



## 2024 ASC Competition

### Project Management Pre-Problem Statement

#### Sponsored by DPR Construction

#### Introduction

##### Thank You!

Thank you for competing and taking on the challenge of educating yourself in this unique way. DPR is excited to sponsor the Project Management problem at the 2024 ASC Student Competition. As leaders of your student groups today, you have set your paths to become the Construction Industry's leading members of tomorrow. We hope to challenge your team's ability to leverage academic knowledge, intuition, problem-solving skills, and your ability to have fun in a high intensity environment.

##### DPR's Culture and Project Approach

DPR Construction was founded in 1990 by Doug Woods, Peter Nosler and Ron Davidowski, the D, the P and the R, who set out to develop a company that cultivates an entrepreneurial, open-office environment based on a well-defined purpose, "We Exist to Build Great Things", great relationships, great teams, great buildings, and great people. DPR's culture revolves around our Core Values:

**INTEGRITY.** We conduct all business with the highest standards of honesty and fairness; we can be trusted.

**ENJOYMENT.** We believe work should be fun and intrinsically satisfying; if we are not enjoying ourselves, we are doing something wrong.

**UNIQUENESS.** We must be different from and more progressive than all other construction companies; we stand for something.

**EVER FORWARD.** We believe in continual self-initiated change, improvement, learning and the advancement of standards for their own sake.

We would encourage each of you to read more at: <https://www.dpr.com/company/culture>.

##### Project Management Problem Introduction and Intent

- a. Team – Your competition team will act as members of DPR Construction tasked with determining if your team should ultimately pursue the project. You are empowered to make key business and contractual decisions based on information at hand along with your expertise and assumptions. Your decisions will have significant consequences that impact the success of the project. The deals that you negotiate will map the road ahead, but also expose you to possible roadblocks. You are expected to adapt to situations, engineer solutions, demonstrate DPR's Core Values, and develop a resolution to the project path that lies ahead. The intent of the Project Management problem is to ensure a project runs smoothly, which starts long before we ever break ground. By understanding and managing possible risks you will create a plan to prevent or address them ahead of time. Participants of the Project Management problem will complete the following deliverables throughout the competition:
  - i. Analyze and select an owner contract to begin the development of the project deal
  - ii. Create a construction budget through subcontractor selection and general conditions development
  - iii. Establish the project schedule – via production planning, milestones, or phasing
  - iv. Solve complex construction problems



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- b. Preparation – Teams should be prepared to complete the problem utilizing the following skills:
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| <ul style="list-style-type: none"> <li>i. Business Ethics and Integrity</li> <li>ii. Understanding Project Delivery Methods</li> <li>iii. Contract Evaluation</li> <li>iv. Project Risk Assessment</li> <li>v. Design Responsibilities</li> <li>vi. Unforeseen Condition Liabilities</li> <li>vii. Scope of Work Qualifications</li> <li>viii. Schedule Impacts and Delays</li> <li>ix. Contingencies and Allowances</li> <li>x. Payment Terms</li> <li>xi. Damages and Disputes</li> <li>xii. Subcontractor Bid Review</li> <li>xiii. Scope of Work Comparisons</li> </ul> | <ul style="list-style-type: none"> <li>xiv. Company Qualifications and Evaluations</li> <li>xv. Project Planning:</li> <li>xvi. Scheduling and Sequencing</li> <li>xvii. Site Logistics and Construction Preparation</li> <li>xviii. Managing Schedule and Budget Risks with the client, designers and subcontractors.</li> <li>xix. Creative Thinking and Problem Solving</li> <li>xx. Drawing and Specification Review</li> <li>xxi. Material procurement and coordination</li> <li>xxii. Communication Teamwork/Team Building</li> </ul> |
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### Problem Description

All projects have critical requirements that must be met. Budget and schedule objectives are obvious; however other criteria may include quality, sustainability, safety, reputation etc. To win a project, we not only need to meet these requirements, but we have to prove that we can exceed these goals further than our competitors. Generally, the more aggressively we pursue a project, the more risk we assume.

As stated before, in this problem you will be challenged to create a “winning” deal that recognizes the accepted risk and creates a strategy to contain that risk while maintaining a satisfied client. Your team’s objective is determining if DPR should pursue this project through master contract selection, subcontractor bid validation, schedule development, and general conditions valuation.

### Outline of Events

a. Pre-Competition Activities

Your team will receive a template of a placemat DPR would like you to complete and send back to us (via email, continue reading for more information). These placemats will help our judging panel familiarize ourselves with your teams. Once you’ve created your team email (see below for more information on emails), you will receive the template.

Additionally, your team should familiarize itself with the programs to be used during the competition, listed below. Keep an eye out for a pre-competition workshop DPR will be hosting prior to the competition.

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| <ul style="list-style-type: none"> <li>• Smart Sheet</li> <li>• Microsoft Project</li> <li>• Oracle P6</li> </ul> | <ul style="list-style-type: none"> <li>• Bluebeam Take Off</li> <li>• On Screen Take Off</li> <li>• Gmail</li> </ul> |
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b. Competition Activities

When the problem commences you will be given the following primary contract documents (all documents will be distributed in electronic format):

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| <ul style="list-style-type: none"> <li>• Project Specific Contracts</li> <li>• Contract Assessment Form</li> <li>• Subcontractor Bids</li> </ul> | <ul style="list-style-type: none"> <li>• Subcontract Assessment Form</li> <li>• General Conditions List</li> <li>• Drawings &amp; Specifications</li> </ul> |
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After reviewing these documents, you will need to understand the terms and conditions of the contract, the project parameters, set the project budget, and create a baseline schedule in an effort to create your “winning” deal.

Your teams ultimate goal is to determine if DPR should pursue the project with the information and criteria at hand, and work to defend your position with reasons developed during the competition. During the course of the competition, the teams will manage scenarios that will impact budget, safety or schedule, for example:

- Scope Buy-out process: Review & Select Subcontractors
- Site Conditions & Set Up
- Project Planning and Phasing
- Scheduled Scopes of Work
- Resolution of Unforeseen Situations

Your team’s performance will be measured on the following scales: Risk Assessment & Mitigation, Budget, Schedule and Reputation. These scales will be updated continually based on the decisions made. Upon completion of the project you will be presenting a final contract, sub selection, schedule, and budget. Most importantly, deciding if DPR should pursue this project further and what possible risks the company faces in taking on (or avoiding) this work. Presentations will be in a debriefing format where we will be discussing the rationale behind the decisions made and your ideas for what could have done differently to return a more favorable result.

**Sample Timeline** (Actual timeline will vary; this information is provided to give the teams a better understanding of the activities throughout the day)

Thursday of Competition:

- 6:00 am: Competition Kick Off/Distribute Problem Statement
- 10:00 am: Breakout Session (2 Team Members, 30 min – 1 hour)
- 2:00 pm: Early Deliverables Due
- 3:00 pm: Breakout Session (2 Team Members, 15 min)
- 9:00 pm: Remaining Deliverables Due to DPR

Friday of Competition:

- 6:00 am: Materials Due Via flash drive
- 7:00 am: Start of Presentations (20-minute presentations and 10-minute questions)

**Logistics**

- Internet access is acceptable/required. However, communication with anyone outside of your team members and the DPR team is strictly prohibited and will result in disqualification from the competition.
- During the competition, please reference the subject of your email correspondence in the subject line in an effort to maintain clarity. With the exception of the scheduled meeting times, information from your team to the problem sponsor’s team should be transmitted via email.
- All documents will be relayed to your team electronically.
- PRIOR TO THE COMPETITION:** Your team will be responsible with creating a team email (for example: asc.2024.csulb@gmail.com). When you have created your email, email Brittney Lerdahl at asc.execteam.dpr@gmail.com to receive additional pre-problem documents. **Please include each team members resume.** It is recommended that you familiarize yourselves with the email system in advance of the competition. **Pre-problem information is due January 12<sup>th</sup>**



## Scoring

You will be graded on your ability to execute a plan that is not only profitable but makes your client a raving fan. It will also require you to balance competing goals like cost, schedule, quality, safety, sustainability, etc. Below, you can see an example of the scoring rubric used in previous years' problems. This year's problem will be graded similarly, but with minor variations made due to module difficulty.

- a. Contract Assessment – 15%
- b. Project Budget – 15%
- c. Project Schedule – 15%
- d. Site Logistics/Safety – 10%
- e. Breakout Session Activities – 10%
- f. Go/No Go Evaluation & Scenarios – 10%
- g. Presentation – Post Project Download – 25%

## Questions?

Please contact Brittney Lerdahl at [asc.execteam.dpr@gmail.com](mailto:asc.execteam.dpr@gmail.com).