

THE CAPITOL SOWER

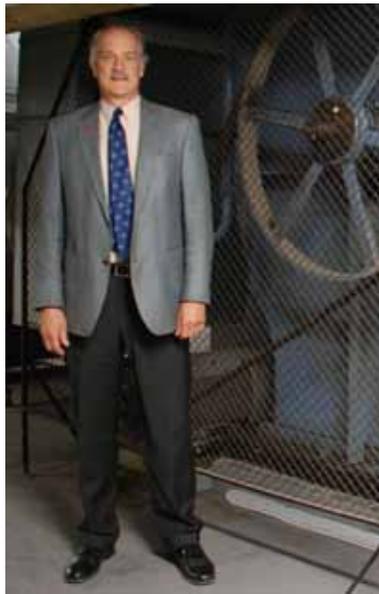
THE NEWSLETTER OF THE CAPITOL COMMISSION | VOLUME EIGHT | NUMBER TWO | JUNE 2016

Keeping the Capitol Comfortable

Nebraska Capitol architect Bertram Goodhue used steam radiator technology to heat the over 100,000 square feet of his monumental stone structure. Steam was generated at the University of Nebraska's power plant and brought to the Capitol via a mile long tunnel. In the 1960's the original system was modified to accept chilled water from the University in an attempt to make summers more comfortable. Because the original design was for one pipe to run from room to room, chilled water could only come in after all danger of a freeze was past and the steam shut off. During the variable spring and autumn seasons in Nebraska, offices easily become too hot or too cold. The Office of the Capitol Commission is undertaking a ten year Heating, Ventilation and Air Conditioning (HVAC) Replacement Project which will incorporate the best of the old system with the latest technology. While the new HVAC Project will take the same amount of time it took to build the Capitol, the project will be more difficult than new construction.

The Project planning phase to replace the 50 year old HVAC system has begun and includes an extensive survey of existing conditions, verifying all against the most up to date architectural drawings in the Capitol's Archive. Once the project is completed a new set of mechanical drawings will be created and placed in the Archive. Staff from project consultants, BVH Architects and Alvine Engineering, are moving from room to room documenting the location of all existing equipment, while looking for ways to bring the two pipes needed for the new system into the Capitol's adaptive use office space and the highly finished preservation spaces.

Initial discussion of the latest HVAC technology introduced the idea of using an energy efficient geothermal system. Further investigation revealed its benefits, especially for cooling, and a well field location on state owned property was identified. The building-wide survey will help the engineers appropriately size the well field and new system. The District Energy Commission steam plant built when the pipes from the University began to fail will serve as backup during extreme cold. Once the well field is in place, work in the Capitol will begin. Removing outdated ducts and pipes, and then installing the new system will require major demolition and reconstruction. The most efficient way to achieve this is to vacate a quarter of the building at a time, all while maintaining the Capitol as the functioning seat of State Government. 



Clark deVries, PE, standing beside an original ventilation fan still in service, is HVAC Project Manager.

Nebraska Capitol Commission Membership

Pete Ricketts
Governor
Chairman

Galen Hadley
Speaker of the Legislature
Vice-Chairman

Michael Heavican
Chief Justice Supreme Court

Katherine Ankerson
Dean
College of Architecture, UNL

Michael Smith
Executive Director & CEO
Nebraska State Historical Society

Bryce Neidig
Congressional District 1

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Congressional District 2

Jim Cudaback
Congressional District 3

Robert C. Ripley
Administrator, Office of
the Capitol Commission
Secretary



The People of the OCC Office of the Capitol Commission

OCC AT WORK Experience and Service

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Tom Kaspar, Architect
Matt Hansen, Architect
Mark Tonjes, Capitol Manager
Tammy Honor, Facilities
Construction Coordinator
Joni Lowry
Administrative Assistant

ARCHIVE

Karen Wagner, Archivist

CARPENTRY

Brett Daugherty, Shop Supervisor
Lana Gabel,
Furniture Conservator
Dawn Hickmon,
Furniture Conservator
Steve Janssen, Furniture Finisher
Phil Lagoni, Mason
John MacKichan,
Hardware Conservator
Mike Marshall, Cabinet Maker

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Capitol Conservation Supervi-
sor
Richard Mallam, Custodial Leader
Rich Naber, Custodial Leader

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Groundskeeper Leader
Don Pracheil, Mechanic

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Sheet Metal Fabricator
Tahir Karimi, Electrician
Jeff Gillett, Plumber
John Steele,
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Tourism Supervisor/
Special Events Coordinator/
Public Information Officer
Daniel Hutt,
Tourism Aide
Ted Haubrich,
Tourism Aide

Two Office of the Capitol Commission staff begin their 40th year of service to the citizens of Nebraska in 2016.



**MARK TONJES 40 YEARS
CAPITOL MANAGER**



**STEVE JANSSEN 40 YEARS
FURNITURE FINISHER**

The Office of the Capitol Commission has six new team members to replace staff who have retired or taken other positions. OCC welcomes them and looks forward to many productive years of service from each one.



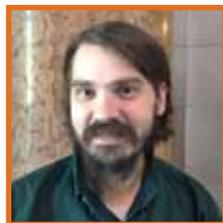
**HEATHER DINSLAGE
GROUNDSKEEPER LEADER**



**LANA GABEL
FURNITURE CONSERVATOR**



**JEFF GILLETT
PLUMBER**



**TED HAUBRICH
TOURISM AIDE**



**DANIEL HUTT
TOURISM AIDE**



**JONI LOWRY
ADMINISTRATIVE ASSISTANT**

Commission Gains New Member

The newly appointed Dean of the University of Nebraska College of Architecture, Katherine Ankerson, will join the Nebraska Capitol Commission as prescribed by state statute. Ankerson received her bachelor of science in architecture, bachelor of architecture and master's degree in architecture from Washington State

University. Her experience as an administrator, educator and scholar will serve the Nebraska Capitol Commission well. Ankerson's belief in interdisciplinary and cross-disciplinary engagement well suits the Commission's task of overseeing the preservation, maintenance and operation of Nebraska's National Landmark Capitol. 

CONSERVATION PROJECTS

Vestibule Lamp Restoration

While projects such as the courtyard fountain installation and HVAC upgrade are the most visible activities in the Nebraska State Capitol. Capitol Commission staff continue with the day to day care and maintenance of the building. Conservation of the building's many one of a kind light fixtures is on going. OCC staff recently completed a project to repair, rewire and clean the bracket lamps on the east and west sides of the 2nd floor Vestibule stairways. Eighty years of service in a public space had taken its toll on the four gilt-bronze fixtures. Hinges and latches allowing access to the bulbs were bent, broken or missing; etched glass cylinders and panels were broken. Using a conservation approach, staff restored the lamps and returned them to service.

The first task was to determine the best way to remove the lamps, in pieces or intact. Staff discovered the lamps had previously be removed intact which had caused some damage. Step by step documentation of the disassembly and reassembly process was developed to guide future caretakers. Once the lamps were removed, the pieces were inspected and cleaned. The Capitol's electrician replaced original wiring. The Capitol's machinist carefully straightened bent components and manufactured missing and broken latches and hinges. A local glass expert examined the original glass and provided replacement cylinder door flat glass. Once staff had completed their work and all processes were documented, the fixtures were returned to the 2nd floor Vestibule stair landings. 



In the before, left, and after, right, images above the bracket lamps appear the same. Closer examination reveals the dust is gone, the glass shades are clean, the bottom left side access door has been restored and the stars are properly oriented.



Above, left and right, Capitol Architect Matt Hansen helps disassemble a lamp, labeling each piece for identification. In the middle photo each lamp's components are kept together during the cleaning and restoration process. Bottom left, Capitol Electrician and Maintenance Shop Supervisor Michael Jordan and Carpentry Shop Supervisor Brett Daugherty return the lamp to its original location. Daugherty wears white cotton gloves to keep hand oils and acids from damaging the cleaned fire gilt-bronze surfaces.

While We're at It...

While each quadrant of the Capitol is vacant of occupants during the HVAC Project, the Office of the Capitol Commission is planning to take advantage of the opportunity to repair, restore and upgrade the areas of the offices effected by the needed HVAC system. Rather than renovating one or two offices per year, entire quadrants of offices will see partial improvement. Window repair will occur without disrupting Capitol occupants. Fire and life safety equipment will be inspected and upgraded during the project. At the completion of the HVAC Replacement Project Capitol occupants will return to find sections of their offices in the best condition since original construction.

Rather than bring the painting contractor into the Capitol for a one or two office job, efficiencies will come from the contractor's ability to move from office to office. Once their equipment is inside the Capitol it can remain until the entire project is complete, reducing wear and tear on the building as well. Efficiencies improve as contractors repeat processes over and over, fine-tuning skills.

Windows are an important part of maintaining a comfortable indoor environment. Many windows in the Capitol are showing their age and in need of repair. Rather than

disrupt staff at work, windows will be removed and repaired while the offices are vacant. Efficiencies will emerge as OCC staff and contractors learn the inner working of each style of window. Repetition of processes will improve skill level in the manufacture of missing or damaged parts. Weather stripping and glass pane replacement will occur as needed.

The Capitol's fire and life-safety system will be inspected and improvements made as needed. During past renovation projects, fire suppression systems have been added as part of each project. Not all areas of the Capitol have received this important technology and the HVAC Project offers the opportunity to gain access and bring fire suppression to these remaining locations. In addition, a new alarm system will be installed, improving staff notification of weather and other potential threats.

The Office of the Capitol Commission will continue to investigate other opportunities for repairing, restoring and upgrading the Nebraska State Capitol during the HVAC Replacement Project. Once the ten year project is over the Capitol should be in excellent working condition and better able to serve Nebraskans and their government for decades to come. 

*Vacant
offices
provide
unique
opportunity*



Walls behind induction units have not been touched since the 1960's HVAC upgrade. They will be stripped and repainted while offices are vacant of staff and equipment. Note the classic 1960's mint green wall color.

BEHIND THE SCENES

Remnants of Second Capitol Found

Visitors and staff in the Nebraska State Capitol hear about the ten year four phase construction of Bertram Goodhue's cross within a square design. Guides describe how the second Capitol stood while sections of the square base went up around it. Only after staff had been moved into the newly constructed sections was the old Capitol demolished. The second phase constructed the east, north and south arms of the cross within the square. Third and fourth phases built the tower and west arm, completing the Capitol. The murals and courtyard fountains originally planned were not realized due to the Great Depression. Now that the project to install the missing fountains has begun, remnants of the phased construction are being uncovered.



Contractors stopped excavation in the northwest courtyard and notified Office of the Capitol Commission Architects, in gray sweatshirts at left, of the rubble found while excavating a mechanical pit. Examining the layer of stone, they determined rubble remained after second capitol demolition and was covered as top soil was brought in prior to final landscaping. Closeup of rubble layer and one of the intact pieces salvaged below and left.



Contractors found bricks buried in the southwest courtyard. Skilled excavation by Jerry Urban with Kingery Construction, right, exposed the steam tunnel leading from an old on-site power plant to the second Capitol. The exposed brick tunnel, far right, before being filled with concrete to allow work to continue on the fountain footings and foundation.



Consultants Survey Capitol



During the two year initial planning and design phase of the HVAC project, consultants from BVH and Alvine Engineering will survey and document the existing heating and ventilation system in the Capitol. Consultants will also investigate the inner structure of the Capitol to locate areas for the new system to occupy. Left, Julie Cawby with BVH Architects, documents original vents in the Supreme Court. Right, Paul Bauman with Alvine Engineering, investigates the internal tower structure.



WHAT'S OLD IS NEW

Supporting the HVAC Project

Once again Capitol Archivist Karen Wagner is reviewing Capitol original documents, supporting the preservation architects and consultants as they plan the upcoming HVAC project. The inspection will allow the consultants and OCC staff to identify areas where the original mechanical system drawings may be lacking in detail and information. It cannot be overstated how important the original design documents and specifications will be in the planning phase of the ten year project to upgrade and replace the heating and air conditioning system in the building. The consulting architects and engineers will reference the original documents as they go office to office inspecting existing conditions and planning changes in the system. During construction and then in the 1960's modifications, contractors may not have been as detail-oriented as current preservation standards require. Once the ten year project is over, any missing information will be added and a complete set of design documents will then be available for future caretakers

of the Capitol.

In addition to the architectural drawings representing the original and 1960's upgraded HVAC system, the Nebraska Capitol Collections also contain examples of original steam radiators, image below. One of the benefits of the preservation oriented focus of the Office of the Capitol Commission is having examples of original materials used in the construction of the building. The collection of original steam radiators enables preservation staff to determine original size and scale of the radiators in the Capitol initially. As the consultants plan the system, they will be able to maintain size and scale of any new equipment visible to the public and staff. It may even be possible to rebuild original radiators for replacement in preservation spaces. The value of the Nebraska Capitol Collections in the ongoing preservation and maintenance of the Nebraska Capitol is significant and provides OCC the opportunity to maintain our Capitol in the best manner possible. 



CAPITOL EVENTS

Girl Awards Ceremony

June 18, 2016

The Girl Scouts Spirit of Nebraska Homestead Service Center sponsored event will begin at 2:00 in 2nd floor rotunda.

Alzheimer's Educational Booth

June 27 - July 1, 2016

The Nebraska Alzheimer's Association will provide brochures and information about Alzheimer's Disease in a 1st floor display.

Independence Day

July 4, 2016

The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m.

Nebraska Home Care Display

February 18, 2016

The Nebraska Home Care Association educational display in 1st floor rotunda.

Noon Concert

July 15, 2016

The Lincoln Men's Chorus will perform in 2nd floor rotunda.

Pretrial, Probation and Parole Supervision Display

July 18 - 22, 2016

The Nebraska Administrative Office of Probation celebrates supervision week with a display in 1st floor rotunda.

NSP Graduation Ceremony

August 18, 2016

The Nebraska State Patrol Basic Recruit Camp 57 will have their graduation ceremony in the 2nd floor rotunda at 10:00 p.m.

Labor Day

September 5, 2016

The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m.

Jr. Duck Stamp Exhibit

September 12 - 23, 2016

The U.S. Fish and Wildlife Service will display youth artwork in the 1st floor rotunda.

NDCS Awards Ceremony

September 21, 2016

The Nebraska Department of Correctional Services will honor employees in the 2nd floor rotunda at 2:00 p.m.

Bar Induction Ceremony

September 29, 2016

The Nebraska Supreme Court will hold a swearing-in ceremony for newly admitted members of the Nebraska State Bar Association in the 2nd floor rotunda at 10:00 a.m.

Hispanic Heritage Month Exhibit

September 30 - October 15, 2016

The Nebraska Latino-American Commission will have an educational display in the 1st floor rotunda.

Probation Officer Ceremony

October 12, 2016

The Nebraska Administrative Office of Probation will hold a probation officer swearing in ceremony in the 2nd floor rotunda of the Capitol at 3:00 p.m.

Day of the Dead Exhibit

October 22 - November 5, 2016

The Nebraska Latino-American Commission will have an educational display in the 1st floor rotunda.

Lights On After School

October 22, 2016

The Nebraska Community Learning Center Network has requested the Capitol be lit orange to raise awareness of the importance of after school programs in child development.

Veteran's Day

November 11, 2016

The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m.

Nebraska Map Gallery

November 13 - 18, 2016

The Nebraska GIS/LIS Association celebrates International Map Year with display in the 1st floor Rotunda.

Commissioner's Recognition

November 14, 2016

The Nebraska Department of Education will recognize career and technology students in a 2nd floor rotunda ceremony at 3:00 p.m.

World Prematurity Awareness Day

November 17, 2016

The Nebraska Chapter of the March of Dimes has requested the Capitol be lit purple.

Thanksgiving Holiday

November 24 - 25, 2016

The Capitol will be closed.

Tree Lighting Ceremony

December 11, 2016

Pinewood Bowl, Inc. will bring in the holidays with a tree lighting and carol sing in the 2nd floor rotunda at 2:00 p.m.

Christmas Holiday

December 25 - 26, 2016

The Capitol will be closed on December 25 and will be open for tours from 10:00 a.m. to 5:00 p.m. on December 26.

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

Nebraska State Capitol

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 1:00 to 4:00 pm. Please call 402.471.0448 or visit www.capitol.org for more information. 



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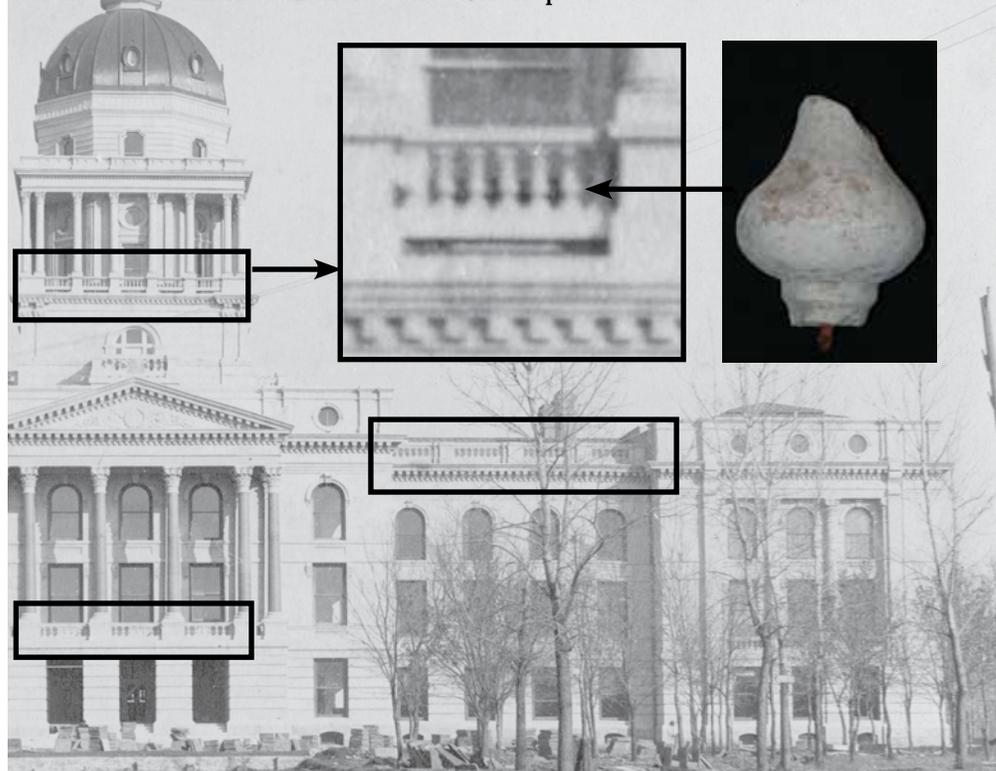
*Capitol Architect
Bertram Grosvenor Goodhue, 1869-1924*

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Capitol Archeology

Digging deep, Capitol Architect Matt Hansen, scanned and enlarged an archival photo of the second Capitol seeking the location of an urn-like piece of rubble found during fountain project excavation in a courtyard. Barely visible even at high resolution, the balustrades along the building's balconies, walls and columned drum feature urn shaped balusters.



The Capitol Sower, published by the Office of the Capitol Commission, is available on line at www.capitol.org. Contact the Tourism Supervisor at <roxanne.smith@nebraska.gov> for more information.

Please contact us if you have any questions or comments about the content. All images property of the Office of the Capitol Commission.