

ACEC ARIZONA'S ENGINEERING EXCELLENCE AWARDS

The American Council of Engineering Companies of Arizona's (ACEC Arizona) annual Engineering Excellence Awards (EEA) competition recognizes engineering firms for projects that demonstrate an exceptional degree of innovation, complexity, achievement, and value.

ACHIEVING STATEWIDE RECOGNITION

ACEC Arizona's Engineering Excellence Awards competition showcases the year's top engineering achievements to a statewide audience of clients, industry leaders and key decision-makers. All submissions are recognized and highlighted at the 2022 Engineering Excellence Awards Gala on Saturday, October 22, 2022 at the Phoenix Zoo (455 N Galvin Parkway, Phoenix, Arizona 85008.)

Engineering Excellence Awards entries are accepted in one of 11 project categories:

- Studies, Research and Consulting Engineering Services
- Building/Technology Systems
- Structural Systems
- Surveying and Mapping Technology
- Environmental
- Waste and Storm Water
- Water Resources
- Transportation
- Special Projects
- Energy
- Industrial and Manufacturing Processes and Facilities

In each category, small projects (total project construction budget under \$2.5 million) will be judged separately from large projects (total project construction budget over \$2.5 million.)

A diverse panel of judges possessing a vast array of built environment and technical expertise convene to evaluate and rank submissions for engineering excellence. The panel then selects top award winners in each category, including two Grand Awards (one large project, one small project) and Honor Awards. One Judge's Choice Award will be selected from the Grand Award winners. The Judge's Choice Award will be announced at the **ACEC Arizona Engineering Excellence Awards Gala** as the top winner selected by the judges, whose decision is considered final. Awards will be presented to the clients/owners and entering firms.

All entries are eligible for the People's Choice Award, which will be awarded based on voting by Gala attendees. Project panels will be displayed during the cocktail reception, and the winner announced during the Gala.

Award recipients (Grand and Honor) must have a firm and/or client representative in attendance to receive on-stage recognition at the Gala.

All projects are rated on the basis of: uniqueness and/or innovative application of new or existing techniques; future value to, and enhancing public awareness/ enthusiasm for the engineering profession; social, economic, and sustainable development considerations; complexity; and successful fulfillment of client/owner's needs, including schedule and budget.

ELIGIBILITY

Projects entered in the Engineering Excellence competition must have been managed from an Arizona-based office, and may have been executed anywhere in the world. Any engineering or surveying firm located in Arizona is eligible to submit a project. Membership in ACEC Arizona is not required.

GENERAL CRITERIA

1. Engineering or surveying projects that have been recognized in the awards programs offered by other state or national organizations are welcome to participate in the ACEC Arizona Engineering Excellence Awards competition.
2. Projects entered in the competition may have been executed anywhere in the world and managed by an Arizona office. Projects submitted in the categories of (A) Studies, Research and Consulting Engineering Services or (D) Surveying and Mapping must have been publicly disclosed by the client between August 1, 2020 and July 31, 2022. Construction of projects (all other categories plus applicable projects in D) Surveying and Mapping) must have been substantially completed and ready for use between August 1, 2020 and July 31, 2022. See award categories section for the full listing of all eligible categories.
3. Entries in the state competition may be placed in any one of the 11 categories. The entering firm must select the one category that is most appropriate. A project may be entered only once in any category. However, after a project entered in Studies, Research and Consulting Engineering Services has been constructed, it may be entered in a different category in the year when eligible.
4. Each entry must consist of four components:
 - Part 1: Project entry (online submission only) and fees
 - Part 2: Project entry, including:
 - Online electronic submission
 - Photographic display panel

Non-compliance with the rules may disqualify an entry. Please read the requirements thoroughly.

Note: See Preparing Your Entry for the Engineering Excellence Awards.

5. ACEC Arizona will not be responsible for any damages to or loss of an entrant's official electronic entry, or photographic display panel.
6. The ACEC Arizona Engineering Excellence Awards Committee reserves the right to determine, and change if necessary, the eligibility and category classification of any entry.

JUDGING

Entries will be judged on the basis of:

- Overall engineering excellence
- The work performed by the entering firm only
- The rating guidelines listed

AWARDS

All submissions are considered Honor Award winners. The panel of judges will select the winners at their discretion: one small project and one large project Grand Award will be given in each category. A Judges' Choice Award will be selected from the Grand Award winners. The Judge's Choice Award will be announced at the Gala as the top winner selected by the judges, whose decision is considered final. All entries are eligible for the People's Choice Award, which will be awarded based on voting by Gala attendees. Awards will be presented to the clients/owners and entering firms submitting the winning entries.

PUBLICITY

The public relations and marketing value of participation in the state Engineering Excellence Award program is substantial. All state winners will be highlighted in ACEC Arizona's public relations program, which benefits all Arizona engineering firms. Working with participating firms, ACEC Arizona representatives will contact local media to announce winners and their awards. Through state efforts, display panels may be exhibited in such public venues as city and state administrative buildings, universities, shopping centers and office buildings. These activities enhance direct business development benefits for state award winners and all entering firms. Further benefits can be gained through feature stories presented in firm brochures, newsletters and other publications.

RATING GUIDELINES FOR JUDGING

Each entry will be evaluated based on the following five categories, which are key elements of the project description text required in the electronic submittal described below.

1. Uniqueness and/or innovative applications of new or existing techniques
2. Future value to the engineering profession and enhanced public awareness/enthusiasm of the role of engineering
3. Social, economic and sustainable development considerations
4. Complexity
5. Successful fulfillment of client/owner needs

RATING GUIDELINE DEFINITIONS

1. Uniqueness and/or Innovative Applications of New or Existing Techniques:
 - a. Does the entrant's contribution to the project demonstrate the use of a new science or a breakthrough in the general knowledge of engineering?
 - b. Does the entrant's contribution to the project represent a unique application of new or existing technology, techniques, materials or equipment?
2. Future Value to the Engineering Profession and enhanced public awareness/enthusiasm of the role of engineering:
 - a. Will the entrant's contribution to the project redefine current engineering thinking?
 - b. Does the entrant's project increase public awareness/ enthusiasm about the role of engineering in their everyday lives?
3. Social, Economic and Sustainable Development Considerations:
 - a. Do the solutions identified produce secondary benefits of value to the community environment?
 - b. Does the entrant's approach provide society with social, economic, or sustainable development benefits?
 - c. Does the entrant's contribution to the project improve the health, safety or welfare of the public or affected environment?
4. Complexity:
 - a. Did the entrant's efforts successfully address highly complex criteria or unique problems?
 - b. Were extraordinary problems of site, location, hazardous conditions, project requirements, or similar elements present?
 - c. Did the entrant's solutions require the use of out-of-the- ordinary technology or ingenuity for achievement of the project's goals?
5. Successful Fulfillment of Client/Owner Needs:
 - a. Did the entrant successfully engage the client/owner in the overall project development process?
 - b. Was it an economical and cost-effective solution?
 - c. How did the final cost compare to the original budget estimate?
 - d. How closely does the entrant's solution meet the total goals of the client/owner?
 - e. Did the entrant meet the client's time schedule?

PREPARING YOUR ENTRY

This section describes all required submission materials for entering the 2022 ACEC Arizona Engineering Excellence Awards competition. All materials must be submitted exactly as designated below. Digital files must be PC compatible and appropriate to the information being submitted (i.e., Microsoft Word for text, high resolution JPEGs, photos or other images, PowerPoint, Adobe PDFs, etc.).

If the submission does not meet the requirements listed, it may be disqualified.

If any part of an entry does not meet the requirements listed, that portion of the entry may not be presented for judging. Please follow the guidelines.

No reference to other awards is permitted in your submitted materials.

DATES TO REMEMBER

- August 12, 2022 -
 - Part 1: Official Entry Forms and entry fees due to ACEC Arizona via online web portal.
 - Part 2: Completed entries (submitted via online web portal) and photographic display panels are due to ACEC Arizona as instructed in the Call for Entries. All materials submitted for judging become the property of ACEC Arizona and may be used in publications or other promotional. Submitted materials will NOT be returned. Materials received after August 12th will NOT be accepted.
- August 15- August 26, 2022 – Judging
- August 29, 2022 - Winners notified
- October 22, 2022 – ACEC Arizona's Engineering Excellence Awards Gala at the Phoenix Zoo

CALL FOR ENTRIES: CATEGORIES

Each category shown below has two subcategories: Large Project and Small Project. Small projects are defined as having a total project construction budget that does not exceed \$2.5 million. Awards will be given in both the small and large project category.

A. STUDIES, RESEARCH AND CONSULTING ENGINEERING SERVICES. Non-design services, projects not involving the preparation of construction documents consisting of but not limited to the following types of projects: New products, materials and technologies; Expert testimony; Basic research and studies; Computer/software technology; Technical papers; Public outreach/ involvement; Water conservation; Security plans; Project feasibility studies/economic/risk; Value engineering

B. BUILDING/TECHNOLOGY SYSTEMS. Mechanical/electrical/ plumbing; Computer/technology; Communications; Acoustics; Software systems; Sustainability or carbon neutrality; Efficiency certification standards, e.g. LEED; Energy efficiency - new and retrofit; Secure facilities (military/ research/correctional)

C. STRUCTURAL SYSTEMS. Foundations; Tunnels; Buildings; Seismic design; Towers; Bridges; Stadiums

D. SURVEYING AND MAPPING TECHNOLOGY. Geometrics, ALTA, land title and rights surveys; Control, GPS, monitoring or construction surveying; Survey mapping, GIS/LIS, photogrammetry

E. ENVIRONMENTAL. Hazardous waste; Solid waste; Restoration/reclamation/remediation; Air quality; Noise; Recycling; Waste pond management; Carbon sequestration and trading; Mitigation

F. WASTE AND STORM WATER. Wastewater collection/treatment and disposal; Residuals management and reuse; Graywater systems; CSOs; Mine tailings; Agricultural; Storm water management; Erosion control

G. WATER RESOURCES. Hydraulics, hydrology; Surface and groundwater supply development; Treatment; Transmission, distribution & storage; Watershed management; Water use reduction; Flood risk management; Climate adaptation; Coastal and eco-system restoration; Locks/dams/water control structures; Irrigation

H. TRANSPORTATION. Highways; Rail; Airports; Marine/ports; Public transit; Intermodal facilities

I. SPECIAL PROJECTS. Safety and security; Corrosion protection/cathodic protection; Program and construction management; Land development; Trenchless technologies/directional boring; Recreational facilities; Subsurface engineering

J. ENERGY. Transmission and distribution; Power generation; Renewable energy; Cogeneration; Energy storage technologies; Energy usage reduction programs; Demand side management

K. INDUSTRIAL AND MANUFACTURING PROCESSES AND FACILITIES. Petrochemical; Biotech; Manufacturing; Heavy industry; Industrial waste; Materials handling; Mining, metallurgy, mineralogy

SUBMISSION REQUIREMENTS

The following components must be submitted in order to qualify for judging:

| ITEM | | DUE DATE | METHOD OF DELIVERY |
|-------------------------|--|----------------------------|---|
| PART 1 of Project Entry | Electronic Entry Form, Consent Form, and Fees | August 12, 2022 5:00 PM | Submitted via ACEC of Arizona's Awards Submittal Portal Online Submission Opens July 1, 2022 |
| PART 2 of Project Entry | Electronic Submission | August 12, 2022 5:00 PM | Submitted via ACEC of Arizona's Awards Submittal Portal |
| | USB Flash Drive Containing Submission and Awards Video Materials | August 12, 2022 5:00 PM | Delivered to ACEC of Arizona 532 W. McDowell Road Phoenix, AZ 85003 |
| | Photographic Display Panel | August 12, 2022 5:00 PM | Delivered to ACEC of Arizona 532 W. McDowell Road Phoenix, AZ 85003 |

****NOTE:** No QR Codes or embedded links are permitted in any portion of an award submission**

While similar in most guidelines and submission requirements, ACEC Arizona's 2022 EEA Call for Entries is NOT fully consistent with ACEC National requirements. If your firm plans to enter the ACEC National EEA competition, carefully review the ACEC National Call for Entries.

PART 1: ELECTRONIC ENTRY FORM, CONSENT FORM, AND FEES

Due August 12, 2022 by 5:00 PM

Located on the ACEC of Arizona Submission Portal (the online submission portal will open July 1, 2022.)

Furnish all information requested below for each entry (signatures by the submitting firm(s) and the client(s)/owner(s) are required.) Firm, project, and client/owner's name should be entered as they are to appear on the award.

ABOUT THE PROJECT

- Project name (limit of 45 characters)
- Select category and appropriate subcategory
- Project location (address, city, state)
- What was the Entrant's role in the project?
- Scheduled and actual completion/use dates
- Project cost information
 - For entries in categories (A) Studies/Research and Consulting Engineering Services, (D) Survey and Mapping Technology, provide budgeted and actual costs
 - For entries in all other categories, provide construction costs for total project and entrant's portion of the project:
 - Total project budget
 - Total project actual
 - Entrant's portion of total project budget
 - Entrant's portion of total project actual

Budgeted and/or actual costs may not apply to some studies/research/consulting engineering services entries and some projects in the survey and mapping technology category)

NOTE: With the exception of projects in (A) Studies, Research and Consulting Engineering Services and (D) Surveying and Mapping Technology, costs reflected below are always construction costs and are NOT engineering fees. If your firm was responsible for the entire engineering design of the project, then the Entrant’s Portion of the Total Project Budget amount and the Entrant’s Portion of the Total Project Actual Cost amount will be the same as the Total Project Budget amount and Total Project Actual Cost amount.

If your firm was not responsible for the entire engineering-design of the project, then the Entrant’s Portion of the Total Project Budget amount and the Entrant’s Portion of the Total Project Actual Cost amount should be the part of total project construction cost your firm was responsible for. (e.g., a mechanical engineering firm was responsible for \$12M of a total project budget of \$40M. \$12M is the Entrant’s Portion of the Total Project Budget. \$40M is the Total Project Budget.)

- Was this project awarded through the QBS process?

ABOUT THE FIRM(S) SUBMITTING THE PROJECT

- Entering firm
- Firm CEO
- Firm representative
- Address (street, city, state, zip)
- Phone (office and cell)
- Email

CONSENT TO SUBMIT

Once the electronic entry form is completed, download the Project PDF for Signature from the Submission Dashboard for signature by both the entrant and the client/owner (senior executives/officials), stating that the submitted project was substantially completed and ready for use between August 1, 2020 and July 31, 2022. Electronic signatures are accepted. This form can then be uploaded as part of the electronic entry submission. Specifications: PDF format.

Authorization and signatures are required from two parties:

- Entering Firm
 - Name, title, and signature of Senior Executive/Principal authorizing submission
 - Include address (city, state, zip; no PO Box), phone, and email
- Client/Owner(s) of the Project
 - Client/Owner(s) company name
 - Name, title, and signature of Client/Owner Representative authorizing submission
 - Include address (street, city, state, zip), phone, and email

KEY PARTICIPANTS

List the key participants on the project including firm name, address, phone number, website, and e-mail address of each participant. Include contractors, subcontractors, other engineers, architects, and designers significantly involved in the project.

FOR PROMOTIONAL PURPOSES

Provide social media sites for the submitting firm and client/owner(s) of the project.

| 2022 EEA ENTRY RATES | 1 st Entry | Additional Entries |
|----------------------|-----------------------|--------------------|
| ACEC Arizona Members | \$350 | \$200 |

| | | |
|--------------------------|-------|-------|
| Non-ACEC Arizona Members | \$750 | \$500 |
|--------------------------|-------|-------|

NOTE: Entry fees may be paid online via Visa, Master Card, American Express or Discover or via check made out to ACEC of Arizona and mailed to 532 West McDowell Road, Phoenix, Arizona 85003.

PART 2: OFFICIAL SUBMISSION, ELECTRONIC ENTRY

Due August 12, 2022 by 5:00 PM

There are three components of Part 2 of the project entry process:

- I. Electronic Submission
- II. USB Flash Drive Containing Submission & Awards Video Materials
- III. Photographic Display Panel

I. ELECTRONIC SUBMISSION

All project information must be submitted electronically, along with the USB materials requested in Section II. Each document must be uploaded separately through ACEC of Arizona's Awards Submittal Portal (the online submission portal will open **July 1, 2022**.) The electronic entry must contain all of the following items:

01 CLIENT/OWNER LETTER (one page maximum)

Letter addressed to ACEC of Arizona describing the relationship of the client/owner and entrant in the development of the project and how it exceeded the client/owner's needs. Specifications: PDF format.

02 EXECUTIVE SUMMARY (one page maximum)

Overview of project. Describe the problem and solution; project title and entry category must appear at the top of the page. Specifications: 8.5" x 11"; 1" side margins; single-spaced text; 12 pt. minimum size font; PDF format.

03 PROJECT DESCRIPTION (six pages maximum)

Tell the story of the project. Address items a, b, c, and d as listed below; project title, entry category, and page number must appear at the top of each page. Entrants may use text, photos, graphics, or charts as needed. Specifications: 8.5" x 11"; 1" side margins; single-spaced text; 12 pt. minimum size font; PDF format.

Text must include the following:

- a. **ROLE OF ENTRANT'S FIRM** in the project.
- b. **ROLE OF OTHER CONSULTANTS** participating in the project.
- c. **ENTRANT'S CONTRIBUTION TO THE PROJECT:** A brief description of the entrant's contribution addressing each of the following Rating Guidelines (refer to "Rating Guideline Definitions" for detailed rating and judging information):
 - Uniqueness and/or innovative application of new or existing techniques.
 - Future value to the engineering profession and enhanced public awareness/enthusiasm of the role of engineering.
 - Social, economic, and sustainable development considerations.
 - Complexity.
 - Successful fulfillment of client/owner needs.

Include total project budgeted cost, total project actual cost, entrant's portion of the budgeted cost, entrant's portion of the actual cost, scheduled and actual dates of completion (as indicated on the Official Entry Form).

d. SUMMARY: Describe in layman's terms why this project is worthy of special recognition (word count between 100-500 words.) Explain all factors that comprise the project's uniqueness and complexity, such as innovative engineering, challenges faced, and overall social impact. **NOTE:** This summary will provide the basis for all ACEC Arizona publicity as related to the project.

04 KEY PARTICIPANTS

List the key participants on the project including firm name, address, phone number, website, and e-mail address of each participant. Include contractors, subcontractors, other engineers, architects and designers significantly involved in the project. Specifications: 8.5" x 11"; 1" side margins; single-spaced text; 12 pt. minimum size font; PDF format.

05 PHOTOS OR GRAPHICS

At least 10 different photos or graphics with captions describing the subject matter (refer to "Photograph Guidelines" below). Captions shall begin with: Photo 1, Photo 2, etc. Specifications: JPEG file; RGB format; High Resolution (300dpi).

Photo Captions: Once photos are uploaded, upload captions for the 10 images on the online submittal site. USB: Provide 10 captions in a Word format.

Photograph Guidelines: Because the photographs will be projected on a large screen during the Gala, it is very important to submit sharp, high-quality, high-resolution images.

Five of the photographs must show the completed project and provide the highest level of visual impact for publicity. Five of the photographs must display the planning, startup, and/or construction phases of the project.

06 PHOTOGRAPHIC DISPLAY PANEL

Small-size copy of the photographic display panel. See Display Panel Specifications in item III. Specifications: JPEG file; RGB format; High Resolution (300dpi).

07 MEDIA LIST

Email addresses of local newspapers, TV, radio stations and other media outlets where your project can be highlighted. If the entrant prefers to handle all local and national publicity for the project, include a statement to that effect. Specifications: Excel file; 8.5" x 11" or 11" x 17".

08 100 WORD NARRATIVE

Narrative of no more than 100 words (no acronyms, abbreviations or bullets, please) for use during the audiovisual presentation at the Gala. Specifications: 8.5" x 11"; 1" side margins; double-spaced text; 12 pt. minimum size font; PDF format.

09 POWERPOINT PRESENTATION

PowerPoint file, containing 12 slides including a title slide with ACEC Arizona logo, firm name, project name, project location: city and state, followed by 10 slides that include photos 1 through 10 (same photos as Item 5 above), a final slide that contains the photographic display panel. This presentation will be used by the judges as part of their evaluation. Do not include sound, transition effects, animation, preset timing, or slide show sequencing.

10 SUPPLEMENTARY REPORT

Include a supplementary report containing the findings portrayed with text, graphs, or photos, as needed.

NOTE: This report is ONLY required for (A) Studies, Research and Consulting Engineering Services submittals. Specifications: PDF format.

II. USB FLASH DRIVE

USB Contents and Specifications: One USB flash drive (to be sent to ACEC Arizona with Photographic Display Panel.) Include labels on USB and Photographic Display Panel with firm name and address, project name, and category. Test the USB flash drive on different computers to ensure that it is not machine-dependent.

Submission Materials

Include each of the following items in the file type indicated, in the order given, and with the titles shown:

- 01 Cover Sheet
- 02 Client/Owner Letter
- 03 Executive Summary
- 04 Project Description
- 05 10 Photos or Graphics (Photo Captions: submitted separately in a Word document)
- 06 Photographic Display Panel (small-size copy)
- 07 Media List
- 08 100 Word Narrative
- 09 PowerPoint Presentation
- 10 Supplemental Report

Awards Video Materials

The awards video requirements are completely separate from the panel and entry submissions. In order to create a video for your award, we need:

- 01 A minimum of twenty-five (more is better) high-resolution digital photos showing key aspects of or related to the project. These photos are completely separate from the photos required for the entry submission.
- 02 Include a Word document containing a short description of each photo.
- 03 The photos should be created and selected to illustrate key features in the project narrative, and should be different (i.e., not essentially variations of the same shot.) Include before and after shots of the project.
- 04 Include all photos shown on your Photographic Display Panel, as well as a digital file of your display panel.
- 05 Include your company logo in either Illustrator (.ai) or high resolution Photoshop (.psd) file.

III. PHOTOGRAPHIC DISPLAY PANEL

Panel text and photos should demonstrate the challenges, solutions, innovation, complexity and unique aspects of key project elements. The panel should be prepared with high-quality photos and graphics with minimal text (to be sent to ACEC Arizona).

All entries are eligible for the People's Choice Award, which will be awarded based on voting by Gala attendees. Project panels will be displayed during the cocktail reception, and the winner announced during the Gala. The panel should convey key, succinct messages related to the project and graphics conveying the work conducted to quickly capture attendees' attention and impact their decision.

Photographic panel requirements:

1. **PANEL SIZE:** 30" x 30" square, mounted on gatorboard (black or white.) NOTE: Framed panels will NOT be accepted.
2. **PHOTOS/GRAPHICS:** Maximum of 6 photos and/or graphics shall be used on the panel. Each image shall be a minimum of 7" x 5" or 35 square inches in area. A background photo is not considered a photograph.
3. **TEXT/FONTS:** Panel text may not exceed 250 words total, not including captions. Font sizes: 32 pt. minimum font for text or descriptions; 28 pt. minimum font for captions and graphics.
4. **REQUIRED ELEMENTS:** The front of the panel shall also include the ACEC Arizona logo (download from ACEC Arizona website), title and location of the project or study, client/owner's name and location, and entering firm's name and location (minimum 32 pt. font size).
5. **BACK OF PANEL LABEL:** Add a label to the back of the panel with the name and address of the entrant's firm, the project name, and the category in which the submission will be judged.