

LERA

Consulting Structural Engineers



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STATEMENT OF QUALIFICATIONS

Firm Profile

Leslie E. Robertson Associates (LERA) is a M/WBE structural engineering firm providing services to architects, owners, contractors, and developers. Since our founding in 1923, we have designed numerous landmark projects across the world, and established a strong reputation for design and technical excellence. Today, LERA's talented professionals continue the tradition of creating innovative, yet constructible and economical structural designs.

Our portfolio includes a wide variety of building types of every size and level of complexity. We have accomplished unique and award-winning designs for new buildings as well as renovations to existing and historic structures. Our services include complete structural designs, feasibility studies, peer reviews, value engineering, blast analysis and design, forensic consulting, and special inspections.

Headquartered in New York City, LERA also operates offices in Mumbai, India and Shanghai, China.

CULTURAL FACILITIES | REPRESENTATIVE PROJECTS



LUCAS MUSEUM OF NARRATIVE ART

Chicago, IL



The Lucas Museum of Narrative Art will be located in the City of Chicago, south of Soldier Field across from Northerly Island. The museum will consist of two main program elements: a museum and an integral parking structure. The Museum program areas will include galleries, central public space, offices, restaurants, an observation floor, theaters, education space, archive space, and MEP space.

Completion Date Active

Owner

Lucas Museum Foundation

Architects

Design Architect: MAD Architects

Architect of Record: VOA Associates Incorporated



BROAD ART MUSEUM

Los Angeles, CA



The Broad is a new contemporary art museum in downtown Los Angeles. The museum is home to the nearly 2,000 works of art in The Broad Art Foundation and the Broads' personal collections, which are among the most prominent holdings of postwar and contemporary art worldwide.

The museum's design merges the two key components of the building: public exhibition space and archive/storage. The "vault," plays a key role in shaping the museum experience from entry to exit. The vault is enveloped on all sides by the "veil," an airy, honeycomb-like structure that spans across the block-long gallery and provides filtered natural daylight.

The overall project consists of 3-stories art museum, with approximately 80,000-sf (7,400-sm) above a parking facility. LERA in collaboration with Nabih Youssef and Associates, Los Angeles.

Construction Cost \$68 million

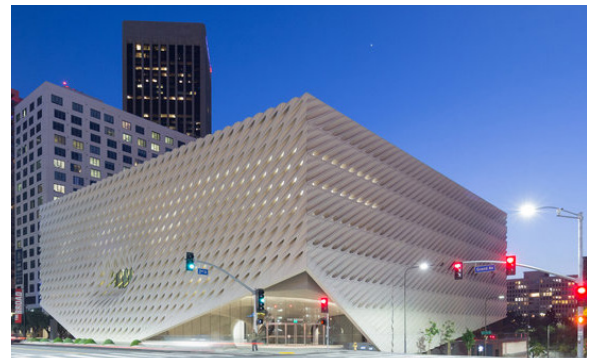
Completion Date Active

Owner

The Broad Art Foundation

Architect

Diller Scofidio & Renfro in Association with Gensler



NASCAR HALL OF FAME AND MUSEUM

Charlotte, NC



The design for the Hall of Fame and Museum evokes the sinuous shape of the racetrack, highlighting the excitement of the sport. A complex structural system featuring curved and sloped forms as motifs was devised to house the project's Great Hall and related exhibits.

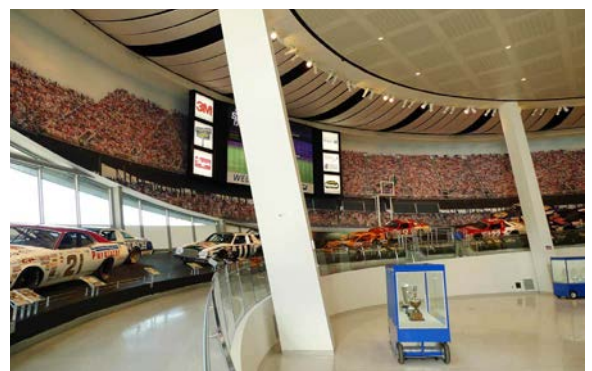
A distinctive architectural feature of the museum is its stainless steel façade, which twists in the form of a Mobius strip to form a unique canopy, spanning 110-ft (33.5-m) over the main entrance.

The project consisted of a five-acre complex. The 175,000-sf (16,250-sm) Hall of Fame and Museum is the centerpiece of the complex. The site also houses a 19-story office tower, a 102,000-sf (9,500-sm) expansion to the Charlotte Convention Center, a bi-level footbridge connecting the Ballroom to the existing Convention Center, a 12,000-sf Studio, and a 1000-car post-tensioned concrete parking garage located below the Ballroom. Long-span roof trusses enable the extra-large Ballroom to be column-free.

Construction Cost \$200 million
Completion Date 2010

Owner
City of Charlotte

Architect
Pei Cobb Freed & Partners



WILLIAM JEFFERSON CLINTON PRESIDENTIAL LIBRARY & MUSEUM

Little Rock, Arkansas



In response to Mr. Clinton's desire to "put things in the light," the William Jefferson Clinton Presidential Library & Museum was designed to be a vibrant place, accessible, highly visible and mutable. The main building takes the form of a glass bridge symbolizing President Clinton's theme of "Building a Bridge to the 21st Century."

The project is 165,000-sf (15,000-sm). It houses archive and exhibit spaces, and the Clinton Foundation Headquarters. The site includes the University of Arkansas Clinton School of Public Service and a 28-acre recreational park. At the center of the project is the Bridge (Museum) Building, which serves as a library that houses exhibits that are dedicated to Mr. Clinton's presidency, his life and times. The 420-ft (130-m) long glass-enclosed Museum Building hovers above the ground while cantilevering out 90-ft (27-m) at both ends. The building's transparency and daylighted spaces are designed to serve as very public invitations. This presidential center includes a new public park, as well. The building has received a LEED Silver rating.

Construction Cost \$90 million
Completion Date 2004

Owner
Clinton Presidential Foundation

Architect
Ennead Architects



NEWSEUM AND FREEDOM FORUM

Washington, District of Columbia



Dedicated to journalism and free speech, this museum features a two story media wall and a glass facade, reflecting openness and transparency. The 650,000 sf (60,000 sm) building contains galleries, a 500 seat auditorium, technologically advanced black box broadcasting facilities, office and retail space in a seven story building envelope. A unique truss system allows for the formation of a 4,500 sf (420 sm) window wall and monumental stair.

Design considerations included four below-grade levels which are built with reinforced concrete. A sixteen-inch thick foundation retains soil at the building's perimeter.

Construction Cost \$230 million
Completion Date 2008

Owner
Freedom Forum

Architect
Ennead Architects



NEW YORK HISTORICAL SOCIETY RENOVATION

New York, NY



This project consists of renovations and alterations to the New York Historical Society building located on Manhattan's historic Upper West Side. Upgrades include improvements to both the Central Park West and 77th Street entrances, as well as interior enhancements to render the principal gallery space a more inviting event space. A section of the first floor was converted into a restaurant.

Construction Cost \$70 million

Completion Date 2010

Owner

New York Historical Society

Architect

Platt Byard Dovell White



NATIONAL MUSEUM OF AMERICAN JEWISH HISTORY

Philadelphia, PA



This project consists of a 100,000sf (9,300sm) museum housing cultural and learning resources. The building is formed of two distinct structures: a terracotta volume containing galleries, conference, and administrative space; and a glass volume, containing additional exhibition space, which cantilevers onto Independence Mall. The building also houses an auditorium below grade.

Construction Cost \$150 million

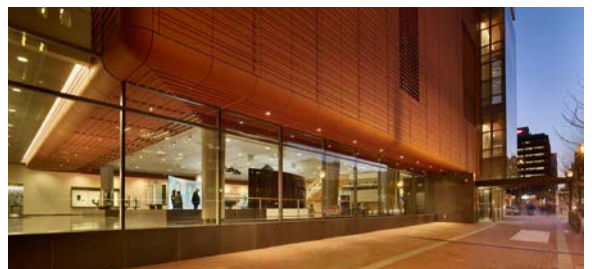
Completion Date 2010

Owner

National Museum of American Jewish History

Architect

Ennead Architects



UNIVERSITY OF UTAH SCIENCE MUSEUM

Salt Lake City, Utah



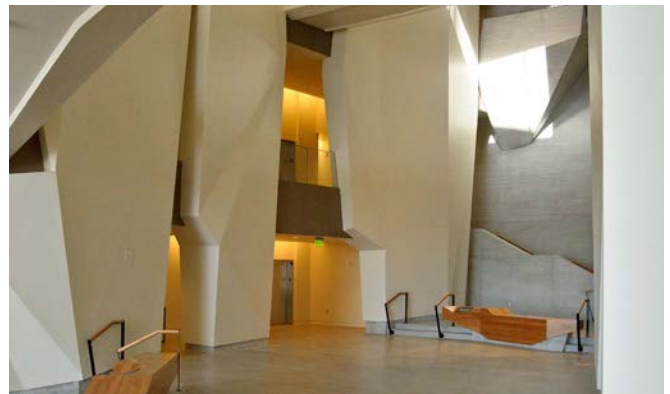
The project is a new facility for the Utah Museum of Natural History on a sensitive site at the eastern edge of the campus at the University of Utah. The structure will accommodate new exhibitions and innovative approaches to collections storage, educational space, research space, and work areas are to be included in the facility.

This project consists of a new 170,000 gsf (16,000 gsm), housing gallery space, classrooms, research laboratories, and a separate parking structure for 200 cars. Clad in a copper facade covering approximately 42,000sf (3,900sm) of the building's exterior, the structure is intended to serve as a visual extension of its surrounding desert context. Concrete for the project will use recycled fly ash, and other materials will be drawn obtained from local sources. The project is intended to achieve LEED certification.

Construction Cost \$103 million
Completion Date 2011

Owner
University of Utah

Architect
Ennead Architects



JOHNSON MUSEUM OF ART NEW WING CORNELL UNIVERSITY

Ithaca, NY



The Johnson Museum of Art added a new 16,000-sf wing to the existing museum. The new space includes a dramatic new sculptural glass and concrete entryway and lobby, multiple galleries, workshop studios, and a lecture hall. The Herbert F. Johnson Museum of Art was designed by I.M. Pei in 1973. The project included renovations to the original 5 story facility.

Construction Cost \$6 million
Completion Date 2011

Owner
Cornell University

Architect
Pei Cobb Freed & Partners

Awards
American Institute of Architects New York Chapter, Honor Award



LAS VEGAS SPRINGS PRESERVE VISITOR CENTER

Las Vegas, Nevada



The Visitor Center at the Las Vegas Springs Preserve features sustainable, regional, durable, recyclable and low-maintenance materials, including native stone walls, weathered steel siding, and energy efficient glass.

This 90,000-sf (8,400-sm) multi-use project includes a Visitor Center. Consisting of several structurally independent buildings and a 20,000-sf (1,800-sm) shade structure, sustainable and recyclable materials are integral project components.

Construction Cost \$72 million
Completion Date 2007

Owner
Las Vegas Springs Preserve

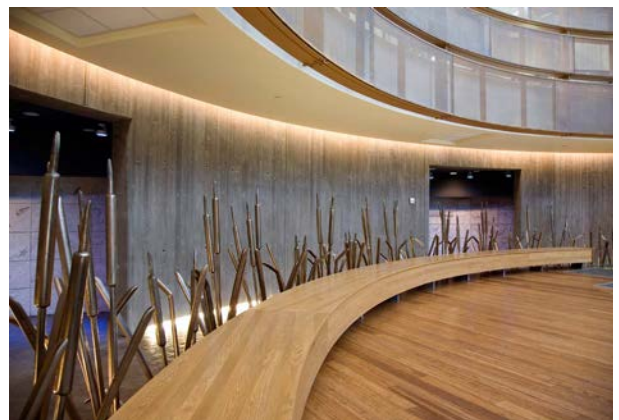
Architect
Tate Snyder Kimsey Architects

Awards

Platinum Award for Engineering Excellence, ACEC New York, 2008

Award of Merit, American Institute of Steel Construction, 2008

Honor Award, AIA Nevada Design Award, 2003



NATIONAL CONSTITUTION CENTER

Philadelphia, Pennsylvania



The National Constitution Center, which opened in Philadelphia on July 4, 2003 was created by an act of Congress to "increase awareness and understanding of the Constitution's history and its relevance in people's daily lives."

This 435,000-sf facility houses a 36,000-sf (3,300-sm) visitor center, a 46,000-sf exhibition space, an 11,000-sf (40,400-sm) educational resource center, and a media production facility. The building's central lobby is defined by a 168-ft by 112-ft (50-m by 35-m) oval-shaped atrium framed by a large glass curtain wall that faces the park. The museum also houses an auditorium, intended to serve as a national town hall for presidential debates and other significant events.

The major challenge faced by the designers was to create a welcoming public facility that treated the Constitution, not just as history, but also as part of a living process. From the lofty front "porch" through the airy and spacious sky lit lobby to the 350-seat theater-in-the-round, and its surrounding gallery, the National Constitution Center provides an inviting and educational environment as expansive as its architectural design.

Construction Cost \$120 million
Completion Date 2003

Owner
National Park Service

Architect
Pei Cobb Freed & Partners



NEW YORK HALL OF SCIENCE ADDITION

Queens, New York



The New York Hall of Science provides a hands-on opportunity for the community to experience science and technology.

In an ongoing effort to improve their facilities, the Hall of Science, in collaboration with the City of New York Department of Design and Construction, the City of New York Department of Cultural Affairs, undertook the second phase expansion for the master plan for the Hall of Science. An innovative program utilized sustainable features to promote energy efficiency.

This 70,000-sf (6,500-sm) addition provides expanded space for permanent and temporary exhibits, as well as exhibition preparation and shop facilities. It features the 'Hall of Light,' an exposed steel structure that spans a day-lighted 225 ft. x 50 ft. (69-m x 15-m) exhibit hall. The form for the exposed structure was devised to complement the architect's vision and reflect the structure-as-exhibit desire of the Hall of Science. Additionally, the existing Great Hall, which was constructed for the original World's Fair, has had an exterior façade restoration and an interior renovation is under way.

Construction Cost \$90 million

Completion Date 2004

Owner

New York City Department of Design & Construction

Architect

Ennead Architects



ROCK AND ROLL HALL OF FAME AND MUSEUM

Cleveland, OH



The Rock and Roll Hall of Fame and Museum was designed to express the dynamic music it commemorates and to serve as an emblem of the city that introduced the term "Rock and Roll." The building provides a center of entertainment and learning, celebrating urban life and contemporary culture.

This 143,000-sf (13,000-sm) facility combines geometric forms and cantilevered spaces. The project includes 50,000-sf (4,600-sm) of exhibition space beneath a soaring "glass tent" spanning 260-ft. (80-m) that engages an eight-story, 165-ft. (50-m) tower containing the Hall of Fame. Completed on a fast-track schedule, this project won the AISC Engineering Award of Excellence, the AISC Innovative Design and Excellence in Architecture with Steel Award, as well as a Merit Award from the New York Concrete Industry Board.

Construction Cost \$85 million
Completion Date 1995

Owner
Rock & Roll Hall of Fame and Museum

Architect
Pei Cobb Freed & Partners



MEYERSON SYMPHONY CENTER

Dallas, TX

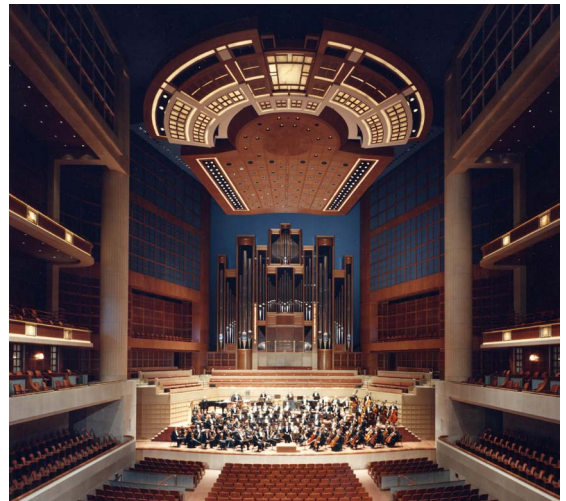


The building is the new home for the Dallas Symphony Orchestra. It contains a 2200 seat performance hall, an administration wing, entertainment rooms, ticket booths, restaurant and 100 car parking level.

Construction Cost \$85 million
Completion Date 1989

Owner
The City of Dallas

Architect
Pei Cobb Freed and Partners



THE GAGOSIAN GALLERY

New York, NY



The Gagosian Gallery is sited in the vibrant West Chelsea arts district. The structural design conceived for the project supports a program that includes a Main Gallery, a Special Purpose Gallery, a Small Prints and Video Showroom, a Private Showroom, in addition to office and art handling space.

Located in the Chelsea section of Manhattan, this project consisted of the conversion of a one-story warehouse into a 20,000-sf (1,900-sm) art gallery with a 4,000-sf (380-sm) mezzanine. The project included raising existing, exposed trusses 5-ft (1.5-m) over a portion of the building to form a 100-ft (31-m) clear span for exhibit space.

Construction Cost \$4 million
Completion Date 2000

Owner
Gagosian Gallery

Architect
Gluckman Mayner Architects



MACAO SCIENCE CENTER

Macao, China



Located on reclaimed land on the waterfront of Macao. The Science Center serves as an educational facility for young people in and around the region.

This project is a 150,000-sf science center. Combined with a conference center, the science center includes 15 galleries, a planetarium, a multifunction hall, and an observation deck with a 180 view of Taipa Island. Major components include a planetarium, international conference center with a 500-seat auditorium, seminar rooms, and supporting amenities.

Construction Cost \$87 million
Completion Date 2009

Owner
Macao Science Center

Architect
Pei Partnership Architects



PINGTAN MUSEUM

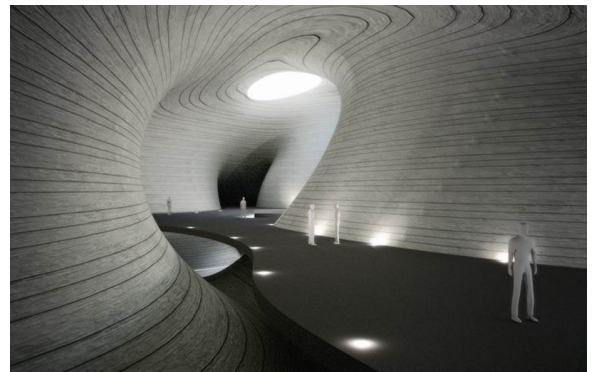
Pingtang, China



The Pingtan Art Museum in Pingtan, China will be the largest private museum in Asia. The museum itself acts as a smaller scale island off the Pingtan Island, connected to land only by a slightly undulating pier, which, in turn, bridges artificial and natural, city and culture, as well as history and future. It wishes to communicate a sense of purity and an idea of Zen.

Architect

MAD Architects



SUZHOU MUSEUM

Suzhou, China

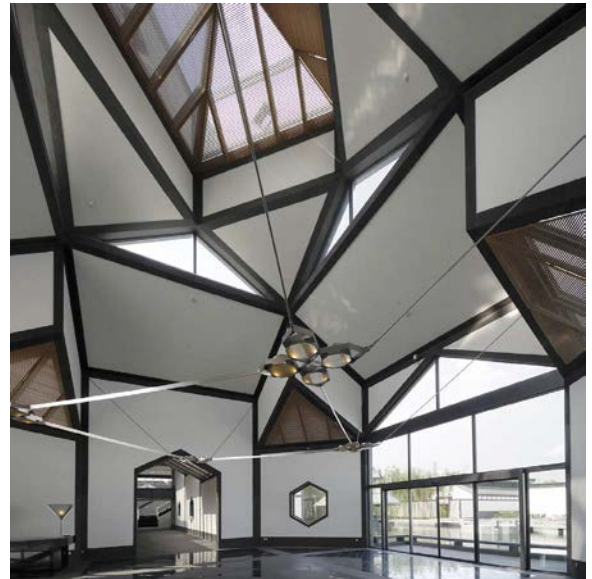


This 185,000-sf (17,000-sm) museum complex houses a collection of historic art and artifacts from the 2,500-year-old city of Suzhou. The museum contains 75,000-sf (7,000-sm) of exhibit space, a 200-seat auditorium, administrative and curatorial offices, research library, and art storage facilities.

Construction Cost Not Available
Completion Date 2006

Owner
Suzhou Museum

Architect
I.M. Pei in association with
Pei Partnership Architects



WEST KOWLOON CULTURAL DISTRICT

West Kowloon, China



The West Kowloon Cultural District is a 4.3 million-sf (400,000-sm) development site on the Hong Kong waterfront. Planned uses will comprise arts and cultural facilities, commercial and residential districts, and significant open space.

LERA was on the team of Henderson Land Development Co. Ltd. in the initial government-held design competition for the West Kowloon Cultural District, and was involved in the structural design of state-of-the-art Opera House, Performance Venues, and Art Museums, as well as the extensive Canopy over the site.

Construction Cost \$3.1 billion
Completion Date 2004 (Concept Design)

Owner
Henderson Land Development

Architect
Hellmuth, Obata & Kassabaum



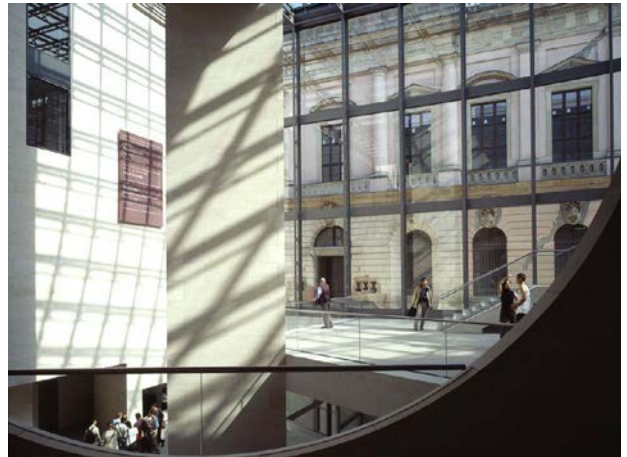
GERMAN HISTORICAL MUSEUM ADDITION

Berlin, Germany



This I.M. Pei masterpiece is an addition to the German Historical Museum, connected to the original building by an underground passageway.

The glass-enclosed spiral staircase, a 16,100-sf glass wall and an 9,500-sf skylight presents a modern addition that coexists with the traditional architecture of the museum and its historical neighborhood. The design's intent is to invite people into the building. With every step new perspectives open up in both the light-flooded entrance hall and the architecture at the heart of the city outside. From the stairs you can gaze into the sky above – or look out at the neighboring baroque building, the "Zeughaus," which was once the old armoury. The building opened to critical acclaim.



Construction Cost \$120 million
Completion Date 2003

Owner
German Historical Museum

Architect
I.M. Pei, Architect

MIHO MUSEUM AND BRIDGE

Kyoto, Japan



An inspired blending of modern geometric forms and traditional Japanese motifs, I.M. Pei's ingenious design is an architectural triumph. The building, 80 percent of which is underground, is nestled within a 247-acre mountainous nature preserve. Shinji Shumeikai, the spiritual organization that commissioned the building, and local governing authorities were deeply concerned about preserving the natural splendor of the site. In response to those concerns, I.M. Pei conceived of a tunnel through the mountain and a bridge across the valley to reach the museum. The Miho Museum Bridge was ecologically designed by LERA to span the deep valley without the intervention of piers rising up from the ground.

Construction Cost \$185 Million
Completion Date 1997

Client/Architect
I.M. Pei, Architect



NEW YORK TOLERANCE CENTER

New York, NY



The first floor and basement of the Daily News Building were transformed into a new a museum and training center. The 20,000-sf (1,860-sm) training center includes spaces specially designed for interactive workshops and exhibits. Located in the heart of Manhattan, the center is described as a "social laboratory" for diversity training programs for front-line professionals such as teachers, police, and community leaders. The New York Tolerance Center is a professional multi-media training facility targeting educators, law enforcement officials, and state/local government practitioners. It provides participants with an intense educational and experiential daylong training program.

Construction Cost \$8 million
Completion Date 2003

Owner
New York Tolerance Center

Architect
NBBJ

