



ASSOCIATED SCHOOLS OF CONSTRUCTION

2024 Student Competition

Open Problem
Concrete Solutions



SUNDT

Skill. Grit. Purpose.®

INTRODUCTION

Sundt Construction, Inc, is proud to be sponsoring the 2024 “Concrete Solutions” ASC Student Competition problem. **Welcome and thank you for your participation.**

Sundt is committed to being the most skilled builder in America, led by the industry’s most skilled construction professionals. Our experience in multiple markets, wide range of self-perform capabilities, and unique employee-ownership culture bring exceptional quality to our work and lead to prosperous outcomes for our clients, employee-owners and communities.

Concrete has been a leading building material for over 2,000 years. Almost every project involves the use of concrete in some way, and for some projects concrete is the main building material. Modern ready mixed concrete also provides remarkable flexibility in meeting the needs of challenging design and sustainability considerations.

The ASC Competition has done an excellent job in providing an environment for the competitors to experience life as a general contractor and as a subcontractor within the mechanical/electrical fields. In participating in the Concrete Solutions problem, you will have the opportunity to peek into the life of a self-performing general contractor.

This competition offers an outstanding opportunity for your career development: it allows you to showcase your talents, become a leader and network with protentional employers and construction recruiters. Congratulations on making the decision to compete.



PROBLEM DETAILS

Sundt has recently been successful in its pursuit of a new and exciting project. Your team of “Sundt employees” has been assembled to assist the company in self-performing the concrete scope of work. The problem statement will be related to both preconstruction and construction responsibilities. The judges will be acting as the general contractor for the project. They will be reviewing your required deliverables and will request a formal interview.

Listed below are some items to review which will help prepare your team for the competition:

The competition teams will be expected to:

- Perform constructability reviews for concrete scope to ensure successful execution of concrete scope.
- Perform a quantitative takeoff
- Develop a detailed estimate
- Develop a construction/ pour sequence schedule, demonstrating an understanding of concrete-related activities and sequence
- Recognize and address safety concerns and address during presentation
- Recognize and be able to address project specifications requirement and plan the work to meet the specification requirement.
- Analyze vendor quotes to meet project needs for example
 - Ready Mix
 - Reinforcing
 - Crane/Equipment

Deliverables that are expected to be received from the teams are as follows:

Self-Perform Deliverables – Your team will be expected to provide quantity takeoff, detailed estimate, list of assumptions and an execution plan.

Schedule – You will be expected to provide a schedule in Primavera P6 or other scheduling software, that details concrete scope durations. Be prepared to answer scheduling questions during team presentation.

Team Presentation – You will present your solution to the problem using Microsoft PowerPoint or a software program of your choice. Team presentations will be expected to be 20 minutes in length with 10 minutes for Q/A. Additional details for presentation will be given during the problem kick off.

Suggested software

- On Screen Take Off or other quantity take off software
- Bluebeam Revu
- Microsoft Office
- Revit Structure or other modeling software
- HCSS Heavy Bid or other estimating software
- Primavera P6 or other scheduling software

Miscellaneous

- Looking for a little insight to the competition? Check out this video from previous competitions
<https://www.youtube.com/channel/UC0pwOKP6FthY8jTouqM7btQ/featured>
- ASC Regions 6 & 7 website:
asc67.org/competition.html
- Looking for Internships at Sundt Construction Inc
[Internships - Construction Company & General Contractor | Sundt](#)

Other Notable Problem Information

- Participation in this problem will be limited to 12 teams determined on a first come, first served basis.
- Competing teams will have access to the internet at their own discretion and cost
- Points will be deducted for submitting deliverables past the stated deadlines - 1 point for every minute late
- An LCD projector, screen, and laptop (w/Microsoft products) will be provided for presentations.
- Team rooms will be visited by the judges periodically on Thursday, February 8th, 2024.
- Initial problem documents will be distributed via flash drive. Hard copies of documents may be provided.
- Trophies and cash prizes will be awarded for first, second and third place finishing teams
- An additional award will be provided – MVP Award
- The competition rules listed at asc67.org/rules.html will be strictly adhered to.

SCORING CRITERIA

POINTS	CRITERIA
5 Points	Prequalification
25 Points	Self-Perform deliverables (template(s) to be provided)
70 Points	Project Meeting/Team Presentation
5 Points	Bonus: identifying the concrete solution

TIMELINE OF EVENTS

Friday, December 15th, 2023

- Team registration ends; Team member and Faculty Coach names due to ASC committee

Wednesday, January 10th, 2024

- Deadline for Prequalification (5 Points see requirements below)
 - Provide a resume of each team member, including a headshot photo,
 - Contact information
 - Industry experience
 - Brief narrative of the individual's scholastic status
 - Year in school (Freshman, Sophomore, Junior, Senior)
 - Clubs/extracurricular activities
 - Currently have an internship offer or looking for an internship
 - Currently have a full-time employment offer or looking for a full-time employment
 - Provide e-mail and phone number for the team captain that will also be the main point of contact during the competition
 - Please provide name and company of industry sponsor
 - Prequalification will be sent to ASCConcreteSolutions@sundt.com

Wednesday, February 7th, 2024

- Please refer to ASC Region 6 and 7 web page for a list of events under the Schedule of Events tab. This schedule is subject to change; so please note posting date.

Thursday, February 8th, 2024

- Events as listed online under ASC Schedule of Events. This schedule is subject to change; please note posting date.
- 7:00am – 8:00am: Pre-bid meeting. Sundt will introduce the Problem Statement and the official Scope of Work Documents will be distributed to the teams.
- 8:00pm: Deliverables that will be outlined in the Problem Statement are due.

Friday, February 9th, 2024

- 7:00am – 6:30pm: Oral Presentations
 - Presentation times will be assigned on Thursday during problem exercise
 - Times will be emailed to teams
 - These times are subject to change depending on number of teams competing
- 6:30pm – 6:55pm: Problem Recap Meeting
- 7:00pm – 9:00pm: Social Event (food, drinks and prizes)

Saturday, February 10th, 2024

- Events as listed online under ASC Schedule of Events. This schedule is subject to change; please note posting date.
- 8:00am – 10:00am: Student breakfast sponsored by Sundt in the Sierra Foyer
- 8:00am – 12:00pm: Job Fair in the Nugget Grand Ballroom
- 12:15pm – 1:00pm: Awards Ceremony in Cascade Ballroom

CONCLUSION

Concrete Solutions has been integrated into the ASC competition to allow you an opportunity to experience the world of self-performed concrete. We believe that this problem will challenge you to think in detail about what it takes to win and build a concrete project in this extremely competitive market. Thank you very much for your interest and we look forward to seeing you in February!

Prior to the competition questions can be directed to:

Mike Canter
602.402.3086
ASCConcreteSolutions@sundt.com

Contact information for questions during the competition will be provided the day of the event.

Congratulations to last year's first place finishing team:

