

2024 ASC Student Competition

OPEN COMPETITION PRECONSTRUCTION PROBLEM

*Pre-Problem Statement and
Competition Information Package*

Presented by:



CONSTRUCTION

Introduction



Welcome Students and Teaching Professionals to the 2024 ASC Student Competition!

PCL Construction, Inc. is proud to sponsor the Open Competition Preconstruction Problem at the 2024 ASC Student Competition. We believe this competition is a valuable tool for your career development. PCL wants every team to benefit from the knowledge and experience gained by participating in this Preconstruction Problem.

THE IMPORTANCE OF PRECONSTRUCTION

The road to a successful project delivery begins with solid preconstruction planning. Preconstruction is where contractors have the greatest ability to bring additional value to the project and assist the owner and designers in achieving their vision in the most cost and time efficient manner.

The objective of this competition is to increase your exposure to the common challenges of preconstruction tasks in today's construction environment. The problem proposed will be representative of the required tasks performed during the preconstruction phase of a project. Tasks encountered as part of the competition may include:

- Safety planning
- Staff and labor management
- Risk analysis
- Scheduling
- Estimating
- Constructability reviews
- QA/QC
- Logistics planning and reviews
- Target Value Design/Value engineering studies
- Procurement methods
- Technical written communications
- Presentation skills

There are many dynamic elements to every project during design and construction, the PCL project we are presenting is a great example. Our hope is you can give us your best work in solving and presenting the challenges you are about the face and learn from our real-world experiences.

At the end of the competition the top three teams as determined by the PCL judging panel will be recognized at the Awards Ceremony. It's important to keep in mind that each participant is a winner when you combine the experience of this competition and the industry exposure gained by attending the event.

Problem Premise & Deliverables



THE COMPETITION SCENARIO

Your team is a general contracting firm that is proposing on upgrades and additions within a fully active sports facility. This is one of the planned phases of a multi-year upgrade. This project will focus on high-end upgrades to enhance the fan experience. If selected as the winning firm, your team will be issued a preconstruction agreement and will partner with the owner and design team in establishing budgets, keep the design in alignment with budget, and perform constructability and logistic reviews to provide the best value to fill the client's needs.

The competition consists of the following phases:

Phase I - Request for Proposal Submission (20 points)

Phase II - Preconstruction Meeting Deliverables (40 points)

Phase III - Preconstruction Meeting Presentation (40 Points)

Each of these Phases will detailed further in this document. The final project debrief will be given by PCL the night of Friday, **February 9th, 2024**.

Prerequisites



Successful teams will need to exhibit the following skills and expertise:

- Safety planning
- Collaboration and problem-solving techniques
- Strong written and oral communication skills
- Conducting effective project meetings
- Constructability knowledge
- Risk analysis
- Quality management
- Site logistics planning
- Conceptual scheduling
- Estimate development/Conceptual estimating/QTO
- TVD/Value engineering
- Virtual Design and Construction techniques
- Innovation
- Creativity
- Teamwork

Competition Rules



The rules for the competition will be governed by the following guidelines:

- Adhere to all ASC 2024 Competition Rules.
- Additional competition rules will be reviewed at the Competition Kick-off Conference held on the morning of **Thursday, February 8th, 2024**, at 7:00 AM in PCL's assigned venue.
- Participation is limited to 12 teams maximum for this problem. Participation will be on a first-come, first-served basis with a maximum of one team per school admitted for this competition.
- PCL will use a combination of portable flash drives and a web-based file share site for distribution of problem statement files, requests for information, and submittals.
- Software requirements are limited to Microsoft Word, Microsoft Excel, a CPM scheduling program (Project or P6), and a PDF program (preferably Bluebeam Revu). Students are strongly encouraged to have licenses available for tools to assist them with typical planning and preconstruction activities such as estimating, modeling and clash detection, and presentations. Innovation is encouraged, and points will be assessed based on the quality of the deliverables.

Scoring



The 1st, 2nd, and 3rd place teams will be recognized with a trophy and a nominal cash award at the Awards Ceremony following the Career Fair.

The team scoring is a three-step process. Determination of the winning team is based on a pre-established uniform grading scale for each phase of the problem submittal, for a total of 100 points. There is an added 5 point discretionary bonus for those teams that exhibit an exceptional creative aspect during the Presentation Phase. Each team will receive a summary of their scoring after the competition, which will include the top, average, and individual scores.

Note: Timeliness is extremely important in this competition and in construction. Late submissions are highly discouraged. A -25% penalty will be assessed to your score of each deliverable that is submitted after the posted deadline.

Phase I:
Request for Proposal
Submission (RFP)



20 points

THE PROJECT PHASES

The Phase I proposal request will be distributed via a file share site to the registered teams on **Monday, January 8th, 2024**. It will be a Request for Proposal (RFP) with a brief description of the project and a list of project requirements. The deliverables will be detailed in the Phase I proposal request and may include but are not limited to:

- Project organizational chart
- A narrative of your team's project approach to preconstruction
- General Conditions proposal outlining staff and support costs
- Conceptual project budget
- Conceptual summary schedule
- Cash flow forecast
- Safety planning
- Risk Analysis
- Logistics plans
- Technical construction planning
- Value engineering ideas
- Construction equipment planning and selection

The Phase I proposal package shall be prepared by each team prior to the competition and submitted online by **Friday, February 2nd, 2024, at 2:00 PM PST**.

In addition to the Phase 1 Deliverable all teams are to provide their student resumes with a photograph by January 10th, 2024 to CABHR@pcl.com.

Phase II:
Preconstruction
Meeting Deliverables



40 points

The Phase II Preconstruction Meeting Minutes outlining the required Deliverables will be distributed and discussed at the mandatory Competition Kick-off Meeting. All teams attending the meeting are then invited to submit one (1) electronic copy of the Phase II submission via PCL's flash drive issued to each team. There will be a variety of new project challenges introduced at this phase of the project and the students will be challenged to prioritize, address and respond to these requests prior to their presentations the next day.

Phase III:
Preconstruction
Meeting (Presentation)



40 points

The Phase III Deliverables will be completed by each team on **Friday, February 9th, 2024, at 8:00 AM**. The upcoming presentation order will be determined by a team's competition. All teams are expected to be ready to deliver their presentation materials between 8:30 AM and 5:30 PM. Teams may not present any new materials in their slide deck that were not submitted by the 8:00 AM deadline.

Meeting parameters:

- All meeting presentations are limited to 30 minutes in length with time for Q&A. Scoring will be based on professional solutions to the open action items AND the number and quality of discussion on additional meeting agenda items covered by the full team.

Event Timeline



Thursday February 8th, 2024

7:00 AM – Competition Kick-off Meeting. PCL to introduce Phase II Preconstruction Services Deliverables to teams.

11:00 AM - Phase II RFIs due to PCL

1:30 PM - Group meeting to discuss Phase II RFIs responses.

7:00 PM - Phase II Preconstruction Deliverables due. Phase III Presentation instructions issued.

Friday February 9th, 2024

8:00 AM – Phase III Presentation Materials due. No changes to slide deck after submission to PCL judges. Team competition to determine presentation order.

8:30 AM to 5:30 PM – Team Preconstruction Meeting Presentations (30 mins per team including Q&A)

6:00 PM to 6:30 pm – PCL to present project debrief to all teams (Group Meeting Debrief)

Saturday, February 10th, 2024

8:00 AM to 12:00 PM – Career Fair

12:15 PM to 1:00 PM – Awards Ceremony

Contact Us



Good luck in your endeavors! Any questions can be directed to the PCL representative below.

Daniel Brown – Senior Project Manager

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