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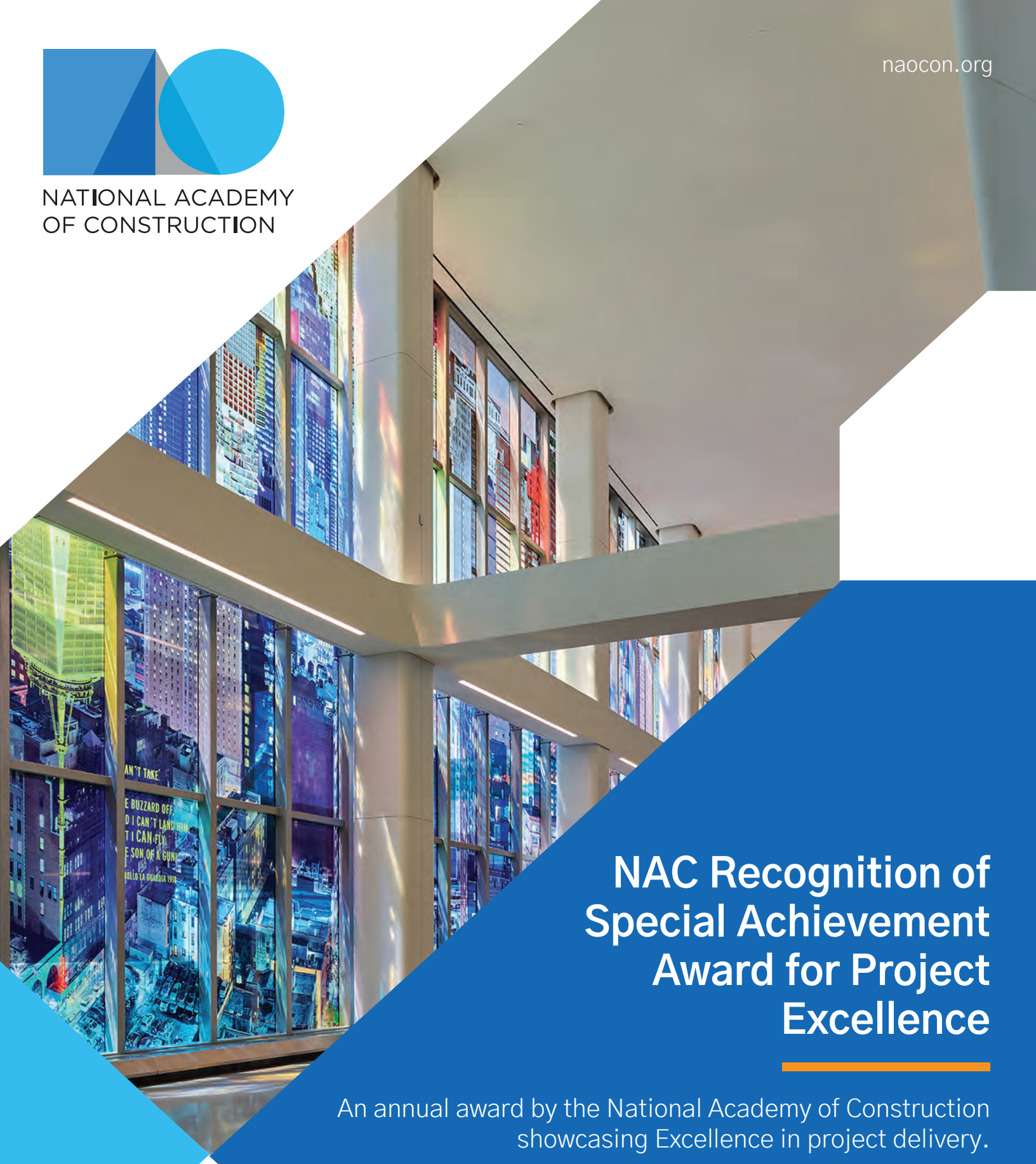

NAC Recognition of Special Achievement Award for Project Excellence

An annual award by the National Academy of Construction showcasing Excellence in project delivery.

TRANSFORMING THE INDUSTRY TO BUILD A BETTER NATION

Honoring Outstanding Achievements in Architecture, Engineering, and Construction

In 2020, the NAC Executive Committee approved the creation of a new recognition program: the NAC Recognition of Special Achievement for Project Excellence.

This recognition was created to demonstrate NAC's commitment to build and grow broad public knowledge and support of the achievements of the architectural, engineering, and construction industry and their effects on the built environment and society.

The NAC's purpose in awarding this recognition is to highlight the creativity, innovation, vision, and accomplishment of the practitioners in this community of interests by identifying and celebrating those achievements.

Achievements may be projects, techniques, methodologies, technologies, or practices that have been implemented in the past decade and that have married many aspects of planning, design, construction, management, and operations into one significant achievement.

This booklet further explains the NAC framework, selection process, criteria, timing, and obligations of the Recognition. It also includes the nomination format and examples of project type.

2025 NAC'S Recognition of Special Achievement Award:

The Wyoming State Capitol Project

The Wyoming State Capitol Project was an ambitious venture to preserve, restore, and renovate the Capitol that faced significant challenges including projected costs exceeding the budget by over $50 million and resulting in bringing construction to a standstill. Recognizing the importance of protecting this historic site for both Wyomingites and the nation, the Governor and Capitol Square Oversight Group, selected MOCA Systems, Inc. (MSI) to join general contractor JE Dunn and architect HDR Architecture to realign the project, ensuring its successful completion within the allocated $300 million budget and six-year timeline.

Historic restoration projects help preserve culture and history while giving new life to existing buildings for economic, environmental, and socio-cultural benefits. By bridging the gap between modern functionality and the preservation of heritage, the Wyoming State Capitol project made significant strides in improving the impact of "The People's House."

How Innovation, Collaboration, and Planning for Complexity Transformed a National Historic Landmark

Restoring a 130-year-old, historically significant state capitol building is a complex project and the project team had to overcome many challenges including:

- Balancing the budget by dramatically cutting design costs: Careful contingency management saved $50 million and delivered the project $1 million under budget
- Redesigning the basement to add functionality while accommodating mechanical and electrical equipment
- Preserving the historic elements of the structure of the Capitol while expanding its public spaces
- Restoring original high ceilings once lost to air conditioning equipment installation

Before the restoration project commenced, the Capitol's legislative committee rooms barely accommodated 25 citizen attendees. These small committee meeting rooms severely restricted public attendance for debates and discussions and significantly impacted Wyoming residents' ability to voice their concerns and offer input to legislators.

By adapting the existing structure and developing the underground extension, the renovation provided two 45-capacity, two 100- capacity, four 75-capacity, and one 300-capacity committee rooms. For the first time in 130 years, the people of Wyoming now directly participate in the legislative process without space restrictions.

The Capitol project required extensive demolition and renovation including new modern restrooms, improved egress and accessibility and new state-of-the-art safety systems. To avoid disruption and delays while ensuring employee and worker safety, JE Dunn carefully planned mechanical, electrical, and structural work for nights and weekends. The team further enhanced safety by facilitating trade partner engagement with OSHA to discuss and resolve potential hazards. This collaboration resulted in an outstanding safety record for the project.

Among the greatest challenges for this project was to improve energy efficiency while preserving the Capitol's historic architecture. Solutions included:

- Removing a large atrium and glass ceilings to reduce heating and cooling needs.
- Installing an efficient central plant to serve Capitol Square and other state facilities.
- Introducing LED lighting, including the conversion of historic fixtures.
- Designing exterior curtain walls to meet modern energy standards.
- Sourcing stone locally to reduce carbon emissions from transportation.

By restoring the historic integrity of the Capitol and enhancing its functionality, the project enriched the cultural impact of "The People's House." Every addition, change, or modification ensured that the public would have better access to their governing bodies. Moreover, the restoration of the chamber where women were first granted the right to vote in the U.S. and the world underscores the importance of preserving historical narratives for future generations. The Wyoming State Capitol project stands as a symbol of equality and embodies the significance of revitalizing National Historic Landmarks to empower communities.

A large, complex, and socially important project like the Wyoming State Capitol required inspired thinking, creative planning, and unwavering team collaboration. By balancing high-impact interventions with innovative solutions, the team served modern needs without sacrificing history. In 2019, the project was delivered under budget and in time for the Wyoming Statehood Day Celebration.

2024 NAC'S Recognition of Special Achievement Award:

Isabella Dam Safety Modification Project

The Isabella Dam Safety Modification Project is one of the largest dam modifications in the United States over the past few years. The $350 million construction contract, overseen by the US Army Corp of Engineers (USACE), was successfully completed in the summer of 2023. The USACE has a portfolio of dams that exceed 700 in number and the Isabella Lake Dam was rated near the top in risk.

Failure of the existing Lake Isabella Dam would affect downstream communities particularly the city of Bakersfield which has a population of approximately 407,000 inhabitants. The flood area also includes Interstate 5 which is a major a north-south commercial route and several active oil fields which if flooded will create an environmental catastrophe. The Lake Isabella Dam Safety Modification Project addressed deficiencies in the dam structure and provided improvements that enhance its ability to provide flood risk damage reduction to the downstream communities.

The dam had been under an operating/reservoir pool restriction since 2006 and upon completion of this project in 2023, the restriction was lifted, just in time to capture "great melt" runoff. The reservoir is now operating at is full capacity. This reservoir also serves as a reliable source of agricultural irrigation and a popular recreational space. Just as important, this project left a lasting impact in the local community as USACE renovated several recreational sites and campgrounds around the lake. In addition, USACE built several buildings for the local Forest Services district including a new administration building, a new fire station, and a forthcoming visitor center.

Isabella Dam consists of 185-foot and 100-foot high main and auxiliary dams, respectively. As part of the modifications, both dams were raised 16 feet. The project addressed three primary failure modes in the existing dam that included (1) overtopping failure, (2) seismic failure, and (3) seepage erosion failure; all failure modes that could lead to significant life and economic losses in the event of a dam failure. The project scope primarily included modifications of both the Main Dam and Auxiliary Dam and construction of a new Emergency Spillway. The Emergency Spillway included an iconic 28-foot-high labyrinth weir. To make space for the Emergency Spillway 3 million cubic yards of material were excavated.

The most significant aspect of innovation on this project's design is the labyrinth weir. The new Isabella weir structure serves as a pseudo-dam — built to regulate water flow through the emergency spillway rather than hold it back, compared to the main and auxiliary dams. At three stories tall, the concrete weir was placed in a roughly 1,300-foot-long opening, with an effective length (if straightened out) of nearly 3,000 feet. The zig-zag configuration provides much more length of weir in a confined area and increases the amount of water that can be safely discharged.

The project, which was constructed during the COVID pandemic and during a period of severe wildfires, was in essence a hazardous mining operation with on-site blasting, dive operations, and worker protection against silica dust. Despite this, the project achieved over 2.6 million labor hours worked with no significant accidents or injuries. The team took proactive steps identifying areas to address before they became major issues which helped build and sustain a culture of safety. Additionally, the project significantly reduced its carbon footprint by producing the majority of the construction materials onsite. All dam embankment materials and concrete aggregates were quarried from the Emergency Spillway excavation. An onsite rock crushing plant produced sand, gravel, crushed stone, and all the zoned embankment materials. All concrete was batched and cooled onsite, and all materials were tested in one of the three onsite material testing laboratories.

The impact of the success of the Lake Isabella Dam Modification project was very well documented. More than a dozen papers were written about the project and accepted by several professional organizations throughout the world, including the United States Society of Dams (USSD), Association of State Dam Safety Officials (ASDSO), Construction Management Association of America (CMAA), Comité Nacional Español de Grandes Presas (SpancolD), and the International Commission on Large Dams (ICOLD). Similarly, several pieces about the project were published by the American Society of Civil Engineers (ASCE).

Further, the project has received several awards such as USSD 2023 Excellence in Construction Project Award, CMAA 2023 Project Achievement Award, ASDSO 2023 National Rehabilitation Project of the Year Award, American Council of Engineering Companies 2024 Engineering Excellence Award, US Army Corps of Engineers 2023 Project D

2023 NAC'S Recognition of Special Achievement Award:

Fargo Moorhead Metropolitan Area Flood Risk Management Project

In 2023, the National Academy of Construction selected the U.S. Army Corps of Engineers (USACE) Fargo-Moorhead Metropolitan Area Flood Risk Management Project as the recipient of its Recognition of Special Achievement Award. For this project USACE's St. Paul District, and its partners, the cities of Fargo, ND, Moorhead, MN, and the Metro Flood Diversion Authority, are working cooperatively to complete this critical project.

This is a generational project which will impact residents of both North Dakota and Minnesota for decades to come. It also provides a road map on how to innovatively address resilience and sustainability in a large civil infrastructure project.

This $3B federal project includes a 30-mile diversion channel with upstream staging and floodwater storage as well as 21 bridges (18 highway, three railroad); two aqueduct structures; nearly 40 miles of levees and floodwalls; three large, gated control structures; 22 miles of dam embankment; four miles of U.S. Interstate-29 raise; and environmental and cultural mitigation and monitoring. The project will provide flood risk management for nearly 260,000 people and 70 square miles of infrastructure in the communities of Fargo, Moorhead, West Fargo, and Horace, ND; and Harwood, MN, and will save the nation millions of dollars annually in flood fighting and potential flood damages.

From concept to construction, USACE and its partners consistently solved challenges on the project, including splitting work between USACE and the non-federal sponsors for simultaneous design and construction. This expedited project completion by approximately 10 years when compared to traditional delivery methods. Additionally, as the first USACE project in the nation to leverage a public-private partnership delivery model, the St. Paul District and its partners are setting the example of how to deliver projects to the nation more efficiently in a resource-constrained environment. Dozens of consultants and construction firms have participated in the effort, showing the strength of the private commitment to the project.

In spearheading the Fargo-Moorhead Metro Area flood risk management project, the St. Paul District exemplifies the kind of innovation and partnership that we strive for as we work to protect communities and engineer solutions for the nation's toughest challenges.

2022 NAC'S Recognition of Special Achievement Award:

La Guardia Terminal B Project

The first winner of the National Academy of Construction (NAC) recognition of special achievement was the "Transforming New York City's La Guardia Airport's Terminal B into a World Class Facility". This project exemplified NAC's commitment to demonstrate the great work and achievements of the architectural, engineering and construction industries and their positive effects on the built environment and society.

The construction of the $4 billion, 1.3 million square foot, La Guardia Terminal B was the first phase of a transformation of New York City's La Guardia Airport. Once described as a "third world airport", La Guardia is now one of the most modern airports in the world.

Under the leadership of the Port Authority of New York and New Jersey and the New York State Governor's office, this enormous achievement brought together dozens of partners, consultants and stakeholders to bring to fruition this complicated project while maintaining existing operations at the airport and continuing construction during the Covid pandemic.

The project used a carefully designed series of complex phasing strategies to minimize impacts on daily airport operations including the use of temporary pedestrian connectors and modular roadway bridges. The construction was sequenced and coordinated with the Airport stakeholders.

The new roadway system was built while maintaining the existing roadway Operation. This included the use of modular, temporary roadway structures Providing passengers with access to the existing terminal while allowing construction of the new roadways. The new roadways were built using an elaborate system of horizontal rails and hydraulic jacks to install 60-ton girders followed by a carefully sequenced bridge deck construction.

The new Terminal was the first airline terminal in the world to achieve to leadership in Energy and Environmental Design (LEED) v4 Gold certification by U.S Green Building Council.

The Terminal includes a four level arrivals and departures hall and two concourses housing 35 new gates. Each of the Concourses is connected to the main terminal by skybridges, which are also an important part of the complex project construction staging. The staged skybridge construction allowed maintaining operations in the existing terminal while the new terminal was built and opened in phases. This is also the first airport in the world to feature dual skybridges over active airfield operations


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NAC Award for Special Achievement for Project Excellence

Instructions

Applications must be submitted electronically to the Honors and Awards Program office, NAC_Awards@utexas.edu by April 30 of the year of award or by completing online at https:// tinyurl.com/3rm5nyyj. The project team may be asked to attend a virtual meeting to answer questions if deemed necessary by the jury. The project must be complete within the past 10 years at the time of the nomination. The jury may consider substantially completed projects which in this instance means that the majority of expenditures and scope has been completed at the time of the nomination and most of the project is being used for its intended purpose. All entries must be in English.

JUDGING CRITERIA

The jury will consider entries on the basis of the following general criteria:

Originality and Innovation
- New or Innovative Application of Technology, Design, Materials, Process/Methods and Construction

Safety Considerations and Performance
- What was the safety record for the project?
- Specific actions taking to reduce safety incidences

Resourcefulness in Planning and Solving Design Challenges
- Complexity of the problem or situation addressed
- Creativity in Solutions

Sustainability Considerations
- Environmental
- Social
- Economic
- Resilience
- Carbon reduction

Project Planning and Delivery Team Alignment
- Financing, budget, and schedule
- Meeting the client's needs
- Budget and schedule adherence

Contributions to the Well-Being of People and broader Communities, Including Aesthetic Value
- Of Particular importance is how this project through its completion has impacted the region and nation

Eligibility

Nominated Achievements must have been implemented in the past decade and must have been recognized with at least one other major honor, recognition or award.

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Who May Nominate

The NAC President/CEO will request nominations from NAC members, as well as members of federal agencies, national laboratories, and other professional engineering, architectural, and construction societies and associations. Nominations can be submitted by NAC members and non-members.

Time Frame for Nomination

The nomination process will be announced in January. Nominations are to be submitted to the NAC President/CEO by April 30.

The Selection Committee will review the nominations and make a selection by July. The Executive Committee will review and act on the recommendation.

The NAC Recognition of Special Achievement for Project Excellence will be awarded at the NAC Annual Meeting. The recipient is expected to provide a project video and make a short acceptance speech during the Annual Meeting.

Selection Committee

The members of the Selection Committee may include the following:

- Chair of the National Academy of Construction
- President/CEO of the National Academy of Construction
- Three past recipients of the Ted C. Kennedy Award
- One member of the NAC Communications Committee
- One member of the NAC Awards Committee
- At least one federal agency representative
- At least one representative of national societies or professional associations

Applications must be submitted electronically to the Honors and Awards Program office, NAC_Awards@utexas.edu by **April 30 of the year of award** or by completing online at https://tinyurl.com/3rm5nyyj.

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