CS3.3 Documentation during Delivery

Session Description, Presentation Outlines, and Speaker Bios

October 13, 2017
3:00-4:30 PM

Session Title
Documentation during Delivery

Session Description
The documentation processes traditionally used in historic preservation projects evolve continuously as technology changes. This holds true for identifying the initial existing conditions work as well as managing the exchange of information during the design and construction phases. This session explores key roles that digital collection, processing, and management of information play in the success of large scale projects.

Learning Outcomes
Upon completion, participants will:

- better understand the complexities of planning and managing large-scale or complex institutional rehabilitation projects;
- understand how to analyze historic structures and adapt and augment cutting edge documentation technology;
- understand better ways to communicate critical aspects of existing conditions;
- be able to define fundamental documentation challenges and introduce innovative data management and tracking into their projects.

Keywords
large scale, documentation, communication, tracking, modeling, complex projects.

‘GOMO’ A Contemporary Response to Collegiate Gothic

Donald Luxton
Principal
Donald Luxton Associates

1. Introduction

II. Topic 1: Additions to Collegiate Gothic Contexts
   A. Early History of Interventions (Scrape vs. Anti-Scrape)
   B. Collegiate Gothic Campuses
   C. Modern Interventions

III. Topic 2: The University of Regina College Avenue Campus Renewal Project
   A. Purpose of the Project
   B. Analysis of Historic Context
   C. Documentation of Existing Buildings
   D. Analysis of Existing Buildings
   E. Resolution of Design and Heritage Issues (Standards & Guidelines)
   F. Challenges of Fast Track Design and Construction

IV. Topic 3: Current Progress: Under Construction
   A. Ongoing Construction Refinements

Connecting New-Age Design with Old-Age Buildings

Lizzie Olson
Senior Project Engineer
Robert Silman Associates

I. Introduction (2 min)
   A. Thesis statement
   B. Brief presentation overview

II. Design planning (4 min)
   A. Key differences in the design process for existing vs. new buildings
   B. Establishing a cross-disciplinary basis of design and evaluating risk-to-reward

III. Design development (5 min)
   A. Challenges of producing design models and documents for existing buildings
   B. Adapting and augmenting design tools to better respond to the needs and challenges of design

IV. Design delivery (6 min)
   A. Shortcomings of traditional contract documents for existing buildings
   B. Communicating design intent and aspects of the design that are contingent on critical conditions, assumptions, and variables

V. Conclusions (3 min)
   A. Brief presentation recap
   B. Recommendations for future exploration and implementation

Longwood Gardens' Main Fountain Garden: Technology Bringing Life to History

Kathryn Biddle
Architectural Conservator
Dan Lepore & Sons

Lauren Shaughnessy
Architectural Conservator
Dan Lepore & Sons

I. Introduction
   A. Brief history of Longwood Gardens
   B. Mission and objectives of the project

II. Identification of Project Scale and Scope
   A. Description of project timeline
   B. Discussion of overlapping trades
   C. Description of stone survey, removal, and crating

III. Creation of a Stone Logging and Tracking Plan
   A. Creating a common language and organizing a tracking plan
   B. Alphanumeric identification system
   C. Excel spreadsheet logging
   D. Stone tagging
   E. QR Code tracking

IV. Implementation of Communication Technology
   A. Using tablets, mobile devices, and scanners for tracking
   B. Creating databases and reports
   C. Disseminating information across the construction team

V. Conclusion
   A. Importance of logging for quality control, productivity, and organization
   B. Need for comprehensive documentation and active communication among project team
   C. Suggestions for future implementation of tracking/logging

The Restoration of St Patrick's Cathedral: Designating and Tracking Thousands of Changing Repairs from Design through Construction

Ricardo Viera
Director, Field Services,
Building Conservation Associates, Inc.

I. Description of the Restoration of St. Patrick's Cathedral

II. Description and limitations of initial survey
   A. Survey Drawings
   B. Development of base drawings
      1. Laser scanning
      2. Field dimensions
      3. CAD Drawings
      4. Tags with treatments

III. Cloud-based Construction Field Management Software (BIM 360 Field)
   A. Loading drawings and specs
   B. Installing treatment pins
   C. Changing treatments
      1. New repair
      2. Omitted repair
      3. Repair & Location Confirmed
      4. Changed Repair
      5. Revie After Cleaning
   D. Attachments
   E. Status of Treatments
   F. Syncing Changes
   G. Data exported to Microsoft Access or Excel
   H. Cost Implications

IV Conclusion

Speaker Bios

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Donald Luxton is the principal of a leading western Canadian heritage and cultural resource management firm, and a well-known consultant, advocate, educator and author who for more than three decades has worked on numerous projects throughout western Canada. His expertise, interest and accomplishments have been acknowledged through numerous awards, including the Heritage Canada Achievement Award in 2003 and a number of literary prizes including a BC Book Prize in 2004. In 2007 was elected to the College of Fellows of Architecture Canada. From 2014-17 he was the lead consultant on the City of Vancouver Heritage Action Plan.

Lizzie Olson
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Lizzie Olson is a structural engineer with an enduring appreciation for architecture, preservation, and the power of the built environment. She has been with Silman for over 9 years, gaining experience in preservation engineering in New York and across the county. She holds degrees in architectural engineering from the University of Kansas and historic preservation from Columbia University. In recent years, she has taught a course in preservation engineering and has presented and published a paper for APTI.

Kathryn Biddle
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Kate is an architectural conservator at Dan Lepore & Sons Company. She earned a BA in Architecture and Art History from Penn State University and a MS in Historic Preservation and Conservation Science from the University of Pennsylvania. Kate is responsible for in situ conservation treatments, conditions assessment, documentation, laboratory testing, and project management for masonry restoration projects. She is a two-time recipient of The Peterson Prize from The Carpenter's Company of the City and County of Philadelphia. Her master's thesis earned her The Charles E. Peterson Award for outstanding work in the specialized study of historic building technology.

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Lauren joined as project manager with Dan Lepore & Sons and continues to foster her role as an architectural conservator. She collaborates on project bidding estimates, conducting conditions assessments, conservation techniques and repairs, and cataloging and maintaining up to date documentation throughout a project's duration. She received her B.S. in Building Construction from Georgia Tech in 2013 and her Masters in Historic Preservation, with a concentration in Conservation from the University of Pennsylvania in 2015. Her master's thesis is titled "Cataloging Built Heritage: Methods of Recording Unit Masonry for the Future of Historic Preservation."

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Ricardo Viera has a Master of Science degree from the Graduate School of Architecture, Planning and Preservation at Columbia University and a Master of Architecture degree from the University of Florida. He is Director of Field Services for Building Conservation Associates. Mr. Viera has overseen many conservation and historic preservation consulting projects during his 27-year tenure at BCA. Mr. Viera was the Project Manager for the restoration of the American Embassy in Madrid, Spain; the restoration of the Traveler's Insurance Tower in Hartford, Connecticut, the Yale University Art Galleries, and currently for Pier 57 and Moynihan Station in New York City.