



## **AIA TAP BIM Awards**

**2013 Professionals' Choice BIM Award**



# Award Winning BIM 2005 to 2013

2005, 2006, 2007, . . .

What's in a name?

A lot, actually.

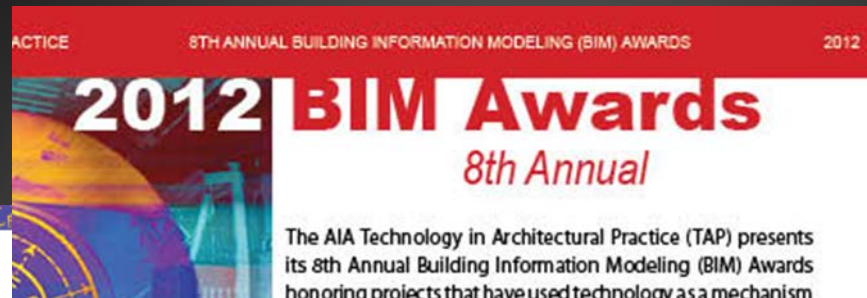
If we didn't have BIM, we wouldn't have a National BIM Standards Committee - an important component in the

*Education Thrives, Process Arrives, Design Survives*

## BIM Comes Alive

The 4th Annual AIA TAP BIM Awards reveal the liveliness BIM demonstrated in 2007 - a year called a tipping point for this advanced technology tool set.

The fear that institutions of higher education were not hitting their groove with BIM is allayed with four awards in the academic category. A studio that convincingly demonstrated that modular housing can "rain" BIM.



The AIA Technology in Architectural Practice (TAP) presents its 8th Annual Building Information Modeling (BIM) Awards honoring projects that have used technology as a mechanism



The AIA Technology in Architectural Practice (TAP) presents its 7th Annual Building Information Modeling (BIM) Awards honoring projects that have used technology as a mechanism to bridge the gap between people and processes. The 2011 Awards reveal how BIM is advancing from a pure tool

## 2007 BIM Awards 3rd Annual

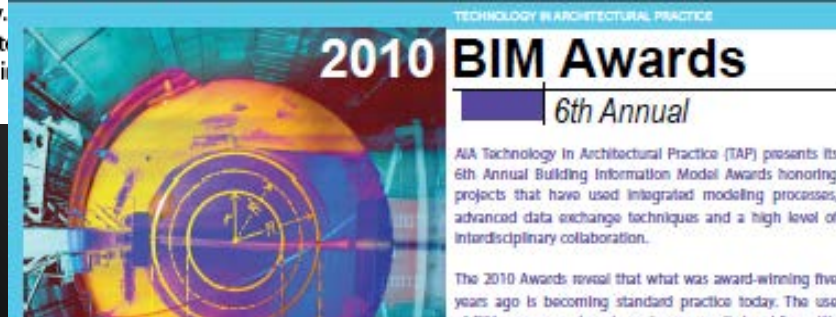
AIA Technology in Architectural Practice (TAP) presents

TECHNOLOGY IN ARCHITECTURAL PRACTICE

## 2009 BIM Awards 5th Annual

AIA Technology in Architectural Practice (TAP) presents its 5th Annual Building Information Model Awards honoring projects that have used integrated modeling processes, advanced data exchange techniques and a high level of interdisciplinary collaboration.

The 2009 Awards reveal that what was award-winning five years ago is becoming common practice today. The use of BIM processes alone is no longer worth heralding. We're able to look into process details and recognize subtle refinements and artful applications. See [www.aia.org/tap](http://www.aia.org/tap) for more of the Art of BIM as embodied by this year's award recipients and compare them to winners from previous years. The comparison is revealing.



AIA Technology In Architectural Practice (TAP) presents its 6th Annual Building Information Model Awards honoring projects that have used integrated modeling processes, advanced data exchange techniques and a high level of interdisciplinary collaboration.

The 2010 Awards reveal that what was award-winning five years ago is becoming standard practice today. The use of BIM processes alone is no longer worth heralding. We



## Your Moderator and Hosts from AIA

- Stephen Hagan, FAIA
- Brian Skripac, Assoc. AIA
  - Upcoming 2014 Chair of AIA TAP



# AIA TAP KC Leadership Team



**Kimon  
Onuma**  
Chair - 2013



**Brian  
Skripac**  
Chair - 2014



David  
Scheer



Calvin  
Kam



Stephen  
Hagan



Kristine  
Fallon



Tony  
Rinella

## Active Past Chairs



Andy  
Smith



Jeffrey  
Ouellette



Karen  
Kensek



Luciana  
Burdi



Marty  
Doscher



Mike  
Kenig



Pete  
Evans



# Sponsors

- The AIA TAP Leadership would especially like to thank our sponsors who help make this possible:

- Circle Member



- Benefactor





# Session | Online Webinar Learning Objectives

- Learn and discover award winning team dynamics, the people and process side of BIM and its influence on architectural practice
- Identify what BIM is, and what its future could be, based on lessons learned from eight years of AIA TAP BIM awards
- Recognize how architectural excellence can be enhanced and enabled using BIM.
- Identify the interface between BIM and Integrated Project Delivery (IPD) and Process Improvement



# Follow us on Twitter

- @aia\_tap

The screenshot displays the Twitter profile of AIA TAP (@aia\_tap). The profile header includes the AIA TAP logo, the name 'AIA TAP', the handle '@aia\_tap', and a bio stating: 'TAP Knowledge Community serves as a resource for @AIANational members, the profession, and the public in the deployment of technology in #architecture' with the website 'http://aia.org/tap'. The statistics show 1,260 tweets, 150 following, and 875 followers.

The left sidebar contains navigation links: Tweets, Following, Followers, Favorites, and Lists. Below these are video thumbnails and a 'View all photos and videos' link. The 'Who to follow' section lists 'Ace Hardware' (promoted), 'Meridian Systems' (followed by Tekla and others), and 'Jonathan M. Taylor'. The 'Trends' section shows '#TridentNews' as a promoted trend.

The main feed shows three tweets from AIA TAP:

- Tweet 1 (20h):** 'They're is still time to register for tomorrow's 2013 Professionals Choice #BIMAward with @theBIMForum bit.ly/178cCHW' (Note: 'is' is a typo for 'isn't').
- Tweet 2 (23 Apr):** 'Leadership Team members @SHaganFAIA & @BrianSkrupac are off to @theBIMForum for the Professionals Choice #BIMAwards #humanBIM'.
- Tweet 3 (22 Apr):** 'We're partnering w/ @theBIMForum on the 2013 Professionals Choice #BIMAward. Register now to participate on 4/24 bit.ly/178cCHW'.



## 2013 AIA TAP BIM Awards Jury

**RK Stewart FAIA**  
*Jury Chair*

Salt Lake City, UT

**Harry McKinney AIA**  
**Director of Virtual  
Design | Construction**

Clancy & Theys  
Raleigh NC

**Tom Sawyer**

Engineering  
News Record  
New York, NY

**Dennis Sheldon PhD**  
**Chief Technology  
Officer**

Gehry Technologies  
Santa Monica, CA

**Eric Teicholz**  
**President CEO**

Graphic Systems Inc  
Boston MA

- Presented at 2013 AIA Convention BIM Awards  
Reception and Ceremony | Denver CO | June 19 2013



# We are also Live Online!

## Technology in Architectural Practice

**AIA** Knowledge Communities



### **AIA TAP and AGC BIMForum 2013 Professionals Choice BIM Award**

April 24, 2013 | 4-5pm ET | 1-2pm PT | Earn 1.0 AIA LU | [Learn more »](#)

This year the 9th Annual AIA TAP BIM Awards is again delighted to be partnering with the AGC BIMForum to host presentations and in-person | online voting for the 2013 Professionals Choice BIM Award.

This webinar will be broadcast live from the AGC BIMForum in Miami and the following firms and projects, already vetted by AIA to receive BIM Awards recognition at the 2013 AIA Convention in Denver on June 19, 2013, will present their projects for your vote!

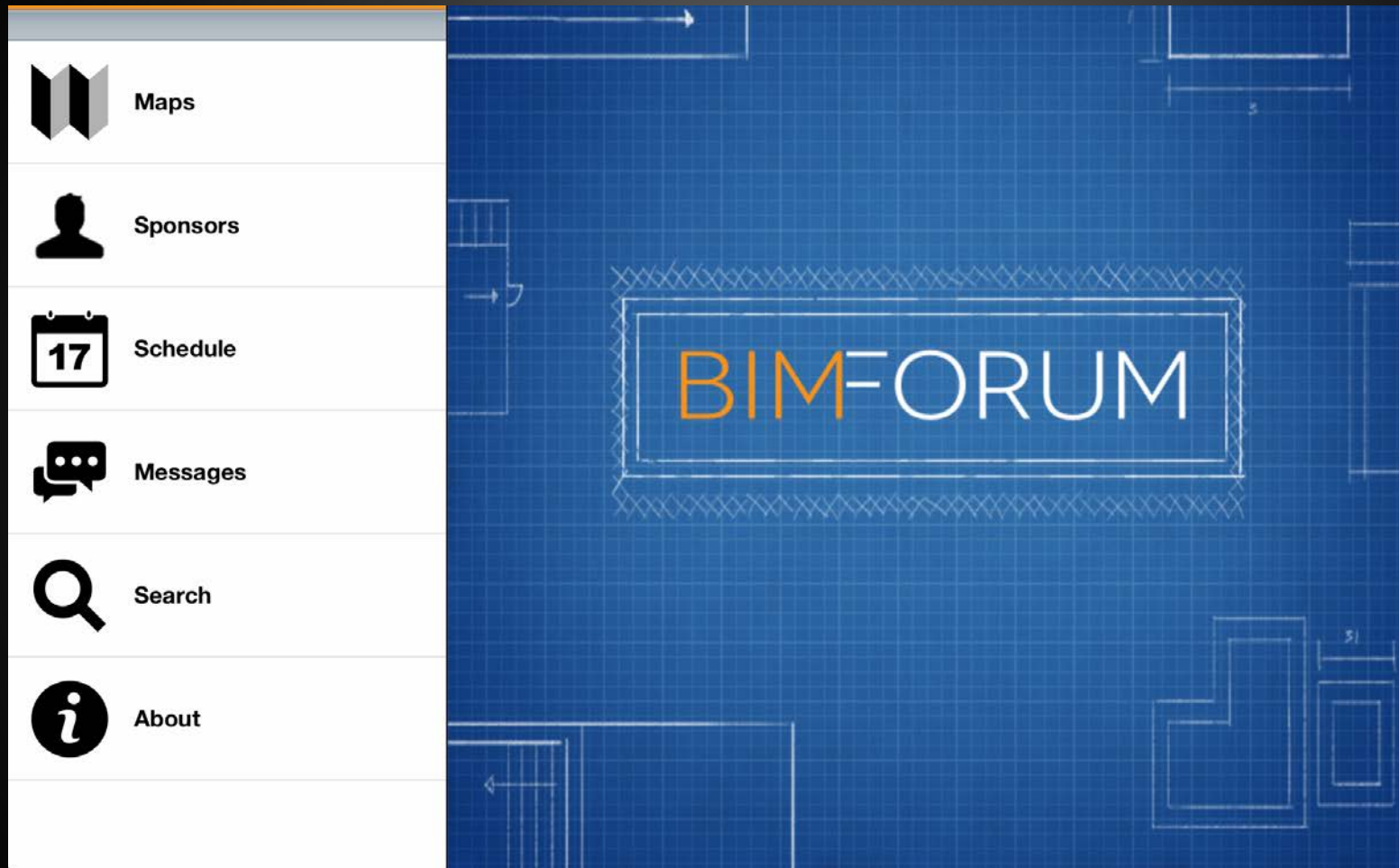


# YOU are the Jury!!

- Here in person at BIMForum | Miami
- Online at AIA TAP Webinar
- Selection of Professionals' Choice will be Immediately After these Presentations
- Take Notes and Be Prepared to VOTE!

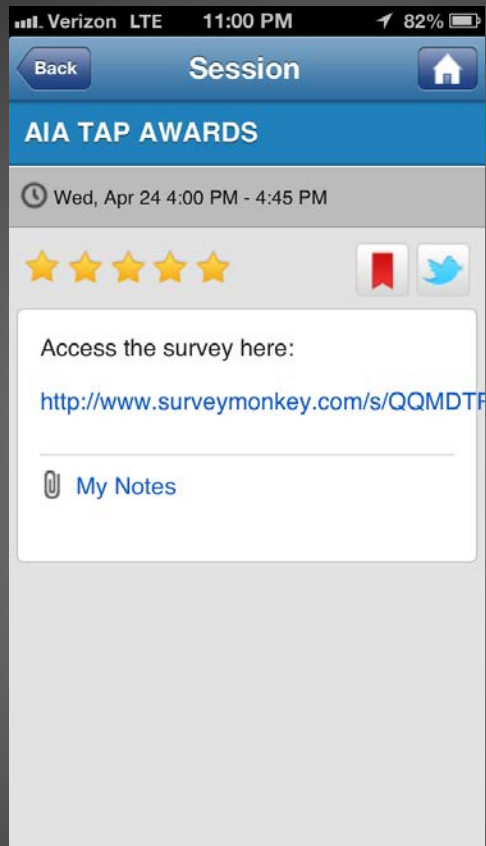
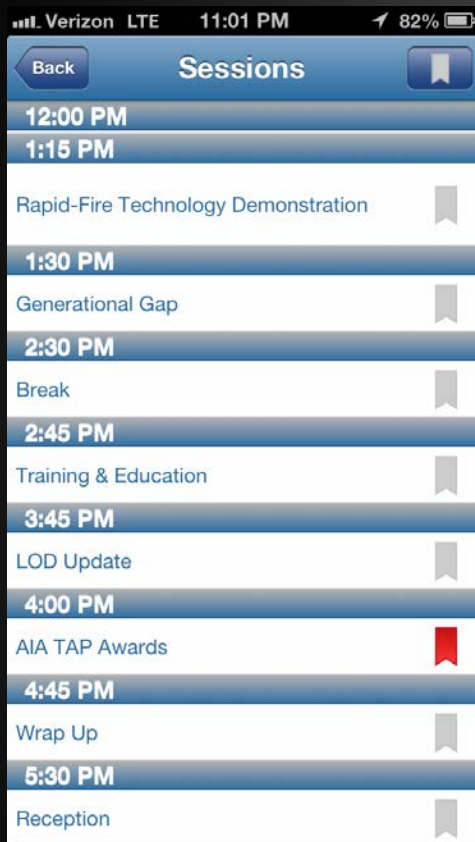


# BIMForum APP and Voting!





# BIMForum APP and Voting!





# YOU are the Jury!!

- CollinsWoerman + GLY Construction  
*Group Health Cooperative Puyallup Medical Center*
- Fentress Architects / Mortenson Construction  
*Ralph L. Carr Colorado Judicial Center*
- CO Architects  
*Phoenix Bio-medical Campus / Health Sciences Education Building*



# CollinsWoerman + GLY Construction

*Group Health Cooperative Puyallup Medical Center*

- **Dave Burger AIA**  
**Integrated Design Manager | GLY**







GroupHealth

GroupHealth

# HEALTHCARE OF THE FUTURE

GROUP HEALTH COOPERATIVE  
PUYALLUP MEDICAL CENTER

INTEGRATED CARE + FACILITY DESIGN



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# PRESENTING PARTNERS



GLY | INTEGRATED DESIGN MANAGER



JAMEY BARLET  
COLLINSWOERMAN | SENIOR ASSOCIATE





GroupHealth

GroupHealth

# HEALTHCARE OF THE FUTURE

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## LEAN PROGRAMMING SOLUTION

# DOLPHI-GATOR AFFINITY

### COLLABORATIVE DESIGN MODEL

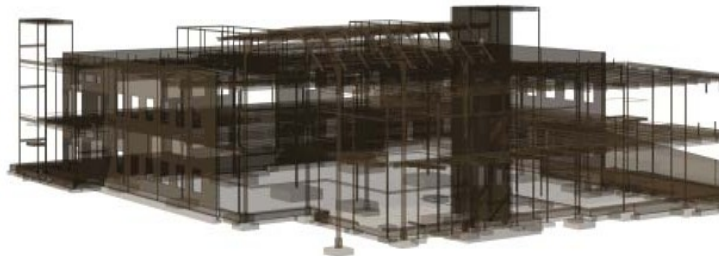
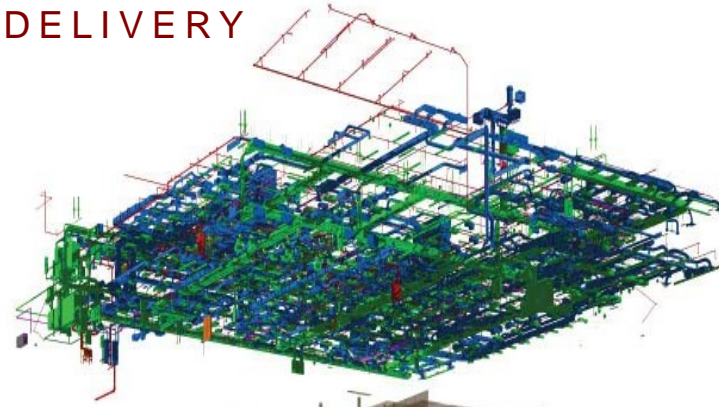
Two design ideas that arose from collaborative design process of tenant, architect and contractor were combined to become the starting point for building the shared model..





INTEGRATED PROJECT DELIVERY

# INTEGRATED CARE AND FACILITY DESIGN = IPD/LEAN PROGRAMMING DESIGN + CONSTRUCTION



MOCKUP CARE ROOM

MODELED CARE ROOM

BUILT CARE ROOM





## WAREHOUSE + MOCKUPS

# PODS FACILITATE FLEXIBLE PLANNING + WAS ESSENTIAL TO FORWARD-THINKING DESIGN



WAREHOUSE MOCKUP VIEW OF POD





COLOCATION + SHARED MODEL

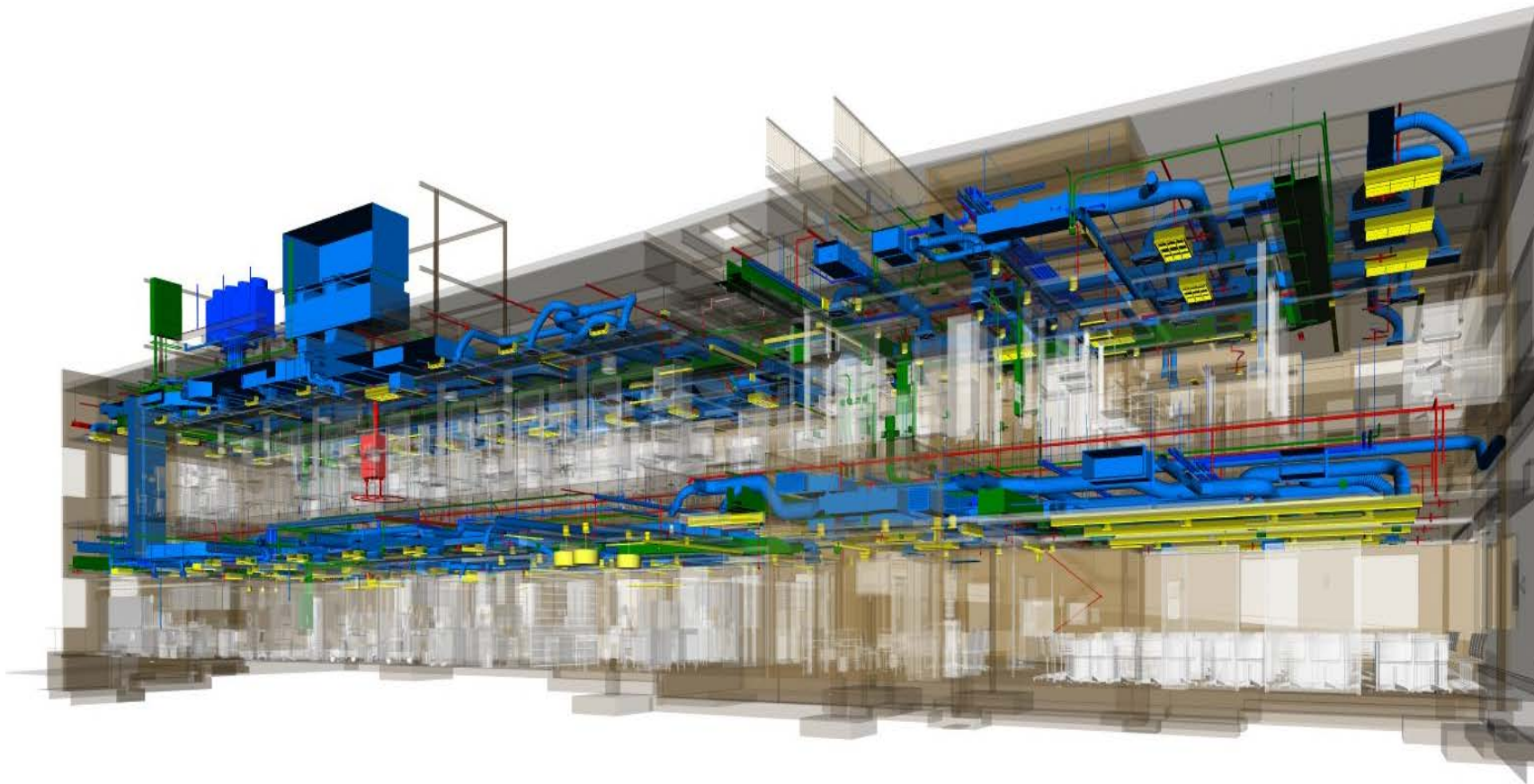
EARLY COLOCATION OF TEAM MEMBERS  
PROVIDED EFFICIENT COMMUNICATIONS  
+ CONTINUAL COORDINATION + QA/QC





MECHANICAL SYSTEMS DESIGN, SELECTION + COORDINATION

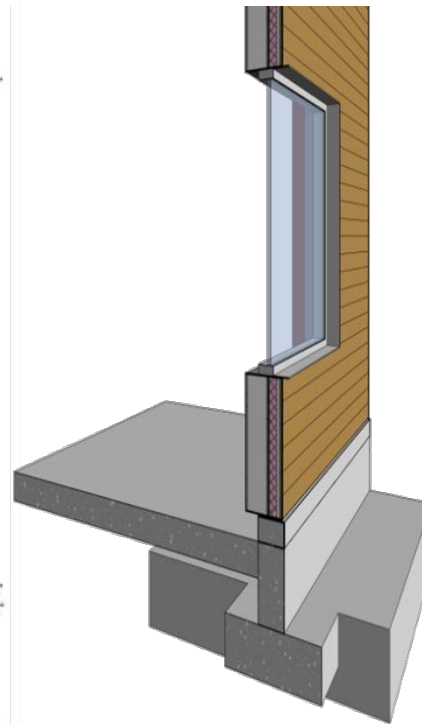
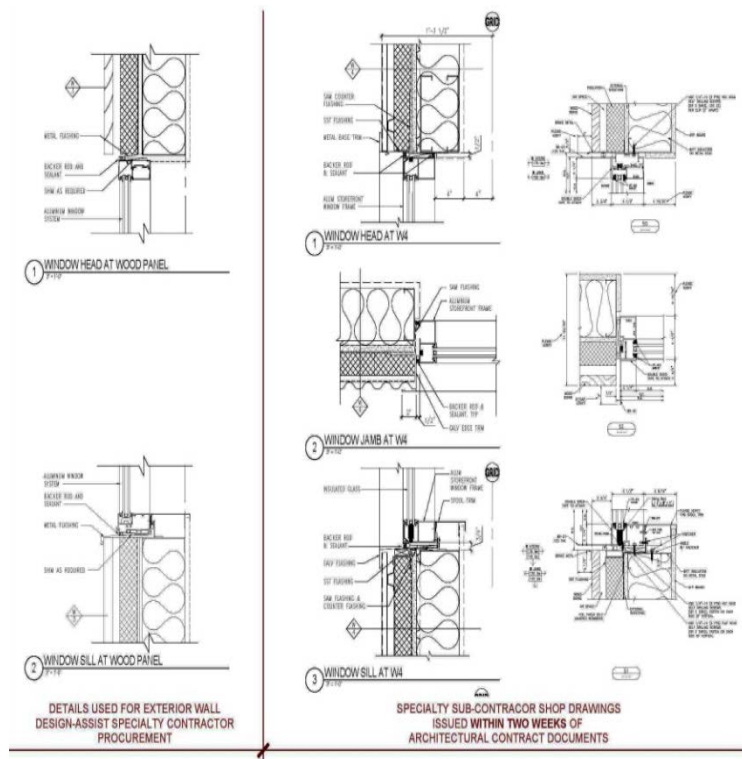
# PLUG + PLAY PODS ACCOMMODATE FUTURE CHANGES, ALLOWING THE REST OF THE FACILITY TO OPERATE





## DESIGN-ASSIST EXTERIOR WALL DEVELOPMENT

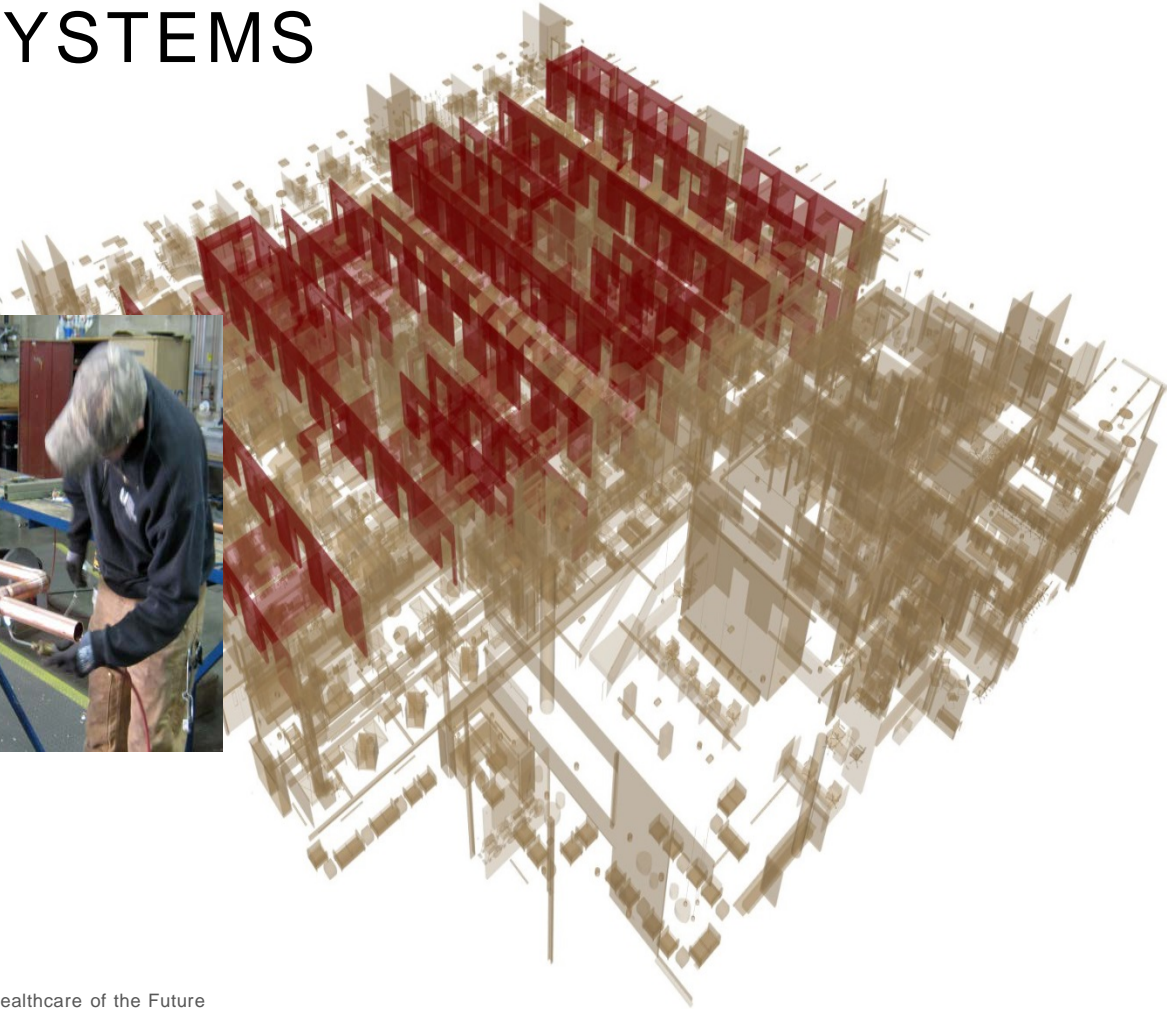
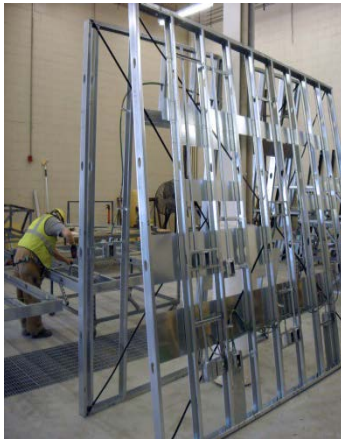
# DESIGN-ASSIST EXTERIOR WALL DEVELOPMENT CLARIFIED SCOPES + INCREASED COODINATION





PREFABRICATION + MODELING

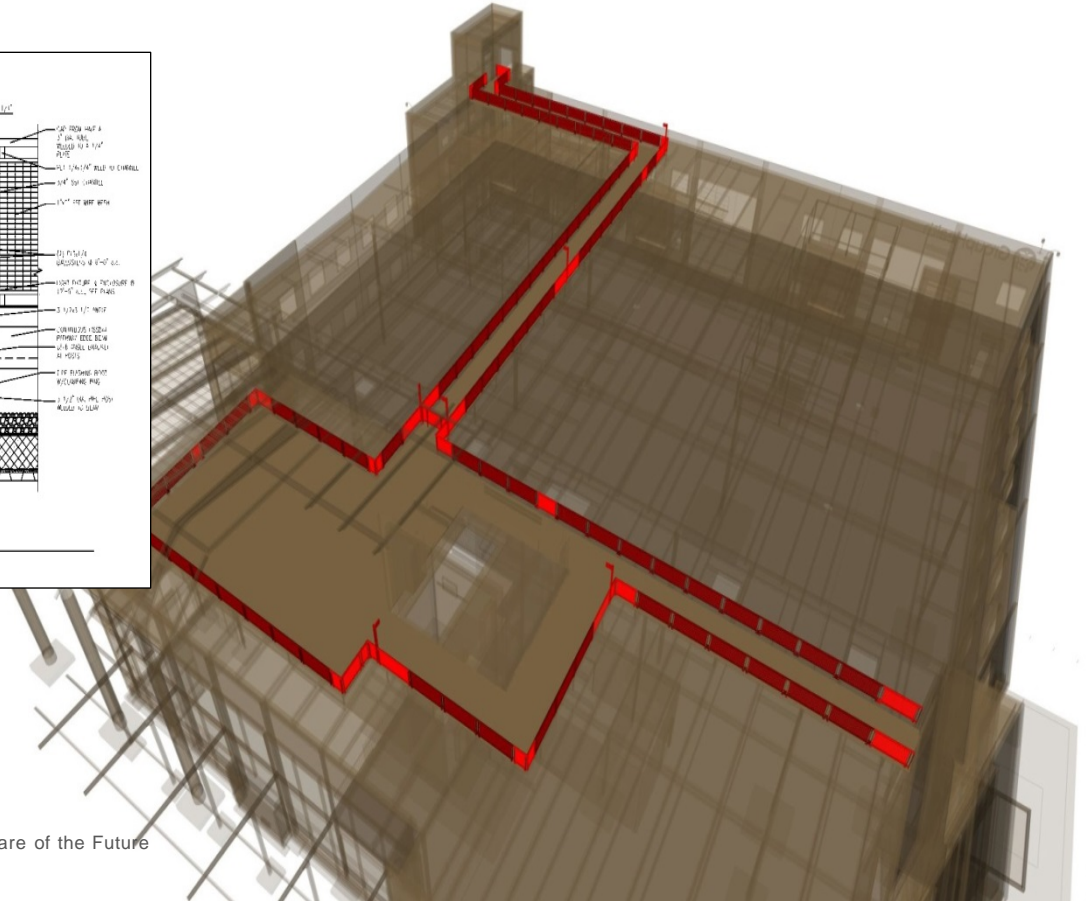
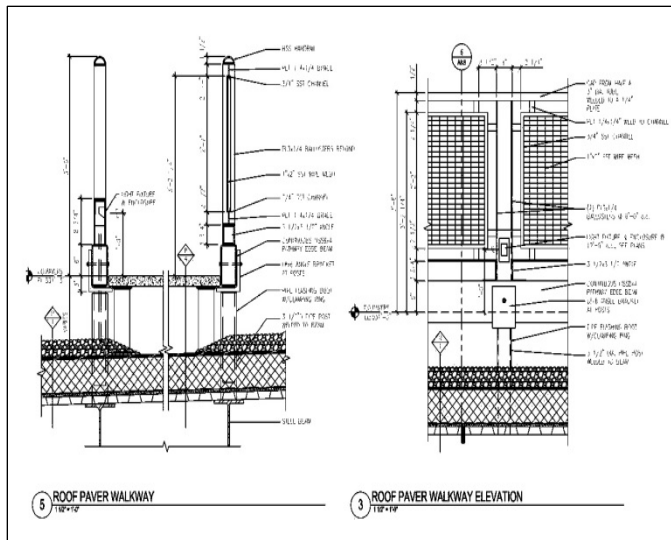
# BIM FACILITATED PRE-MANUFACTURING 42 EXAM ROOMS WITH ALL ELECTRIC + PLUMBING SYSTEMS





DIRECT FROM BIM TO FABRICATION

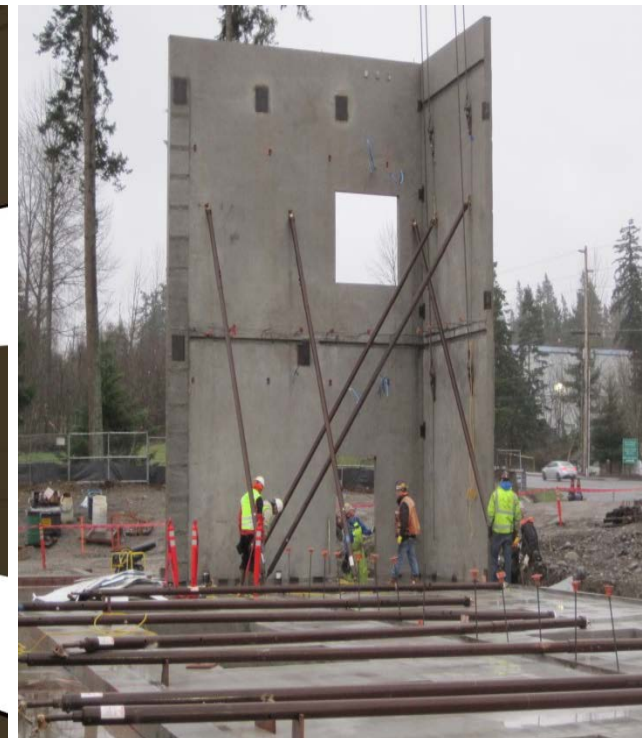
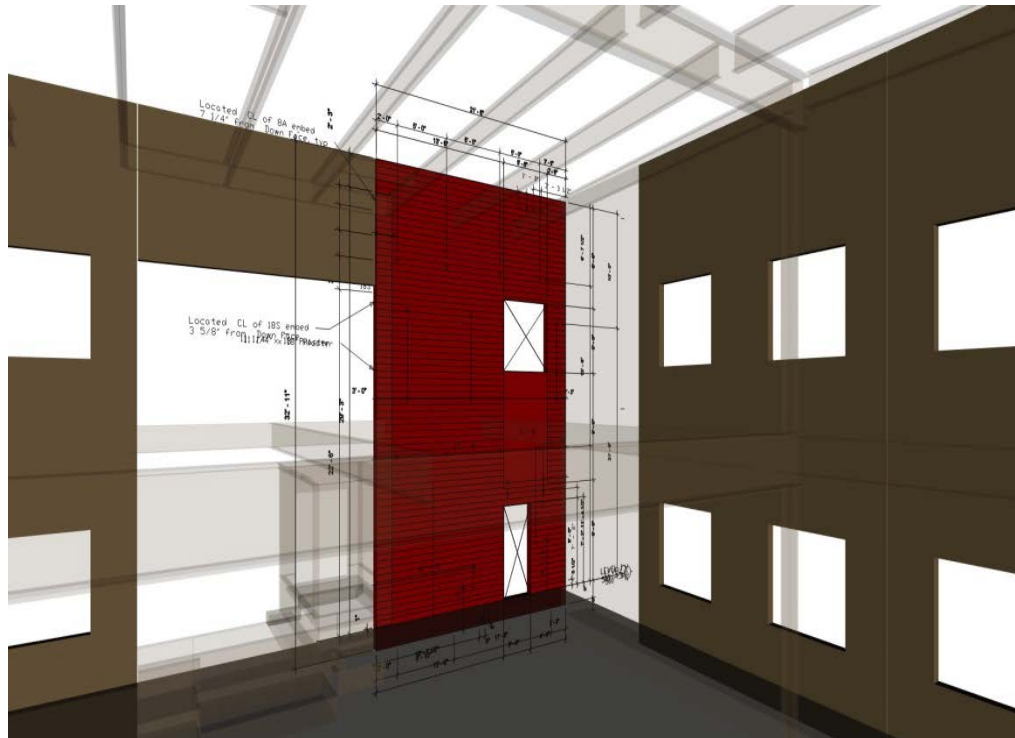
# RAILING 3D MODEL WAS DELIVERED DIRECTLY TO FABRICATOR WHO PRODUCED THE SHOP DRAWINGS





## INTEGRATION DRAWINGS FROM BIM

# 3D MODEL DEVELOPED COLLABORATIVELY DURING DESIGN WAS ACTIVELY USED TO SUPPORT CONSTRUCTION





FF+E COORDINATION USING BIM

ALL EQUIPMENT + FURNITURE WAS  
MODELED TO ENSURE ACCURATE ITEM  
COUNTS + MATERIAL TAKE-OFFS



MODELED FF+E



## ACTIVE PATIENT PARTICIPATION DURING LEAN PROGRAMMING



<https://www.youtube.com/watch?v=-nkacQke1gk>

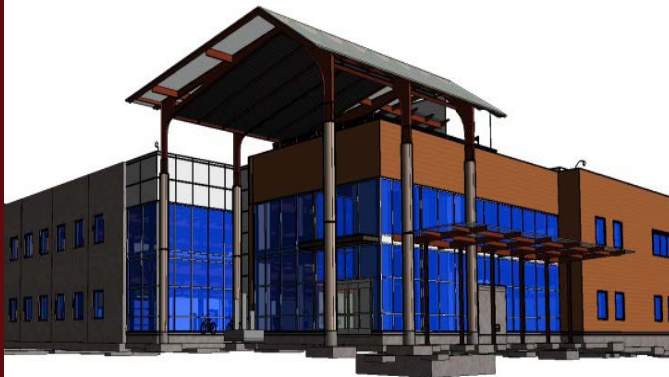


## PROJECT RESULTS

- INNOVATIVE DESIGN + CONSTRUCTION APPROACHES
- FIRST LEED-HC GOLD [HEALTHCARE] FACILITY
- SUCCESSFUL PROTOTYPE FOR 13 FUTURE CLINICS



SCHEMATIC DESIGN: SKETCHUP MODEL



CONTRACT DOCUMENTS + CONSTRUCTION: BIM [REVIT] MODEL



BUILT FACILITY





W  
COLLINS  
ERMAN

## GROUP HEALTH COOPERATIVE PUYALLUP MEDICAL CENTER

DAVE BURGER, AIA, LEED AP  
GLY | INTEGRATED DESIGN MANAGER  
p: 425.451.8877 | e: dave.burger@gly.com

JAMEY BARLET  
COLLINSWOERMAN | SENIOR ASSOCIATE  
p: 206.245.2100 | e: jbarlet@collinswoerman.com



# Fentress Architects / Mortenson Construction

*Ralph L. Carr Colorado Judicial Center*

- Brian E. Filkins

Senior Integrated Construction Coordinator  
**Mortenson Construction**





# Ralph L. Carr Colorado Judicial Center

2013 AIA TAP BIM Award Winner

Delivery Process Innovation



Trammell Crow Company





695,000 square feet  
State Courthouse  
12-story office tower

\$200M construction budget  
27-month construction schedule  
LEED-Gold target



## SUCCESS FACTORS

**100-year**  
building symbolizing the  
**Rule of Law**

**Integrating**  
**ALL** users in the design-build  
**process**

Paying  
**Attention** to detail

**Significance**  
of decisions  
in the design process

Construct a building  
for **today**  
while considering the  
**future**









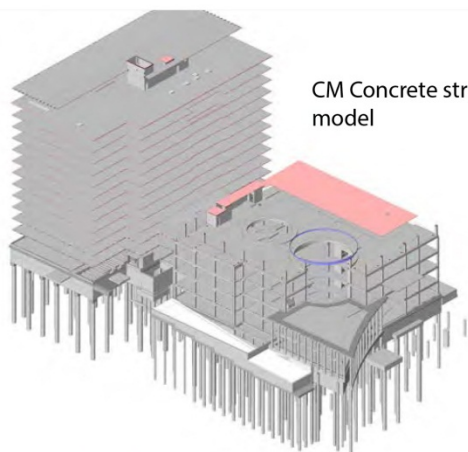
## Ralph L. Carr Colorado Judicial Center



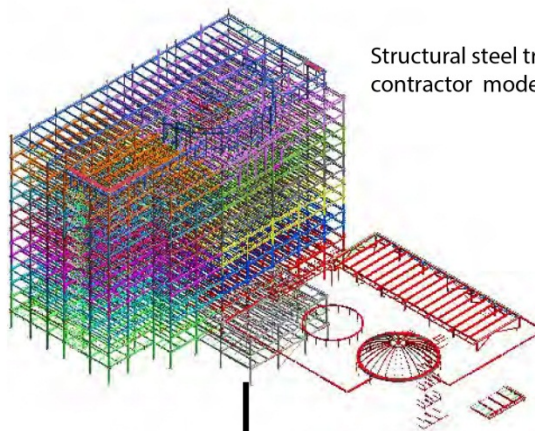
Trammell Crow Company



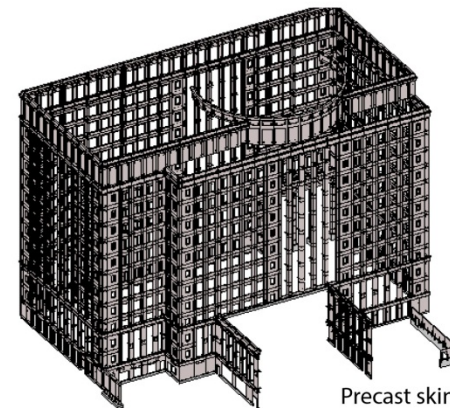




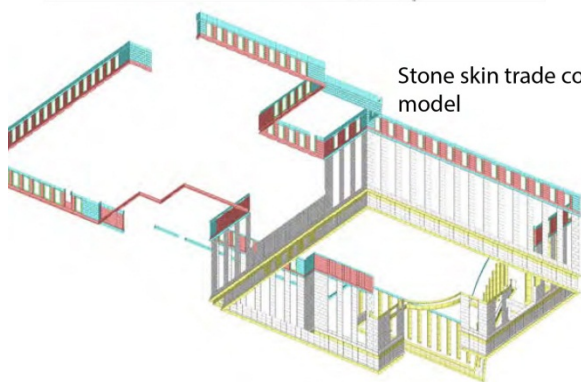
CM Concrete structural model



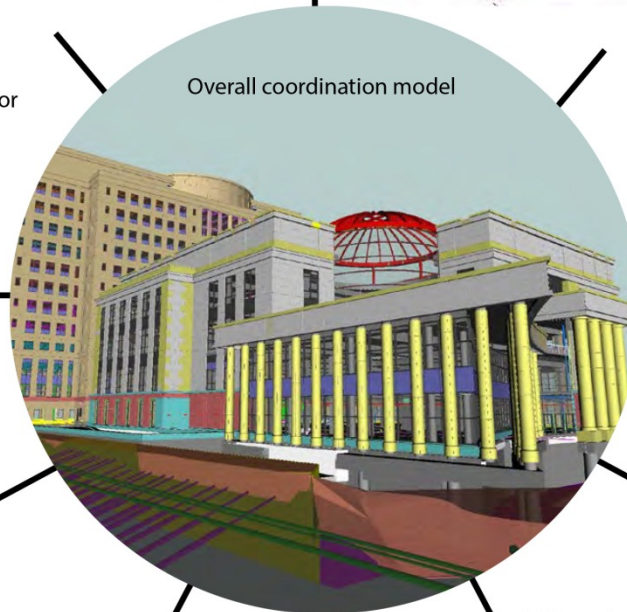
Structural steel trade contractor model



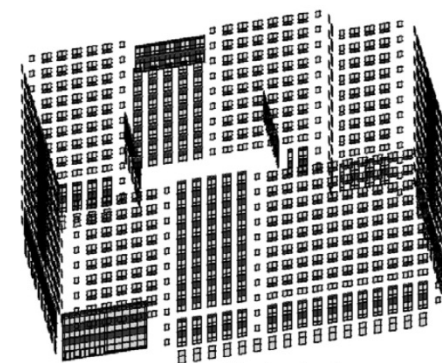
Precast skin trade contractor model



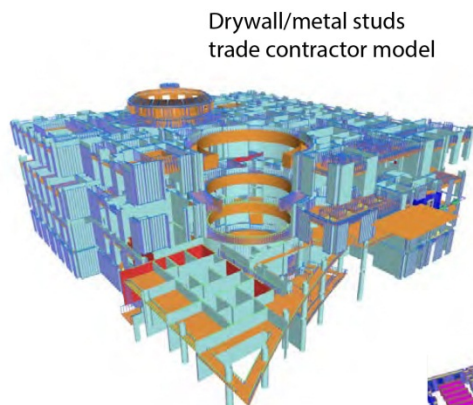
Stone skin trade contractor model



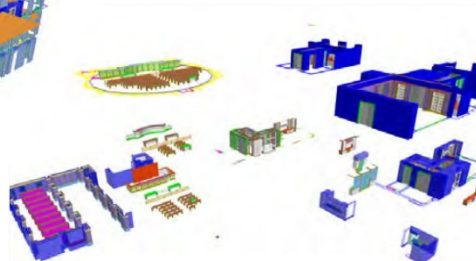
Overall coordination model



Glazing trade contractor model



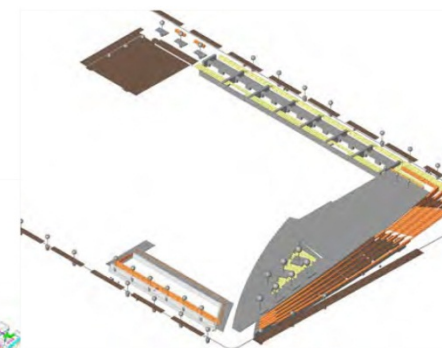
Drywall/metal studs trade contractor model



Millwork trade contractor model



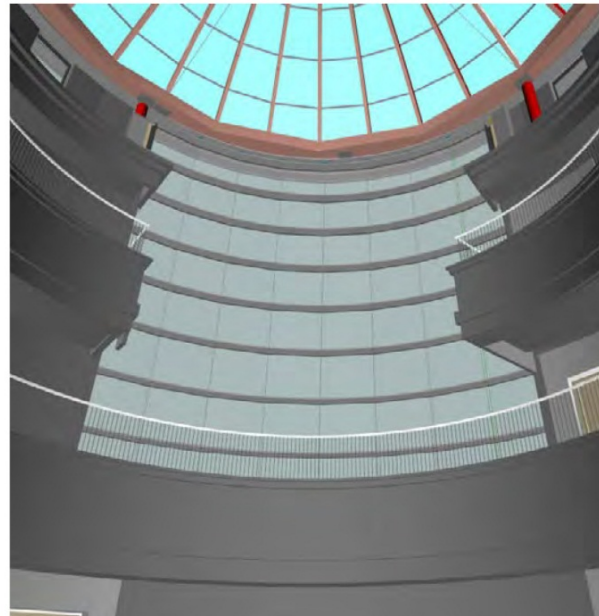
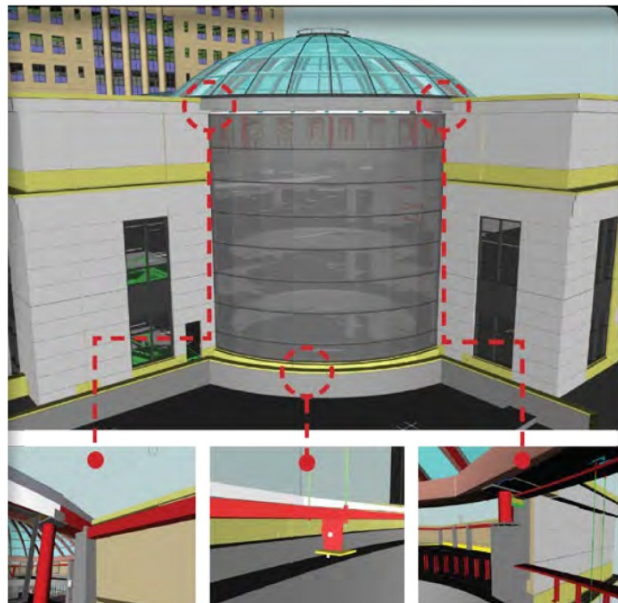
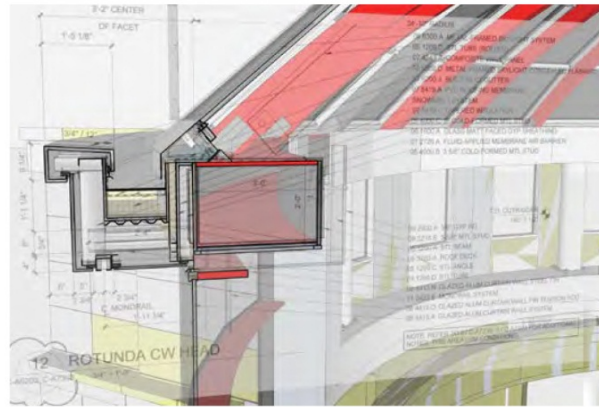
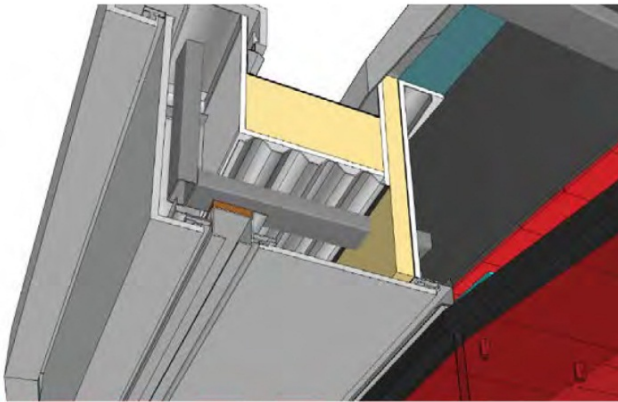
MEP trade contractor model



Site concrete and stone trade contractor model

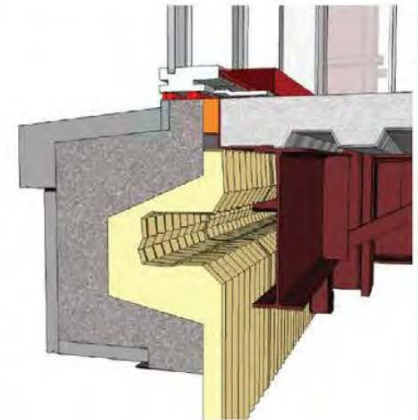
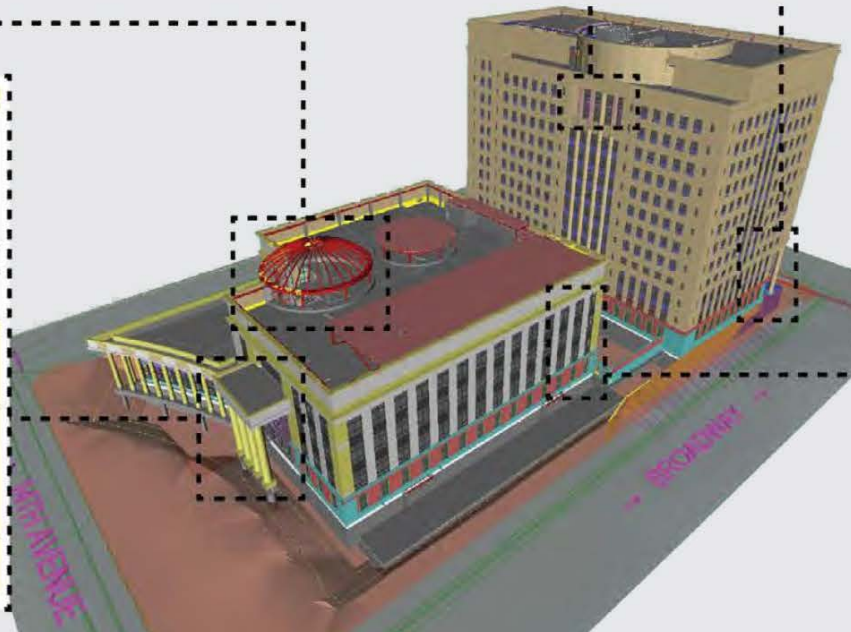
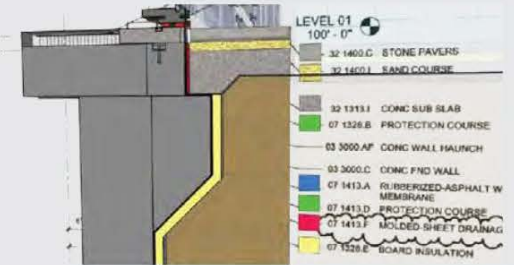
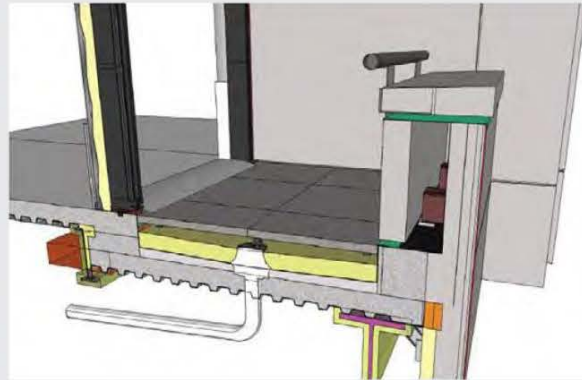
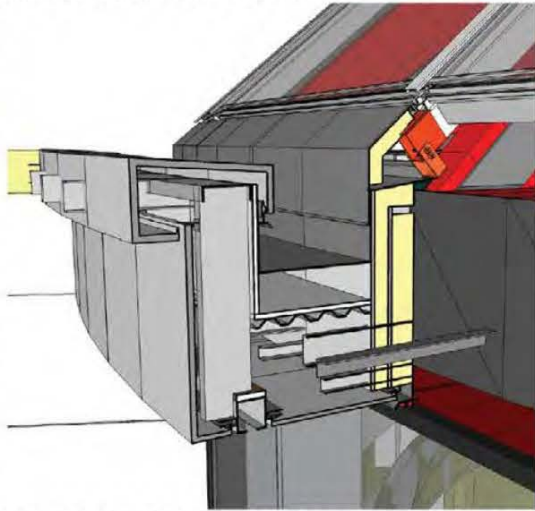


# Delivering Design Intent Through Virtual Mockups



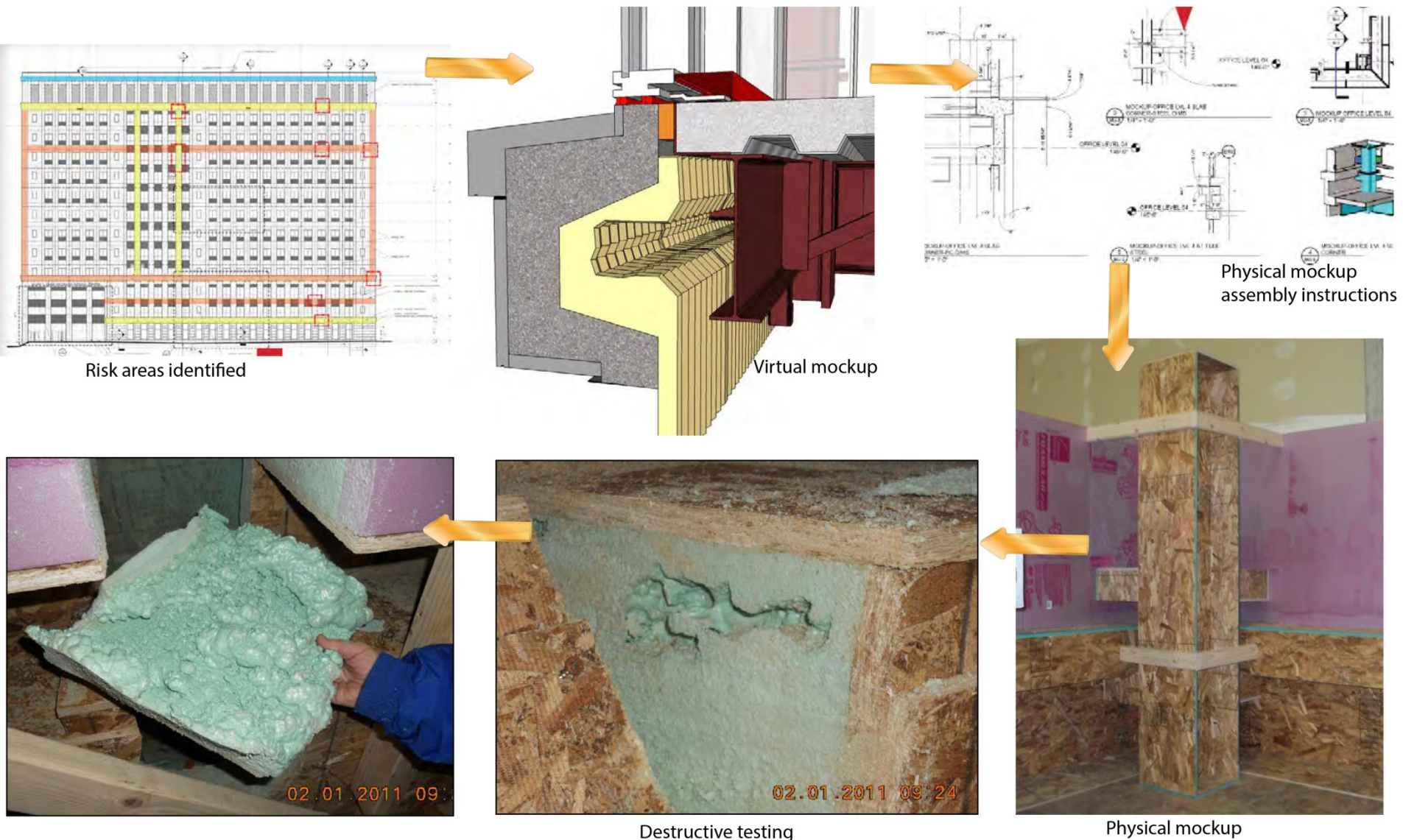


# Expedited Detail Resolution Reduces Project Risk



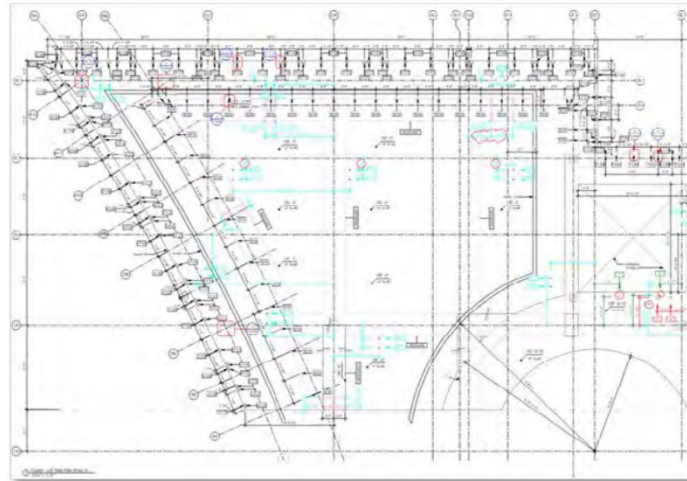


# Improving Building Performance - Proof of Concept





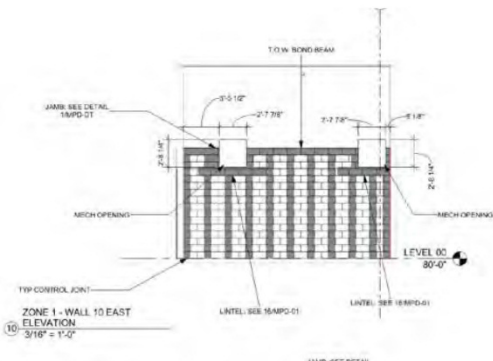
# Improving Construction Efficiency, Delivering Cost Savings



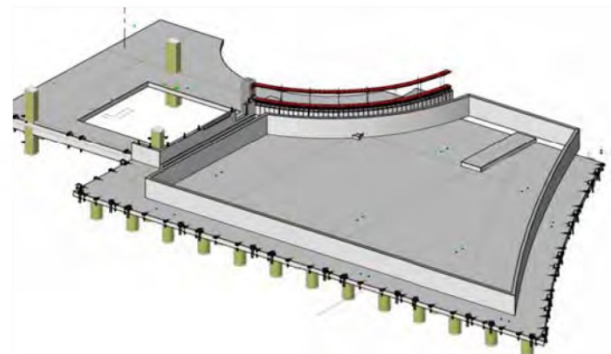
Concrete deck lift drawings



Phasing plans



CMU lift drawings



Concrete elevator core model

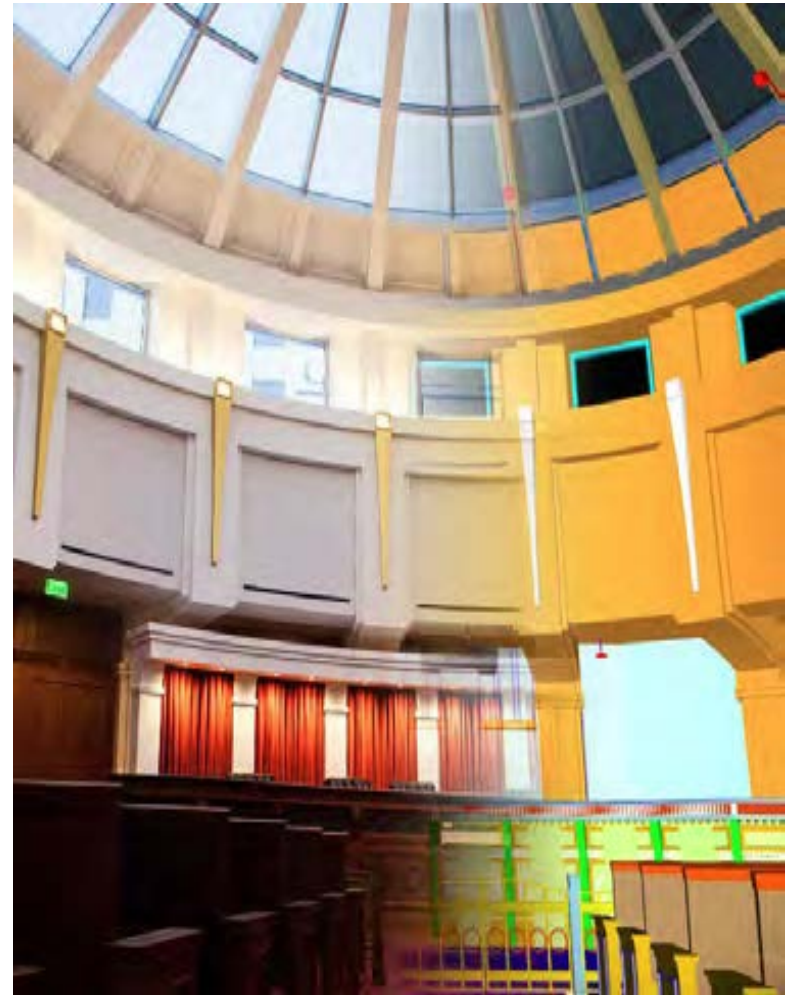


# Process Improvement: Construction Phase

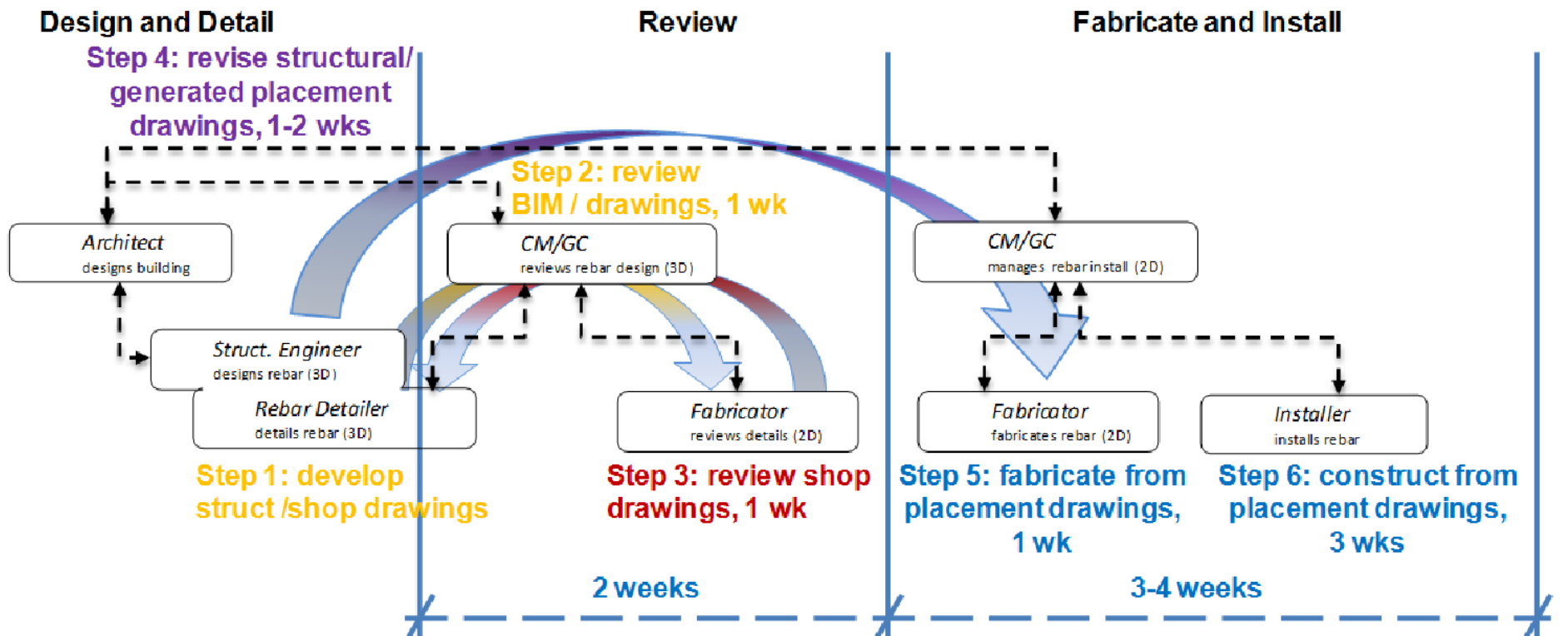
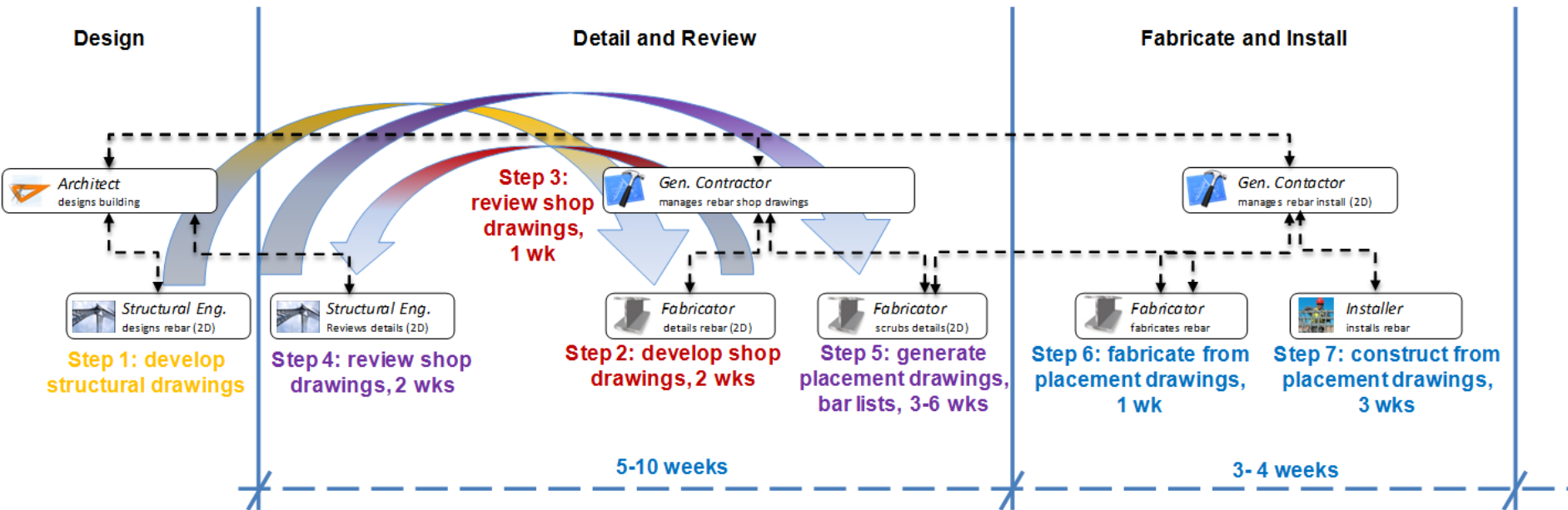


*"This was the beauty of the BIM process to us. For a subcontractor to have that level of influence, well that was just unheard of before."*

Project Architect









# Developing Processes that Connect People to Information



Plan room computer dashboard interface



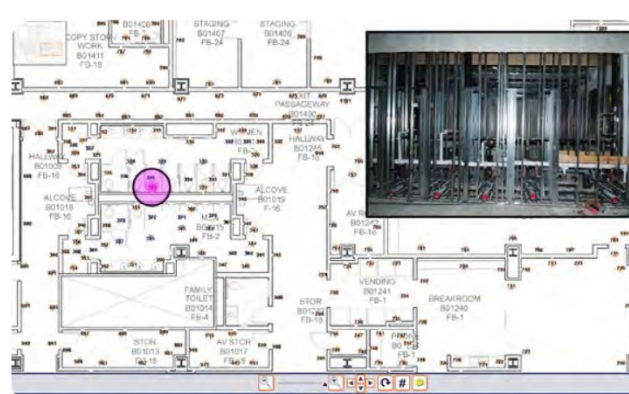
Touch screen plan room computers replace paper drawings



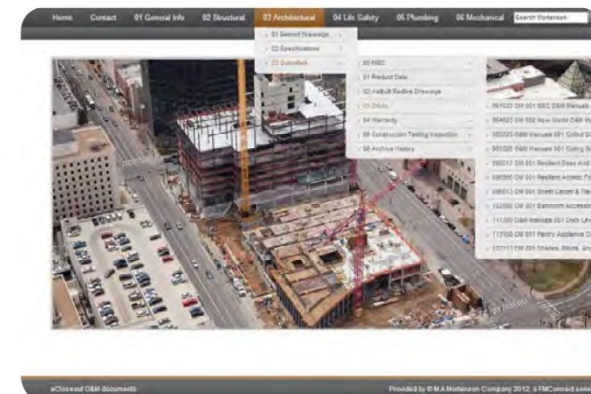
Field tablets connect directly to the cloud



Field computer dashboard interface



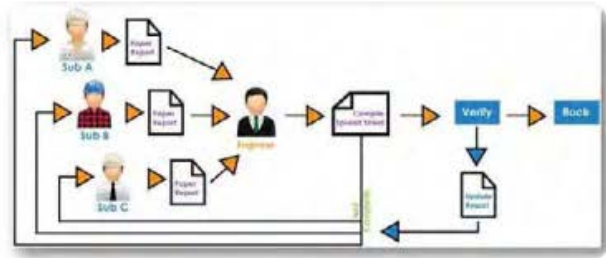
In-wall documentation for facilities maintenance



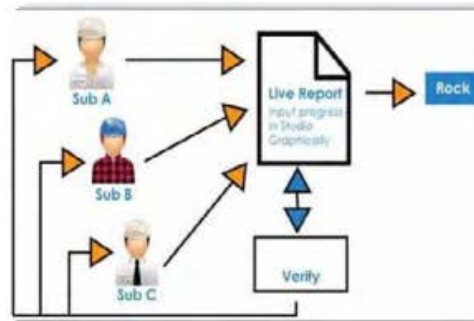
Electronic closeout and O&M interface for facilities maintenance



# Leveraging the Cloud to Share and Streamline



Typical inspection sign off process



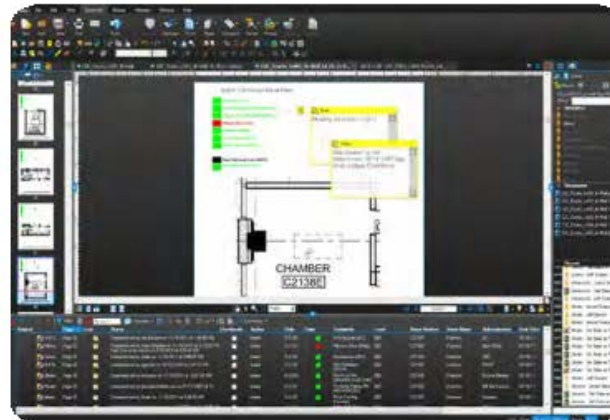
Streamlined team inspection sign off process



Courtroom millwork viewed on site through augmented reality



Interactive graphical interface representing tabular data on inspection sign-off status



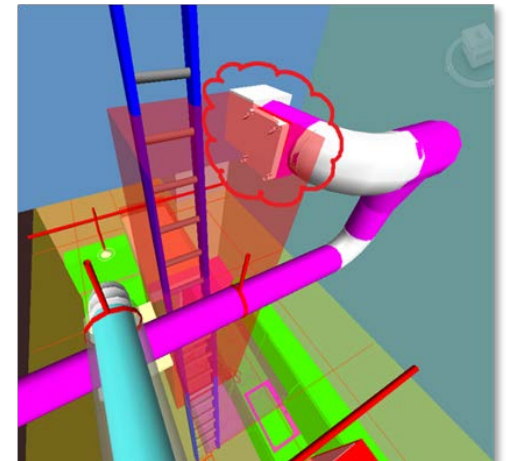
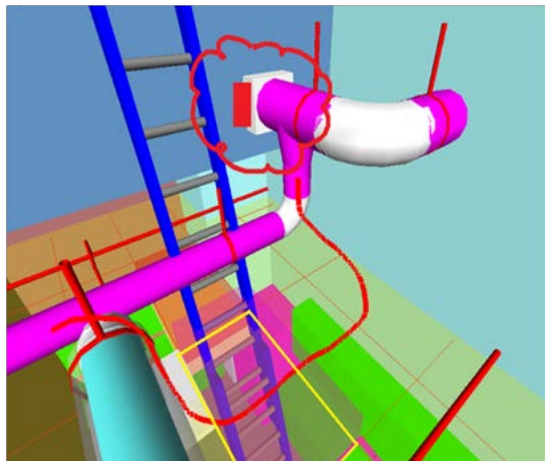
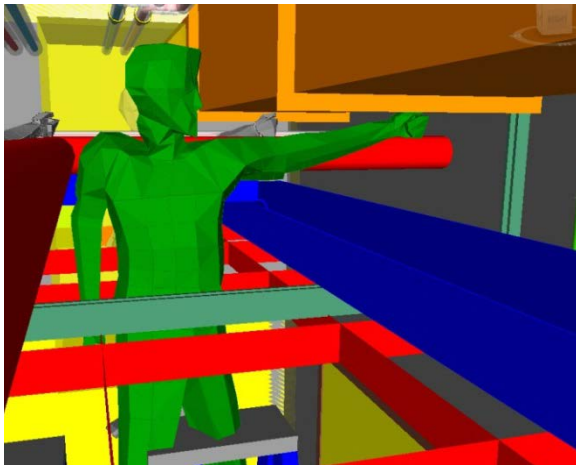
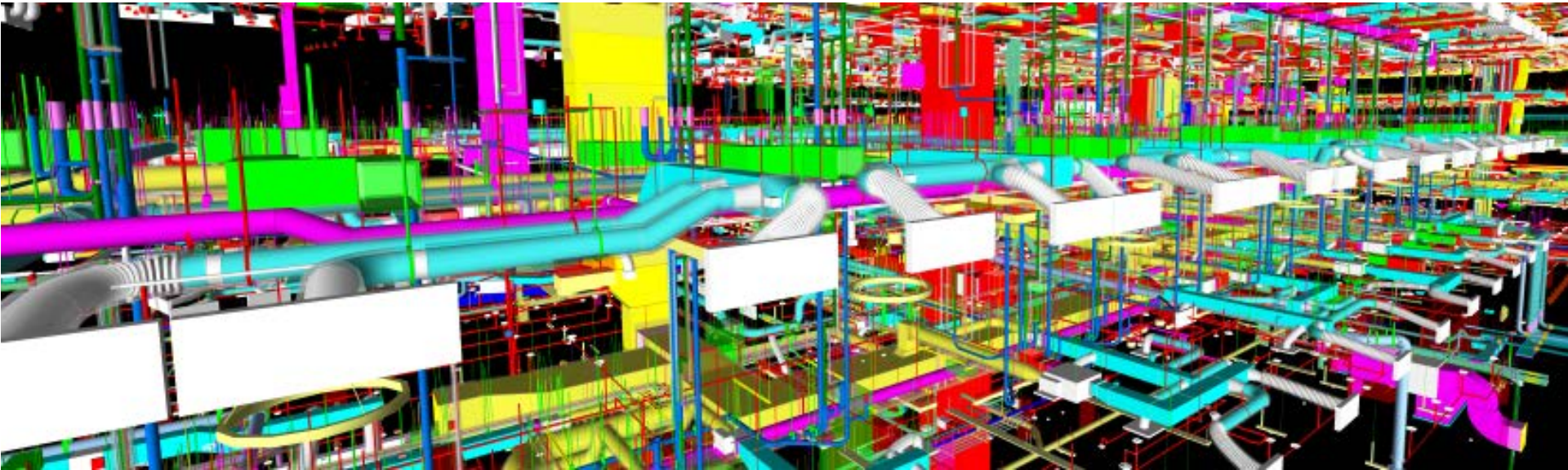
Detailed room status interface linked to plan view (as shown at left)



Interactive graphic material tracking and installation status interface

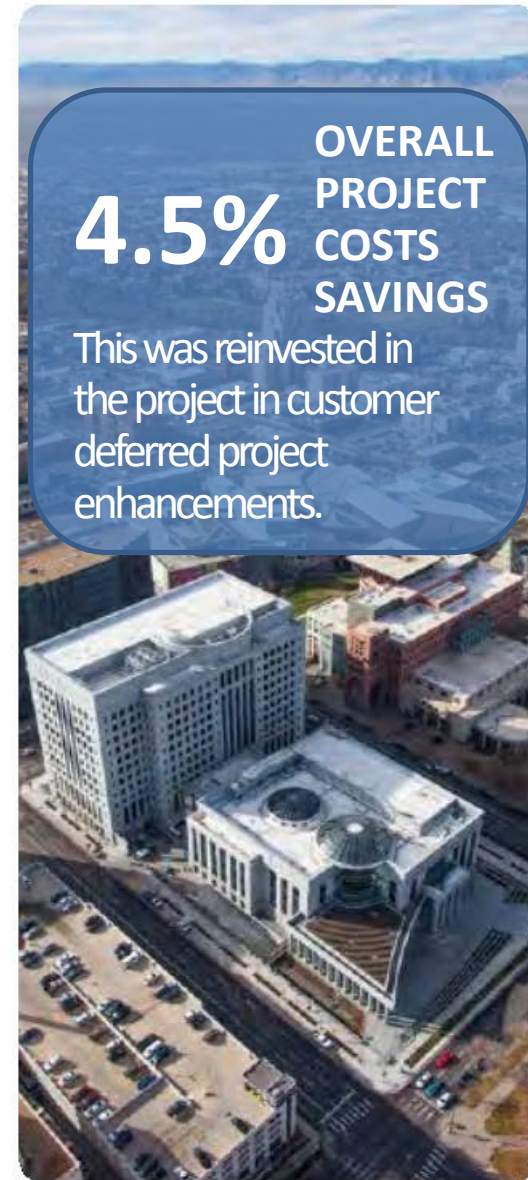
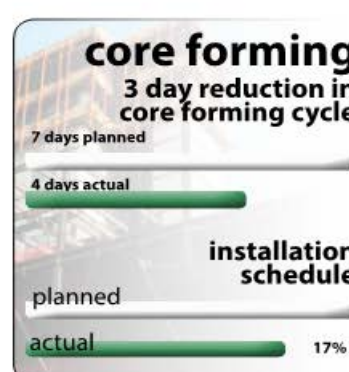
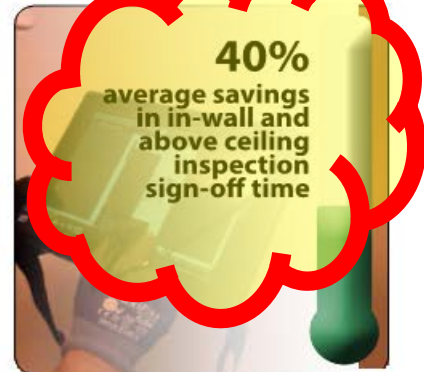
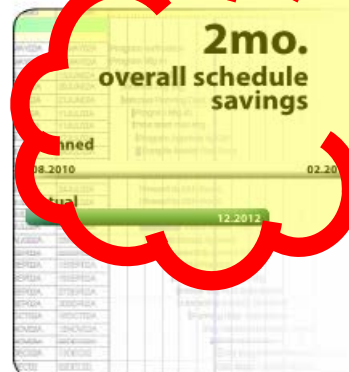
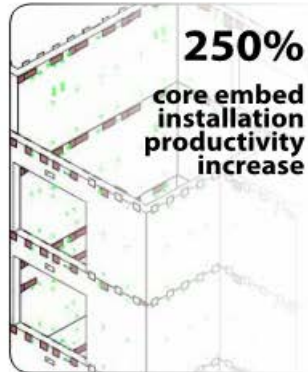


# Beyond Typical MEP Clash Detection to Owner FM





# Measured Return on Investment





## Owner Quotes

*"[The team members] are experts at creating and maintaining the spirit of **teamwork and collaboration** between all parties."*

*"BIM coordination between design team and construction groups has been **exceptional**."*

*"**This has been one of the best projects I have worked on!** From preconstruction through nearing the finish line [the team] has dedicated the resources, ensured the highest level of quality and safety, and maintained the **highest level of professionalism and teamwork**."*

*"Your company totally understands customer service. I am extremely pleased with each and every person that I have dealt with. What a classy firm. Knowledge of the work and commitment is very high. Great job!"*

## SUCCESS FACTORS

### 100-year

building symbolizing the

### Rule of Law

**Integrating**  
**ALL** users in the design-build  
**process**

Paying  
**Attention** to detail

**Significance**  
of decisions  
in the design process

Construct a building  
for **today**  
while considering the **future**







# Ralph L. Carr Colorado Judicial Center

2013 AIA TAP BIM Award Winner

Delivery Process Innovation



Trammell Crow Company





# CO Architects

*Phoenix Bio-medical Campus | Health Sciences Education Building*

- Jenna Knudsen AIA LEED AP  
Associate Principal  
CO Architects



# TWO UNIVERSITIES, TWO OWNERS, TWO ARCHITECTS, TWO CONTRACTORS:

HEALTH SCIENCES EDUCATION BUILDING – PHOENIX BIOMEDICAL CAMPUS



CO ARCHITECTS







# 1

## BUILDING DESIGN & CONTEXT





## Team

**Arizona Board of Regents**  
Owner

**CO Architects**  
Design + Executive Architect

**Ayers Saint Gross**  
Associate Architect + Master Planner

**DPR Construction • Sundt Construction, Inc.,  
Joint Venture**  
Construction Manager/General Contractor

## Description

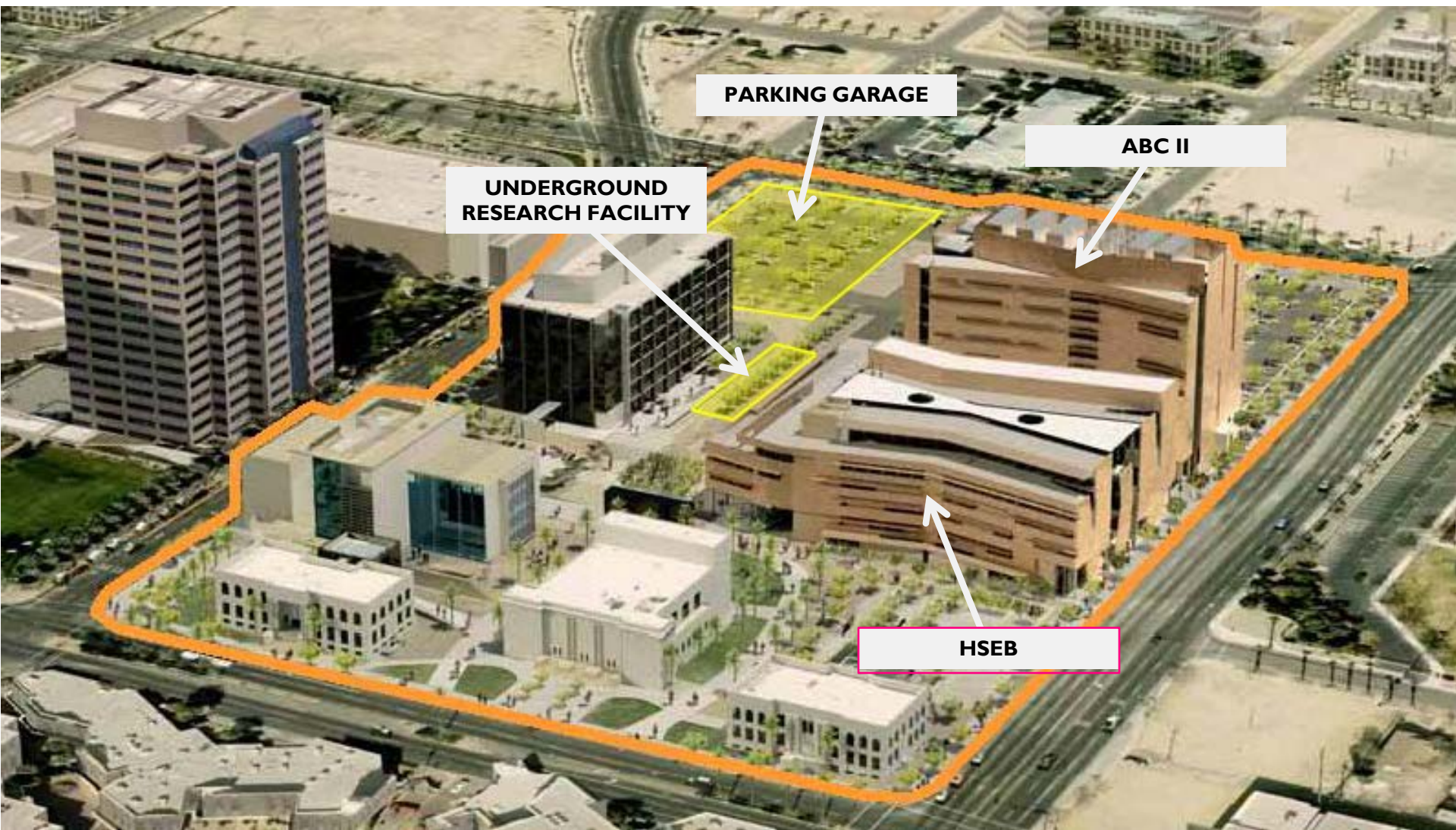
- 268,000 GSF
- \$99 million
- Completed July 2012

## Contract/Delivery Method

- CM at Risk
- Design Assist





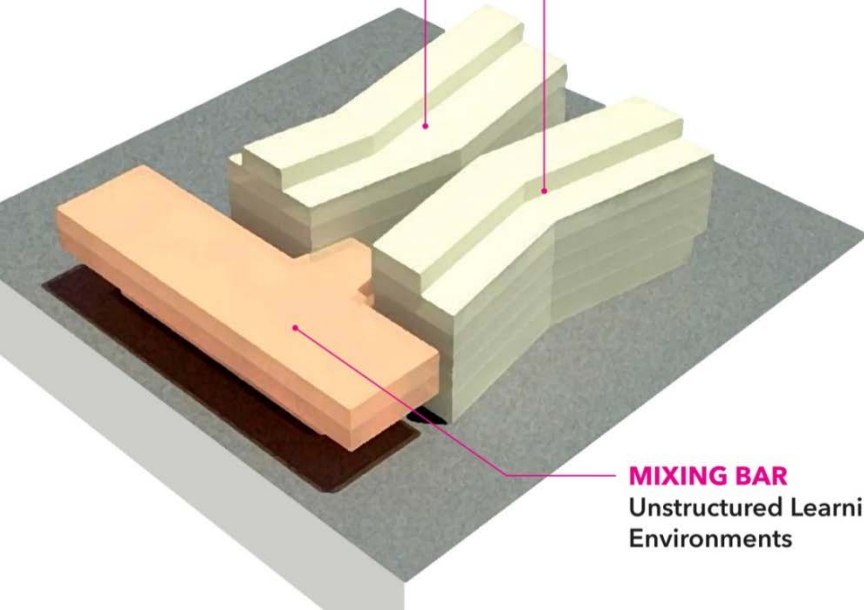




**NORTH BAR**  
Structured Learning  
Environments

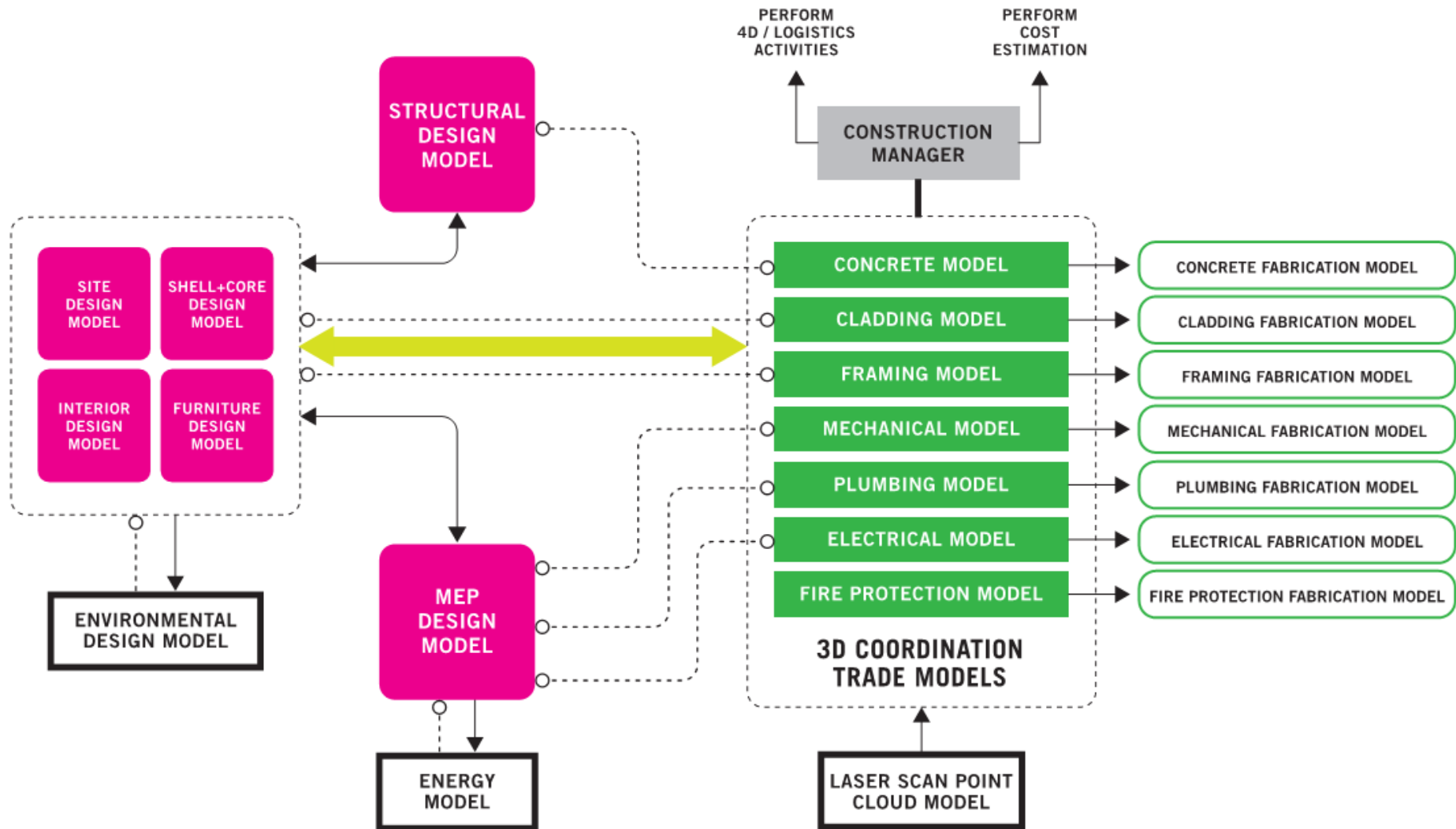
**SOUTH BAR**  
Structured Learning  
Environments

**MIXING BAR**  
Unstructured Learning  
Environments





# BIM Flow Diagram



—> Indicates Model Transfer  
- - - - - O Indicates Model Feedback



2.

**COPPER SKIN**





# Copper Skin Conceptual Studies

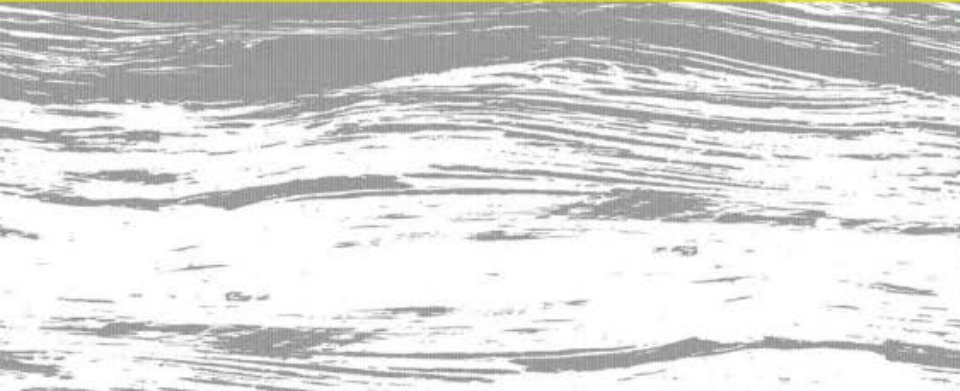
1. CANYON IMAGE



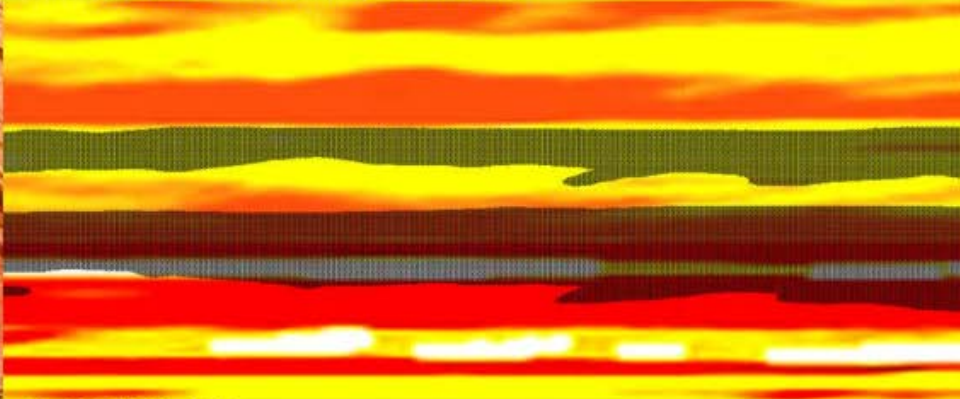
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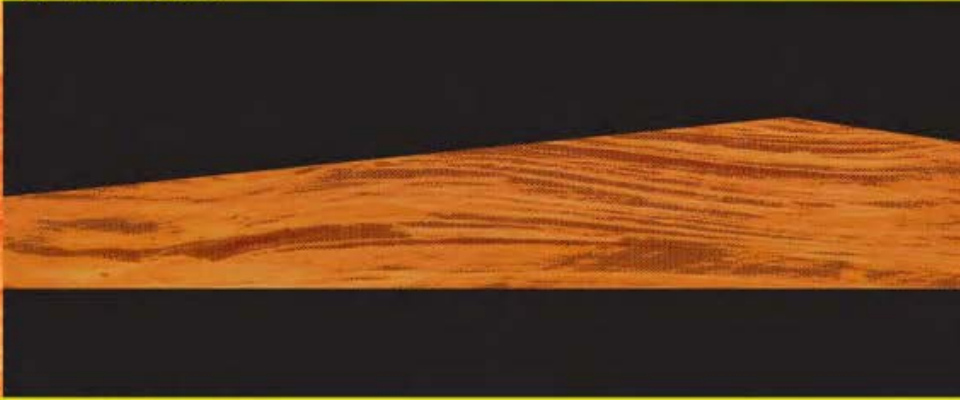
3. POSITIVE/NEGATIVE BITMAP



4. PANEL MAP – SOLID, VOID, PERFORATION



5. 2D PANEL MAP



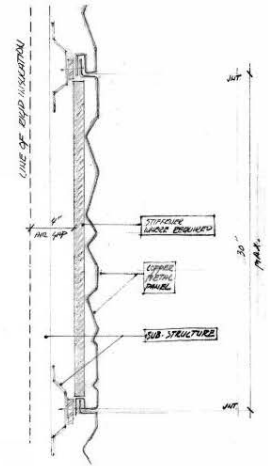
6. ELEVATION STUDY



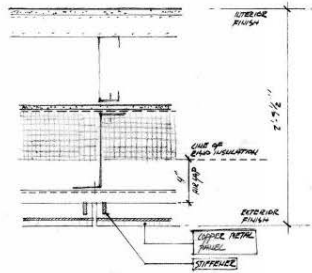




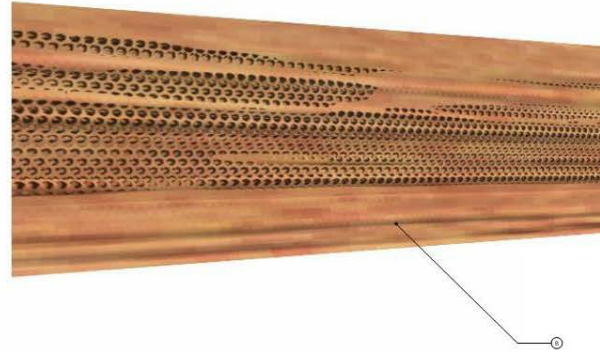
# Defining the Panel Pattern & Module



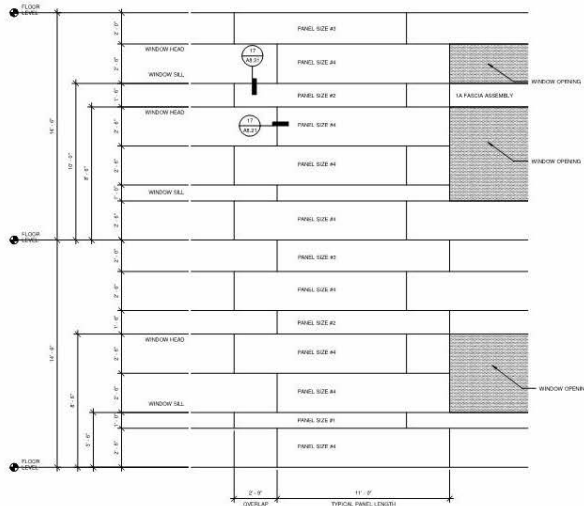
SECTION/TYPICAL COPPER PANEL PROFILE  
SCALE: N.T.S.



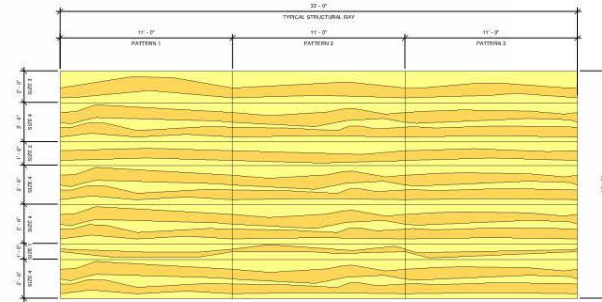
PLAN/TYPICAL COPPER PANEL CONNECTION  
SCALE: N.T.S.



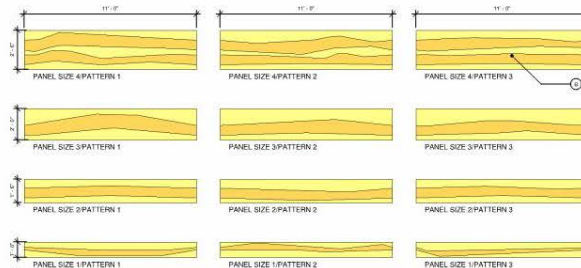
TYPICAL COPPER PANEL FINISH  
SCALE: N.T.S.



5 METAL PANEL MODULE  
3/8" = 1'-0"



19 COPPER PANEL FINISH  
3/8" = 1'-0"



20 COPPER SIZE DIAGRAM  
3/8" = 1'-0"

CO ARCHITECTS

5555 Wilshire Boulevard, 9th Floor  
Los Angeles, CA 90048  
323.525.9500 (phone), 323.525.0055 (fax)

AYERS  
SAINT  
GROSS

60 East 8th Avenue Parkway  
Suite 101  
Tempe, AZ 85281  
480.352.1111 (phone)  
480.352.1112 (fax)

ARCHITECTS & PLANNERS

## KEYNOTE LEGEND

- FABRIC CANOPY
- 1/2" x 1/2" COPPER WALL PANELS
- 24" x 48" GLAZED ALUMINUM FRAMED ENTRANCES AND CORNERPOST
- 24" x 48" GLAZED ALUMINUM CURTAIN WALL & WINDOW
- 24" x 48" METAL FRAMED DIVIDERS
- 1/2" x 1/2" ARCHITECTURAL CORNERS
- 24" x 48" CONCRETE JUMP HANDRAILS
- 1/2" x 1/2" CONCRETE METAL FRAME AND WARE
- 24" x 48" HORIZONTAL BUNGARDS
- 24" x 48" BALLASTER ROOF
- 24" x 48" ALL GLASS ENTRANCE & STAIRFRONT
- 1/2" x 1/2" METAL STAIR & RAILINGS
- 24" x 48" PEDESTAL PANEL SYSTEM
- 1/2" x 1/2" HORIZONTAL METAL CANOPY
- 24" x 48" VERTICAL BUNGARD
- 24" x 48" LOANER
- 24" x 48" PEDESTAL TRAFFIC COATING
- 24" x 48" POLISHED CONCRETE PLASTERING
- 24" x 48" GLAZED ALUMINUM FRAME
- 1/2" x 1/2" ARCHITECTURAL DIVIDED STRUCTURAL STEEL TRAMWAY
- 1/2" x 1/2" VERTICAL FOLDING DOOR

## REVISIONS

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# Copper Panel Mock Ups

1<sup>ST</sup>



2<sup>ND</sup>



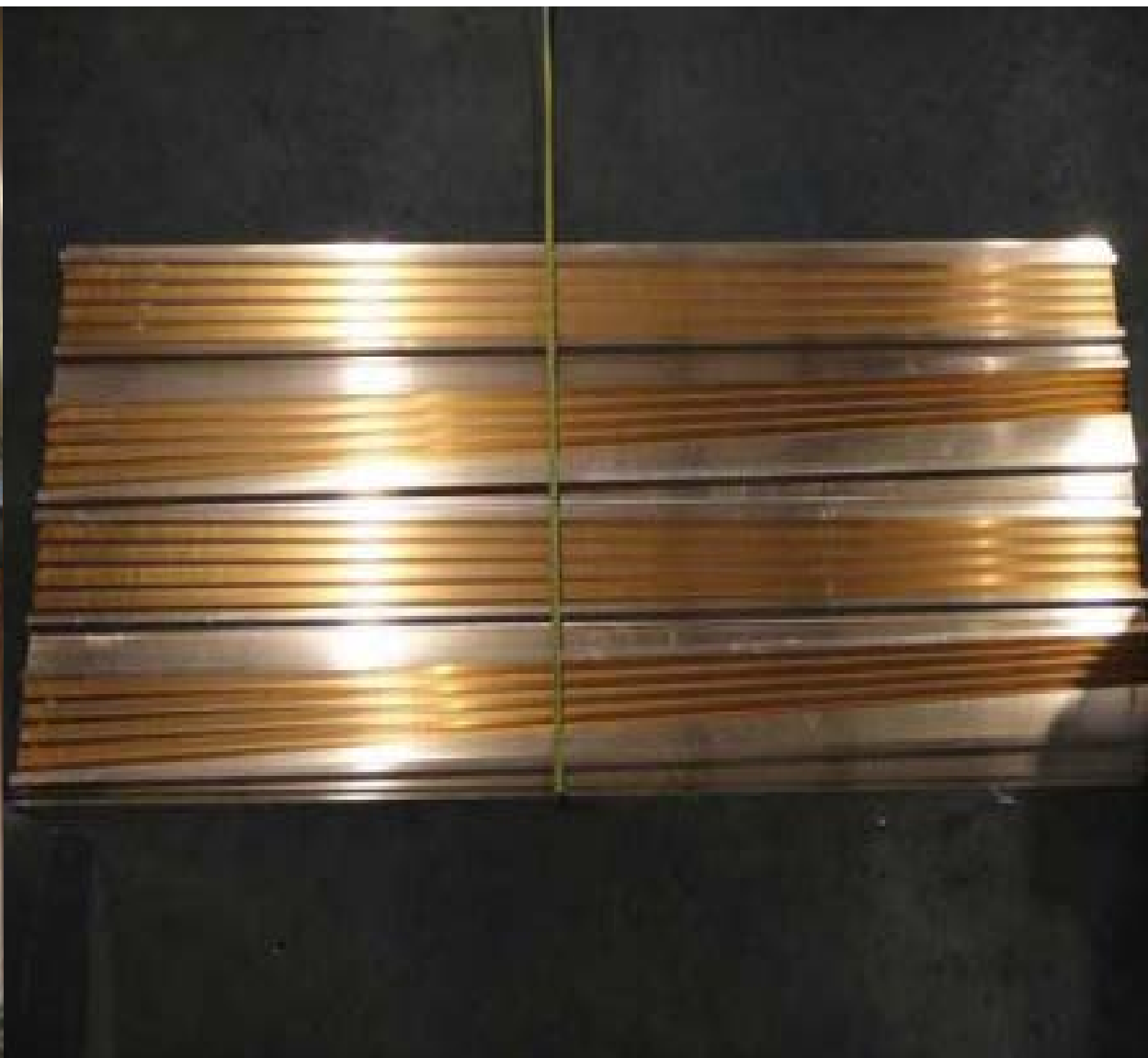
3<sup>RD</sup>



4<sup>TH</sup>



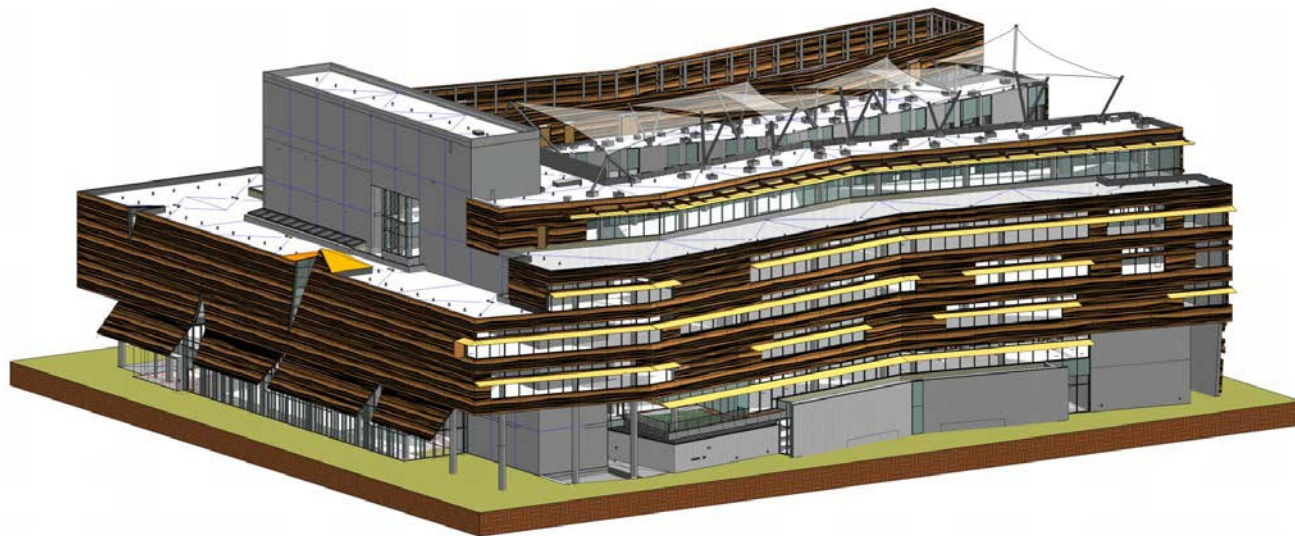








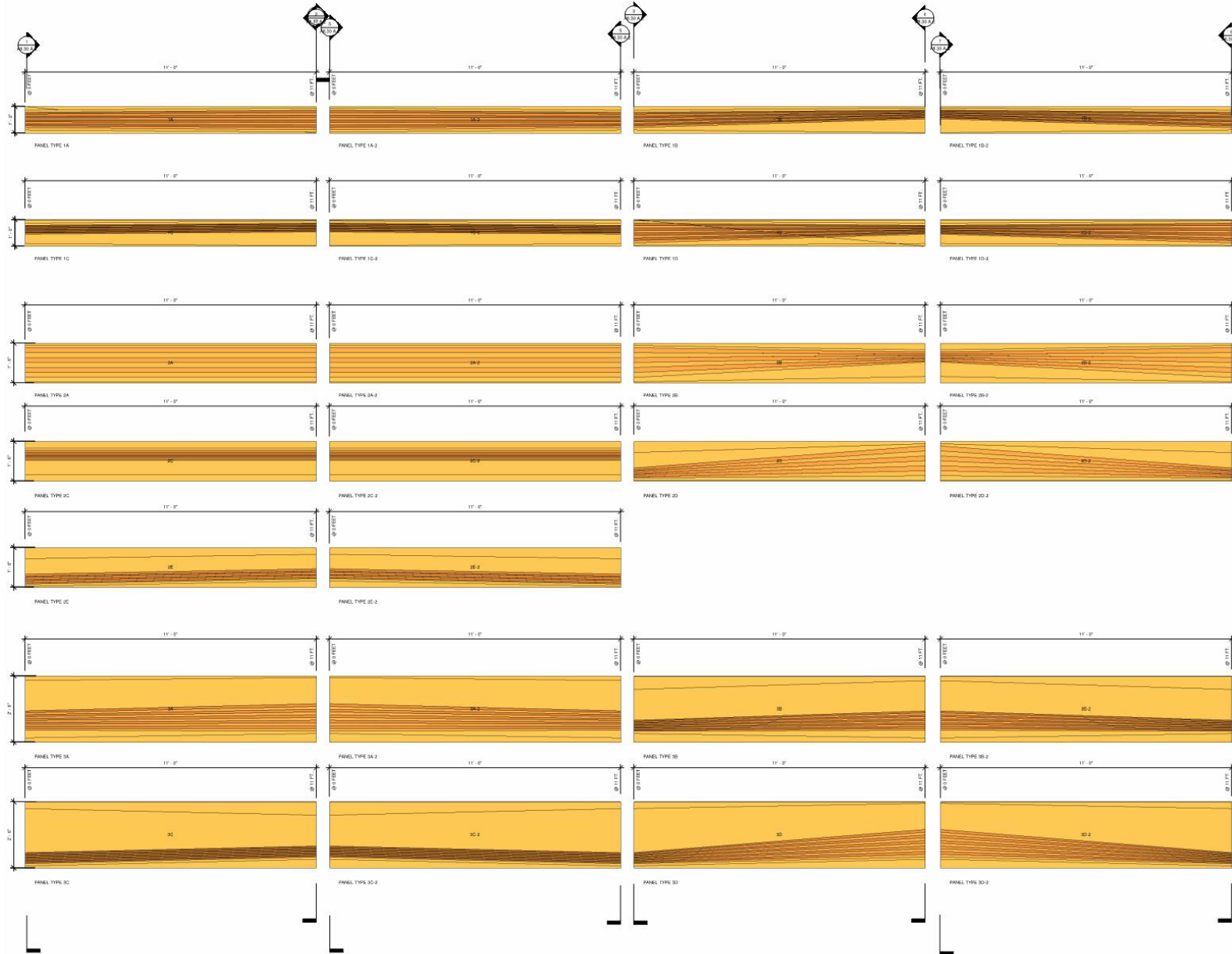
# Model Panels







# Document Panel Types



CO ARCHITECTS

5055 Wilshire Boulevard, 9th Floor  
Los Angeles, CA 90024  
313.525.0500 phone 313.525.0555 fax

60 East Rio Salado Parkway  
Suite 701  
Tempe, AZ 85281  
480.521.1515 phone  
480.521.1513 fax



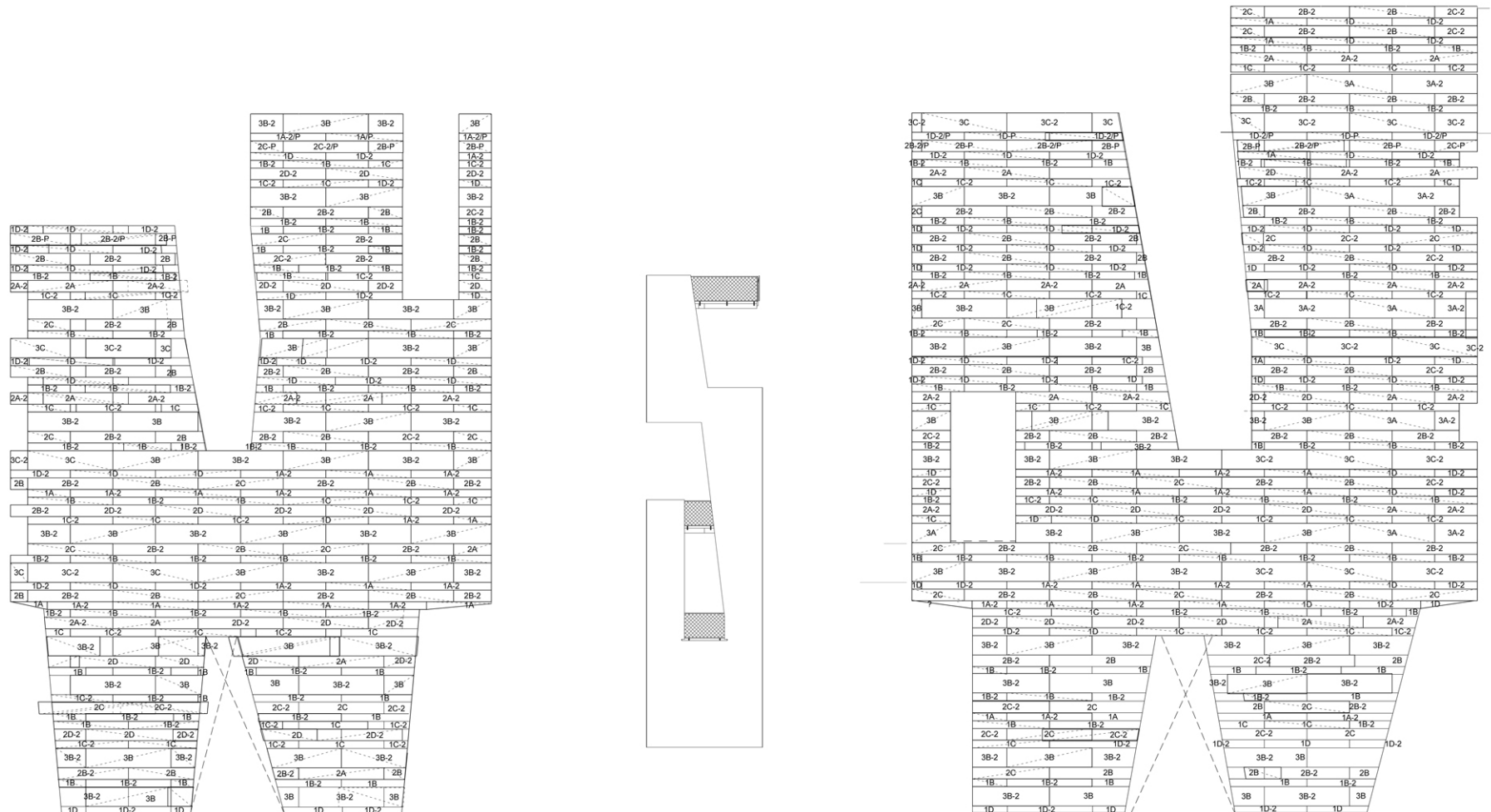
## LEGEND

- EXTERIOR ELEVATIONS LEGEND**
- 04 22 10 CONCRETE UNIT KENEDY MASONRY
  - 03 33 00 CONCRETE SHEAR WALL
  - 03 33 00 ARCHITECTURAL CONCRETE
  - 07 42 13 COPPER PANELS
  - 07 42 13 COPPER PANEL TYPE  
SEE DRAWING A8.30 A.1 A.2 A.3 A.4 A.5 A.6 A.7 A.8 A.9 A.10 A.11 A.12 A.13 A.14 A.15 A.16 A.17 A.18 A.19 A.20 A.21 A.22 A.23 A.24 A.25 A.26 A.27 A.28 A.29 A.30 A.31 A.32 A.33 A.34 A.35 A.36 A.37 A.38 A.39 A.40 A.41 A.42 A.43 A.44 A.45 A.46 A.47 A.48 A.49 A.50 A.51 A.52 A.53 A.54 A.55 A.56 A.57 A.58 A.59 A.60 A.61 A.62 A.63 A.64 A.65 A.66 A.67 A.68 A.69 A.70 A.71 A.72 A.73 A.74 A.75 A.76 A.77 A.78 A.79 A.80 A.81 A.82 A.83 A.84 A.85 A.86 A.87 A.88 A.89 A.90 A.91 A.92 A.93 A.94 A.95 A.96 A.97 A.98 A.99 A.100 A.101 A.102 A.103 A.104 A.105 A.106 A.107 A.108 A.109 A.110 A.111 A.112 A.113 A.114 A.115 A.116 A.117 A.118 A.119 A.120 A.121 A.122 A.123 A.124 A.125 A.126 A.127 A.128 A.129 A.130 A.131 A.132 A.133 A.134 A.135 A.136 A.137 A.138 A.139 A.140 A.141 A.142 A.143 A.144 A.145 A.146 A.147 A.148 A.149 A.150 A.151 A.152 A.153 A.154 A.155 A.156 A.157 A.158 A.159 A.160 A.161 A.162 A.163 A.164 A.165 A.166 A.167 A.168 A.169 A.170 A.171 A.172 A.173 A.174 A.175 A.176 A.177 A.178 A.179 A.180 A.181 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# Building Form







The final copper cladding cost was a 48% reduction over the schematic cost estimate, a result that was achieved through a series of intense work sessions, virtual and physical mock-ups, and weekly model exchanges.



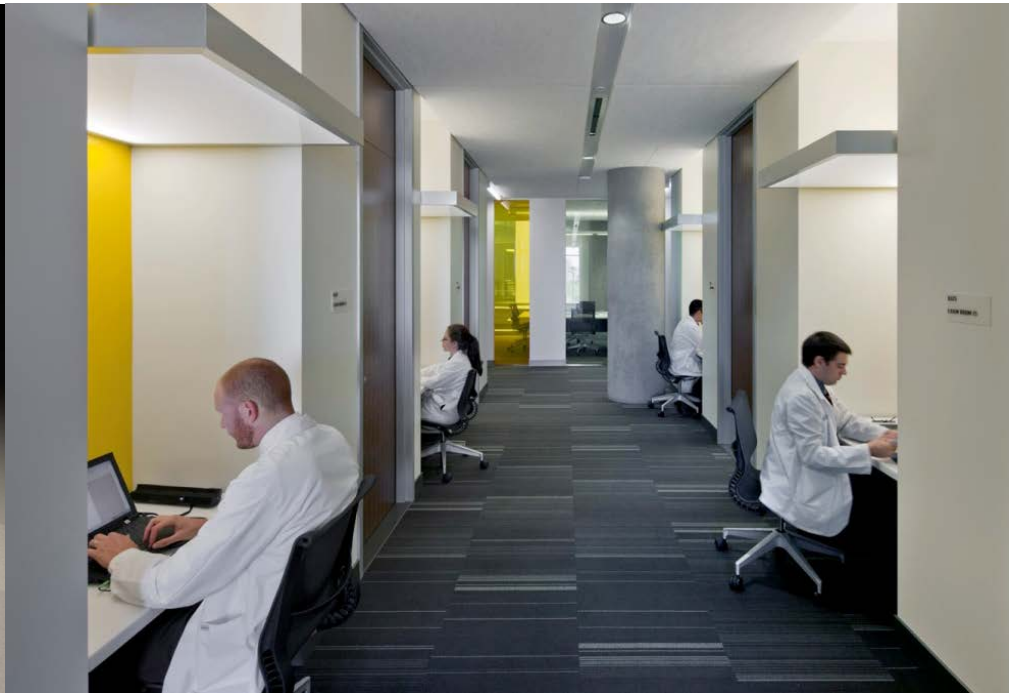
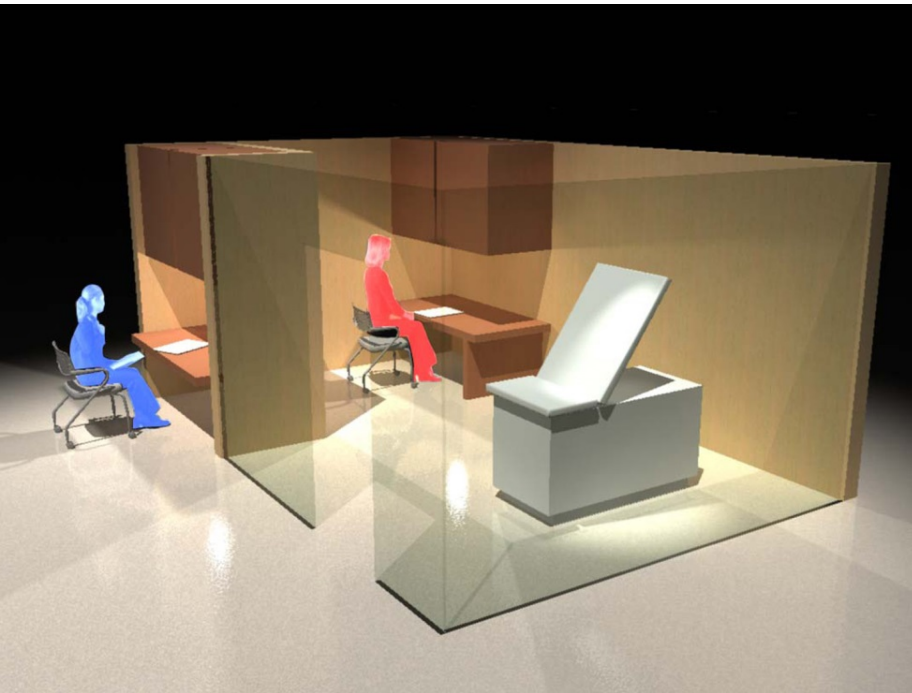
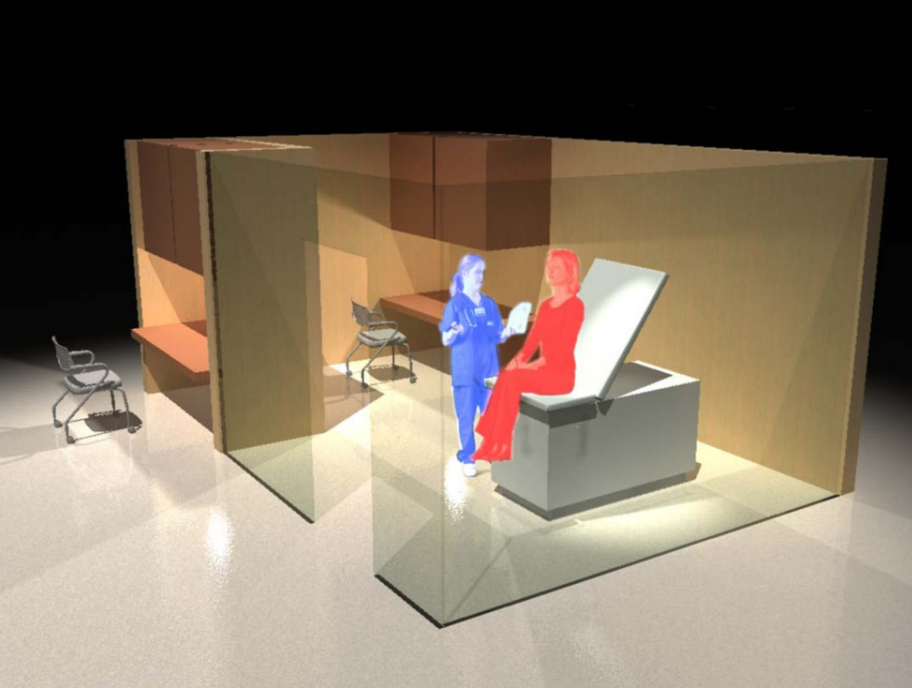


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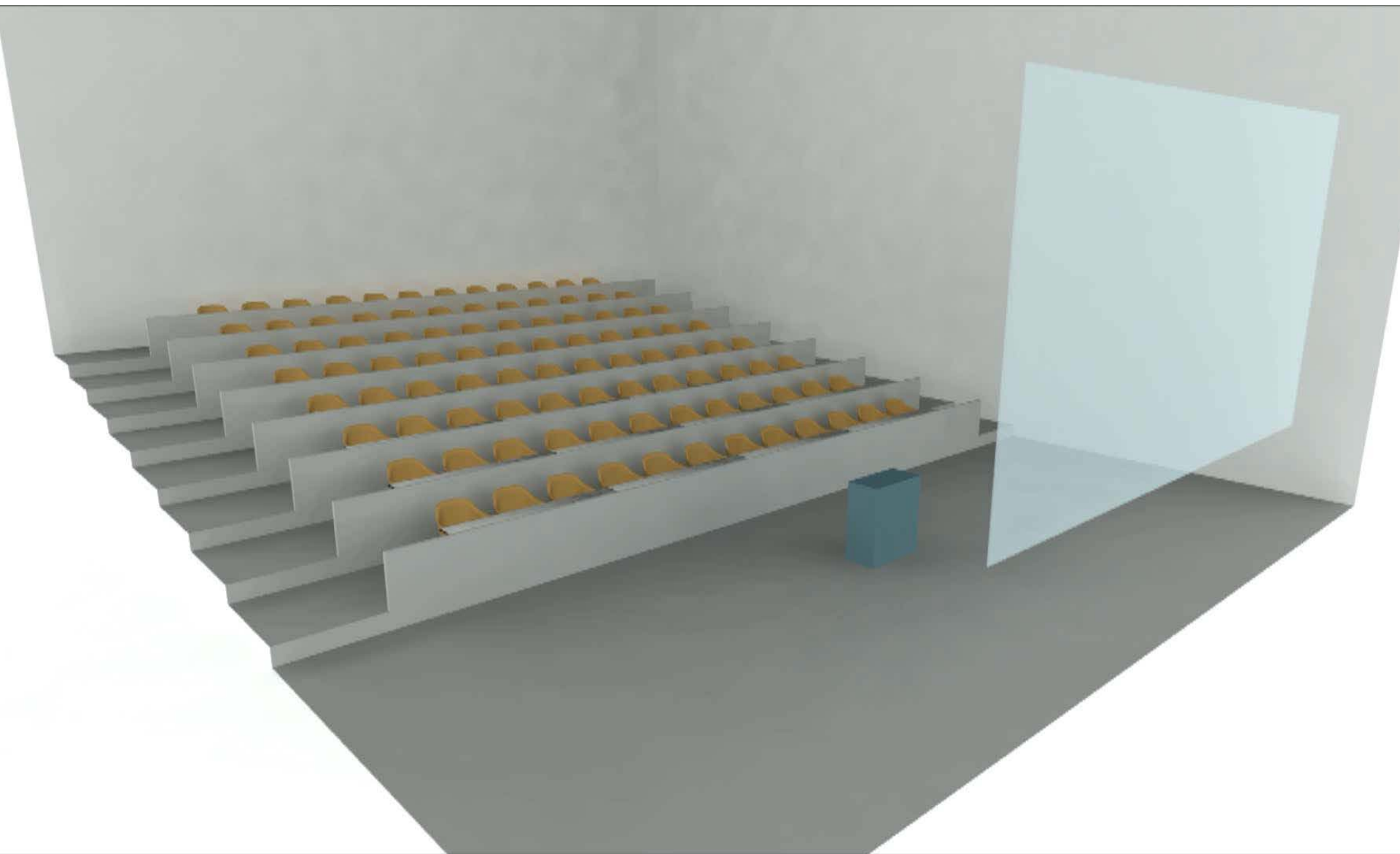
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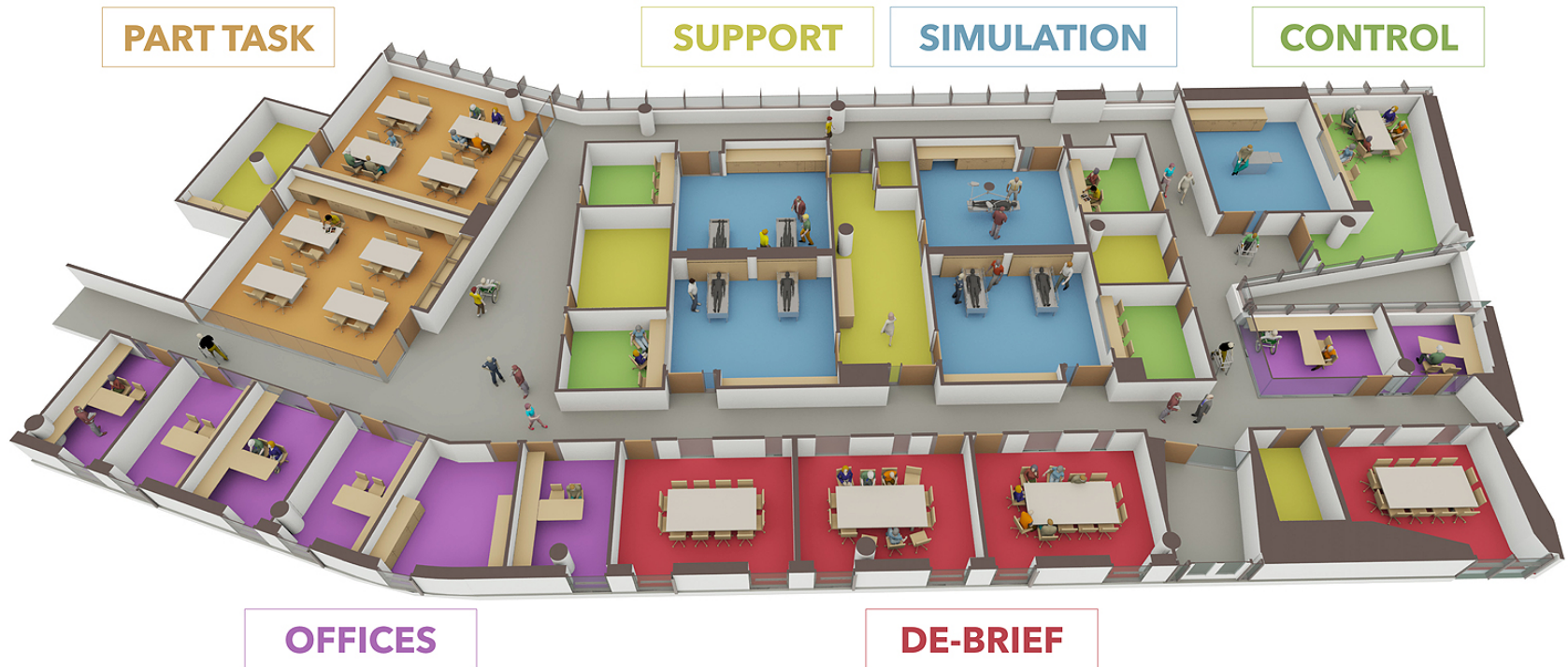














**MEDICINE ONLY**

**644 ASF**



**INTERDISCIPLINARY**

**470 ASF**

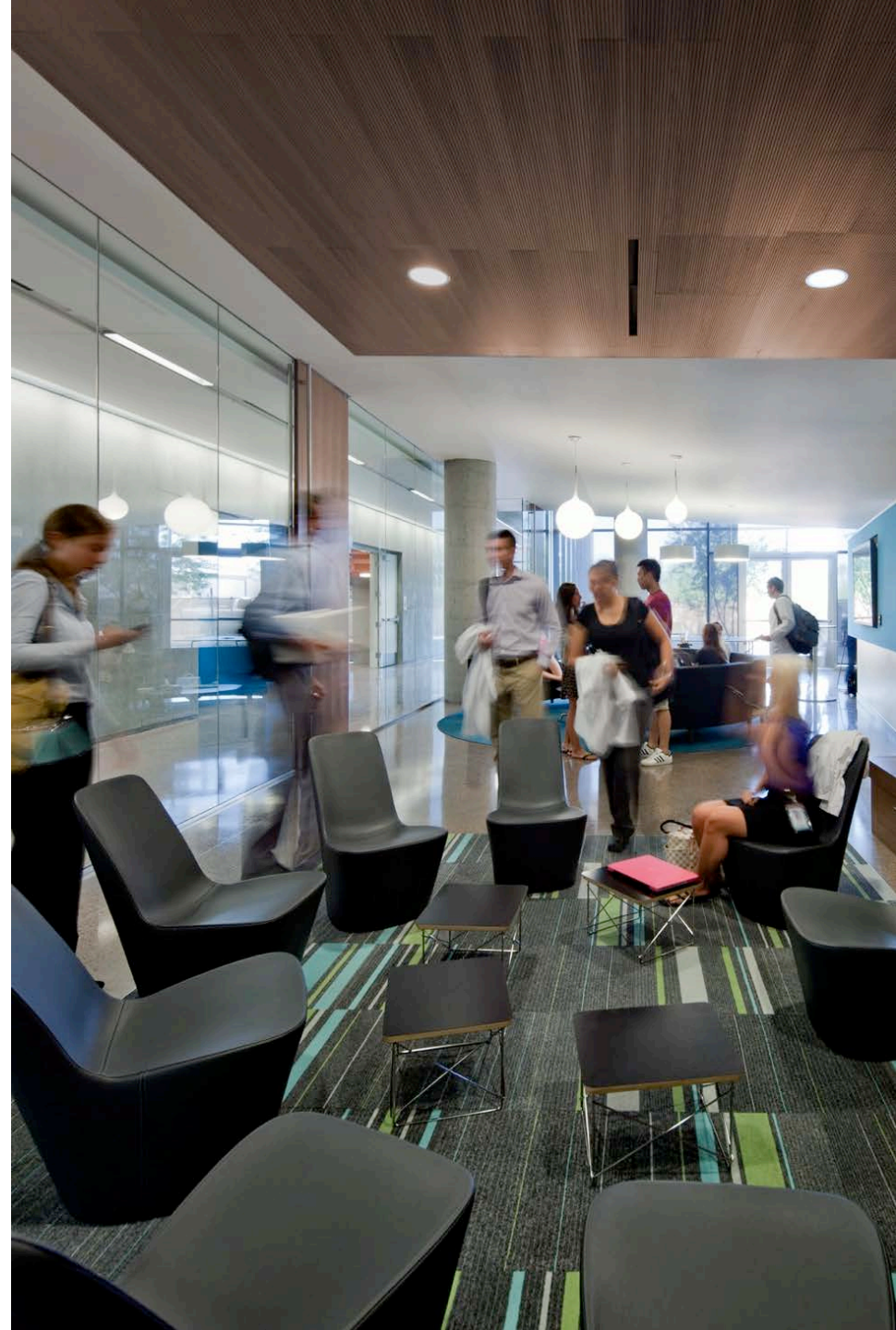


**ASF PER STUDENT REDUCTION DUE TO SHARED SPACE**



## OWNER'S STATEMENT

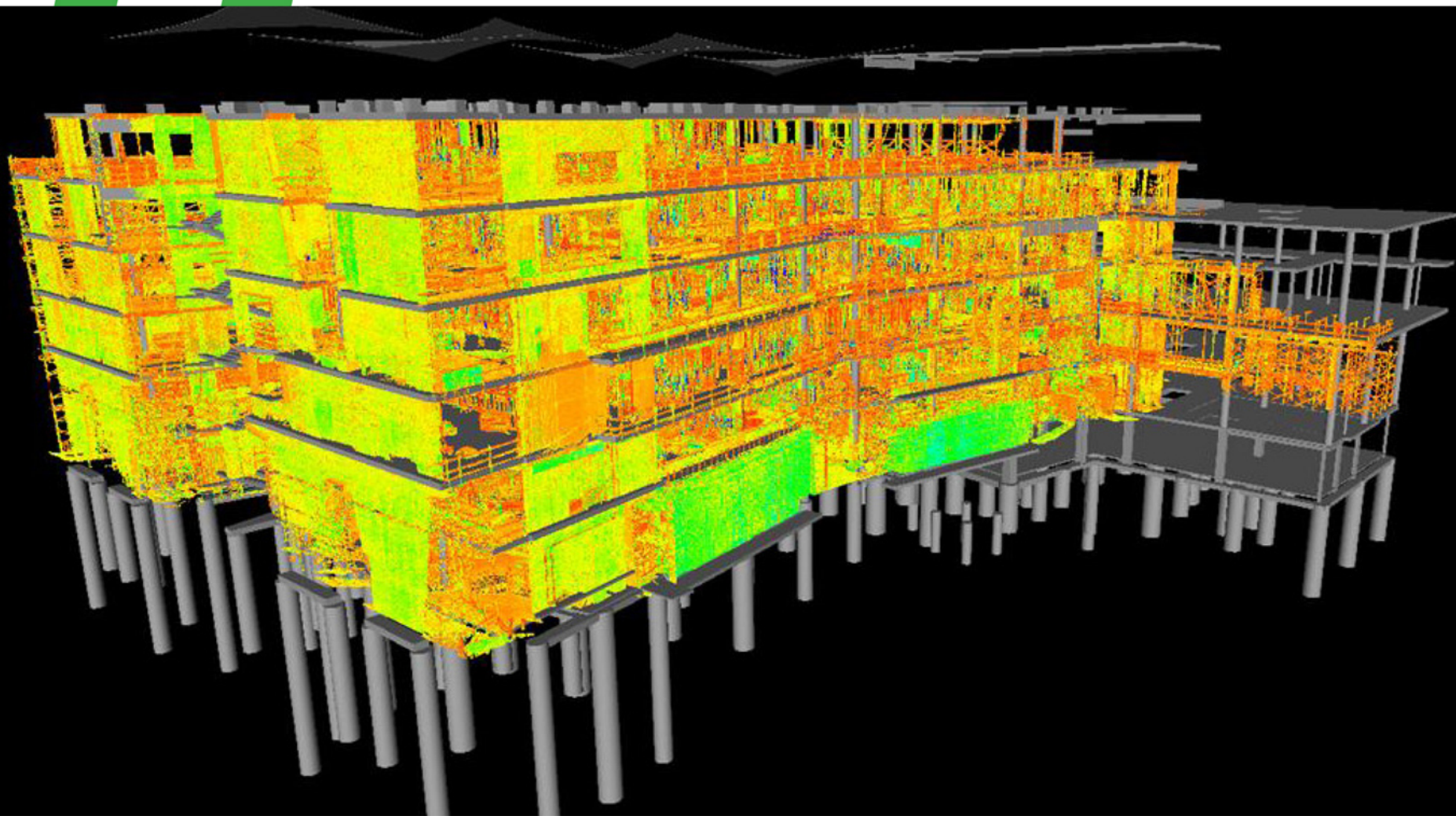
The BIM design process expedited the programming process and resulted in the universities' ability to contribute to the building, which resulted in an overall reduction of program area. The BIM process for this project is a model for future projects we undertake.





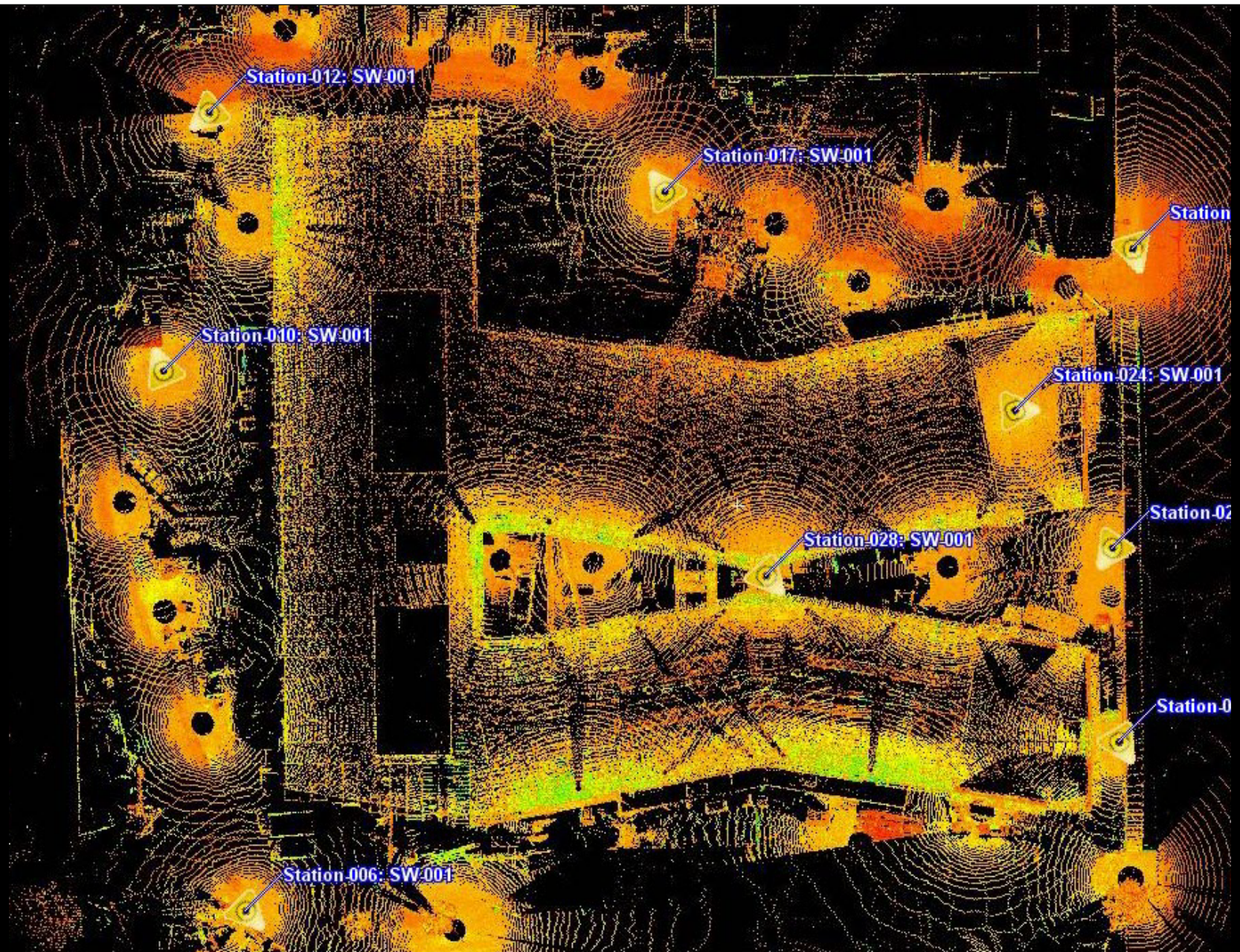
# 4

## VERTICAL BIM INTEGRATION





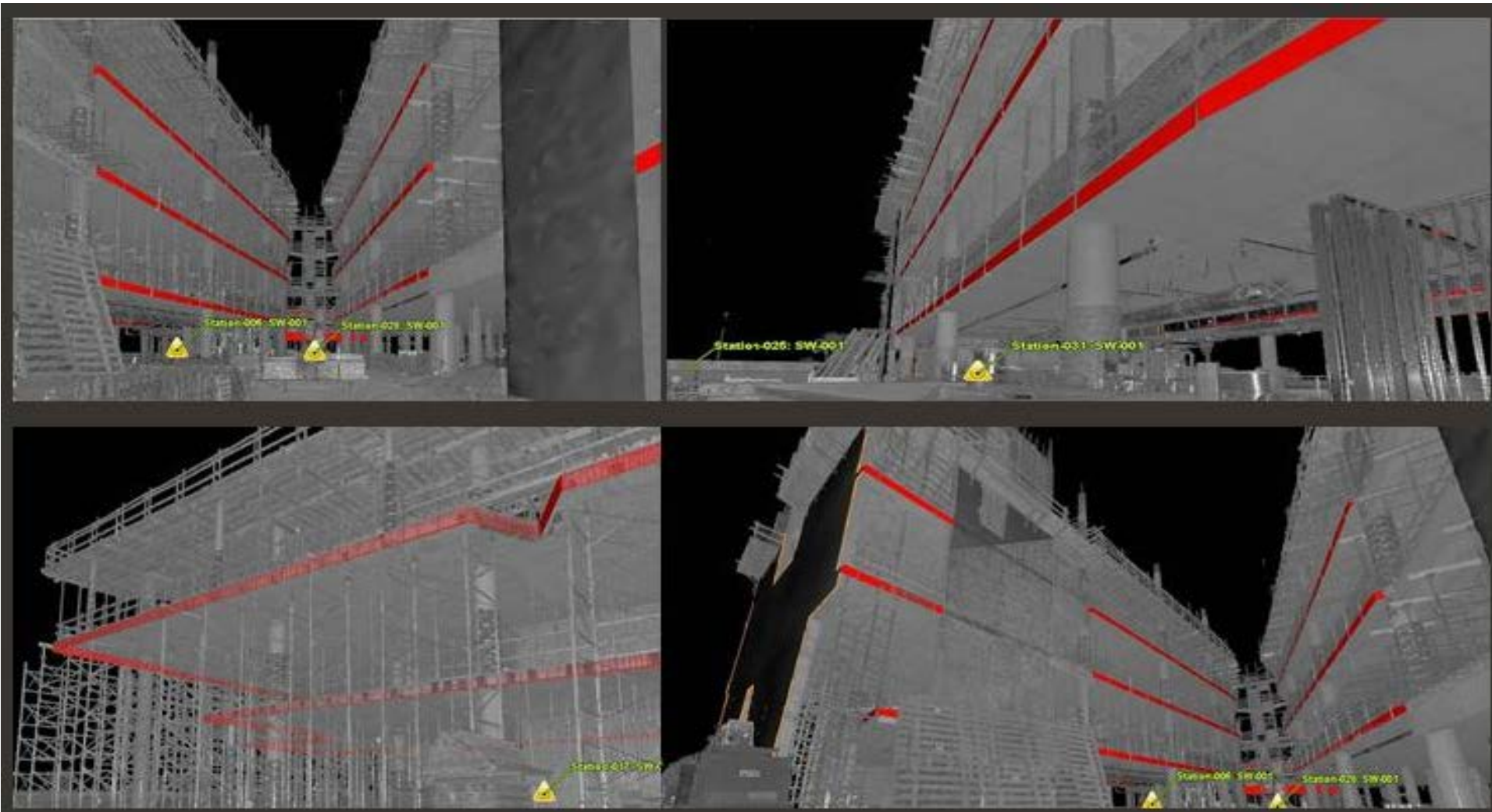
# Slab Deck Edge Surface Extraction





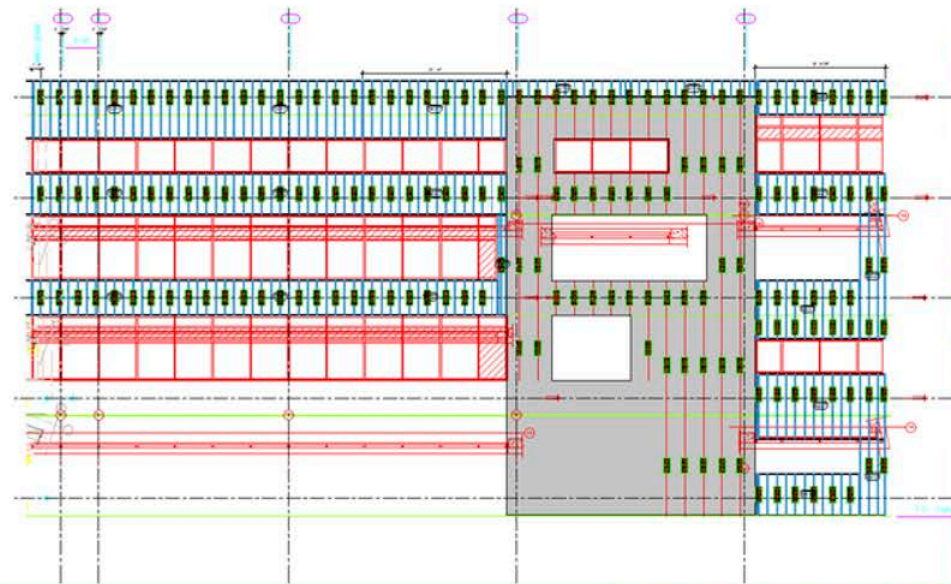


# Slab Deck Edge BIM Overlay





# Exterior Back-up Wall Prefab

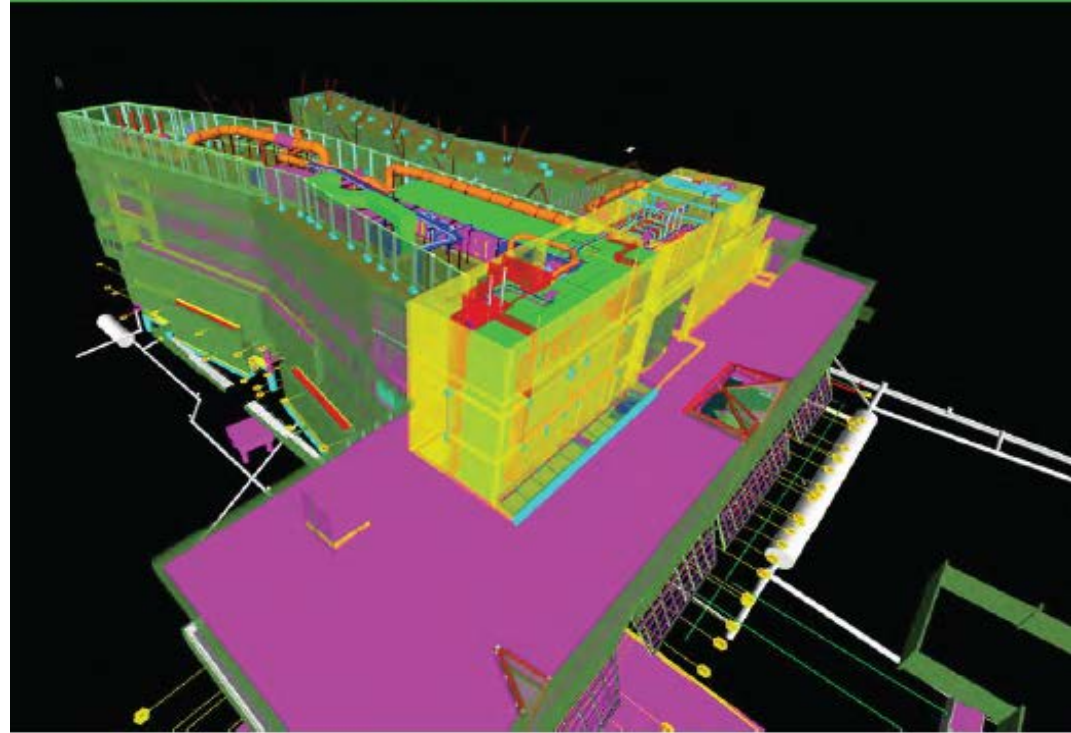


EXTERIOR BACK-UP WALL ERECTION DRAWING AND INSTALLATION



- Freeing BIM from the ivory tower (trailer)
- Democratizing the 3D model

NAVISWORKS COORDINATION MODEL



BIM KIOSK



**John A. Martin & Associates**

Structural Engineer

**AEI Engineers**

MEP Engineer

**Kaplan Gehring McCarroll Lighting**

Lighting Engineer

**JJR**

Landscape Architect

**Dibble Engineering**

Civil Engineer

**Transsolar**

Climate Engineer

**Professional Service Industries**

Geotechnical Engineer

**Rolf Jensen & Associates**

Fire Protection/Code Consultant

**Lerch Bates**

Loading/Vertical Transportation  
Consultant

**The Sextant Group**

Audiovisual Technology

**Davis Langdon**

Cost Estimator

**Sundt Heavy Civil**

**Sundt Concrete**

**Sun Valley Masonry**

**Kovach Building Enclosures**

Metal Cladding

**KT Fabrication**

Curtain Wall

**University Mechanical**

**Cannon & Wendt Electric**

**DPR Drywall**

**Western States Fire Protection**





## CONTRACTOR'S STATEMENT

The most important advantage BIM delivered to the HSEB project was dramatic cost savings and schedule reduction. Construction contingency was drawn down only 25% for construction-related purposes, allowing the client to use the remaining contingency for program and equipment purchases they otherwise would not have been able to fund.



# TWO UNIVERSITIES, TWO OWNERS, TWO ARCHITECTS, TWO CONTRACTORS:

HEALTH SCIENCES EDUCATION BUILDING – PHOENIX BIOMEDICAL CAMPUS



CO ARCHITECTS





# YOU are the Jury!!

- CollinsWoerman + GLY Construction  
*Group Health Cooperative Puyallup Medical Center*
- Fentress Architects / Mortenson Construction  
*Ralph L. Carr Colorado Judicial Center*
- CO Architects  
*Phoenix Bio-medical Campus / Health Sciences Education Building*



Thank You!

- Stephen Hagan, FAIA
- Brian Skripac, Assoc. AIA
  - Upcoming 2014 Chair of AIA TAP

JOIN US IN DENVER ON Wednesday, June 19 for  
the 2013 BIM Awards Ceremony and Reception



# Sponsors

- The AIA TAP Leadership would especially like to thank our sponsors who help make this possible:

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## AIA TAP BIM Awards

2013 Professionals' Choice BIM Award