

Engineering Intelligence for Mission-Critical Infrastructure

Transforming BIM Models into Construction Intelligence.

Roots BIM LLC | Delivering BIM Excellence for Global Data Center Development.



Scaling digital delivery across global hyperscale and colocation markets



Facility Portfolio



Hyperscale
Data Centers



Colocation
Facilities



High-Density
Computing
Environments



Tier III and Tier IV
Facilities

Operational Scale

Multi-disciplinary BIM Teams



Availability

24/7 Project Support Capability



Lifecycle Expertise

Design, Coordination, Fabrication,
and Construction Integration

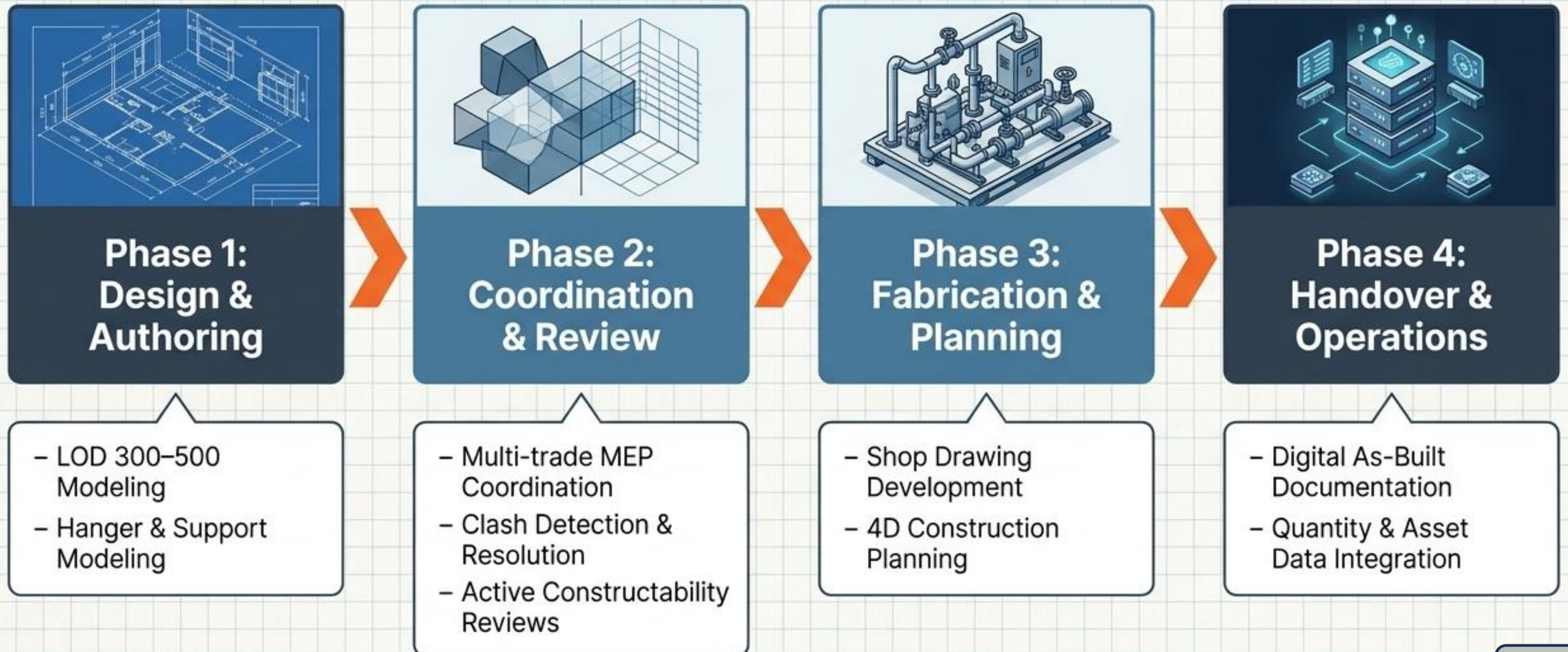


Proven capability supporting projects requiring complex mechanical cooling systems, redundant electrical infrastructure, high-density cable routing, and large-scale prefabrication workflows.

Modeling for constructability rather than just geometry

Standard BIM		Roots Engineering Intelligence	
Primary Objective	Standard BIM focuses on basic geometric representation.	✓	Roots BIM focuses on proactive field execution and fabrication readiness.
Model Fidelity	Standard BIM utilizes generic LOD (Level of Development).	✓	Roots BIM authors precision LOD 300–500 models, including detailed hanger & support modeling.
Clash Management	Standard BIM performs passive clash detection.	✓	Roots BIM executes active constructability reviews and definitive clash resolution before construction begins.
Deliverables	Standard BIM delivers isolated digital models.	✓	Roots BIM delivers actionable shop drawing development, 4D construction planning, and integrated quantity/asset data.

Injecting engineering intelligence across the entire project lifecycle



Driving precision and coordination on Microsoft Wisconsin MKE03 projects

Critical Tank Modeling (MKE03)



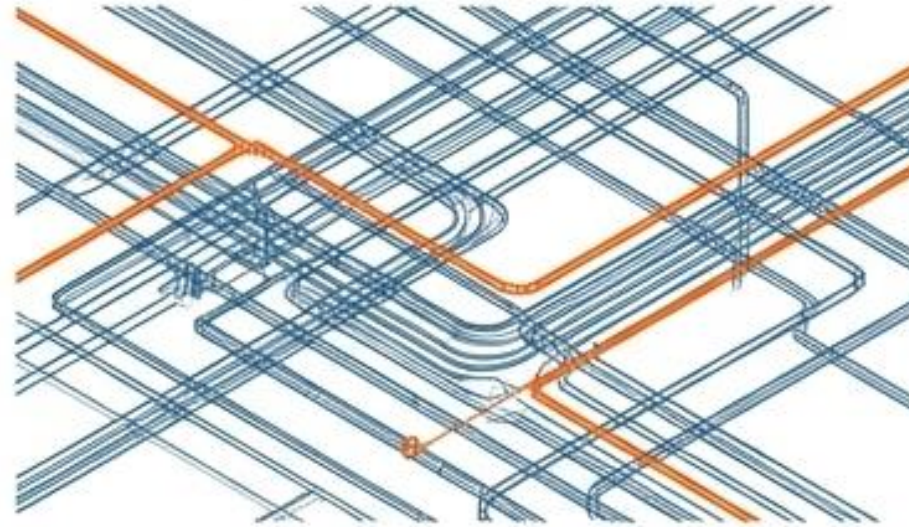
Intervention

Detailed BIM development of 11 critical tanks with high-fidelity geometry.

Impact

Seamless integration with surrounding MEP and structural systems, ensuring fabrication and installation readiness.

Electrical Deliverables (MKE03 COLOs)



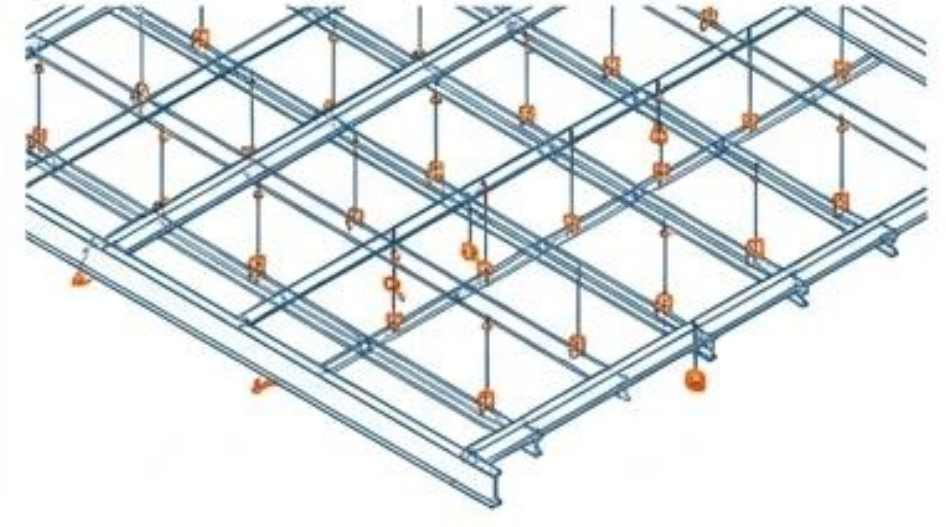
Intervention

Consolidated multiple fragmented electrical contractor deliverables into a unified model.

Impact

Improved coordination visibility, supported project-wide design consistency, and eliminated documentation fragmentation.

Supplemental Ceiling Structures (MKE0304)



Intervention

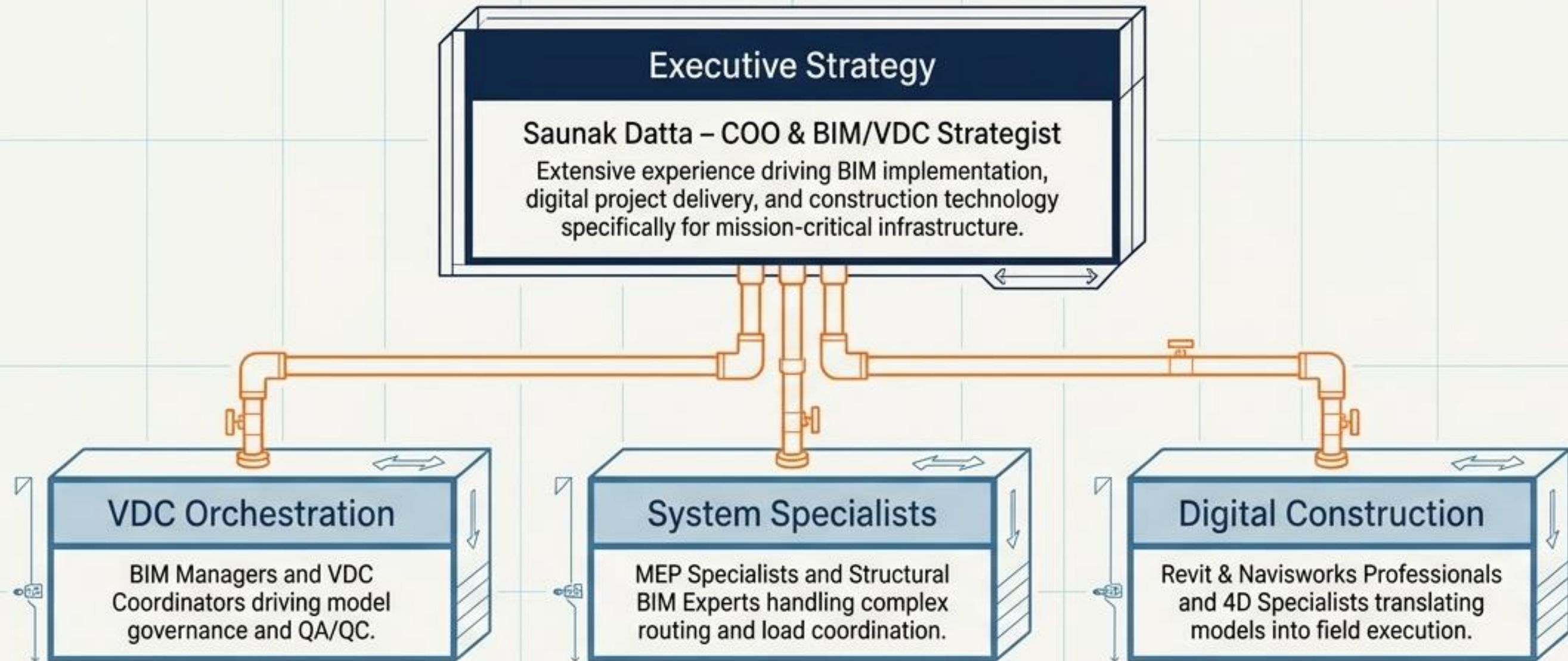
Consolidation and verification of hanger loads attached to supplemental ceiling structures.

Impact

Enhanced visibility into load distribution, ensuring safe support systems and streamlining the constructability review process.

Unified Value Delivered: Reduced field conflicts, improved coordination accuracy, enhanced stakeholder communication, and superior decision-making through centralized BIM data.

Technical leadership grounded in mission-critical field execution



A team combining deep technical modeling capability with practical construction understanding, enabling BIM solutions that directly support field execution across Data Centers, Healthcare, Industrial, and Commercial sectors.

The definitive VDC partner for Walsh Construction and Microsoft

Mission-Critical Expertise

Native understanding of redundancy, uptime requirements, prefabrication workflows, and complex MEP infrastructure.

Rapid Scalability

Flexible, multi-disciplinary teams capable of absorbing and supporting continuously evolving project demands.

Quality Governance

Standardized QA/QC workflows and strict, consistent model governance to eliminate data degradation.

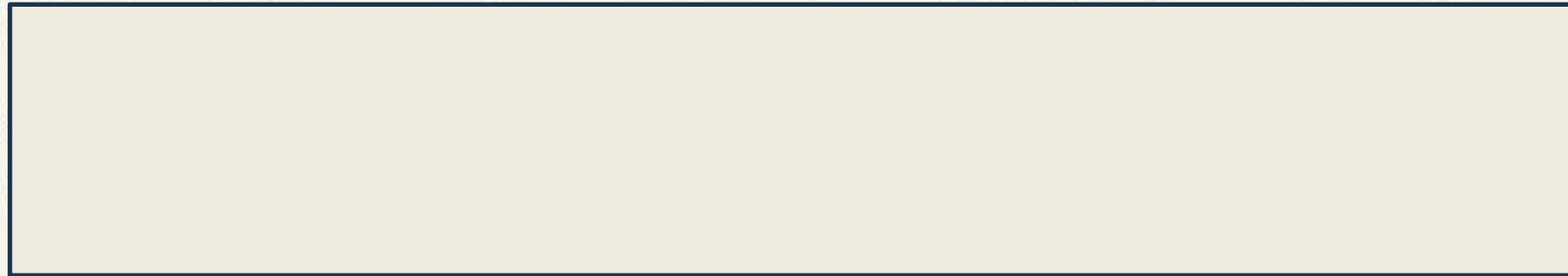
Seamless Collaboration

A culture built on integrating fluidly with owners, designers, general contractors, and trade partners.

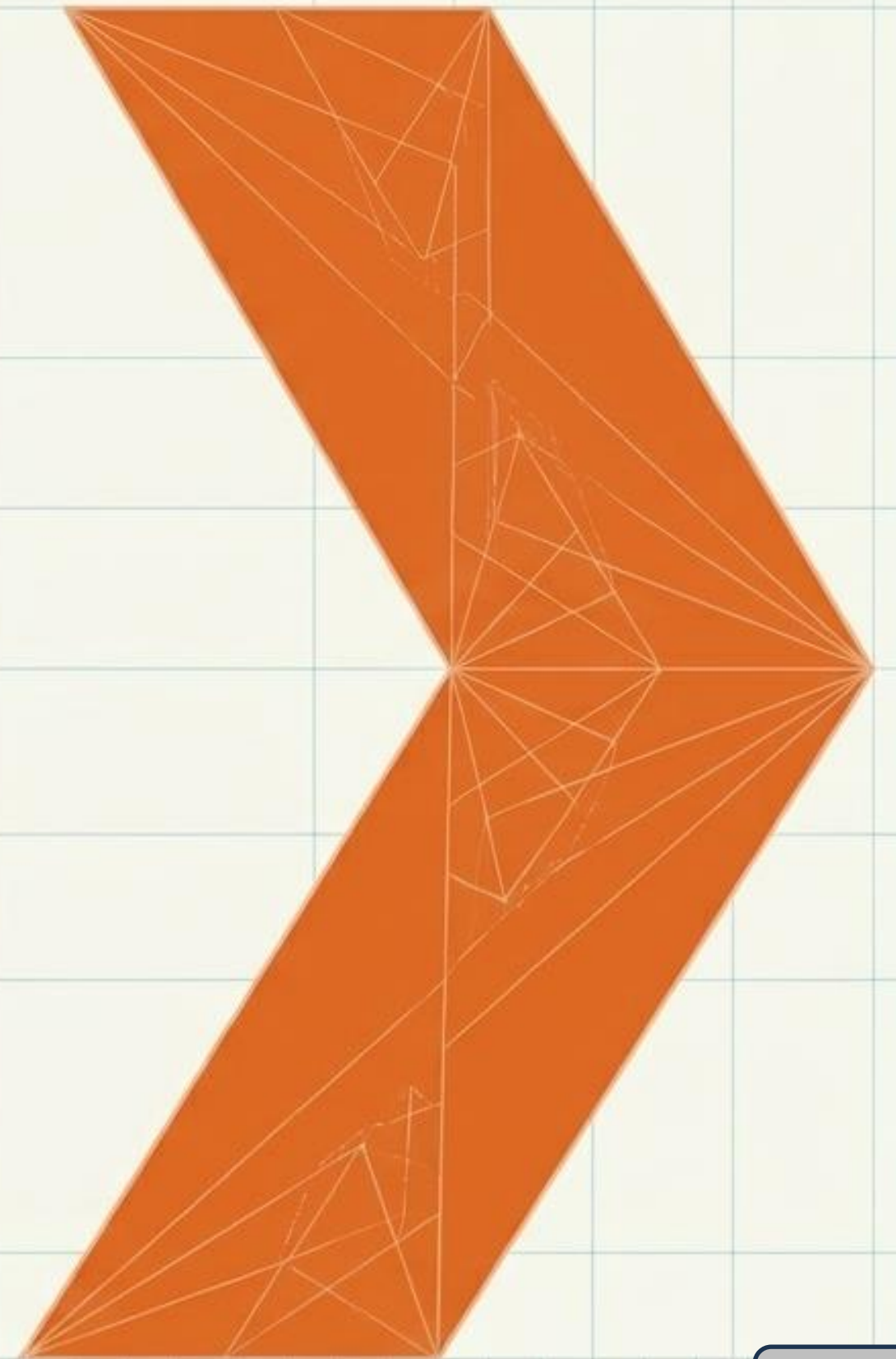
Powered by Data-Driven Engineering Intelligence—optimizing coordination and mitigating risk long before construction begins.

Certainty, efficiency, and quality for complex data center development.

Roots BIM LLC transforms fragmented project information into actionable construction intelligence.



Roots BIM LLC | Engineering Intelligence



Engineering Intelligence

