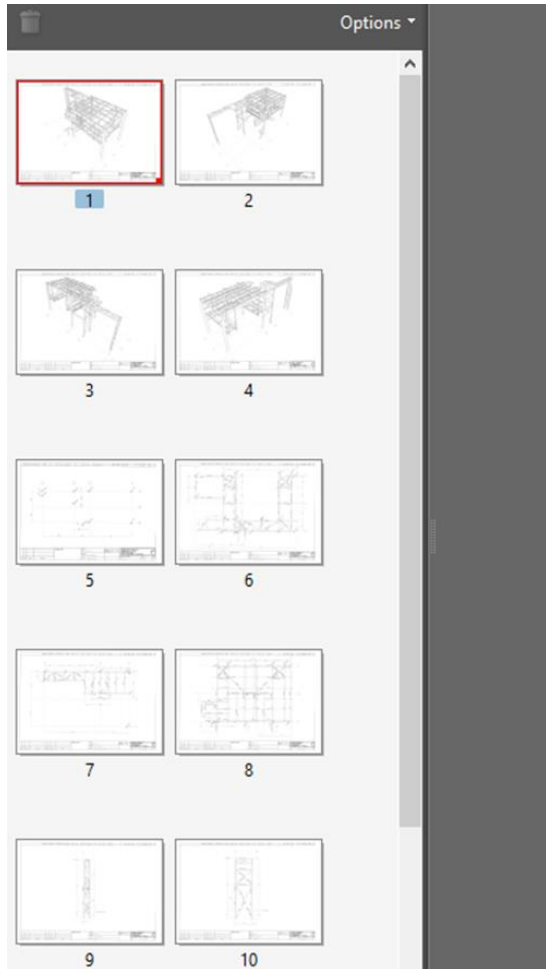


Non BIM Approval Methodology

- PDF Structural Drawings Issued to Steel Fabricator
- Steel Fabricator Issues 1st Iteration of PDF Fabrication Drawings
- Depending on project size, PDF fabrications can exceed 200+ pages
- Engineer reviews each page (often multiple times as several sheets may reference same location with different views, i.e. elevations, plan, sections)
- Commentary & Markup prepared by Engineer
- Commentary Issued to Steel Fabricator to make changes
- Steel Fabricator Issues 2nd Iteration of PDF Fabrication Drawings
- Engineer reviews changes, Commentary & Markup prepared by Engineer
- Changes / commentary correct == APPROVAL, otherwise further commentary etc.....

Non BIM Approval Methodology

- Steel Fabricator PDF Fabrication Drawings

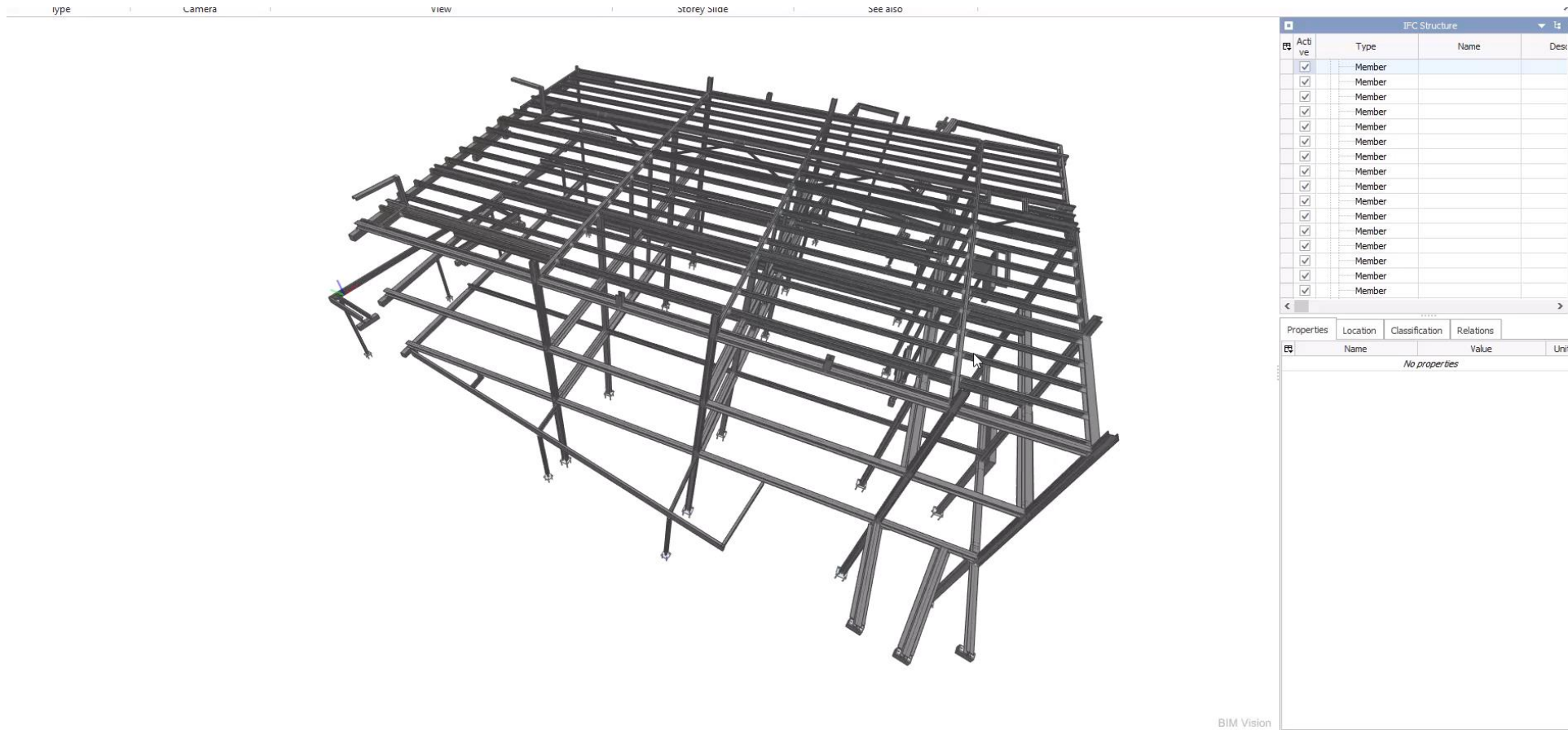


BIM Enabled Approval Methodology

- PDF Structural Drawings & Steel IFC Model Issued to Steel Fabricator
- Steel Fabricator Issues 1st Iteration of IFC Fabrication Model Using Tekla or similar
- Single 3-D model captures all data
- Engineer reviews model
- Commentary Schedule prepared by Engineer, referring to data within Fabricators IFC model
- Commentary Schedule to Steel Fabricator to make changes
- Steel Fabricator Issues 2nd Iteration of IFC Fabrication
- Engineer reviews changes, Commentary Schedule to Steel Fabricator to make changes
- Changes / commentary correct == APPROVAL, otherwise further commentary etc...

Non BIM Approval Methodology

- Steel Fabricator IFC Fabrication Model



Pros & Cons of Non BIM vs Enabled Approval Methodology

Pros:

- Improved QA for Design
- Improved Efficiency for the Designed at review stage
- Improved construction / Fabrication project timelines for project delivery (approval process reduced through 3D process)

Cons:

- Requires high level of 3D competence from designer
- Requires high level of 3D competence from fabricator
- Project Manager & Client required to lead the 3D process

Thank You – Questions & Answers

