TOWARD INTEGRATION: Collaborative Architecture and Design Methods

Thesis proposal for a
Fargo International Market & Food Co-op

An integration of processes, people, and experiences

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Software:
- AutoCAD Architecture 2011,
- InDesign CS5, Photoshop CS5, Render[In],
- Revit Architecture 2011, SketchUp 8 Pro
Problem Statement
What are the implications of architecture delivery models on the access to and propagation of quality architecture?

Research
Current architectural delivery models lack in communication, sharing, and accountability (such as design/bid/build).

Integrated Project Delivery as a formal collaborative process is successful by involving key participants early. Intensified Planning and goal definition, Collaborative and Open communication, Technology and Building Information Modeling (BIM) enable further collaboration of key participants, by allowing participants to develop one model, virtually merging the buildings parts to create a cohesive and resolved model.

Forming Conclusions
Integration of people and process produces further developed and integrated architecture, and therefore higher quality results.

meaning...
less waste
better coordination of complex issues and details
shared success and failure
and
collaborative innovation
Collaboration: Consisting of a working session with Chris Hawley of Stahl Meland Hawley Architects & Builders, chosen for a balance of architectural design, contracting, and collaborative process experience.

**Process**
- Developing program and goals
- Initial concepts of layout/form
- Collaborative innovation
- Group decision making
- "Consultant" issues/input
- Based on collaborative decisions
- Integrating ideas/systems

**Structure**
- Discussion Issue: Columns on same grid pattern as existing
- Ideas: Reference historic pattern or set new grid
- Material

**Mechanical**
- HVAC to new and existing

**Design/Form/Materials**
- Use horizontal beam/soffit between old and new for chase
- Split to each side

**Discussion Issue**
- Connection to historic building
- New Entry

**Site/Circulation**
- Main floor 5' above grade
- Separation between old/new
- Stepped parking/nodes of landscape
- Group elevator/escalator systems when possible

**Site/Circulation**
- Connection to historic building
- Accentuate new entry/make apparent
- Canopy/Axis

**Development**
- Quick visualization of decisions from collaboration
- Reveal/offset bridging new and existing
- Material contrast and replication
- Soffit/mechanical chase between new/existing

**Collaborative Sketch Ideas**
- Discussion Issue: Columns on same grid pattern as existing
- Ideas: Reference historic pattern or set new grid
- Material

**SITE SKETCH**
- STRUCTURE/MECHANICAL/SPACIAL SKETCH
- CONCEPT RENDERING
Learning Kitchen
Provides a community gathering place to learn cooking techniques, promote products, and encourage healthy eating.

Outdoor Seating and Market Space
Canopies provide shading and color for a pleasant outdoor environment to eat and support outdoor market events.

International Foods
Guests can stop for lunch with a choice of two international foods vendors and the co-op deli, in a bright informal cafeteria.

Structural/Mechanical/Circulation Corridor
The bridge between new and historic construction provides a chase for mechanical piping, material transition from new building to old, and natural daylighting.

Replacement Windows
New glazing can preserve the historic character of the Fargo Laundry Building facade while reducing thermal loss and allowing stimulating sunlight into the building.

Cart Escalator
People and cart escalators allow shoppers to easily access each level.

Storage
Existing and additional basement space allows for ample dry and freezer storage, while a dedicated freight elevator moves products floor to floor.