

26TH ANNUAL



26TH LCI CONGRESS
OCTOBER 22-25, 2024

Optimizing Trade Partner Procurement by Showcasing Lean

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10/23/24

SURFING THE WAVE OF LEAN DESIGN AND CONSTRUCTION

Presentation Outline

- Introductions
- Project Information
- Core Lean Tenet – Generating Value
 - The core focus of this presentation is to maximize value to the owner during the trade partner procurement process.
- About the Trade Partner Procurement RFP
- Airco Mechanical's Response
- Tangible Takeaways – What will attendees from each discipline walk away with?



SIX TENETS OF LEAN CONSTRUCTION

1 Respect for People

2 Optimize the Whole

3 Generate Value

4 Eliminate Waste

5 Focus on Flow

6 Continuous Improvement



UCDH Medical Center

Davis Campus

5,300 Acres

Buildings:

1,700

Building Space:

12.5M SF

**Average Age of
Buildings:**

45+ Years Old



Sacramento Campus

145 Acres

Buildings:

50+

Building Space:

4M SF

Population:

**14,000 Employees
serving 3000 Patients
per day.**

**Operational & Utility
Budget:**

**\$3B/yr. Operational
\$10-\$15M/yr. Utility**

**Only Level 1 Trauma
Center inland Northern
California**

Project Information

Project Goals

- Support 1.5M SF growth.
- Meet Seismic Compliance Requirements
- Reduce the use of Fossil Fuels

Project Delivery

- Progressive Design Build

Schedule

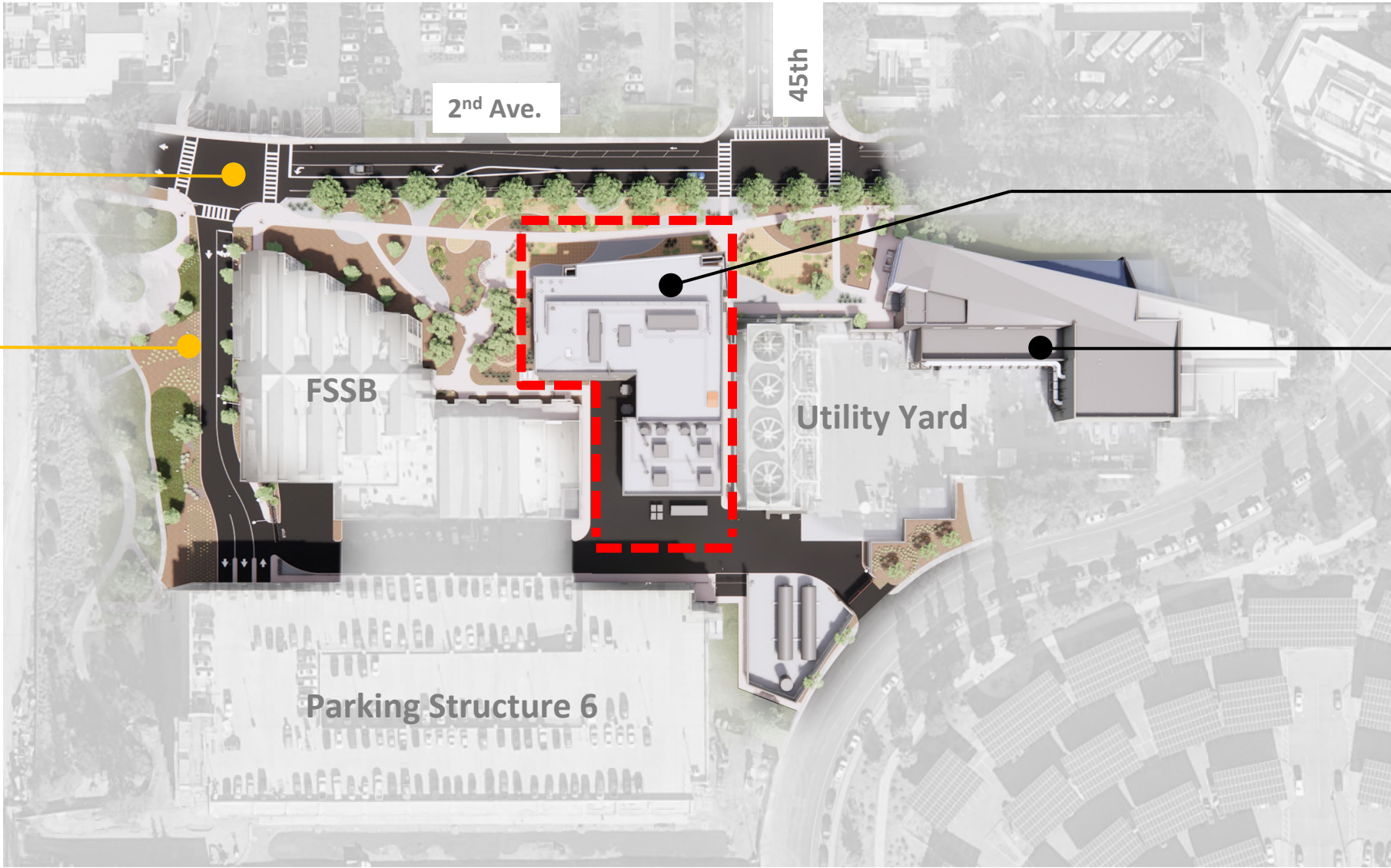
- Design Started in Q3 2023
- Complete by Q1 2027 to support upcoming projects.



Project Site

**2ND Avenue
Improvements**

**PS6
Driveway**



**Annex
Building**

**Renovation of
Central Plant**

Project Scope

Major Equipment & Utility Upgrade-

- New emergency generators
- Upgrade existing HHW to support new buildings
- New Chiller to support new buildings
- New site infrastructure
- New SMUD electrical feed

Zero Downtime as the Goal



The Request for Proposal

- Two Step Process

- **Prequalification Questionnaire** – Basic financial and similar experience information
- **Request for Proposal:**
- Technical Proposal - Detailed staffing and experience information
- Cost Proposal – Fee, bond rate and labor rates

- Project Challenges

- Modification of Existing Hydronics System without Disruption
- Concurrent Projects of New CUP Annex Building with a Significant Scope in the Existing CUP





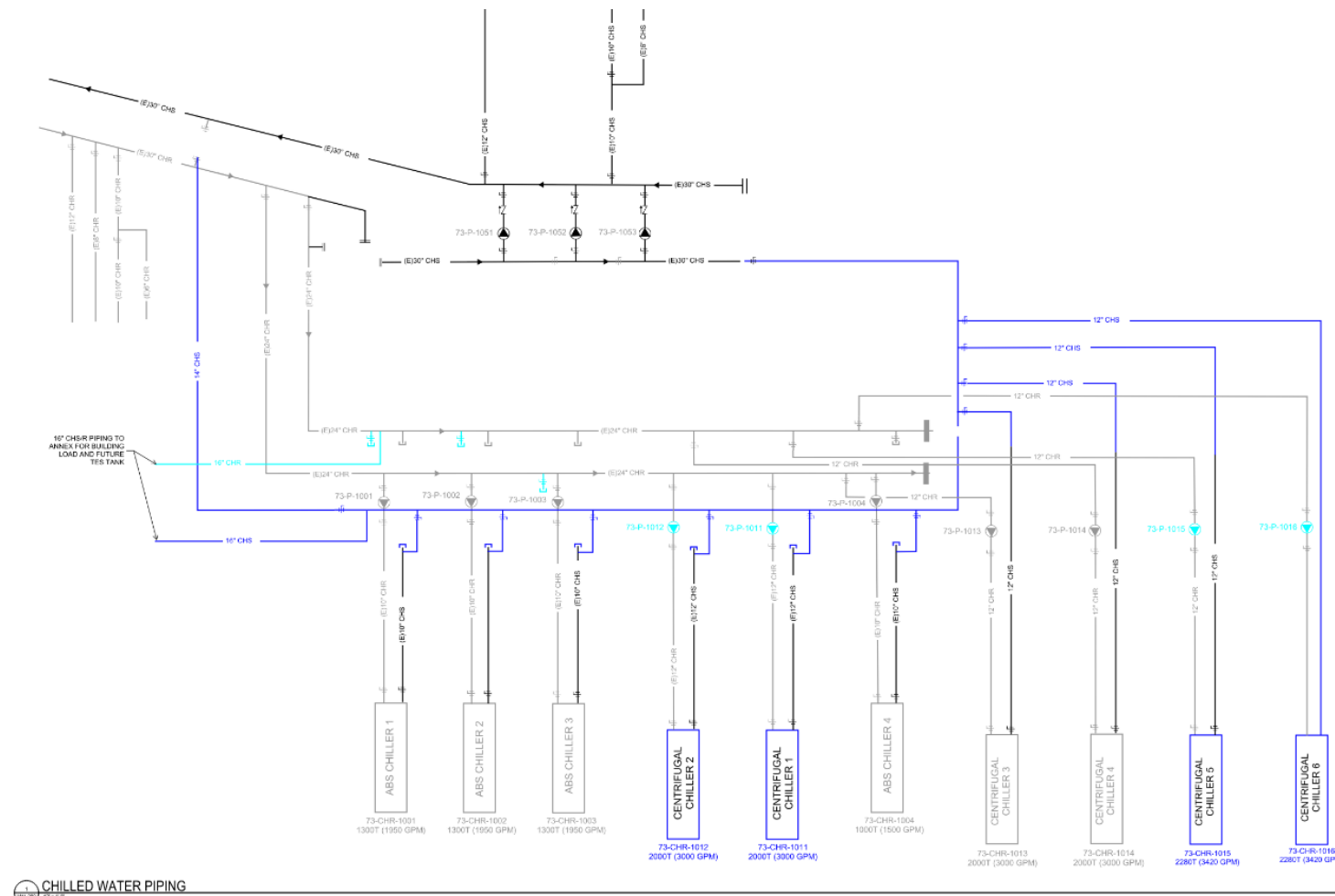




The Request for Proposal

Technical Focus Questions:

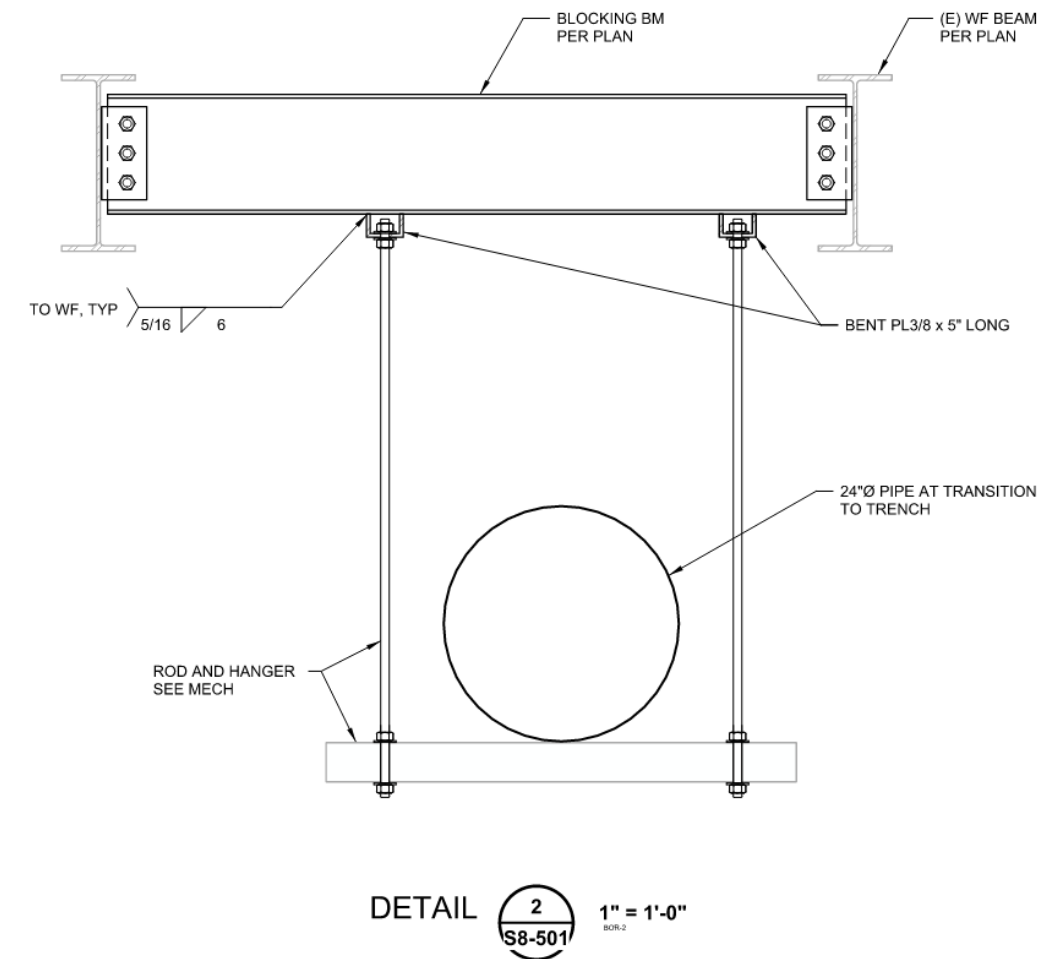
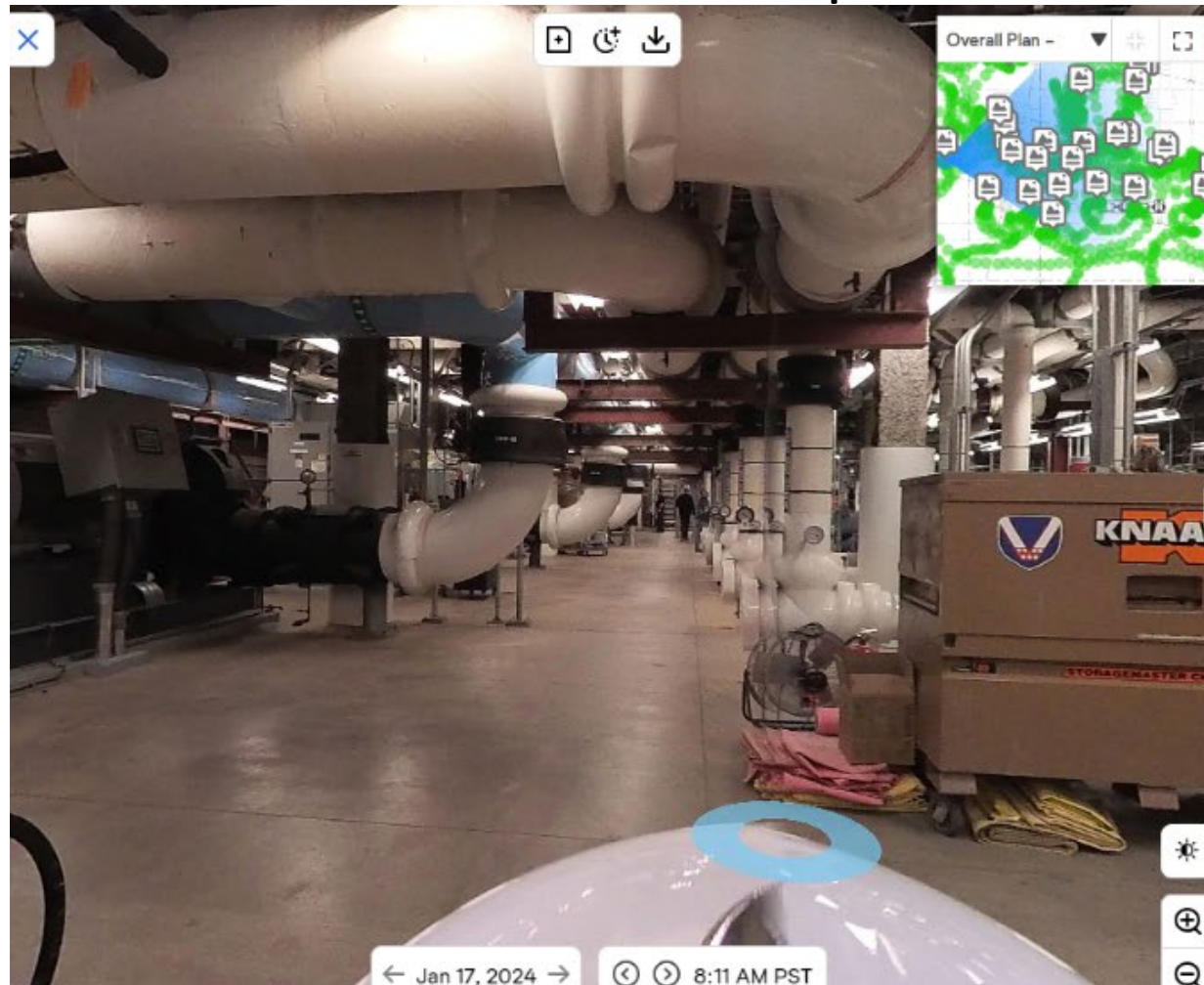
- How will your team contribute to the eCUP CHW system design development to improve constructability and ensure seamless systems cutovers?



The Airco Proposal Response

Technical Focus Questions:

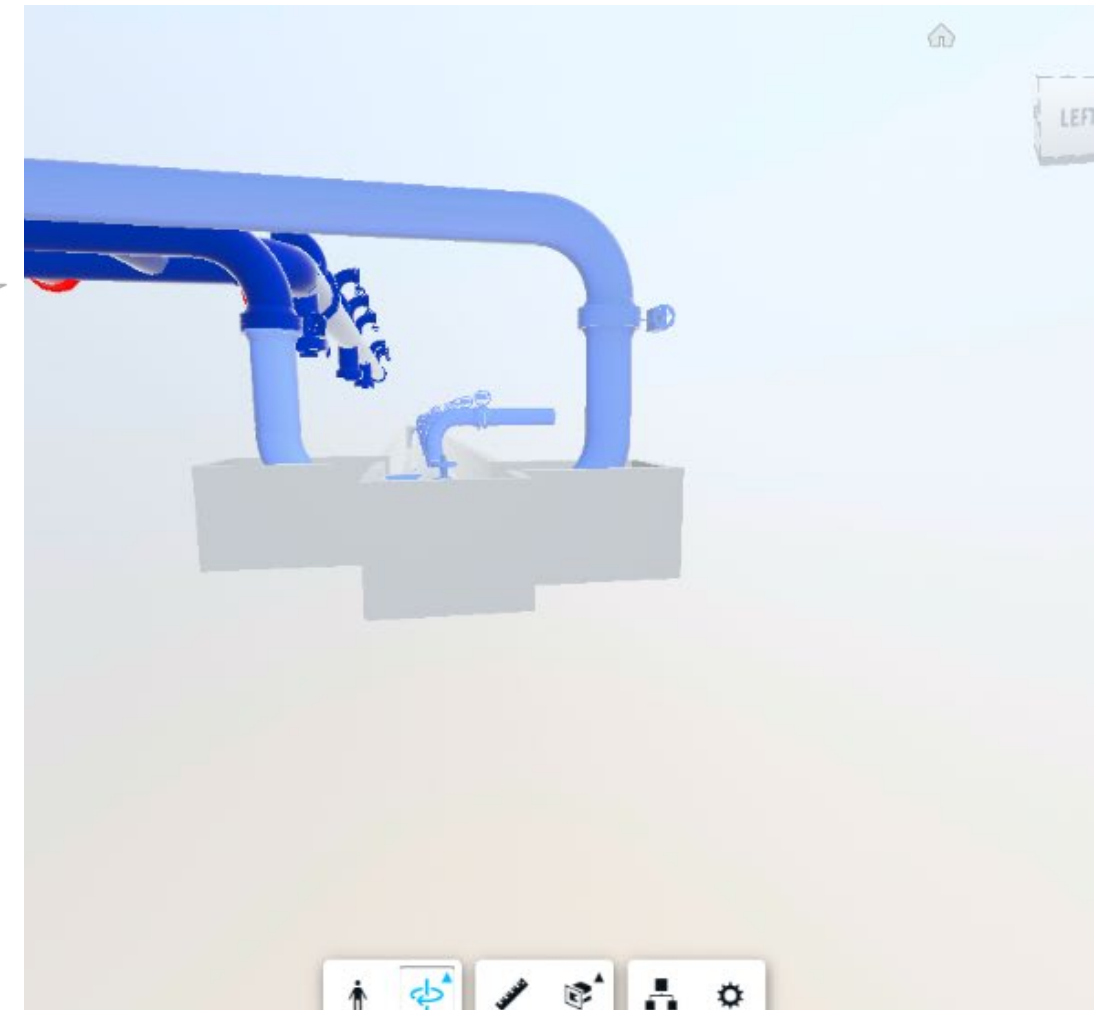
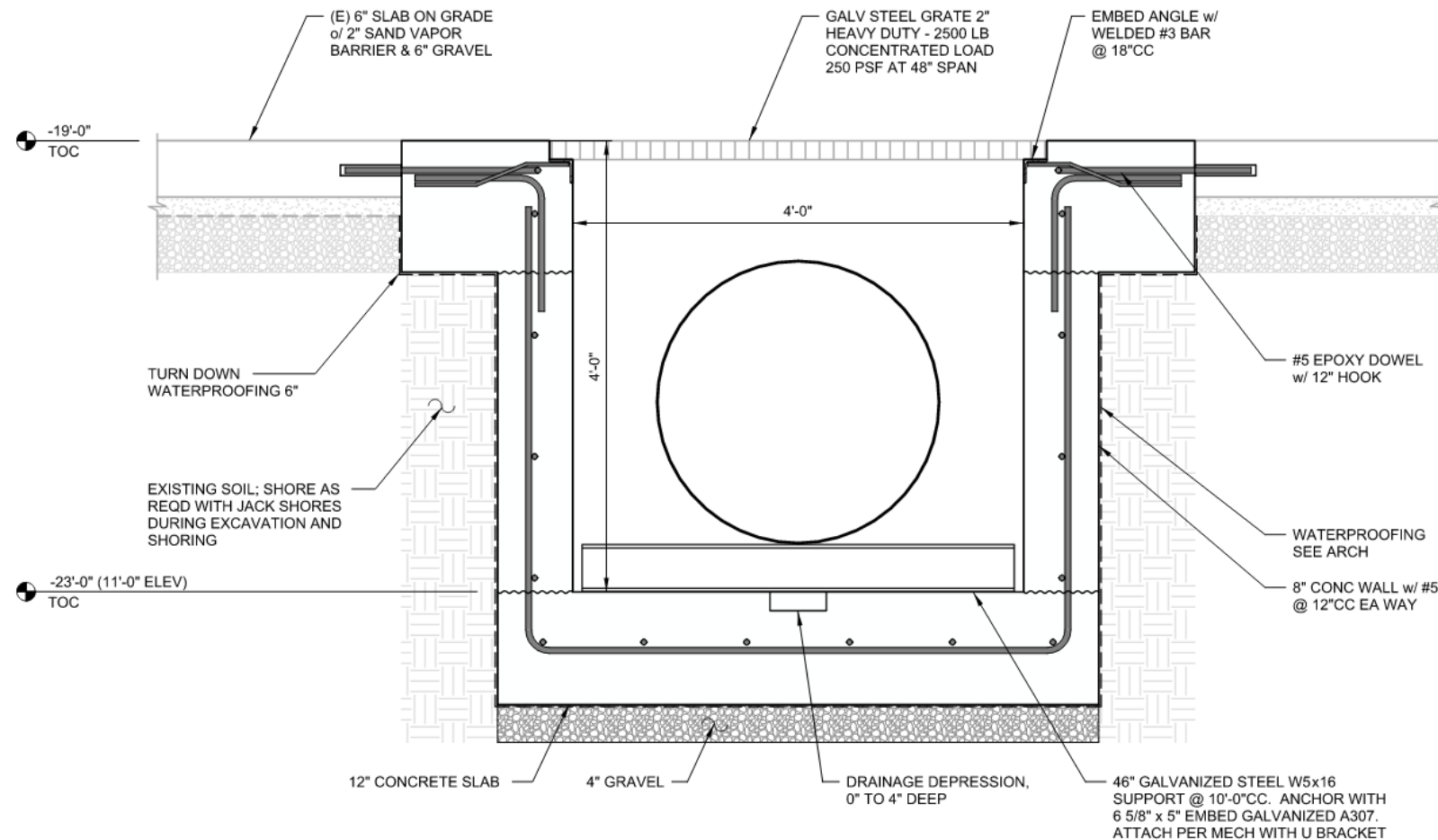
- Describe your team's approach to implementing this design solution while ensuring continuous CHW flow to the campus.



The Airco Proposal Response

Technical Focus Questions:

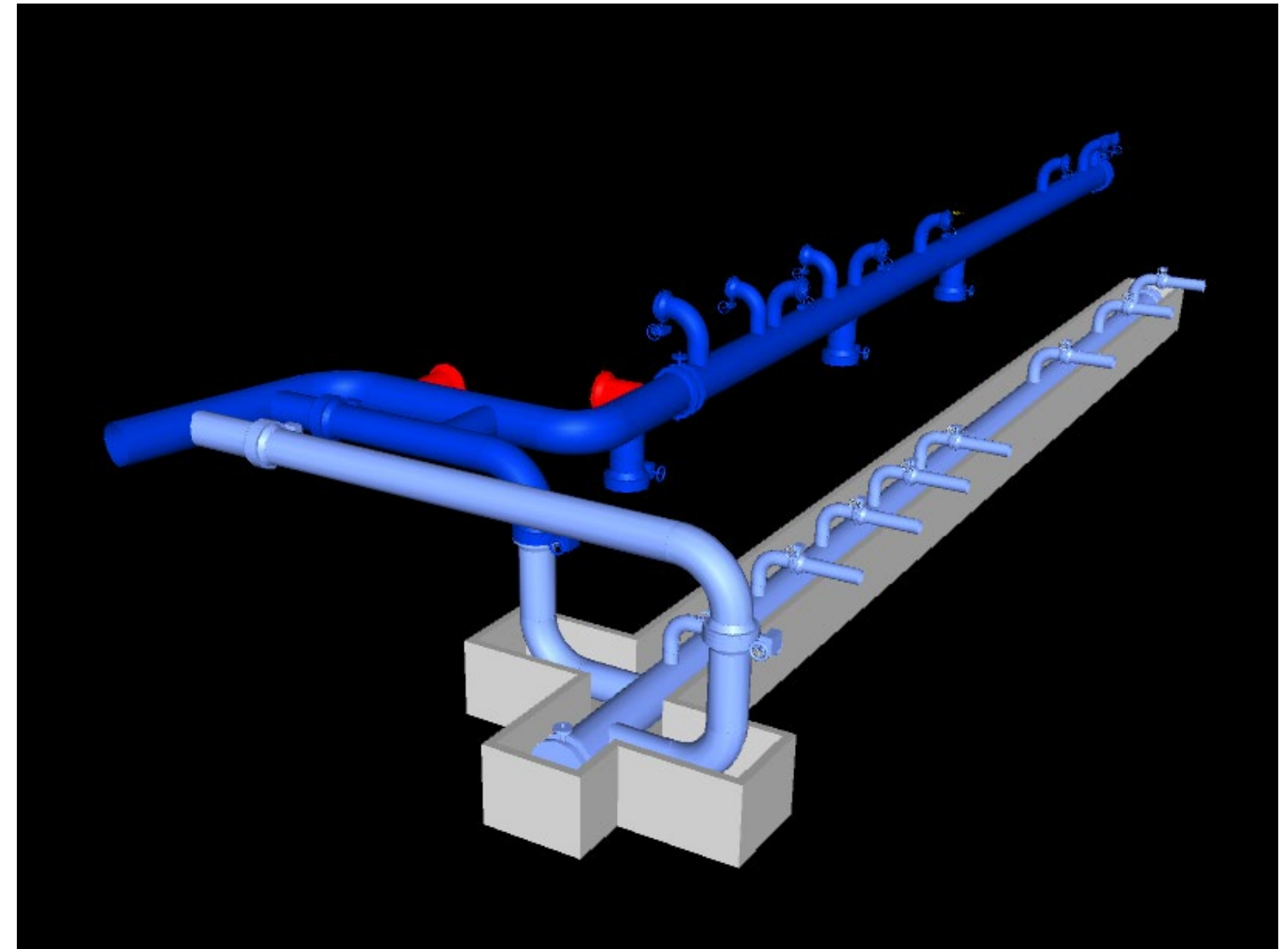
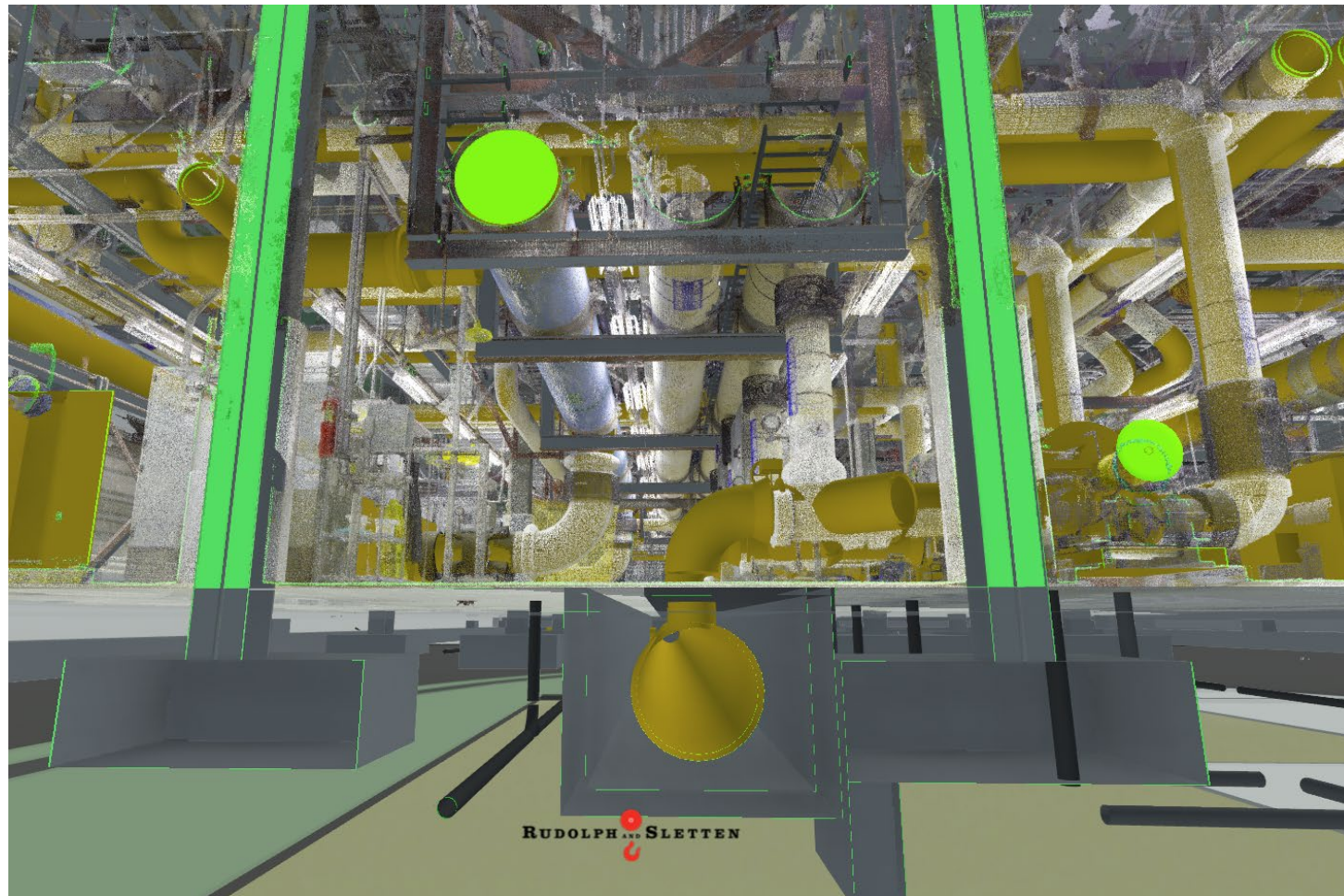
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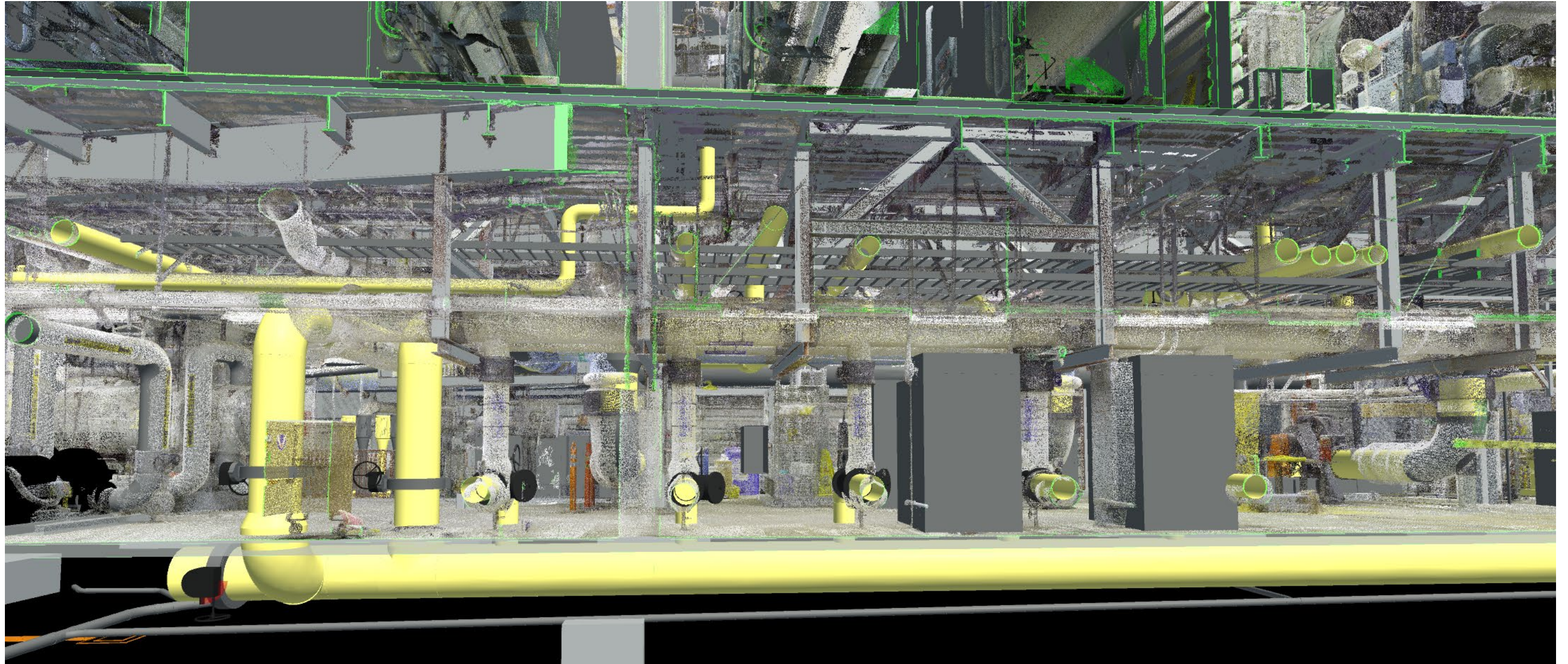
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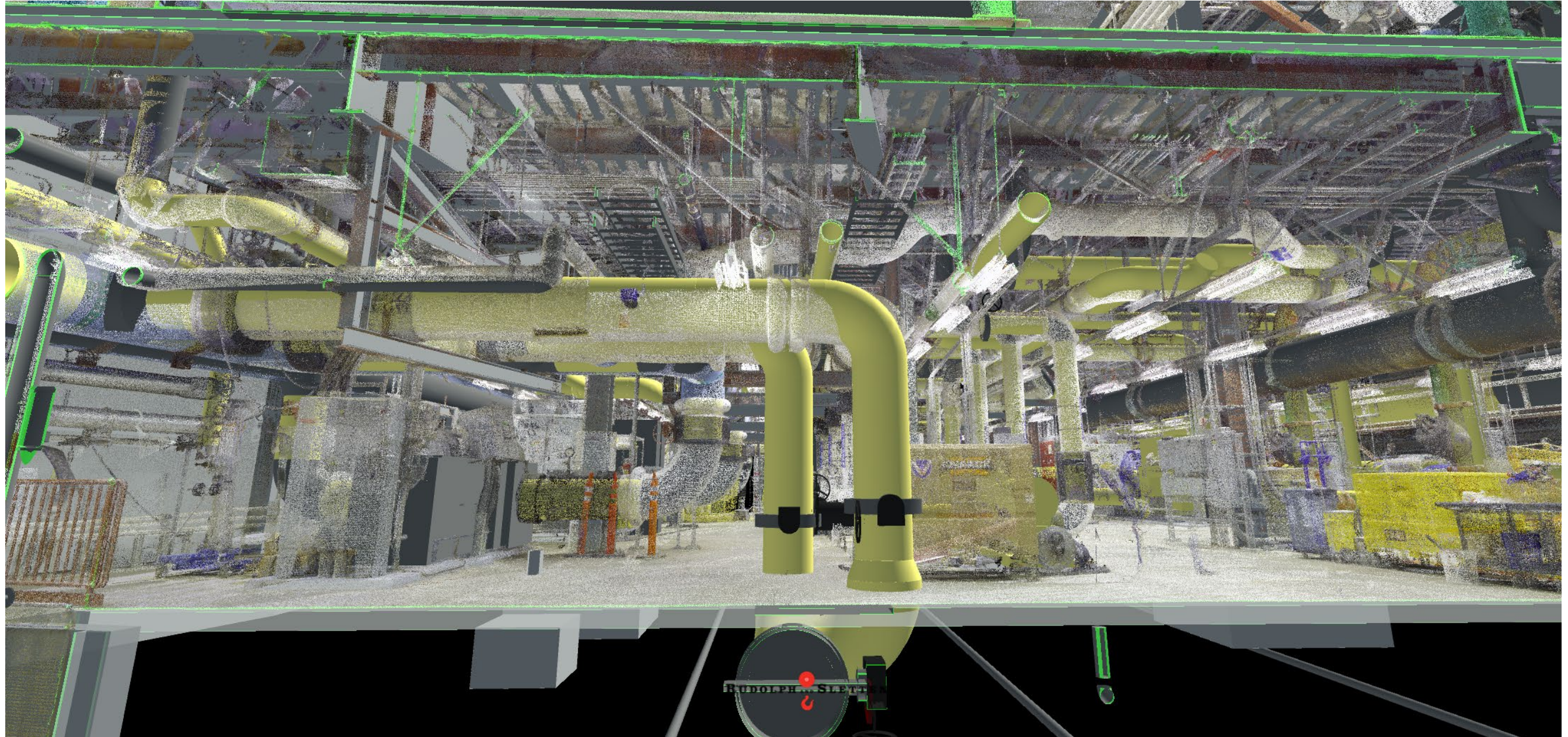
- What challenges do you see in the sequencing exhibit and how would your team approach resolution?



The Proposal



The Proposal



Other examples using on-boarding to drive value

Drywall and Framing interview questions

- How can we achieve high STC Ratings of 54, 57 and 60 while using 16 & 18 gauge studs with a 20' deck-to-deck dimension
- What do you see as the advantages or disadvantages of the exterior framing options - balloon framing or platform framing
- For the metal panel exterior, what are the cost and installation impacts to using the Greengirt product versus other solutions to address Title 24 requirements

How can you apply this tomorrow?

- *Use the on-boarding process to drive value into your project*
- *Rather than asking for experience or qualifications, focus on specific challenges*
- *Use the on-boarding process to crowd-source ideas*
- *Vet and implement potential solutions*
- *Create a team environment where all ideas are heard*





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In the spirit of continuous improvement, we would like to remind you to complete this session's survey! We look forward to receiving your feedback.