

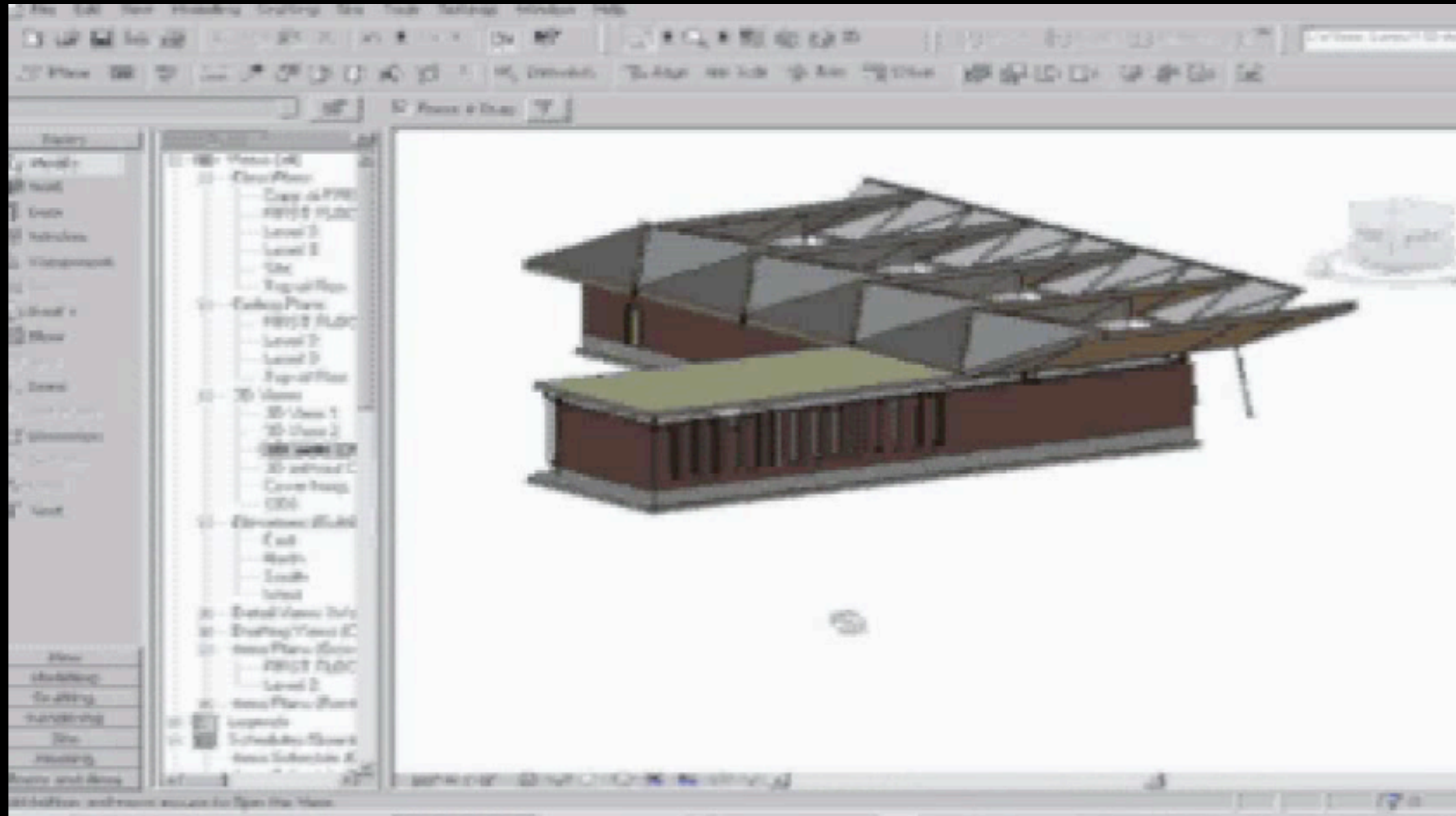
An aerial view of a city with various buildings and streets. Overlaid on the city are several colored lines and shapes, including red and blue outlines around buildings and a blue grid pattern, suggesting a digital architectural or urban planning model.

AEC Industry Opportunity

Jay Bhatt

Senior Vice President, AEC

Building Information Modeling



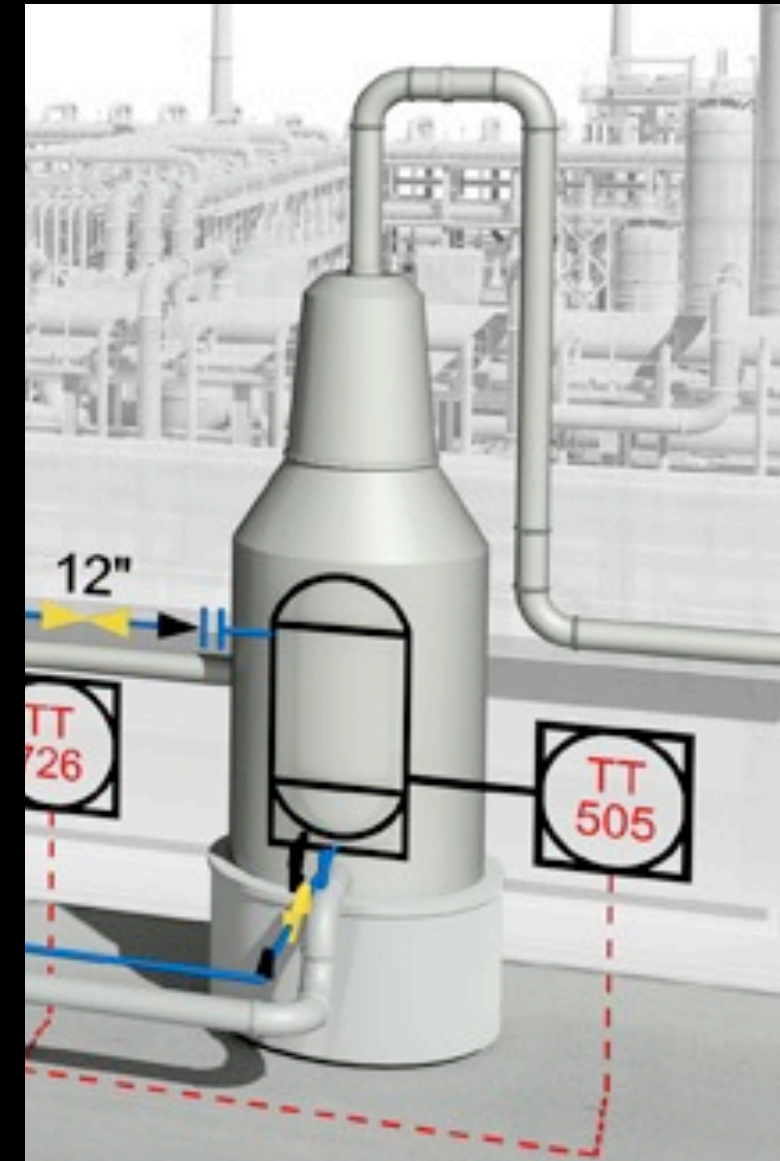
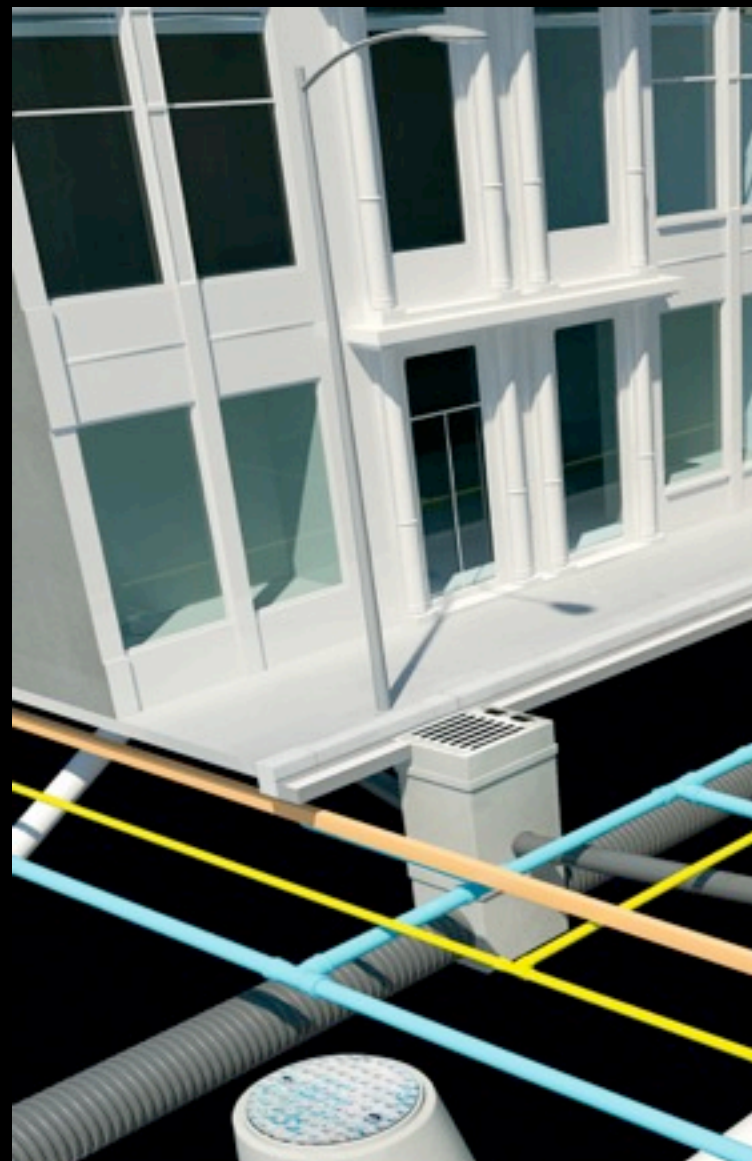
Infrastructure Modeling

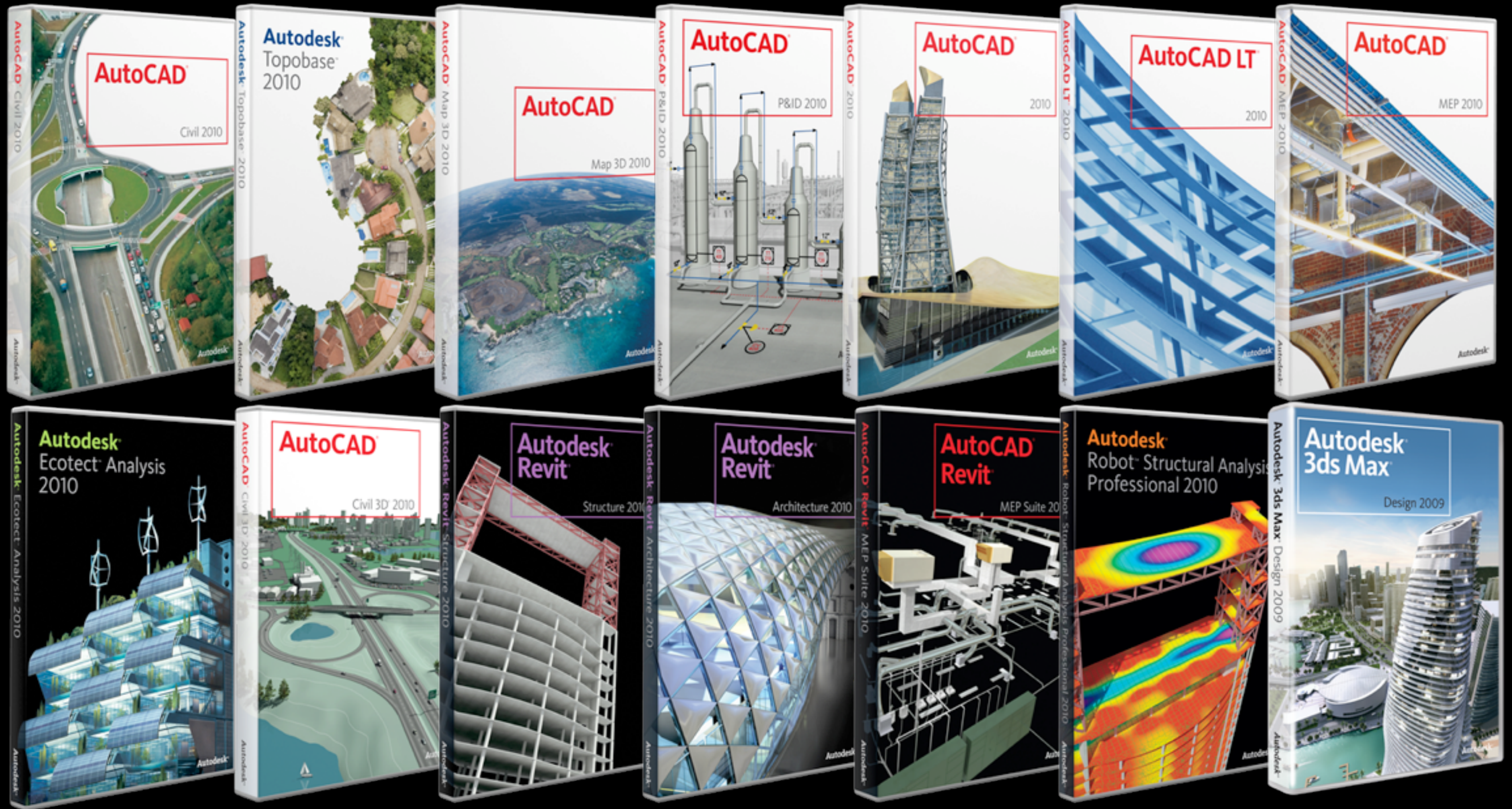


Digital Plant Design



Architecture, Engineering & Construction



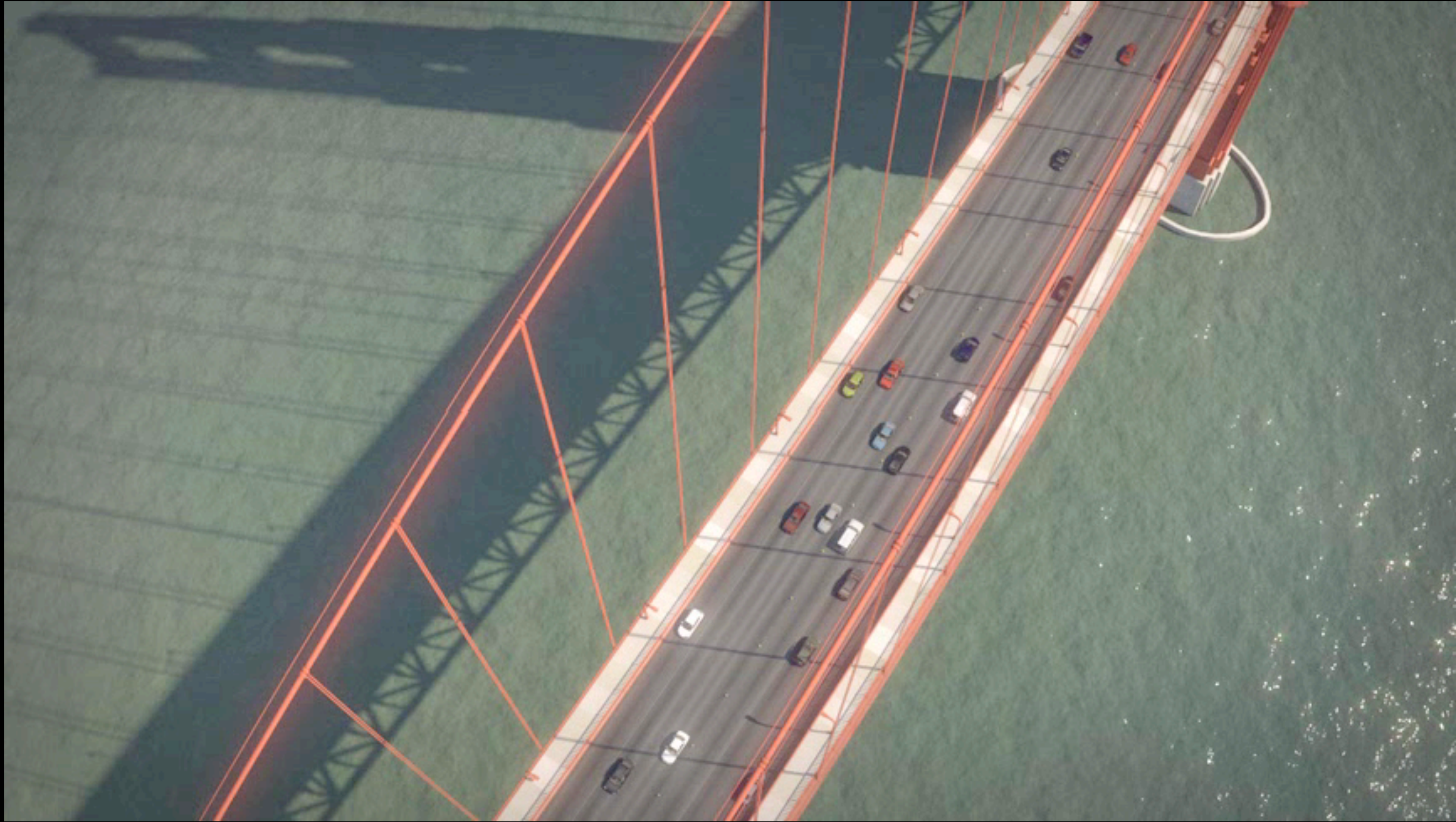


Design

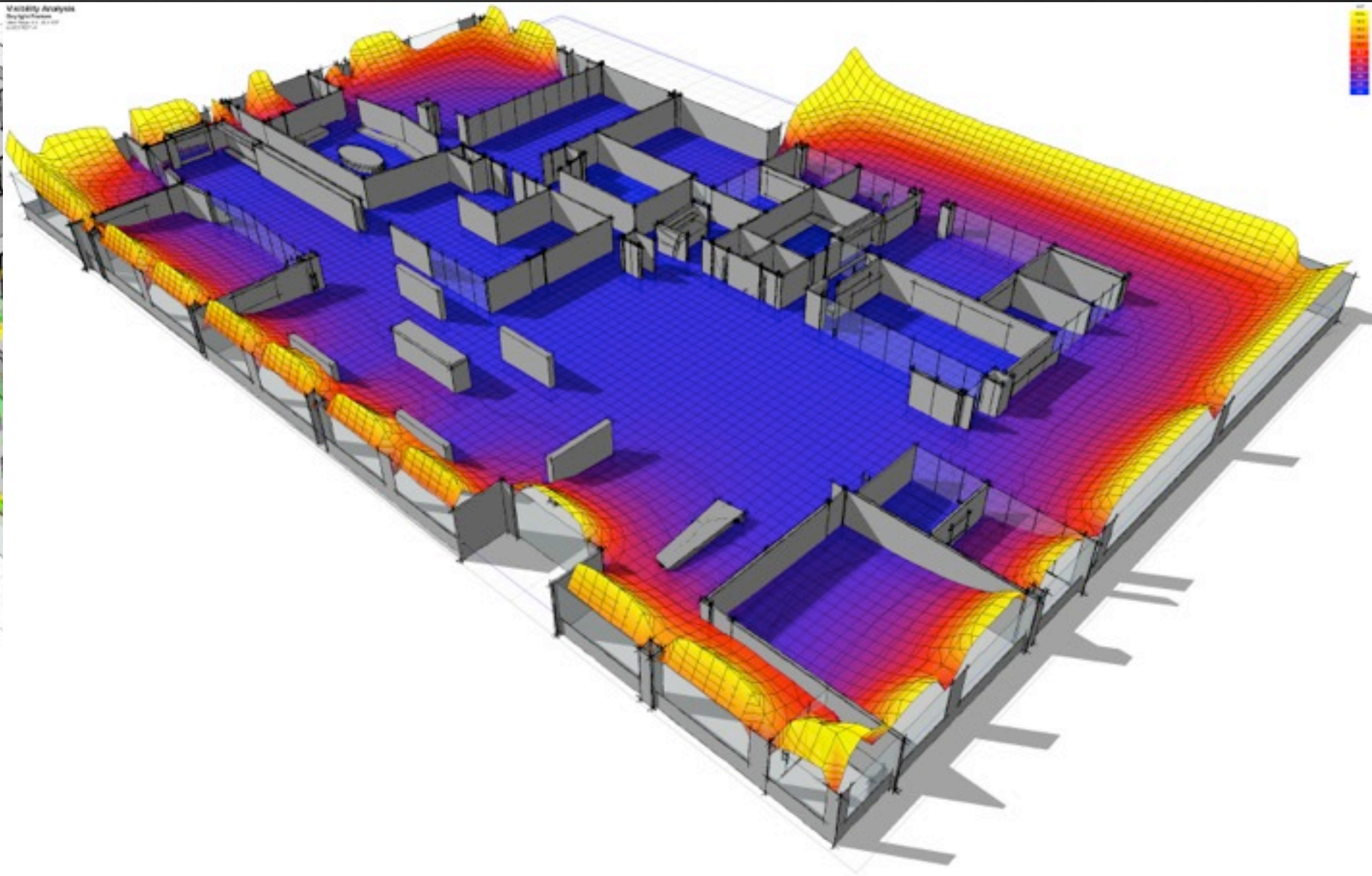
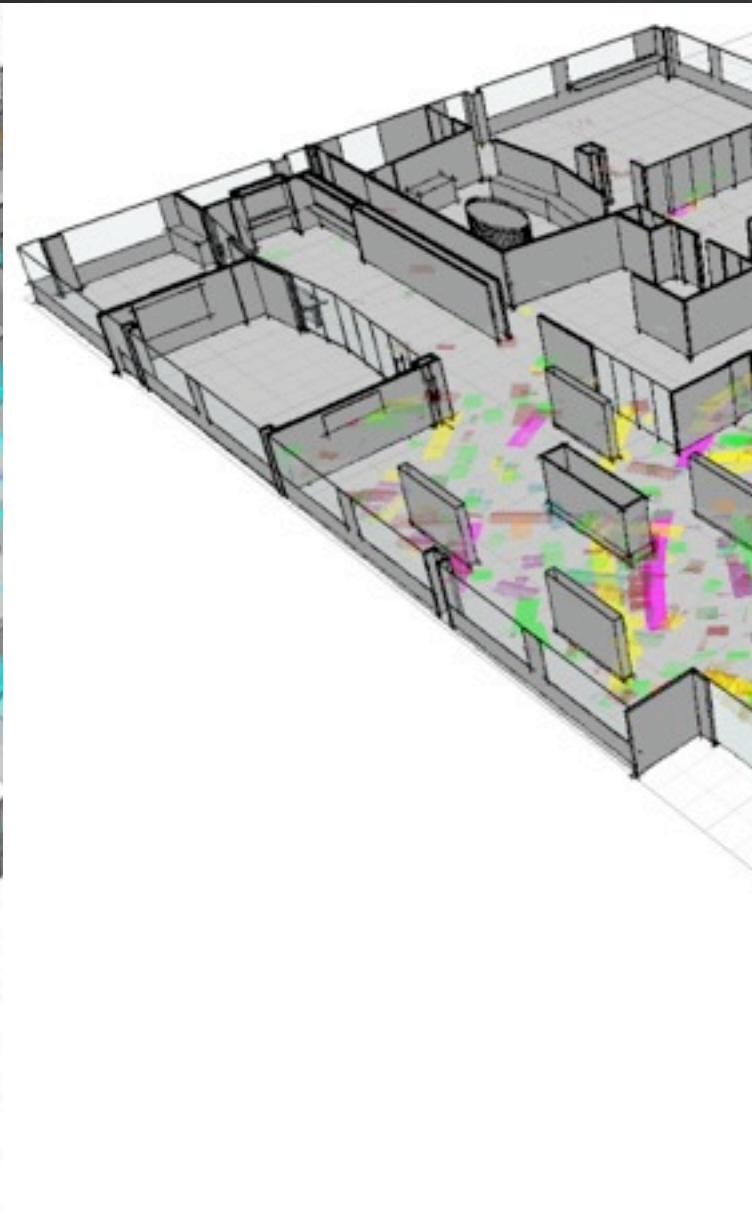
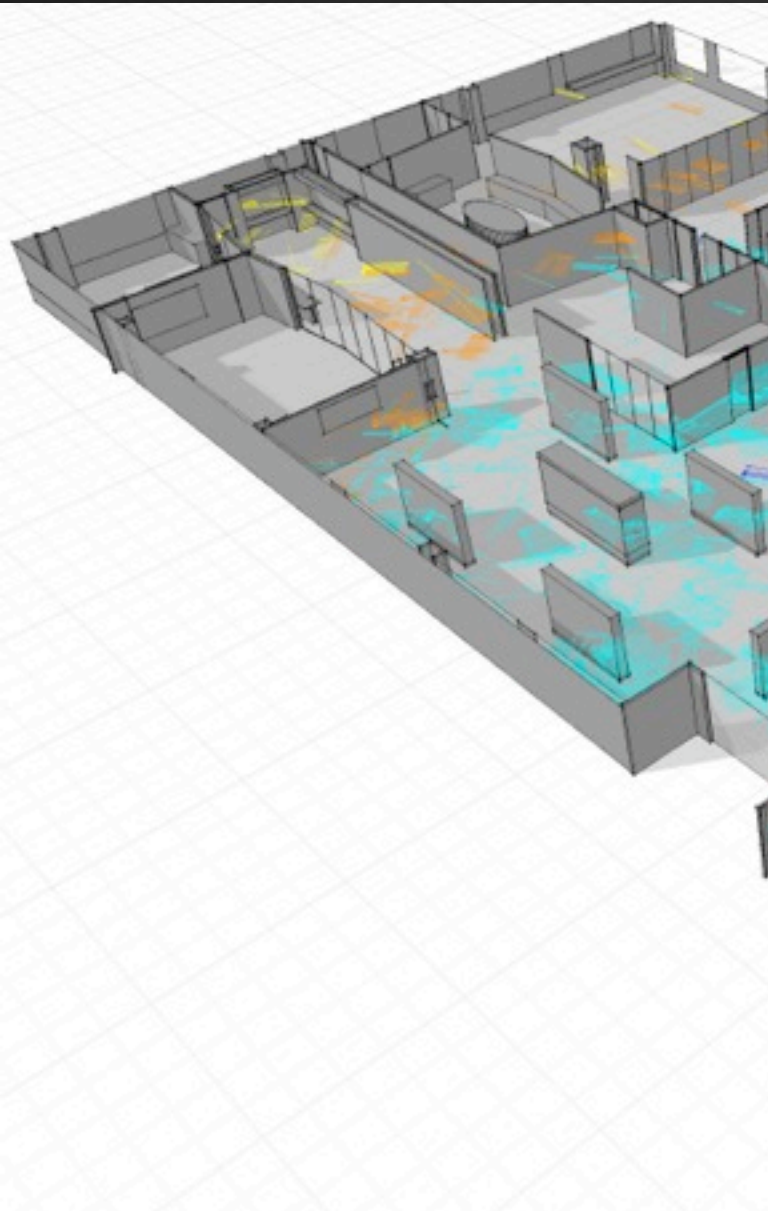


Images courtesy of Chandavarkar & Thacker Architects

Visualization



Simulation



Global Economic Stimulus



**US:
\$789B+**



**Canada:
\$30B+**



**Brazil:
\$28B+**



**EU:
\$200B+**



**China:
\$586B+**



**Japan & Korea:
\$62B+**



**Australia:
\$42B+**

**ASEAN:
\$18B+**

Global Infrastructure Opportunity

- Buildings
- Transportation / Environmental
- Utilities

Department of Veterans Affairs



VA Salt lake City, UT



VA New Mexico



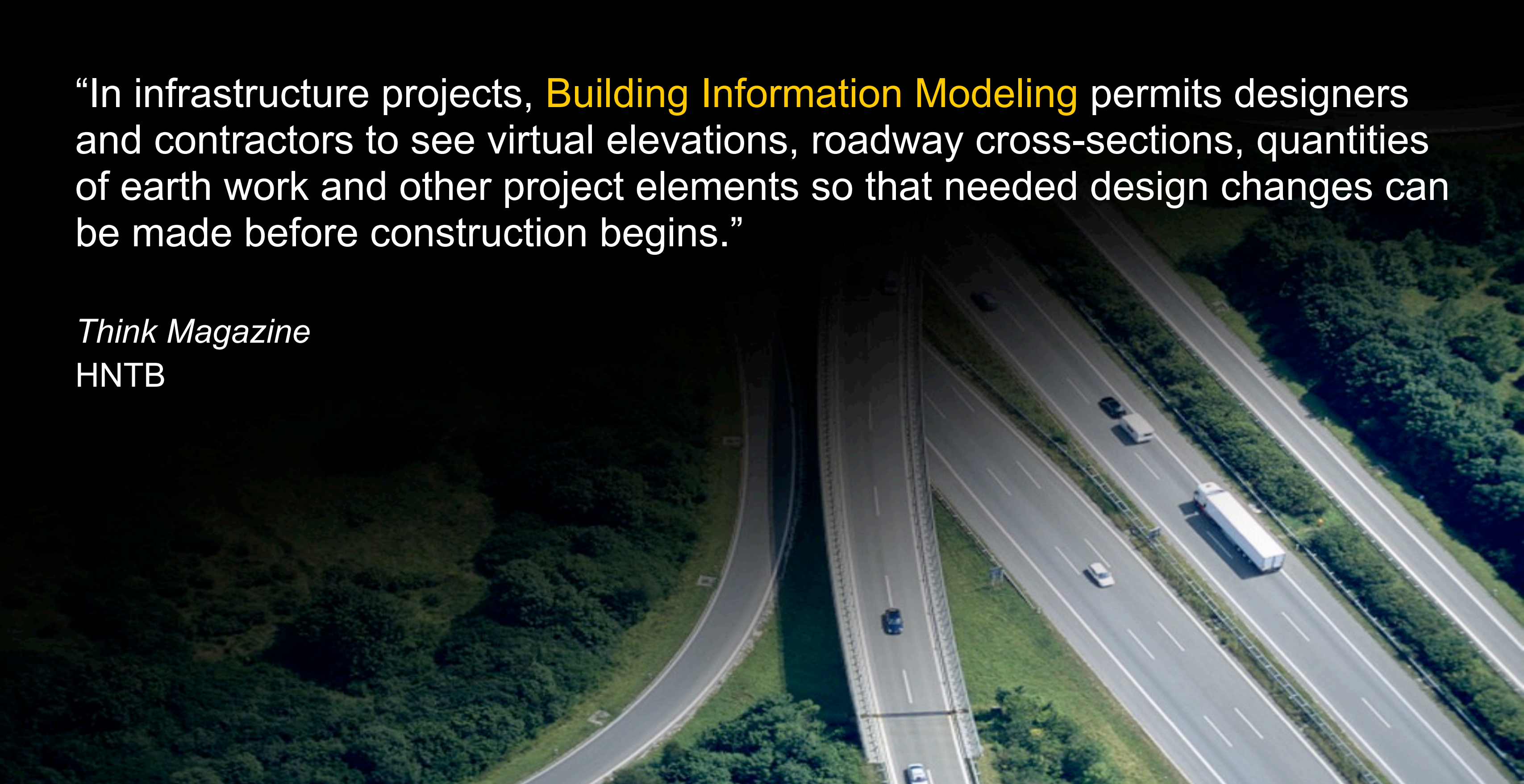
VA Houston, TX



VA Denver, CO

“In infrastructure projects, **Building Information Modeling** permits designers and contractors to see virtual elevations, roadway cross-sections, quantities of earth work and other project elements so that needed design changes can be made before construction begins.”

Think Magazine
HNTB





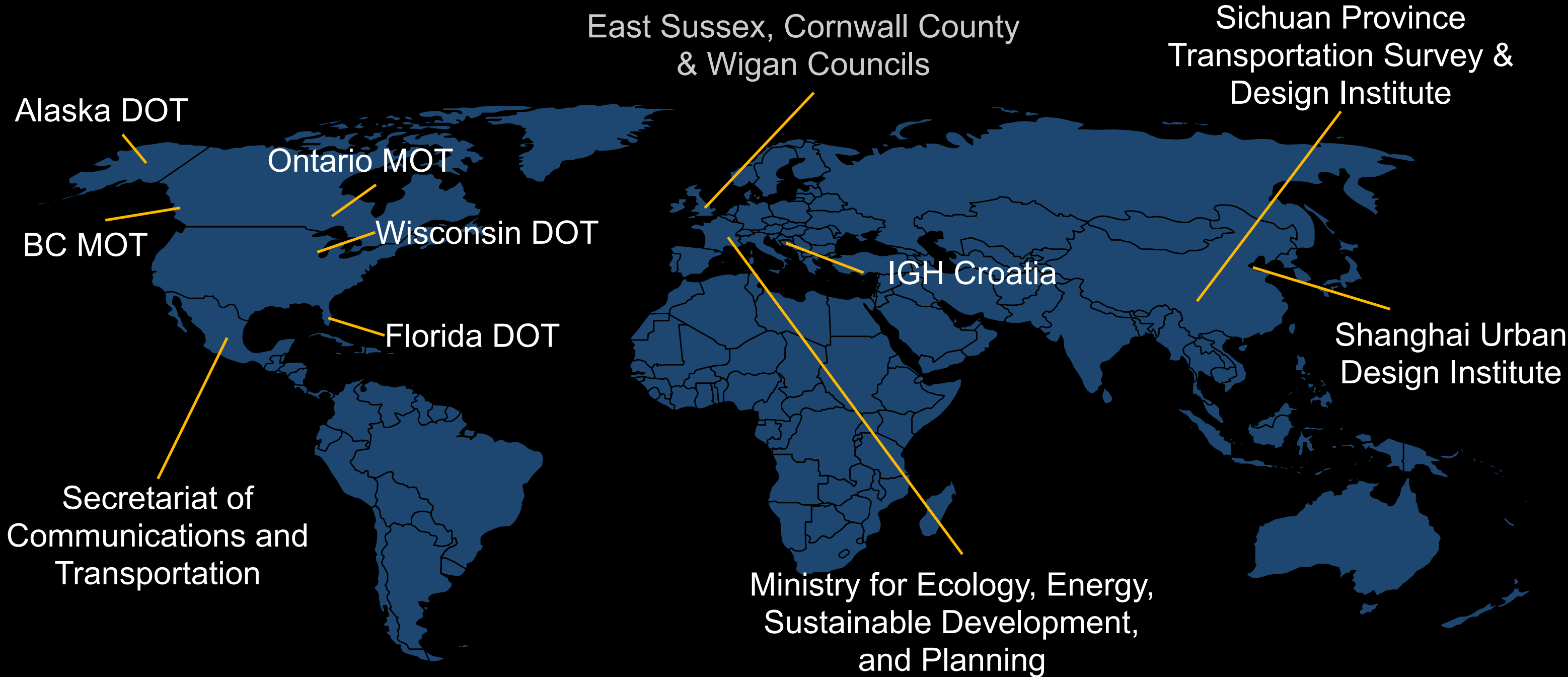
FULL BRIDGE CLOSURE
Labor Day Weekend 2007



THE SAN FRANCISCO-OAKLAND
BAY BRIDGE SEISMIC SAFETY PROJECTS

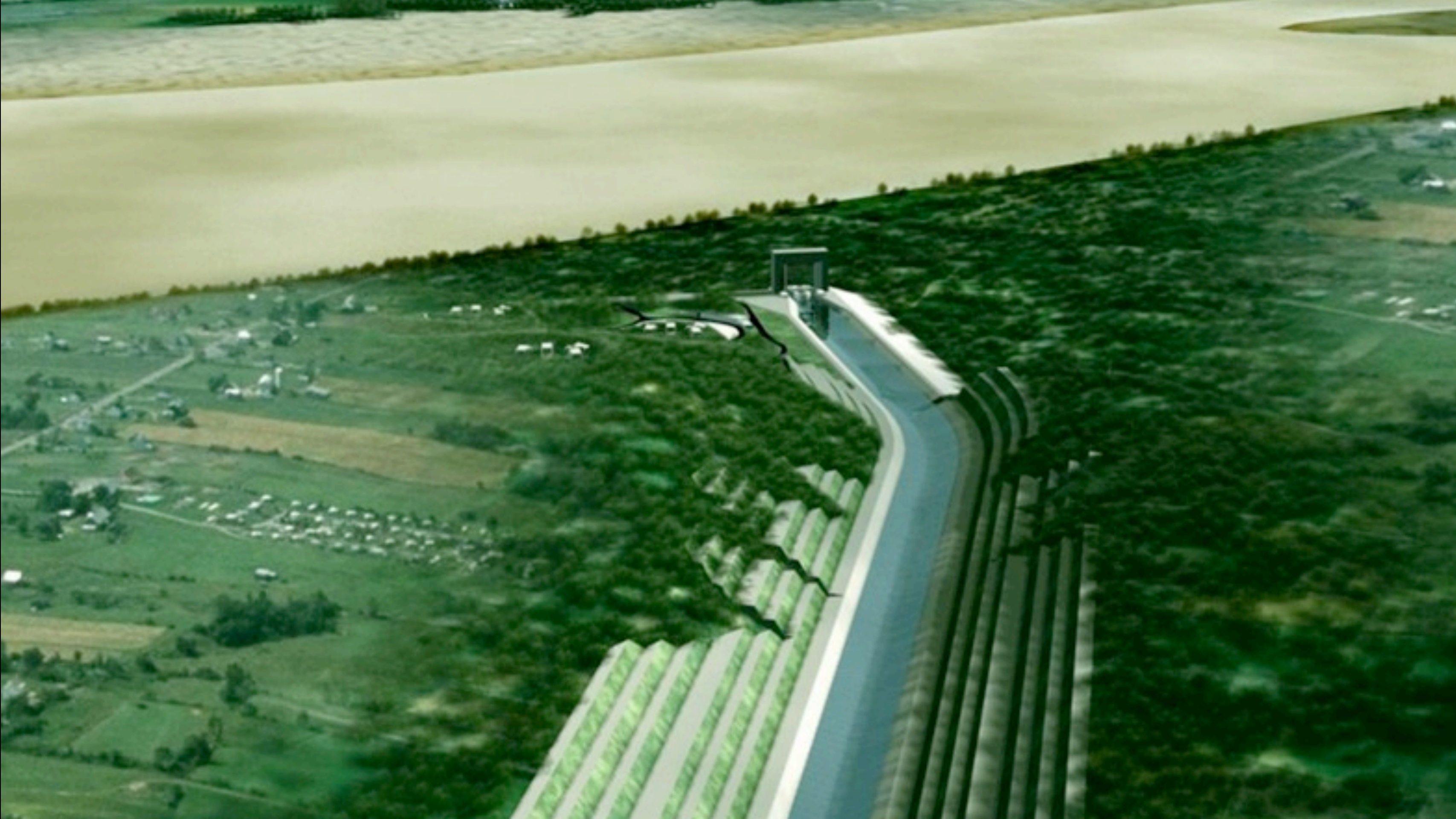


Transportation Agency Wins



7x

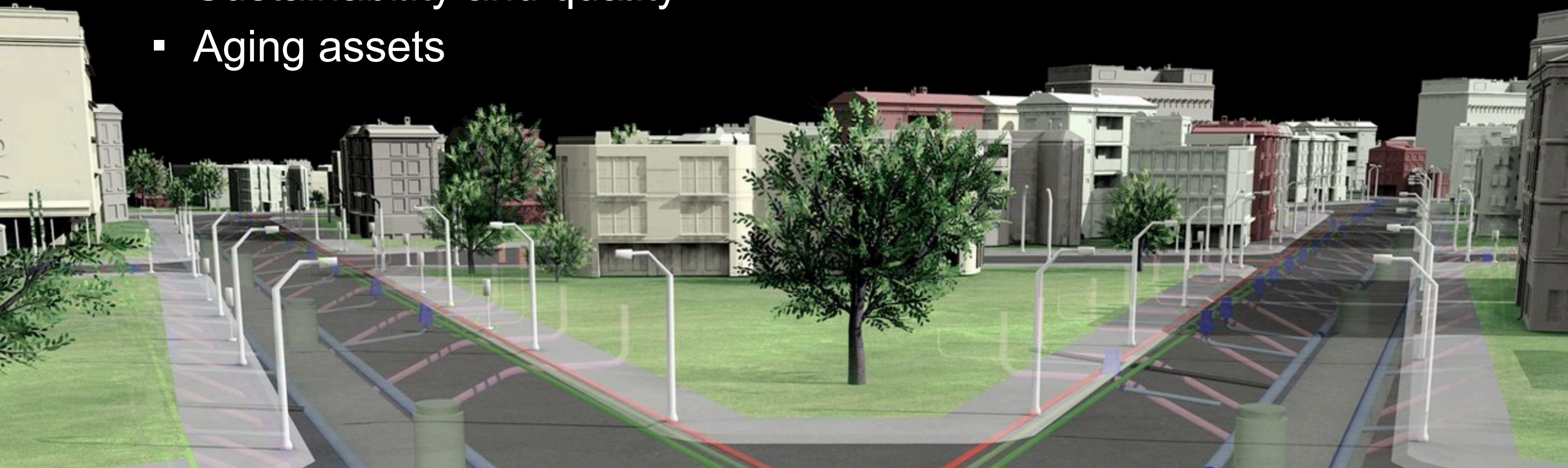




Utility Business Challenges

Infrastructure challenges

- Intelligent grid
- Sustainability and quality
- Aging assets



ÜZ Lültsfeld (Germany)

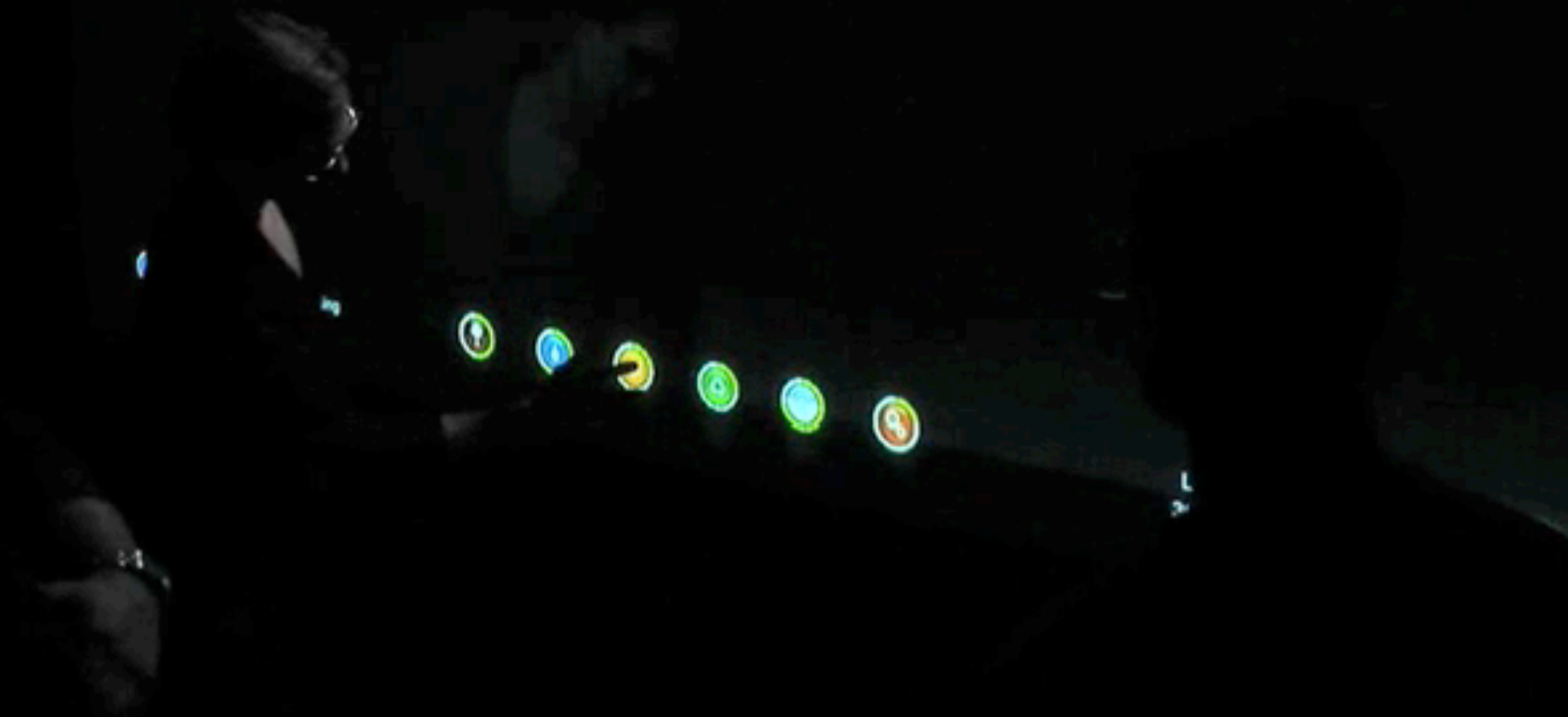
Enable Faster Permitting and Approval of Solar Generation

- Challenges: Difficult to access network information
- Needs: Accelerate approvals
- Solutions: AutoCAD Map 3D, Autodesk Topobase, MapGuide

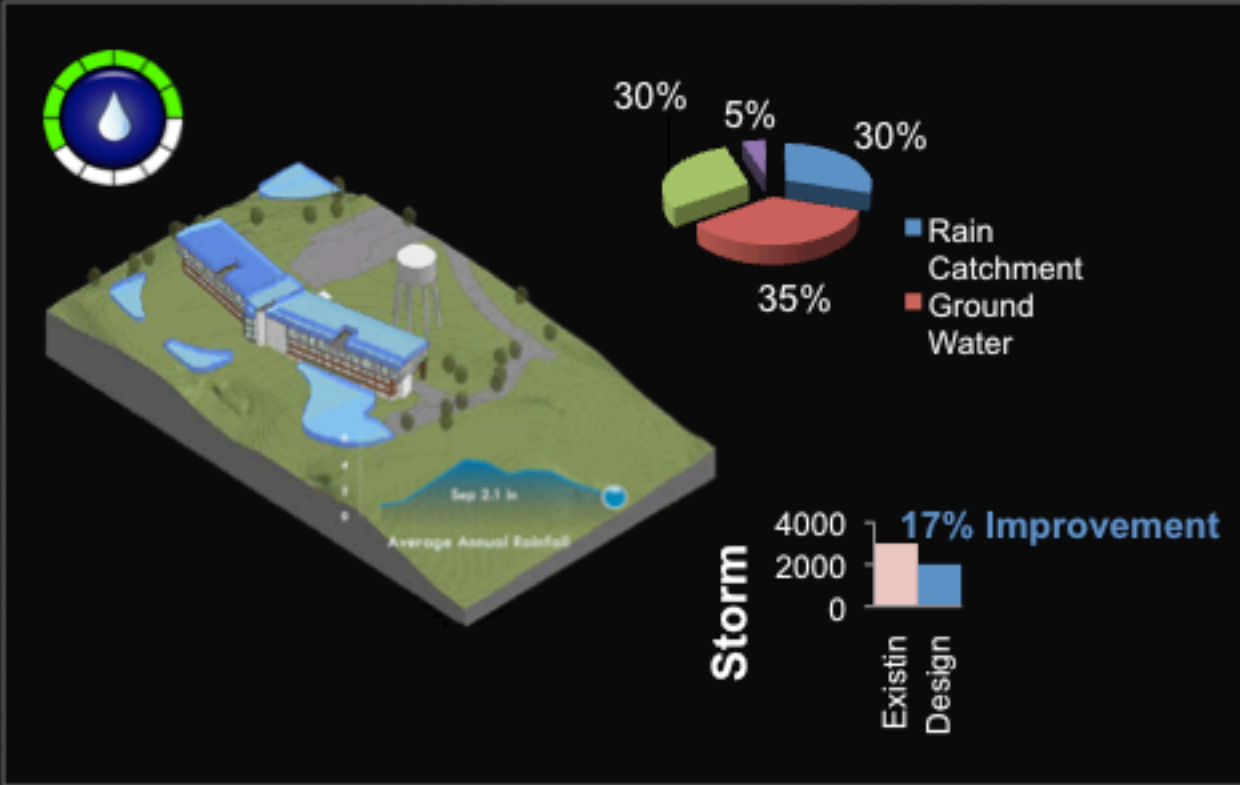
Sonneborn, Inc.

25% time reduction
using AutoCAD P&ID

Technology Leadership



Industry Leadership



Autodesk®