This document, which is available at https://pswc2019.weebly.com/, describes the Student Timber-Strong Design Build Competition and states the 2019 rules for the conference. Clarifications, which include any revisions to the rules, are published at that web site and do not appear in this document although they are formal addenda to the rules. The web site includes the form for requesting clarifications and other information. Information at the web site takes priority over any other source except as herein noted.

ASCE, AWC, BSLC, and SST support and encourage the equitable opportunity for participation in the Student Timber-Strong Design Build (TSDB) Competition by all interested and eligible individuals without regard to race, ethnicity, religion, age, gender, sexual orientation, nationality, or physical challenges. Participation should be inclusive, open, and fair to all interested and eligible students.

Last Year’s Competition
1. **Objective**
The Timber-Strong Design Build Competition enables students to gain experience in performing crucial aspects of common civil engineering design and practice. Participating students will learn about the processes involved in professionally designing and proposing a project bid. Students will also gain exposure to the management and building practices used in construction environments. Through preparation of a project bid, the performance of analysis, and management of the construction process, each team is expected to act as a design construction firm while competing in a friendly environment. It is the goal of this competition to provide unique insight and hands-on experience for the next generation of sustainable design and construction structural engineers.

2. **Participant Rules**
   - Each University may enter only one team per department.
     - In the interest of collaboration, Universities with American Society of Civil Engineers (ASCE) Student Chapters are encouraged to combine into one team
     - ASCE Architectural Engineering Institute (ASCE/AEI) Student Chapters are allowed to also participate.
   - Teams shall consist of at least 4-6 engineering students who are in good standing with their ASCE student chapter during the current competition academic year. This requirement is waived for guest teams.
   - 4-6 members shall be designated as “builders”.
   - One builder of the team, must be identified as the Team Captain.
   - The team must have at least one underclassman.
   - The team must have at least one male and female
   - The team members shall not vary throughout the competition. In other words, the team members that start the competition will be the same team members that complete all portions of the competition.
   - The team must have at least one faculty advisor.
   - Everyone on the team must be a registered participant of PSWC 2019
3. **Event Description**

The American Wood Council (AWC), Simpson Strong-Tie Company Inc. (SST) and Binational Softwood Lumber Council (BSLC) are interested in creating a new subdivision of sustainable, wood light-framed student houses within the city of San Luis Obispo, California. The city continues to witness a growth in population size while enrollment at Cal Poly, San Luis Obispo is at an all-time high, which increases the demand for housing. While other natural resources are rapidly depleting due to this demand, wood is the only building material that grows naturally, is 100% renewable, and outperforms other building materials in overall carbon footprint reduction. As a result, the AWC, SST, and BSLC are seeking proposals and prototypes for a student house that is sustainable, structurally durable, and efficient.

4. **Project Scope and Milestones**

**Scope:**

Each team will be prompted to structurally design and construct a wood light-framed structure. Throughout the design process, the teams are required to create a preliminary design and a final bid report.

Each team is required to erect and construct the wood structure which was designed in the team report at the “construction site”. Each team will conclude with a display board presentation.

Each team must upload pictures and videos of the team’s design and building process to a collaborative Google Drive folder. To gain access to this folder, each team captain must send an email to pswc2019@gmail.com with [Timber-Strong Design Build Folder request] in the email title. The folder may include practices, meetings, event photos, videos, etc. of the competition itself. All teams must have photos and/or videos in the folder before 5:30 pm on April 6, 2019 (the day of the Timber-Strong Design Build competition) or the team will be disqualified.

**Milestones:**

- Report Submitted: March 15
- Display Board & Presentation (at competition): April 5
- Construction Building: April 6
- Google Folder with at least 1 photo and presentation video: April 6, 6:00 pm

More specifics about the exact design elements and report requirements are currently in development and will be appended to these rules at a later date.