



SEAOI 50TH ANNIVERSARY

50 SIGNIFICANT STRUCTURES IN 50 YEARS

Annual Awards Dinner

June 6th, 2015

50 SIGNIFICANT STRUCTURES IN 50 YEARS



DEWITT
CHESTNUT
APARTMENTS

Completed: 1965
Chicago, IL



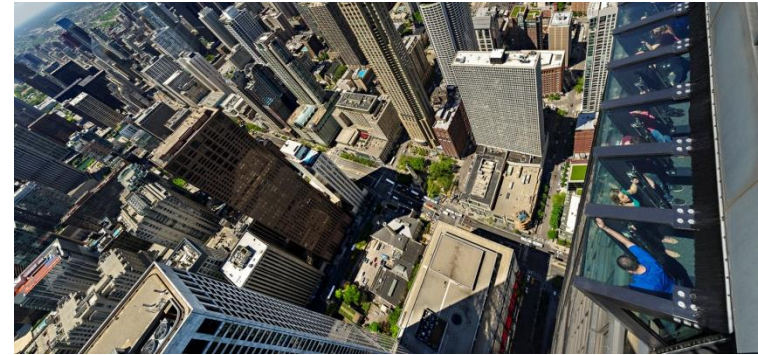
50 SIGNIFICANT STRUCTURES IN 50 YEARS



DALEY
CENTER AND
PICASSO
STATUE

Completed: 1967
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



JOHN
HANCOCK
CENTER

Completed: 1970
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



WILLIS TOWER
(SEARS TOWER)

Completed: 1974
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



INTERSTATE
ROUTE 57
BRIDGE OVER
MISSISSIPPI
RIVER

Completed: 1979
Cairo, IL

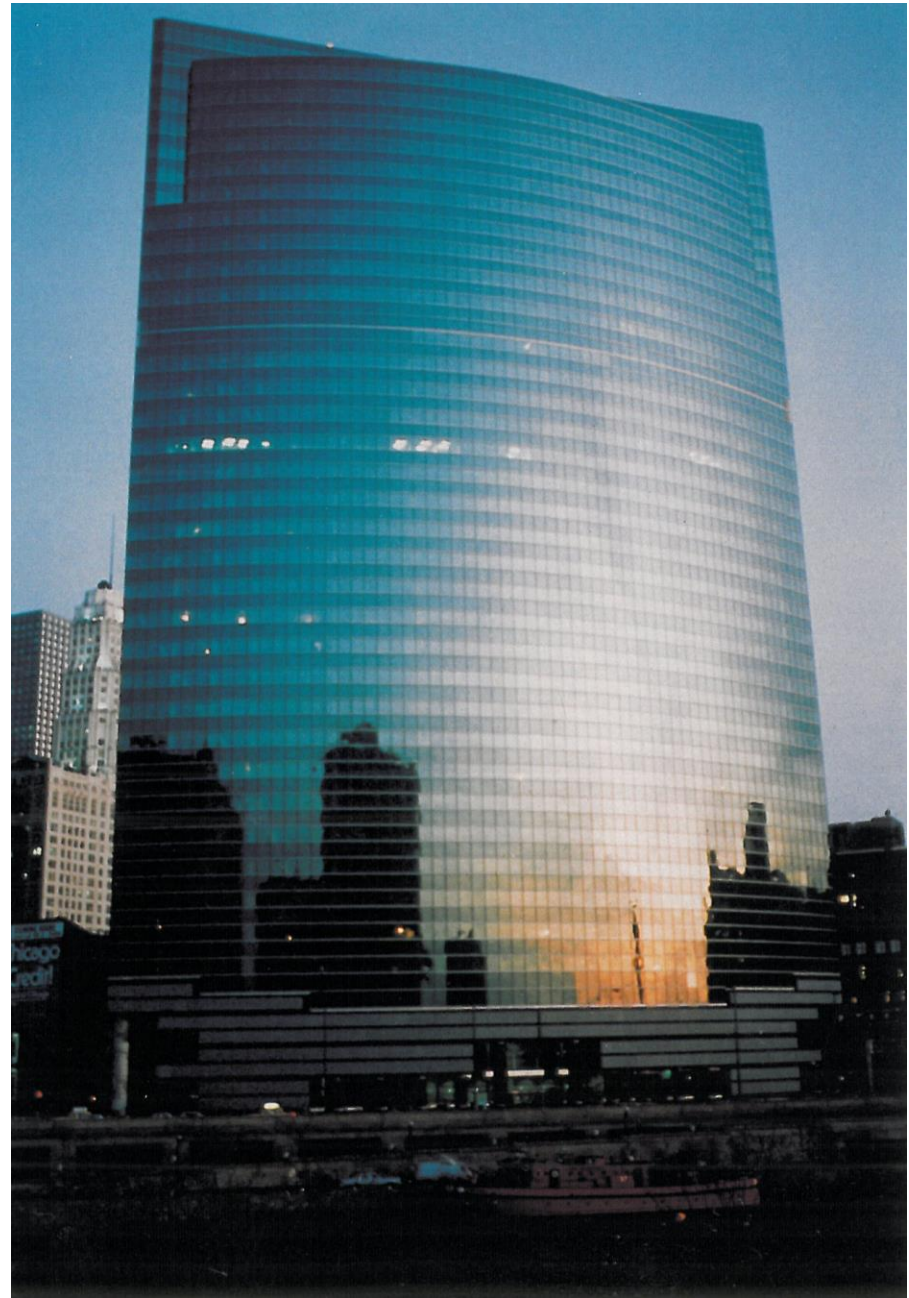


50 SIGNIFICANT STRUCTURES IN 50 YEARS



HAJJ
TERMINAL
Completed: 1981
Jeddah, Saudi Arabia

50 SIGNIFICANT STRUCTURES IN 50 YEARS



333 WEST
WACKER
BUILDING

Completed: 1982
Chicago, IL

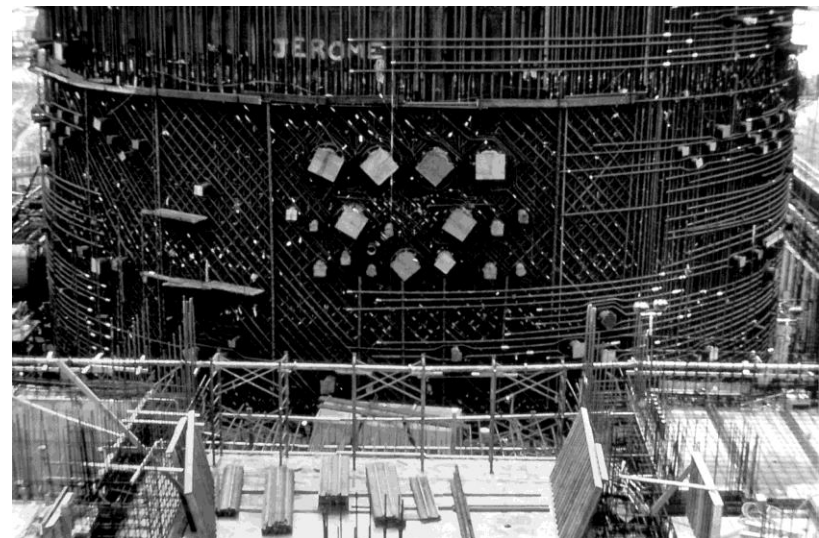


50 SIGNIFICANT STRUCTURES IN 50 YEARS



CLINTON MARK III CONTAINMENT STRUCTURE

Completed: 1983
Clinton, IL



50 SIGNIFICANT STRUCTURES IN 50 YEARS



COLUMBUS
DRIVE
BASCULE
BRIDGE OVER
THE CHICAGO
RIVER

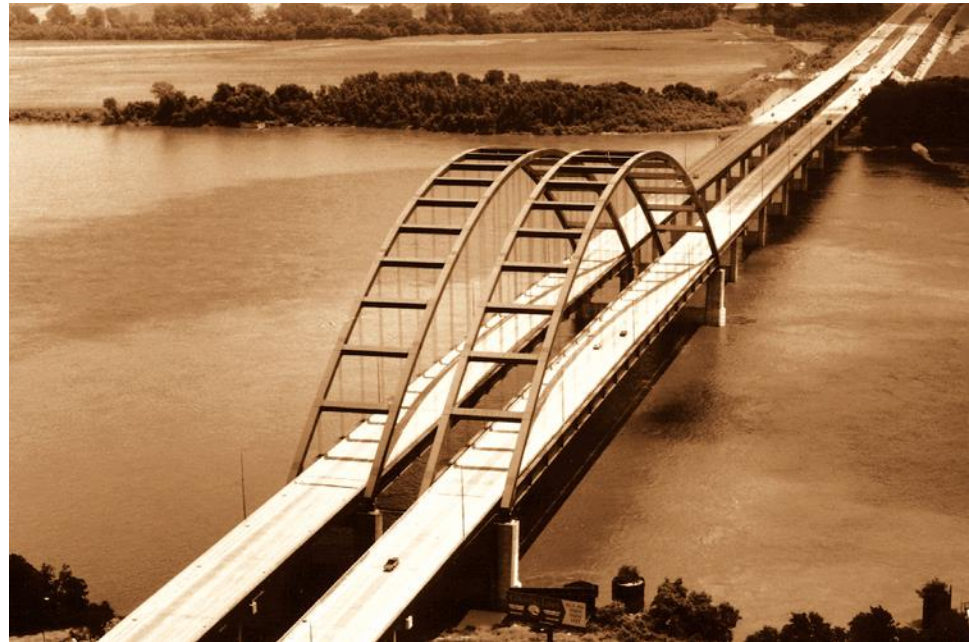
Completed: 1983
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



INTERSTATE
ROUTE 255
BRIDGE OVER
MISSISSIPPI

Completed: 1985
Jefferson Barracks, MO



50 SIGNIFICANT STRUCTURES IN 50 YEARS



ONTERIE CENTER

Completed: 1986
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



MCCORMICK
PLACE, PHASE 2
EXPOSITION
CENTER

Completed: 1986
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



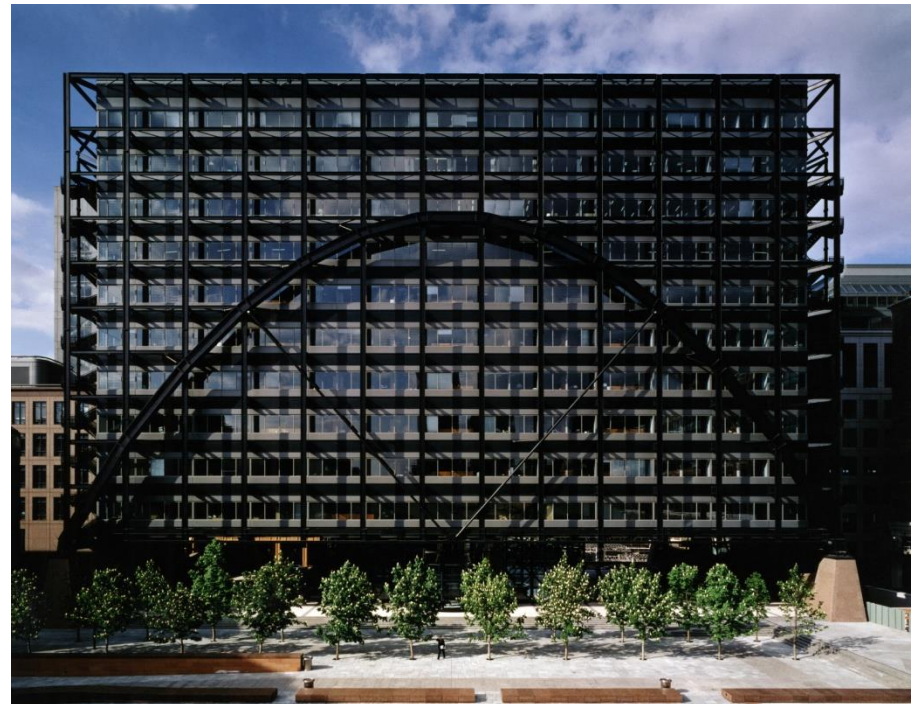
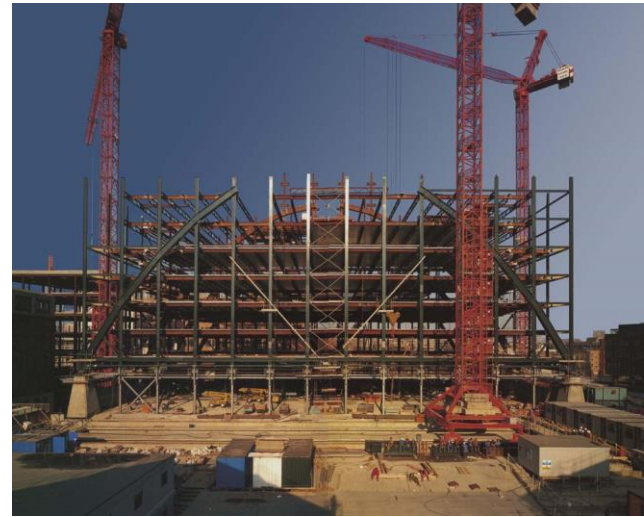
BANK OF
CHINA
BUILDING
Completed: 1989
Hong Kong, China

50 SIGNIFICANT STRUCTURES IN 50 YEARS



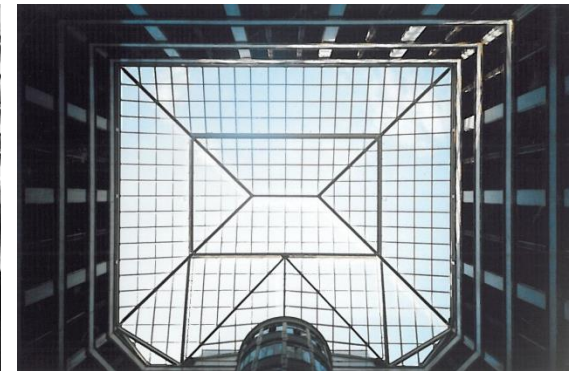
900 N
MICHIGAN
AVENUE
Completed: 1989
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



EXCHANGE
HOUSE
(BROADGATE)
Completed: 1990
London, UK

50 SIGNIFICANT STRUCTURES IN 50 YEARS



THE ROOKERY REHABILITATION

Completed: 1992
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS

77 WEST
WACKER
DRIVE

Completed: 1992
Chicago, IL



50 SIGNIFICANT STRUCTURES IN 50 YEARS



100 N
RIVERSIDE
(MORTON
INTERNATIONAL
BUILDING)

Completed: 1992
Chicago, IL



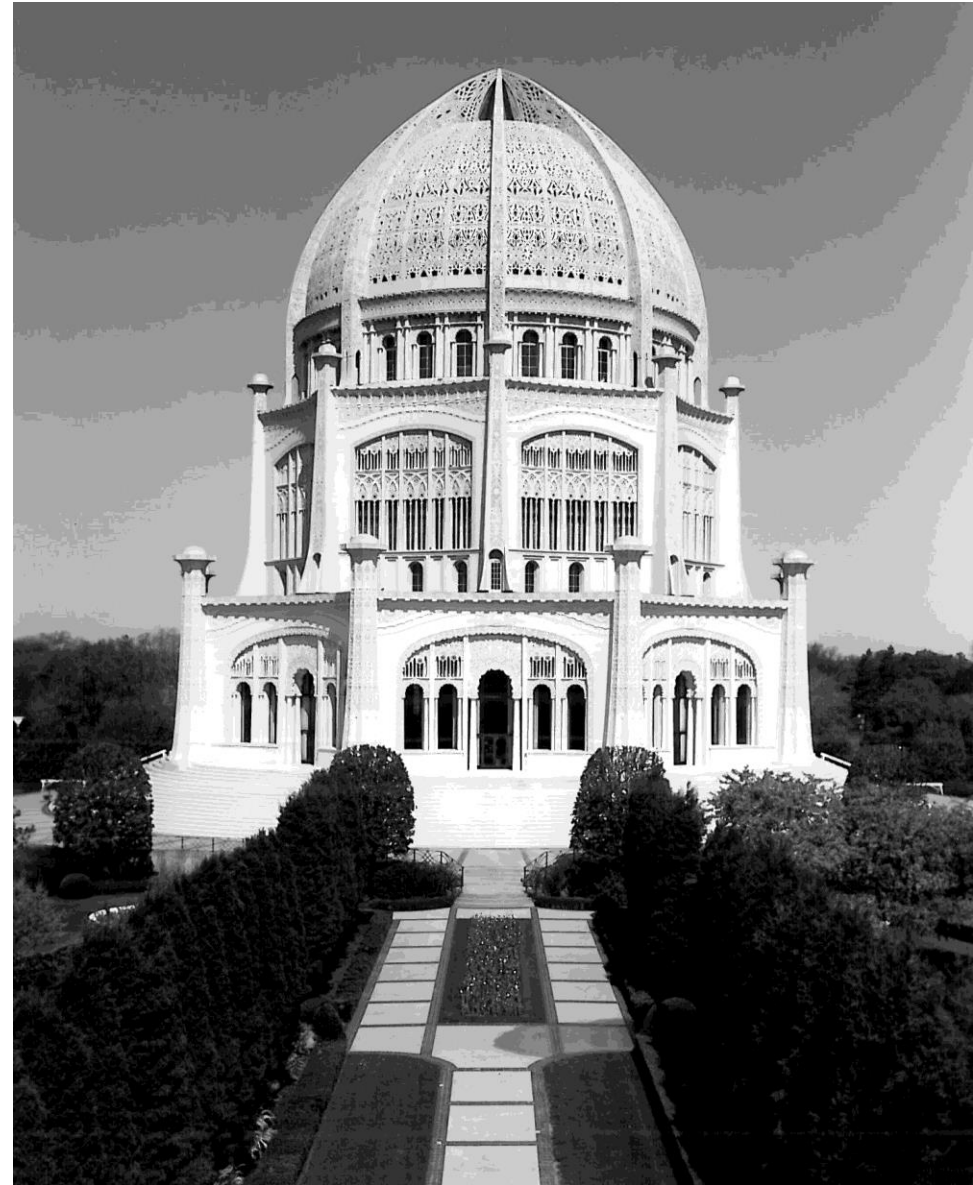
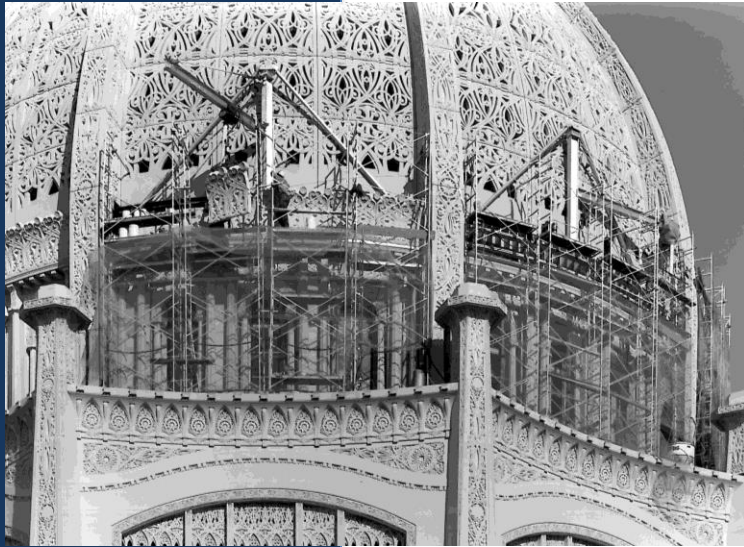
50 SIGNIFICANT STRUCTURES IN 50 YEARS



AMOCO
BUILDING
FAÇADE
RECLADDING

Completed: 1993
Chicago, IL

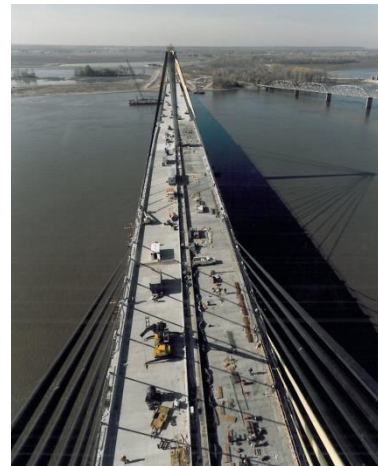
50 SIGNIFICANT STRUCTURES IN 50 YEARS



BAHA'I HOUSE
OF WORSHIP

Completed: 1994
Wilmette, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



CLARK
BRIDGE

Completed: 1994
Alton, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS

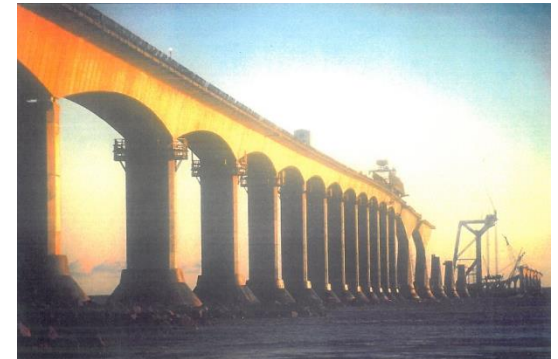


SEISMIC
ISOLATION
RETROFIT,
US COURT OF
APPEALS

Completed: 1995
San Francisco, CA



50 SIGNIFICANT STRUCTURES IN 50 YEARS



CONFEDERATION BRIDGE

Completed: 1997
Prince Edward Island,
Canada

50 SIGNIFICANT STRUCTURES IN 50 YEARS

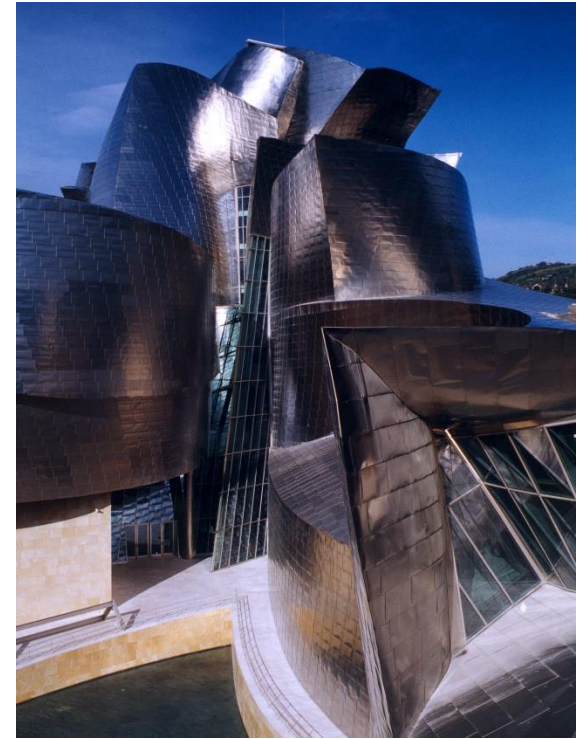


PETRONAS TWIN TOWERS

Completed: 1997
Kuala Lumpur, Malaysia



50 SIGNIFICANT STRUCTURES IN 50 YEARS



GUGGENHEIM
MUSEUM BILBAO

Completed: 1997
Bilbao, Spain

50 SIGNIFICANT STRUCTURES IN 50 YEARS



DAMEN AVENUE BRIDGE

Completed: 1999
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



PARK TOWER

Completed: 1999
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



EAST FORK CABLE-STAYED BRIDGE

Completed: 2000
Columbus, IN

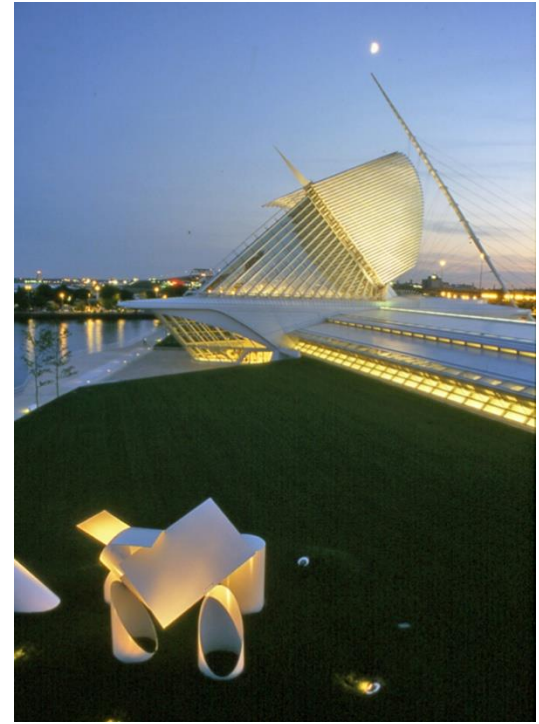
50 SIGNIFICANT STRUCTURES IN 50 YEARS



UBS TOWER

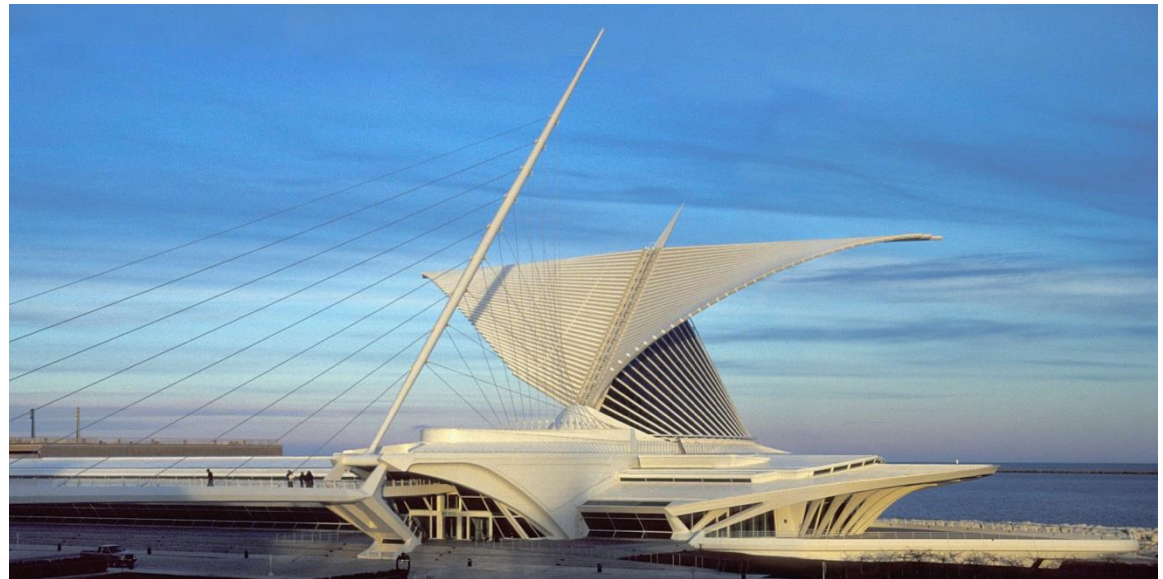
Completed: 2001
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



MILWAUKEE ART
MUSEUM
ADDITION

Completed: 2001
Milwaukee, WI



50 SIGNIFICANT STRUCTURES IN 50 YEARS



INGENIEURE
HOUSE R128

Completed: 2002
Stuttgart, Germany

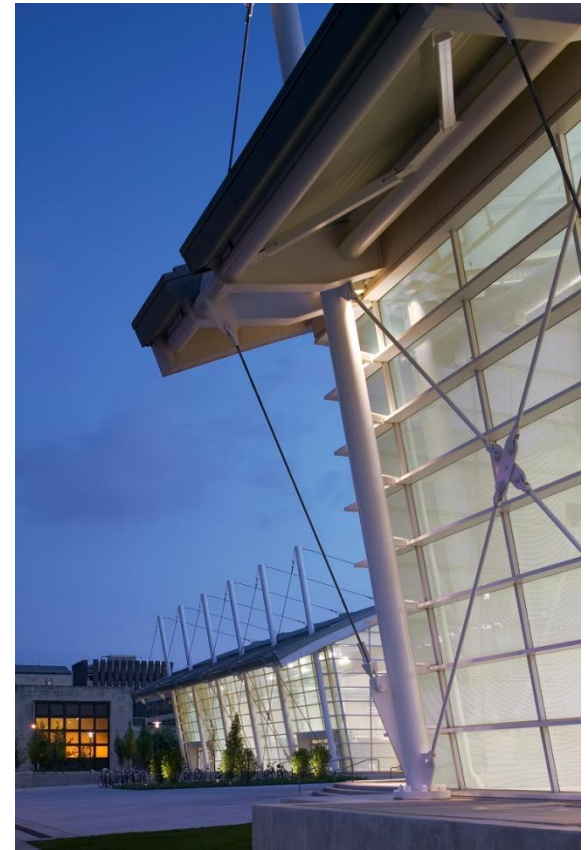
50 SIGNIFICANT STRUCTURES IN 50 YEARS



SOLDIER FIELD
(ADAPTIVE
REUSE)

Completed: 2003
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



RATNER
ATHLETIC
CENTER,
UNIVERSITY OF
CHICAGO

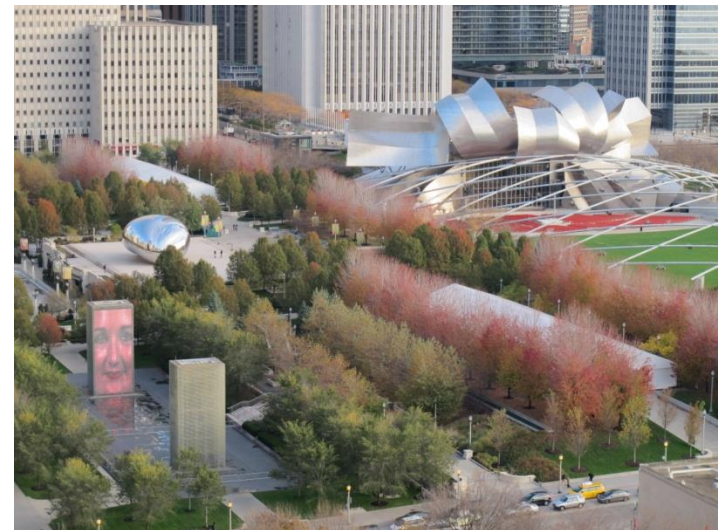
Completed: 2003
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



MILLENNIUM PARK

Completed: 2004
Chicago, IL



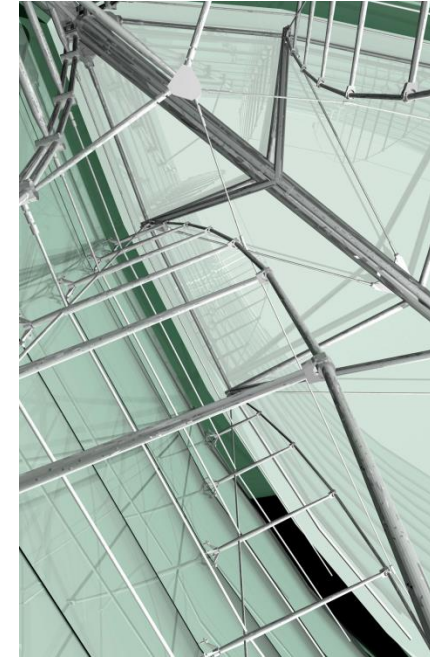
50 SIGNIFICANT STRUCTURES IN 50 YEARS

BOOTH
SCHOOL OF
BUSINESS,
UNIVERSITY OF
CHICAGO

Completed: 2004
Chicago, IL



50 SIGNIFICANT STRUCTURES IN 50 YEARS



GENERAL
MOTORS
ENTRANCE
PAVILLION

Completed: 2004
Detroit, MI



50 SIGNIFICANT STRUCTURES IN 50 YEARS



111 SOUTH
WACKER DRIVE

Completed: 2005
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



NORTH AVENUE BRIDGE

Completed: 2008
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



CATHEDRAL OF
CHRIST THE
LIGHT

Completed: 2008
Oakland, CA



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CAJA MADRID

Completed: 2008
Madrid, Spain

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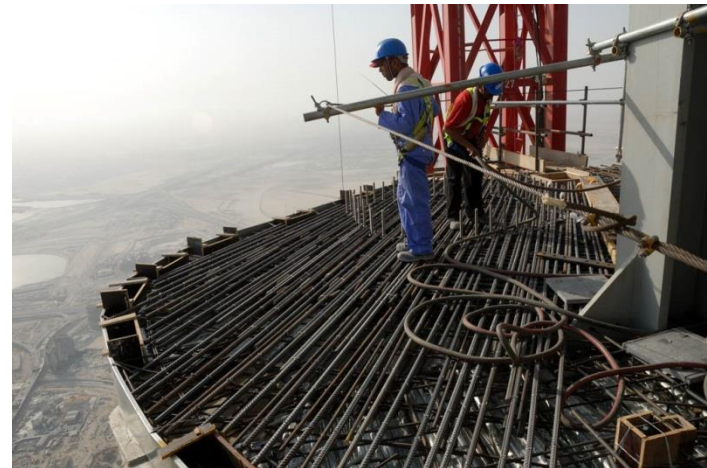


THE ART
INSTITUTE OF
CHICAGO
MODERN WING

Completed: 2009
Chicago, IL



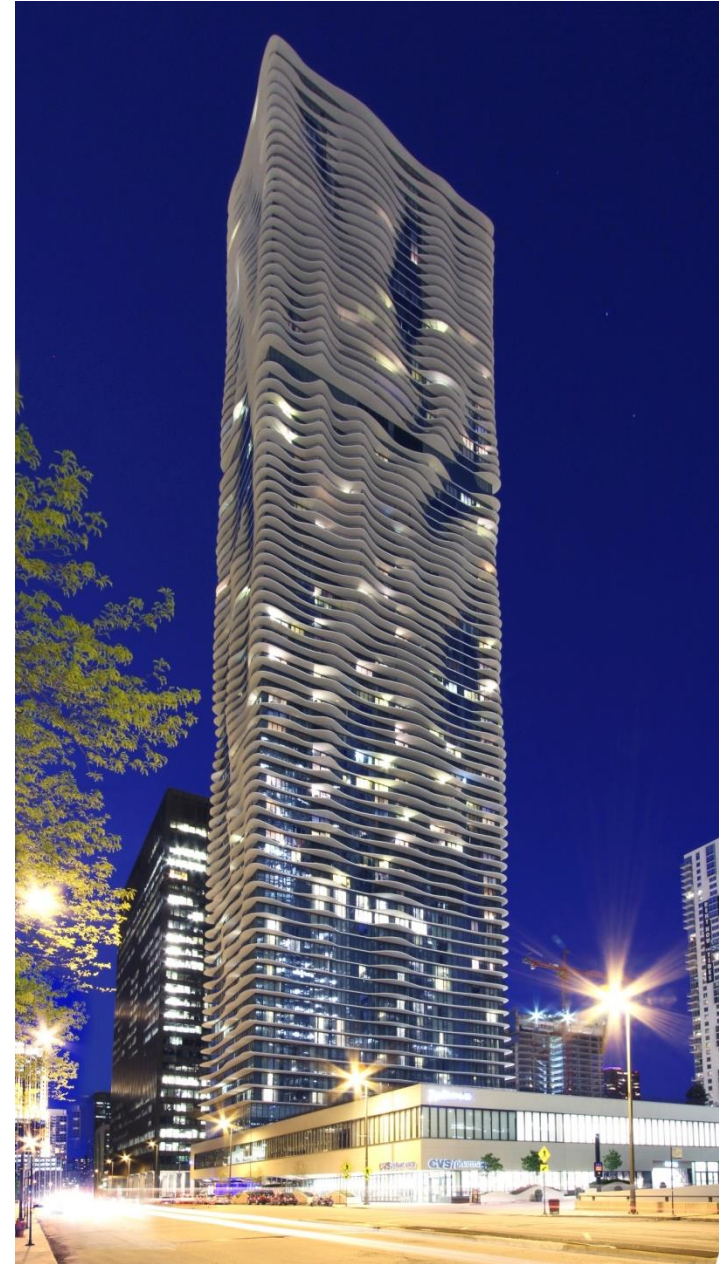
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BURJ KHALIFA

Completed: 2010
Dubai, UAE

50 SIGNIFICANT STRUCTURES IN 50 YEARS



AQUA
Completed: 2010
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



HALSTED STREET BRIDGE

Completed: 2011
Chicago, IL



50 SIGNIFICANT STRUCTURES IN 50 YEARS



300 EAST
RANDOLPH
VERTICAL
EXPANSION
Completed: 2012
Chicago, IL

50 SIGNIFICANT STRUCTURES IN 50 YEARS



WACKER
DRIVE
RECONSTRUCTION
Completed: 2012
Chicago, IL



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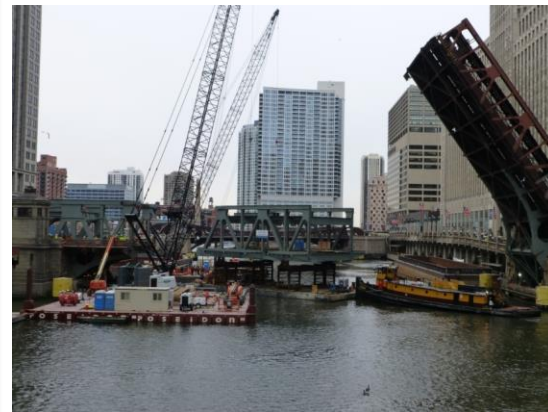


RUSH
UNIVERSITY
MEDICAL CENTER
TRANSFORMATION

Completed: 2012
Chicago, IL



50 SIGNIFICANT STRUCTURES IN 50 YEARS



WELLS STREET BASCULE BRIDGE REHABILITATION

Completed: 2013
Chicago, IL

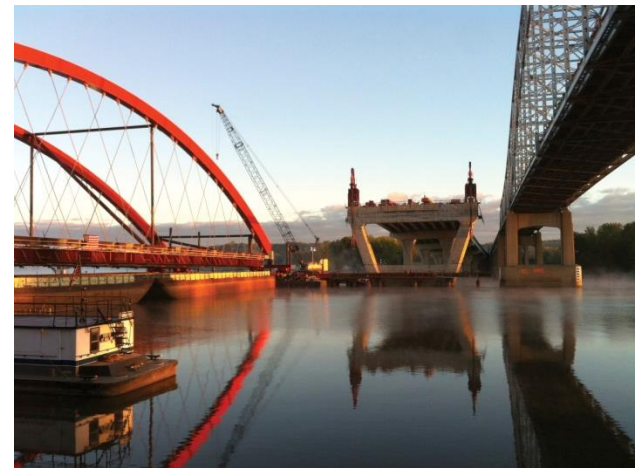
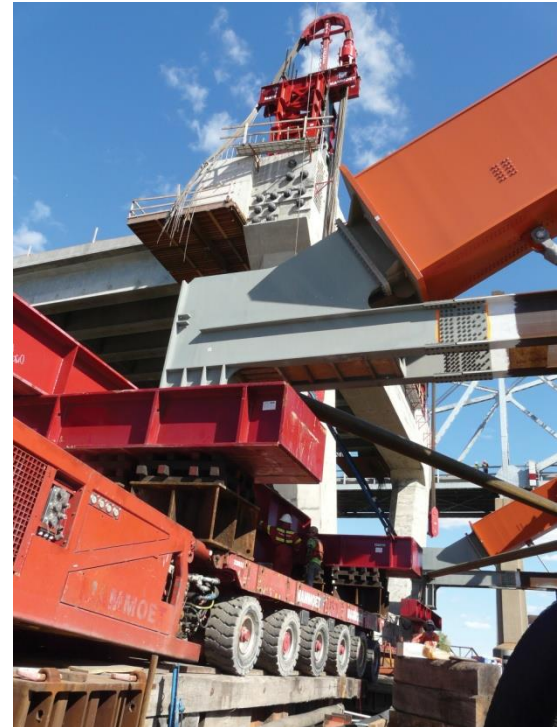
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STAN MUSIAL
VETERANS
MEMORIAL
BRIDGE

Completed: 2014
St. Clair County, IL
St. Louis, MO

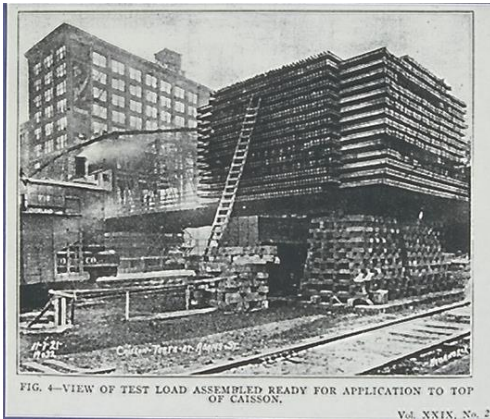
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HASTINGS BRIDGE

Completed: 2014
St. Paul, MN

Advancements in Caisson Foundation Based on Testing



Caisson Load Test
Union Station, 1920



Pressure Meter



Osterberg-Cell Test



Sound Dolomite
230 tsf, One North Wacker, 1999
270 tsf, Trump Tower, 2001



Fractured Dolomite
75 tsf on McCormick Place West Hall, 2004
90 tsf Once Museum Park East, 2006

The Development of 14,000 psi Concrete



1962

6,000 psi
Outer Drive East



1965

7,500 psi
Lake Point Tower



1972

9,000 psi
MidContinental Plaza



1976

11,000 psi
River Plaza



1982

14,000 psi
Chicago Mercantile Exchange

ACKNOWLEDGMENTS

AECOM, J. Muller International (now AECOM), Envirodyne Engineer, Inc. (now AECOM)

ARUP

Alfred Benesch and Company

Cannon Design

CS Associates, Inc. (Formerly Chris P. Stefanos Associates, Inc.)

H.W. Lochner

GCE of Illinois, Inc

GRAEF

Halvorson and Partners, P.C.

Hanson Engineers, Inc.

HNTB

Leslie E Robertson Associates

Magnusson Klemencic Associates

Parsons Corporation

Perkins and Will

Sargent & Lundy Engineers

Skidmore, Owings & Merrill LLP

Werner Sobek

Thornton Tomasetti, Inc.

TranSystems

Tylk, Gustafson & Associates

TY Lin

Wiss, Janney, Elstner Associates

