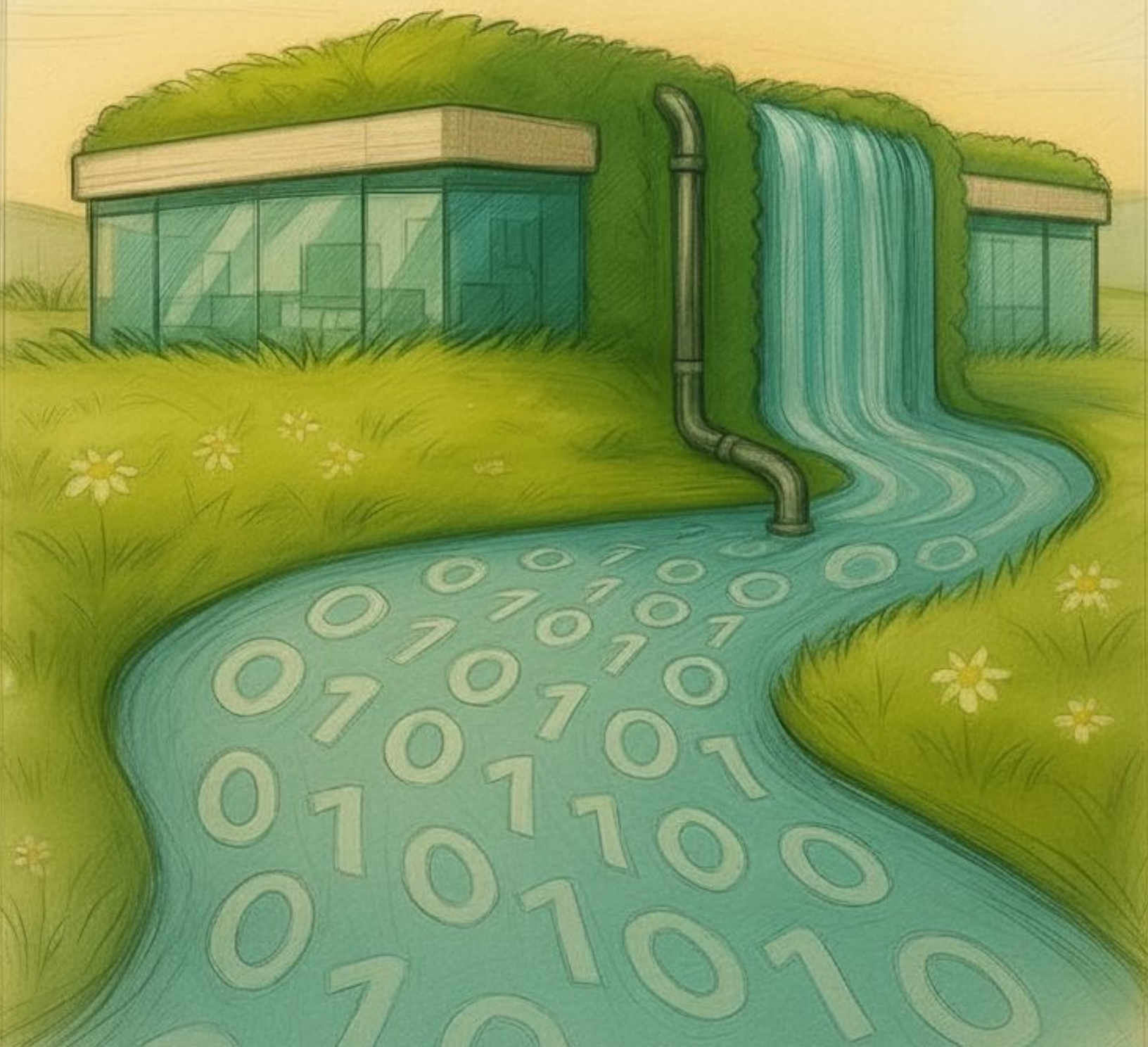




2026 RULES *DATA CENTER*



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Welcome to the ASCE Sustainable Solutions Competition

The American Society of Civil Engineers (ASCE) supports and encourages a fully inclusive culture that celebrates individual uniqueness, engenders a sense of belonging, and promotes equitable opportunity for all people to participate in the ASCE Sustainable Solutions Competition. (See ASCE [Policy statement 417 - Justice, equity, diversity, and inclusion](#)) Participation should be inclusive, open, and fair to all interested and eligible students. Welcome!

Section 1. Mission and Background

1.1 Mission Statement

The ASCE Sustainable Solutions Competition (SSC) inspires students to solve realistic problems in the civil engineering realm by stimulating the development of knowledge in sustainable practices on a platform that encourages multi-disciplinary collaboration.

The SSC encourages students to be innovative and creative and use all resources available to deliver outstanding sustainable solutions that integrate engineering and natural systems working in harmony for the benefit of humanity.

1.2 Problem Statement

The Civil Engineering Computing Corporation (CECC) is requesting proposals for professional civil engineering services and sustainability consulting services to construct a new data center within the City of ASCE. CECC has procured a site along the Big Brown River for the new data center. The site was recently rezoned from agricultural to commercial/industrial.

The CECC board of directors has approved enhanced sustainability goals for the proposed data center, including using the Institute for Sustainable Infrastructure's Envision as the primary sustainability framework.

A nearby parcel recently had a data center development, which was met with minor public opposition. Since, the City of ASCE has received several noise complaints from residents. CECC expects significantly more public concern for this project.

The proposed data center servers will require a significant cooling system; the CECC desires a water cooling system to dissipate the generated heat. The local water utility will only be able to supply a minor quantity of potable water; CECC recognizes that alternative water supplies, such as water recycling, will be required to meet the anticipated cooling demand.

CECC is interested in exploring on-site electricity generation to partially offset the high anticipated electrical demand.

System resiliency and reliability are critical for CECC data centers. Outages can result in millions of dollars in financial losses for CECC and compromised trust from customers and investors.

CECC is also seeking project names from teams at this time.

1.3 Problem Intent

The format of this competition is intended to simulate a request for proposal (RFP) that responds to a real-world challenge.

A proposal is a document that clearly outlines your plan to reach an objective. In civil engineering, project owners often use proposals to competitively evaluate different teams at the planning or pre-planning stage of a project; the project owner will evaluate proposal submissions to select a team for the project.

The planning and sustainability goals for the competition are an integral part of these rules. The purpose of this rules document is to provide students with a proposal scenario, existing conditions, and goals that should be achieved in proposal submissions. The parameters are intentionally broad to encourage creativity and resourcefulness in the proposal development.

Section 2. Participation and Eligibility

2.1 Team Member Requirements

Team members must be:

1. Undergraduate students enrolled during all or part of the current competition academic year,
2. Members of an ASCE Student Chapter in good standing,
3. Society Student Members of ASCE. ([Society student membership is free; be sure to join](#)).

Graduate students are encouraged to serve as advisors.

It is an expectation that teams will reflect diversity, foster an inclusive culture, and treat everyone with dignity and respect.

2.2 Team Requirements

Only one team per ASCE Student Chapter may compete in the competition. Each team must designate a team captain. A student chapter may compete in only one ASCE student symposium per year.

[Conference assignments and student symposium hosts are listed here.](#)

Official Guest Teams

ASCE Student Chapters hosting student symposia may invite Official Guest teams, which are teams from Region 10 that have an official ASCE Student Chapter not yet assigned to any Student Conference. Official Guest teams are eligible to place and receive awards at the student symposium competition and be invited to the Society-wide finals competition (if they meet the other requirements, including eligibility requirements). Official Guest teams may compete in only one student symposium per year. ASCE Student Programs shall be notified by the student symposium host of an Official Guest team prior to the start of the student symposium via email to student@asce.org.

Exhibition Teams

A university group that is in the establishment phase of becoming an ASCE Student Chapter may request to compete at their potential future ASCE Student Symposium as an exhibition team. If the student symposium host grants permission, the exhibition team may compete.

An ASCE Student Chapter team wanting to enter a competition that is NOT being hosted at their assigned student symposium, may request to compete at another ASCE Student Symposium as an exhibition team. If the student symposium host grants permission, the exhibition team may compete.

An ASCE Student Chapter team wanting to enter a competition that is being hosted at their assigned student symposium but has circumstances that prevent participation at their assigned student symposium, may contact ASCE Student Programs (student@asce.org) with a description of the circumstances to explore options.

Exhibition teams will be scored but shall not be ranked or win awards at the student symposium competition.

Exhibition teams will not be eligible to advance to Society-wide finals competition based on competition placement.

2.3 Levels of Competition and Society-wide finals Eligibility

There are two levels of competition:

1. student symposium, and
2. Society-wide finals.

Eligibility criteria for student symposium participation and Society-wide finals are shown in Appendix F.

The highest-ranking eligible team at the student symposium competition will receive an invitation to the Society-wide finals competition.

The Society-wide finals current year host school will be invited to compete in the Society-wide finals competition. They will have the choice of either competing in the year that they host the Society-wide finals or the following year. They must:

1. Compete at their respective student symposium competition and meet eligibility requirements within the same year that they intend to compete in the Society-wide finals competition; and
2. Within seven calendar days of the end of their student symposium during the year that they host, notify ASCE Student Programs of which year they intend to compete at the Society-wide finals competition.

The SSC Rules Committee reserves the right to invite additional participants to the Society-wide finals competition. If wildcards are used to invite additional participants, the wildcard selection process will be posted on the [ASCE Sustainable Solutions Competition Collaborate site](#).

The SSC Society-wide finals competition will be held in conjunction with other Society-wide finals competitions at the 2026 ASCE Civil Engineering Student Championships, June 25-27, 2026, at Fairmont State University, Fairmont, West Virginia.

2.4 Post-Student Symposium Verification of Competition Results

Once scores of the student symposium competition are finalized, the Head Judge must promptly upload the completed official scoring spreadsheet to ASCE's Cerberus files transfer protocol (ftp) server (see Appendix G for Cerberus Upload Guidance). Teams will not be invited to the Society-wide finals competition until ASCE receives this spreadsheet is received and confirms eligibility.

2.5 Awards and Recognition

The top teams at each ASCE student symposium will receive recognition.

At the ASCE Sustainable Solutions Competition Society-wide finals, ASCE shall award the following to the winning teams' ASCE Student Chapter:

- 1st place overall winner: \$1,500 prize and trophy
- 2nd place overall winner: \$1,000 prize and trophy
- 3rd place overall winner: \$500 prize and trophy

Section 3. Conduct

3.1 Professionalism

This competition is to be conducted with the highest regard for ethical responsibility per [ASCE's Code of Ethics](#). All members of ASCE, regardless of their membership grade or job description, commit to all the ethical responsibilities in this Code. All ASCE members should make themselves familiar with ASCE's Code of Ethics.

All participants shall act professionally and respectfully at all times. Failure to act appropriately may result in sanctions, disqualifications, and loss of invitations to future student symposia competitions or Society-wide finals competitions. The inappropriate use of language, alcohol, or materials, uncooperativeness, and general unprofessional or unethical behavior will not be tolerated.

Plagiarism

The ASCE Sustainable Solutions Competition will not tolerate plagiarism of any kind, intentional or unintentional. No use of copyrighted or trademarked materials is permitted without written authorization from the copyright or trademark owner.

Submitted proposals may be screened for plagiarism or unauthorized use at the discretion of the judges or the SSC Rules Committee.

Plagiarism or unauthorized use are grounds for disqualification. If plagiarism or unauthorized use is suspected, the SSC Rules Committee will make the final determination regarding disqualification.

Use of Artificial Intelligence

The SSC Rules Committee does not encourage nor discourage the use of generative artificial intelligence (AI) and natural language processing (NLP) models in teams' proposal development. However, teams must clearly cite instances or portions of work as completed by the respective generative AI/NLP when used to generate for a substantially progressed product (generated outlines or grammar checks would not be considered substantial progression). Failure to cite all instances of generative AI/NLP use will be considered plagiarism for this competition.

Additionally, all uses of AI/NLP must be documented in the technical design proposal (see Section 7.11).

3.2 Safety

Safety is the highest priority; behaviors that increase the risk of or cause personal injury will not be tolerated. Judges and student symposium hosts, including Safety Officers, are empowered to stop or prohibit an activity which is deemed to be hazardous, or to postpone an activity until the hazard is rectified. All participants are responsible for complying with all campus/venue protocols and procedures, including those deemed necessary for public health purposes.

Virtual competition provisions may be provided and activated in coordination with ASCE.

While the SSC is typically held indoors, if there is a thunderstorm, all outdoor activities shall cease and may not resume until at least 30 minutes have passed since the last observed occurrence of thunder or lightning.

Section 4. Requests for Information

Requests for information (RFI) must be submitted through the online [2026ASCE Sustainable Solutions RFI Form](#). **The RFI form will close Wednesday, February 4, 2026, at 11:59 p.m. Eastern Standard Time (EST).**

Clarifications and responses will be posted on the [ASCE Sustainable Solutions Competition Collaborate Site](#) within approximately 14 days of receipt, starting September 26, 2025 until February 13, 2026. **RFI responses are considered part of the rules.**

ASCE single sign-on (SSO) credentials are required to access the ASCE SSC Collaborate Site. Credentials / an account can be created after joining as a student member (see Section 2.1).

Each team should regularly check the ASCE SSC Collaborate site for new RFI responses, including before submitting an RFI; your team's question may have already been answered in another RFI response.

Based on RFIs and other rules developments, the SSC Rules Committee may issue errata or addenda. The SSC Rules Committee will notify teams of such changes via the ASCE SSC Collaborate site by February 13, 2026.

While the RFI form does collect team and team member information, this information will not be shared in the RFI response.

If teams have any questions regarding rules or need clarification to confirm they are interpreting a portion of the rules correctly, then they should submit an RFI. Otherwise, interpretations will be up to the judging team and may result in deductions. “Ask, don’t assume.”

The SSC Rules Committee acknowledges that the RFI deadline will be before the student symposium submission deadlines; teams should review submission requirements and submit any questions as RFIs prior to the RFI deadline.

Please note that all RFIs submitted will receive a response; teams should be mindful about asking for information that may reveal proprietary strategies to all SSC teams.

Section 5. Site Parameters

5.1 Site

The existing site and site vicinity are provided in Appendix A. These are layered PDFs to ease the ability to import into CAD software.

5.2 Civil Scope of Work

The civil scope of work for the site is as follows:

- Building infrastructure
 - 4 buildings, at 120,000 square feet each
 - *Interior components of the buildings will be designed by CECC’s consultant architect and are not part of the civil scope of work.*
 - *Buildings will house servers, office/working space, and employee amenities.*
- Cooling infrastructure
 - Must be water-based.
 - Average demand is 80 MW.
- Fire Safety
 - Provide water supply infrastructure to support fire emergencies. 2 buildings should be assumed to be on fire simultaneously.
- Power infrastructure
 - On-site 220kV substation, at 400 feet by 300 feet
 - Civil will need to locate the substation pad.
 - *Electrical components within the chosen location will be designed by CECC’s consultant electrical engineer and are not part of the civil scope of work.*
- Site infrastructure
 - Employee access
 - Site security

5.3 Miscellaneous Parameters

- Site soils
 - Hydrologic Group B
- Permitting requirements
 - Stormwater management
 - The City of ASCE’s municipal separate storm sewer system permit requirements apply to all redevelopment and development projects:
 - Limit disturbance of natural drainage features.
 - Limit clearing, grading, and soil compaction.
 - Minimize impervious surfaces.
 - Minimize runoff by dispersing runoff to landscaped areas or using permeable surfaces.

- Prevent site discharge (e.g., capture and/or infiltrate) for events up to the 24-hour, 95th percentile rainfall event.
- All projects that create or replace 22,500 square feet or more of impervious surfaces have the additional requirements of:
 - Use of green stormwater infrastructure/nature-based solutions.
 - Manage post-development peak flows discharged from the site to not exceed pre-project peak flows for 2-year through 10-year 24-hour storm events.
- The site has the following rainfall data for 24-hour storms:
 - 85th percentile: 1.8 inches
 - 95th percentile: 2.4 inches
 - 2-year: 3.5 inches
 - 5-year: 5.8 inches
 - 10-year: 7.0 inches
 - 50-year: 11.1 inches
- The site has the following average annual rainfall data:
 - 30.2 inches
- Water quality impairments for the Big Brown River Watershed:
 - Total Copper
 - Nutrients
 - Ammonia
- Utility information
 - The local water utility can supply 20,000 gallons per day of potable water to the proposed site.
 - The local water utility will require a separate fire lateral from the domestic lateral.
 - The local water utility also has a 3 million gallon per day wastewater treatment facility that uses a treatment train consisting of: screening, physical primary clarification, aeration and activated sludge treatment, and physical secondary clarification. The wastewater treatment facility is located approximately 5,400 feet away from the site. The effluent is non-potable and has high total suspended solids and high organic content.
 - Industrial effluent discharges to the sanitary sewer system must be metered for quantity and water quality based on anticipated pollutants.
- Groundwater information
 - There is an abandoned agricultural well on the site that is 30' deep. Uses of groundwater withdrawals are strongly discouraged due to the decrease in aquifer levels from years of agricultural irrigation. Many residential wells in the area have already run dry.

Although the CECC and the City of ASCE are fictional entities, all teams must use the given site parameters.

5.4 Geographic Location

Given that the City of ASCE is fictional, teams should geographically locate the site in a familiar setting. Consult and use relevant codes and regulations to justify decisions. If teams use additional codes or design guidance, they should explicitly cite them within the proposal. Combinations of various codes and regulations should be relevant and appropriate. *For example, it may not be appropriate to combine City of Boston, Massachusetts codes with City of El Paso, Texas codes.*

5.5 Additional Parameters

The parameters provided are intended to be general and to provide teams with a starting point for their design. Teams are expected to use their engineering judgment to make reasonable assumptions for any additional parameters. The SSC Rules Committee will not provide additional site parameters. ***Teams have latitude and are encouraged to make reasonable assumptions that include justifications to support the logic and reasoning for the assumptions in the development of their designs.***

Section 6. Proposal Overview

Judges will assess proposals for inspiration, inclusiveness, completeness, justification, and ingenuity in meeting the RFP's goals.

6.1 Proposal Components

The competition has four proposal components:

- Technical Design Proposal – see Section 7
- Sustainability – see Section 8
- Poster – see Section 9
- Interview – see Section 10

Section 7. Technical Design Proposal

7.1 Technical Design Proposal Overview

The Technical Design Proposal will be scored on the inclusion of all items in this section, thoroughness of design considerations, formatting, and justification of design decisions. *Teams are expected to identify, reference, and apply industry resources to support their design decisions. Collaboration with industry professionals and subject matter experts is encouraged.*

Teams must submit a technical design proposal. This proposal must include the following elements in the listed order:

- Cover Sheet – see Section 7.3
- Cover Letter – see Section 7.4
- Project Approach – see Section 7.5
- Team Organizational Chart – see Section 7.6
- Preliminary Cost Estimate – see Section 7.7
- References – see Section 7.8

The technical design proposal must include the following appendices:

- Site Plan Exhibit – see Section 7.9
- Sample Design Calculations – see Section 7.10
- Artificial Intelligence Use Log– see Section 7.11

No additional appendices are permitted.

7.2 Technical Design Proposal Formatting Requirements

Page formatting requirements

Page size must be 8.5 inches by 11 inches (unless otherwise noted). Page margins must be minimum 0.5-inch on all sides.

Content formatting requirements

The Technical Design Proposal must be written in English using 11-point font, normal character spacing, and single line spacing. Headings and subheadings may use any legible font type or size. Body and heading text must be searchable. Headers and footers are permitted within the margins and may use any legible font type or size.

Do not include blank pages or separator pages.

A table of contents may be included, but it must fit within the page limits of the sections as described below. Figures should be legible.

7.3 Cover Sheet

Provide a cover page (1-page maximum). The cover page must include the team name, school name, project name, and team member names. Content formatting requirements and page margin requirements do not apply to the cover sheet.

7.4 Cover Letter

Provide a cover letter (1-page maximum) that includes a brief description of the project background and scope, highlights of the proposed design, and support of why your team should be selected for the project. The cover letter must include the school name, student symposium name, faculty advisor name, and a statement acknowledging that the team has reviewed all RFIs and errata. The team captain must sign the cover letter.

7.5 Project Approach

The project approach (6-page maximum) should cover the following:

- Key project and site features
- Water supply and cooling
- Stormwater management
- Site resiliency
- Systems approach
- Sustainable construction opportunities
- How will the team support CECC public relations staff to engage with stakeholders.

Teams may highlight other information in the project approach such as key design parameters, project challenges, and potential benefits of design elements.

Teams must report their possible award level for Envision and justify why CECC should pursue that possible award level.

7.6 Team Organizational Chart

Provide a team organizational chart (1-page maximum). For each team member, include the following:

- Name
- Team Role
- Class standing (*e.g., freshman, 2nd year, etc.*)
- Years experience participating in the Sustainable Solutions Competition

The team organizational chart must be supplemented by individual photos or a team photo. Content formatting requirements do not apply to the team organizational chart.

7.7 Preliminary Cost Estimate

Provide a preliminary cost estimate (1-page maximum) for the total construction cost in US dollars pertaining to the proposed civil design. The cost estimate must be in a tabular format with column headings for item description, quantity, unit of measurement, cost per unit, cost, and a reference for the chosen unit price. Provide a summarized estimated total construction cost. Teams must descriptively title each reference and should link where appropriate.

Cost estimates will be scored on completeness and quality of references. Cost estimates should be inclusive of all design decisions, and account for materials, labor, and other miscellaneous costs. *Teams are encouraged to seek out guidance from local practitioners and advisors to determine the appropriate sources of cost information.*

7.8 References

Teams should include a references section to cite sources. There is no page limit to this section.

References used only for cost estimation should not be included in this section.

7.9 Site Plan Exhibit

Provide an 11-inch by 17-inch sheet (1-page maximum) with a clear legible site plan, labeled as Appendix A. Content formatting requirements do not apply to the site plan exhibit.

The site plan exhibit must include the following:

- Project name
- School name
- Client name
- Location
- Legend
- Scale bar
- North direction arrow
- Plan view of the site
- Important site features with annotations clearly identifying features. These may include:
 - Buildings/structures, roads, sidewalks, and other site infrastructure;
 - Site drainage and conveyance controls;
 - Design vehicle access;
 - Sustainable water and energy infrastructure; and,
 - Other innovative and project-defining features.

7.10 Sample Design Calculations

Provide relevant design calculations (4-page maximum) used to prepare the proposal, labeled as Appendix B. The calculations must be legible, and may be typed or handwritten/scanned. Calculations may include, but are not limited to:

- Existing and proposed development analysis:
 - Existing and new impervious area (ft²)
 - Show both through calculation and visual comparison
 - Existing and new stormwater runoff volume (ft³)
 - Existing and new site discharge at outfall (ft³/s)
- Calculations supporting placement or quantity of NBS features
- Water demand and supply requirement calculations
- Equivalent carbon dioxide (CO₂e) impacts
- Earthwork balance (ft³)
- Other calculations supporting sustainability features

7.11 Artificial Intelligence Use Log

Teams must document all uses of generative artificial intelligence (AI) and nature language processing (NLP) model use throughout their proposal development. Label as Appendix C. Typical computer or web uses that integrate AI/NLP as an auxiliary function (e.g., query on search engine) should not be included. Teams must document their uses in a tabular format with columns for date of use, name of AI program or NLP model, brief description of use, and estimated quantitative environmental impact.

Teams should quantitatively estimate an environmental impact for each AI/NLP use; cite a source and list within this appendix. The metric (e.g., energy, water, social impact, etc.) is at the team's own choosing but should be consistent. If AI/NLP is not used in the development of the proposal, the team should state such in the log. There is no page limit to this section.

Section 8. Sustainability

8.1 Sustainability Overview

The City has adopted the Institute for Sustainable Infrastructure's Envision framework to serve as the project's basis to assess sustainability. Teams must submit an Envision checklist and Envision documentation.

Teams are encouraged to use Envision throughout their proposal development.

8.2 Envision Checklist

Download the Envision (v3) Guidance Manual and Envision Checklist (v3); see Appendix B for download instructions. Teams should use these resources to guide the development of their site design.

Each team must complete the Envision Checklist (v3) to reflect their proposed site design or proposed actions to be taken during planning and construction. For each credit, teams will determine applicability to the project and then answer yes or no questions about their proposal to determine the point value awarded.

The Envision Guidance Manual provides extensive information on sustainable design categories and approaches and identifies the actions that must be taken to achieve sustainable design criteria for the corresponding levels of achievement.

Teams should maintain the integrity of the Envision Checklist (v3) spreadsheet; do not modify cell positions of the spreadsheet data.

8.3 Envision Documentation

As a supplement to the Technical Design Proposal (Section 7), preliminarily demonstrate justification for the Envision credits submitted in the Envision Checklist (v3) as a "Envision Criteria Sample Justification Document". *These sample justifications will simulate the third-party verification process that is done for all Envision projects.*

Envision Criteria Sample Justification Document

Provide a cover page that includes the team's school name, team member names, and be labeled as Appendix D. Content formatting requirements and page margin requirements do not apply to the cover page.

Provide a tabular summary of the total of Envision credits for each achievement category based on the Envision Checklist (v3), followed by reporting the possible award level.

Provide justifications for a **minimum of 2** credits for **each** Envision achievement category (Quality of Life, Leadership, Resource Allocation, Natural World, Climate and Resilience). These justifications should describe the project features or actions taken that justify the criteria for the level of achievement points claimed for the credit. Teams will be scored on the merits of their justifications. Each justification must include the following required elements:

- Credit identification number
- Credit title
- Points representing Level of Achievement and total points possible
- Sufficient support of how the identified credit values meet the criteria for the credit. Justifications should demonstrate how the project achieves various Levels of Achievement across criteria as outlined by the Envision Guidance Manual.

A sample justification for Resource Allocation 2.2, Reduce Construction Energy Consumption, is provided:

RA2.2 Reduce Construction Energy Consumption | 8 Achieved/12 Points Possible: The Project Team conducted two separate planning and economic assessments to reduce energy consumption during construction. The four energy reduction strategies that will be implemented are: (1) use local sand provider to reduce trucking distance for concrete reducing diesel consumption, (2) use ash from a nearby local industry in concrete manufacture to reduce diesel consumption, (3) solar photovoltaics and batteries will be placed on the two construction trailers to reduce onsite energy consumption, and (4) LED lighting will be used in all light applications during construction to reduce onsite energy consumption.

Envision Criteria Sample Justification Document Formatting Requirements

Formatting requirements of the Envision Criteria Sample Justification document are the same as the Technical Design Proposal Formatting Requirements (see Section 7.2), except as follows:

- The Envision Criteria Sample Justification document must not exceed 5 pages
- Do not include the tabular summary or justifications on the cover page.
- No appendices are permitted.

Section 9. Poster

9.1 Poster Overview

Create a poster to showcase the team's ability to develop outreach material to inform the citizens of the City of ASCE of the project's sustainability features and benefits. The poster should be accessible and educational to the general public.

The poster must include:

- Team name
- School name
- Project name
- Site plan with annotations

The poster should also include:

- Source of inspiration for the design
- Key design features and sustainability features
- Benefits of the chosen design to the City, its citizens, and other interested stakeholders

Teams will be scored on informativity, clarity, and aesthetics.

Formatting: The poster must not exceed 48 inches in width or 36 inches in height.

9.2 Poster Display Session

Teams must print their posters and display them at the competition at the designated time and location.

Teams must supply their own mounting materials, unless specified otherwise. The host school will specify the format of the poster display session and suggested mounting materials.

The host school will determine the time and location for a publicly accessible poster display session at the competition (i.e., student symposium).

9.3 Fan Favorite

At each competition, individuals may vote on posters to determine the "Fan Favorite" in the categories of:

- Coolest Cooling
- Best Site Resiliency
- Best DCIM (Design with the Community in Mind)

ASCE will provide QR codes for online voting ballots. Judges may not participate in the voting. Voters may not vote for their own student chapter's team. Teams awarded as "fan favorite" in the various categories may receive recognition at the awards ceremony.

Section 10. Interview

Each team will present their proposal to a judging panel representing the CECC to promote selection of their team. The interview will consist of a presentation and a question-and-answer session. Teams will be scored on presentation skills, quality and integration of a 3-D site walkthrough, and responses to judges' questions.

Interviews will be publicly accessible.

10.1 Interview Team

Each team must have a 2-to-5-member interview team to present their proposal. The interview team members must be:

1. team members meeting the requirements of Section 2.1; and
2. be registered participants of the student symposium / Society-wide finals.

10.2 Presentation

Teams must present in English. Teams should present in a professional manner (*as would be given to a company board of directors*). Teams are encouraged to create a slide deck or other visual aids to accompany their presentation. Presentations may not exceed 7 minutes and 5 seconds. Judges will cut off presentations longer than 10 minutes.

3-D Site Walkthrough

Include a 3-D site walkthrough of the proposed site for no more than 2 minutes of the presentation. The 3-D site walkthrough should include a bird's eye view of the entire site and at least 3 first-person views from key locations of interest on or near the site.

Teams must create their 3-D site walkthrough using Trimble SketchUp: 3D Modeling Software. The SSC has SketchUp licenses available for teams; see Appendix C for more information. Teams must only enhance SketchUp models using free and publicly available add-ons.

10.3 Question-and-Answer Session

Immediately following the presentation, judges will conduct an approximately 5-minute question-and-answer session with the interview team. Questions will only come from the judges.

Section 11. Submissions

11.1 Intent and Eligibility Acknowledgement Form

Teams must submit online [Intent and Eligibility Acknowledgement Forms](#), no later than **5:00 p.m. Eastern Time (ET) on November 3, 2025**.

By completing this form, a student chapter states:

1. Their intent to have a team participate in the competition at their assigned student symposium; and
2. Their acknowledgement of the eligibility requirements for student symposium competition participation and advancement to Society-wide finals competition (Appendix F).

The form must be completed and separately submitted by the:

1. Team Captain;
2. ASCE Student Chapter Faculty Advisor; and
3. Competition Faculty Advisor.

All parties will use the same form link to submit. If the ASCE Student Chapter Faculty Advisor and the Competition Team Faculty Advisor are the same person, the form has a field to indicate as such. Teams can verify completion checking the [Intent Form Status Report](#).

11.2 Competition Submissions

Deadlines

Student symposium competition submission deadlines will be at least 3 weeks prior to the competition; the student symposium host may determine an earlier date. *Check your [student symposium's website \(link to the list of all student symposia\)](#) to find the exact date; this information should be available by the date of publication for Mailer 2, typically mid-January.*

Society-wide finals competition submission deadlines will be determined and distributed to invitees by ASCE staff, *typically 4 to 5 weeks prior.*

Judges may refuse to review deliverables that are more than 10 days late.

Deliverables

Prior to the competition, teams must submit the following deliverables as part of their proposal:

1. Technical Design Proposal (PDF; as outlined in Section 7)
2. Envision Checklist (v3) (XLSX; as outlined in Section 8.2)
3. Envision Criteria Sample Justification (PDF; as outlined in Section 8.3)
4. Poster (PDF; as outlined in Section 9.1)
5. Sketchup File (SKP; outlined in Section 10.2)

Submit each deliverable as one combined file with all required elements. All files (except for the SketchUp file) must be under 10 MB in size. Do not upload compressed folders (i.e., zip folders).

Teams that are invited to the Society-wide finals competition are encouraged to make updates to all proposal components; however, the Envision Checklist (v3) and the body content of the Envision Criteria Sample Justification Document must match the student symposium submission.*

**The following is not considered body content: formatting, the cover page, references to other parts of the document, references to other submission deliverables.*

Submission Instructions

Teams must submit all competition deliverables via upload to ASCE's Cerberus ftp server. Submissions outside of this platform will not be reviewed. See Appendix G for Cerberus Upload Guidance.

ASCE will provide each team with a unique, secure submission link to the Cerberus ftp server in February 2026 to the team captain, faculty advisor, and other contacts provided by teams in the Intent and Eligibility Acknowledgement Form (Section 11.1).

Submit files using the following file name format, using an underscore character as a separator:

School name or Abbreviation_Deliverable name

As an example:

University of ASCE_Technical Design Proposal.pdf
 University of ASCE_Envision Checklist.xlsx
 University of ASCE_Envision Criteria Justification.pdf

The school name or abbreviation must match across all submissions.

Section 12. Scoring

12.1 Scoring Overview

The four proposal components are assigned the following maximum proposal points:

Technical Design Proposal	40 proposal points
Sustainability	20 proposal points
Poster	15 proposal points
Interview	25 proposal points

Judges will score each proposal component, and then assign proposal points proportional to the highest achievement score for each proposal component, rounded to the nearest 0.5 proposal points.

An example of a single proposal component with 4 teams is provided:

Technical Design Proposal (40 proposal points)				
Team	Raw Score from Judges (after deductions)	Calculation: $(\text{raw score} / \text{max}) * (\text{category proposal points})$	Calculation result (before rounding)	Proposal Points
A	79	$=(79/94)*40$	$=33.62$	33.5
B	92	$=(92/94)*40$	$=39.14$	39.0
C	94	$=(94/94)*40$	$=40.00$	40.0
D	65.5	$=(65.5/94)*40$	$=27.87$	28.0

The proposal points for each proposal component will be summed together for the total proposal points. The CECC (i.e., judges) will rank teams based on total proposal points. In the case of a tie in total proposal points, the higher sustainability score prevails.

Official Submissions

The files submitted on Cerberus are considered the team's official submissions. Judges will score these files for the Technical Design Proposal, Sustainability, and Poster proposal components, except where noted otherwise.

12.2 Deductions

Teams should read these rules thoroughly to understand “must” terminology and active voice instructions. These form the basis for assessing deductions.

Deductions will also be assessed to the corresponding proposal component.

Judges will document, tally, print, and provide a deduction summary sheet to teams using a version of Appendix D.

Appendix D outlines the point values of the various deductions. Deductions will be made to the judges' scores (i.e., not proposal points) for the corresponding proposal component. Each proposal component is judged on a 100-point scale.

Judges will assess Technical Design Proposal, Sustainability, and Poster deductions for:

1. Does not including required information.*
2. Does not follow formatting requirements.*
 - a. Does not follow submission formatting requirements.
3. Competition submission materials received past deadline.**

*Assessed on a per-instance basis.

**Deduction cannot be appealed.

Posters will be measured at the competition. This deduction cannot be appealed.

Judges will assess Interview deductions for:

1. Interview Team has less than 2 or more than 5 members.**
2. Presentation longer than 7 minutes and 5 seconds.**
3. 3-D site walkthrough is more than 2 minutes of the Presentation.**
4. 3-D site walkthrough utilizes non-compliant software.
5. SKP file received past deadline.**

**Deduction cannot be appealed.

Missing deliverables will be considered as “received past deadline”.

Captains’ Meeting

A mandatory captains’ meeting should be held at the beginning of the competition to ensure all teams and judges are aware of the competition schedule, presentation order, and timeline for appeals.

At this meeting, the Head Judge will privately hand each team their own deduction summary sheet; this sheet will outline the deductions for the Technical Design Proposal, Sustainability, and Poster. Team captains will then sign the sheet to acknowledge their deductions and return to the Head Judge prior to the start of each team’s Interview. Immediately following the Interview, the Head Judge will mark the sheet and notify the team of any Interview deductions. Teams may request that the Head Judge return their deduction summary sheet to finish developing appeals.

12.3 Appeals

Deduction Appeals

Teams may appeal their deductions by completing Appendix E: Request for Clarifications and Appeals and submitting to the Head Judge by the deadline announced at the Captains’ Meeting. Appeals must be limited in scope to matters regarding their own team. The Head Judge has final say over deductions and appeals. *The Head Judge may consult with the SSC Rules Committee regarding deductions and appeals, but the SSC Rules Committee will not overturn their decision.*

Competition Eligibility Appeals

Any appeals related to eligibility for advancement to Society-wide finals competition must be initiated by a student chapter leader or team captain in disagreement with a ruling related to their own team within 7 days of notification of ineligibility and received through student@asce.org with subject line: ASCE 2026 Competition Eligibility Appeal. This email will initiate a request for an appeals form. The form will be used to explain the appeal.

Section 13. Training and Resources for Teams

The SSC Rules Committee encourages teams to review training and resources on the [ASCE Sustainable Solutions Competition Collaborate site](#) throughout the year. *Any questions regarding training and resources should be posted directly to the ASCE Collaborate Site; please do not submit RFIs!* Below are some of the trainings and resources that will be available:

SketchUp Download

See Appendix C for information.

Envision Training Webinar

A webinar will be hosted in November to provide an overview of the Envision v3 Checklist and Envision Guidance Manual.

ISI Envision Mentoring

The Institute for Sustainable Infrastructure (ISI) will pair teams with an Envision-certified professional for mentorship. Details will be released in November/December.

Envision Sustainability Professional training

ISI will offer complimentary training to become Envision Sustainability Professionals (ENV SP) for up to five members of each team. Details will be released in November/December.

Past Submissions

Past posters from the Society-wide finals are available. Please be sure to use them for inspiration only, and not to copy or plagiarize.

The SSC Rules Committee will be releasing top-performing proposals from at least 2 years ago. The past proposals will be anonymized by removing all formatting and naming references. Please be sure to use them to understand what a top-performing proposal looks like, and not to copy or plagiarize.

Section 14. Judge and Competition Host Information

The information in this section is intended for judges and competition hosts; teams do not need to review this information.

Host Information

Hosts of the SSC have the following responsibilities:

- Communications
 - Inform student symposium attendees of various trainings and resources as they are announced.
 - Coordinate a submission deadline date with the Head Judge.
 - Inform attendees of submission deadlines.
 - Mailer 3
 - Provide schedule for captain's meeting and interview.
 - Provide specifications for poster display mounting.
- Judges
 - Secure 3 to 5 judges, including a Head Judge for the competition.
 - *The judging panel may include professionals and educators. The panel should have at least one judge experienced in site design and at least one judge well-versed in sustainability. Local Envision Sustainability Professionals are highly encouraged.* Local support for the Sustainable Solutions Competition is essential for the competition's development and success.
 - Provide judge contact information to ASCE to ensure invitation to the Judge Training Webinar, typically in February.
 - Communicate pre-competition level-of-effort for deliverable review.
- Captains' Meeting
 - Secure a location for a pre-competition Captains' Meeting. For smaller quantities of teams, this may be just before the interviews.
- Poster Display Session
 - Secure a publicly accessible location for the Poster Display Session.
 - Specify the preferred poster mounting method(s) (i.e., easels, thumbtacks, tape, etc.). Notify teams by Mailer 3. Teams should assume that they are responsible for supplying their own mounting hardware, but the host may elect to provide this for the teams.
 - Post the Fan Favorite QR codes. ASCE will provide a QR code for voting. ASCE will provide the Head Judge a link to the voting results.
 - Provide ample space between each poster to avoid overcrowding. 8 to 10 feet on-center is a suggested spacing.
 - Consider co-locating with other poster / tabling / display sessions of other ASCE student competitions.
- Interview

- Secure a publicly accessible location for interview with ample seating and audio-visual projection capability.
- Provide an interview order/schedule no later than Mailer 3. Interview times are recommended to be in time slots of 15 to 20 minutes intervals; this interval includes setup, presentation, and evaluation time. Provide judges' breaks every 4 to 5 Interviews.
- If other outstanding questions or concerns arise, please contact ASCE and the SSC Rules Committee.
- Refer to the ASCE Student Symposium Host Planning Guide for additional information.

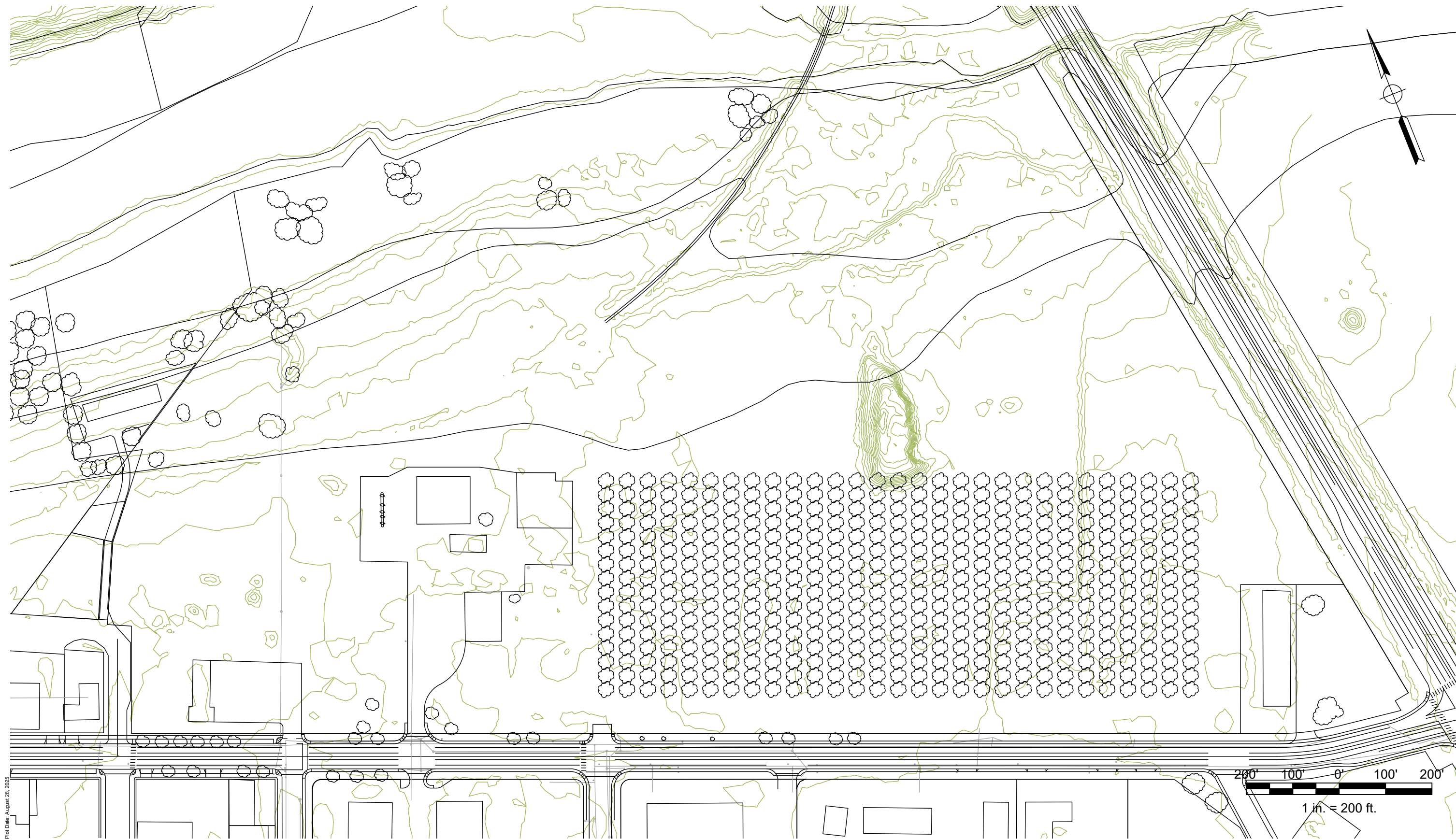
Judge Responsibilities

SSC Judges will have the following responsibilities:

- Attend or review Judge Training Webinar content provided by the SSC Rules Committee, provided in February.
- Ask questions to the SSC Rules Committee before and during the competition. Contact information will be provided.
- Head Judge should coordinate with the competition host on setting a submission deadline. The submission deadline should be at least three weeks prior to the start of the competition (i.e., student symposium) but may be more if there are a large quantity of teams.
- Review and be well versed in the rules and RFIs (see Section 4) as posted on the [ASCE Sustainable Solutions Competition Collaborate Site](#). The SSC Rules Committee will also provide summary resources.
- ASCE will provide judges access to the online submissions through ASCE's Cerberus ftp server at least three weeks prior to the competition. See Section 11.2: Competition Submissions. All judges are expected to conduct an initial review and scoring of the submitted content prior to the competition (i.e., student symposium) and be prepared to complete all scoring within the time provided during the contest.
- Be on-site at the competition (i.e., student symposium).
 - The Head Judge should lead a Captains' Meeting. Bring printed copies of each team's deduction summary sheet.
 - All judges should be present for Interviews.
 - Verify that the host has posted the Fan Favorite QR codes in the Poster session.
- The Head Judge must upload the completed scoresheet (see Section 2.4) to the provided Cerberus link (see Appendix G for Cerberus Upload Guidance).
- The Head Judge must email results to the host and associated results distribution list.
- *After both student symposium and Society-wide competitions, the judging panel is encouraged to provide constructive feedback to all teams as a way of enhancing the student educational experience and advancing the profession.*

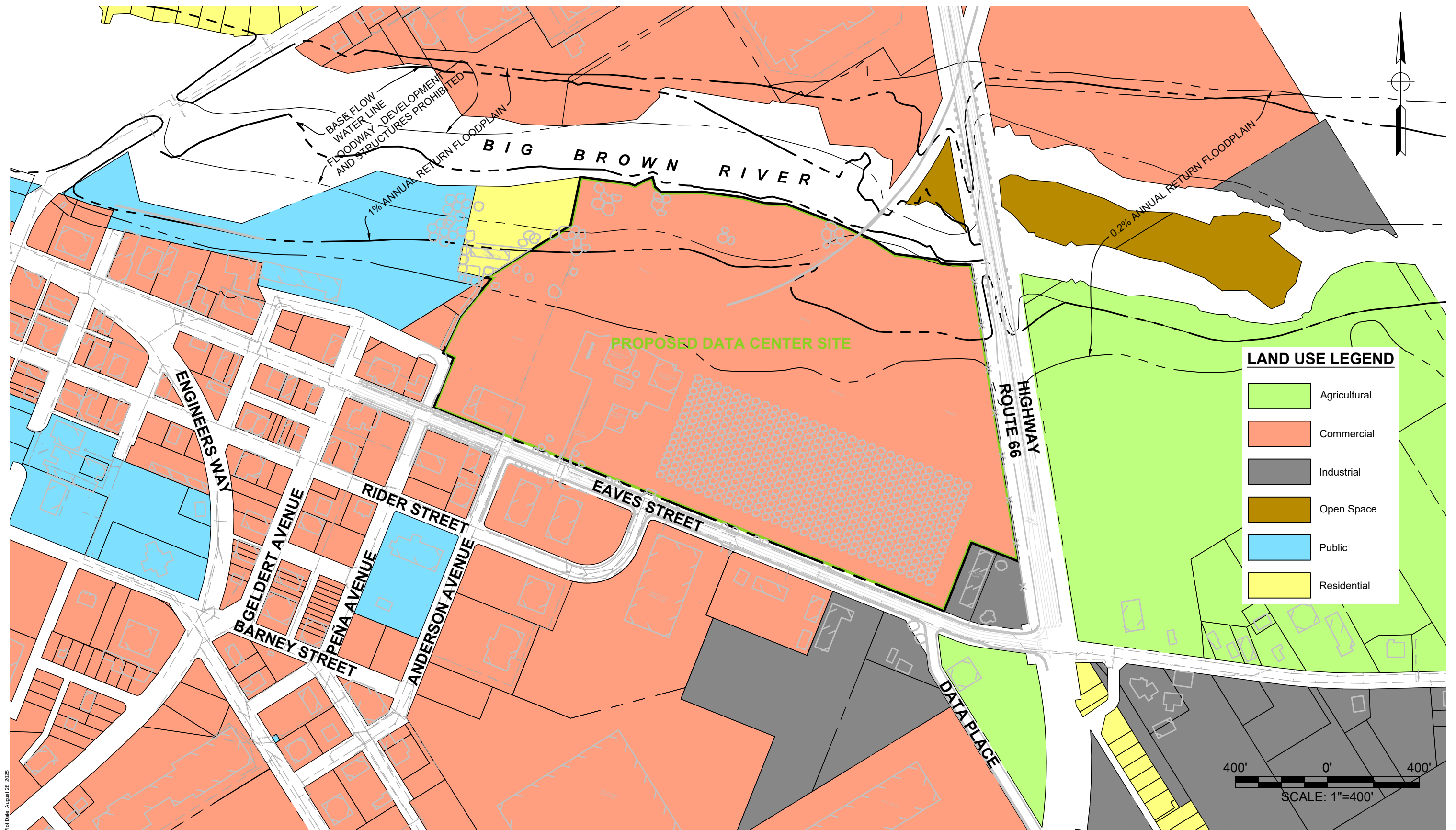
Appendix A. Existing Site Drawing

Included on the following three pages.



Plot Date: August 28, 2025



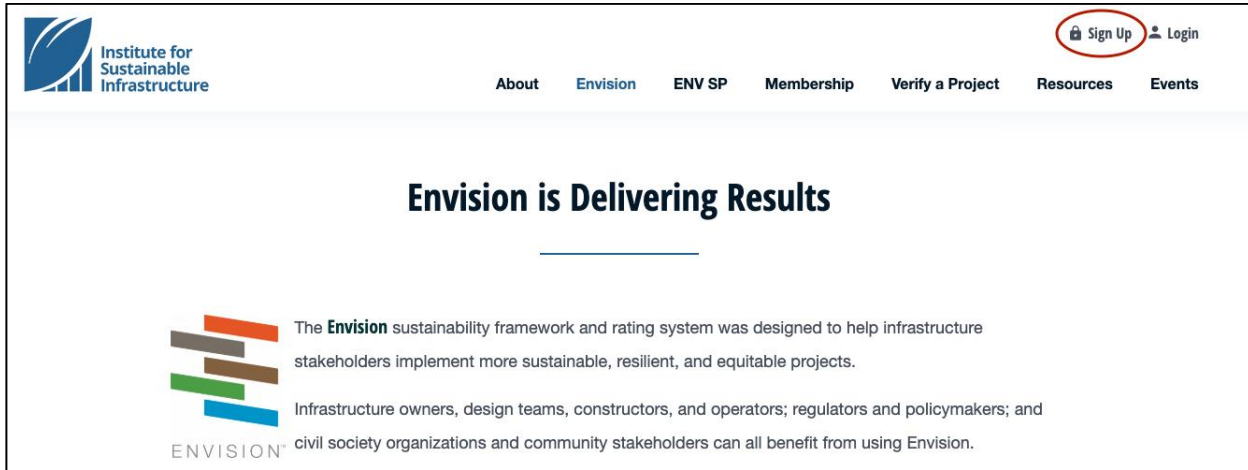


SUSTAINABLE SOLUTIONS COMPETITION 2025: COMMERCIAL SITE CONVERSION
APPENDIX A. (3 OF 3)
EXISTING SITE VICINITY MAP

Appendix B. Envision Download Guide

The first step to accessing ISI resources (<https://sustainableinfrastructure.org/envision/use-envision/>) is to create a free account. Click "Sign Up" in the top right corner or "Join" at the bottom of any page. [A detailed tutorial to sign-up is linked here.](#)

Students should check if their academic institutions are [member organizations of ISI](#). If so, they should affiliate themselves with the institution when creating their accounts. If an account is already created, log in to your dashboard, and under "Expand Your Account", select "Connect Organization".



Once logged in, the website will take you to your Dashboard. Scroll down to the "Resources" section where there are various Envision resources, including the Envision Guidance Manual and Envision Checklist (v3).



Appendix C. SketchUp Download Instructions

Please use the following information to download SketchUp 2025 for the SSC.

The SSC would like to thank **Trimble** for providing these license authorizations!

There are a limited number of SSC-use licenses. Each team is **limited to one license**.

Download Links for SketchUp

<https://www.sketchup.com/en/download/all?srsltid=AfmBOooRN0FxHnQrfGsYqhINyQOuc97DCVptFyjZvU1BFESzrG6lxVQD>

To Authorize (or Remove) Licenses

<https://help.sketchup.com/en/admin/authorizing-or-removing-license>

License authorization information

License authorization information will be posted to the [ASCE Sustainable Solutions Competition Collaborate Site](#) in mid-September.

Appendix D. Sample Deductions Form

Head Judge Instructions: Tally deductions per SSC scoresheet. Provide deductions for Technical Design Proposal, Sustainability, and Poster at the Captains' Meeting. Provide deductions for Interview immediately following.

School Name: _____

Technical Design Proposal (TDP)

- _____ Does not include required information. (-2.5 points each, up to -10 points)
- _____ Submission does not follow formatting requirements. (-2 points each, up to -10 points)
- _____ Submission received past deadline.* (-5 points per day, up to -35 points)

Sustainability

- _____ Does not follow formatting requirements. (-5 points each, up to -10 points)
- _____ Submissions received past deadline.* (-5 points per day, up to -35 points)

Poster

- _____ Does not include required information. (-5 points each, up to -10 points)
- _____ Does not follow formatting requirements.* (-2 points each, up to -10 points)
- _____ Submission received past deadline.* (-5 points per day, up to -35 points)

Interview

- _____ Interview team has fewer than 2 or more than 5 members.* (-30 points)
- _____ Presentation is longer than 7 minutes and 5 seconds.* (-10 points for each 30 seconds over)
- _____ 3-D site walkthrough is more than 2 minutes of the presentation.* (-30 points)
- _____ Presentation 3-D site walkthrough uses non-compliant software. (-30 points)
- _____ SKP file submission received past deadline.* (-5 points per day, up to -35 points)

*Deduction that cannot be appealed.

I, the team captain, acknowledge the above deductions. I understand that I may submit an appeal (Appendix E) to the Head Judge prior to the appeals deadline.

Head Judge Name

Head Judge Signature

Team Captain Name

Team Captain Signature

Appendix E. Request for Clarifications and Appeals

Instructions for Teams: Please provide completed form to the Head Judge prior to the appeals deadline, as announced during the Captains' Meeting. Appeals must only involve your own team.

School Name:

Team Captain(s):

Contact Information:

Briefly describe nature of clarification or appeal:

Head Judge Response:

Head Judge Signature

The Head Judge should update deduction scoring if any appeals are granted.

Appendix F. Competition Eligibility

The purpose of student competitions is to provide student members career-enrichment opportunities to gain hands-on, practical experience and leadership skills. Society Competitions are an important and special opportunity to showcase the engineering and professional skills of student teams. As such, mutual respect is required for all stakeholders, including competitors, judges, hosts, and guests. Invitations to the Student Symposia and the Society-wide finals competitions/ ASCE Student Civil Engineering Championships are a privilege, not a right. Failure to act professionally can result in sanctions, disqualifications, and loss of invitations.

Please note that the requirements for eligibility for Society-wide finals competitions are more stringent than the requirements for participation at the student symposia competitions.

Student Chapter Eligibility for Student Symposium Competition

The following qualifications are required of all ASCE Student Chapters to compete at the Student Symposium Competitions:

An ASCE Student Chapter must:

1. Be in good standing with ASCE:

- a. Have paid their annual dues, as received by ASCE, no later than the start of their Student Symposium.**
- b. Have submitted their student chapter's full Annual Report or EZ Annual Reporting Form no later than February 1, 11:59 p.m. EST.**

Student Chapter Eligibility for ASCE Society-wide Finals Competition

The following qualifications are required of all ASCE Student Chapters in order to advance to the ASCE Society-wide Finals Competition:

An ASCE Student Chapter must:

1. Be in good standing with ASCE:

- a. Have paid their annual dues, as received by ASCE, no later than February 1, 11:59 p.m. EST.**
- b. Have submitted their student chapter's full Annual Report, no than February 1, 11:59 p.m. EST and have received a minimum score of 25 points out of a possible 100. Student Chapters that submit an EZ annual reporting form do not qualify to advance on to competition finals; and**

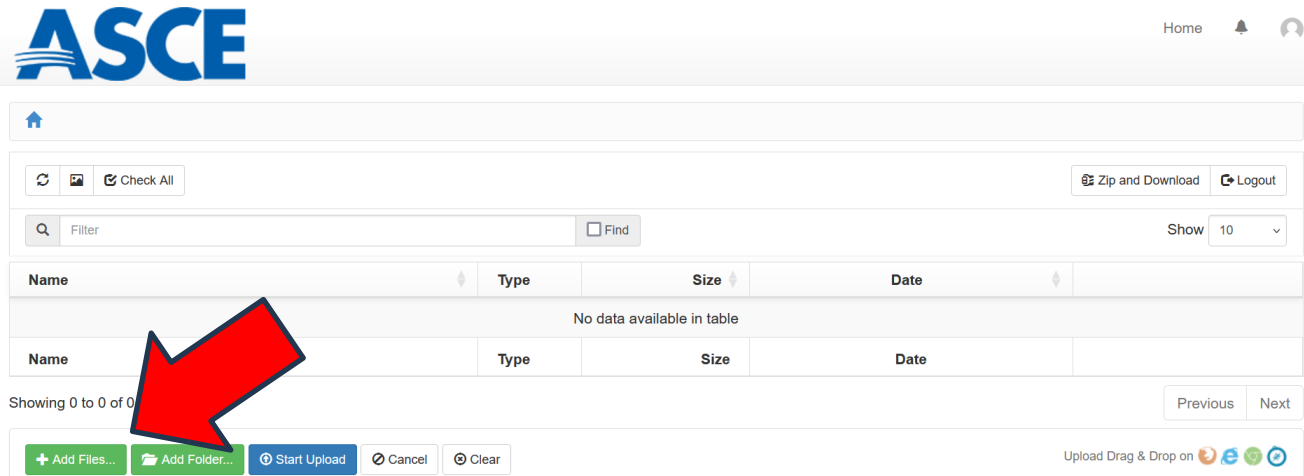
2. Attend and participate in their assigned Student Symposium as shown through their school's:

- a. On-time attendance and active participation by a member of the ASCE Student Chapter at the Student Symposium Business Meeting.**
- b. Participation in the Student Symposium Paper Competition, including submission and presentation by a member of the ASCE Student Chapter. Note that any papers/presentations created for any other competition do not count as an entry into the Student Symposium Paper Competition.**

Questions regarding eligibility should be directed to student@asce.org.

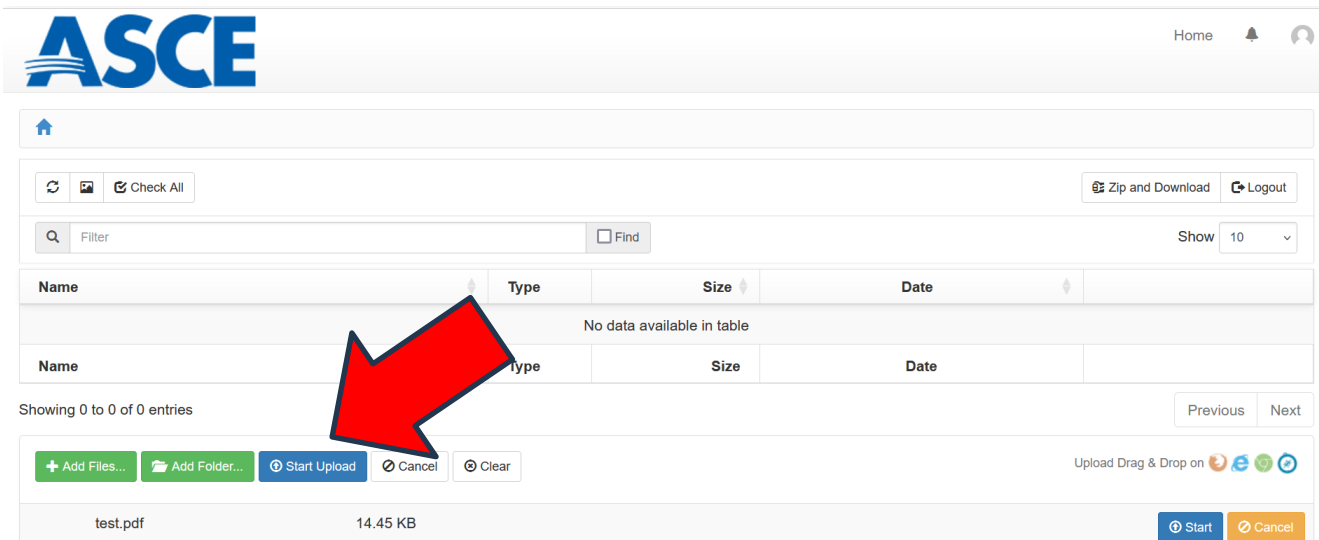
Appendix G. Cerberus Upload Guidance

To add files to your Cerberus folder (secure link provided by ASCE), you can either click the **+Add Files** button and then browse to find the files to upload or drag and drop files to the area directly below the **+Add Files** button.



The screenshot shows the ASCE Cerberus interface. At the top is the ASCE logo and navigation links (Home, notification bell, user profile). Below is a toolbar with icons for refresh, folder, and 'Check All', along with 'Zip and Download' and 'Logout' buttons. A search bar with 'Filter' and a 'Find' button is present, along with a 'Show 10' dropdown. A table with columns 'Name', 'Type', 'Size', and 'Date' is shown, with a message 'No data available in table'. Below the table, it says 'Showing 0 to 0 of 0'. At the bottom, there are buttons: '+ Add Files...', '+ Add Folder...', 'Start Upload', 'Cancel', and 'Clear'. A red arrow points to the '+ Add Files...' button. To the right of these buttons is a section for 'Upload Drag & Drop' with social media icons.

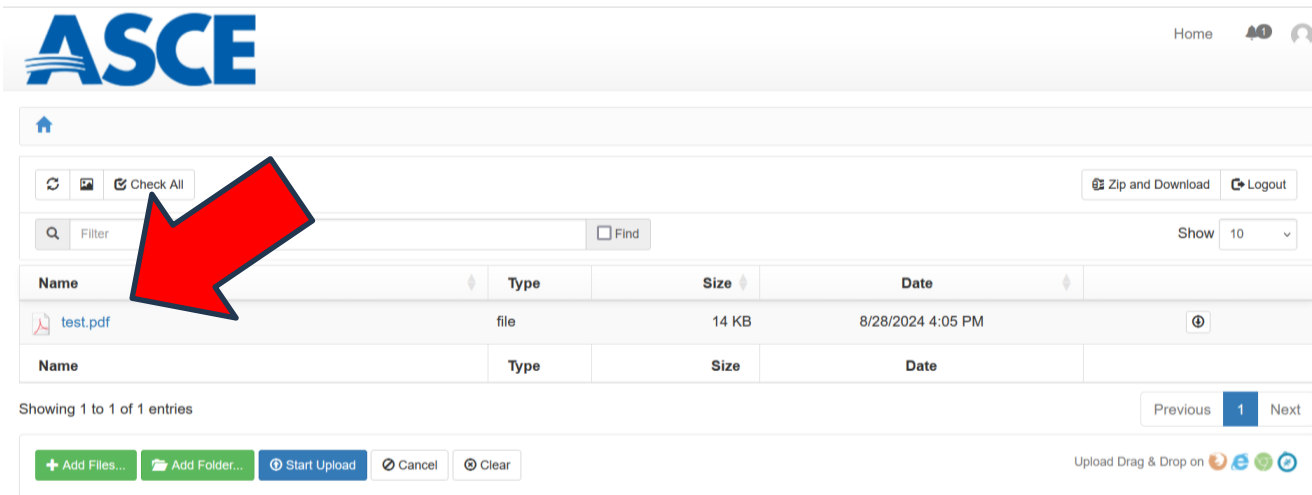
The selected (or dragged and dropped) files will appear in the upload area. To upload the file into the folder, click **Start Upload**. (To delete the uploaded file from the upload area, click **Cancel**.)



The screenshot shows the ASCE Cerberus interface with a file 'test.pdf' (14.45 KB) uploaded. The table now has one entry. A red arrow points to the 'Start Upload' button. The 'test.pdf' entry has a 'Start' button (blue) and a 'Cancel' button (orange) to its right.

Name	Type	Size	Date
test.pdf		14.45 KB	

When the file has been successfully uploaded, the name of the file will appear under “name”.



ASCE

Home

Check All

Zip and Download

Logout

Filter

Find

Show 10

Name	Type	Size	Date
test.pdf	file	14 KB	8/28/2024 4:05 PM

Showing 1 to 1 of 1 entries

Previous 1 Next

Add Files... Add Folder... Start Upload Cancel Clear

Upload Drag & Drop on

Need help?

If your team needs modifications or deletions to Cerberus uploads, send an email to jupmeyer@asce.org with a request stating, for the file that you want deleted:

1. the location (folder path), and
2. the exact file name.

Note: ASCE staff will only delete files via this request. If modifications (i.e., name changes, file updates, move file to another folder) are desired, you will have to request deletion and upload the updated version.

Note: Requests made after the competition submission deadline may be subject to Deductions.