Cathedral of Christ the Light Tour: A Case Study Brought to Life

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Disclaimer: This presentation was developed by a third party and is not funded by WoodWorks or the Softwood Lumber Board.
Agenda

- Setting the Stage
- Simple Strategize Employed
- Glu-lam Timber Framed Structure
- Curved Pews
- Reredos Wall
- Keys to Project Success

WEBCORBUILDERS
Inspiration
Vision

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Execution Constraints
Simple Project Strategies

Simple Strategies
1. Dual-purposing Building Systems
2. Modest & Readily Available Materials
3. Standardized Materials

Success Dependent On:
➢ Start w/End in Mind
➢ Be Flexible in Decision Making
➢ Higher Level of Effort & Time

Not Business As Usual!

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Glulam Timber Framed Structure

Design Challenge
➢ Utilize glue-laminated timber framed structure as both structure and architectural finish
Glulam Timber Framed Structure

Procurement

- Similar Experience
- Services Necessary
- On-board Early

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Glulam Timber Framed Structure

Procurement Approach

- National Search
- Identified 2 “Turn-key” Trade Contractors & 1 Supplier Only
- Utilized Internal Capabilities
- Best Value Competitive Bid
- 3 Complete Options
- Selected Western Wood Structures

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Glulam Timber Framed Structure

Detailed Design Coordination & Testing
- Value Engineering
- Samples & Mock-ups
- Tension Rod Testing

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Glulam Timber Framed Structure

Logistics & Scheduling
- Exposure to the Elements
- Transportation
- Hoisting Capacities
- Site Erection Sequencing
- Transitional Surveys
Erection Sequence
Erection Sequence
Erection Sequence
Erection Sequence
Erection Sequence
Erection Sequence
Erection Sequence
Design Challenge

- Curved pew seating, critical to the aesthetic and functional layout of the Cathedral, fundamental
Curved Pew Seating

Procurement
- National Search
- Competitive Bid Package
- Bid Analysis
- Selection Criteria
  - Experience
  - Species
  - Alternate Details
  - Best Value

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Curved Pew Seating

Coordination & Detailed Design
- Shop Drawing Development
- Mock-ups
- Support Leg Coordination
- Anchoring Detail

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Reredos Screen Wall

Design Challenge

- Stacked wood screen partition
- Dimensional lumber
- Random Layout

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Reredos Screen Wall

Procurement
- Prequalified Trade Contractors
- Combined Millwork Scope
- Lowest Complete Bid Awarded
- Mid-Canada Millwork
- Webcor Builders

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Reredos Screen Wall

Concealed Fastening & Structural Anchoring

- Detail Development
- Collaboratively
- Shop Drawings & Mock-ups
Reredos Screen Wall
Reredos Screen Wall

Architecturally Random
- Pre-finished
- Concealed Fasteners
- Kit of Parts/Standardized
- Efficient & Cost Effective

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Keys to Success

- High Quality Trade Contractors
- Key Trade Contractors Early
- Physical Mock-ups
- Planning for Collaboration
- Focus on Transitions or Touch Points
- Kit of Parts Concept
- Leverage Prefabrication

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Thank you!