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Margins must be at least ¾”.
This paper must be in portrait orientation

Executive Summary

Basic Info about Cornell, conference, competition history, and performance level
Canoe name, weight, length, width, depth, thickness, and color
Engineering properties of the concrete, types of reinforcement, significant innovations
Analysis, design, construction/project management
Analysis

Quantitative results from analysis of forces, stresses, etc. Describe loading cases, support conditions, assumptions, and analysis tools. Material property values for concrete, reinforcement, and composite that must be achieved according to structural analysis.
Development and Testing

Concrete and reinforcement materials considered, tested, and actually used.
Test methods (use and refer to standard test methods where possible)
Describe initial concrete and reinforcement materials and why.
Quantitative test results from that baseline, and adjustments made
Provide manufacturer’s recommended dosage for admixtures and discuss deviation from recommended amount. Describe iterative method for achieving desired material and composite properties.
List final concrete, reinforcement, and composite test results.
Provide percent open area (POA) for reinforcement.
Compare final material properties and proportions to design specifications determined.
Project Management/Const

Describe project planning process: cost, time, quality, scope, risk management
Discuss financial and resources allocations
List major milestone activities and how they were determined and accomplished
Show critical path and how it was determined.
# of man hours for design, testing, and construction, placement of reinforcement, form removal, and finishing.
Discuss quality control
Discuss safety program implementation
Innovation & Sustainability

Discuss Innovative Ideas
Describe sustainable materials or other sustainable aspects of design and construction.
Organization Chart

Organization Chart of team member’s names, roles, tasks etc.
Project Schedule

Planned and Actual execution need to be included. Denote Critical Path
Design Drawing

Design drawing (elevations, plans, typical cross sections, dimensioned)
Bill of materials for the form (include quantities)
Up to 7 general notes about the form may be added
Appendix A - References

Follow ASCE Author’s Guide to Journals, Books, and Reference Publications

http://www.asce.org/Content.aspx?id=18404
Go to this link for guidelines at the bottom of the page
Appendix B–Mix Proportions

Table listing every concrete mixture used in the canoe

USE A SEPARATE PAGE FOR EACH DATA TABLE
You can use the provided excel sheet and then paste it onto this document.
Appendix C–Bill of Materials

BOM: list name, quantity, and unit price as well as total cost of each material.
Cost Estimate: Cost to manufacture canoe for resale

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<th>Material</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Price</th>
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