The Nebraska State Capitol Exterior Masonry Restoration Project is complete. The Office of the Capitol Commission announces the last vestiges of the Project, the east construction yards, will be removed in the Spring of 2011. The Exterior Masonry Project began in 1995 by commissioning Bahr Vermeer Haecker Architects of Lincoln and Wiss, Janney, Elstner Associates of Chicago as consultants for the project. In 1998, following investigation of the condition of the entire masonry exterior of the Capitol and the development of a five phase plan for restoration, work began on the north entrance. That same year, the Capitol’s tower was enclosed with scaffold and work was begun to repair and weatherproof the limestone façade of the Capitol. Initially the project was scheduled to take eight years and be conducted in five phases: Phase I – Restoration of the North Entrance; Phase II – Restoration of the Gold Dome and Drum; Phase III – Restoration of the Tower and Turrets; Phase IV – Roof Replacement; Phase V – Restoration of the Base. However, early in the project, national economic conditions and discovery of concealed conditions within the exterior façade caused the project timeline to be extended. Now, 12 years after contractor Mark 1 Restoration Company of Dalton, Illinois arrived on site, the project is complete.

During the twelve year project: the entire exterior façade was cleaned and organic growth and dirt removed; all four entrances were dismantled and rebuilt to prevent water infiltration; all existing exterior mortar joints in the base and tower tuck pointed. Ineffective original expansion joints in the tower limestone walls were replaced at each floor level and fractured stones were repaired or replaced; the four tower corner turrets and observation deck walls were dismantled and reset; the gold glazed tile dome was cleaned and re-grouted; the tower octagon windows were re-glazed using unbroken original amber window glass and where needed, newly manufactured matching amber glass. And finally, the parapet walls of the four cardinal entrance pavilions were dismantled and rebuilt. From 2007 through 2010, in concert with the masonry work, project subcontractor Midland Engineering of South Bend, Indiana installed a new 100 year, two and a half acre, 20 ounce batten copper roof over insulation added to improve energy efficiency in the Capitol.

While the Sower was accessible from the tower and dome scaffold, a Save Outdoor Sculpture grant, provided jointly by Target Stores and federal appropriation, was secured by the state to inspect and fully restore this bronze colossus and its base. Mayda G. Jensen, of Jensen Conservation in Omaha, revealed the Sower was in good structural condition and needed only cleaning and re-application of patina to maintain its condition. A federal Save America’s Treasures grant also aided masonry restoration efforts on the south entrance.

The Exterior Masonry Restoration and Reroof Project was ultimately completed on schedule and within the budget of $57.4 million which was provided over the twelve year project by Legislative Appropriation.
Experience and Service

The Office of the Capitol Commission benefits from the experience of staff who have worked in the building for many years. These members add valuable information about past projects and have an understanding of procedure and the day to day operation of the building. In October 2010, four Office of the Capitol Commission staff received recognition for their years of service to the state.

Don Pracheil
Mechanic
30 years

Phil Lagoni
Mason
20 years

Gloria Witherspoon
Tourism Aide
20 years

Richard Mallam
Custodial Leader
10 years

Capitol Commission’s 2011 Schedule

The Nebraska State Capitol Commission has set their schedule of quarterly Commission meetings for 2011. All meetings are open to the public and begin at 9:00 am in State Capitol Hearing Room 1507. The Joint Annual Meeting with the Capitol Environs Commission will be held at 10:00 am following the November 3, 2010 Capitol Commission Meeting.

February 8, 2011
June 2, 2011

August 16, 2011
November 3, 2011
While the Exterior Masonry Restoration Project scaffold allowed access to the top of the Capitol, staff took advantage of the once in a lifetime opportunity and applied for a grant to extend the scaffold another 50 feet and examine Lee Lawrie’s ‘Sower’. The Heritage Preservation ‘Save Outdoor Sculpture!’ Grant Program, partially funded by Target Stores and the National Endowment for the Humanities, also provided funds to hire a conservator to inspect and restore the 19’ tall cast bronze figure on top of the Capitol. The Sower, a symbol of agriculture, and its 14’ tall base of wheat and corn shocks were in much better condition than expected considering the statue is 400 feet off the ground. High wind and weathering had not damaged the sculpture. Using a boroscope to peer inside, the conservation contractors discovered the interior armature was in near perfect condition. Weep holes were open, allowing internal condensate to flow out of the statue. What appeared to be weld marks on top of the Sower’s head indicated the statue was serving its secondary function as a lightning rod for the Capitol. This evidence of lightning strikes did not cause concern.

Once the Sower was determined to be structurally sound, the conservators addressed the exterior surface of the figure. The original patina and bee’s wax finish had been removed by exposure to the elements and weathering. The resulting finish was a combination of oxidation and soiling. In preparation for applying a new protective patina on the Sower, conservators first cleaned the bronze surface using detergent applied with a soft brush. Pressure washing then removed detergent, soiling and loosely adhering corrosion. Conservators chose to protect the statue with a light green patina approximating the predominant color of the existing natural condition. After a final coat of lacquer and wax was applied scaffold was removed.

By taking advantage of the opportunity to build upon the scaffold erected for the Exterior Masonry Project, and using grant money, Capitol staff increased the value of the Masonry Project to future generations. The Sower was determined to be in good condition, an indication that the sculpture will be able to withstand another 70 years of harsh conditions atop the Capitol tower.
Project Improves Performance

Following the failure of the first two state capitol's to provide a long term home to Nebraska's state government, citizens and their elected leaders chose to invest in a new building which would house government for many generations to come. In 1995, after 70 years of using Bertram Goodhue's house of state, citizens and their elected leaders invested in the Capitol Exterior Masonry Restoration Project. The just completed Exterior Masonry Project protects the investment of those earlier generations by restoring and improving the waterproof exterior of the Capitol. The extensive restoration work required during this project emphasizes the importance of routine building maintenance. By maintaining the building and making needed improvements future generations can avoid similar costly restoration.

Preparation for the project began with an investigation of the drawings and documents in the Nebraska Capitol Collections, and the use of that documentation to investigate the existing condition of the masonry facade. During the restoration contractors uncovered hidden conditions which required changes and improvements to the internal structure of the building. The Office of the Capitol Commission recognized the importance of providing future caretakers of the Capitol with as much information as possible. During all phases of the exterior masonry project each component was carefully documented and will be organized and available for use by future caretakers of the Capitol.

With a focus on the long term use and preservation of the Capitol, project decisions were made which will provide for easier maintenance and reduce the expenses of future generations. While the tower was being restored through-wall 'D' anchors were installed above the 14th floor observation decks to allow staff a safe and convenient way to secure future rigging on the Capitol for inspection, repair and cleaning of the tower. Attic spaces were cleaned and pathways installed to allow easier access for routine maintenance of the plumbing, electrical and HVAC systems. Roof hatches were installed in attic spaces allowing safer access when ice and snow limit mobility on the roof.

During the project, it was discovered that the original construction techniques using red clay bricks made the structure vulnerable to the effects of moisture and freezing temperatures. Red clay bricks were replaced with concrete bricks less likely to swell and shift stone. Additional flashing was added to the horizontal and vertical surfaces of the parapet walls for improved waterproofing. More efficient channels for water to pass through the masonry were created, such as adding voids and weep holes in the free standing walls at the entrances. To increase efficiency and reduce heating and cooling costs, insulation was added under the new 2.5 acre copper roof. A roof which maximizes batten construction to minimize seams which could leak in the future. Gutters and downspouts were modified and additional roof drains installed to increase water flow and prevent pooling during times of excessive rainfall and snow melt.

The Office of the Capitol Commission and the contractors completed the Exterior Masonry Project in 2010. Through this necessary investment in maintaining our house of state future generations will continue to benefit from the early 20th century investment of those early citizens who built the finest Capitol possible in the 1920's.
Golden Tile and Glass

When Bertram Goodhue approached the challenge of designing a monumental, functional and long-lasting Nebraska State Capitol, he studied buildings from earlier times and places as he developed his solution. From other capitols, he learned gold and copper domes need frequent maintenance. From the first two Nebraska capitols, he learned building materials should be durable in a harsh climate. From the cathedrals of the old world, he learned buildings can stand and be used for centuries. Once the tower was enclosed with scaffold in 2000, staff learned how successfully Goodhue had applied this knowledge at the top of the Capitol.

The Capitol’s dome is 350 feet off the ground. Goodhue knew that a dome at that height would be difficult to maintain and chose glazed tile for the finished surface. Experiments at his office in New York indicated a gold glazed tile would give the appearance he wanted and be durable. Once crews were able to inspect the gold glazed tile, staff learned Goodhue’s choice of material was a success. The tile was intact and structurally secure, needing only a gentle scrub with soap and water and mortar joint touch up. Inspection of the Thunderbird mosaics beneath the golden dome again showed the ceramic tile to be durable despite extremes of temperature and high winds blasting the tile with dust, rain, snow and ice.

Nebraskans can be pleased to know that Bertram Goodhue created a beautiful and ‘durable’ crown for their monumental Capitol. He used the knowledge gained from the experience of others to improve his design with an eye toward long-term life and stability.

Once contractors completed the gentle cleaning and grouting, the Capitol’s dome was ready to shine.

The gold dome crowning the Nebraska State Capitol helps define the Memorial Chamber. Sitting like a temple atop the office tower, the Memorial Chamber honors heroic public service. The room is decorated with black marble and has amber colored glass windows to give it a quiet ‘reverent’ ambiance. Through the years, high winds and the occasional bird have cracked and broken the stained glass which lights this chamber. Previously, working from the interior, broken panes were replaced with clear glass. The scaffold which allowed access to the masonry facade also provided access to replace and restore all the broken amber glass at the top of the Capitol. Local stained glass expert Harry Tompkin used his extensive knowledge of historic and modern glass manufacturing and the national glass network to locate a manufacturer willing to replicate the original glass. The Uroboros Glass in Portland, Oregon produced the modern equivalent of the historic glass. Once production was underway, Capitol staff had more glass made than was needed for the current restoration. Future generations of Capitol caretakers will benefit from having replacement glass on-site and readily available. The minimal investment in additional glass will save future generations substantial time and money. Throughout the masonry project, Capitol staff took advantage of the opportunities presented to aid and support future generations of Nebraskans in the maintenance of our Capitol.

The vendor matched the color of the original glass, left, with only a slight variation in texture, right.
Masonry Project Means Better Access

Office of the Capitol Commission staff knew the Nebraska Capitol Collections and Archives contained documentation that would aid architects and contractors during the Exterior Masonry Restoration Project. Staff also knew that retrieval of the information in a timely manner would be a challenge. The large volume of materials retained and stored following the 1922-1932 original construction of the building was in the early stages of organization. The Masonry Project required better organization at an increased speed. To achieve this goal the Capitol Archivist applied for and received a National Historic Publications and Records Grant. The grant allowed the Office of the Capitol Commission to hire a Project Archivist to help organize the Capitol’s architectural drawings. Organization of the architectural drawings to current archival standards involved unrolling/unfolding, flattening, cataloging and placing them in archival flat files where they are easily accessible to staff. From these documents, staff determined that Capitol architect Bertram Goodhue had separately numbered and dimensioned each stone on the facade. The ability to easily access and use this information saved time and money preparing construction documents for the repair and ongoing maintenance of the exterior masonry envelope.

In 2008 an additional NHPRC grant aided in cataloging the correspondence and business records of the 1920’s Capitol Commission which oversaw original construction. Commission minutes, correspondence and business records underwent a similar archival treatment and were then entered into a searchable database for ease of staff access. During construction, the Capitol Commission contracted with the Indiana Limestone Company to set aside one section of the quarry exclusively for mining stone for Nebraska’s Capitol. Using the newly organized correspondence and records, Capitol staff coordinated research with the archivist at the quarry. Together they were able to determine the exact location of that quarry. The Indiana Limestone Company reopened the same quarry location and matched the replacement material to the original. The records also identified the Nebraska sand deposit where they mined the sand used in the original mortar mix. This information enabled contractors to closely match original materials.

Without the assistance of Capitol Archivist Karen Wagner and Project Archivists hired with the NHPRC grants valuable information would not have been easily accessible in a timely manner. The specific detailed information provided by the Nebraska Capitol Collections and Archive helped ensure the Exterior Masonry Restoration Project was the best possible. To assist future generations, the documentation resulting from the completed project will be cataloged and incorporated into the archive. This information will prove invaluable as future generations of Nebraskans maintain their monumental Capitol and independent scholars continue to explore the importance of our Capitol in the evolution of twentieth-century architecture.
Opportunity-Points of View
January 31 - February 4, 2011
Nebraska Appleseed sponsored first floor rotunda photo display focusing on education, job training and work supports.

Big Dogs Huge Paws
February 5-11, 2011
First floor rotunda display about large dog breed rescue and adoption sponsored by Big Dogs Huge Paws.

Build Nebraska Awards
February 6-13, 2011
The Nebraska Building Chapter of the Associated General Contractors will showcase the 2010 award winners in the first floor rotunda.

Invest in Us
February 7-11, 2011
The Nebraska Children and Families Foundation sponsors a traveling interactive display about early childhood development.

Credit Union History
February 14-18, 2011
The Nebraska Credit Union League will have a display in the first floor rotunda.

Awards of Excellence
February 28 - March 4, 2011
The American Institute of Architects-Nebraska sponsor a first floor rotunda display showcases award winning designs.

Gambling Awareness Month
February 28 - March 4, 2011
First floor display to announce March as Gambling Awareness Month.

Music Education Week at the Capitol
February 28 - March 4, 2011
The Nebraska Music Educators Association sponsor a series of noon concerts in the second floor rotunda featuring choirs and bands from across Nebraska.

Nebraska Statehood Day
March 1st, 2011
The anniversary of Nebraska’s 1867 admittance to the United States as the 37th state.

Youth Art Month
March 6-20, 2011
Nebraska Art Teachers Association presents the winners of the annual Youth Art Contest. Artwork from students in all grades will be featured in the first floor rotunda.

Youth Art Month Awards Ceremony
March 12, 2011 at 2:00 p.m.
Nebraska Art Teachers Association program honoring student art, featuring the Nebraska art winners from each congressional district, will be held in the second floor rotunda.

Legislative League Quilt Display
March 21-25, 2011
The Nebraska Legislative League will display hand made quilts in the first floor rotunda. The quilts will be donated to children in hospitals in Nebraska.

Choral Concert
April 10, 2011 at 3:00 p.m.
The University of Nebraska Chamber Singers will present a concert in the second floor rotunda of the Capitol.

Sustainable Agriculture Display
April 25-30, 2011
A Nebraska Environmental Action Coalition sponsored display in first floor rotunda.

Worker’s Memorial Day
April 28, 2011 at 7:30 p.m.
The evening rally on the north plaza will raise awareness about those who have died in workplace related accidents.

Mayors Run For Children
April 30, 2011
The Lincoln Track Club will sponsor this Fun Run for Lincoln’s elementary students. The event will be held on the Capitol grounds between 7:00 and 10:00 a.m..

Nebraska Holocaust Commemoration
May 1, 2011 at 3:00 p.m.
The Jewish Federation sponsors the annual remembrance ceremony for Holocaust victims and survivors.

National Peace Officer's Week
May 6-13, 2011
The first floor rotunda display honoring Nebraska’s Peace Officers killed in the line of duty is sponsored by the Nebraska State Patrol.

Cornhusker Girls State
June 9, 2011 at 2:00 p.m.
Sponsored by the American Legion Auxiliary the Girls State Inauguration will be held in second floor rotunda.

Cornhusker Boys State
June 10, 2011
Nebraska state agencies will host the Boys Staters in this event sponsored by the American Legion. They will meet in the second floor rotunda at 1:00 p.m. before moving out to meet with the various state agencies.

The Governor will sign Proclamations at 10:30 a.m. in the Warner Chamber on February 16, March 9 (1:30 p.m.), April 13, May 11 and June 7. For proclamation information please contact Sarah in the Governor's Office at (402)471-2256.

All events at the Nebraska State Capitol are free and open to the public.

Nebraska State Capitol Free Guided Tours are offered Monday-Friday hourly from 9:00 am to 5:00 pm, except at noon. Saturday and Holidays from 10:00 am to 5:00 pm, except at noon and Sunday from 10:00 to 4:00 pm. Please call 402.471.0448 or visit www.capitol.org for more information.
Proclaiming Martin Luther King Day

The Nebraska Department of Correctional Services Honor and Color Guard posts the colors to begin the January 14, 2011 Martin Luther King Day Ceremony in the Capitol Rotunda. Nebraska Governor Dave Heineman and Lincoln Mayor Chris Beutler presented proclamations praising the work of Dr. Martin Luther King, Jr.; and First Lady Sally Ganem presented the awards given to the student essay contest winners. The program concluded with awards presented to Nebraskans whose lives and work are dedicated to the goal of equal opportunity for all. Additional photographs may be seen at www.flickr.com/photos/lat_am_commission/