All teams are required to submit **only one** design proposal. This design proposal is used to determine which teams are invited to compete in the Seismic Design Competition. Remember, the SLC retains the ability to restrict the number of invited teams due to time limitations and space availability at the conference venue. Therefore, please pay particular attention to your proposal.

This document describes items that must be included in the design proposal and provides guidelines for teams to submit a high-quality proposal. Scoring of the proposals will be based on the requirements and rubric provided in this document. This document does not override the Official Rules; it is meant to supplement the official rules by providing formatting and content requirements of the design proposal.

1. Formatting Requirements

- The proposal shall not exceed 4 pages, including the title page. Any proposal exceeding the page limit will not be scored.
- The proposal must be 11pt, single-spaced, US Letter (8.5 in x 11 in), Times New Roman font with 1-inch margins.
- Any deviation from the formatting requirements will result in substantial deductions from the proposal score at the discretion of the SDC chairs.

2. Plagiarism Requirements

• Plagiarism is strictly prohibited and may result in disqualification or non-invitation to compete. Any citation style is accepted, as long as it is consistent. Works Cited or References pages are required but do not count toward the page limit. See Section 5.1 of the Official Rules for more information. Please also reference requirements related to use of AI in Section 2.4.

3. Page Content Requirements

• Page 1: Title Page

- Name of the school
- Overall computer-generated image of the exposed structural system (an optional image of the final architectural state may also be included here. Such images will be scored as part of the architectural description). Names of all team members and the designated team point of contact (Note: the designated team point of contact will be the only point of contact between the team and the SDC Chairs from the start of the design to the completion of the competition).

• Pages 2 - 4: Proposal Content

- A summary of the site conditions and seismic activity expected for Portland, Oregon (e.g., soil types, historic earthquakes, major fault lines, magnitude and shaking expected for future earthquakes, etc.). This summary should address how these items impact the foundation and seismic design considerations.
- The seismic Site Class corresponding to the location of your structure must be determined and included as part of the proposal in accordance with Table 20.2-1 of ASCE 7-16 or ASCE 7-22. Additionally, the possibility of liquefaction and lateral spreading at the site should be addressed using the provided geotechnical information provided on the competition website.
- A summary of considerations for structures with an elevated walkway passage and those design requirements.

- Selection of at least 11 ground motions representative of GM#2, which represents the Risk-Targeted Maximum Considered Earthquake (MCE_R) as defined in ASCE 7-16 and ASCE 7-22. Please provide a brief description of how the team selected the ground motions and a figure showing the response spectra of the selected ground motions compared to the target GM#2 (i.e., MCE_R).
- O Description of the structural system and elaboration on the plans for predicting the structural behavior (computer modeling, small-scale testing, etc.).
- Explanation of how the client's architectural requirements (as detailed in Section 1.3 of the Official Rules) will be met and any other economic or environmental considerations.
 The predicted weight of the balsa wood model should be provided as an economic consideration
- Professionalism demonstrated through concise and clear writing with a good command of grammar and spelling
- o Proposed damping devices may be included in the proposal but are not necessary. Final approval of the damping devices must be made through the Damping Device Approval Process (Section 7.2 of the Official Rules)
- o Diagrams and photos are recommended but must fit within the page limit.
- AI-generated imagery is permitted <u>only</u> for architectural visualizations. All generated content must correspond to the structural design and be presented in a clear, logical, and accurate manner. Images that do not meet these criteria will not be scored. See Section 2.4 of the Official Rules for Use of Artificial Intelligence within the SDC
- For additional information, please see the rubric at the end of this document

• Page(s) 4(+): Works Cited

- Teams must cite the references that they use in creating their proposal
- No additional content for the proposal may be included on the Works Cited page(s)

4. Submission Requirements

A PDF of the document must be submitted to the online form linked below by the deadline in the official rules. You should receive a notice of receipt after submission from the form. If you do not receive confirmation within 24 hours of submission, please email <u>sdc@eeri.org</u> to confirm submission.

https://forms.gle/CFXBTr9dYGKBLehK6

Teams are not bound to the designs submitted in the design proposal process. Design proposals are not evaluated for rule violations. Selected designs are still subject to penalization or disqualification. Teams are responsible for ensuring that their buildings follow the competition rules. For any clarification, refer to the clarifications section on the competition website, or the team point of contact can submit a clarification request (See Section 10 of the Official Rules).

5. Rubric

Category/Description	An excellent proposal	A poor proposal	Points
Title Page	Contains all required items, neatly arranged on the title page	Is missing one or more items	Req'd
Project Description	Has a completely developed project overview and clearly addresses the project objectives; succinctly highlights major points. Mentions a	Has simplistic or unfocused ideas; is unclear on the purpose of the project; goes into excessive detail or contains filler / is off topic	5
Architectural Description	Concept: Shows a compelling inspiration; Articulates the design approach clearly, and the solution fully addresses conceptual requirements.	Lacks clear inspiration or fails to explain it well; does not meet the conceptual requirements, or the approach is superficial/incomplete.	3
	Context: Suggests a thoughtful integration of the design within the urban context; Describes specific socially friendly features.	Ignore the urban context; Does not include or explain socially friendly features, or their connection to the context is superficial.	3
	Sustainability: Includes a sustainability approach; Details specific environmentally friendly features that are integrated with the design.	Appears to lack a sustainability approach; Fails to mention environmentally friendly features, or the mention is general without justification.	3
	Accessibility: Presents an accessibility approach; Includes ADA compliance, emergency exits, and inclusive design elements.	Lacks accessibility features; Omits ADA compliance details or emergency scenario planning, or the approach is general/incomplete.	3
	Visuals: Includes meaningful, clear, and persuasive images or diagrams that support the design narrative.	Does not include meaningful visuals; Visuals present are low quality, unclear, or do not support the design narrative well.	3
Geotechnical/Site Description	Describes expected soil conditions, including types, expected strength, and potential challenges; discusses liquefaction and lateral spreading; provides correct seismic Site Class	Demonstrates limited understanding of the site and the unique challenges it poses; does not mention liquefaction or lateral spreading; seismic Site Class is incorrect or not included	5
	Describes the expected seismic activity (major faults, historic earthquakes, magnitude and shaking of future events)	Has limited, inaccurate or overly broad descriptions of the site conditions and seismic history	5
	Addresses how these items impact foundation and seismic design considerations	Link between the conditions and the design is not discussed or is unclear; contains filler / is off topic	5

Category/Description	An excellent proposal	A poor proposal	Points
Structural Description	Accurately identifies and explains effective structural systems and details and their purpose	Has poor or inaccurate descriptions of structural systems and details	5
	Describes the purpose of the structural system in the context of achieving the project objectives	Little sense of purpose in the context of the project boundaries and objectives	5
	Effectively integrates engineering drawings to describe features	Contains excessive or unrelated illustrations; contains filler / is off topic	5
Predicted Structural Behavior	Provides a clear and meaningful explanation of the method for predicting the structural behavior (computer modeling, small-scale testing, etc.)	Has unclear or illogical explanations of how the structural behavior will be predicted	10
Ground Motion Selection	Briefly describes how the teams selected a set of at least 11 ground motions representative of GM#2 as defined in the Official Rules	Does not describe how the team selected the ground motions	5
	Presents a table listing the selected ground motions with their metadata (earthquake, station, year, magnitude, distance) and scale factors	Does not provide a table or provides inadequate metadata	5
	Provides a figure showing their response spectra compared to the target spectrum for GM#2	Fails to perform a ground motion selection representative of GM#2 or does not provide a figure	5
Economic Considerations	Has compelling financial incentives for the owner to choose your design	Has poor or unconvincing financial incentives	5
	Provides the predicted weight of the structure to demonstrate material efficiency	Does not provide the predicted weight of the structure	5
Writing	Is essentially free of grammar and spelling errors; each sentence is structured effectively; has good range and accuracy of vocabulary	Has many grammatical and spelling mistakes; contains poor sentence structure; vocabulary is extremely limited, or terms are used incorrectly	5
Organization	Is logically organized with effective, smooth, and logical transitions	Is poorly organized; content lacks effective transitions and flow	5
Presentation	Contains meaningful pictures or diagrams; formatted like a professional document	Contains irrelevant, ineffective, excessive, and/or unprofessional pictures or diagrams; is not formatted appropriately	5

Category/Description	An excellent proposal	A poor proposal	Points
Works Cited or Reference Page	Is consistent in format and all references or citations are correctly cited	Is inconsistent in format or not included in proposal	Req'd