



New Ways to Visualize 3D Models



New Ways to Visualize 3D Models

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Augmented Reality



We Care



We Listen



We Share



We Innovate



We Excel

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TECHNICAL WORKSHOP 

Augmented Reality

- Ability to layout
- Run a quality control check for accuracy
- Video document for coordination with jobsite teams
- Walk through verifying installation and tolerances within the true space of any system uploaded

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TECHNICAL WORKSHOP 

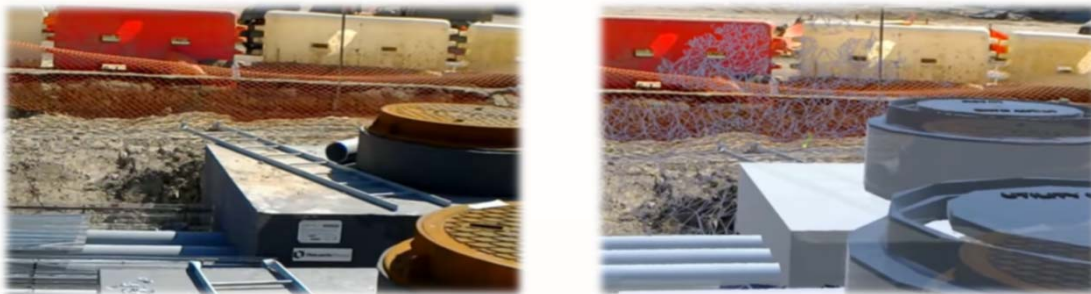
Layout

- Schedule compression and shop drawings were not available
- Available column lines used as points of reference
- Layout was completed in 30 minutes
- Avoiding job site impact

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TECHNICAL WORKSHOP 

Vault Verification

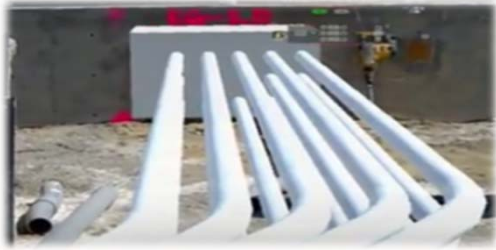


Installation and Verification using HoloLens

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Stub Up Verification

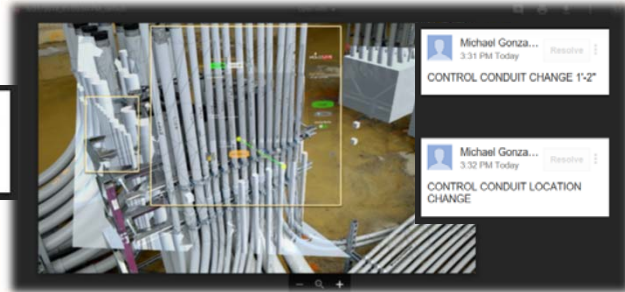


Installation and Verification using HoloLens

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Issue Tracking



Communication from the field to the design team

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TECHNICAL WORKSHOP 

Mission Statement

Building Quality |
Promote zero deficient installations

Building Value |
Capture and coordinate with other trades saving time

Building People |
Transforming the way we think about building

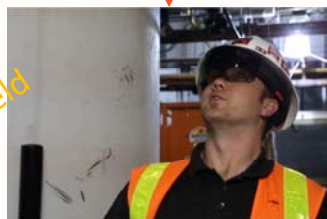
Current Design Coordination Process:



Lean Construction

Use Augmented Reality Technology

Field



Live

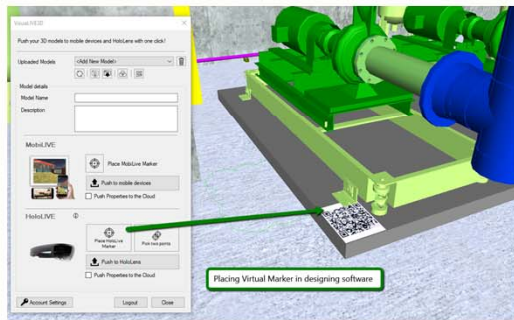


Office

How it works:

Model Alignment

1- Marker Method

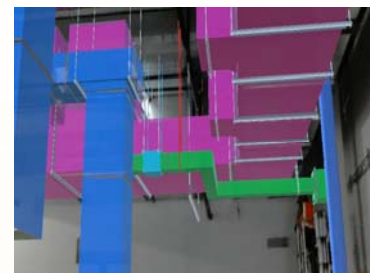
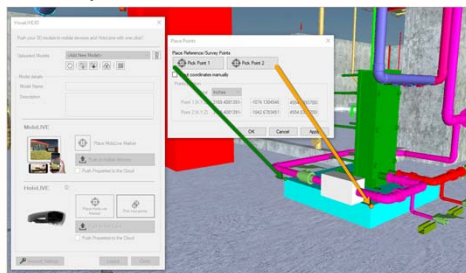


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How it works:

Model Alignment

2- Control Points – Survey (N, E, EL) or known points

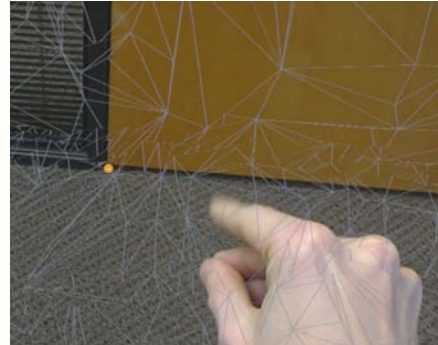


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How it works:

Model Alignment

3- In-App Alignment – Match point to point



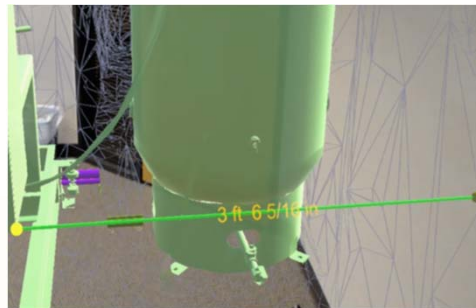
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How it works:

Advanced Measuring



Measure Point to Point of the model
In mixed reality



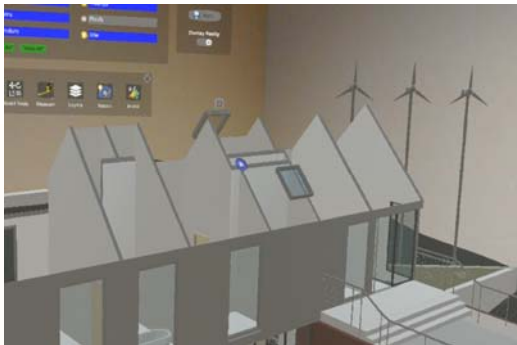
Measure Point to Point of the model to
Reality
In mixed reality



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How it works:

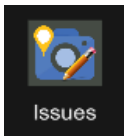
Layers On/Off



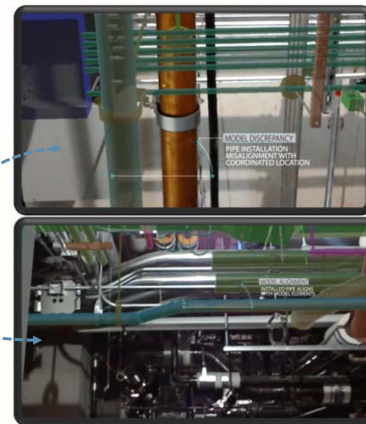
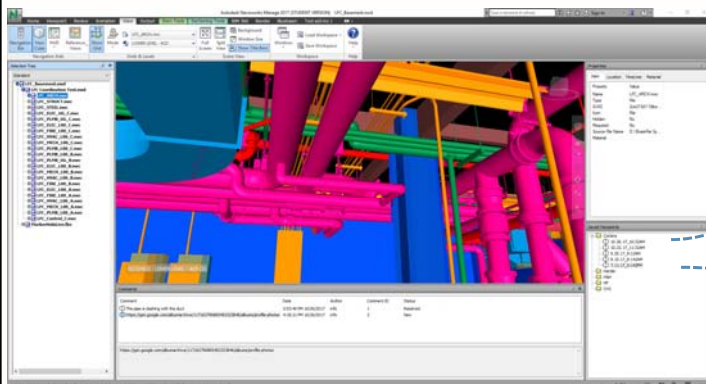
Say: "Hide", "Show", "Isolate", "Hide All", "Show all" + Layer Name

How it works:

Issue Capturing - RFI



LIVE



Questions?

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