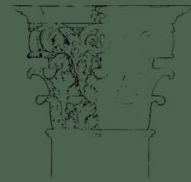


21st Century State Capitol Restoration Project
Missouri State Capitol

LONG RANGE MASTER PLAN
JEFFERSON CITY, MISSOURI





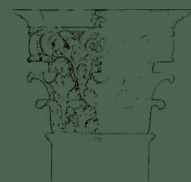
SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

The Missouri State Capitol Building 21st Century State Capitol Restoration Project Long Range Master Plan December 28, 2018



Existing Missouri State Capitol Building 2018

Designed by Tracy and Swartwout, 1913 - 1917



SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

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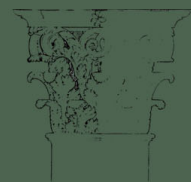
MASTER PLAN

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INTRODUCTION & ACKNOWLEDGEMENTS.

- # Guiding Principles
- 21st Century Missouri State Capitol Master Plan Objective
- Missouri State Capitol Commission
- The Planning Process





SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

Guiding Principles

A principle is a fundamental truth that governs one's belief or behavior and serves as a foundation to build upon. For our purposes, a Guiding Principle will govern the direction of the project and will serve as the foundation for all decisions to build upon.

On July 9, 2018, MOCA met with members of the Missouri State Capitol Commission and conducted a vision session that resulted in the identification of three Guiding Principles.

- 1. Functional Space Expansion with an Integrated Campus Concept** - Presently, the Legislature has added office mezzanines on the first and second floors of the Capitol to accommodate the growing needs of the members. In doing so, the space within the Capitol is highly compressed. The need to decompress space and remove the mezzanines within the Capitol will require an expansion of space. It is the desire of the members of the Commission and Legislative Leadership that the expansion create a connected campus where movement between spaces can be easily facilitated internally and externally to the Capitol. Additionally, the new space will have a strong connection, both physically and logistically, to the Capitol.
- 2. Architectural Integrity and Historic Character** - The goal of the restoration is to restore the architectural integrity of the Capitol or to return the Capitol architecture to its original design and decoration. The original architects of Tracy and

Swartwout, provided the State of Missouri with a Capitol that is uniquely designed to serve the people of Missouri. It is critical that restoration and design decisions reflect those of the initial design and work to maintain the integrity of the original design and that any new structures are sympathetic and subservient in their design to the Capitol.

- 3. Open Public Building** - The Missouri State Capitol belongs to the people of Missouri. It is the embodiment of the constitution where members of the public are able to attend meetings within its walls on any number of topics. Recently, the exterior doors of the Capitol have been closed and locked. This includes the large south doors at the third floor. For decades, these doors were held open symbolizing to the State and the citizens that the work which the legislature is doing within the Capitol is open and transparent to the public. While safety and security is a concern, so too is the symbol of what an open Capitol stands for. As a Guiding Principle, the building needs to be open and welcoming to the public and all visitors.

These then constitute the Guiding Principles. All decisions on this project will be made in support of these three principles.

21st Century Missouri State Capitol Master Plan Objective

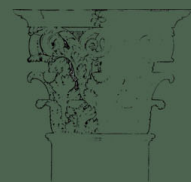
The Missouri State Capitol Master Plan document is a living document that provides a 20 year view of the

restoration, preservation and expansion of the Capitol. The Master Plan should be reviewed periodically and, as appropriate, amended and modified to maintain the 20-year-view.

The Missouri State Capitol Commission (MSCC) is required, by statute, to develop a comprehensive, multi-year, pre-design plan specifically for the restoration of the Capitol building.

This document provides the following goals, objectives and actions that are required to implement the desires of the MSCC. The 21st Century Capitol Renovation Master Plan must:

1. Identify appropriate and required government and public functions of the Capitol building.
2. Identify and address space requirements for legislative and executive branch functions.
3. Identify and address the long-term preservation requirements of the Capitol building.
4. Take into account the comprehensive plan for the Missouri State Capitol Area, as amended in 2018.
5. Take into account the rules governing zoning and design for the Capitol Area.
6. Provide for citizen access.
7. Provide for information technology needs.
8. Incorporate energy efficiency.
9. Provide for security while opening up the Capitol to the Public.
10. Identify opportunities for the education programs including public and school tours and lunches.
11. Include all additional space needs for the efficient operation of state government.
12. Flexible to accommodate needs that will change as expressed by the board.



SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

The Planning Process

The Missouri State Capitol Commission (MSCC) began the planning process in July 9, 2018 with a Vision Workshop conducted and facilitated by MOCA. The MSCC, working with the Office of Administration (OA), retained the Owner Representative Team of MOCA to develop a 21st Century Comprehensive Master Plan and Historic Structures Report for the Capitol. The planning team reviewed historic reports and plans from a variety of sources and information provided by the OA's project manager. MOCA reviewed the program requirements and identified planning alternatives with the help of Historic Architectural Specialist, Structural, Mechanical, Civil, Electrical and Life Safety engineers. The team focused on current and future needs associated with the systems, structure and exterior and interior space needs associated with the Capitol. Traffic considerations for tour buses and parking locations/configurations were also considered due the possible desire to remove the Senate parking structure and to replace it with a new facility/structure.

The Legislative leadership, Governor's office, MSCC Leadership and OA/FMDC project manager participated in a series of workshops facilitated by MOCA. The information developed in these workshops provided guidance to MOCA and the MSCC by way of collaboration between different groups in order to further understand the overall needs.

Following these workshops, working sessions/meetings were held with the Governor's Office, Legislative leadership, members of the Commission, Commission Leadership and OA/FMDC. The resulting diagrams provide the fundamental approach to the overall

recommendation on how best to proceed with the restoration and expansion of the Capitol. The planning team studied the organizational structures of the current office orientation and organization to best understand the legislative needs.

The Capitol's mechanical, electrical and plumbing systems were analyzed to determine adequacy of each of the systems. This analysis identified several options for improvement.

Based upon the discussion held both initially and with the MSCC and Legislative leadership, MOCA developed several different options for consideration. The option which was overwhelmingly supported by the MSCC and Legislative Leadership was based upon the following fundamental concepts:

1. All Legislative Members offices must be held within the historic footprint of the State Capitol building.
2. The Legislative Chambers will need to be used for all legislative session during the restoration of the Capitol. This will require coordination between session to restore these important spaces.
3. When determining the location of Legislative staff space or offices, distance is a critical element to consider.
4. When considering temporary office space for the legislative members during the construction phase (swing space), that it be identified and/or placed in a location that minimizes travel distance to and from the chambers or leadership offices in a connected or indoor connection. Initially, the MODOT building was an attractive option. However, during the Vision Session, there was unanimous agreement to not proceed with MODOT for either swing space or

permanent space, as it would not be conducive to legislative functions.

5. The restoration of the Capitol provides an excellent opportunity to study the current space utilization and to identify ways to improve and recommend efficient space planning and reconfiguration of spaces.

Based upon these fundamental needs of the Legislative and Executive branches, an expansion below grade to the north and south appeared to be the most compelling option to proceed with.

Planning

Within this document MOCA has developed proposed space plans, sequence or phasing plans, as well as organizational diagrams. These have been developed to accomplish the following:

1. To provide a test fit space plan to assure the MSCC and OA that the programmatic needs of both the Executive branch and the Legislative branch can and have been met. It should be understood that space planning will go through several iterations and political analysis before the final plan is approved.
2. To provide a proposed balanced phasing approach in order to develop the budget and schedule to sufficient detail that a Rough Order of Magnitude (ROM) budget could be responsibly developed.



SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

Schedule

Schedule development has been built around a three-phase approach to restore the occupied Capitol building. This approach will take approximately one year longer than if the building was closed. However, closing the Capitol for a comprehensive restoration at one time is not feasible due to the lack available space for critical functional activities. Additionally, due to the need to build the North and South extension structures first, the overall time line for design, restoration and occupancy extends until 2028.

Budget

The budgeting process for the Capitol has focused on four basic cost elements.

First, the hard costs associated with system replacement of mechanical and electrical throughout the building.

Second, the decorative finish areas or the historic specific finishes of the building. This would include historic lighting, decorative painting, wood window replacement and alike.

Third, the soft cost of design and construction fees, furniture, fixtures, equipment, swing space and owner needs would be included as well.

Fourth, escalation of costs with any multi-year project estimates must be adjusted to account for the annual cost of inflation. After investigating the local and national market trends in construction and what is anticipated to occur over the next ten years it is suggested that an average of 4% annual increase be applied to the midpoint of construction.

Likewise, the costs associated with the north and south extensions have been developed in a similar manner. The north extension shall consist of a Visitor Center for public and school children. A parking garage for the Governor's office and a food service facility. The Capitol will also be included in the North expansion.

The expansion to the south will be developed in two levels, below ground. To accommodate this, rock excavation is included within the estimated costs. This will house the House Committee Rooms, Senate Committee Rooms and staff offices for both the Legislature and Executive Branch.

A new parking structure for the Senate is proposed. This new structure will replace the 300-plus car structure for the Senate and Senate Staff. Added to that is an additional 300 parking stalls, likely consisting of 100 for the Executive branch and 200 for the public.

The overall Rough Order of Magnitude cost projection for the project is estimated to be \$535,363,000.00



SECTION ONE: INTRODUCTION & ACKNOWLEDGEMENTS

Missouri State Capitol Commission

The Missouri State Capitol Commission includes:

Ms. Dana Rademan Miller, Chair
Chief Clerk of the House

Lt. Governor Michael Kehoe,
Vice Chair

Senator Caleb Rowden
Member of the Senate 1

Senator Shalonn Kiki Curls
Member of the Senate 2

Representative Pat Conway
Member of the House of Representatives 1

Representative Scott Fitzpatrick
Member of the House of Representatives 2

Ms. Sarah Steelman
Commissioner of the Office of Administration

Ms. Betty Hearnese
Governor Appointee 1
Charleston

Vacant Slot
Governor Appointee 2

Mr. Patrick Baker,
Senate Administrator

Facilities Management Design and Construction

Cathy Brown - Department Director FMDC

Bryan Chinn - Project Management Unit Section Leader

Sherry Kempf - Senior Project Manager

Maintenance

Steve Kroner, Facilities Operation Manager

Paul Ridenhour, Maintenance Supervisor

Other Support

DNR - Missouri State Museum and Staff - Tiffany Patterson

DNR - Missouri State Historic Preservation Office - Toni Prawl

Missouri State Archives - John Dougan

Bob Priddy

Master Plan and Historic Structures Report Team

This document has been developed and organized with the assistance of:

- MOCA Systems



- STRATA Architecture Inc.



- Building Preservation, LLC



- Bob D. Campbell & Company, Inc.



- Bernhard, LLC



- Rogers-Schmidt Engineering Co., P.C.



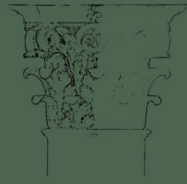
- Henderson Engineers, Inc.



- Architectural Arts Conservation LLC



We would like to express our appreciation to Dana Rademan Miller and Patrick Baker of the MSCC, the Senate and the House and the Office of Administration project manager Sherry Kempf, who provided assistance and guidance throughout the process.



SECTION TWO: EXECUTIVE SUMMARY

Executive Summary

When the Capitol was initially envisioned, it provided a wide variety of spaces within its walls for most all of State Government offices. However, over time many of those offices have grown to exceed the space available within the Capitol and have relocated to other buildings outside of the Capitol building.

With each successive exit of a state agency or office, the space was backfilled by legislative functions.

In 1950, the basement level was added to the Capitol where it was once used as a storage area for automobiles and freight wagons. This provided a relief valve regarding the pressure of legislative needs such as meeting rooms, hearing rooms, and legislative staff office space for support functions. This relief only lasted a short while and was eventually outgrown as additional functions and staff were crammed into tighter and tighter spaces.

In 1974 and 1984, the mezzanines were constructed around the perimeter of the first floor and, to a lesser degree, along the south edge of the second floor.

This expansion has greatly impacted the building. The character of the building on the first and much of the second floor has been altered to where the once glorious naturally lighted hallway from daylight transmitted through the outer offices to the interior corridor has now been all but completely closed off.

Even with the use of the basement and the added space provided by the mezzanines, the demand for functional space to support the legislature, either

from organizations like the press or from within the House or the Senate, has continued to place pressure on the Capitol building. Without a comprehensive overall approach to a solution, the Capitol is in danger of having real damage done to it by impacting the major historically significant spaces with future inappropriate mezzanines or other types of expansions.

The Missouri State Capitol Commission (MSCC) recognized this in 2016 and over the past two years has been working to develop a comprehensive approach to the planning for the future use of the Capitol.

21st Century State Capitol Restoration Project Long Range Master Plan + Historic Structures Report

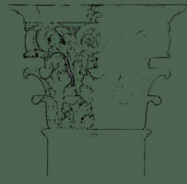
In July of 2018, MOCA, an Owner Representative firm, was retained to develop the 21st Century State Capitol Restoration Project Long Range Master Plan and Historic Structures Report for the State Legislature for consideration and funding in 2019.

MOCA's first action was to hold a Vision Session with the members of the Capitol Commission and other invited leaders of the State in order to identify the Guiding Principles. Three Guiding Principles were identified:

- Functional Space Expansion within a Campus Concept
- Architectural Integrity and Historic Character
- Open Public Building

Each of these is further explained within this document in greater detail.





SECTION TWO: EXECUTIVE SUMMARY

The following are the key elements that comprise the Comprehensive Capitol Restoration/Expansion Masterplan:

Phase One

1. *Expansion to the north with a Visitor Center* - Presently there is no real Visitor Center associated with the Capitol. Additionally, large groups and school children do not have any place within the building for orientation or group gathering other than the first floor of the rotunda. Additionally, security concerns have resulted in closing the Capitol and installing security devices that are inconsistent with an open, but secure public building. The new expansion will provide for security screening and will serve as the primary entry point for visitors. Presently, the Governor's parking is convoluted and not as secure as it should be. The north expansion proposes a new, secure, below grade parking structure that will provide parking for the Governor and Governor's security detail along with a security office.

The north expansion will include approximately 19,500 gsf.
2. *Expansion to the south for legislative staff and meeting space* - Presently the basement is housing the majority of legislative staff and the House meeting/Hearing rooms. The space is poorly organized due to the imposition of parking that is located in the center of the building. The current House Hearing rooms are small and do not provide the full capability of a modern Capitol Hearing room. However, due to the structure of the Capitol the Hearing rooms are constrained by both ceiling

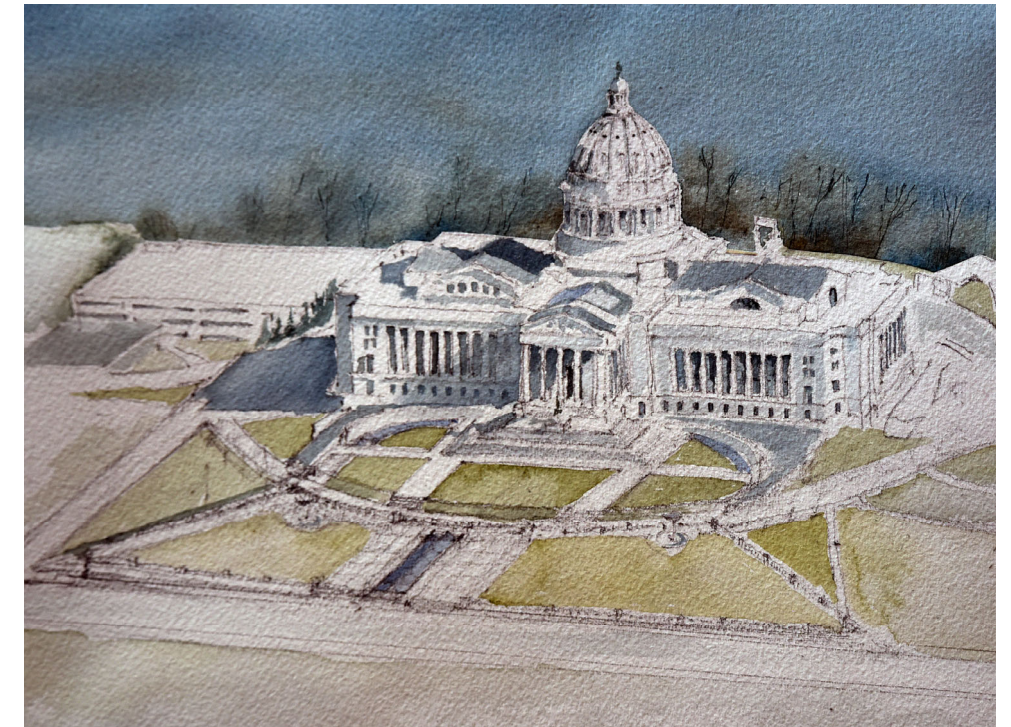
height and structural columns. The staff offices have been squeezed into the remaining spaces, creating a highly inefficient working environment for the legislature. Add to this the need to address the mezzanines and there is a total need for additional office and meeting space of 163,000 gsf.

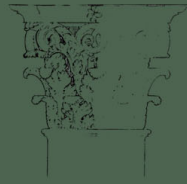
During the investigation, MOCA reviewed previous studies that proposed several alternate locations for how best to address this overcrowding in the Capitol. After review, the MODOT building was considered for both temporary office during construction and for permanent space following the restoration. However, MODOT is only 81,000 nsf with a minimal amount of circulation space. MOCA found that this will work best for the some Executive branch functions due to its configuration. MOCA does not believe that MODOT will provide an effective solution to overcrowding or swing space.

The most efficient and cost effective plan to resolve the overcrowding of the Capitol long term will be to expand the Capitol to the south by creating a new 145,000 gsf. underground facility that will provide the larger more appropriate hearing rooms, high quality office space for Staff and for expansion in the future. By expanding underground, the plan will preserve the main stairway and the south Capitol lawn, grounds and monuments for continued public use and inaugural ceremonies.

Phase Two and Three

3. *Restoration of the Capitol* - throughout the Capitol, modifications to increase square footage over time have been made to try to solve the problem of overcrowding. The largest impositions have been:





SECTION TWO: EXECUTIVE SUMMARY

- Mezzanines which compressed the building.
- Mechanical and electrical systems which have required the lowering of ceilings.
- The elimination of natural lighting within public corridors due to lowered ceilings.
- Office space that backfilled the available space requiring a number of inefficient individual mechanical units.

The Master Plan recommends returning the Capitol to the original architectural integrity that was designed by Tracy and Swartwout in 1917. This will require the removal of all the mezzanines, dropped ceilings and mechanical duct work as well as the reassignment of office, meeting and functional spaces within the building.

The result of this recommendation will be to decompress the Capitol and to provide more light into the public corridors while improving the functional space needs within the building. However, the number of Member offices on floors 1 through 4 will be significantly reduced for the House (due to the removal of the mezzanine spaces). The Master Plan proposes relocating these member offices to a newly organized and well designed basement that will provide for greater access and more effective member office layout.

On floors 1 through 4, the perimeter offices are all in need of a renovation and return to the original design of higher ceiling and reopening the transom/sidelight to the public corridors. The Masterplan proposes a design for both a Senate Member office and a House Member office that will provide for effective function, while allowing for the

restoration of light to the public corridor.

The public spaces are generally in good condition and have been well maintained throughout the Capitol. While there will need to be some cleaning of stone, the Master Plan is recommending that within the two phases of construction activities the House and Senate Chambers, Chamber galleries or public spaces be restored over a multi-year period. This will require coordination and timing by the Construction Manager at Risk (CMr) to appropriately schedule work activities that can be done during non-session times. The House and Senate Chambers will remain the primary meeting area for legislative session and the work will need to be organized to accommodate the legislative schedule. Accommodations will need to be made for any kind of special session or veto session that may be called during the construction phase within the interim period.

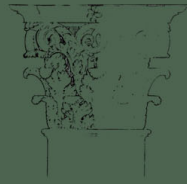
The existing historic Capitol building restoration, itself, will be restored in two major sequences or phases.

The first restoration phase will consist of relocating all the occupants from the basement, and the north and east side of the Capitol on floors 1 through 4 to the north and south expansion which will serve as swing space during the restoration. Those occupants of the basement will be located in semi-permanent space that will be expanded following the completion of the Capitol. Those from level 1 through 4 will temporarily be located in the extension until the work on the north is complete, at which time some will be relocated to newly remodeled offices in the basement and the north side of the Capitol on floors 1 through 4.

The second phase of the existing Capitol restoration will begin when the restoration work moves to the south and west side of the Capitol and all the occupants on floors 1 through 4 will move to the temporary swing space in the north and south expansion. Once the south side of the Capitol and the remaining areas of the basement are complete, those in the swing space will move to the finished space in the Capitol.

With the Capitol finished, the swing space will be modified for occupancy by staff of both legislature and executive branches.

4. Parking is presently distributed in four primary locations. The Masterplan recommends the consolidation and modification to the parking as follows:
 - Capitol basement parking be eliminated completely to allow for Legislative offices.
 - Governor's parking will be provided in the north expansion with a direct connection to the Governor's office.
 - All site parking is to be closed.
 - Public street parking around the Capitol to be eliminated to provide for a better overall flow of traffic around the Capitol. This will require the addition of a approximately 250 public parking stalls to be included within the new Senate parking structure to the northeast of the Capitol
 - Senate Parking to be demolished and a new 600 stall parking structure be constructed on the same general site, absorbing the displaced parking from the basement and site parking.
 - House parking to remain as it is However, the



SECTION TWO: EXECUTIVE SUMMARY

House will absorb the member parking that is currently in the basement within their current parking totals.

5. Security and Safety - To enhance security and to achieve an open secure boundary, the following enhancements/changes will be made:
 - Public circulation to the north for public access to the boundary will need to be enhanced.
 - Staff and employee access through the current first floor entry or other doors will occur through the use of card readers.
 - The south main doors will be reopened.
 - West Capitol Avenue circular drive will be closed on the south side and a pedestrian walk will be incorporated into the south expansion.
 - Removal of the security station to the east of the Capitol.
 - Increased presence of officers trained to spot those with criminal intent, other presence.
 - Surveillance equipment with an improved security office is recommended.
6. The cost to accomplish this work is provided in Section 15 of the report. The total cost for the proposed restoration is \$521,865,313. This includes all of the restoration, expansion and parking recommendations contained within the 21st Century State Capitol Restoration Project Long Range Master Plan.

Additionally, MOCA was asked to look at the total comprehensive project and to provide discrete smaller phases of work that could take place over

time.

As the analysis of the building problems and restoration needs were determined, it became clear to MOCA that the ability to break up the restoration into smaller discrete pieces of the restoration that could be bid or contracted separately over time by OA was not feasible or recommended. This is largely due to the need to completely redesign and relocate all of the mechanical, plumbing and electrical within the building. The largest and most difficult aspect of this work is the replacement of the mechanical system with a four pipe fan coil unit at the perimeter and vertically ducted forced air systems to replace the horizontal systems currently in use in the Capitol.

Therefore, MOCA has reviewed several options for how a reduced project scope could be implemented. The primary drawback for these reduced scope options is, while they address overcrowding of the Capitol proper, they do not address the need to upgrade and replace mechanical, life safety and electrical systems within the Capitol. Therefore, MOCA has not provided additional pricing or phasing for a reduced scope approach to the restoration.

7. The schedule is a similar analysis to that of the cost. MOCA has reviewed two approaches; The first approach of doing it all at once vs. the piecemeal approach of doing smaller project over an extended period of time. As with the Cost analysis, MOCA is not able to provide the piecemeal approach nor does MOCA recommend this approach for the reasons



listed above.

The current schedule anticipates that planning and construction of the multi-year phased approach will be approximately a 9-year project completed in 2028.

8. The project is exceptionally complex and, after review of the different delivery methods, MOCA is suggesting that the project be completed in three phases of work using one delivery method known as a Construction Manager at risk (CMr). This delivery method is explained in more detail within the project delivery section (twelve) of the plan. Based upon current Missouri procurement law, legislative action will be required to allow CMr delivery of the project.



SECTION THREE: ARCHITECTURAL HISTORY

Statement of Significance

The Missouri State Capitol is a majestic Neo-Classical style building constructed almost exclusively of materials gathered from within the borders of the state. The exterior is clad in Burlington limestone from the Carthage quarries of southwest Missouri. It is just over 435 feet long, with a tall central dome and large formal porticos which feature extensive, classically-derived ornamentation. The building also features an impressive collection of fine art. Exterior ornamentation includes bronze sculptures and stone bas-reliefs, and the interior of the building contains numerous murals which depict Missouri subjects. The Capitol was designed by the New York architectural firm of Tracy and Swartwout. The architects issued plans in 1913 and the new Capitol was placed in service in 1918. Installation of the artwork was largely completed by 1924, when the building was formally dedicated.

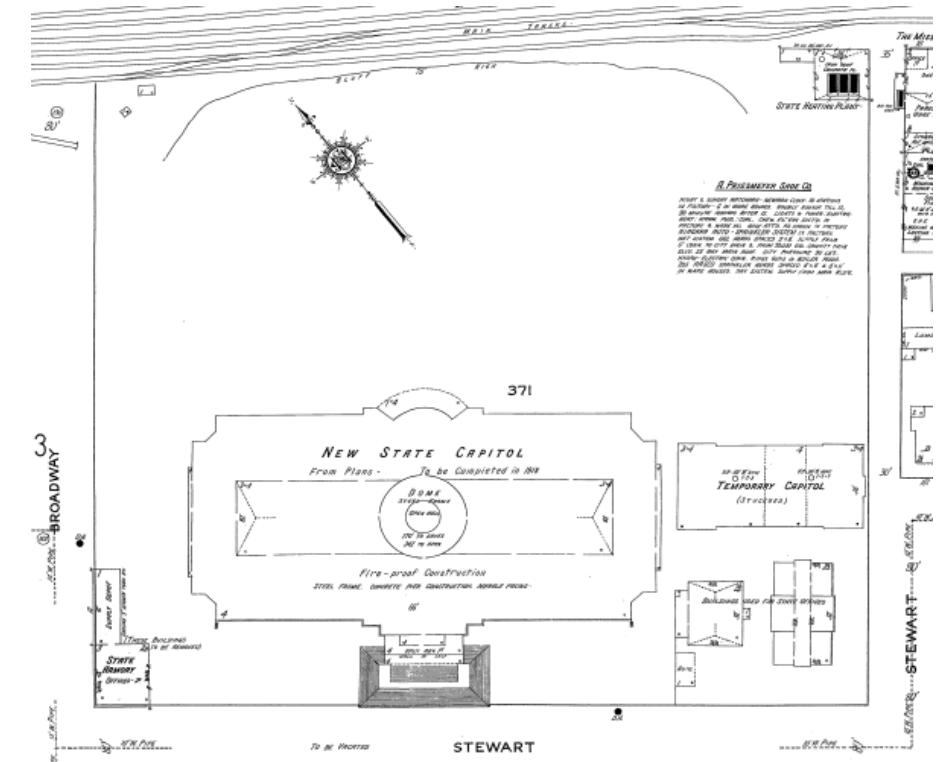
The Missouri State Capitol is significant for its long role as the seat of Missouri state government, as well as for the refined and elegant architectural design of the building. Missouri had numerous Capitol buildings in its first 90 years; the present building has been in service for just over a century. The building has seen remarkably few alterations over the years. It appears today very much as it did the day it was dedicated in 1924. A description of the building written fifty years ago, when it was listed in the National Register of Historic Places, is still accurate: “it is an overt, architectural expression of Missouri’s statehood, housing the nucleus of government function in Missouri.”

General History of the Capitol

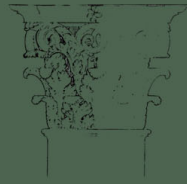
On February 5, 1911, in what a later publication described as a ‘fortuitous’ event, a lightning strike started a fire that was to destroy Missouri’s state Capitol building. The author found that fire to be fortunate in hindsight, because it led to the construction of the present building, which has proven to be far more enduring than any of its predecessors.

The Missouri legislature wasted no time making arrangements for a new building—just a few weeks after the fire, they passed legislation which created a four-person commission which was tasked with planning and overseeing the construction of a new seat of government. The new building was to be funded with a \$3.5 million bond issue and not surprisingly, the legislators wanted it to be of ‘fireproof’ construction. The legislation also stipulated that the building was to be constructed on the same site as the building that had burned and that Missouri materials and local labor be used wherever possible.

In August that same year, Missouri voters overwhelmingly approved the bond issue by a vote of 144,664 for and just 45,468 against. The bi-partisan State Capitol Commission was appointed soon after that vote and they held their first meeting on Oct. 9, 1911. One of the first actions taken by the board was the purchase of additional land, which allowed them to double the existing site, for a total acreage of about seventeen acres. That extra land made it possible to erect a separate power plant and a temporary Capitol building on the site and still leave room for ample grounds on all sides of the new building. The temporary Capitol was completed in 1912 and demolished once the new building was completed.



Sanborn Map of the Site, 1916. (Sanborn Fire Insurance Company.)



SECTION THREE: ARCHITECTURAL HISTORY

The next major step for the Capitol Commission was to secure the services of an architectural team. The enabling legislation called for that to be done via a competition, which turned out to be a somewhat lengthy and complicated process. Finally, in October of 1912, the board selected the firm of Tracy and Swartwout, of New York. The architects received a six percent commission, which the board later proclaimed to have been money well spent. They wrote in 1918, that the construction costs for the Capitol were “the lowest of any state of equal size and construction,” due in no small part to the skill of the architectural team. The lead architect was Egerton Swartwout, who was actively engaged in design and construction supervision throughout the process.

Construction documents were issued in March of 1913 and the official groundbreaking ceremony was held a few months later. After a good start, the project got bogged down in a dispute over the source of the stone, which was not resolved for nearly a year. Finally, the contractor agreed to use stone from Carthage and Phenix (sic) quarries as had originally been proposed and work proceeded. The building was substantially complete by the fall of 1917, when the contractor presented the keys to the new building to the Capitol Commission. After another year of direct supervision by the Commission, furniture was in place and the building was declared complete. In December of 1918, the Commission turned the building over to the state and stopped meeting.

The transfer of the building to the state did not mark the end of the project, however. A second commission had been formed in 1917 to oversee the ‘decoration’ of the new Capitol. The Capitol Decoration Commission was created after it became

apparent that there would be money left in the Capitol Tax Fund, which would not be needed for construction or furnishings, but could only be legally used for the Capitol. The new Decoration Commission was therefore tasked with spending that money to embellish the large new building. They began with the addition of murals inside the building. As more funds were released, they authorized the addition of sculpture to the exterior of the building and the grounds. The artwork came in a variety of types and media, all with a common theme—the state of Missouri.

The Capitol was constructed much as it was originally designed, with the exception of a large terrace and arcade on the north side of the building. That feature was intended to cover the railroad tracks and provide a dedicated river landing. When it proved to be too expensive, plans were altered to include smaller terraces around the building instead. Those terraces were constructed under separate contracts in 1917 and 1918.

By the fall of 1924, the building was in use, the majority of the artwork had been installed and the state was ready to celebrate. On Oct 6, 1924, the building was formally dedicated, before a crowd of some 20,000 people. By 1928, the Capitol Decoration Committee had concluded its work and the group published a long illustrated report on the artwork that had been installed during their tenure.

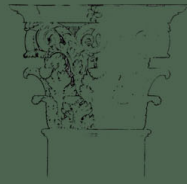
The new Capitol served a wide range of government entities, with space set aside for numerous boards and commissions, as well as the state museum and the legislature. The large ground floor galleries had been designed specifically for the museum and the rooms



Capitol Under Construction, ca. 1915. (Missouri Museum Collections.)



Dedication of Missouri State Capitol ca. 1924. (Missouri Museum Collections.)



SECTION THREE: ARCHITECTURAL HISTORY

around the perimeter were occupied by government entities such as the Public Service Commission and the Board of Agriculture. The second floor had space for elected statewide offices, with a large suite for the Governor, plus offices for the Secretary of State and the State Treasurer and others. The third floor was built with the House and Senate chambers and the remaining spaces on the upper floors were set aside for meeting and committee rooms. Only the presiding officers of the House and Senate were provided with office space in the new building.

The Capitol building saw few changes in physical form or patterns of use over the next several decades. One of the most notable early physical additions came in 1935, when famed Missouri artist Thomas Hart Benton was hired to add murals to the large House Lounge on the third floor. Benton completed that work in December 1936 and the House Lounge has been one of the most visited rooms ever since.

A growing state government spurred an increased need for office space and in 1938, a new state office building was constructed a short distance from the Capitol. The new building included office space for numerous state boards and departments, including nearly a dozen that had been located in the Capitol. The state continued to add office space offsite, which freed up more space in the Capitol, including office space for individual legislators.

The state continued to add office space elsewhere and by 1983, there were three more state office buildings nearby. Those facilities appear to have provided enough office space outside of the Capitol that each legislator could finally have an office inside the Capitol. Legislation passed in June 1983 mandated

that nearly 100 rooms in the Capitol were to be turned over to the House or Senate by the end of that year. Those rooms were presumably converted to legislative offices; the next year marked the first time that the official Manual of the State of Missouri (the Blue Book) included capitol office addresses for all legislators.

Growing demands for space have not impacted the rotunda or the large first floor galleries of the state museum, all of which have been important public spaces since the building was placed in service. The museum spaces were upgraded after 1976, when the Missouri Department of Natural Resources assumed responsibility for operation of the museum and they have seen additional upgrades over the years, but there have been few major changes to the gallery spaces or the rotunda. The rotunda continues to be a frequent site of programs and formal ceremonies.

Over the last half of the twentieth century, the Capitol building saw a number of physical upgrades, but few changes to its overall form or floorplan. One of the first comprehensive upgrades of finishes came in 1950, with interior and exterior cleaning, new interior paint and upgraded fire protection systems. That project also included work on the terraces, which have proven to be one of the most troublesome components of the building; they were built in 1917 and repaired in 1918, 1950-51, 1968, 1973-74, 1982, 1985, 1989, 1992 and 1999. An additional study in 2009 focused on this same issue.

The Missouri State Capitol continues to serve as the seat of state government; all legislative activities take place within its walls, and the building regularly sees more than 400,000 visitors a year. Office space has



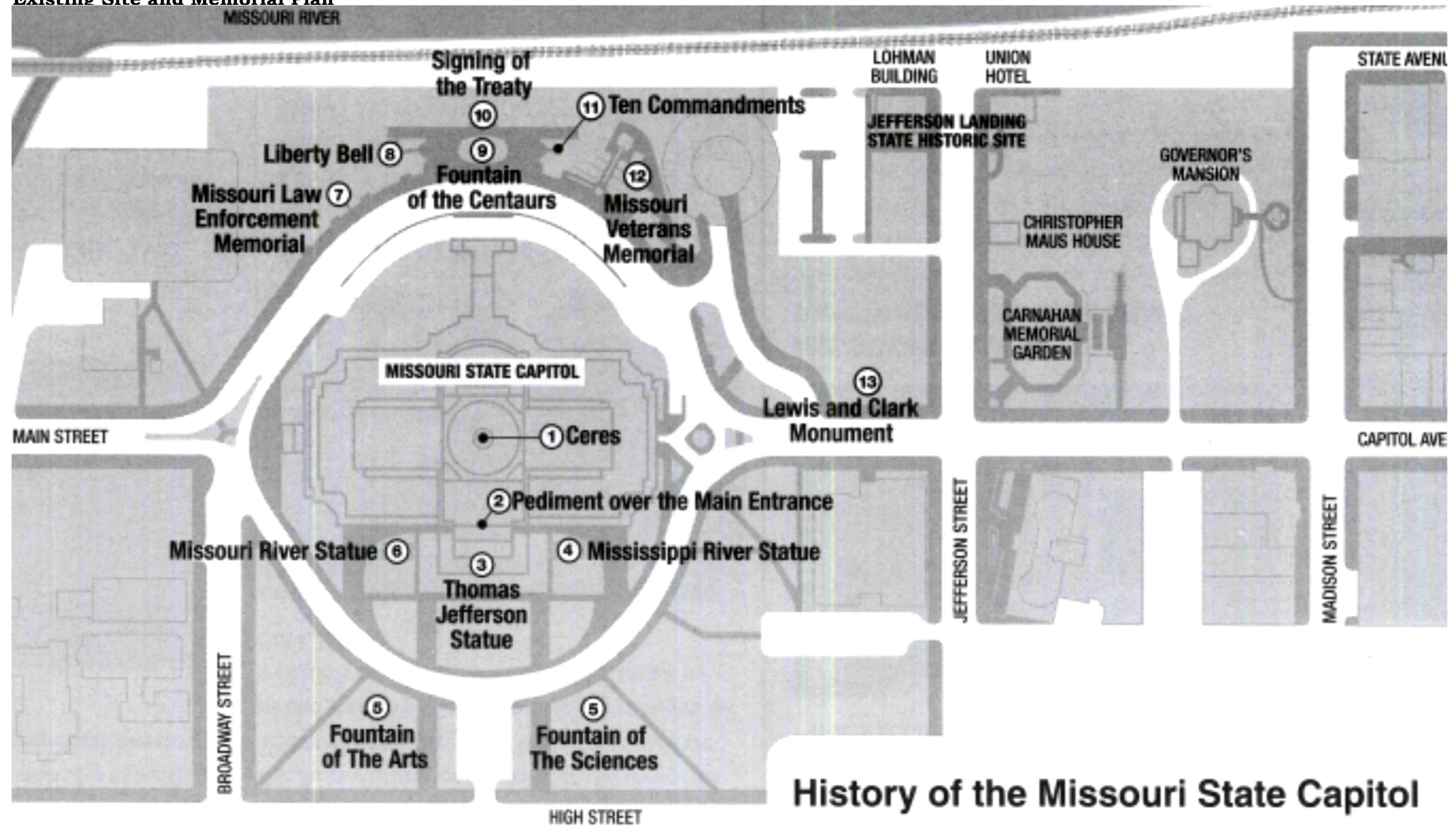
Image of the Soldiers and Sailors Memorial Hall, or “history hall”, believed to have been taken around the time of Governor Gardner’s inaugural ball in 1917. (Missouri Museum Collections.)

continued to be at a premium. Over the years, existing offices have been subdivided and more rooms have been added to the originally unfinished basement, but most of those changes have been done to secondary spaces. The original corridors and office entrances in Floors 1 through 4 have seen few changes and the grand public spaces of the building, including the legislative chambers, rotunda and museum galleries, still look much as they did in the 1920s.



SECTION FOUR: SITE AND MONUMENT

Existing Site and Memorial Plan

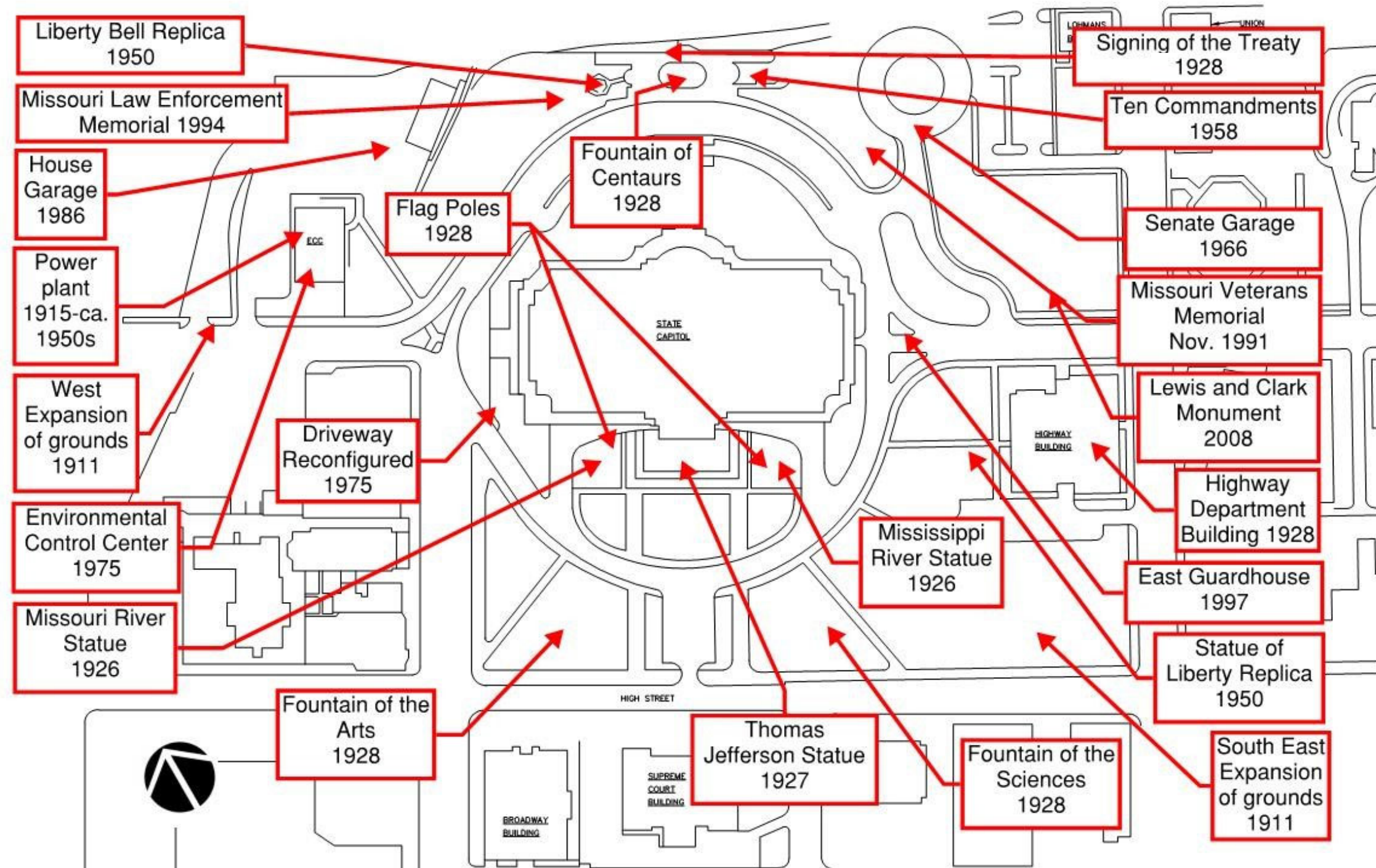


History of the Missouri State Capitol

*Note: The numbers are keyed to the detail description on the following pages within Section Four.
Map provided courtesy of the Missouri Department of Natural Resources Division of State Parks.*



SECTION FOUR: SITE AND MONUMENT





SECTION FOUR: SITE AND MONUMENT

1. CERES

Standing some 400 feet above the river on top of the Capitol dome is a statue of Ceres designed by Sherry Fry. Ceres is the Roman Goddess of Missouri, a strong agricultural state. Her left hand holds a sheaf of grain and she extends her right hand forward in perpetual blessing over the state.



Monument info provided courtesy of the Missouri Department of Natural Resources Division of State Parks.



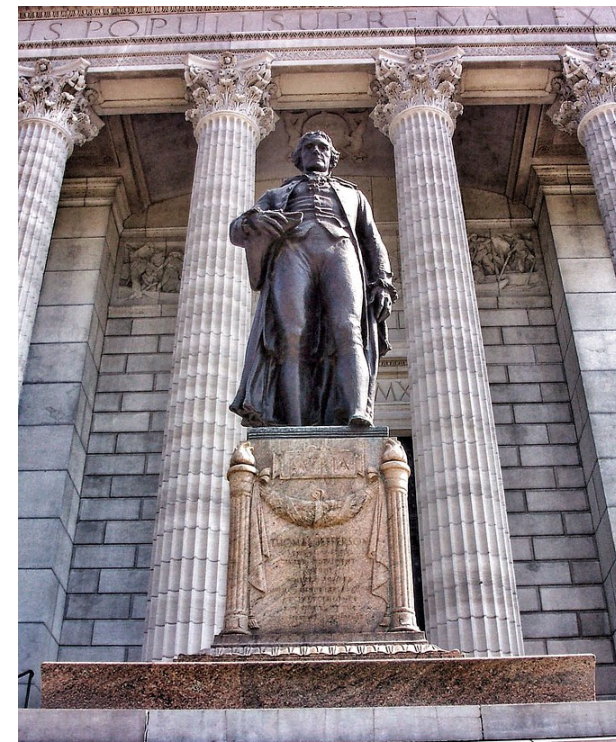
2. PEDIMENT OVER THE MAIN ENTRANCE

These sculptures are symbolic of the state's aspirations. The central figure is the figure of Missouri enthroned. Her left arm rests on a shield bearing the state's coat of arms. At her right stands a boy with a winged globe, the "Spirit of Progress." To the right of this central group is "Agriculture," represented by a man driving a yoke of oxen and a youth bearing a sheaf of grain. This group is followed by a female teaching a youth, "Learning" and a female figure leaning upon a capital supporting a harp representing "Art." On the left of the central group is "Commerce," the god Hermes guiding the "Steeds of Industry." These are followed by a reclining male figure, "Law," contemplating enscribed tablets of the Ten Commandments. Next is a reclining woman representing "Order." She is crushing the serpent of anarchy. The figure at the extreme left represents the "Genius of Justice." The figure at the extreme right represents "The Genius of Light."



3. THOMAS JEFFERSON STATUE

The man for whom our capital city was named, Thomas Jefferson, rightfully stands upon the front steps of the Capitol. Jefferson was as accomplished writer, architect, scholar, and as the third president of the United States he was primarily responsible for the Louisiana Purchase. This 13-foot tall statue was designed by James Earl Fraser and is one of the finest statues of Jefferson in existence.



*Pediment sculptor - Adolph Alexander Weinman.

4. MISSISSIPPI RIVER STATUE

This statue was designed by Robert Aitken. The male figure represents the Mississippi River, often called the "Father of the Waters." He holds in his left hand the rudder of commerce and the anchor of a steamboat representing the significance of river trade. The caduceus in his right hand was the magic wand of Hermes, the god of travelers and commerce. He rests upon a cornucopia, which symbolizes agriculture. The alligator by his knee is a reminder of what life is like on the southern portion of the river. The dolphin behind him is a symbol of good luck to travelers of the river and the three smaller fish represent the river as a source of fishing and recreation. The four panels on the base of this statue are the same as those on the Missouri River statue only reversed.

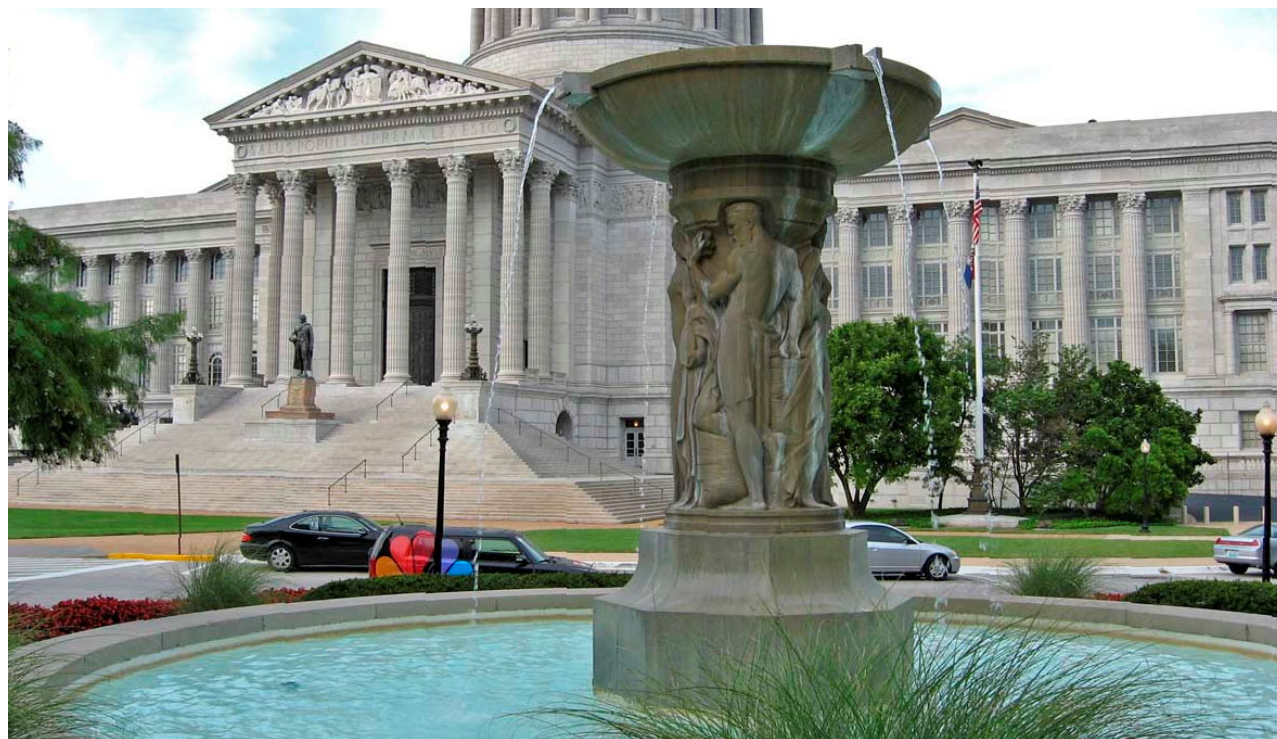




SECTION FOUR: SITE AND MONUMENT

5. FOUNTAIN OF THE ARTS

Four figures are positioned around the central pillar of this fountain. Architecture, a male, is the father of all arts. His hands are resting on a Greek pillar. Sculptor, a male, has his chisel and hammer to free his idea from the encumbering rock. Painting, a female, has her palette and brush. Music, a female, holds her instrument as she catches the strains of aeolian harps in the distance.

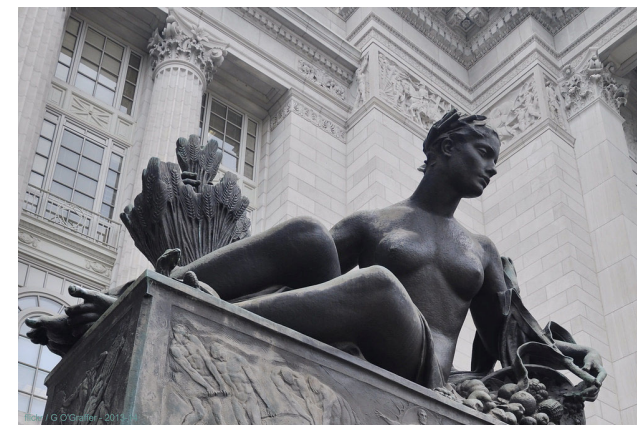


5. FOUNTAIN OF THE SCIENCES

Four figures are positioned around the central pillar of this fountain as well. Geometry, a male, is the oldest and noblest of the sciences. He holds his compass and sphere. Geology, a male, is studying the crystals that he has broken from a ledge. Chemistry, a female, holds her lamp of investigation as she studies the contents of her test tube. Astrology, a female, holds her astrolabe while gazing into the distant stars to read the horoscope of man.

6. MISSOURI RIVER STATUE

This statue was designed by Robert Aitken. The female figure crowned with cattails represents the Missouri River. Her left arm rests upon a cornucopia of fruit while she holds a stalk of corn in her left hand and a bundle of wheat in her right hand. The turtle by her knee represents one of the many small animals dependent upon the river and the catfish and four smaller fish behind her represent the river as a source of fishing and recreation. The oxen skull represents the loss of life and property due to flooding and drought.



7. MISSOURI LAW ENFORCEMENT MEMORIAL

This tribute to all Missouri law enforcement officers killed in the line of duty was dedicated on June 17, 1994. Plaques on the walls contain the name of an officer, his or her position, their city or town, and the date he or she died.





SECTION FOUR: SITE AND MONUMENT

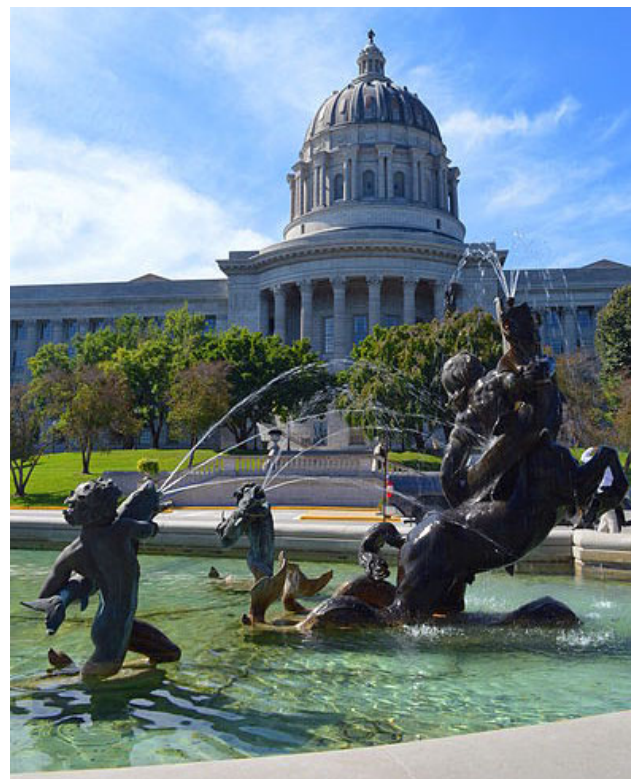
8. LIBERTY BELL

This is a reproduction of the Liberty Bell that rang in 1776 declaring our nation's independence. It was presented to the people of Missouri by John W. Snyder, the United States Secretary of the Treasury. It serves as an inspirational reminder of the United States Savings Bond Independence Drive from May 15 through July 4, 1950. This bell is one of 53 cast in France in 1950 and given to the United States government by patriotic donors.



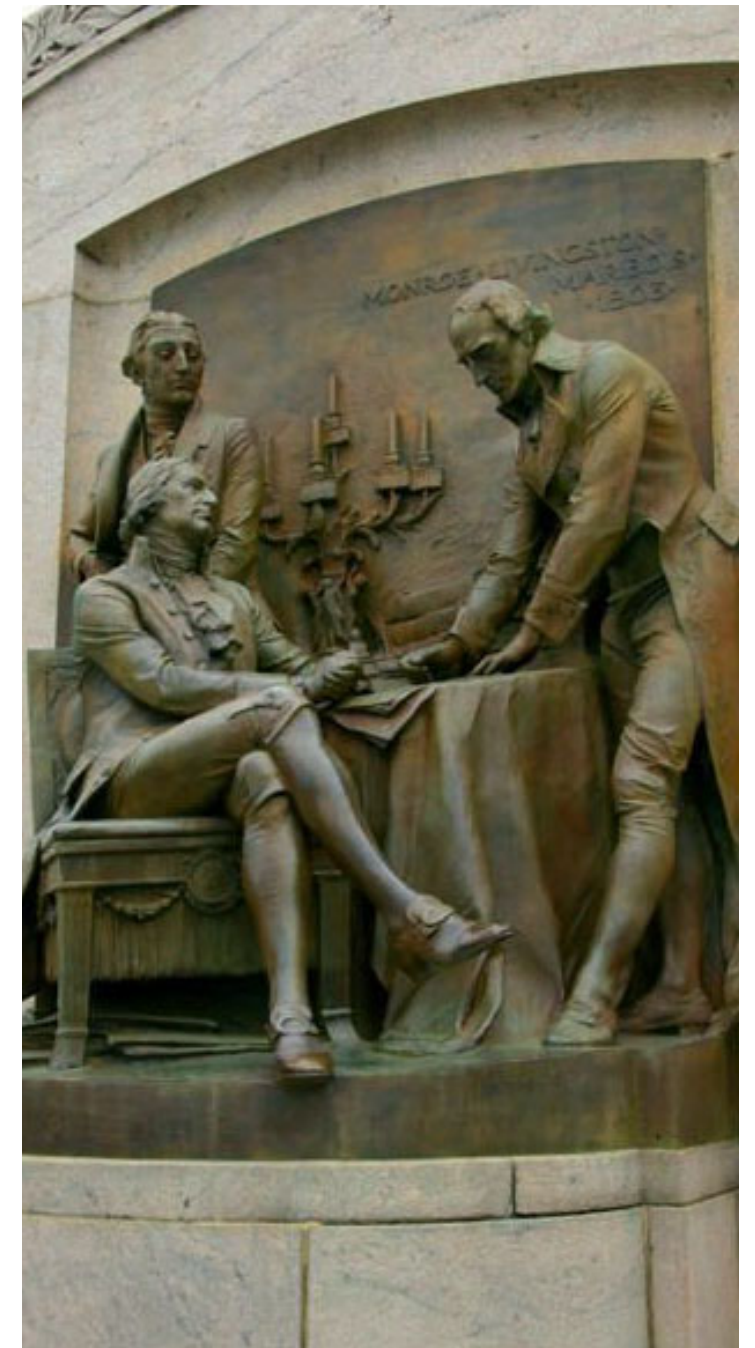
9. FOUNTAINS OF THE CENTAURS

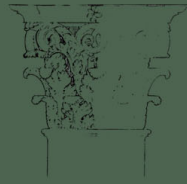
This fountain was designed by Adolph Alexander Weinman. The large figures in this fountain are mythological half animal, half human creatures known as centaurs. They are seen wrestling with serpents and giant fish to represent the wildness of the West. The smaller, boyish figures are sea urchins. They are spraying water on the centaurs with their fish to represent the playfulness of the small animals of the West.



10. SIGNING OF THE TREATY

This sculpture was designed by Karl Bitter for the 1904 St. Louis World's Fair. It depicts Robert Livingston standing, James Monroe seated, and Francois Barbe-Marbois signing the treaty by which the United States acquired the Louisiana Territory from France in 1803. This transaction is commonly known as the "Louisiana Purchase" and Missouri became the second state formed out of this purchase. President Thomas Jefferson wanted control of New Orleans, the major trading port on the Mississippi River. To accomplish this he sent Robert Livingston and James Monroe to France to negotiate the purchase of that city. Napoleon Bonaparte, ruler of France, was in need of money because England was about to declare war on his country. Marbois, Napoleon's treasurer, urged him to sell to the United States not only New Orleans, but the entire Louisiana Territory. Marbois reasoned that France needed the money and if England declared war, the first thing they would take would be France's holdings in the New World. France sold the entire Louisiana Territory to the United States for only \$15,000,000. This averaged out to about 3 cents per acre.





SECTION FOUR: SITE AND MONUMENT

11. TEN COMMANDMENTS

This stone marker was presented to the state by the Missouri State Aerie Fraternal Order of Eagles on June 28, 1958



Monument info provided courtesy of the Missouri Department of Natural Resources Division of State Parks.

MOCA

12. MISSOURI VETERANS MEMORIAL

This tribute to all of Missouri's veterans was dedicated on Nov 11, 1991. The jets of water in the fountain symbolize the turmoil of war and a single arc of water shoots over the jets to symbolize peace. The 24 steps along the waterfall honor Missouri's entrance into the Union as the 24th state. "Missouri Veterans - Guardians of Liberty" is inscribed in the reflecting pool at the end of the fountain. The five bays of the colonnade overlooking the river are a reminder of the five branches of the armed forces. Each of the eight black granite posts along the walk represent a war that has been fought since Missouri became a state. The wars are Mexican-American, Civil War, Spanish-American, World War I, World War II, Korean, Vietnam and Persian Gulf. Three flags guard the Entrance to the walk: the U.S. flag, the Missouri flag and the Veterans' Commission flag. The cannon at the end of the walk was captured during the Spanish-American War at Moro Castle in Havana, Cuba. It was given to the state of Missouri as a war trophy and was placed on the Capitol grounds between 1898 and 1911.



13. LEWIS AND CLARK MONUMENT

This monument pays tribute to the Corps of Discovery that scouted the Missouri River to its source and found a viable route to the Pacific Ocean. The monument portrays Captains Meriwether Lewis and William Clark (expedition leaders), York (Clark's man-servant), George Drouillard (a French-Canadian-Shawnee guide and translator) and Seaman (Lewis' Newfoundland dog). In addition to these main characters, items such as a journal, telescope, guns and hats are portrayed within the monument. The sculpture commemorates the date of June 4, 1804, when the Corps of Discovery encamped near the area that would eventually become the state capital. Bronzes were made by artist Sabra Tull Meyer in 2006-2007, with the dedication in 2008.



14. MISSOURI WORKERS MEMORIAL

In 2000, there was a fund established for a future memorial to be placed upon the Capitol grounds honoring the Missouri Workers. The Workers Memorial Fund was established to create a permanent memorial for all workers who suffered a job related death or injuries that resulted in a permanent disability while on the job in Missouri. A future site or location for this new memorial will be determined following the construction of the north and south extensions. The most logical location for this future memorial will be to the southwest of the Law Enforcement Memorial.

MASTER PLAN



SECTION FIVE: GUIDING PRINCIPLES

Vision Session

Guiding Principles

To initiate the planning process MOCA held a vision session with members of Legislative leadership, the Lt. Governor and the Missouri State Capitol Commission (MSCC). The goal of the Vision Session was to facilitate a discussion to identify the Guiding Principles by which the comprehensive Capitol Master Plan would develop. These Guiding Principles will provide a framework for managing the design and construction during the restoration of the Capitol and all other facilities associated with the plan.

Principle

A principle, by definition, is a rule or law, a fundamental doctrine or tenet. A principle provides a guiding sense of the requirement or obligations of right conduct and a determining characteristic of quality. It is unchanging and is not subject to change, in a word; timeless. A Guiding Principle is a fundamental truth that governs or guides one's belief or behavior and serves as the foundation.

For the purpose of the Comprehensive Master Plan and the renovation of the Capitol, a Guiding Principle will govern the direction of the project and will serve as the foundation for all future decisions to be built upon.

During the Vision Session, there were three Guiding Principles that were identified as critical to the success of the restoration both in a high level approach and in a specific or detailed approach to the project.

These Guiding Principles will be the measurement for all future and ongoing decisions. Every recommendation and/or decision will be based upon its ability to fulfill or complete one or more of the Guiding Principles. Be-

cause a Guiding Principle is timeless in its application, it is expected that future decisions will be made using the same measurement. Both the decisions made while restoring the Capitol and the ones made during the management of the Capitol following its restoration should compliment one another in order to support the whole.

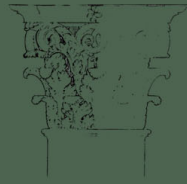
Collaborative Process

The Vision Session was organized into three phases. The first phase was focused on discovery. The assembled group of state leadership was asked to consider what was of most importance in considering the restoration of the Capitol. The second phase prioritized those items. This was accomplished by everyone voting for what they believed were the most important elements from the previous discussion. The third phase was to identify the Guiding Principles and to connect all of the discussed ideas to a principle.

The Three Guiding Principles agreed to:

- 1. Functional Space Expansion with an Integrated Campus Concept** – This principle suggests that an overall plan for current and future expansions of the Capitol be accomplished in a campus setting that is connected to the Capitol both physically and visually. It should enhance the area around the Capitol building in such that views of the Capitol are not blocked or disrupted, but framed and reinforced. That expansion should not sacrifice, but enhance the prominence and stature of the Capitol building. Furthermore, any additions of space should be based upon a functional expansion to limit the amount of space added to the Capitol Campus in the future.





SECTION FIVE: GUIDING PRINCIPLES

2. **Architectural integrity and historic character** – The original architect had a strong vision of what the Capitol was to be, both when it was constructed and centuries into the future. Now over 100 years old, the Capitol requires a major renovation to correct and repair many of the impacts that time has imposed on the building. Many changes have been made that have altered the original design of the architect, such as dropped ceilings that have impacted the natural light distribution throughout the building and the first and second floor mezzanines that have increased the occupant load while compressing the space to create the additional square footage. This principle requires that all restoration and renovation decisions be directed at preserving or restoring the original vision of the architect and the historic character that he designed into the Missouri Capitol.

3. **Open Public Buildings** – since September 11, 2001, many of the most important public buildings within the United States have had the imposition of extreme security measures and equipment imposed upon them. The Missouri State Capitol is no different. Doors have been locked and all but one entrance is available to the public and school children for entry through magnetometers and x-ray equivalents. This principle speaks to the importance that the Missouri State Capitol is a public building where the work of the government should be transparent and as such it should be open and accessible to the general public.

Furthermore, it is for the public that this building was constructed in 1917. This building above all public buildings should be the embodiment of the constitution which guarantees every citizen the right of access to his or her government and legislature.

However, in today’s challenging environment, steps should be taken to provide the appropriate level of security for both the public, school children and elected officials while doing so in an open building where people are free to enter and exit without being subjected to extreme security measures and locked doors.





SECTION SIX: GUIDELINES AND IMPERATIVES

Guideline

The Guidelines shall be adhered to by the architects and the design team, as the owner's directive for the restoration of the Capitol, construction of the North and South Capitol extension and the new Senate Parking Structure.

The Guidelines and Imperatives are tools to be used by the Owner and stakeholders to describe the elements of the restoration and new construction that are of the most importance to them. These are the critical expectations that the Owner has for the project. The Guidelines and Imperatives are not intended to cover every element of the project, only those items that are of most importance to the Owner and will be critical for the architect, engineer and contractor to consider in the design to assure success.

Guidelines are just that; Guidelines. They provide suggested concepts, principles, elements and recommendations that are consistent with the desires of the Owner. Imperatives are critical elements of the project that *must* be incorporated into the project. These have been identified by the owner as Imperatives.

The format of the guidelines and imperatives are organized as follows:

- Idea number - each guideline will have a unique number assigned to a particular Idea or Guideline.
- Guiding Principles - the Owner has determined what principles are critical to the project. Each Guideline builds upon the principles. Each Guideline will include a connection to a principle. There may be one or more principles incorporated into each Guideline.
- General statement regarding the ideas or issues associated with the Guideline or Imperative.
- **Guideline Statement** - a brief statement comprising the essence of the Guideline.
- **Imperative Statement** - a brief statement comprising of a critical element of the project.

MOCA

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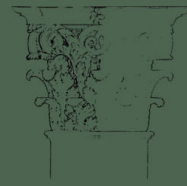
Guidelines

01. General Massing
02. Volume
03. Hierarchy
04. Podium
06. Proximity
08. Columns & Pilasters
09. Approach
13. Entrances
14. Vestibules
15. Exterior Windows
18. New Public Space
19. Skylights
20. Roof
21. Materials
23. Rotunda
24. Governor's Office Suite
27. Other Offices
29. Auxiliary Corridors
30. Food Service
34. Doors
35. Exit Stairs and Pathways
36. Metals
39. Visitors Center
43. Gift Shop
50. Communications
51. Press Offices
52. Site Circulation
53. Bus Drop-Off
54. Site Security

Imperatives

05. North and South Extensions
07. Circulation
10. Axis
11. Vistas
12. Preservation Zones
16. Views of the Capitol Dome
17. Mezzanine Removal
22. Natural Light and Interior Walls
25. House Offices
26. Senate Offices
28. Hearing Rooms /Committee Rooms
31. Corridors
32. Public Restrooms
33. Historic Lighting
37. Decorative Painting
38. Museum Space
40. Governor's Secure Parking
41. Senate Parking
42. Visitor Parking
44. Signage
45. Accessibility Accommodations
46. Structural
47. Rock Excavation
48. Mechanical and Plumbing
49. Electrical
55. Building Security

MASTER PLAN



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Space Utilization

The recent attitude toward space utilization within the Capitol has been to over-program and over-use every available square foot of space to provide for the needs of both the executive branch and the legislative branch. This has subjected people within these two branches of government to work in less than desirable spaces while dealing with very complex issues facing society today.

This over-programming of space, or what has been referred to as “compression”, has resulted in the development of over 12,000 square feet of Mezzanine space that has negatively impacted a total of 24,000 square feet within the building structure and systems.

As the functional needs have grown within both branches of government, space has not, and the idea of doing more with less has become the only option to the point, creating smaller and smaller work areas. This has led to overcrowding and inefficient working environments. One of the areas where the greatest impact has occurred is the current and ongoing need for appropriate legislative office space. In reviewing the current conditions, there are approximately 70 legislative offices that will need to be relocated in order to decompress the building or relieve the programmatic pressure on the building and to provide for more effective and efficient working environments.

This analysis has identified that roughly 163,000 square feet of new space will need to be added to the Capitol Campus in order to properly address this overcrowding or compression of space within the Capitol.

Programming

Current Space Diagrams provided by the Office of Administration (OA) reflect the current space organization, utilization and layout on each floor. Provided along with each space diagram is a current space list for each floor that identifies the function, location and square footage. These documents clearly identify the intense nature of the overcrowded or compressed space within the Capitol.

Future Space Planning - Utilizing the information provided by the OA from the current space diagrams and the desires of leadership to execute the restoration in phases, to continue use the chambers and not close the building during construction, MOCA has developed a program analysis that has balanced FTE and space needs and utilization between the following phases:

- Swing Phase One—Construct North and South Extensions
- Swing Phase Two - North/East Capitol 1 - 4 floors and Basement closed
- Swing Phase Three - South/West Capitol 1 - 4 floors and Basement closed, reorganize South Extension

Each of the three phases minimizes the disruption to the daily functions of the Capitol occupants. The plan attempts to limit the moves of any one individual or organization to a single move-out and a move-back to finished space. The only exception is in the final phase; Phase three, the North and South extensions will be reset for final use and occupancy and some Legislative staff may be forced to move to accommodate the adjustments to the final space plan.

During the initial move, space will be limited and will be designed to a standard of 211 sf for office and 100 sf for clerical. When complete, the standard will be to provide office space of 325 sf and 110 sf for clerical.

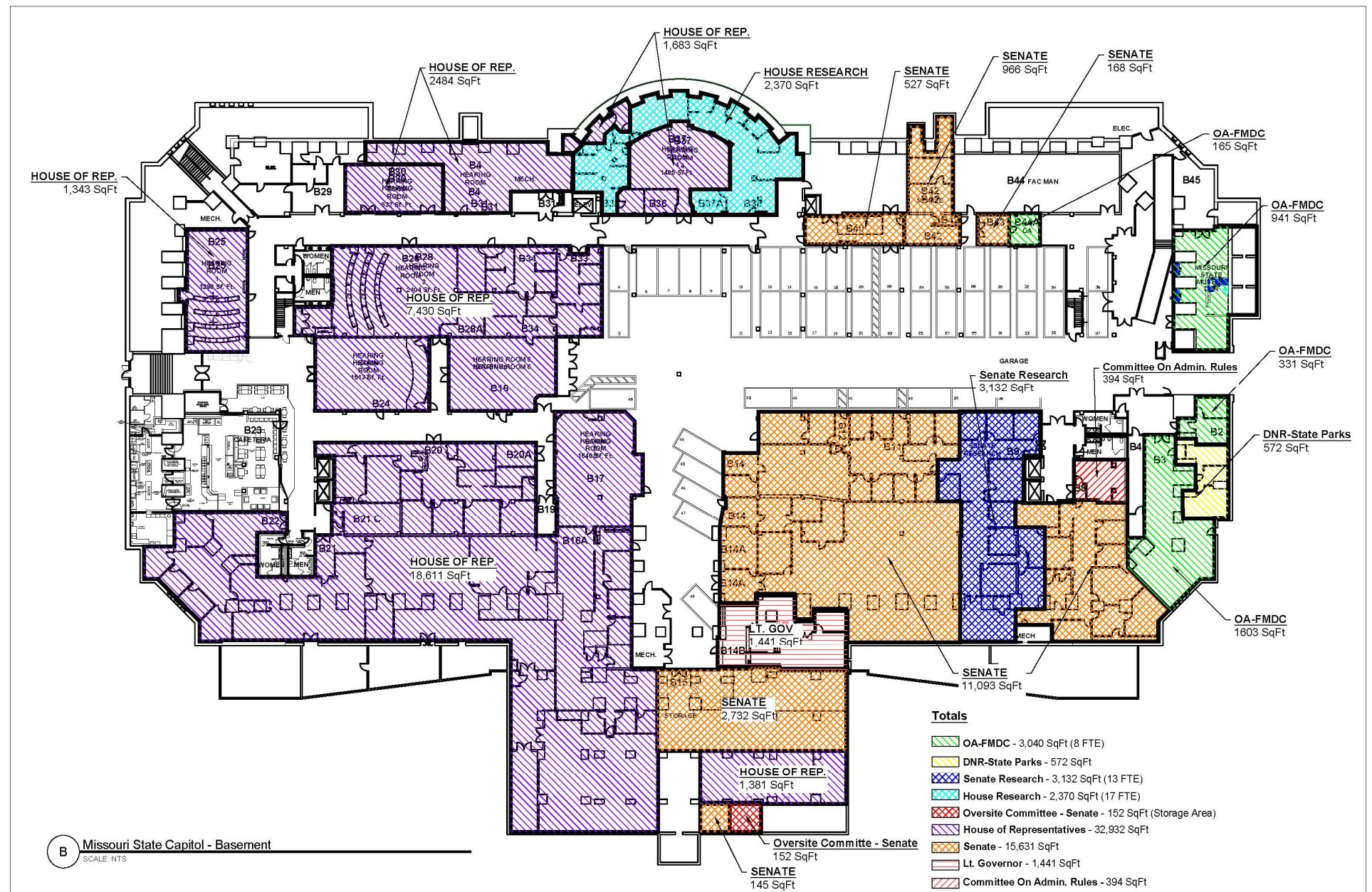


MASTER PLAN

SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

Basement		61,177.00
House of Representative		
Hearing Room	B25 -(Room 1)	1,299.00
Hearing Room	B30 (Room 2)	832.00
Hearing Room	B28 (Room 3)	2,104.00
Hearing Room	B24 (Room 7)	1,513.00
Hearing Room	B18 (Room 6)	1,000.00
Hearing Room	B37 (Room 4)	1,405.00
Hearing Room	B17 (Room 5)	1,640.00
Additional Hearing Room	0	-
House of Representative		
House Office space	B16A, B20,B21,B22	16,971.00
House Office space	B28, B34, B33	2,813.00
House Office space	B4	1,652.00
House Office space	B36	233.00
House Storage Space "Cages"	0	1,381.00
Senate		
Senate Storage	B15	2,732.00
Senate Offices	B14, B12, B11	11,093.00
Senate Offices - Bill Room	B40	527.00
Senate Offices - Operations	B42	966.00
Senate Offices - Maintenance	B43	168.00
Senate Storage	Storage	145.00
House Research		
House Research Office Space	B37, B38	2,370.00
Senate Research	0	-
Senate Research Office Space	B9	3,132.00
Oversight Committee		
Oversight Committee Storage	0	152.00
Committee On Administrative Rules	0	-
Committee On Administrative Rules	B8	394.00
LT. Governor	0	-
LT. Governor Office Space	B14B	1,441.00
Office Administration	0	-
FMDC Office - Contractor - Janitorial Contractors	B44	165.00
FMDC Office - Maintenance Office	0	941.00
FMDC Office - Contractor - CM overseeing the Contractor	B2	331.00
FMDC Office *Maintenance Storage)	B3	1,603.00
Department of Natural Resources	0	-
State Parks	0	572.00
Unassigned	0	-
Garage (primary use in the Building for the Governor.)	0	-
Facility Maintenance	B44	-
Electrical	0	-
Cafeteria - Contractor 2 to 3 yr. and Renewal	0 B45, B29	-
Undefined Space	B23	1,602.00
Restrooms	0	-
Mens	South West	-
Womens	South West	-
Mens	East	-
Women	East	-
Need to have a lunch area for kids for food eating	0	-

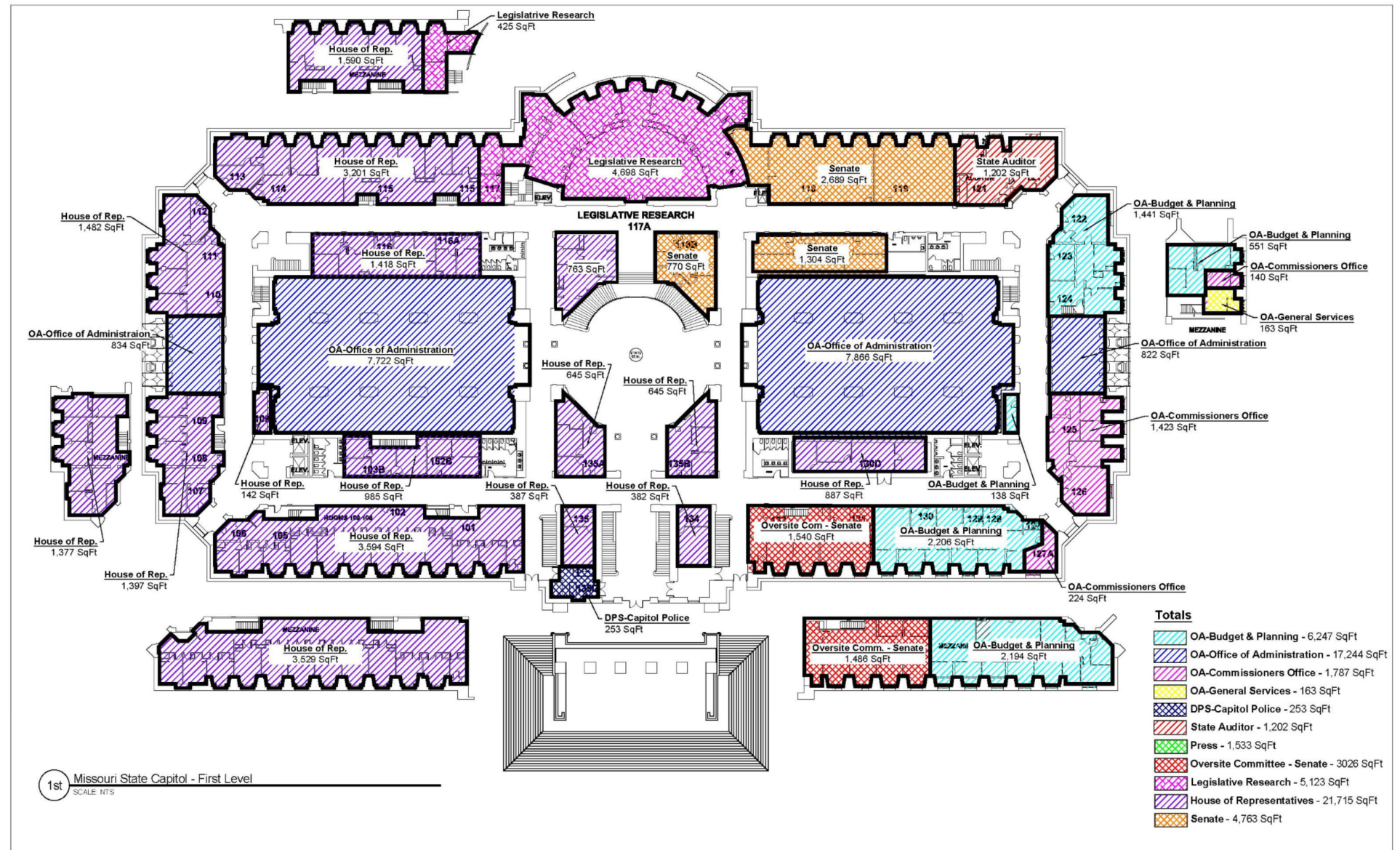


Maps provided courtesy of the Office of Administration.

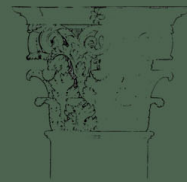
SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

First Floor		62,373.00
House of Representatives	0	-
House of Representatives Member offices	North	3,201.00
House of Representatives Member offices	North - Mez	1,590.00
House of Representatives Member offices	North Internal	1,418.00
House of Representatives Member offices	North/West	1,482.00
House of Representatives Member offices	South/West	1,397.00
House of Representatives Member offices	South/West - Mezz	1,377.00
House of Representatives Member offices	South internal (W)	985.00
House of Representatives Member offices	South	3,594.00
House of Representatives Member offices	South Mezz	3,529.00
House of Representatives Member offices	Rotunda South All	2,059.00
House of Representatives Member offices	South internal (E)	887.00
Legislative Research		
Legislative Research Office	North Center	4,698.00
Legislative Research Office	North - Mez	425.00
Senate		
Senate Committee Rooms	SCR1 - 118	1,344.50
Senate Committee Rooms	SCR2 - 119	1,344.50
Senate Communications offices	North Internal	1,304.00
Senate Communications offices	Rotunda North East	770.00
Press		
Press	Rotunda North West	763.00
Joint Oversight Committee - Senate		
Oversight Committee Office Space	South	1,540.00
Oversight Committee Office Space	South - Mez	1,486.00
State Auditor		
State Auditor Office Space	North	1,202.00
Office of Administration		
Museum	West	834.00
Museum	West Central	7,722.00
Museum	East Central	7,866.00
Museum	East	822.00
Budget and Planning	North East	1,441.00
Budget and Planning	North East Mez	551.00
Budget and Planning	South	2,206.00
Budget and Planning	South - Mez	2,194.00
Budget and Planning	Central East	138.00
General Services	North East Mez	163.00
Commissioners Office	North East Mez	140.00
Commissioners Office	South East	1,423.00
Commissioners Office	South	224.00
Department of Public Safety		
Capitol Police	South Central	253.00
Restrooms		
Womens	North West Central	-
Womens	South West Central	-
Mens	South West Central	-
Womens	North East Central	-
Mens	North East Central	-
Womens	South East Central	-
Mens	South East Central	-



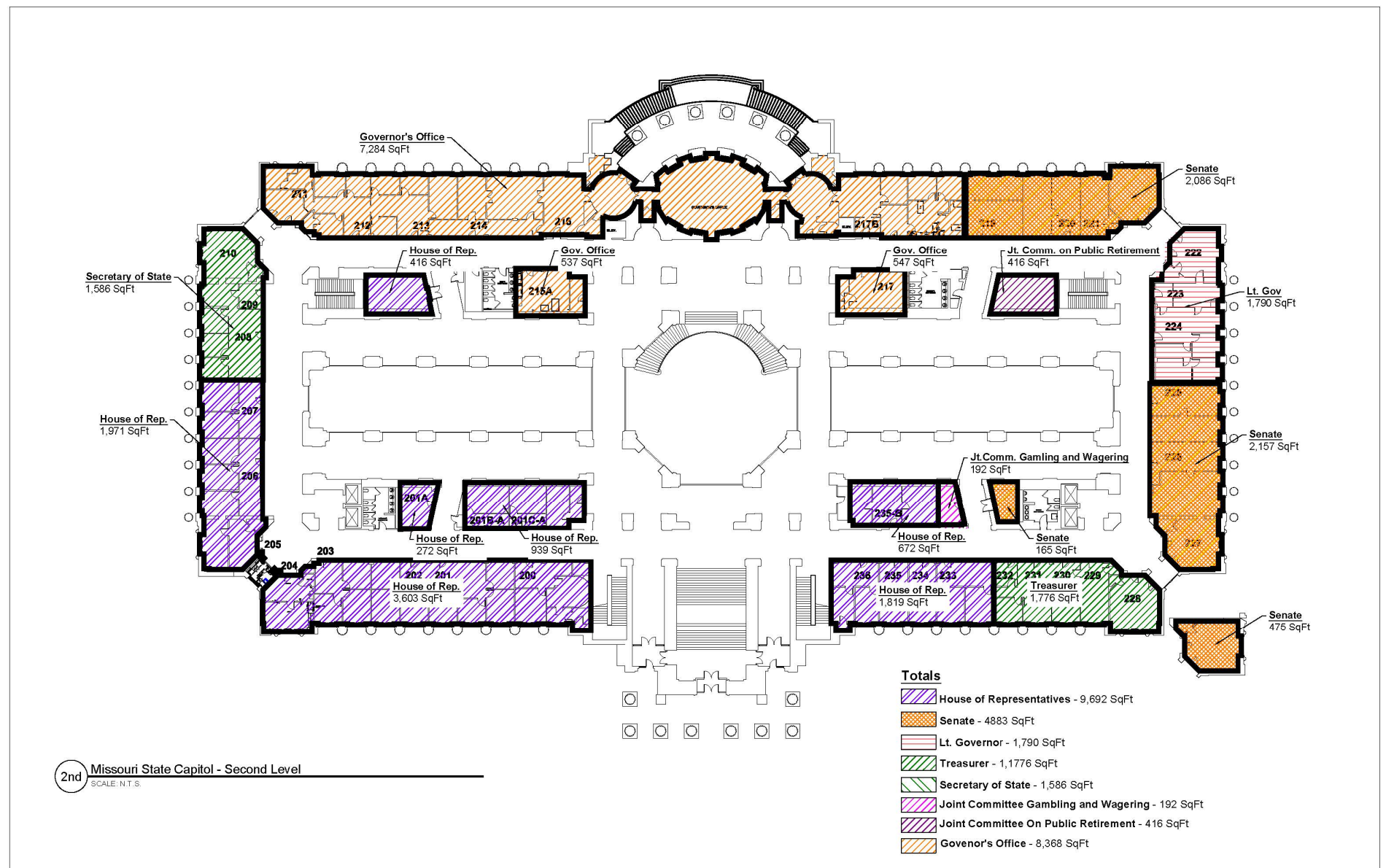
Maps provided courtesy of the Office of Administration.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

Second Floor		28,703.00
Governors Office		-
Governors Office Space	North/Center	7,284.00
Governors Office Space	North/West interna	537.00
Governors Office Space (Conference Room)	North/East Interna	547.00
LT. Governor		-
LT. Governor Office Space	North East	1,790.00
Secretary of State		-
Secretary of State Office Space	North West	1,586.00
Treasurer		-
Treasurer Office Space	South East	1,776.00
House of Representatives		-
House of Representatives Members Offices	West	1,971.00
House of Representatives Members Offices	South	3,603.00
House of Representatives Members Offices	Alcove	-
House of Office Space Vault Staff	North internal	416.00
House of Office Space Staff	South 291	272.00
House of Representatives Office Space	South/West interna	939.00
House of Representatives Office Space	South/East Interna	672.00
House of Representatives Members Offices	South	1,819.00
Senate		-
Senate Member Offices	North East	2,086.00
Senate Member Offices	East	2,157.00
Senate Member Office Mezz.	South East - Mezz.	475.00
Joint Committee on Education	South Internal	165.00
Jt Committee on Public Retirement		-
Jt Committee on Public Retirement		416.00
Jt Committee on Gambling and Wagering		-
Jt Committee on Gambling and Wagering		192.00
Restrooms		-
Womens	North West Centra	-
Womens	South West Centra	-
Womens	North East Central	-
Mens	South East Central	-



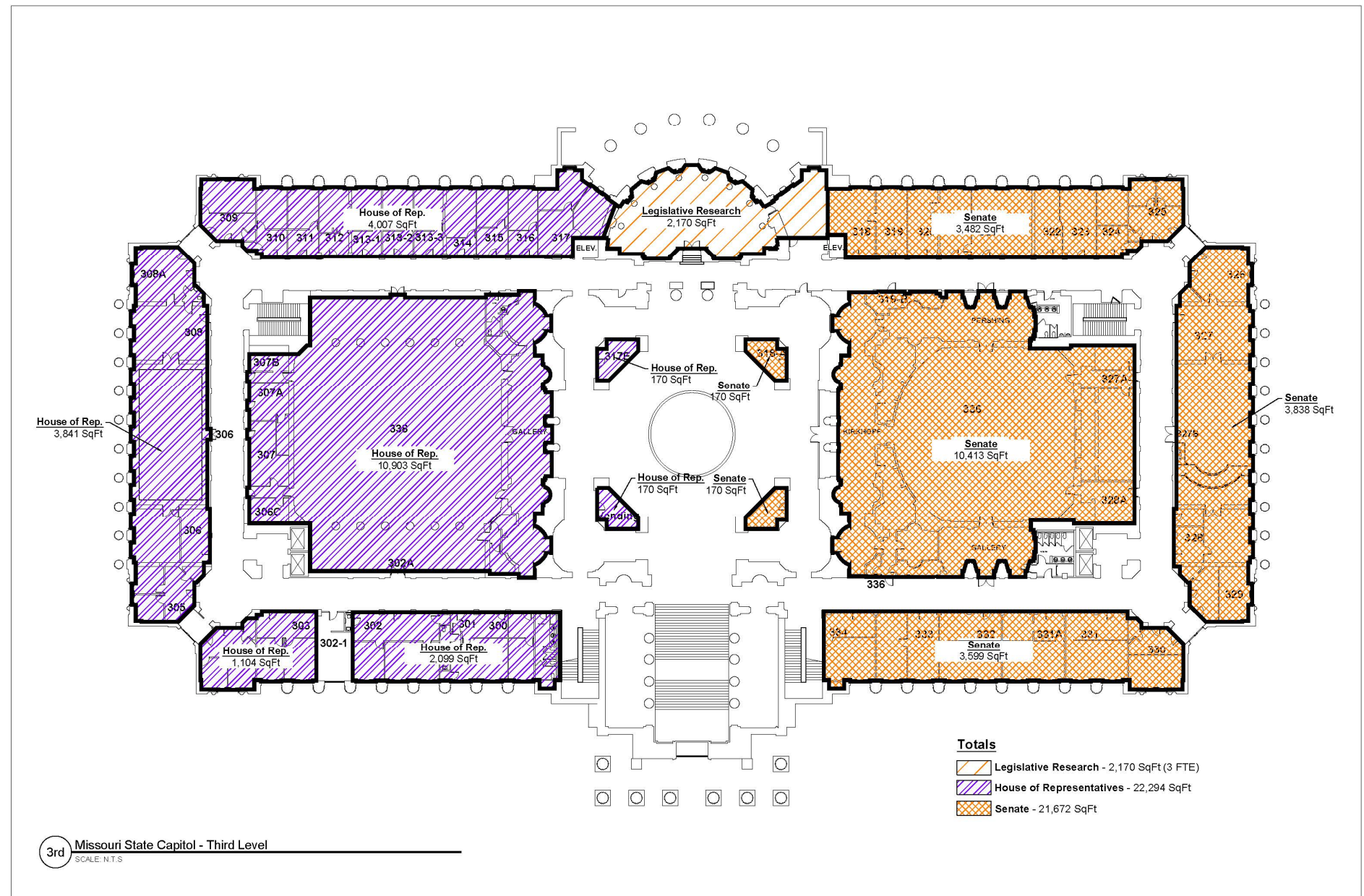
Maps provided courtesy of the Office of Administration.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

Third Floor		48,160.00
House of Representatives	0	-
House of Representatives Member Offices	North	4,007.00
House of Representatives Member Offices	North West	1,121.00
House of Representatives Lounge	Center	1,599.00
House of Representatives Member Offices	South West	1,121.00
House of Representatives Member Offices	South	3,203.00
House of Representatives Member Offices	South 302	1,091.00
House of Representatives Chamber and support	0	10,903.00
House of Representatives Rotunda Columns	North/South	340.00
Senate	0	-
Senate Member Offices	North	3,482.00
Senate Member Offices	North East	1,121.00
Senate Lounge - Used as Committee Room	Center	1,595.00
Senate Member Offices	South East	1,122.00
Senate Member Offices	South	3,599.00
Senate Chambers and Support	0	10,413.00
Senate Rotunda Columns	North/South	340.00
	0	933.00
Library	0	-
Library	North Center	2,170.00
Restrooms	0	-
Men's	North East	-
Women's	South East	-
Womens - House Representative Space	South	-

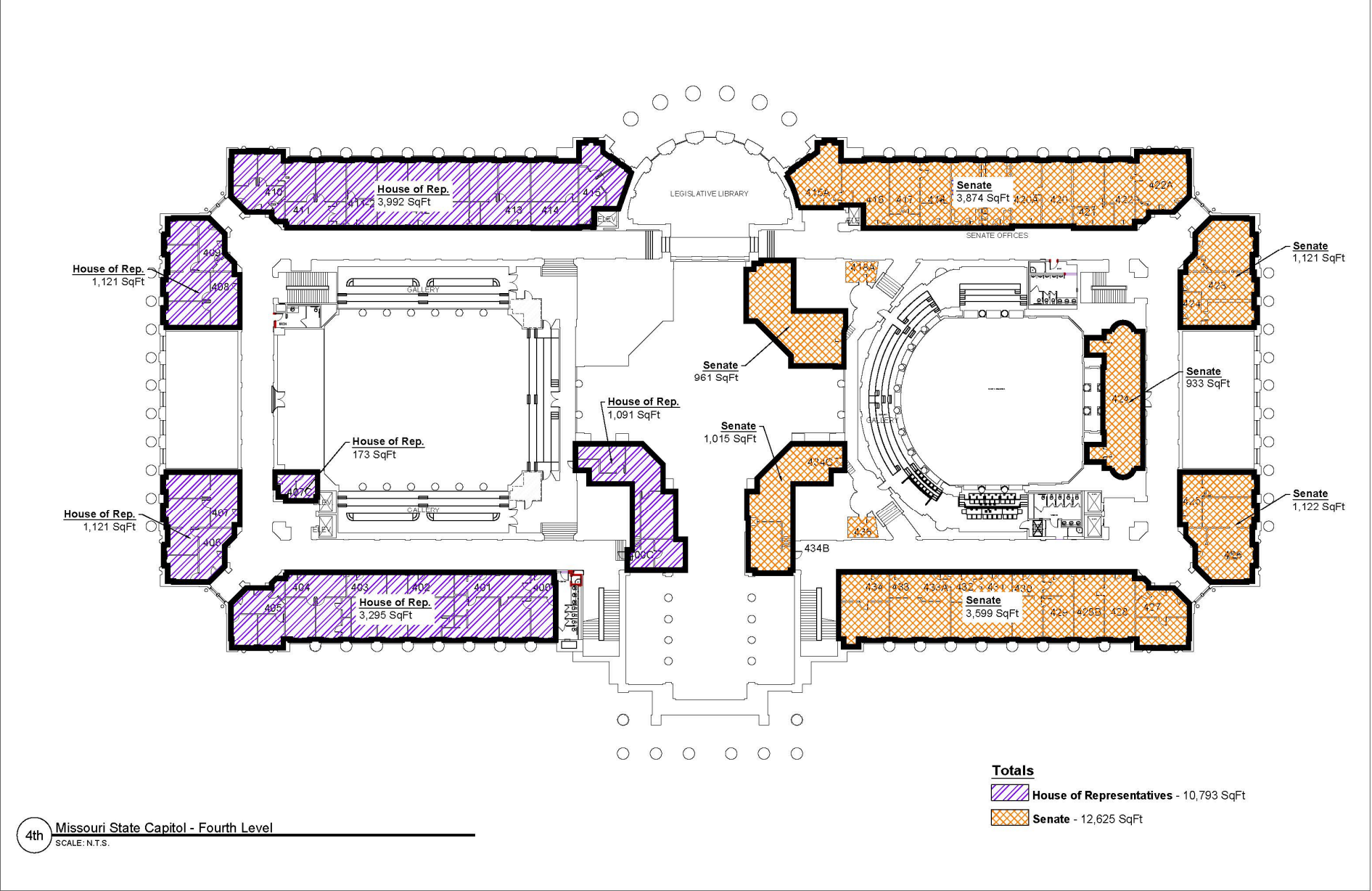


Maps provided courtesy of the Office of Administration.

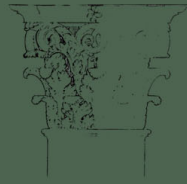
SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

Fourth Floor		24,418.00
House of Representatives	0	-
House of Representatives Member Offices	North	3,992.00
House of Representatives Member Offices	North West	1,121.00
House of Representatives Member Offices	South West	1,121.00
House of Representatives Member Offices	South	3,295.00
House of Representatives Member Offices - Crows nest	South Rotunda	1,091.00
House of Representatives - Space -Staff	407 C	173.00
House of Representatives, Caucus Staff	New Space	1,000.00
House Gallery	N,S,E,W	-
Senate	0	-
Senate Member Offices	North	3,874.00
Senate Member Offices	North East	1,121.00
Senate Member Offices	South East	1,122.00
Senate Member Offices	South	3,599.00
Senate Office Space	North Rotunda	961.00
Senate Office Space	South Rotunda	1,015.00
Senate East Gallery	East Center	933.00
Senate Gallery	N,S,W	-
Restrooms	0	-
Men's	North East	-
Women's	South East	-
Womens	South	-
	0	0
	0	0



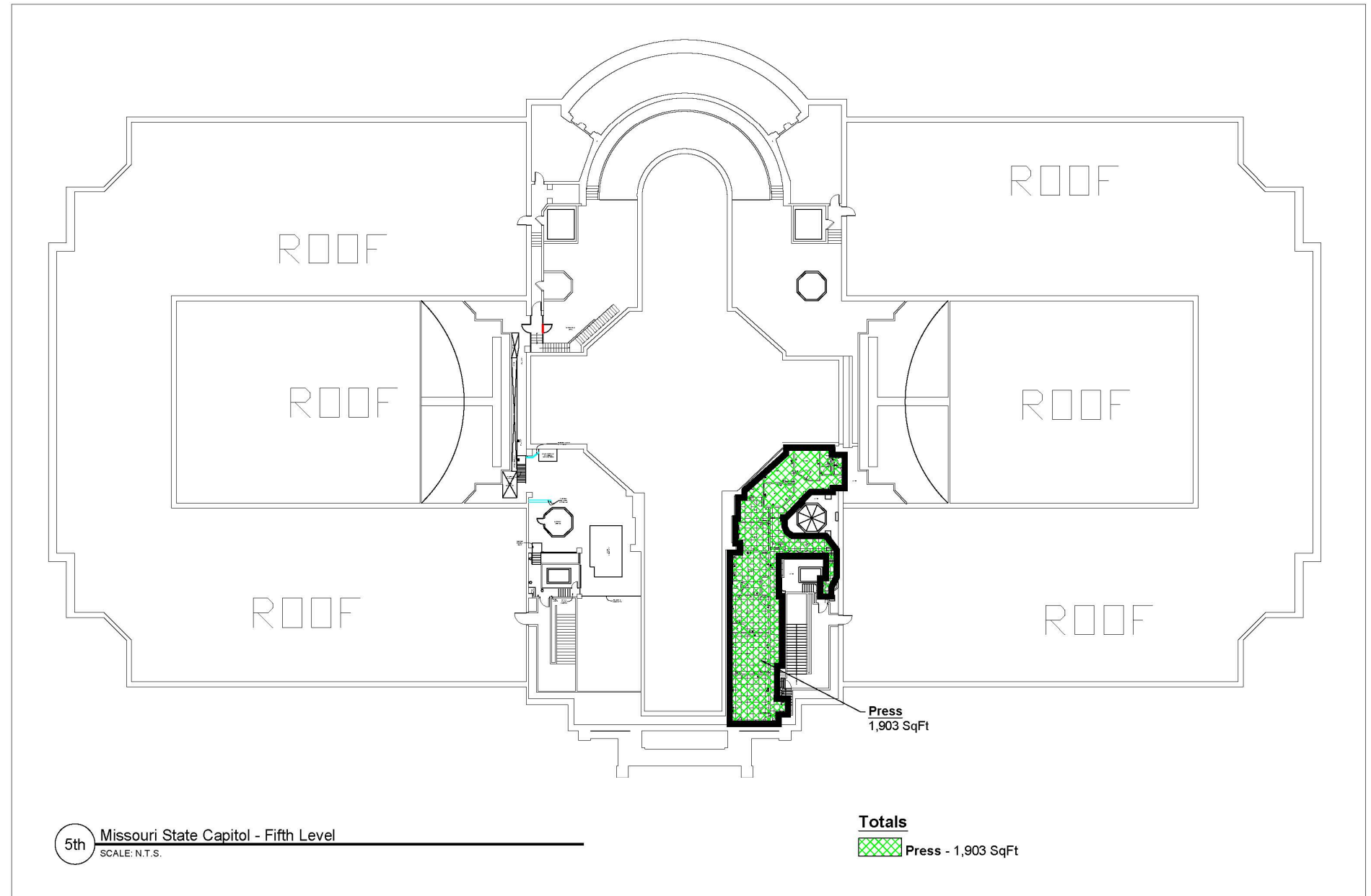
Maps provided courtesy of the Office of Administration.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Current Utilization of Space

Fifth Floor		1,903.00
Press	0	-
Press Offices Space	0	1,903.00



Maps provided courtesy of the Office of Administration.
Note: Press space is technically under the management of the Senate.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program - North Extension

	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed							Swing Two - South/West Capitol and Basement Closed							Swing Three - Capitol, North and South Extensions Open									
		Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A
		House	House	House	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	325.00	North Only
Extension North	19,463.00							39.00	19,152.75							75.00	19,239.40							3.00	19,226.75
Governors office								29.00	8,368.00							0.00	0.00							0.00	0.00
Governor Security Office								3.00	633.75							3.00	633.75							3.00	633.75
Governors Secure Parking									3,151.00								3,151.00								3,151.00
Lt. Governors Office Space								7.00	2,620.00							0.00	0.00							0.00	0.00
House Members									0.00								9,692.15								0.00
House Members			0.00						0.00		31.00						6,548.75								0.00
House Members Staff (legislative Assistance)									0.00							3,143.40								0.00	
Leadership Caucus Staff									0.00							0.00								0.00	
Senate Members									0.00							2,112.50								0.00	
Senate Member					0.00				0.00				0.00			0.00								0.00	
Senate Member Support (Legislative Assistance)									0.00				0.00			0.00								0.00	
Leadership (Legislative Assistance)									0.00				10.00			2,112.50								0.00	
Men's Restroom									200.00							200.00								150.00	
Women's Restroom									200.00							200.00								150.00	
Circulation									3,800.00							450.00								3,800.00	
Visitor Center									0.00							0.00								7,242.00	
Student Dining									0.00							0.00								1,000.00	
Entry and Security									0.00							0.00								300.00	
Cafeteria - Contractor									2,800.00							2,800.00								2,800.00	

North Capitol Extension

The Capitol North Extension will consist of a one-level structure that is aligned with the basement floor level allowing for ease of movement from the north Capitol extension (visitor center) into the Capitol proper.

In Swing Phase three (SP3) the north Capitol extension will provide primarily visitor services which will include:

- The primary entry to the building and security screening.
- Visitor Center that will provide information on the history of the Capitol and the site.
- Student/Tour group gathering and orientation room
- Student dining area
- Capitol Café with seating for dining.

This space will also provide a secure, 3 to 4 stall park-

ing facility for the Governor, a security office and private secure access from the garage to the Governor's office on the second floor by way of stair and elevator. However, during Swing Phase one (SP1) and Swing Phase two (SP2) the space will be used as swing space for the Governor (SP1) and Legislature (SP2).

Swing Phase One - following the completion of the construction, the Governor and staff will temporarily relocate from the current Governor's office to the Capitol north extension. This will allow the North and East side of the Capitol from basement through to the 5th floor to go through the renovation. It is anticipated that work will take approximately 18 to 24 months to complete. Once complete, the Governor will move back to the Historic Governor's office located on the second floor.

Swing Phase Two - Once the north and east portion of the Capitol are restored, work will begin on the south and west portions of the Capitol. Members from the House will relocate to the north and south portions of the Capitol extension. Once the restoration work is complete with the south and west, members of the House will move to their new office space. It is anticipated that this work will take 24 months.

During the SP1 and SP2 there will be no visitor services in the building and only limited Capitol Café service will be open.

When all work is completed with the restoration, the north Capitol extension will be transitioned to the designated use of a Visitor Center (SP3). This work, following the completion of the restoration to the Capitol, will take approximately 8 to 12 months.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open									
		Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A
		House	House	House	Senate	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	325.00	North Only
		Original	Swing	Capitol	Original	Swing	Capitol	back	101.40		Original	Swing	Capitol	Original	Swing	Capitol		101.40		Original	Swing	Capitol	Original	Swing	Capitol		
Extension South	144,126.00							421.00	141,476.70								417.00	144,012.95							244.00	142,850.75	
1. House Hearing Rooms/Committee Rooms									2,160.00									0.00								2,160.00	
2. House Hearing Rooms/Committee Rooms									2,520.00									2,520.00								2,520.00	
3. House Hearing Rooms/Committee Rooms									2,520.00									2,520.00								2,520.00	
4. House Hearing Rooms/Committee Rooms									2,160.00									2,160.00								2,160.00	
5. House Hearing Rooms/Committee Rooms									2,520.00									2,520.00								2,520.00	
6. House Hearing Rooms/Committee Rooms									2,520.00									2,520.00								2,520.00	
7. House Hearing Rooms/Committee Rooms									3,360.00									3,360.00								3,360.00	
8. House Hearing Rooms/Committee Rooms																										0.00	
House Members								100.00	15,632.50								110.00	17,745.00							0.00	0.00	
House Members (Temporary)			50.00					50.00	10,562.50			50.00					50.00	10,562.50							0.00	0.00	
House Members Staff (legislative Assistance)								50.00	5,070.00								50.00	5,070.00							0.00	0.00	
Leadership Caucus Staff								0.00	0.00								10.00	2,112.50							0.00	0.00	
House Management								18.00	3,802.50								15.00	3,168.75							6.00	1,950.00	
Chief Clerk, House Administrator								6.00	1,267.50								0.00	0.00							0.00	0.00	
Assistant Chief Clerk								6.00	1,267.50								0.00	0.00							0.00	0.00	
Administration								6.00	1,267.50								6.00	1,267.50							6.00	1,950.00	
Chamber Staff								0.00	0.00								9.00	1,901.25							0.00	0.00	
House office Space								68.00	14,365.00								68.00	14,365.00							68.00	22,100.00	
Communications and Resolutions								7.00	1,478.75								7.00	1,478.75							7.00	2,275.00	
Drafting								5.00	1,056.25								5.00	1,056.25							5.00	1,625.00	
Information Systems								18.00	3,802.50								18.00	3,802.50							18.00	5,850.00	
Operations								2.00	422.50								2.00	422.50							2.00	650.00	
Maintenance								1.00	211.25								1.00	211.25							1.00	325.00	
Parking Garage								0.00	0.00								0.00	0.00							0.00	0.00	
Bill Room/Post Office								5.00	1,056.25								5.00	1,056.25							5.00	1,625.00	
Hearing Room/Rotunda Reservations								7.00	1,478.75								7.00	1,478.75							7.00	2,275.00	
New Hire or vacancy								13.00	2,746.25								13.00	2,746.25							13.00	4,225.00	
Appropriations								7.00	1,478.75								7.00	1,478.75							7.00	2,275.00	
Xeroxing and Printing								3.00	633.75								3.00	633.75							3.00	975.00	
House Storage - Under Stairs									1,400.00									1,400.00								1,400.00	
Senate Management								21.00	4,436.25								15.00	3,168.75							15.00	4,875.00	
Secretary of Senate								19.00	4,013.75								15.00	3,168.75							15.00	4,875.00	
Administration								2.00	422.50								0.00	0.00							0.00	0.00	
Senate Members								82.00	12,049.70								60.00	10,782.20							0.00	0.00	
Senate Member								24.00	5,070.00			8.00					20.00	5,915.00							0.00	0.00	
Senate Member Support (Legislator Assistants)								48.00	4,867.20								40.00	4,867.20							0.00	0.00	
Leadership (Legislative Assistance)								10.00	2,112.50								0.00	0.00							0.00	0.00	
Senate Office Space								65.00	13,731.25								65.00	13,731.25							65.00	21,125.00	
Appropriations								7.00	1,478.75								7.00	1,478.75							7.00	2,275.00	
Computer Information Systems								14.00	2,957.50								14.00	2,957.50							14.00	4,550.00	
Operations								11.00	2,323.75								11.00	2,323.75							11.00	3,575.00	
Accounting								3.00	633.75								3.00	633.75							3.00	975.00	
Minority Caucus Staff								7.00	1,478.75								7.00	1,478.75							7.00	2,275.00	
Sgt-at-Arms & Doorkeepers								13.00	2,746.25								13.00	2,746.25							13.00	4,225.00	
Communications								10.00	2,112.50								10.00	2,112.50							10.00	3,250.00	



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Beginning Sq Ft Completion of North & South Extensions	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A		Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A		Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A		
		House	House	House	Senate	Senate	Senate		Senate	House	House	House	Senate	Senate	Senate	Senate		House	House	House	Senate	Senate	Senate	Senate	Senate		Senate	Senate	House
		Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only		Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only		Original	Swing	Capitol	Original	Swing	Capitol	325.00	North Only		
Senate Storage - Under Stairs								101.40		2,800.00							101.40		2,800.00							101.40		2,800.00	
House Research Office								13.00		2,746.25							13.00		2,746.25							13.00		2,746.25	
Senate Research Office								13.00		2,746.25							13.00		2,746.25							13.00		2,746.25	
1. Senate Hearing/Committee Room										2,160.00									2,160.00									2,160.00	
2. Senate Hearing/Committee Room										2,520.00									2,520.00									2,520.00	
3. Senate Hearing/Committee Room										2,520.00									2,520.00									2,520.00	
Joint Committee								27.00		5,878.75							25.00		5,456.25							25.00		8,300.00	
Administrative Rules								2.00		422.50							2.00		422.50							2.00		650.00	
Education								1.00		211.25							1.00		211.25							1.00		325.00	
Legislative Research								8.00		1,690.00							8.00		1,690.00							8.00		2,600.00	
Legislative Library								2.00		422.50							0.00		0.00							0.00		0.00	
Oversight Division								12.00		2,535.00							12.00		2,535.00							12.00		3,900.00	
Oversight Committee Storage - Under Stair										175.00									175.00									175.00	
Public Employee Retirement								2.00		422.50							2.00		422.50							2.00		650.00	
Gambling and wagering								0.00		0.00							0.00		0.00							0.00		0.00	
Lt. Governors Office Space (Basement)								5.00		1,056.25							5.00		1,056.25							5.00		1,056.25	
OA Planning and Budget								0.00		0.00							0.00		0.00							26.00		8,450.00	
DNR								0.00		0.00							0.00		0.00							5.00		1,625.00	
Security								0.00		0.00							0.00		0.00							2.00		325.00	
FMDC Office - Janitor								1.00		200.00							1.00		200.00							1.00		200.00	
FMDC Office - Maintenance Office								8.00		1,200.00							8.00		1,200.00							0.00		1,200.00	
FMDC Office - CM Overseeing Contractor								0.00		0.00							0.00		0.00							0.00		0.00	
FMDC Storage - Under the South Stairs										1,625.00									1,625.00									1,625.00	
MEP Space										2,500.00									2,500.00									2,500.00	
Electrical										1,200.00									1,200.00									1,200.00	
Men's Restroom										895.00									895.00									895.00	
Women's Restroom										895.00									895.00									895.00	
Circulation										29,877.00									29,877.00									29,877.00	

South Capitol Extension

The south Capitol extension will be mainly comprised of two function areas:

1. Hearing Room - this will include 6 Hearing Rooms for the House and 2 Hearing Rooms for the Senate. These Hearing Rooms will initially replace those lost in the restoration. These rooms will be designed to seat the appropriate number of House or Senate Members that would be assigned to committees that meet in those rooms.
2. Senate and House Support Staff - Listed in the above outline program includes a number of House and Senate support staff offices and FTE count that need to be accommodated. The majority of these are

presently in the basement of the Capitol and will be relocated to the south Capitol extension.

Initially during SP1 everyone located in the Capitol basement will be relocated to the south extension. These office accommodations will be based upon a 120 square foot office and a 80 square foot workstation for clerical. (Note: with grossing factors applied to the square footage, the office space will be 211 sf and clerical will be 101 sf). It is understood that this is a minimum amount of space and some accommodations will need to be made by the architect when designing the swing space plans in coordination with the final plans.

During SP2, additional offices for Legislators will be added as the south and west Capitol moves into restoration construction work. Again, these will be based on smaller offices and cubicles during this phase. For the legislative offices, they will be based upon the current organization within the Mezzanine spaces where offices are clustered around a common support or clerical area.

In the final phase, SP3, the offices will be enlarged to provide additional space for functions and future growth for the support offices or for other functions. This may be a phased or systematic approach to remodeling the space based upon the final design documents provided by the architect.



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open							
		Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A
		Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only	Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only	Original	Swing	Capitol	Original	Swing	Capitol	325.00	North Only
Basement	56,984.00						0.00	0.00							82.00	31,311.85							159.00	59,797.25	
Hearing Room																									
Hearing Room																									
Hearing Room																									
Hearing Room																									
Hearing Room																									
Hearing Room																									
Hearing Room																									
House Member Offices			0.00				0.00				32.00				32.00	5,760.00			70.00				70.00	12,600.00	
House Member LA							0.00								32.00	4,608.00							70.00	10,080.00	
House Office space																									
House Office space																									
House Office space																									
House Office space																									
House Storage Space "Cages"																									
Senate Storage																									
Senate Offices						0.00	0.00							0.00	0.00							0.00	0.00		
Senate Office Support LA							0.00							0.00	0.00							0.00	0.00		
Senate Offices - Bill Room																									
Senate Offices - Operations																									
Senate Offices - Maintenance																									
Senate Storage																									
Senate Hearing Room																									
Senate Hearing Room																									
Senate Hearing Room																									
House Research Office Space																									
Senate Research Office Space																									
Oversight Committee Storage																									
Committee On Administrative Rules																									
LT. Governor Office Space																									
FMDC Office - Contractor - Janitorial Contractors																							8.00	2,600.00	
FMDC Office - Maintenance Office							0.00								0.00								10.00	3,250.00	
FMDC Office - Contractor - CM overseeing the Contractor																							1.00	325.00	
FMDC Office *Maintenance Storage)																2,500.00								2,500.00	
State Parks																									
Facility Maintenance																									
MEP Space																3,500.00								7,000.00	
Electrical																1,700.00								3,400.00	
Community Room/Temporary House offices											9.00				9.00	1,901.25								1,901.25	
Community Room Circulation/Temporary House offices																912.60								912.00	
Cafeteria - Contractor 2 to 3 yr. and Renewal																									
Circulation Space																8,126.00								10,621.00	
Restrooms																									
Mens																1,152.00								2,304.00	
Womens																1,152.00								2,304.00	



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open							
		Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A
		Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only	Original	Swing	Capitol	Original	Swing	Capitol	211.25	North Only	Original	Swing	Capitol	Original	Swing	Capitol	325.00	North Only
First Floor	33,925.00							96.00	14,676.00							44.00	17,277.75							96.00	27,410.00
Governor									0.00							10.00	2,889.00							10.00	2,889.00
Governor									0.00							4.00	624.00							4.00	624.00
Joint Committee/Hearing Room									0.00							0.00	4,377.00							0.00	4,377.00
House Members in the Capitol - North Phase One Restored								0.00								15.00	3,168.75							30.00	9,630.00
House Member Support Staff								0.00								15.00	1,521.00							30.00	W/ House Member
House of Representatives Member offices								0.00								0.00	0.00								
House of Representatives Member offices								0.00								0.00	0.00								
House of Representatives Member offices								0.00								0.00	0.00								
House of Representatives Member offices		5.00						10.00	1,482.00							0.00	0.00								
House of Representatives Member offices		5.00						10.00	1,397.00							0.00	0.00								
House of Representatives Member offices		6.00						12.00	1,377.00							0.00	0.00								
House of Representatives Member offices		5.00						10.00	985.00							0.00	0.00								
House of Representatives Member offices		7.00						14.00	3,594.00							0.00	0.00								
House of Representatives Member offices		11.00						22.00	3,529.00							0.00	0.00								
House of Representatives Member offices		8.00						16.00	2,059.00							0.00	0.00								
House of Representatives Member offices								0.00	0.00							0.00	0.00								
Legislative Research Office									South Extension								South Extension								South Extension
Legislative Research Office									South Extension								South Extension								South Extension
Senate Committee Rooms									South Extension								South Extension								South Extension
Senate Committee Rooms									South Extension								South Extension								South Extension
Senate Member in Capitol								0.00	0.00							0.00	0.00						5.00	5.00	3,210.00
Senate Members in Capitol LA								0.00	0.00							0.00	0.00						10.00	10.00	W/Senate Members
Senate Communications offices									South Extension								South Extension								South Extension
Senate Communications offices									South Extension								South Extension								South Extension
Press (to leave the building until after renovation)								0.00	0.00							0.00	0.00								0.00
Oversight Committee Office Space								0.00	South Extension							0.00	South Extension							0.00	South Extension
Oversight Committee Office Space								0.00	South Extension							0.00	South Extension							0.00	South Extension
State Auditor Relocate to Main Office								0.00	0.00							0.00	0.00							0.00	Second Floor
State Treasure								0.00	0.00							0.00	0.00							0.00	Second Floor
Secretary of State								0.00	0.00							0.00	0.00							0.00	Second Floor
Museum to relocate during renovation/Store Exhibits									Closed during Renovation								Closed during Renovation								Vestibule - Entry
Museum to relocate during renovation/Store Exhibits									Closed during Renovation								Closed during Renovation								Museum - 7,722
Museum to relocate during renovation/Store Exhibits									Closed during Renovation								Closed during Renovation								Museum - 7,866
Museum to relocate during renovation/Store Exhibits									Closed during Renovation								Closed during Renovation								Vestibule - Entry
Budget and Planning - Relocate to Truman Building								0.00																	South Extension
Budget and Planning - Relocate to Truman Building								0.00																	South Extension
Budget and Planning - Relocate to Truman Building								0.00																	South Extension
Budget and Planning - Relocate to Truman Building								0.00																	South Extension
Budget and Planning - Relocate to Truman Building								0.00																	South Extension
General Services - Relocate to Truman Building								0.00																	South Extension
Commissioners Office - Relocate to Truman Building								0.00																	W/Commissioner office
Commissioners Office - Relocate to Truman Building								0.00								0.00	0.00							5.00	1,780.00
Commissioners Office - Relocate to Truman Building								0.00								0.00	0.00							0.00	W/Commissioner office
Capitol Police								2.00	253.00							0.00	0.00							2.00	300.00
Womens									0.00								Open								Open
Womens									Open								0.00								Open
Mens									Open								0.00								Open
Womens									0.00								Open								Open
Mens									0.00								Open								Open
Womens									Open								0.00								Open
Mens									Open								0.00								Open
Joint Committee/Hearing Room								0.00	0.00							0.00	4,698.00							0.00	4,600.00



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Existing SF	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open								
	Beginning Sq Ft	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	
	Completion of	House	House	House	Senate	Senate	Senate		North Only	House	House	House	Senate	Senate	Senate		North Only	House	House	House	Senate	Senate	Senate		North Only	
	North & South Extensions	Original	Swing	Capitol	Original	Swing	Capitol	back	101.40	Original	Swing	Capitol	Original	Swing	Capitol	back	101.40	Original	Swing	Capitol	Original	Swing	Capitol	back	101.40	
Second Floor	28,228.00							64.00	9,004.00							43.00	11,650.90								99.00	22,975.00
Governors Office Space								0.00	0.00							15.00	5,460.00								15.00	5,460.00
Governors Office Space								0.00	0.00							0.00	0.00								0.00	0.00
Governors Office Space (Conference Room)								0.00	0.00							0.00	0.00								0.00	0.00
Lt. Governor								0.00	0.00							7.00	1,780.00								7.00	1,780.00
Secretary of State Relocated to Main Office								0.00								0.00									3.00	966.00
Treasurer Relocate to Main Office								0.00								0.00									6.00	1,287.00
Auditor								0.00								0.00									4.00	1,287.00
House Member to return to Capitol								0.00	0.00							6.00	1,267.50								23.00	7,383.00
House Member LA								0.00	0.00							6.00	608.40								23.00	W/ House Member
House of Representatives Members Offices		7.00						14.00	1,971.00							0.00									0.00	
House of Representatives Members Offices		14.00						28.00	3,603.00							0.00									0.00	
House of Office Space Vault Staff								0.00	0.00							0.00	0.00								0.00	
House of Office Space Staff								0.00	0.00							0.00	0.00								0.00	
House of Representatives Office Space		3.00						6.00	939.00							0.00									0.00	
House of Representatives Office Space		2.00						4.00	672.00							0.00									0.00	
House of Representatives Members Offices		6.00						12.00	1,819.00							0.00									0.00	
Senate Member in Capitol								0.00								3.00	1,267.50								6.00	3,852.00
Senate Member LA								0.00								6.00	1,267.50								12.00	W/ Senate Member
Senate Member Offices								0.00	0.00							0.00									0.00	
Senate Member Offices								0.00	0.00							0.00									0.00	
Senate Member Office Mezz.								0.00	0.00							0.00									0.00	
Joint Committee on Education								0.00	0.00							0.00	South Extension								0.00	South Extension
Jt Committee on Public Retirement								0.00	0.00							0.00	South Extension								0.00	South Extension
Jt Committee on Gambling and Wagering								0.00	0.00							0.00	South Extension								0.00	South Extension
Conference Room Space								0.00								0.00	South Extension								0.00	South Extension
Capitol Commission Board Room								0.00								0.00									0.00	960.00
Womens									Closed								Open									Open
Womens									Open								closed									Open
Womens									Closed								open									Open
Mens									Open								Closed									Open



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

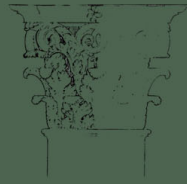
	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open								
		Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	Memb.	Memb.	Memb.	Memb.	Memb.	Memb.	FTE	Swing Space A	
		House	House	House	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	211.25	North Only	House	House	House	Senate	Senate	Senate	325.00	North Only	
		Original	Swing	Capitol	Original	Swing	Capitol	back	101.40		Original	Swing	Capitol	Original	Swing	Capitol	101.40		Original	Swing	Capitol	Original	Swing	Capitol	101.40	
Third Floor	22,068.00								60.00	12,414.00							38.00	12,716.20							100.00	17,943.00
House Member Return to Capitol									0.00	0.00			3.00				3.00	936.00			17.00				17.00	5,457.00
House member Staff Return to Capitol									0.00	0.00							3.00	304.20							17.00	W/ House Member
House of Representatives Member Offices									0.00	0.00							0.00									
House of Representatives Member Offices		1.00							2.00	1,121.00							0.00									
House of Representatives Lounge										1,599.00																1,599.00
House of Representatives Member Offices		3.00							6.00	1,121.00							0.00									
House of Representatives Member Offices		8.00							16.00	3,203.00							0.00									
House of Representatives Member Offices		1.00							2.00	1,091.00							0.00									
House of Representatives Chamber and support									9.00	Chamber 10,900.00							0.00	Chamber 10,900.00							9.00	Chamber 10,900.00
Leadership Support									10.00								0.00								10.00	
House of Representatives Rotunda Columns										340.00								0.00								
House of Representative Committee/Conf. Room																		0.00							0.00	0.00
House Support staff LA																		0.00							0.00	0.00
House of Representative Chief Clerk/Assistant Clerk										South Extension							12.00	1,344.00							12.00	1,344.00
Senate Members Return to Capitol									0.00								4.00	4.00							9.00	9.00
Senate Member Staff LA									0.00								8.00	1,690.00							18.00	W/ Senate Member
Senate Member Offices									0.00	0.00							0.00	0.00								
Senate Member Offices									0.00	0.00							0.00	0.00								
Senate Lounge - Used as Committee Room									0.00	0.00							0.00	1,595.00								1,595.00
Senate Member Offices									0.00	0.00							0.00	0.00								
Senate Member Offices				5.00					15.00	3,599.00							0.00	0.00								
Senate Chambers and Support										Chamber 10,400.00								Chamber 10,400.00								Chamber 10,400.00
Senate Rotunda Columns										340.00								0.00								
Senate Administration/Secretary Office									0.00	0.00							6.00	933.00							6.00	
Senate Committee/Conference Room										0.00							0.00	1,248.00							0.00	
Legislative Library									0.00	0.00							2.00	2,170.00							2.00	2,170.00
Men's										0.00								Open								open
Women's										Open								0.00								open
Womens - House Representative Space										Open								0.00								open



SECTION SEVEN: HIGH LEVEL SPACE PROGRAM

Future Space Program

	Existing SF Beginning Sq Ft Completion of North & South Extensions	Swing One - North/East Capitol and Basement Closed								Swing Two - South/West Capitol and Basement Closed								Swing Three - Capitol, North and South Extensions Open							
		Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A North Only	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A North Only	Memb. House	Memb. House	Memb. House	Memb. Senate	Memb. Senate	Memb. Senate	FTE	Swing Space A North Only
		Original	Swing	Capitol	Original	Swing	Capitol	211.25	101.40	Original	Swing	Capitol	Original	Swing	Capitol	211.25	101.40	Original	Swing	Capitol	Original	Swing	Capitol	325.00	101.40
Fourth Floor	22,485.00						57.00	11,415.00							39.00	8,691.95							84.00	17,861.00	
House Member Return to the capitol							0.00	0.00			9.00				9.00	2,808.00			24.00				24.00	7,704.00	
House members Staff LA							0.00	0.00							9.00	912.60							24.00	W/ House Member	
House of Representatives Member Offices							0.00	0.00							0.00										
House of Representatives Member Offices		4.00					8.00	1,121.00							0.00										
House of Representatives Member Offices		4.00					8.00	1,121.00							0.00										
House of Representatives Member Offices		10.00					20.00	3,295.00							0.00										
House of Representatives Conference Rooms							0.00	0.00							0.00										
House of Representatives Member Offices -Crows nest		3.00					6.00	1,091.00							0.00									TBD	
House of Representatives - Space -Staff							0.00	173.00							0.00										
House of Representatives, Caucus Staff							0.00	0.00							0.00										
House Gallery								Included with Chambers								Included with Chambers								Included with Chambers	
Senate Members Return to the Capitol							0.00	0.00						7.00	7.00	1,478.75					12.00	12.00	7,704.00		
Senate Member Staff LA							0.00	0.00							14.00	1,419.60						24.00	W/ Senate Member		
Senate Member Offices							0.00	0.00							0.00										
Senate Member Offices							0.00	0.00							0.00										
Senate Member Offices							0.00	0.00							0.00										
Senate Member Offices					5.00		15.00	3,599.00							0.00										
Senate Conference Rooms								0.00								1,140.00								1,520.00	
Senate Office Space								0.00																TBD	
Senate Office Space								1,015.00																TBD	
Senate East Gallery								With Chamber								933.00								933.00	
Senate Gallery																0.00								Included with Chamber	
Men's								Closed								Open								open	
Women's								Open								Closed								open	
Womens								Open								Closed								open	
Fifth Floor	1,903.00							1,903.00								0.00								1,903.00	
Press Offices Space								1,903.00								0.00								1,903.00	
Total s without Chambers and Museum spaces																									
North Capitol Extension	19,463.00							19,152.75								19,239.40								19,226.75	
South Capitol Extension	144,126.00							141,476.70								144,012.95								142,850.75	
Basement	56,984.00							0.00								31,311.85								59,797.25	
First Floor	33,925.00							14,676.00								17,277.75								27,410.00	
Second Floor	28,228.00							9,004.00								11,650.90								22,975.00	
Third Floor	22,068.00							12,414.00								12,716.20								17,943.00	
Fourth floor	22,485.00							11,415.00								8,691.95								17,861.00	
Fifth floor	1,903.00							1,903.00								0.00								1,903.00	
Total	329,182.00							210,041.45								244,901.00								309,966.75	
Total Available for each phase		113.00	50.00	0.00	10.00	24.00	0.00	737.00		0.00	89.00	74.00	0.00	20.00	14.00	738.00		0.00	0.00	163.00	0.00	0.00	32.00	785.00	
Temporary Offices				163.00			34.00				163.00			34.00					163.00			32.00			



SECTION EIGHT: BUILDING SYSTEMS

Activities

Current Conditions

This section will discuss the four basic systems within the Capitol which are proposed to be incorporated into the north and south Capitol extensions.

Structural System

Capitol

The Capitol structural system is a steel frame encased in concrete to provide for both structural integrity and fire resistance. The structure is anchored to bedrock by virtue of drilled piers. These piers are large in diameter (approximately 3 to 5 feet). There is approximately 17 to 18 feet of soil that they run through before reaching bedrock and stabilizing.

In general, the historic structure is in good condition and little work is to be done to it by way of reinforcement. Seismic risk is moderate and the frame as designed is expected to be able to withstand the ground motion forces. No Seismic retrofit is planned for the project.

North and South Capitol Extension

The extension of the Capitol to the north and south will use similar structures. It is anticipated that the structural system will use the natural bedrock for foundational support. Subterranean additions to the north and south would also likely incorporate a section of the area with a lowered subbasement slab-on-grade. The practical extent to which the existing slab can be lowered is limited by the size and configuration of the column base castings and piers. Trapezoidal prism shaped castings exist at the bottom of each steel column and bear directly upon the concrete pier. These castings range in size from 3'-0" to 5'-0" square and 14" to 30" tall. Most of the piers range in size from 4'-6" to 7'-9" square. The top of the castings are typically 6" to 12" below the top of the existing slab while the top

of piers are typically 2'-6" to 3'-0" below the top of the existing slab. Therefore, the slab could be lowered as much as 6" without exposing the castings or 2'-6" without exposing the piers. Exposing the castings or the tops of the piers would be structurally acceptable but may cause significant conflicts with the function of the space. Therefore, any effort to lower the existing slab on grade would be more about space planning coordination than it would be about structural conflicts.

A potential two-story subterranean expansion to the south would require a significant mass excavation. While borings in this area are presently not available, some information regarding the nature of that excavation can be derived from the existing Capitol Building Foundation Plan. This plan indicates that rock is located along the south central side of the build at elevation 160'-0". This plan also indicates that the rock elevation can vary significantly under the building footprint, with some piers bearing as low as 139'-0" and some as high as elevation 175'-4". In order to define the extent and nature of the excavation required for the southern addition, some additional parameters must be established/assumed. It should be anticipated that the excavation may be as much as 30' deep and that 0' to 15' of this excavation could be rock. Under such a scenario, a lagging system of excavation could be utilized.

A potential one-story subterranean expansion to the north would require a similar lagging system of excavation, though not as deep.

Both of these additions would be constructed of cast-in-place concrete. A foundation wall would be provided on all sides of the additions and would support the perimeter of the concrete floor and/or roof slabs. Since this wall would lock in and restrain the slabs, a post-tensioned system would not be recommended.

To relieve the concrete shrinkage stresses that would develop in such a restrained system, pour-delay strips would likely be required. The roof of these additions would be required to support not only several feet of grade, but may also be required to support fire truck loading. Therefore, the column grid should be kept relatively tight, on the order of 20 to 25 feet on center, so as to prevent the required depth of roof structure from becoming excessive.



Example of lagging system of excavation. Kansas State Capitol.



SECTION EIGHT: BUILDING SYSTEMS

Activities

Mechanical

Based upon the current mechanical systems and what must be done to return the building back to its original design with the high ceiling, a vertical distribution system with fan coil units will be required to be installed in the building. This will require using both new and existing vertical chases on both the north and south sides of the building. By doing so, this will allow the design team to remove the horizontal distribution system that has caused the lowering of the ceilings within all the perimeter spaces and other interior spaces.

To provide the additional heating and cooling capacity required to accommodate the restoration of the Capitol and the expansion to the North and South, the Central Plant will need to be expanded.

To develop the vertical chases and duct work that will need to be cut into the slabs for the new vertical distribution system, floor areas will need to be cleared of office space and walls. Demolition is dusty and not something that works well within an occupied building. In reviewing the sequence of work, the basement slab will need to progress forward as quickly as possible following the completion of the north and south expansions. With the move from the Basement, the underfloor work will be as soon as possible due to the duration and complexity of ductwork and piping.

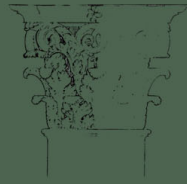
Typically, restoration works best working from the top down. This will require demolition and cutting of the floor slabs for the ductwork. The cutting of the ductwork will need to occur on every level and will need to maintain visual alignment as the contractor moves from the top of the Capitol to the basement, where it will tie into the Mechanical system. This will also be similar for all electrical and data feeds.

Plumbing

The domestic water and drain, waste and vent (DWV) piping systems in the Capitol building serve mostly public, multi-fixture restrooms, private restrooms, kitchenettes, janitor's closets/housekeeping and one commercial kitchen in the basement. If public restrooms are replaced or significantly modified, the plumbing piping, both horizontal run-outs and vertical risers, shall be replaced. If public restrooms generally stay as is, existing piping can be retained. In either case, the current temperature mixing valves that provide single stream tempered water to a bank of lavatories work poorly and should be removed and replaced with mixing devices at the point of use. Generally, existing copper domestic cold, hot and hot water circulating piping mains and vertical risers can be reused if compatible with revised architectural plans. Because of extensive renovations in the basement, domestic water piping will most likely be removed and replaced. Original 100+ year old DWV horizontal and vertical riser piping that serves private restrooms shall be replaced. Original 100+ year old waste piping under the basement floor shall be removed in its entirety and replaced as required to meet plumbing requirements for the renovated building. Sanitary drainage associated with the new building additions shall drain to the city sewer system as elevations dictate. A sewage lift station may be required.

Fire Protection and Sprinklers

Provide sprinklers for the 1st through 4th floors of the original building and new building additions. Extend the existing basement sprinklers to accommodate basement renovations. Provide dry pipe sprinklers for the 5th floor. Replace the original 100+ year old stand pipes as part of an integrated sprinkler system. To meet fire water flow and pressure requirements for both sprinklers and standpipes, provide a fire pump to serve the existing building and new additions.



SECTION NINE: PRESERVATION ZONES

Preservation Zones

General

There are four preservation zones that are overlaid on top of the Capitol floor plans. These zones are as follows:

- **Zone 1**—The highest of the preservation zones, with the highest level of importance within the Capitol is Zone 1. It is expected that within this zone, all spaces both public and private will be restored and returned to the original architectural intent and design. These spaces are the critical character-giving elements of the building. They include the Rotunda, House and Senate Chambers and lounges, the Governor's Reception room and several other spaces of great importance within the building. Within these spaces, materials, hardware, decorative paint and lighting should be restored and carefully replicated to match the original design as completed when the building opened in 1917.
- **Zone 2**—This zone is the second most important zone and, in many areas, is similar in importance to the Zone 1 spaces. Zone 2 spaces are typically directly connected to Zone 1 spaces by either a physical or visual connection. Therefore, they will be seen and approached primarily from Zone 1 spaces. It will be very important to the overall design of the building that these spaces be given equal attention to the quality of finish and appearance. Every effort should be made to replicate the level of finish in decoration, hardware, millwork and floor coverings as would have been found in the original spaces.

The primary difference between the Zone 1 and Zone 2 spaces is that there is limited existing historic fabric. Many of these important spaces have been

changed or modified substantially over the last 102 years. Therefore, within Zone 2, functional modification or new compatible uses are acceptable. These new compatible uses should not impact or damage the existing architectural integrity of the building. Where historic elements remain within the Zone 2 spaces, such as walls, floors, ceilings and other items, they should be retained and restored.

- **Zone 3**—Typically, Zone 3 spaces are not closely associated with Zone 1 spaces. However, within the Missouri State Capitol, the majority of perimeter offices are considered Zone 3 spaces. In many instances these spaces would be considered Zone 2 spaces, due to the relationship to the Zone 1 space. However, because there has been major remodeling in these spaces and that all of the historic material has been lost, they have been classified as Zone 3 spaces. Due to this relationship with Zone 1, these spaces should be treated in the exact same way as the Zone 2 spaces and the same standards for finishes, millwork, hardware and carpeting should apply.

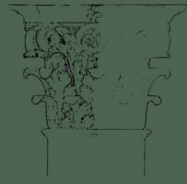
Additionally, one of the most significant architectural design features lies between the Zone 1 corridors and the Zone 3 perimeter offices; the Corridor wall. This wall has remarkable glass transoms or side lights that were initially designed to provide light from the exterior to the interior corridors. It was a critical design element and should be restored. In order to accomplish this, the current first and second floor mezzanines and the dropped ceiling with horizontal mechanical system will all need to be completely removed. New vertical ducted mechanical systems and fan coil units will be utilized along the perimeter.

Vertical duct space will be required. Therefore, while there is no historic fabric remaining and new mechanical is being installed, finishes will need to be consistently and uniformly provided within Zone 2 and Zone 3.

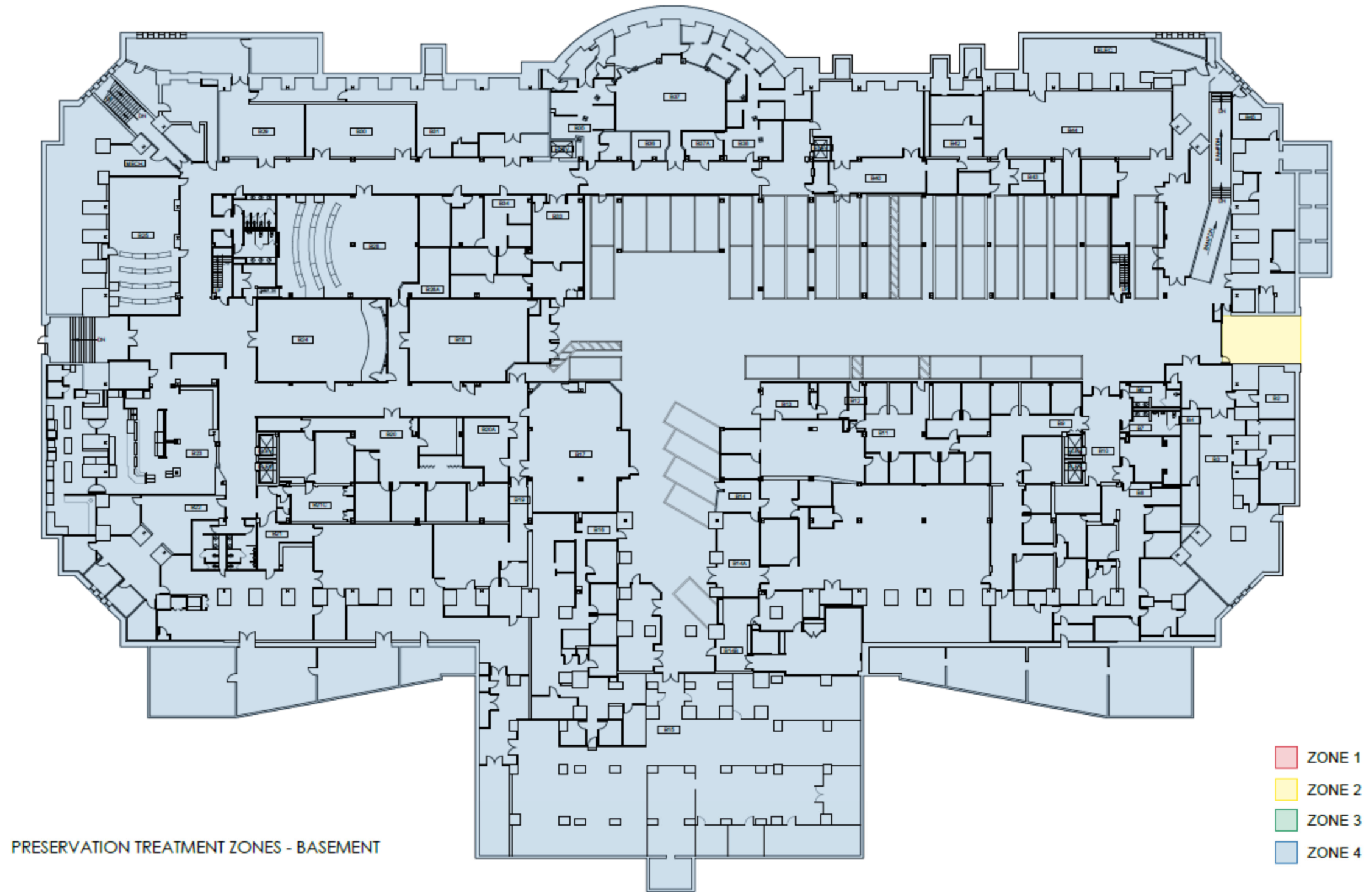
- **Zone 4**—These spaces are typically found, reclaimed spaces, additions or utility spaces such as mechanical or electrical rooms. New spaces are those spaces that have been recently constructed (mezzanines) or are additions to the existing facility. The finishes in these spaces while not historic, since no historic material existed, should be finished in historically compatible finishes.

It is not anticipated that these spaces will be completed as modern with finishes that relate to the current state of design, but reflect the historic nature of the building. The majority of the Zone 4 space is the basement. The future use of the basement will be to provide offices for House of Representative Offices. These offices should be designed with the same level of dignity as those on floors 1 through 4. Compatible materials and colors should be selected to complete the preservation of the Capitol.

The following documents indicate the various zones of use on each floor plan.

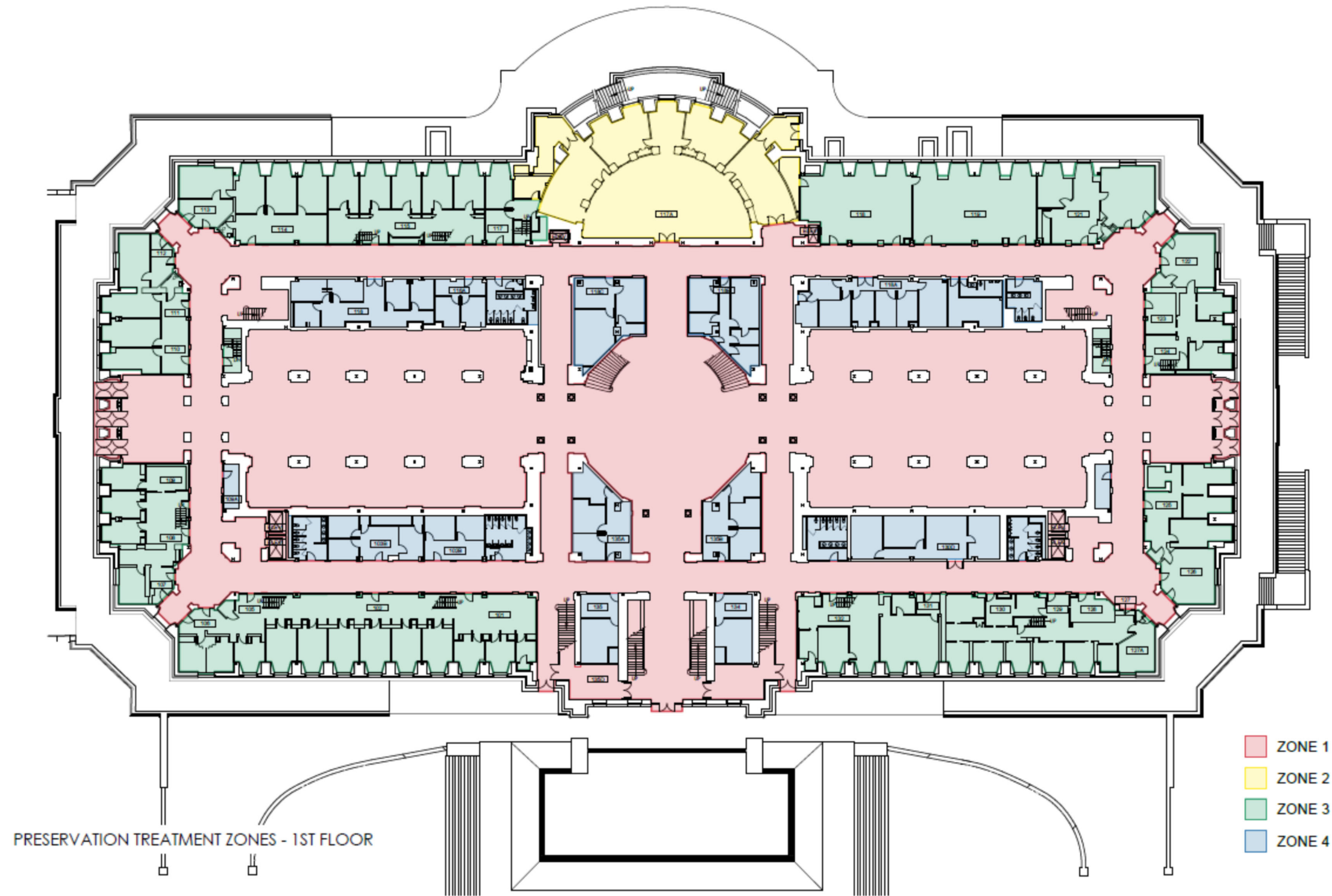


SECTION NINE: PRESERVATION ZONES



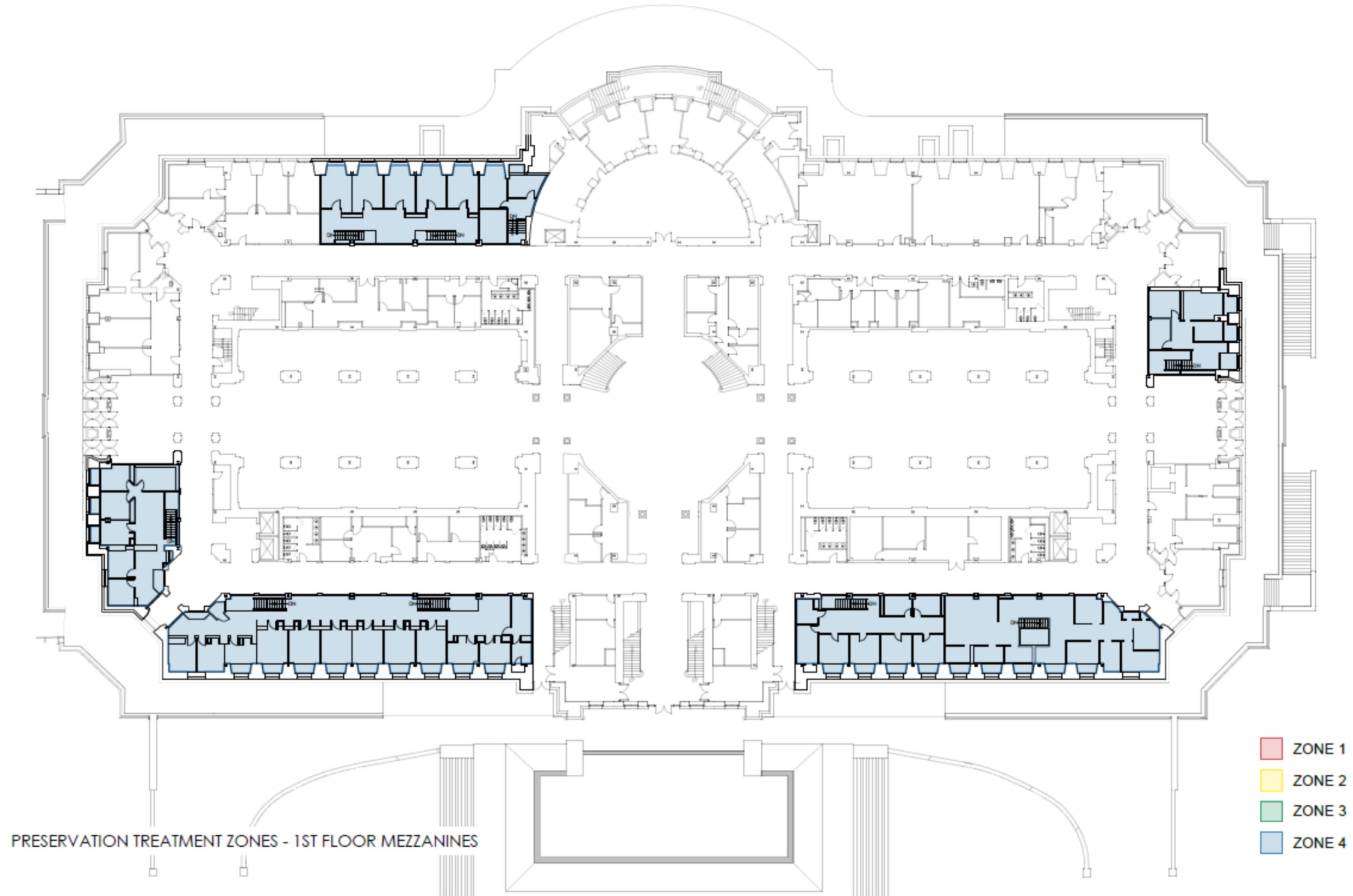


SECTION NINE: PRESERVATION ZONES



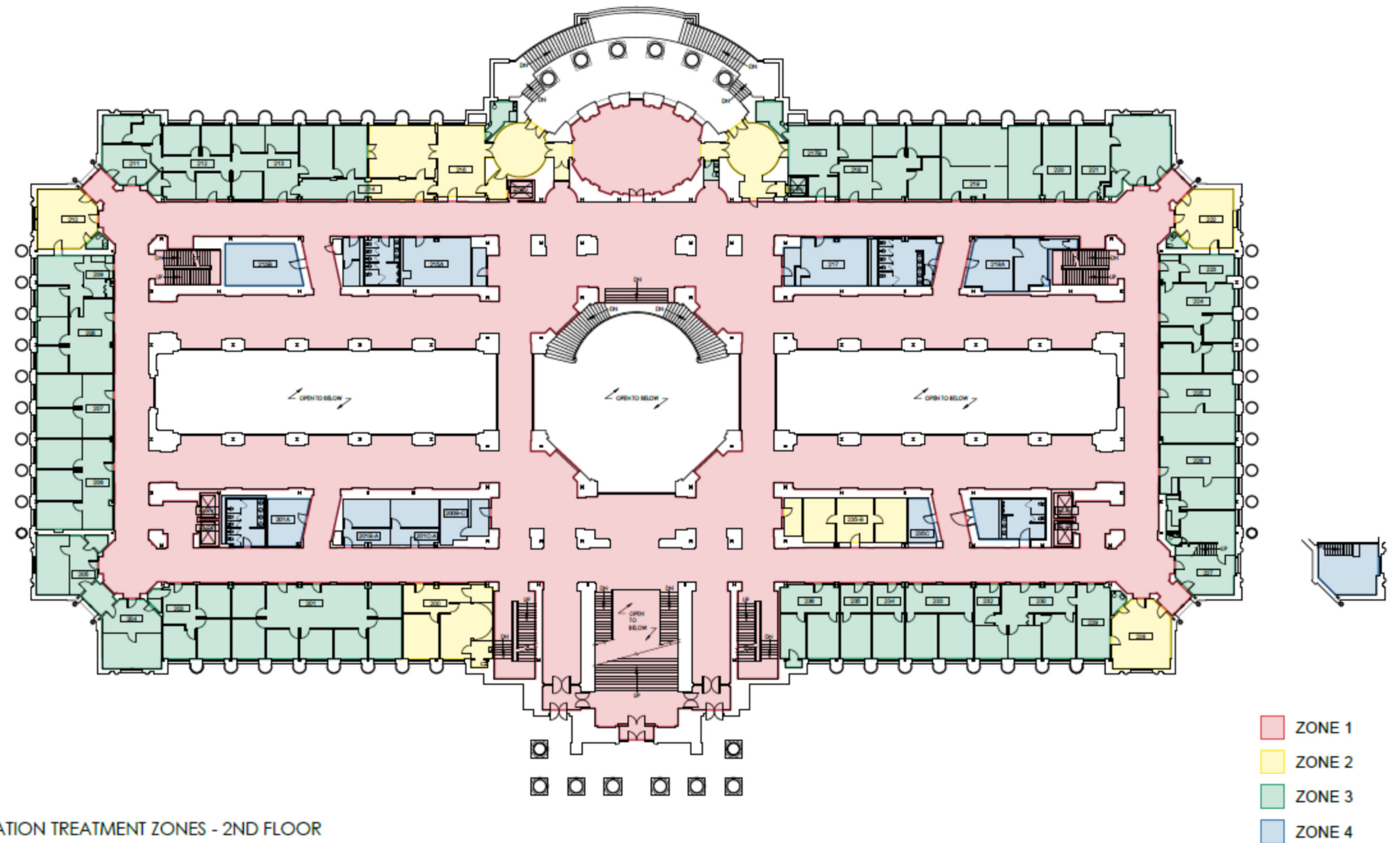


SECTION NINE: PRESERVATION ZONES

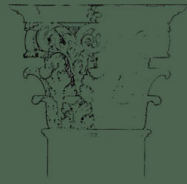




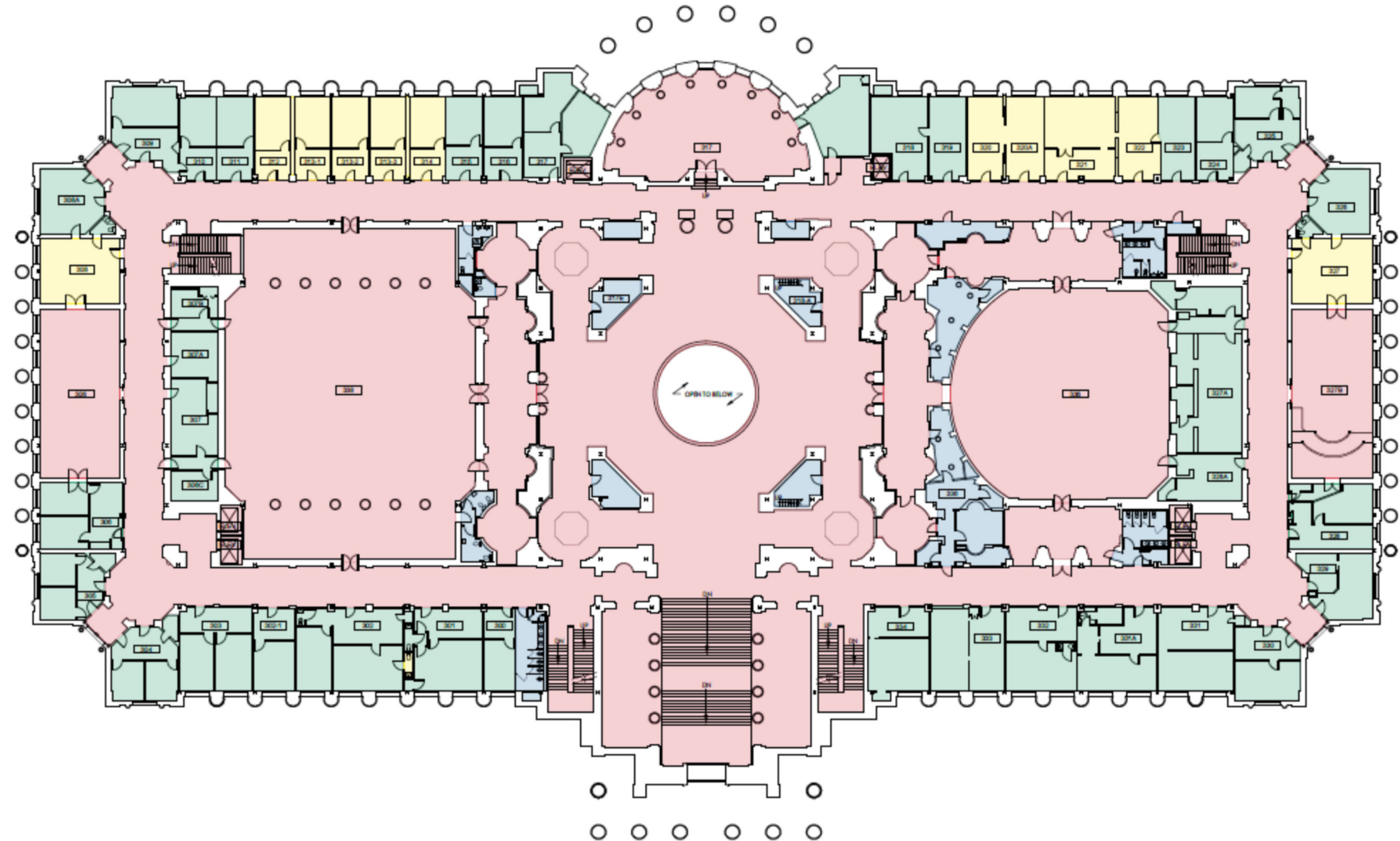
SECTION NINE: PRESERVATION ZONES



PRESERVATION TREATMENT ZONES - 2ND FLOOR



SECTION NINE: PRESERVATION ZONES

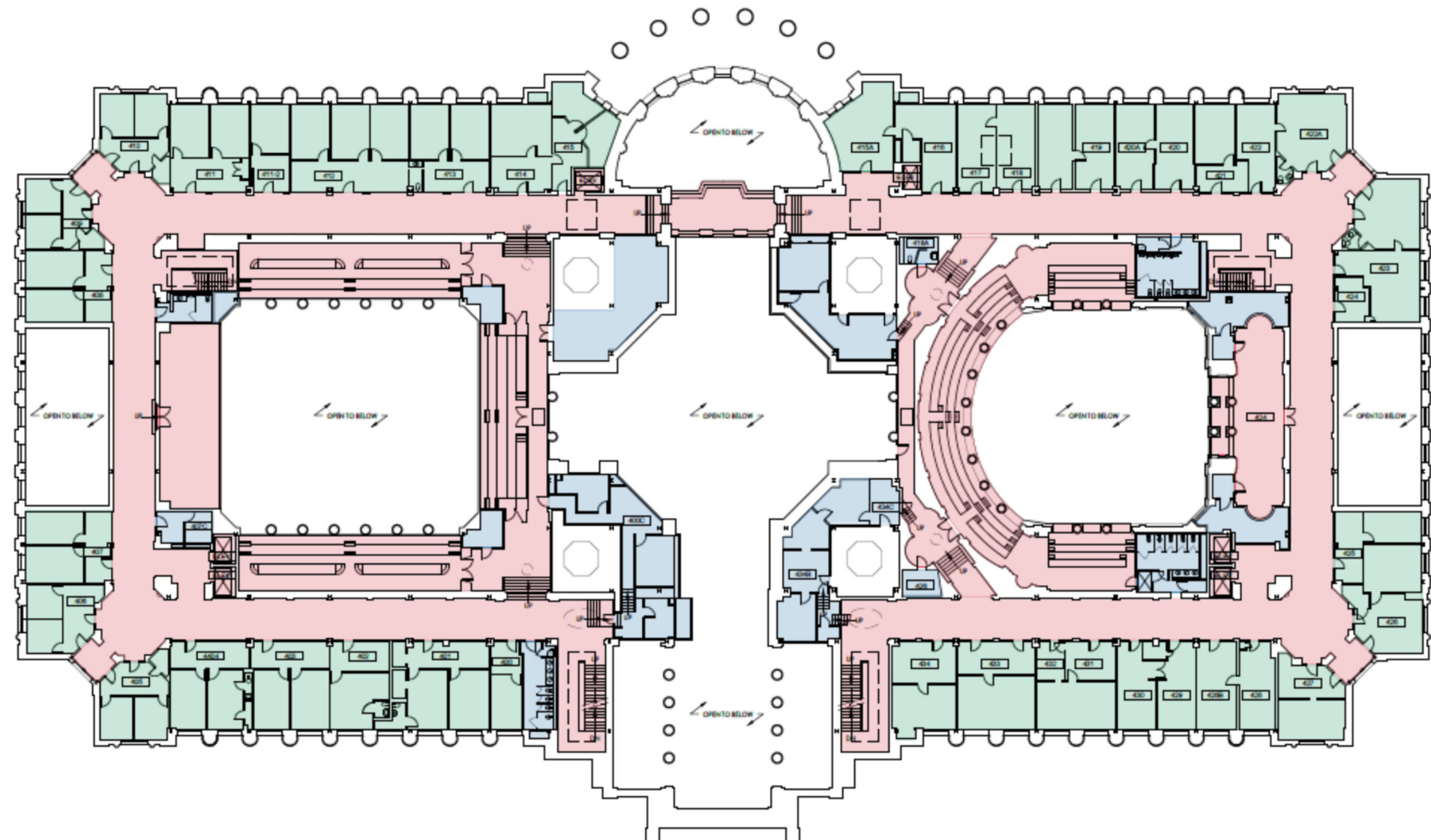


PRESERVATION TREATMENT ZONES - 3RD FLOOR

- ZONE 1
- ZONE 2
- ZONE 3
- ZONE 4

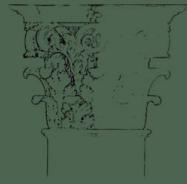


SECTION NINE: PRESERVATION ZONES

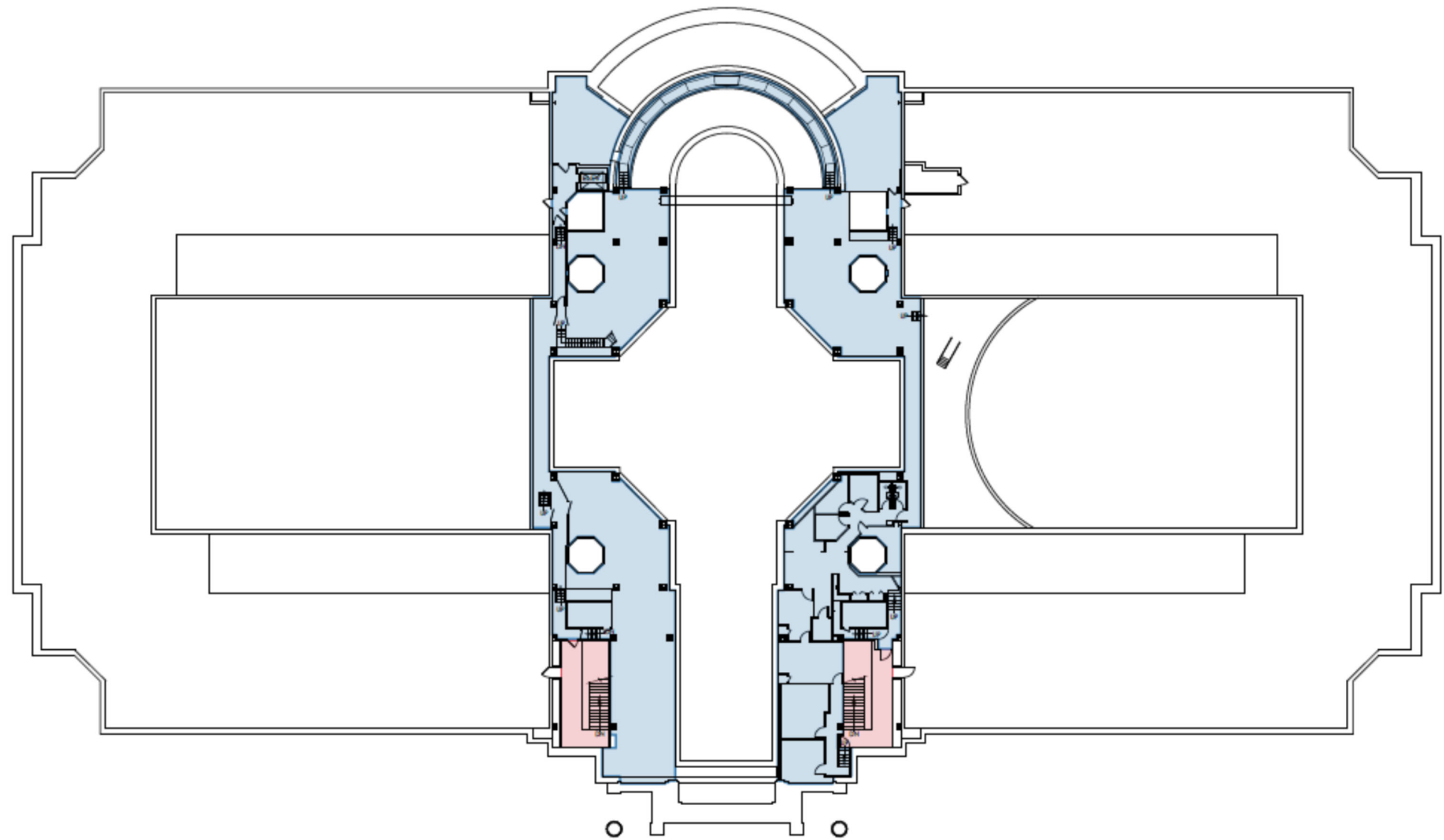


PRESERVATION TREATMENT ZONES - 4TH FLOOR

- ZONE 1
- ZONE 2
- ZONE 3
- ZONE 4



SECTION NINE: PRESERVATION ZONES



PRESERVATION TREATMENT ZONES - 5TH FLOOR

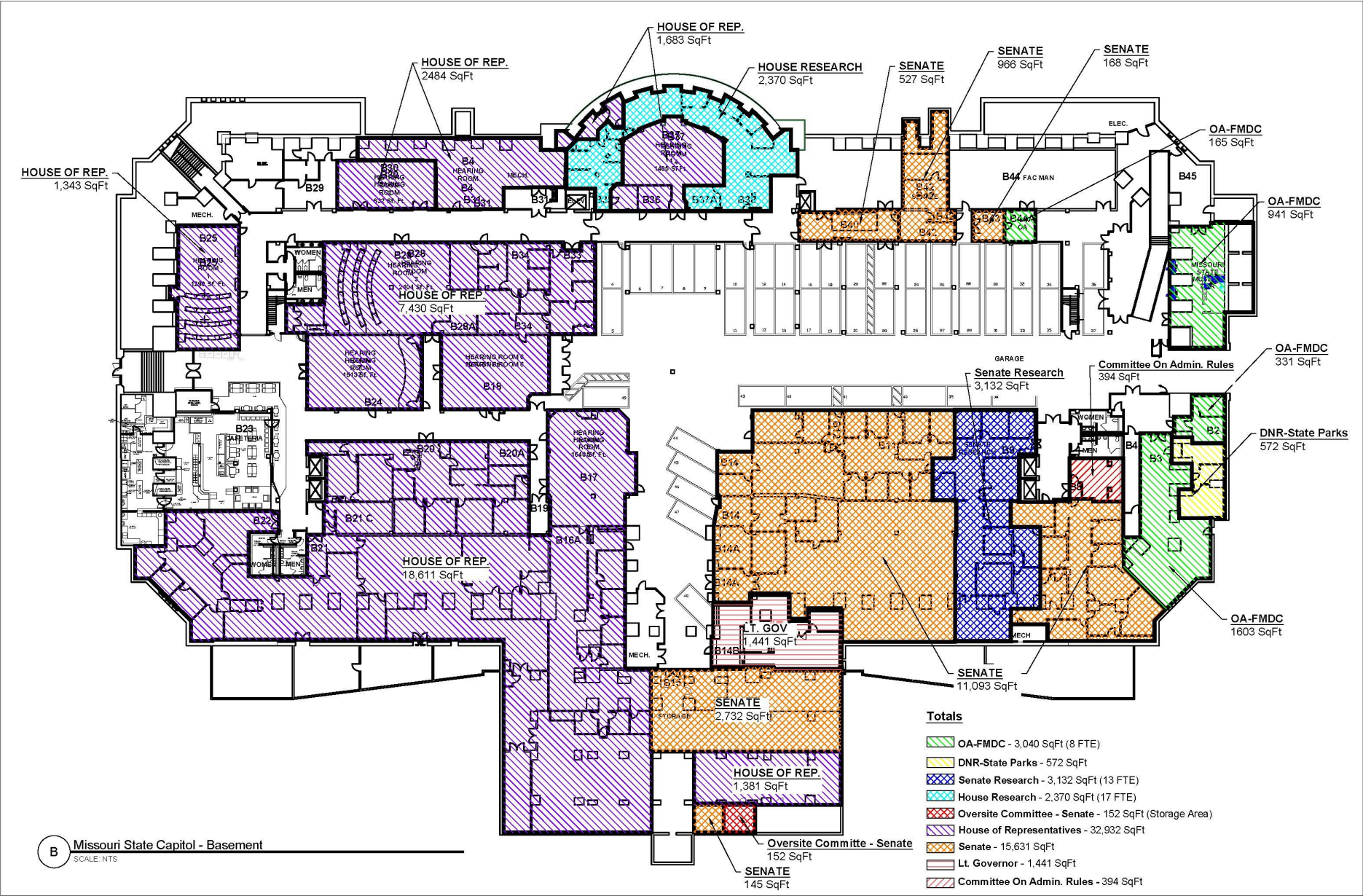
- ZONE 1
- ZONE 2
- ZONE 3
- ZONE 4

SECTION TEN: CAPITOL SPACE PLANNING

Current Space Utilization:

Over time, as organizations or departments have vacated the Capitol, space within the Capitol has been absorbed by members of the Legislature and Executive branch due to the ongoing need for office space. This has created a situation where all of the space within the Capitol, including what was initially designated as storage space within the Rotunda columns and other nooks and crannies, has been filled with offices or other functional space. Throughout the building, this presently accounts for approximately 16,200 net square feet. To relocate this square footage will require additional space for circulation and building systems or approximately 27,000 gross square feet.

In 1974 and 1984, mezzanines were installed in the building on the first and second floors. These now account for approximately 12,000 net square feet of office space. This space, when adjusted for circulation and building systems, will require 24,000 gross square feet to accommodate elsewhere. The introduction of the mezzanines significantly interrupted the natural light that was intended by the architect to provide light to the interior public corridors and to the interior offices beyond. Today, the corridors are largely lighted with artificial lighting and some natural lighting emanating from the end of the corridors.



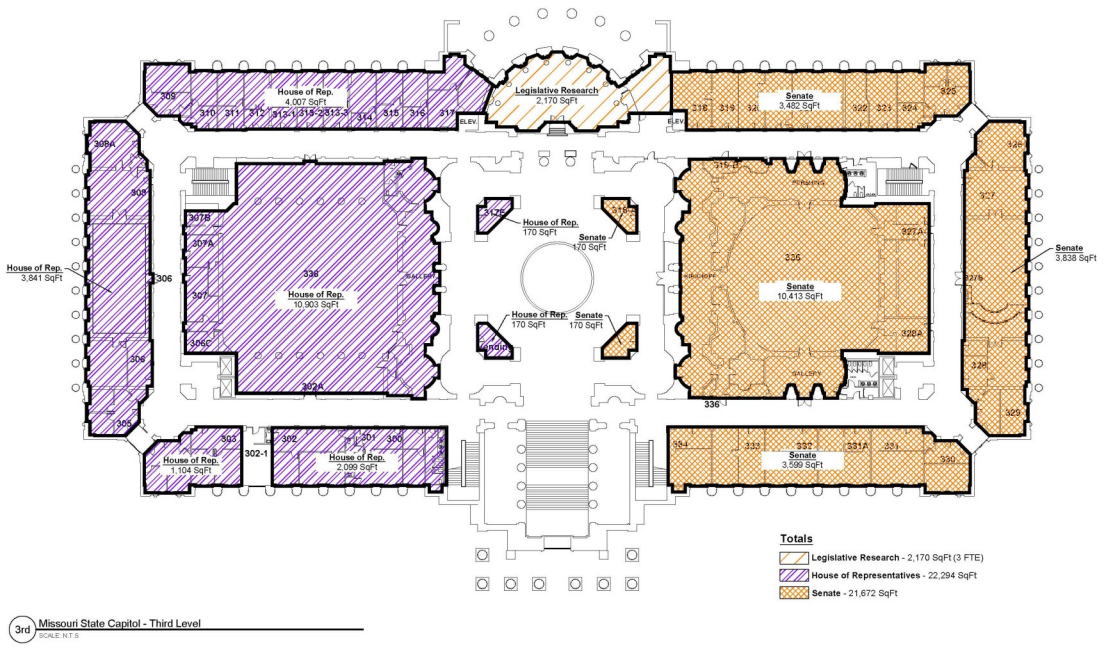
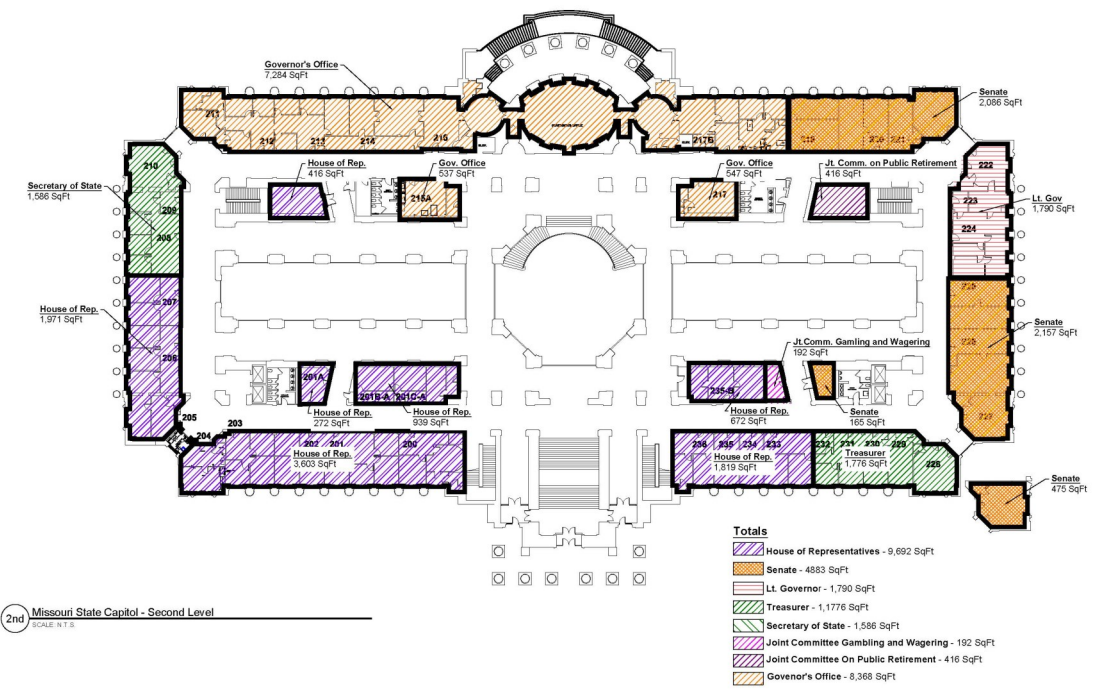
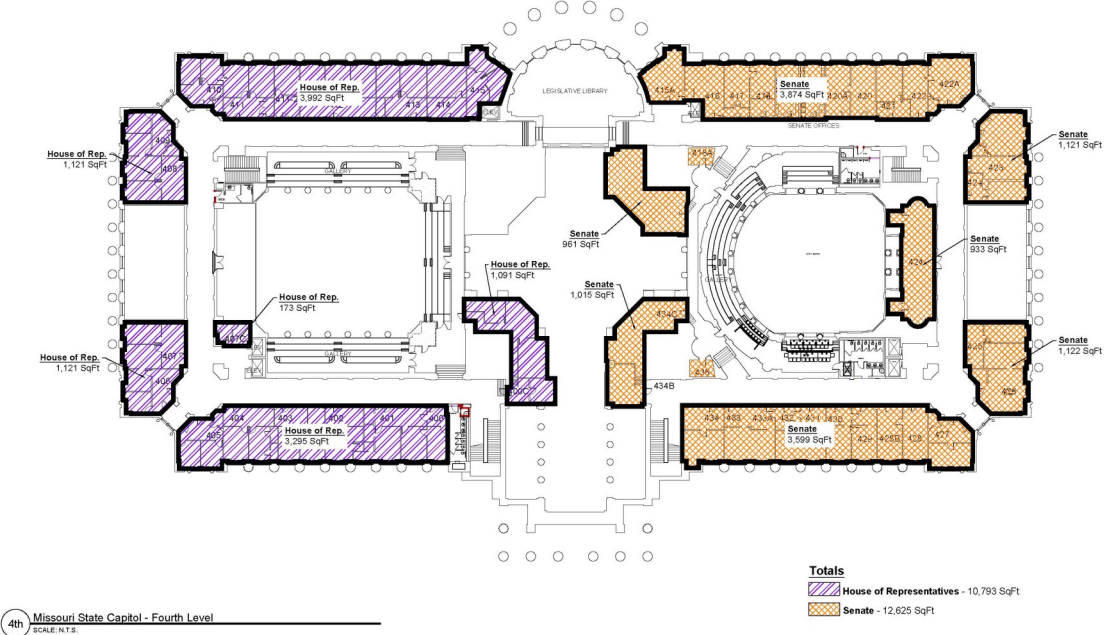
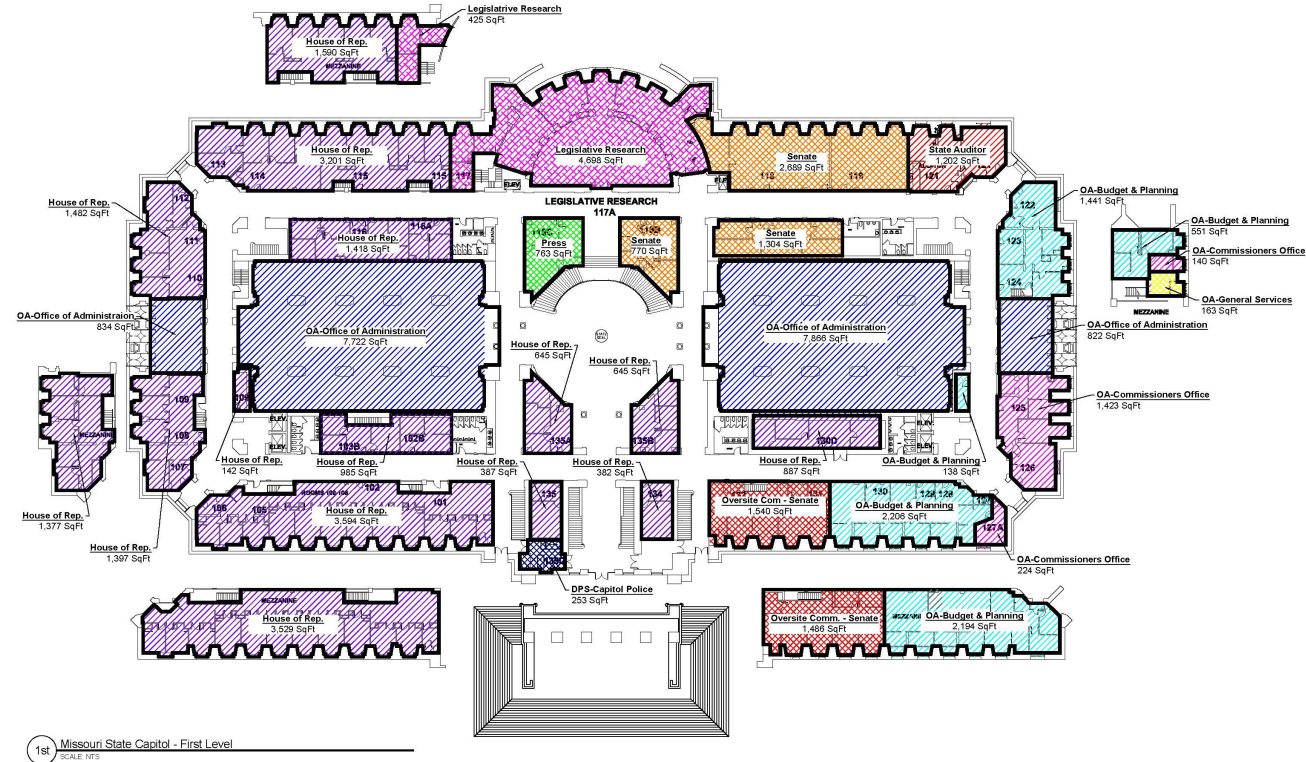
Maps provided courtesy of the Office of Administration.

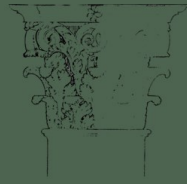
SECTION TEN: CAPITOL SPACE PLANNING

- Totals**
- OA-Budget & Planning - 6,247 SqFt
 - OA-Office of Administration - 17,244 SqFt
 - OA-Commissioners Office - 1,787 SqFt
 - OA-General Services - 163 SqFt
 - DPS-Capitol Police - 253 SqFt
 - State Auditor - 1,202 SqFt
 - Press - 1,533 SqFt
 - Oversite Committee - Senate - 3026 SqFt
 - Legislative Research - 5,123 SqFt
 - House of Representatives - 21,715 SqFt
 - Senate - 4,763 SqFt

Maps provided courtesy of the Office of Administration.

Note: Press space is technically under the management of the House of Representatives.





SECTION TEN: CAPITOL SPACE PLANNING

Continued from page 10.1...

The lower level, which in the original design was open and used as stables and storage, has been turned into a fully utilized basement containing approximately 60,000 usable square feet. This is divided into both Legislative (House and Senate) functions, as well as some limited Executive branch functions. To relocate this space will require approximately 102,000 gross square feet. In addition to the office space, there is approximately 46 parking stalls and vehicular circulation within the basement. From a security standpoint and given events throughout the country since 09/11/01, parking located under essential or iconic facilities has been highly discouraged. Therefore, all parking should be relocated from beneath the building. This will require the con-

Space Planning Options

Space planning options are as follows:

The Comprehensive Restoration Master Plan's focus is to restore the Capitol's architectural integrity, by eliminating the dropped ceilings and restoring natural light to the building, eliminating the mezzanines, creating a unified and connected campus, improving functional efficiency and effectiveness of staff and elected officials, replacing aging mechanical, plumbing and electrical systems and improving security. This is the subject of this document. MOCA was asked to investigate and provide opinion on three additional options:

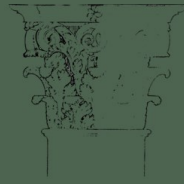
1. Reduce overcrowding in the Capitol by relocating Legislative and Executive branch offices and functions to the existing MODOT building, develop a large underground tunnel for connectivity, remove the mezzanines, provide new office space and hearing rooms within the current Capitol basement parking (do not increase the number of hearing rooms), provide limited parking for the Governor below the Capitol. Do not replace the mechanical, plumbing or electrical systems, maintain the dropped ceilings and dark interior corridors.
2. Remove the mezzanines and relocate all impacted legislators to a smaller south extension, relocate a limited number of Legislative staff offices, do not add additional committee rooms. Do not replace the mechanical, plumbing or electrical systems, maintain the dropped ceilings and dark interior corridors. Construct the north extension/visitors center following the completion of the south extension.
3. Remove the mezzanines and relocate the Legislative office to the north extension for offices only. Do not replace the mechanical, plumbing or electrical systems, maintain the dropped ceilings and dark interior corridors.

This section on space planning has evaluated each of these three different options. This is fundamentally a question of priority and balancing what is best for the long term life expectancy; the next 75 to 100 years with the political will to expend the appropriate amount of funds.

Over the course of this analysis the state has provided MOCA with a number of previous planning studies. These have all been carefully reviewed. Two of the studies have provided information regarding the question about options.

The first was provided in 2001 by Team Four Architects who proposed the addition of the Visitor Center and expansion the north. Team Four studied four options which provided insight and analysis which aided the MOCA analysis. The idea developed consisting of a north Visitor Center has proven to be an excellent suggestion.

The second study provided was by Trivers Architects who, in 2016, provided a study on how to address the overcrowding of the Capitol. Their study proposed to reduce overcrowding in the Capitol by relocating some Legislative and Executive branch offices and functions to the existing MODOT building, developed an underground tunnel for connectivity, removed the mezzanines, provided new office space on the first and second floors and repositioned the hearing rooms within the Capitol basement. This study closed the existing parking within the basement and provided limited parking for the Governor below the Capitol. Their recommendations did not replace the mechanical, plumbing or electrical systems. Therefore, it appears that they maintain the dropped ceilings and dark interior corridors. They also provided some improvement to the security in and around the Capitol.



SECTION TEN: CAPITOL SPACE PLANNING

Option 1

The architectural Firm Trivers was retained by the Office of Administration in 2017 to provide a plan to remove the mezzanines from the capitol. MOCA utilized the Trivers study to develop MODOT Study One and Study Two (See graphics to the right).

MODOT Study One identifies those additional offices to relocate to the MODOT building, utilizing all of the available 79,000 NSF. Upon completion of this chart, it was clear that there was not consensus from the Legislature on relocating staff offices or functional space to the MODOT building. MOCA therefore developed MODOT Study Two which identifies those non-legislative office that could be moved. Unlike the first study that uses 79,000 NSF, the second study only uses 29,000 NSF.

Utilizing the information developed from the Trivers report, MOCA repositioned the first, second and basement levels of the Capitol to understand the impact of the plan. The diagrams on the following page clearly delineate the significant impact associated with Option 2. The results of this analysis are as follows:

	Option 1 CMP	Option 2 ROC	Gained (Lost)
# Representatives Off.	163	145	(19)
# Senator Offices	34	34	0
# House Hearing Rm.	7	7	0
# Senate Hearing Rm.	3	2	(1)
SF House Staff Space	23,536	12,672	(10,864)
SF Senate Staff Space	18,763	0	(18,763)

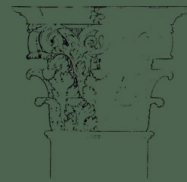
MODOT - Trivers Plan with additional space to use entire building						
	Total	West Wing	North	South	Totals	Over/Under
Basement	4,205	0	4,205	0	4,205	
House Print Storage			2,103		2,103	
Senate Print Storage			2,103		2,103	
Total	0	0	4,205	0	4,205	0
Ground Floor	13,541	7,120	4,405	2,016	13,541	
Senate Print		7,120			7,120	
House Print				2,016	2,016	
Office OF Admin. Commissioner office			2,692		2,692	
State Auditor			1,713		1,713	
Total	0	0	0	0	13,541	0
First Floor	18,085	7,120	5,390	5,575	18,085	
House Research		3,064			3,064	
Senate Research		4,056			4,056	
Treasurer			2,712		2,712	
Secretary of State			2,006		2,006	
Press				3,466	3,466	
DNR State Parks				744	744	
OA General Services			212		212	
Expansion			460	1,366	1,826	
Total	0	0	0	0	18,085	0
Second Floor	18,475	7,120	5,390	5,965	18,475	
House IT		3,560			3,560	
Senate IT		3,560			3,560	
Remaining Senate Offices			5,390	5,965	11,355	
Total	0	0	0	0	18,475	0
Third Floor	17,900	7,120	5,390	5,390	17,900	
Budget and Planning		7,120	360		7,480	
Senate Oversight			5,030		5,030	
Leg Research, Public Retirement, Admin Rules, Ed				5,390	5,390	
Total	0	0	0	0	17,900	0
Fourth Floor	7,120	7,120	0	0	7,120	
Lt. Governor Staff		2,230			2,230	
Senate Admin		2,230			2,230	
House Admin		2,228			2,228	
Conference		432			432	
Total	0	0	0	0	7,120	0
Total	79,326					

MODOT Study One - The architectural Firm Trivers was retained by the Office of Administration in 2017 to provide a plan to remove the mezzanines from the capitol. In that plan, they proposed relocating legislative and executive function to the MODOT building. At that time, MODOT was to continue to be used by MODOT to house their leadership. MOCA was asked to consider using all of the space within the MODOT building. MOCA added to the Trivers report and identified additional Executive and Legislative spaces that could be candidates for relocation. This would be approximately 79,500 sf. (See table above)

MODOT with Legislative Input						
	Total	West Wing	North	South	Totals	Over/Under
Basement	4,205	0	4,205	0	4,205	
FMDC			4,205		4,205	
Expansion					0	
Total	0	0	0	0	4,205	0
Ground Floor	13,541	7,120	4,405	2,016	13,541	
Office OF Admin. Commissioner office			2,692		2,692	
State Auditor			1,713		1,713	
Museum Office Space				1,000	1,000	
Total	0	7,120	0	1,016	8,136	0
First Floor	18,085	7,120	5,390	5,575	18,085	
Treasurer			2,712		2,712	
Secretary of State			2,006		2,006	
Press				3,466	3,466	
DNR State Parks				744	744	
OA General Services			212		212	
Expansion		7,120	460	1,366	8,946	
Total	0	0	0	0	18,085	0
Second Floor	18,475	7,120	5,390	5,965	18,475	
Expansion		7,120	5,390	5,965	18,475	
Total	0	0	0	0	18,475	0
Third Floor	17,900	7,120	5,390	5,390	17,900	
Budget and Planning		7,120	360		7,480	
Expansion			5,030	5,390	10,420	
Total	0	0	0	0	17,900	0
Fourth Floor	7,120	7,120	0	0	7,120	
Lt. Governor Staff		2,230			2,230	
Conference		432			432	
Expansion		4,458			4,458	
Total	0	0	0	0	7,120	0
Total	79,326					

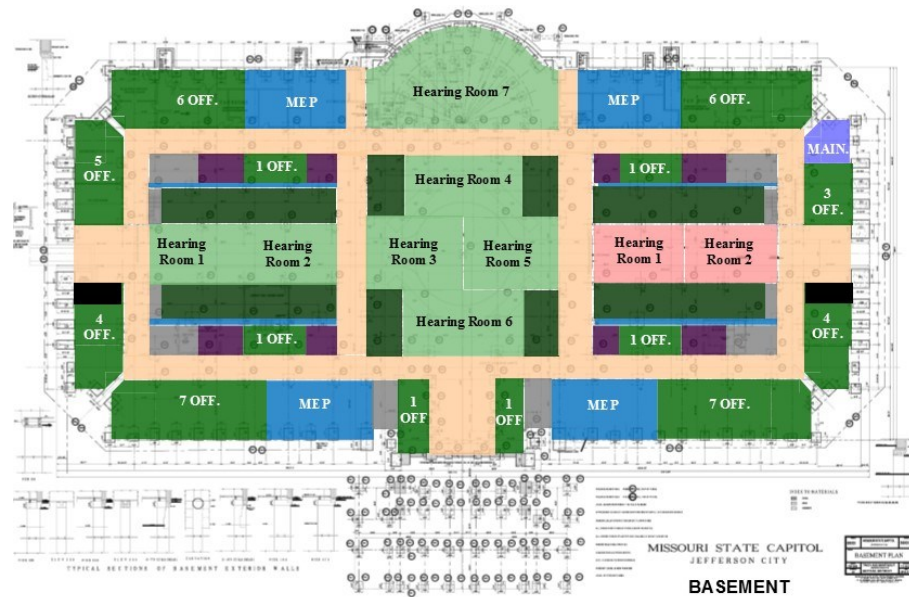
MODOT Study Two - Following the development of the first study, MOCA reviewed the findings with Legislative leadership to confirm the relocation of legislative spaces and functions from the Capitol to MODOT. Legislative Leadership could not support the MODOT Study One which removed Legislative Staff or Legislative Functions from the Capitol.

The table above identifies those spaces within the Capitol that could be relocated to the MODOT building. This would relocate approximately 29,000 sf. (See table above)



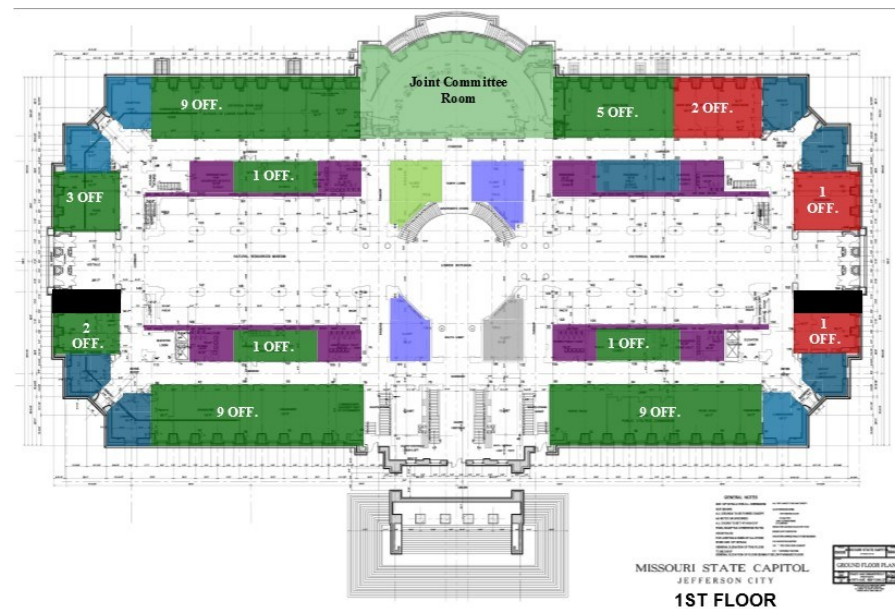
SECTION TEN: CAPITOL SPACE PLANNING

Option 1



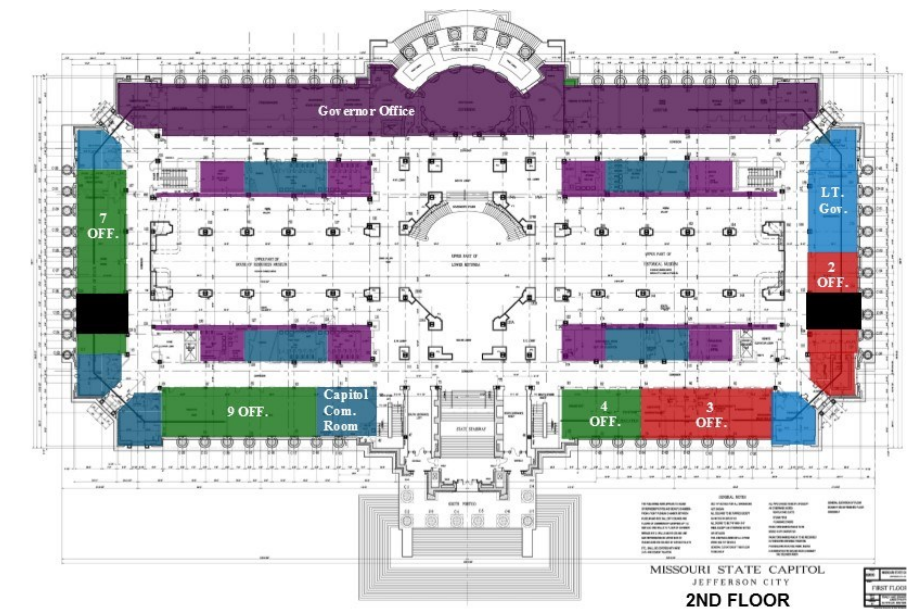
Basement Level

- 48 House of Representative Offices
- 4 Mechanical Rooms
- 8 Men's and Woman's
- Extend Stairs and Elevators
- New Exit Stairs (2)
- 7 House Committee Rooms
- 2 Senate Committee Rooms
- 12,670 SF - House Staff Office space - Current 32,932 sf
- 0 SF - Senate Staff Office space - Current 15,631



First Floor Level

- 40 House Representative Offices
- 4 Senate offices
- Joint Committee Room
- 8 Conference Rooms
- 2 Janitorial Closets
- Commissioner of OA
- New Exit Stairs (2)

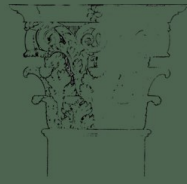


Second Level

- 20 House Offices
- 5 Senate Offices
- Governor Main Office
- Governor Storage
- Lt. Governor Office
- New Exit Stairs (2)

Space Legend

 House Office Space	 Committee Room - Senate
 House Conf. Committee	 Committee Room - House
 Senate Office Space	 New Public Circulation
 Senate Conf. Committee	 Elected Officials
 Governors Office	 Mechanical/Restroom
 Conference Rooms	 Vertical Circulation



SECTION TEN: CAPITOL SPACE PLANNING

Schedule for Option 1

The schedule for Option 1 was provided by Trivers and appears to suggest a design and construction period of three and half years.

Cost of Option 1

The Trivers Architectural Report provided a cost estimate of what appears to be construction costs of \$33.5 Million. It is not possible to validate this estimate. It is assumed that this number is the cost of construction and, as such, it should include contractors' general conditions, contingency and fees. In addition, one must keep in mind the following:

1. Escalation - The Trivers report was completed in March of 2016. The cost would need to be escalated at 4% per year, raising the cost to approximately \$37.5 Million.
2. Owner Soft Costs - Typically on Capitols, owner costs range between 32% and 35% of the project cost. This would increase the estimated cost to \$50.6 Million.
3. The cost of relocating or building a new facility for MODOT would need to be considered within the cost estimate.

Summary of Option 1

Based upon the analysis using the information contained in the Trivers report and based upon the rejection of legislative space in the MODOT building by Legislative representatives and leadership, MOCA does not believe that Option 1 provides a reasonable solution and does not recommend it.

Option 1 does not:

1. Restore the Capitol's architectural integrity
2. Eliminate all the dropped ceilings
3. Restore natural light to the building
4. Create a unified and connected campus
5. Improve functional efficiency and effectiveness of staff

- and elected officials
- 6. Replace aging or failing mechanical, plumbing, life safety, electrical, life safety and security systems

Option 1 does:

1. Remove the Mezzanines
2. Leave the House short 19 offices
3. Leave the Senate short 1 hearing room
4. Leave the Legislature with approximately 28,000 Net Square feet less than recommended

Option 2

Option 2 proposes to remove the mezzanines and relocate all impacted legislators to a smaller south extension, relocate a limited number of Legislative staff offices, do not add additional committee rooms. Do not replace the mechanical, plumbing, or electrical systems, maintain the dropped ceilings and dark interior corridors. Construct the north extension/visitors center following the completion of the south extension.

This Option essentially is Option 1 with an add-on for swing space to the south and to the north in separate phases.

Schedule for Option 2

The schedule for how best to address option three would be as follows:

1. Relocate the office of the Executive branch to the MODOT building
2. Design and construct a south expansion of approximately 95,000 square feet, which is about 65% of the South Expansion from Option 1
3. Implement the Option 2 plan
4. Construct the North extension

Cost of Option 2

The cost of option 2 would generally be as follows:

1. Relocation costs associated with the move to MODOT

- (included in Phase two costs provided by Trivers)
- 2. Construct the smaller south extension = \$81.3 Million
- 3. Implement Option 2 = 50.6 Million
- 4. Construct the north extension = \$19.6 Million
- 5. Total with escalation = \$151.5 Million

Summary of Option 2

Based upon the analysis using the information contained in the Trivers report and based upon analysis of Option 1, MOCA does not believe that Option 2 provides a reasonable solution and does not recommend it.

Option 2 does not:

1. Restore the Capitol's architectural integrity
2. Eliminate all the dropped ceilings
3. Restore natural light to the building
4. Replace aging or failing mechanical, plumbing, electrical, life safety and security systems

Option 2 does:

1. Remove the Mezzanines
2. Provide 19 House offices in the extension
3. Provide 1 Senate hearing room in the extension
4. Provide the Legislature staff with new offices in the south extension
5. Provide a future Visitor Center

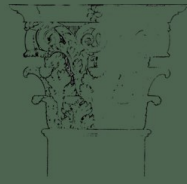
Option 3

Option 3 proposes to remove the mezzanines and relocate the Legislative office to the north extension for offices only. Do not replace the mechanical, plumbing, or electrical systems, maintain the dropped ceilings and dark interior corridors.

Base upon the analysis of Option 3, the summary is as follows:

Schedule for Option 3

The schedule for how best to address option three would be as follows:



SECTION TEN: CAPITOL SPACE PLANNING

1. Relocate the office of the Executive branch to the MO-DOT building
2. Design and Construct a north expansion of approximately 20,000 square feet
3. Implement the Option 2 plan

Cost of Option 3

The cost of Option 3 would generally be as follows:

1. Relocation costs associated with the move to MODOT (included in Phase two costs provided by Trivers)
2. Construct the north extension = \$19.6 Million
3. Implement Option 2 = \$50.6 Million
4. Total with escalation = \$70.2 Million

Summary of Option 3

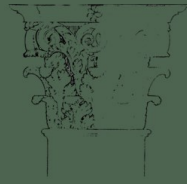
Based upon the analysis using the information contained in the Trivers report and based upon analysis of Option 1, MOCA does not believe that option 3 provides a reasonable solution and does not recommend it.

Option 3 does not:

1. Restore the Capitol's architectural integrity
2. Eliminate all the dropped ceilings
3. Restore natural light to the building
4. Replace aging mechanical, plumbing and electrical systems and improves security

Option 3 does:

1. Remove the Mezzanines
2. Provide 19 House offices in the extension
3. Provide a future visitor center
4. Leave the Senate short 1 hearing room
5. Leave the Legislature approximately 28,000 Net Square feet short



SECTION TEN: CAPITOL SPACE PLANNING

Swing Space

In order to complete the restoration work within the Capitol as proposed in this document, it is essential that temporary space or swing space be identified for the current occupants of the Capitol. This space must be able to accommodate the existing basement as well as 50% of the occupants working on floors 1 - 4. It is estimated this space needed is approximately 163,000 square feet. This space-projection is based upon a typical office of 120 sf (211 sf with grossing) and a typical clerical work space of 80 sf (100 sf with grossing). This limited amount of space is proposed as a balance between providing enough functional space during the temporary short term swing space and the long term permanent space in order to limit construction cost and not over-build for the future.

During the investigation phase of the Master Plan, MOCA analyzes the previous studies that proposed several alternate locations for how best to address the overcrowding in the Capitol. These included the suggestion of expansions to the north, construction of a new office building to the east and use of the MODOT building, to name just a few. In reviewing these studies it was found that they all fell short in two categories:

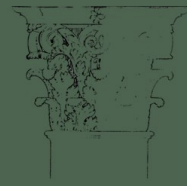
1. The suggested space was not close enough to the Capitol to accommodate the legislative session.
2. The suggested space was not large enough to accommodate the amount of space required for both permanent and temporary needs of the executive and legislative branches.

After the review of these studies, the MODOT building was considered for both temporary office space during construction and for permanent office space following the restoration.

MOCA identified one possible option for the MODOT building. The most favorable use of the MODOT building for some of the executive branch functions such as planning and budget and elected officials, is to relocate from the Capitol to the MODOT building. This would require about 30,000 nsf. The building is only 81,000 nsf, plus a minor amount of circulation space. MOCA found that this space could be used best in the current and possible future configurations and the potential for growth.

The removal of the staff from the Capitol basement will allow for the closure of the basement and the work to begin. However, work can not progress vertically while it is occupied. It is estimated that there is an additional need of 85,000 to 90,000 sf of space that is required to begin the work in Phase two and three. This additional space is not available. Because of these issues, MOCA does not believe that this is the most effective solution.

The most efficient and cost effective plan to resolve these issues in both the long and short terms will be to expand the Capitol to the north and south by creating a new 163,000 gsf. underground facility that will provide the larger more appropriate hearing rooms, high quality office space for staff and for expansion in the future. By expanding underground, the plan will preserve the main stairway and the south Capitol lawn, grounds and monuments for continued public use and inaugural ceremonies.



SECTION TEN: CAPITOL SPACE PLANNING

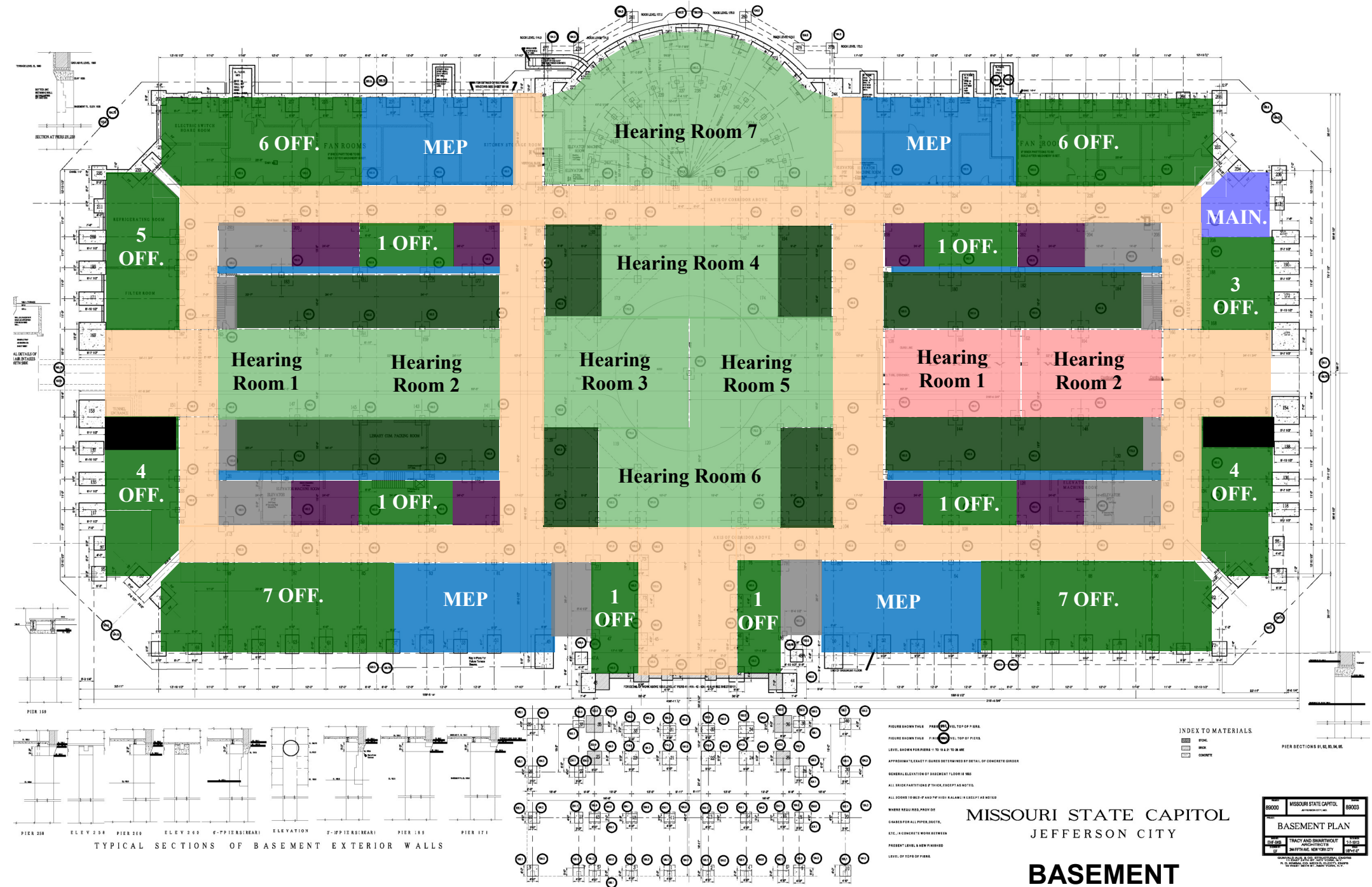
Basement Level

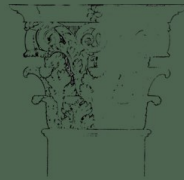
- 48 House of Representative Offices
- 4 Mechanical Rooms
- 8 Mens and Womans
- Extend Stairs and Elevators
- New Exit Stairs (2)
- 7 House Committee Rooms
- 2 Senate Committee Rooms
- 12,670 SF of House Staff Office space - Current 32,932 sf
- 0 SF of Senate Staff Office space - Current 15,631

Reduction of 30 house offices
Elimination of Staff Space from the Capitol

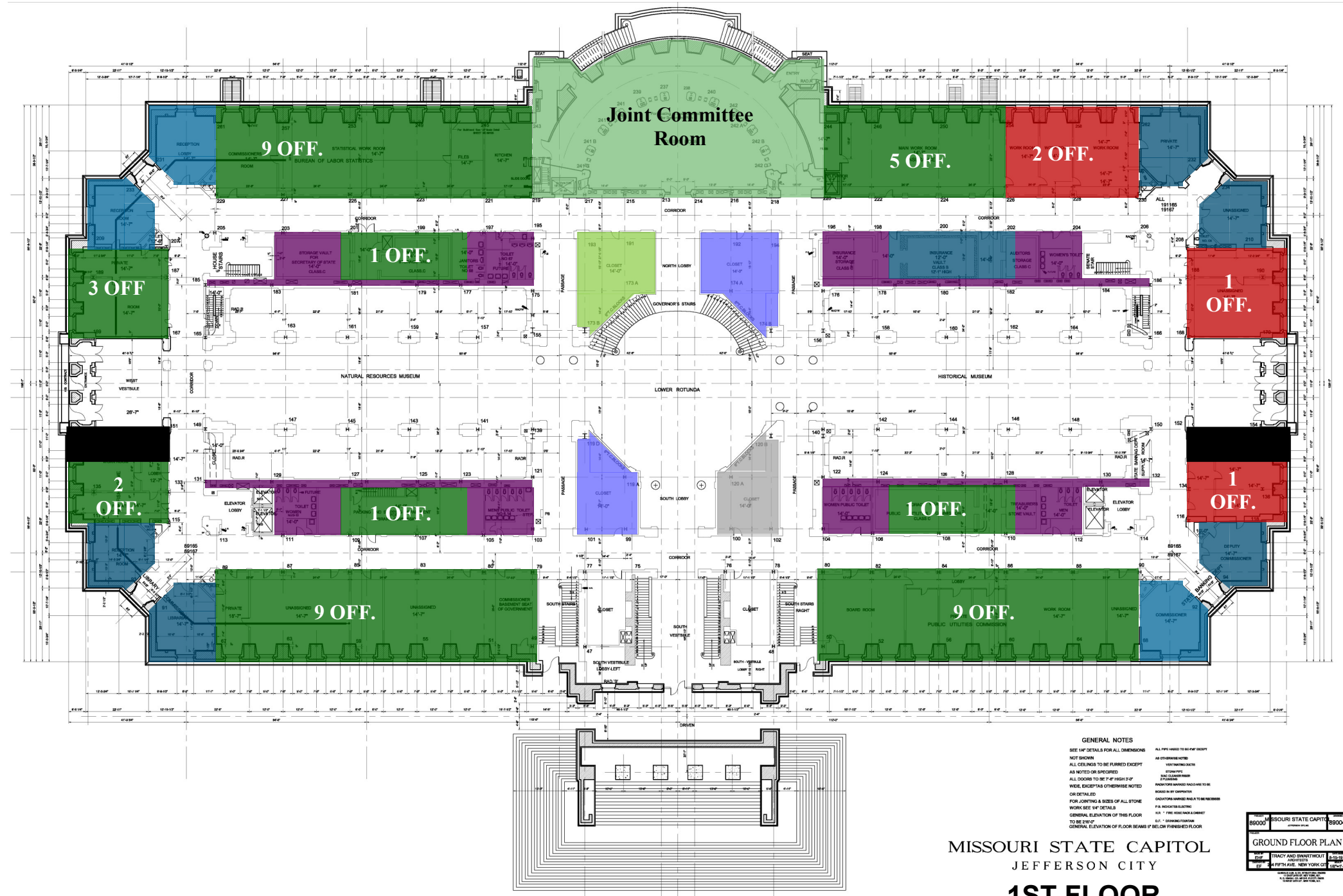
Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Committee Room - Senate
- Committee Room - House
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation





SECTION TEN: CAPITOL SPACE PLANNING



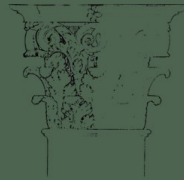
Space Legend

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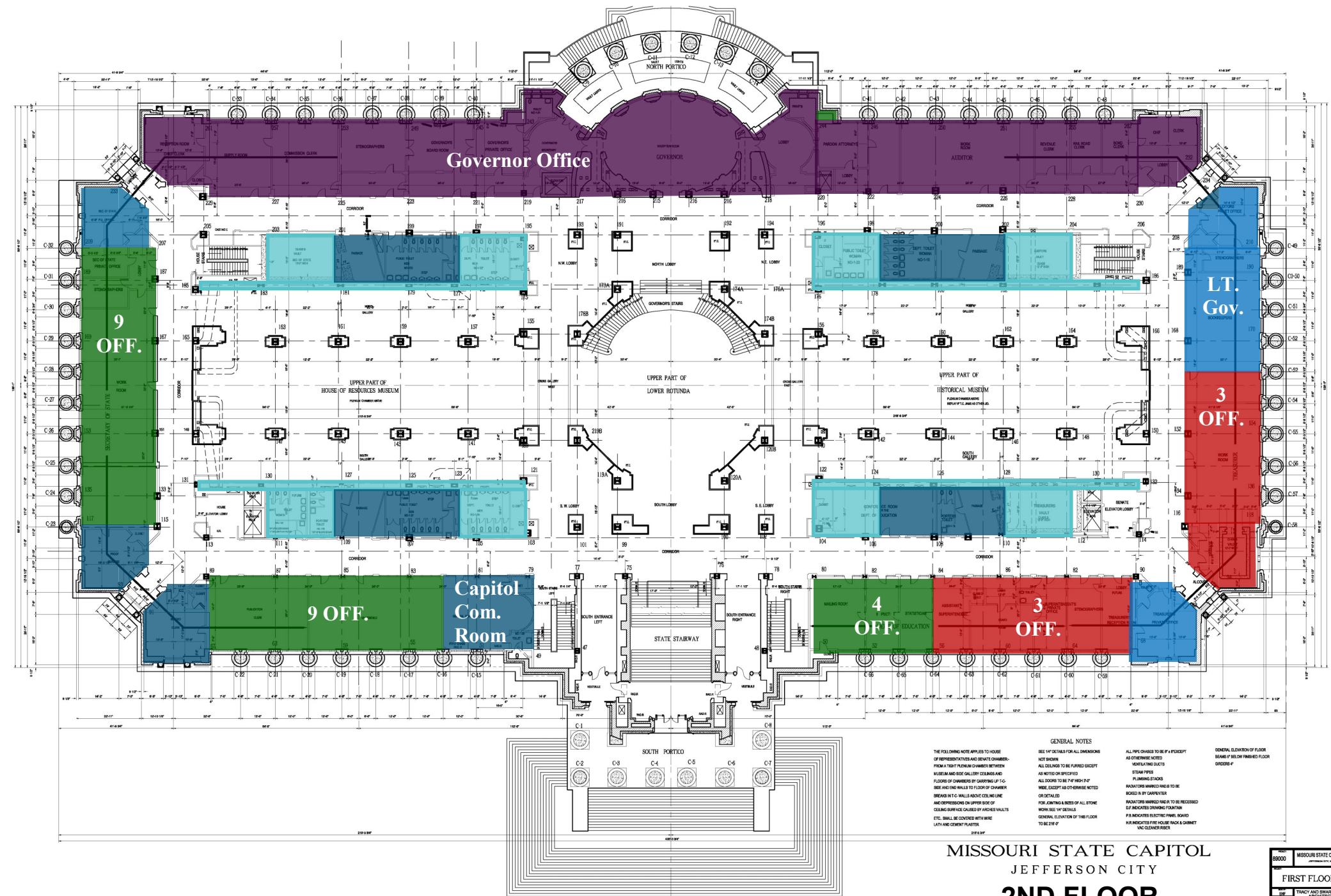
MOCA

MISSOURI STATE CAPITOL
JEFFERSON CITY
1ST FLOOR

MASTER PLAN



SECTION TEN: CAPITOL SPACE PLANNING



Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Committee Room - Senate
- Committee Room - House
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation

GENERAL NOTES

THE FOLLOWING NOTES APPLY TO HOUSE OF REPRESENTATIVES AND SENATE CHAMBERS FROM A TO Z THAT FORM CHAMBERS BETWEEN HOUSE AND SENATE GALLERY COLLEGIATE FLOOR OF CHAMBERS BY CARRYING UP TO. SEE AND WALLS TO FLOOR OF CHAMBER BEHIND BY 6" WALLS AND ON LINE AND DEPRESSIONS ON UPPER SIDE OF CEILING SURFACE CAUSED BY ARCHES VAULTS ETC. SHALL BE COVERED WITH LATH AND CEILING PLASTER TO BE 2" OF

SEE "V" DETAILS FOR ALL DIMENSIONS NOT SHOWN ALL DETAILS TO BE FINISHED EXCEPT AS NOTED OTHERWISE ALL DOORS TO BE 2" MIN. 2" MIN. GROUT AS OTHERWISE NOTED ON DETAILS FOR JOINTS AND SIDES OF ALL STONE WORK SEE "V" DETAILS GENERAL ELEVATION OF THIS FLOOR TO BE 2' 0"

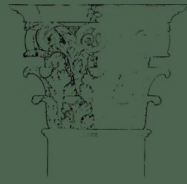
ALL PIPES CHANGES TO BE IN POCKET UNLESS OTHERWISE NOTED PLUMBING STOPS INDICATORS SHOWN SHALL BE LOCATED IN CHARACTER INDICATORS MARKED BACK TO BE RECESSED TO MATCH SURROUNDING SURFACE FINISHES ELECTRIC PANEL BOARD AND INDICATORS FIRE HOSE REEL AND CABINET TO BE 2' 0"

GENERAL ELEVATION OF FLOOR SHALL BE BELOW FINISHED FLOOR GRADE 0'

MISSOURI STATE CAPITOL
JEFFERSON CITY
2ND FLOOR



MASTER PLAN



SECTION TEN: CAPITOL SPACE PLANNING

struction of new parking for the Governor within the north Capitol extension. All of the other parking should either be relocated to the House parking structure or incorporated into a new parking structure to replace the existing Senate parking facility.

Therefore, the total amount of square footage that is under review to decompress the building is approximately 163,000 gross square feet, including approximately 3 to 4 parking stalls for the Governor's office.

Capitol Space Organizational Concept

The Capitol is designed around two primary organizational elements.

The first element is the structure and the placement of the large functional spaces within the center of the Capitol. These spaces are:

- Rotunda as the primary focus and central organizing element of the building. This runs vertically through all floors (1 through 5) of the Capitol.
- East Museum and West Museum space located on the first and second floors. The museum and gallery functions are located symmetrically along the east west axis centered on the rotunda.
- Senate and House Chambers on the third and fourth floors, likewise, extend on the east west axis from the center of the rotunda. The additional chambers that support functions are then symmetrically positioned about the axis. This symmetry continues to the exterior of the building by the placement of the Senate and House lounge spaces at the extreme end of the axial relationship.

On either side (north and south) of these large spaces, the architect has placed a solid bank of utilitarian or

support spaces. These were initially designed to provide for restroom facilities, vaults, storage facilities and meeting spaces. However, presently some of these spaces are now used as office space.

The large spaces and the interior support spaces are encompassed by a continuous corridor that rings the building. These public corridors were designed to be completely lighted with natural light coming through the perimeter offices and then transmitted to the corridors by use of sidelights and transoms providing natural daylight during the day. Architects of the late 19th century and early 20th century were experts with manipulation and use of natural light. Within the Missouri State Capitol, the use of natural light became the second organizing element of the building.

There is no question that the original architect, Mr. Swartwout, had an exceptional understanding and skill when it came to the use of natural light to illuminate the interior portion of the building. This is evident from the historic photographs and from the way the interior corridors were designed to use reflected natural light that passed through the outer offices into light the corridors. However, this is not the only place where natural light was used to illuminate the Capitol spaces. There are approximately 23 skylights and 283 large windows within the Capitol that carefully distribute light through the spaces of most importance and significance. It is essential to the success of the Capitol restoration that the project retain the architectural integrity that Mr. Swartwout designed into the building by restoring these natural light pathways.

Space Organization and Planning Grand Interior Spaces

The grand interior spaces should remain as originally designed by the architect and should be restored to their original organization to the greatest extent possible, given the evolution of modern legislative functions.

Light and Exterior Spaces

Restoration of the light pathways should be accomplished by restoring the original ceiling heights within the perimeter spaces. Once restored, these perimeter spaces should include functions such as offices, meeting rooms, conference rooms, etc., along the exterior walls of the building that are conducive to and allow for light to be transmitted through them and into the interior portions of the Capitol corridors and other spaces.

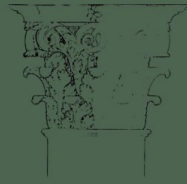
This will also require the restoration of the large existing light transoms above the doorways into the various spaces. Additionally, any transverse or separating wall within an office space will need to allow for transoms for the transmission of natural light.

Support Zone Spaces

The spaces within the support zone as identified above should continue to be used primarily as support spaces and should provide for common access to restrooms, meeting rooms and storage. They should only be occupied or used as office spaces when it is critical to have access to the grand interior spaces and no other office space with windows are available.

Basement Spaces

Basement spaces are largely "found" or new spaces to the building. Presently, these are the support or storage spaces for the legislature, including the placement of House Committee or Hearing rooms, office spaces for support staff for both the House and Senate, as well as, the Executive Branch. Mechanical and Electrical spaces



SECTION TEN: CAPITOL SPACE PLANNING

are also provided in the basement area. Planning of the basement will require an extensive pre-planning of space to both accommodate the functional needs of the Legislative and Executive branches of government, but also to accommodate the mechanical and electrical modifications that are occurring on floors one through four.

Mechanical and Electrical

The current Mechanical and Electrical design of the building is primarily a horizontal distribution system comprised of hot water and variable air volume mixing boxes. The imposition of this system on the building has been the creation of lowered ceilings in many of the office spaces in order to deliver the proper volumes of air required by code and to provide comfort to occupants. Initially, the building was designed to take full advantage of natural ventilation through the large exterior windows and other building elements designed to naturally ventilate the building.

In order to return the natural light to the interior corridors and to raise the ceilings back to their original height, as called for in the guiding principle of architectural integrity, the mechanical systems must change from a horizontal distribution system to a vertical distribution system or at a minimum, a combination of a horizontal system in large spaces where the interstitial spaces are available for ductwork and distribution without lowering ceilings and a vertical system that will replace the horizontal distribution above the dropped ceilings within the office and other exterior wall spaces. (Note there will be a need to drop ceilings in these spaces a few inches in order to provide for fire protection sprinklers and possible electrical boxes). These, however, shall not impact or interfere with the transmission of light for the illumination of the interior corridors.

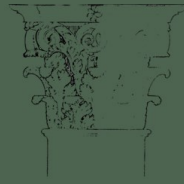
Space Planning Diagrams

The space planning diagrams that follow have been developed to provide a general idea of how the space in the Capitol may be organized to meet the constraints placed upon the Master Plan at this point in time.

The development and the eventual resolution of the floor plan will take time to work through all the functional and political issues that must be addressed when realigning space within the Capitol. In many projects which MOCA has managed, the final floor plan evolves over time through a series of studies, conversation with leadership and careful adjustment.

Space planning constraints:

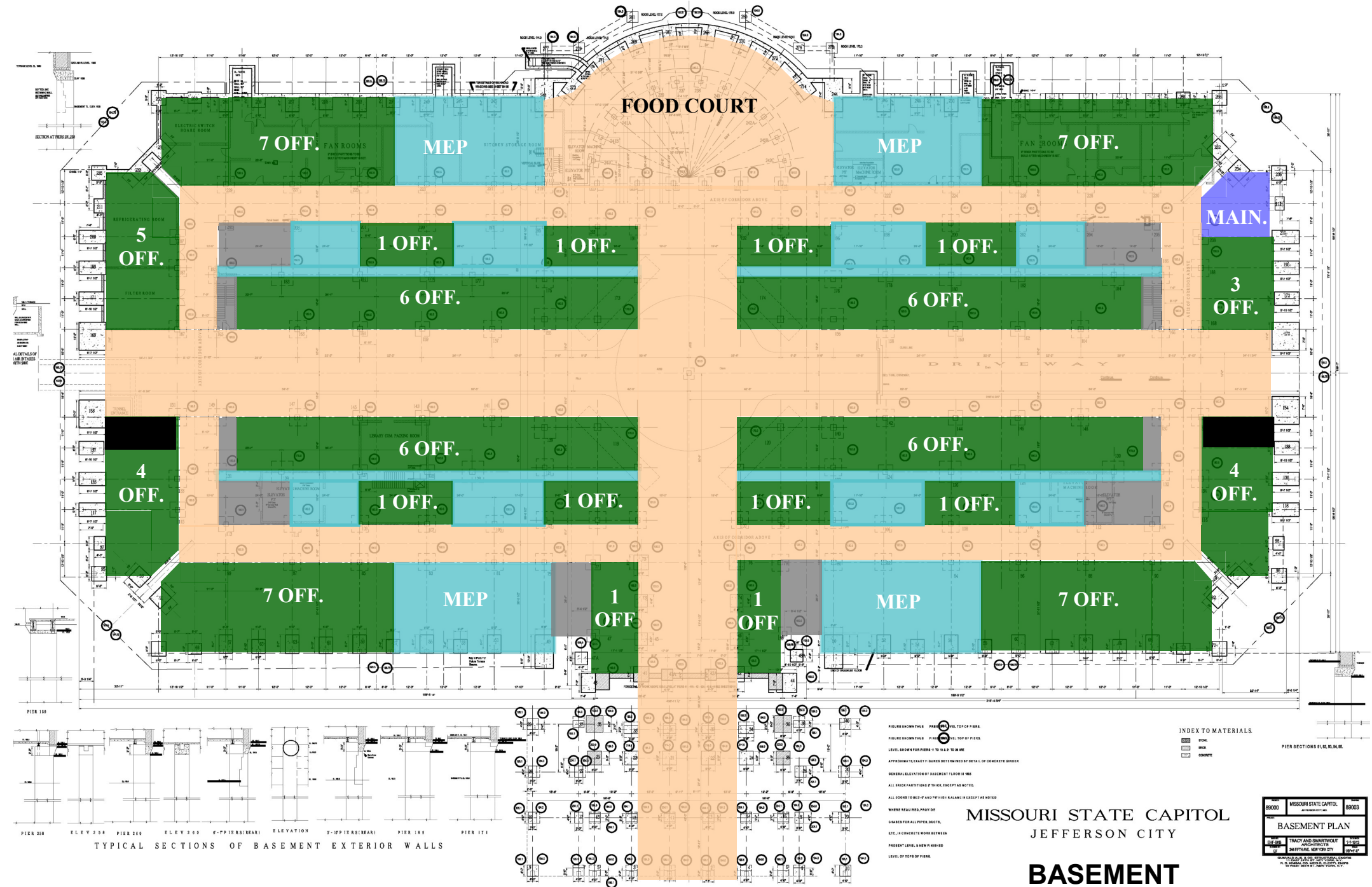
1. Guiding Principles.
2. All House and Senate Members must have offices within the historic Capitol footprint.
3. Connections to the North and South Capitol Extensions should be clearly defined and easily accessible.
4. Compliance with all Life Safety and ADA codes.



SECTION TEN: CAPITOL SPACE PLANNING

Basement Level

- 78 House of Representative Offices
- 4 Mechanical Rooms
- 8 Men's and Woman's
- Extend Stairs and Elevators
- New Exit Stairs (2)



Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Legislative Library
- Committee Room
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation



MISSOURI STATE CAPITOL
JEFFERSON CITY

BASEMENT

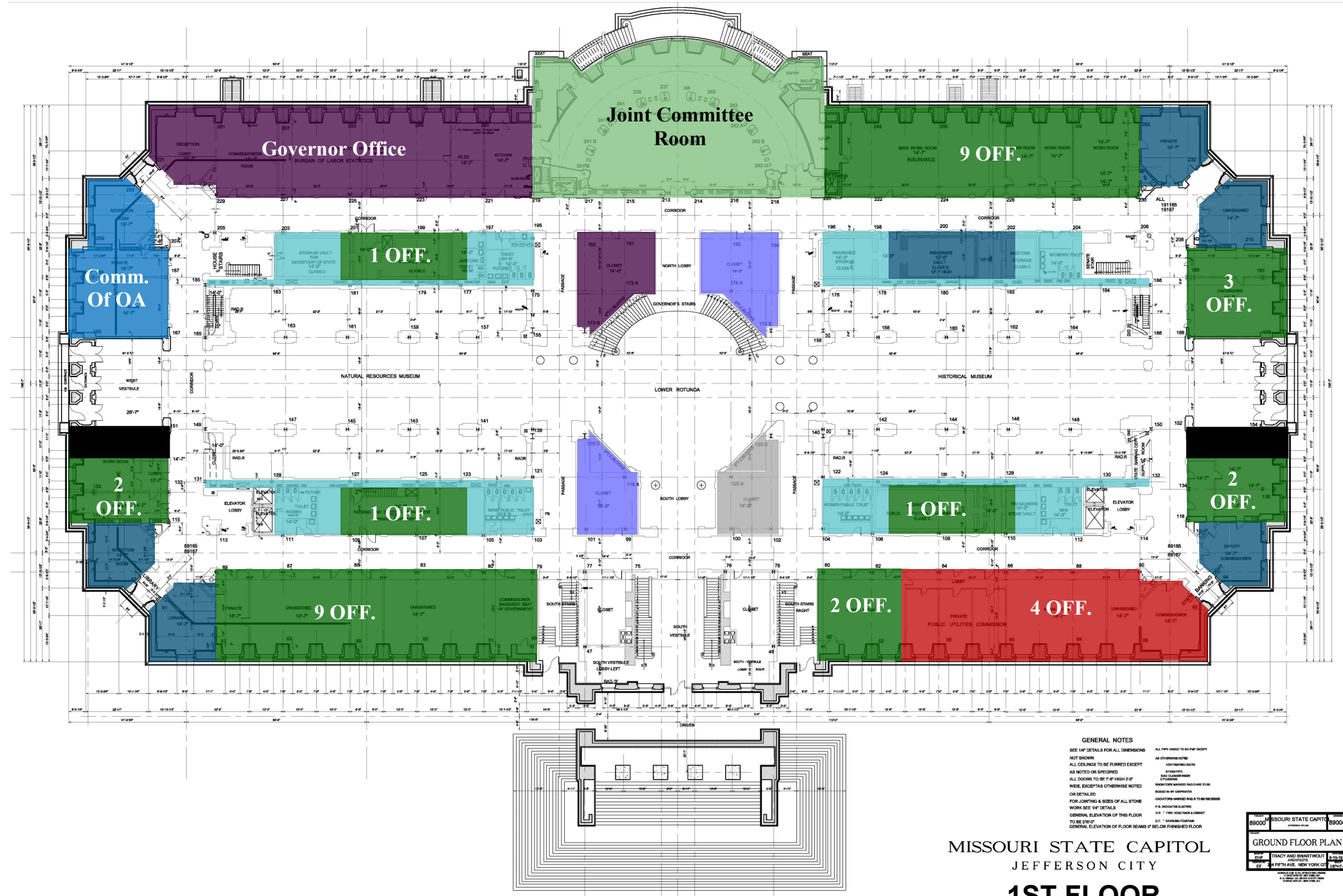


MASTER PLAN

SECTION TEN: CAPITOL SPACE PLANNING

First Floor Level

- 30 House Representative Offices
- 4 Senate offices
- Governor First Floor Office
- Governor Storage
- Joint Committee Room
- 7 Conference Rooms
- 2 Janitorial Closets
- Commissioner of OA
- New Exit Stairs (2)



- ### Space Legend
- House Office Space
 - House Conf. Committee
 - Senate Office Space
 - Senate Conf. Committee
 - Governors Office
 - Conference Rooms
 - Legislative Library
 - Committee Room
 - New Public Circulation
 - Elected Officials
 - Mechanical/Restroom
 - Vertical Circulation

GENERAL NOTES
 SEE 1/4" DETAILS FOR ALL DIMENSIONS
 NOT SHOWN
 ALL CEILING TO BE FINISHED EXCEPT
 AS NOTED OR SPECIFIED
 ALL DOORS TO BE 7'-0" HIGH 2'-0" WIDE, EXCEPT OTHERWISE NOTED
 OR DETAILLED
 FOR JOINTING & SIZES OF ALL STONE
 WORK SEE 1/4" DETAILS
 GENERAL ELEVATION OF THIS FLOOR
 TO BE 2'-0" TO FINISH FLOOR
 GENERAL ELEVATION OF FLOOR SEABED 1' BELOW FINISHED FLOOR

MISSOURI STATE CAPITOL
 JEFFERSON CITY
1ST FLOOR

89000	MISSOURI STATE CAPITOL	89004
GROUND FLOOR PLAN		
TRACY AND BINNETT/VOYSE	PROJECTS	8/15/2018
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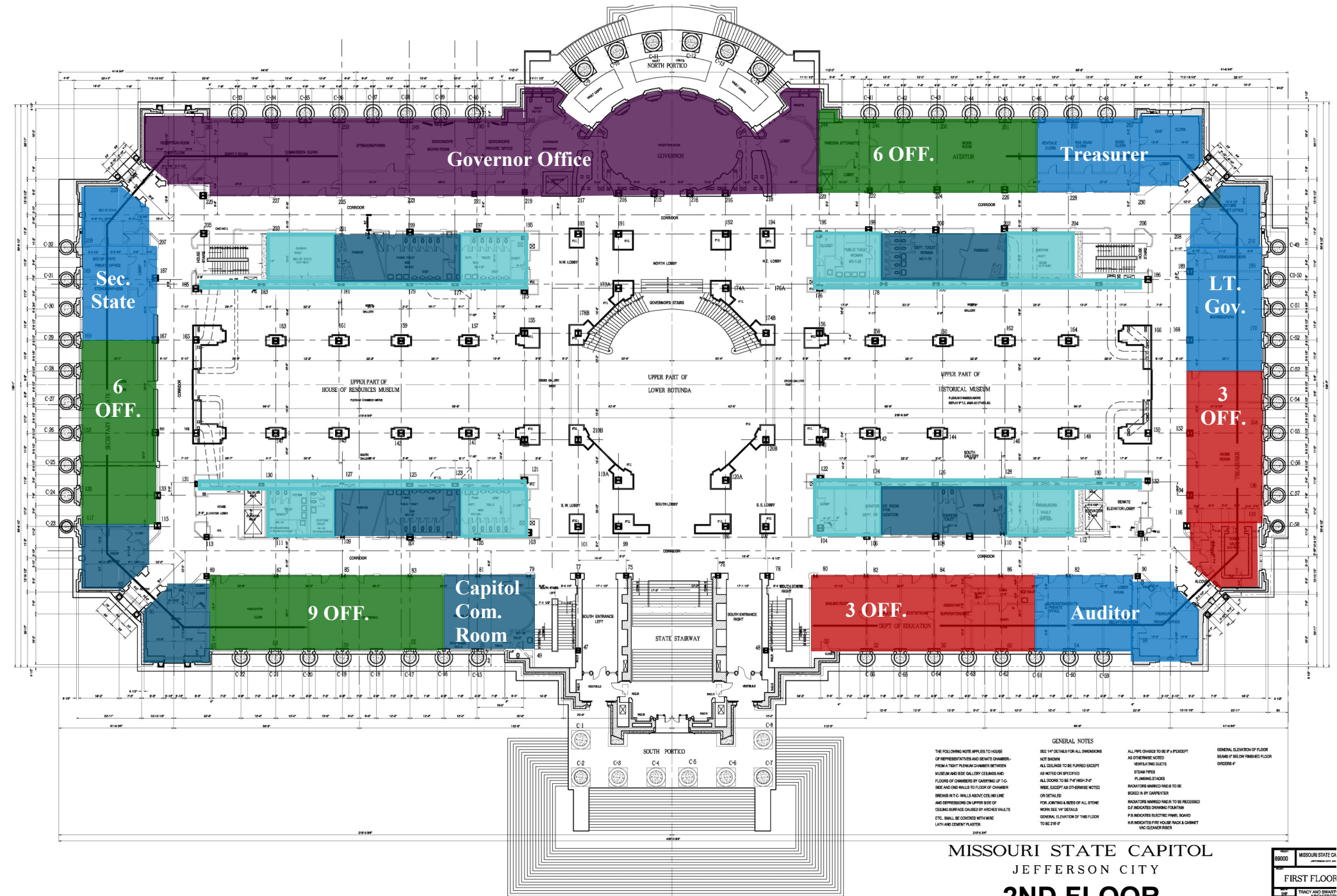


MASTER PLAN

SECTION TEN: CAPITOL SPACE PLANNING

Second Level

- Governor Main Office
- Governor Storage
- Lt. Governor Office
- Secretary of State Ceremonial Office
- Auditor Ceremonial Office
- Treasurer Ceremonial Office
- 6 Senate Offices
- 21 House Offices
- New Exit Stairs (2)



Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Legislative Library
- Committee Room
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation



THE FOLLOWING NOTE APPLIES TO HOUSE OF REPRESENTATIVES AND SENATE CHAMBERS FROM A TRUST FURNISH CHAMBERS BETWEEN HOUSE AND SENATE GALLERY COLLEGIATED FLOORS OF CHAMBERS BY CARRYING UP TO. SEE AND END WALLS TO FLOOR OF CHAMBERS BEHIND BY 1/2" WALLS AND ON LINE AND DEPRESSIONS ON UPPER SIDE OF CEILING SURFACE CAUSED BY ARCHES VAULTS ETC. SHALL BE COVERED WITH WAX LATH AND CEILING PLASTER TO BE 2" TH.

GENERAL NOTES
SEE 'W' DETAILS FOR ALL DIMENSIONS NOT SHOWN ALL DETAILS TO BE FINISHED EXCEPT AS NOTED OR SPECIFIED ALL DOORS TO BE THE FIRST 2" WIDE, EXCEPT AS OTHERWISE NOTED OR SPECIFIED FOR JANITORS & SIDES OF ALL STONE WORK SEE 'W' DETAILS GENERAL ELEVATION OF THIS FLOOR TO BE 2' 0"

ALL PIPES CHANGES TO BE IN A POCKET AS SHOWN UNLESS NOTED OTHERWISE
PLUMBING STOPS INDICATORS SHOWN HEREIN TO BE LOCATED IN CHARACTER INDICATORS SHOWN HEREIN TO BE RECESSED 2" FROM FINISHED SURFACE OF ARCHES DOWNSIDE CHAMBERS
FIRE INDICATORS FIRE HOSE REEL & CABINET TO BE 2' 0"

GENERAL ELEVATION OF FLOOR SHALL BE BELOW FINISHED FLOOR SPECIES 4"

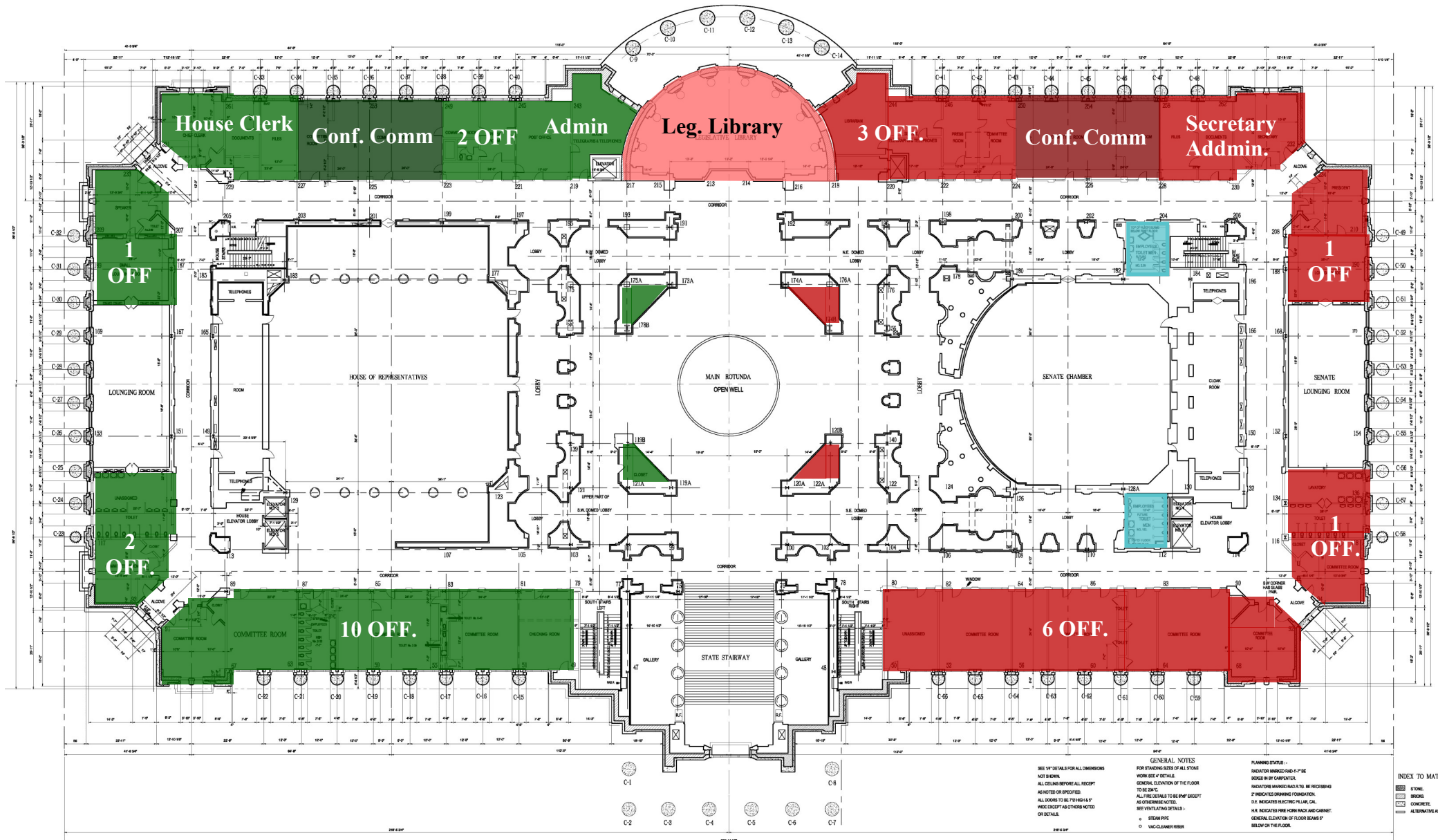
MISSOURI STATE CAPITOL
JEFFERSON CITY
2ND FLOOR

MASTER PLAN

SECTION TEN: CAPITOL SPACE PLANNING

Third Floor

- Chief Clerk of the House
- Conference Committee House
- Conference Committee Senate
- Secretary of the Senate
- Senate Administration
- 15 House of Representative offices
- 11 Senate Offices
- House Storage
- Senate Storage
- Legislative Library
- New Exit Stairs (2)

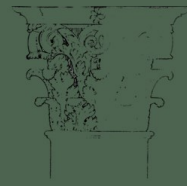


Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Legislative Library
- Committee Room
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation

3RD FLOOR MASTER PLAN

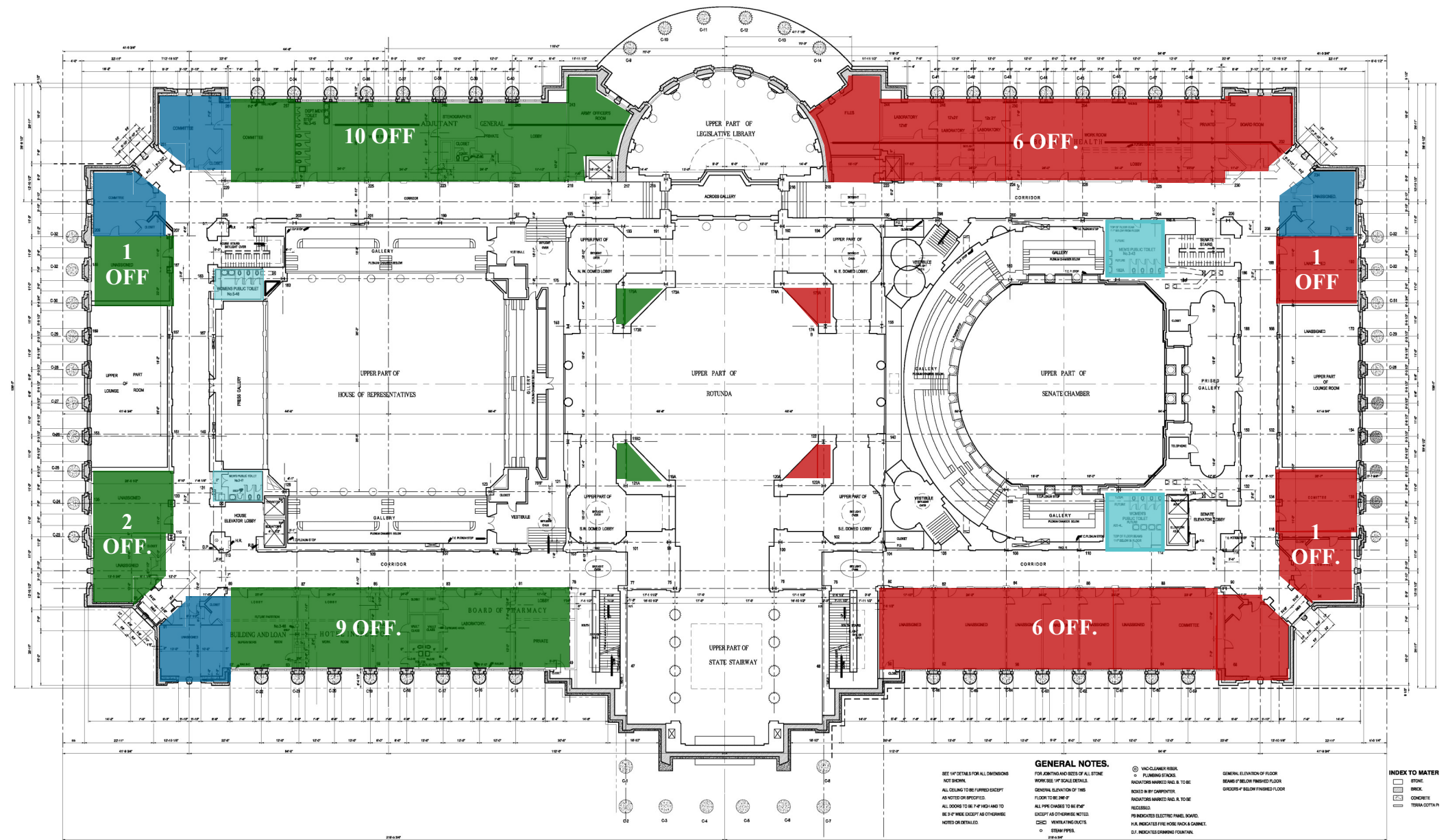




SECTION TEN: CAPITOL SPACE PLANNING

Fourth Floor

- 14 Senate Offices
- 22 House of Representative Offices
- House Storage
- Senate Storage
- New Exit Stairs (2)



Space Legend

- House Office Space
- House Conf. Committee
- Senate Office Space
- Senate Conf. Committee
- Governors Office
- Conference Rooms
- Legislative Library
- Committee Room
- New Public Circulation
- Elected Officials
- Mechanical/Restroom
- Vertical Circulation

GENERAL NOTES.

SEE SCHEDULE FOR ALL DIMENSIONS
NOT SHOWN.
ALL DOORS TO BE FINISHED EXCEPT
AS NOTED OR SPECIFIED.
ALL DOORS TO BE P-49 HIGH AND TO
BE 3' 0" WIDE EXCEPT AS OTHERWISE
NOTED OR SPECIFIED.

FOR FINISHING AND SITES OF ALL STONE
WORK SEE UP SCALE DETAILS.
GENERAL ELEVATION OF THIS
FLOOR TO BE 36' 0" P.P.S.
ALL PIPE CHASES TO BE P.P.P.
EXCEPT AS OTHERWISE NOTED.
C.I.C. INDICATES CHIMNEY.
S.P.P.S. INDICATES
P.P.P.S.

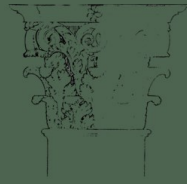
INDICATES MECHANICAL
INDICATES WALK TO BE
NOTED BY CONTRACTOR.
INDICATES WALK TO BE
NEEDED.
P.P. INDICATES ELECTRIC PANEL BOARD.
P.P. INDICATES FIVE WIDE WALKWAY CHANNEL.
D.F. INDICATES CHIMNEY TOWER.

INDEX TO MASTER

STONE
BRICK
CONCRETE
TERRAZZO

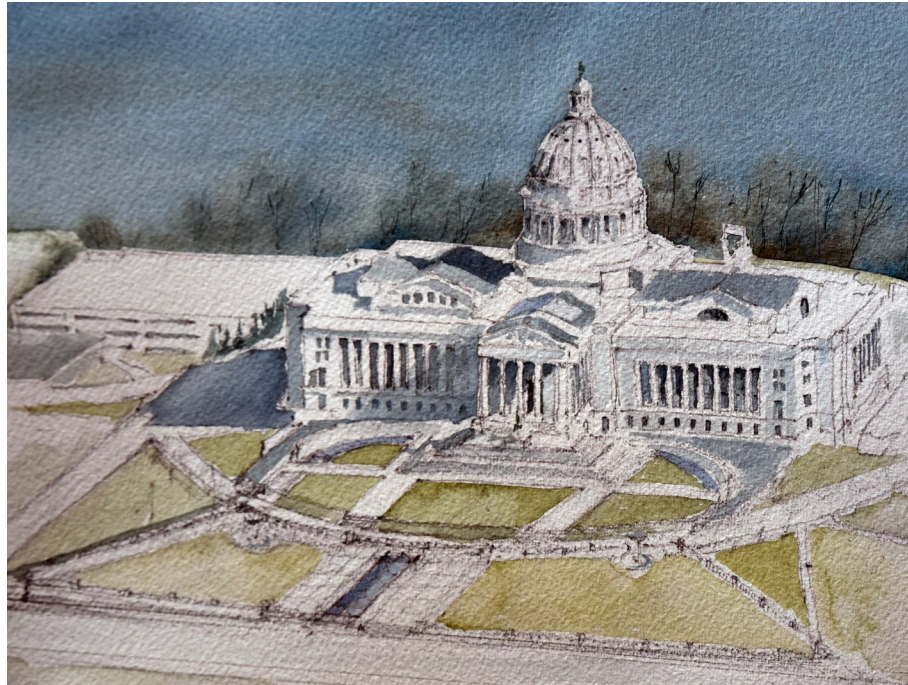
4TH FLOOR MASTER PLAN





SECTION TEN: CAPITOL SPACE PLANNING

Swing Space North and South Extension



Swing space is space that is used to temporarily house a department or organization during the restoration or remodel of their space. Due to the limited phase approach, there will be three periods as described above where swing space will be needed to keep the Capitol building open and the occupants from the executive branch and legislative branch who require access to the capitol in close proximity to the Chambers and Governor.

The execution of moves within a construction project requires a great deal of coordination and cooperation from all parties involved in the planning and move. MOCA highly recommends that Pull Planning scheduling be done using the “Last Planner Method”, to make these moves as efficient and as effective as possible, so that the down time experienced by the contractor during

these move periods is minimized in order to manage the cost associated with the move.

Note the development and use of swing space is always difficult. It will be critical that this plan is refined and further developed prior with the selected architect during the design scoping workshops and is built into the overall construction GMP strategy by the CMr.

Executive Branch

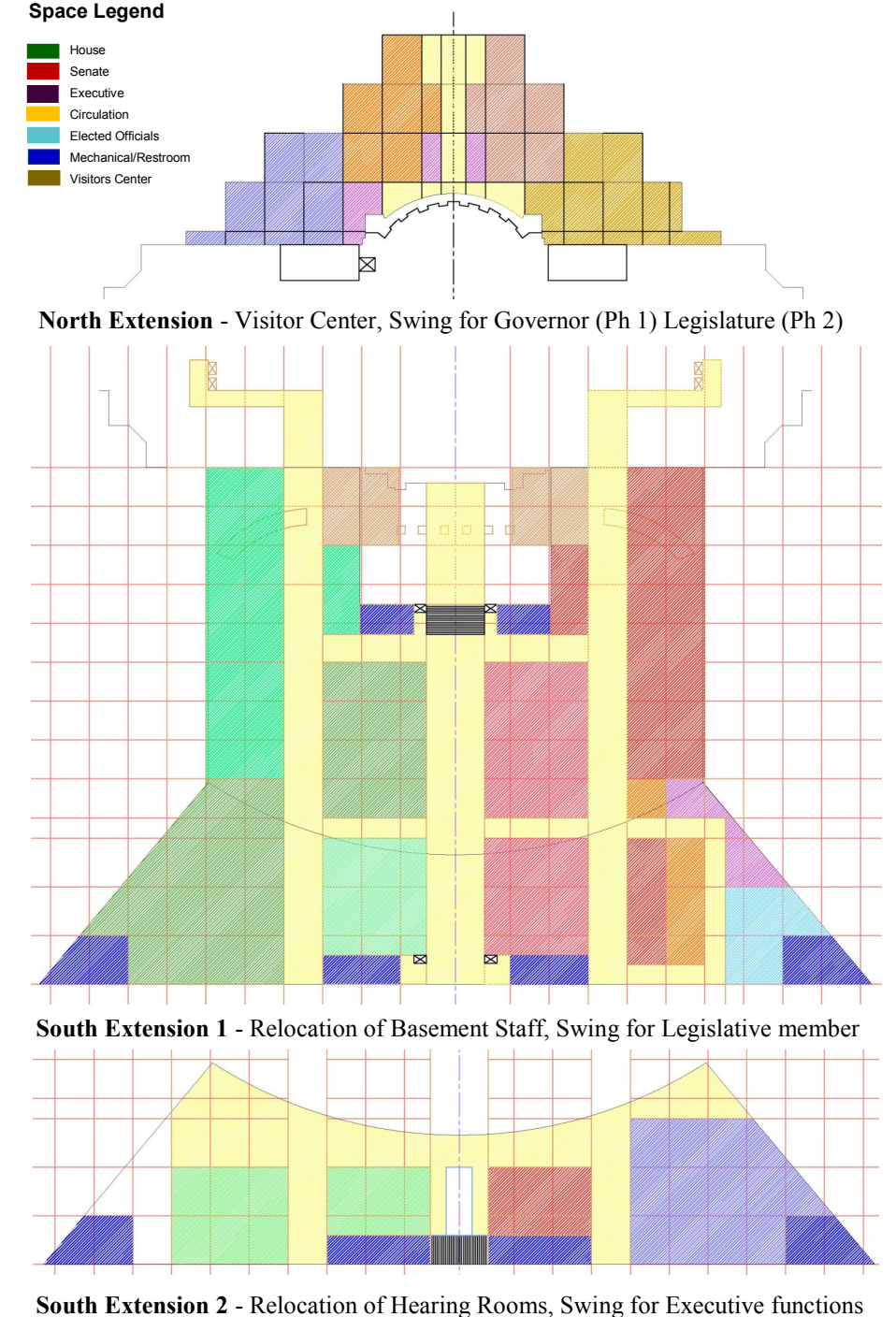
The Governor and Lt. Governor will relocate to the North Capitol Extension and therefore, will not leave the Capitol during the restoration. However, in developing the plan and analyzing the amount of expansion space for both the long term and short term (swing space), the remaining Executive Branch office must relocate out of the Capitol and into other state owned buildings.

The agencies or departments that must relocate include:

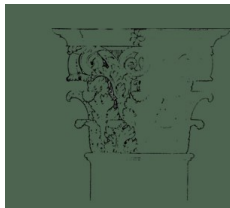
- The Commissioner of Administration - it is recommended that the Commissioner relocate along with all the office of administration staff, including budget and planning and others to the Truman building. Planning for this relocation should start immediately upon approval of the funding for the project. This is the closest and most accessible building for these offices. While office space within the building may or may not be fully utilized at the time of the relocation, it may be necessary for other government offices to be relocated for the duration of the construction to lease space within Jefferson City.
- Auditor, Treasurer and Secretary of State will relocate to their existing offices spaces within Jefferson City. This will require some reorganization of spaces within each office.

Space Legend

- House
- Senate
- Executive
- Circulation
- Elected Officials
- Mechanical/Restroom
- Visitors Center

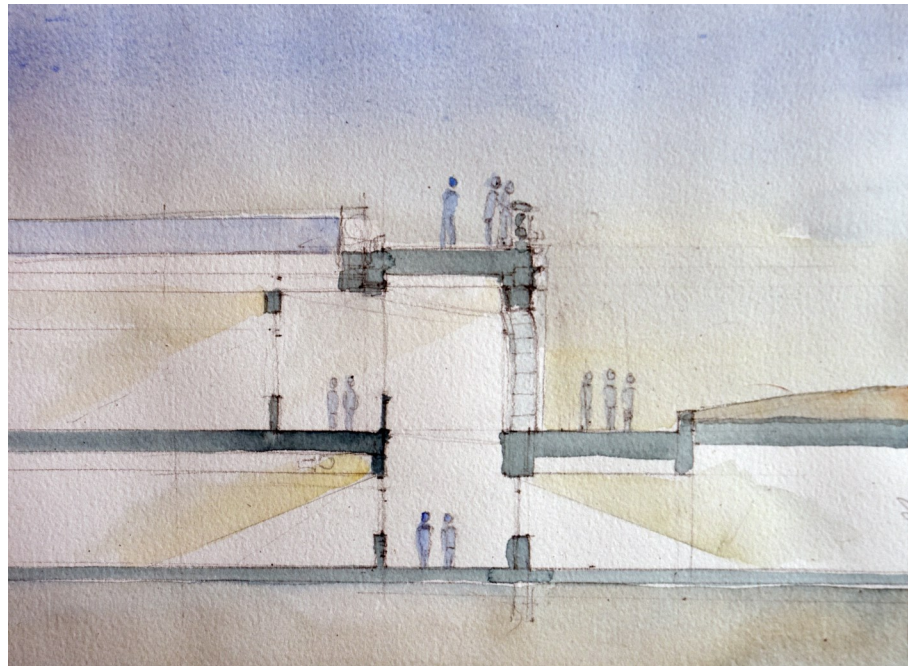


MASTER PLAN



SECTION TEN: CAPITOL SPACE PLANNING

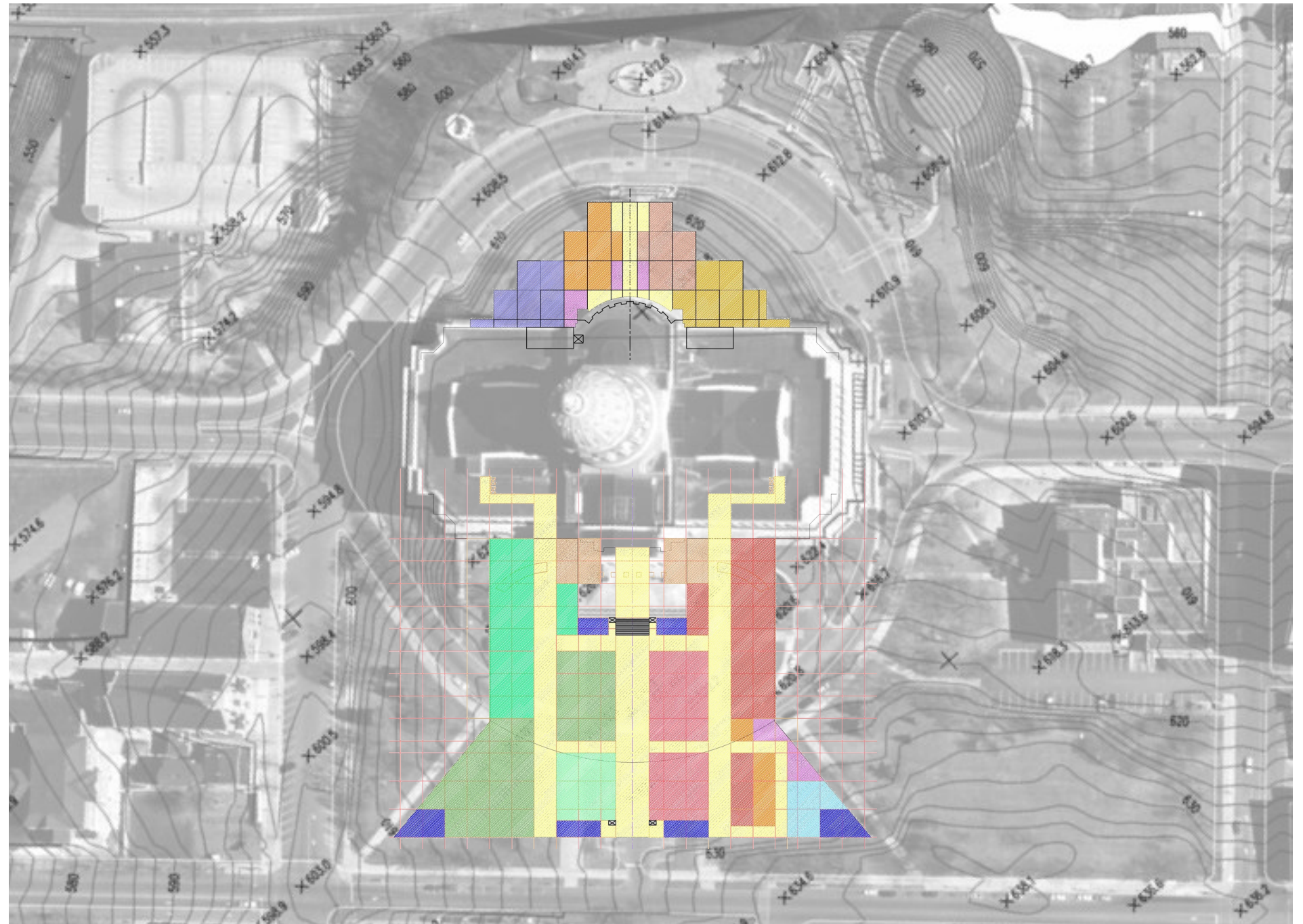
Swing Space

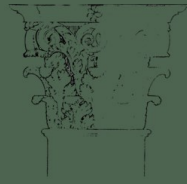


Section at the two story space at walk way



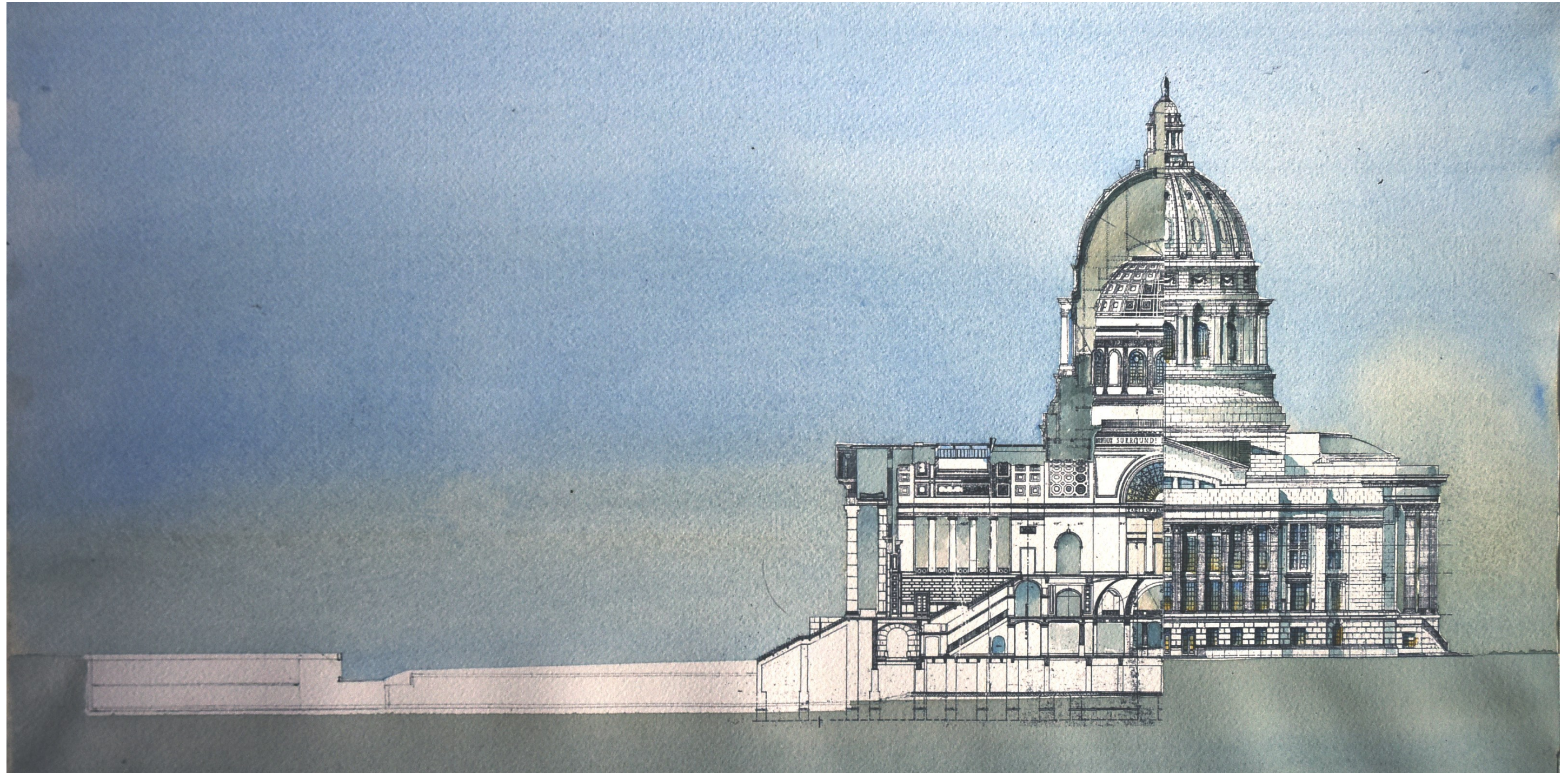
View from South Extension to the Capitol

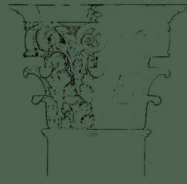




SECTION TEN: CAPITOL SPACE PLANNING

Swing Space





SECTION ELEVEN: SEQUENCE OF THE WORK

Approach to the Project

In Section Ten, Space Planning, the proposed planning diagrams suggest one option for re-planning the State Capitol. This plan proposes to restore it to its original design of high ceilings and naturally lighted interior corridors. It also proposes reclaiming the entire basement for the use of Legislative offices. This will then decompress the Capitol and will displace approximately 145,000 sf of new legislative and executive staff space and Hearing rooms below ground to the south and an additional 20,000 sf to the north. This 165,000 sf of new space will be used for both Swing Space and long term office space when the work is complete.

Sequence of Design and Construction

The work associated with restoring the Capitol is both comprehensive and complex. Within the Capitol, mechanical, electrical/communication and plumbing systems have been added, modified and replaced little by little over the years leaving a system in many areas uncoordinated with the spaces it serves. For example, mechanical systems have been located where space permits and ductwork or piping has been run where it needs to go through circuitous and constrained pathways that pose challenges to sequencing of construction. Additionally, structural systems for mezzanine removal will likewise need careful coordination while working within an open public building. The master planning process has studied the following approaches to the comprehensive restoration:

- Close the building and restore it all at once with one contract. While this approach would be the least expensive and would result in a comprehensive restoration in less time, it would require locating several hundred thousand square feet of office and meeting space to a place where the legislature could convene the legislative session at a reasonable location and

cost. *Therefore, this approach does not appear practical and is not recommended.*

- Small individual projects with multiple contracts spread over a long period of time resulting in a completed project. There is no question that approaching the comprehensive restoration of the Capitol in this manner will become an expensive proposition and will be an ongoing project for decades if it would ever be complete. Furthermore, it is unlikely that it would result in a complete restoration. Because the systems within the building are so intertwined that replacing small portions at a time can not be done with any kind of guarantee that it would not expand beyond the scope of the project to a much larger project. *Therefore, this approach is not recommended.*
- Limited phasing one contract while working in an open public building. A three phased approach to restoring the Capitol, where half of the building is open and half of the building is closed will allow for a comprehensive approach to replacement of the systems. Furthermore, as these systems are organized to run vertically from the basement to the roof, this phasing would make the most sense for installation of new systems within logical building quadrants. While this limited phased project will cost more due to the extended length of time of approximately 8 to 12 months, it is the most cost effective from the standpoint of moving and relocation costs.

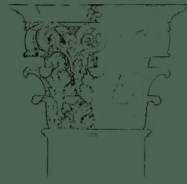
It is therefore the recommendation that the project proceed with a limited phase one construction contract approach within an open public building. This recommendation offers the following benefits:

1. The quality of the finishes to be “Capitol Quality” - will be much easier to achieve through the selection of one architect and one contractor to provide the



work.

2. Procurement of materials are subject to procurement law and the likelihood of multiple projects being able to procure the same systems, materials and quality is highly unlikely.
3. Coordination between major contractors like mechanical and electrical with multiple major subcontractors will make holding engineers and installers responsible simplified.



SECTION ELEVEN: SEQUENCE OF THE WORK

Sequence of the Project

4. Liability and warranty related issues are easily resolved when the responsibility lies with a single entity.

Recommended Sequence of the work.

Based upon the potential space plan presented in section ten and the recommended approach of one contractor delivering the project using a Construction Manager at risk approach as recommended in section twelve, Procurement, the sequence of the work should be as follows: *(note this section should be reviewed in conjunction with the schedule recommendations in section 16 and with Implementation plan in Section 13.)*

Sequence 1 - Selection and procurement of Owner Team. The Owner team should be comprised of the Owners Representative (OR), Architect of Record (AOR) and the Construction Manager at risk (CMr).

1. Select the Owner Representative. Have the Owner Representative assist in the development of the RFP and selection of the Architect and CMr.
2. Selection of the architect and the CMr to design and to restore the Capitol.

Sequence 2 - Design - Once the Owner team is in place with the OR, AOR and the CMr. The Owner Representative will manage the design process.

1. Owner Representative to facilitate Design Scoping workshops using the Guiding Principles, Master Plan, Historic Structures Report and Design Guidelines to familiarize the architect and contractor with the scope and substance of the work for the entire project by engaging in collaborative workshops where the design guidelines and imperatives are the focus of each workshop.
2. Complete the Scope Documents and construction documents for the entire projects. Separating the

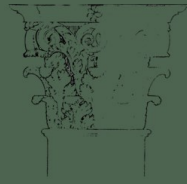
project into bid packages as determined for construction by the CMr during the design scoping workshops.

Sequence 3 - Construction - Construction will be divided into three separate construction phases:

1. Construction Phase 1 - Construct the 165,000 GSF of underground space to the north and south of the Capitol. This is a critical first phase and will need to be done while maintaining the daily operation and session functions of the State Capitol.
2. Construction Phase 2 - Once the Construction of the north and south underground extensions are complete, the relocation of all legislative staff and meeting space from the basement and from the north and east side of the Capitol floors 1 through 4 will be relocated to the newly completed extension space. This will include the following:
 - All of the executive branch occupants, regardless of location in the Capitol, will move to their new locations. The Governor and Lt. Governor will move to the north Capitol extension while the other executive branch function including, State Treasurer, Auditor, Secretary of State and Commissioner of OA and associated staff will relocate to their current main office locations. This is done as a cost saving to not overbuild the Capitol Extension during the swing phase of the restoration. All offices will return to the Capitol Campus following the Restoration.
 - The Senate Parking Structure will be complete and will provide 600 stalls for parking. The majority of those stalls (approximately 350) will be for Senate use. The remaining stalls will be for Executive branch and for the use of the General Public, since all public parking around the Capitol is being removed for security rea-

sons.

- With offices closed on the North side of the Capitol, all mezzanines along the north and east sides of the building will be demolished along with the existing non-historic fabric.
- Mechanical ductwork, electrical and piping for both the horizontal and vertical runs from the new basement mechanical and electrical rooms will begin. Within the basement, ductwork will be installed to each of the four quadrants in the basement below the basement level slab. Mechanical, electrical and plumbing shafts will extend vertically on the north and east sides of the Capitol through floors 1- 4.
- Following the installation of the Mechanical and Electrical systems, finish work will begin.
- During this phase, the Senate Chamber and associated spaces will be restored in-between two sessions of the legislature.
- The large open museum space on the first and second floors on the east side will be restored and repainted. The Historic paintings will be protected. These paintings have been conserved and repaired. The Capitol restoration budget does not contemplate doing any restorative work or repairs to the artwork as it has been done previously.
- Once the work on the North and East sides of the building is complete the following activities will occur:
 1. Repopulation of the north and east sides of the Capitol including the Governor, Lt. Governor and Members of both the House and the Senate.
 2. The north half of the basement will also be able to be occupied with members of the House of Representatives.



SECTION ELEVEN: SEQUENCE OF THE WORK

Sequence of Construction

3. Construction Phase 3 - The occupants on floors 1 - 4 on the South and West sides of the Capitol will move into their assigned swing space. This will be identified early during the design phase such that the number of moves any one group is asked to do is minimized to limit distractions and lost productive time.
 - Construction work will then begin with the extension of the mechanical and electrical vertically within the South and West areas of the Capitol from the new mechanical rooms in the basement.
 - Once the Mechanical and electrical systems are completed, the finish work will follow. This will be similar to the sequence described in Construction Phase 2.
 - During this phase, the House Chamber and associated spaces will be restored in-between two sessions of the legislature.
 - The large open museum space on the first and second floors on the west side will be restored and repainted. The Historic paintings will be protected. These paintings have been conserved and repaired. The Capitol restoration budget does not contemplate doing any restorative work or repairs to the artwork as it has been done previously.
 - Once the work on the South and West sides of the building is complete the following activities will occur:
 1. Repopulation of the south and west sides of the Capitol by Members of both the House and the Senate and the other Executive Branch agencies.
 2. The south half of the basement will also be able to be occupied with members of the House of Representatives.

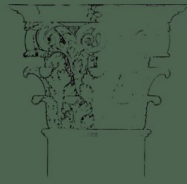
3. Once the Capitol is completely restored and executive and legislative branches have been relocated to the restored spaces, the extension spaces will be transitioned to their final configurations.

- Visitor Center - North Extension
- Student Dining - North Extension
- Orientation/Lecture hall - North Extension
- Food Service and Dining - North Extension
- House Staff Space - South Extension
- Senate Staff Space - South Extension
- Additional public Space/Hearing Rooms - South Extension.

Sequencing Recommendations and Contingencies

The sequencing plan proposed will require close coordination with the Contractor, Fire Marshal and State Leadership of both houses and the Governor to accommodate the public within the building during the time that the Capitol is undergoing restoration within its different phases of construction.

It is recommended that alternative session location be investigated prior to the start of construction which could be used for a special session or an emergency meeting when the chambers are in the construction mode in-between legislative sessions.



SECTION TWELVE: PROCUREMENT

Delivery Methods

There are several delivery methods that could be used to provide design and construction for the expansion and the restoration of the Capitol. This section will explore the following:

- Design/Bid/Build or the Traditional way of procuring architectural and construction services.
- Progressive Design/Build which is a collaborative and interactive design/build process.
- Construction Manager at Risk or CMr which provides for higher levels of open collaboration and communication for complex projects may require statutory legislation or adjustment.

All delivery methods in one way or another provide the owner with a finished project. Some delivery methods are better than others for specific type of project. It is critical that the right delivery method is aligned with the critical elements of the project.

The alignment of a project delivery methodology with a project should be based upon the following understanding and willingness or ability of the owner to accept the risks of the project. This then becomes the Owner Risk Profile, The delivery Method should be matched and aligned to that profile.

Based upon experience with Capitol Restoration Projects, there are six criteria that MOCA typically uses to identify an owner’s project risk profile, these are:

1. Owner Structure
2. Public Accountability
3. Project Complexity
4. Project Risk Acceptance

5. Budget Tolerance
6. Schedule Tolerance

These six criteria are scored based upon low, moderate and high risk to the owner. Once the Risk profile is understood and matched to the project risk, a proper assessment of the delivery method can be compiled.

Missouri Risk Profile

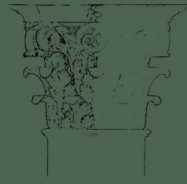
The restoration of the Missouri State Capitol and associated extension to the north and south is a risky project. This is largely due to:

Owner Risk Profile

- 1) There is little known and will be known about the actual existing condition of the building.
- 2) There is extensive work required in and below the basement.
- 3) Scheduling of moves by the owner and the continued use of the Capitol during construction.
- 4) The volatility and unknowns within the construction industry place the project in a higher risk category.

The owner after review of the owner risk profile has a low to moderate risk tolerance and would therefore need to have a delivery method that will allow for unknown conditions to be dealt with while not exceeding the budget or schedule, since they are sensitive to public opinion and to the view of other members of the legislature.

Criteria for Alignment	Low Risk Tolerance	Moderate Risk Tolerance	High Risk Tolerance
1. <u>Owner Structure</u> - is the composition of the owner a single entity owner, non-political owner or multi-headed political owner?	Multiple-headed political owner	Multiple-headed political owner	Single Entity Owner
2. <u>Public Accountability</u> – is the owner accountable to self or to the community as a whole?	State of Missouri	Community	Self
3. <u>Project Complexity</u> - how complex is the project from the ability to know everything about the project? Does the owner require careful mitigation of complex issues or are they willing to accept and work with the complexity of the project?	Require Mitigation measures to assure success	Limited mitigation measure required	Acceptance of unknown Risk
4. <u>Risk Acceptance</u> - what level of risk will the owner be willing to accept? Is the owner adverse to risk or will the owner accept higher levels of risk?	Adverse to Risk	Willing to accept some Risk	Acceptance of Risk
5. <u>Budget Tolerance</u> - are there budgetary consequences for the owner or can they spend what they need to in order to complete the project?	No Budget flexibility	Set Budget limited flexibility	Flexible
6. <u>Schedule Tolerance</u> - is the schedule flexibility in that the owner can take occupancy when they need to or are there dates that must be met during construction to keep the owner functioning?	Limited Schedule flexibility	Some Schedule Flexibility	Flexible



SECTION TWELVE: PROCUREMENT

Delivery Methods

Design/Bid/Build or Traditional

Design/Bid/Build or the traditional process of procuring an architect and a contractor is as follows:

1. Owner creates a set of owner requirement documents and a Request for qualification from Architects. This is developed by the Owner Representative.
2. The Owner then issues the RFQ and goes through a selection process to identify who the most qualified architect is. The fee and the contract are then negotiated.
3. The architect uses the owner requirement documents and meeting with the owner after the design period to design the building.
4. The Architect provides a set of construction documents, as well as, a specification and estimate of probable cost to the owner for bidding.
5. The documents are then offered to contractors to bid.
6. The Contractor who has the lowest bid is awarded the project.

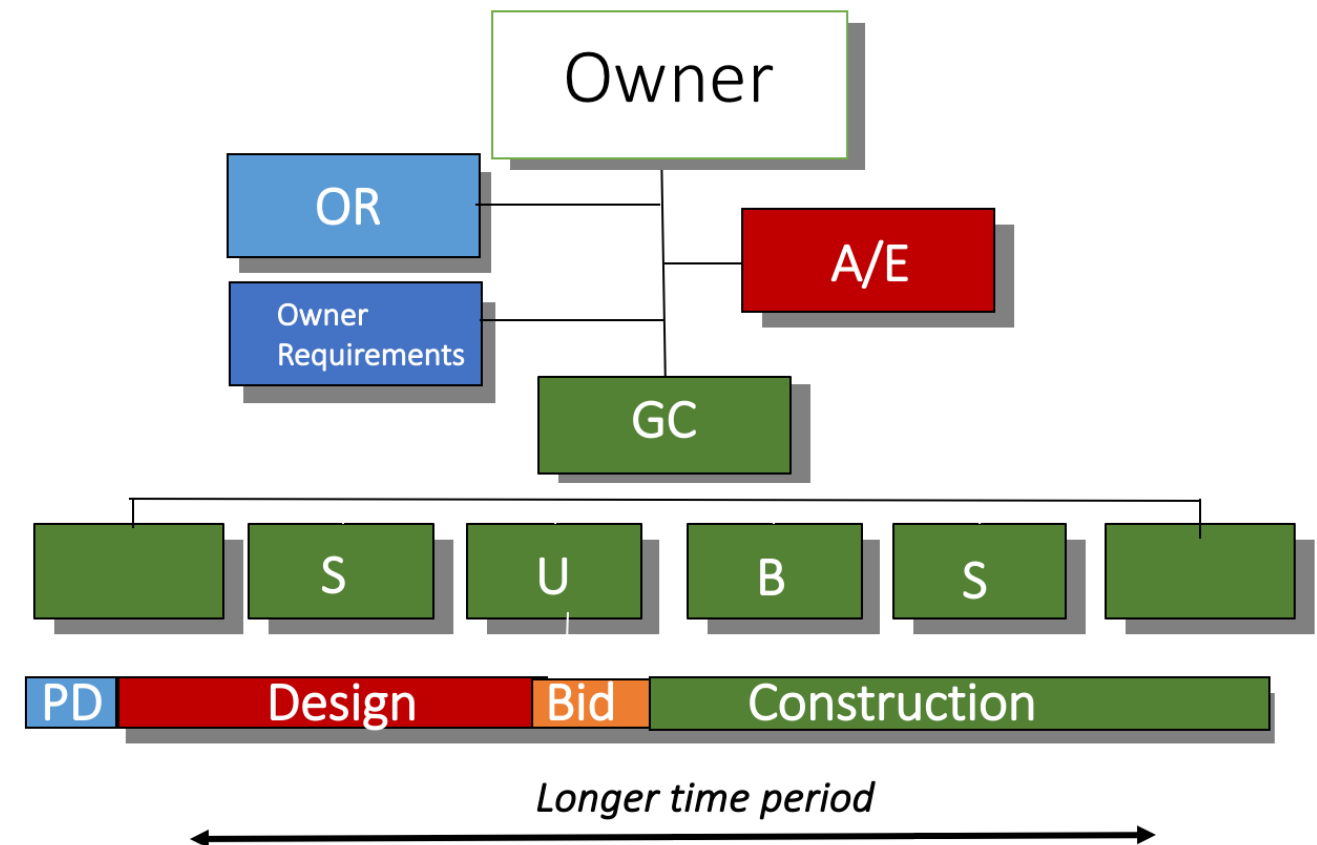
Typically this procurement method has been used with success in the following types of projects:

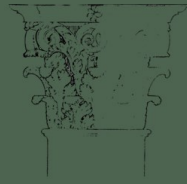
- New construction projects where most all elements of the projects are known and easily obtained.
- Projects where the schedule will allow for changes or modifications in drawing to accommodate or re-design back to budget.
- Projects where the owner is more interested in the design quality of the project and less concerned about the cost of the project.

Projects where this delivery method has not worked well includes:

- Projects with a high degree of unknown work or unforeseen conditions. The contractor will typically exclude these elements from the bid and once encountered will provide a high price in terms of change orders to address the unforeseen or unknown condition.

This delivery method is not recommended due to the risk to the budget and schedule.





SECTION TWELVE: PROCUREMENT

Delivery Methods

Design/Build

Design/Build method procures the architect and a contractor as a single package as follows:

1. Owner creates a set of owner requirement documents and a Request for qualification from Design/Build (D/B) teams. This is developed by the Owner Representative.
2. The Owner then issues the RFQ/RFP and goes through a selection process to identify the most qualified D/B team. The fee and the contract are part of the selection process. The D/B team will be selected in one of three ways:
 - A competition where the D/B team submits a design and price for the work. (Typical Design Build)
 - A competitive price to constructing the work based upon the owner requirement documents. (Modified Design Build)
 - A set of qualifications and the fee with the design and the cost of the work to be determined in a collaborative manner. (Progressive Design Build)
3. Once selected and depending upon the method of selection, the project will move forward with the completion of the design work and then with construction.

Design/Build Delivery Method is best utilized in one of two ways:

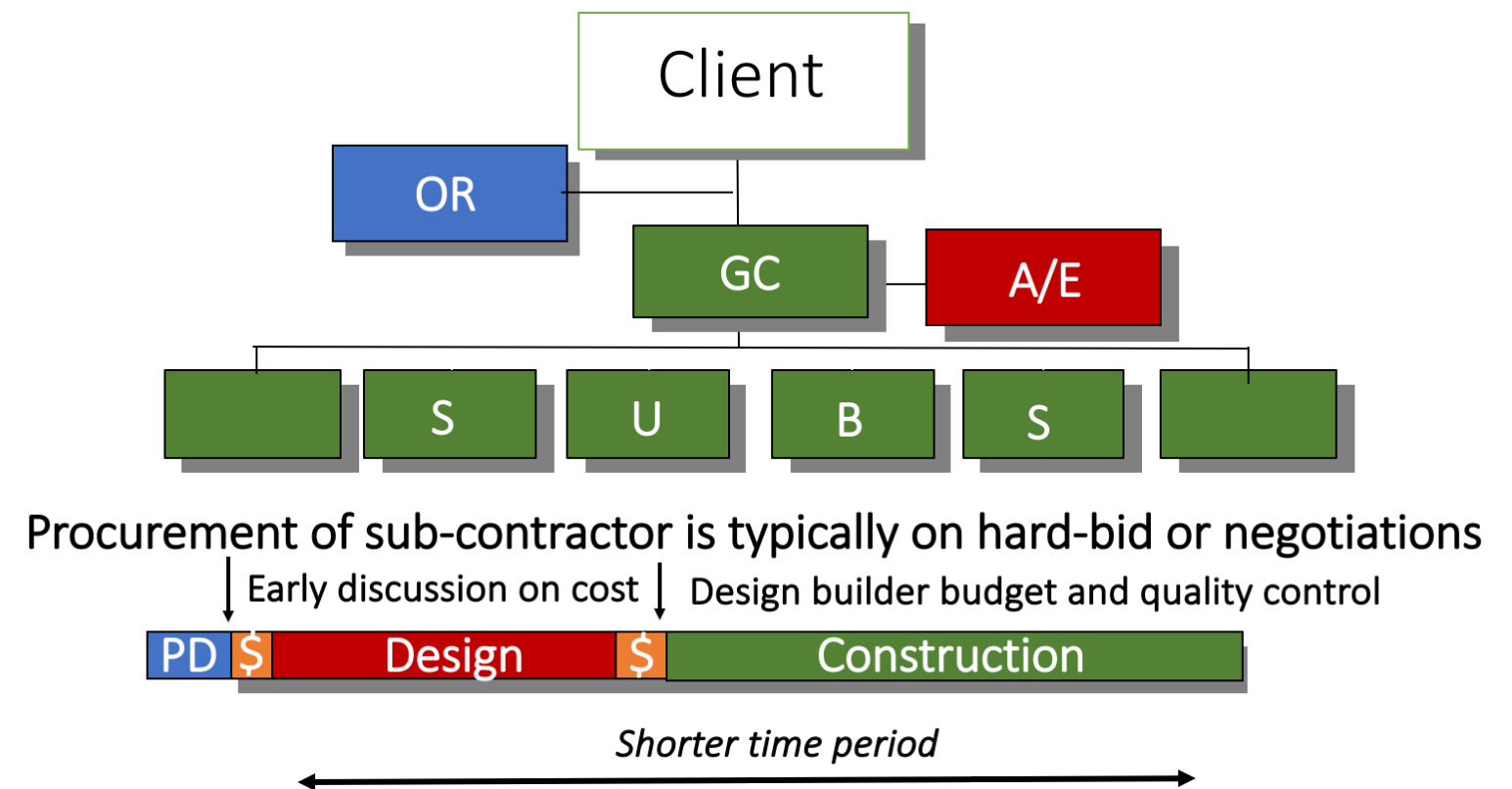
1. Within a typical Design Build project, the owner provides all the information to the design build team and they develop a design along with the price. This is then presented to the owner. The owner has the

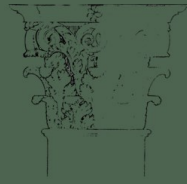
opportunity to select any one of the designs and the price associated with the design. Once this is done, the contractor is completely committed to deliver that design for the price. This method of delivery is best served on projects where there is a high degree of certainty that the owner is not going to change their project requirements and that there is a low number of unknown conditions or unforeseen conditions.

2. Progressive Design Build is a modification to the design build method that allows for the design build team to work with the owner to develop the project design and budget. Upon completion of the design, the design build team signs a Guaranteed maximum

price (GMP). At this point, the design build team will work together to deliver the project.

Progressive Design Build within the proper structure could be a recommended delivery method for this project, however, care must be taken in the selection of the design build team. Many times teams will be created based upon competitive advantage and not on what would be the best or most compatible team for the owner. Additionally, in some design build organizational structures, the designer is limited to their collaboration and interaction with the owner; this would need to be avoided.





SECTION TWELVE: PROCUREMENT

Delivery Methods

Construction Manager at Risk

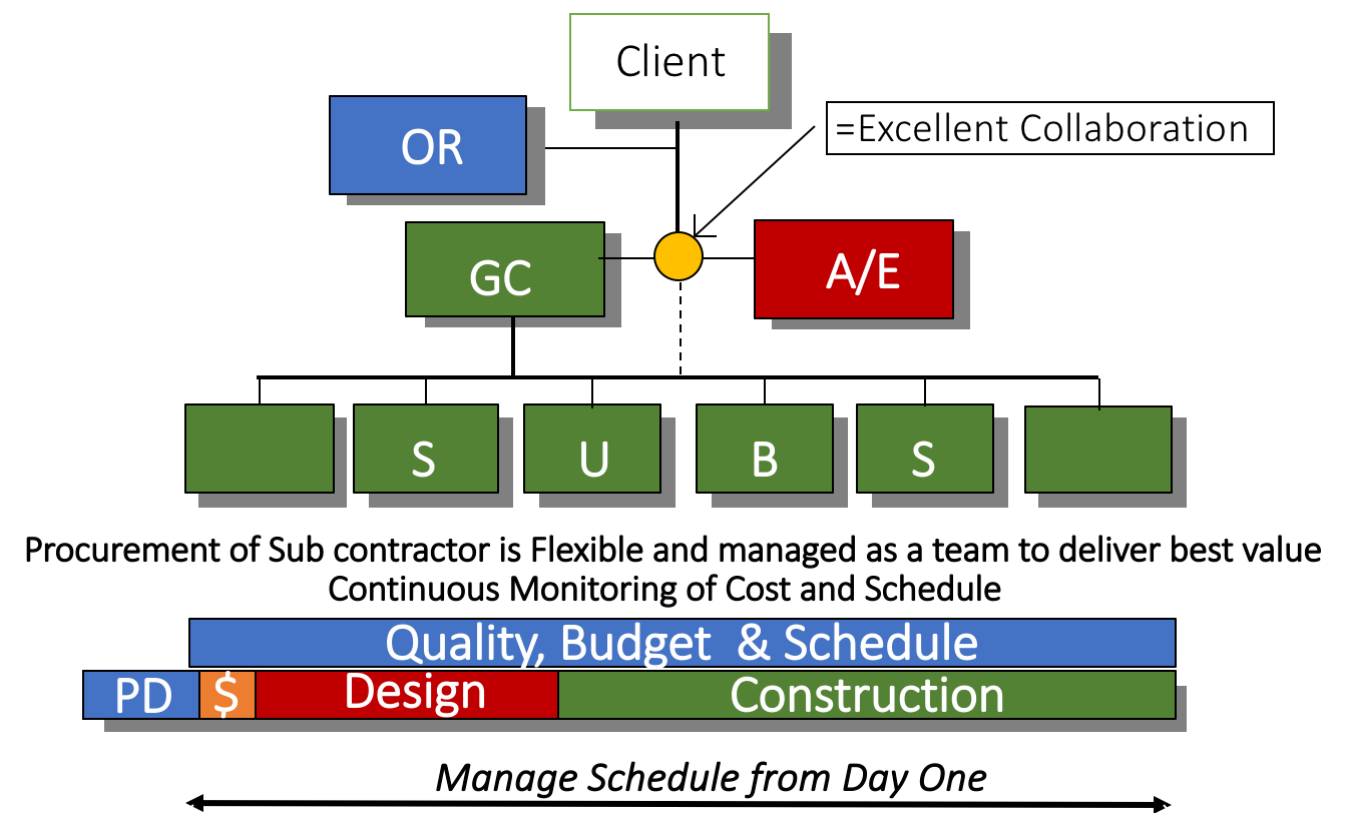
Construction Manager at Risk is a process of procuring an architect and a contractor is as follows:

1. The Owner creates a set of owner requirement documents and a Request for qualification from Architects and a Request for Proposal from a Construction Manager or General Contractor (CMr). These RFQ and RFP documents are coordinated. This is developed by the Owner Representative.
2. The Owner then issues the RFQ and the RFP and goes through a selection process to identify the most qualified architect and the Construction Manager (CMr) for the project. The fee for the architect is negotiated, while the fee for the CMr is provided as part of the selection process, along with the other materials.
3. The Owner, Owner Representative, Architect and the CMr meet together in workshops to review and develop the design using the owner requirement documents to guide the design.
4. The CMr, during the design process, will provide investigative services including limited selective demolition to learn as much about the unknown conditions of the building as possible before the development of the GMP.
5. Throughout the design, the CMr continues to refine the budget as the architect provides updated drawings of the project. Late design elements and or changes to the project by the owner are easily accounted for and included in the project prior to the CMr delivery of the GMP.
6. Within the GMP, the CMr will carry a variety of contingencies that are used to maintain and manage

- the project. These contingencies are either used to complete the project or are returned to the owner at the end of the project.
7. The complete cost process is open book and available to the owner from the start to the completion of the project.
 8. Once the Owner agrees to the GMP, the CMr is then released to build the project. The GMP obligates the CMr to deliver the design for the provided cost.
 9. While effort was taken to identify all unknown conditions, there are always some that are not

found. The CMr and architect will present options to the owner who will have the ability to choose how to proceed with the scope of the work. This offers the great degree of flexibility of any of the delivery methods.

This process has been used on most of the Capitol Restorations throughout the county including: Utah, Idaho, Wyoming, Kansas and Minnesota. This process is recommended for use on the Restoration of the Missouri State Capitol, and will require legislative action.



SECTION TWELVE: PROCUREMENT

Procurement Activities

Recommendation

MOCA is recommending the use of a Construction Manager at Risk (CMr) delivery method for the restoration of the Capitol, South Expansion and North Expansion. This will require statutory modification to enable the use of CMr for this project. That statutory action is expected to occur in 2019. The delivery of the Senate parking structure may be through traditional procurement methods.

Selection Process

Three Contracts – OPM, AE & CMr

- OPM - One Step Process Qualifications and Management plan basis of selection. Negotiate following selection. The Owner will provide an outline of duties and responsibilities for which the OPM is to provide their qualifications and Management plan.
- AE & CMr Teams selection - Two step process:
- Step One - Qualifications
 - Background of firm
 - Project specific experience in historic restorations with references
 - Specific Personnel in historic restorations
- Step Two - Management Plan, Interview and Fee
 - Owner provided information (see above)
 - Management Plan to include:
 - Approach / Pre-Design / Design
 - Buyout / Construction
 - Budget Estimate (CMr only)
 - Contract Terms / Fee
 - Negotiate following selection

Owner Provided Information

Prior to the owner issuing the solicitation documents, the owner representative will provide the following:

Request for qualification - Stage One

Request for proposal - Stage Two

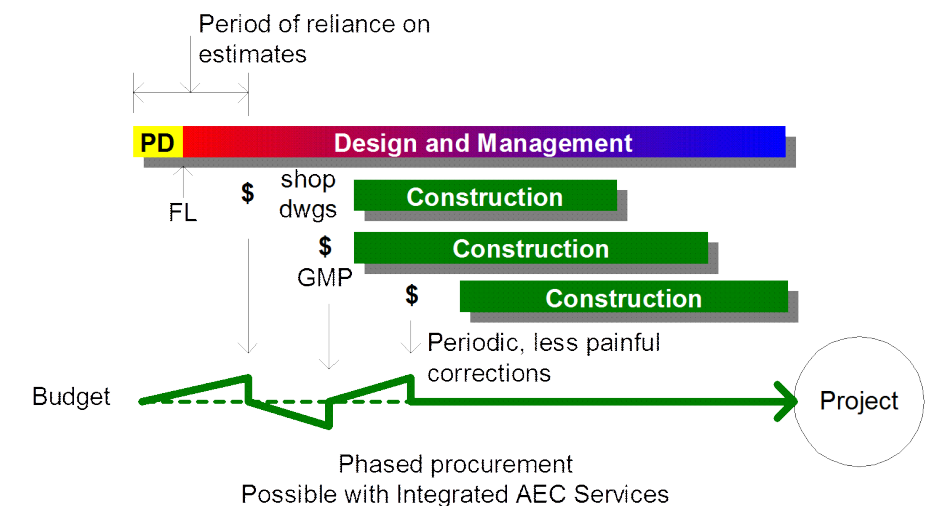
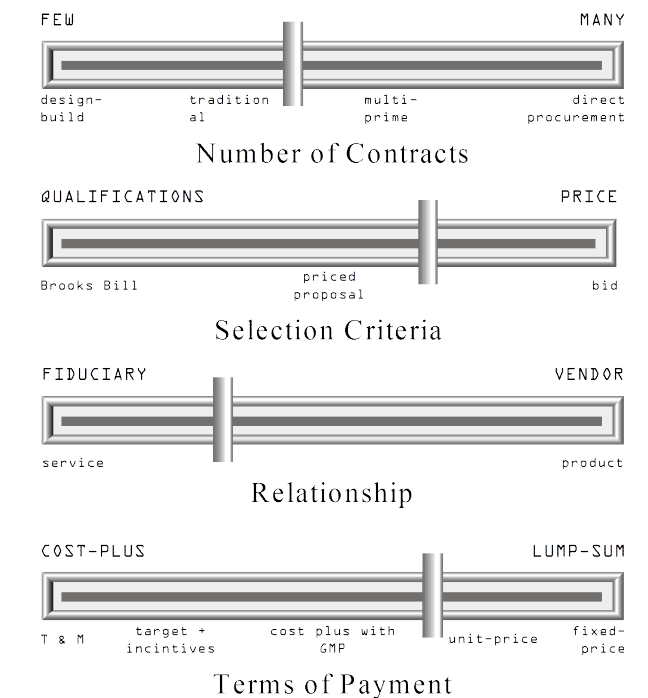
- Comprehensive Master Plan
- Preliminary Pre-Design
- Design Guidelines Outline
- Design Process Outline
- Terms / Conditions of Collaborative Relationships
- Proposed Contract A/E or CMr

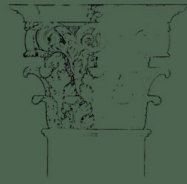
Collaborative Design Process

Following the selection and completion of negotiations:

The OPM will:

- Work directly with and communicate to the MSCC, Missouri State Capitol Commission
- Complete the Design Guidelines and imperatives for the project.
- Provide programing and management of the process with the Commission.
- Will organize and manage the design scoping workshops and design process.
- Conduct the collaborative weekly design sessions.
- Compile summary documents from the design scoping workshops





SECTION TWELVE: PROCUREMENT

Procurement Activities

The A/E will

- Collaborate with the OPM in all areas of the project.
- Complete the Design.
- Review and comply with the Historic Structures Report (SHPO).
- Review and provide comment to the OPM on the Design guidelines & Imperatives during workshops.
- Provide outline specifications supportive of the Design Guidelines.
- Participate fully in all the Design Scoping Workshops.
- Participate in the Summary Document development
- Implement the program developed by the OPM for the Commission.
- Complete Scope Documents.
- Complete Construction Documents.
- Participate in all construction related processes.

The CM will:

- Collaborate with the A/E and OPM on all elements of the project.
- Collaborate with the completion of the design.
- Provide Project and workshop cost estimates throughout the design scoping workshop.
- Provide a scope document estimate.
- Provide three estimates during construction documents (40%, 65% and 90%).
- Provide a schedule and schedule updates as new information affecting the schedule is discovered during scoping workshops and construction documents.
- Provide a complete GMP to the owner.
- Provide all services related to the construction of the work as described in the contract documents.

Payment Terms

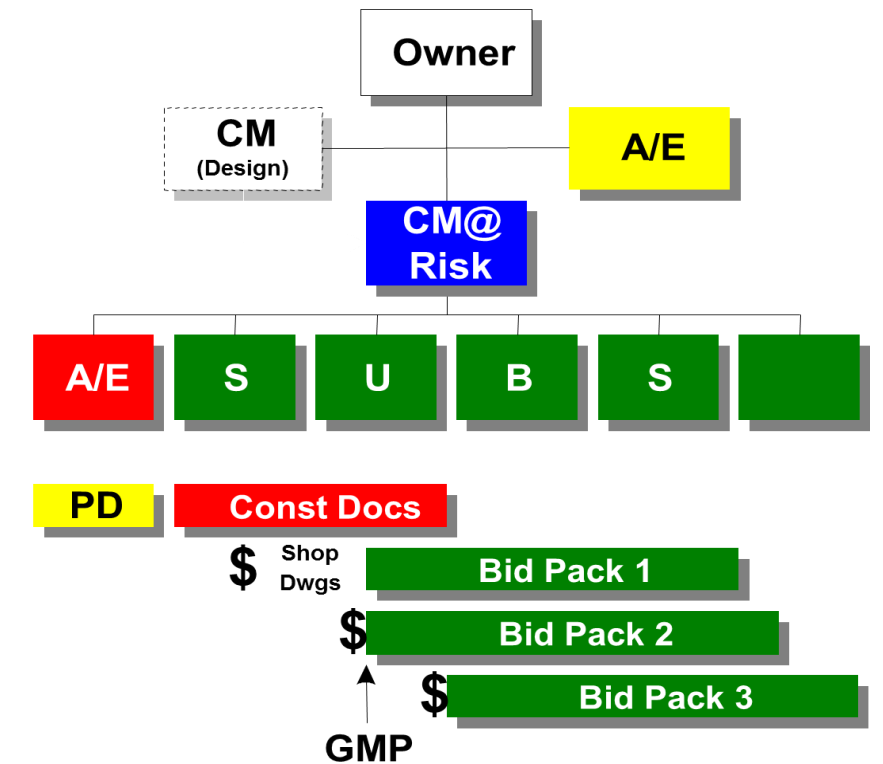
OPM, A/E, CMr

- Lump Sum Fixed Fee for design and construction for the project. Paid monthly as a percent complete.
- CMr Pre-Construction Fixed Fee for design phase services. Paid monthly as a percent complete.
- CMr Construction Services, GMP, with a Fixed Fee and cost reimbursable for labor and materials. GMP shall include:
 - General Conditions Construction
 - CMr Labor
 - Sub Contractor Labor and Materials
 - CMr Fee
 - 10% Construction Contingency

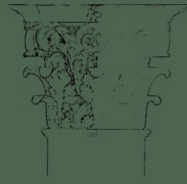
Paid Monthly deriving from a schedule of values approved by the State for work complete and in place or stored.

Contract Terms

- There shall be an established Fixed Limit of Construction Cost (FLCC).
- The Owner, Architect and Contractor will agree to work together to complete the work for the FLCC. The Owner, Architect and CMr will continue to work together with all diligence to provide a GMP within the FLCC for no additional fee regardless of how long it takes. Each must exercise the appropriate standard of care in executing their responsibility with one another.
- The owner shall establish a Satisfaction Fee/Bonus for the Architect and the CMr as follows:
- The Architect and CMr will each place 5% of their “fee” at risk. This shall be the portion of the fee that



CM at Risk

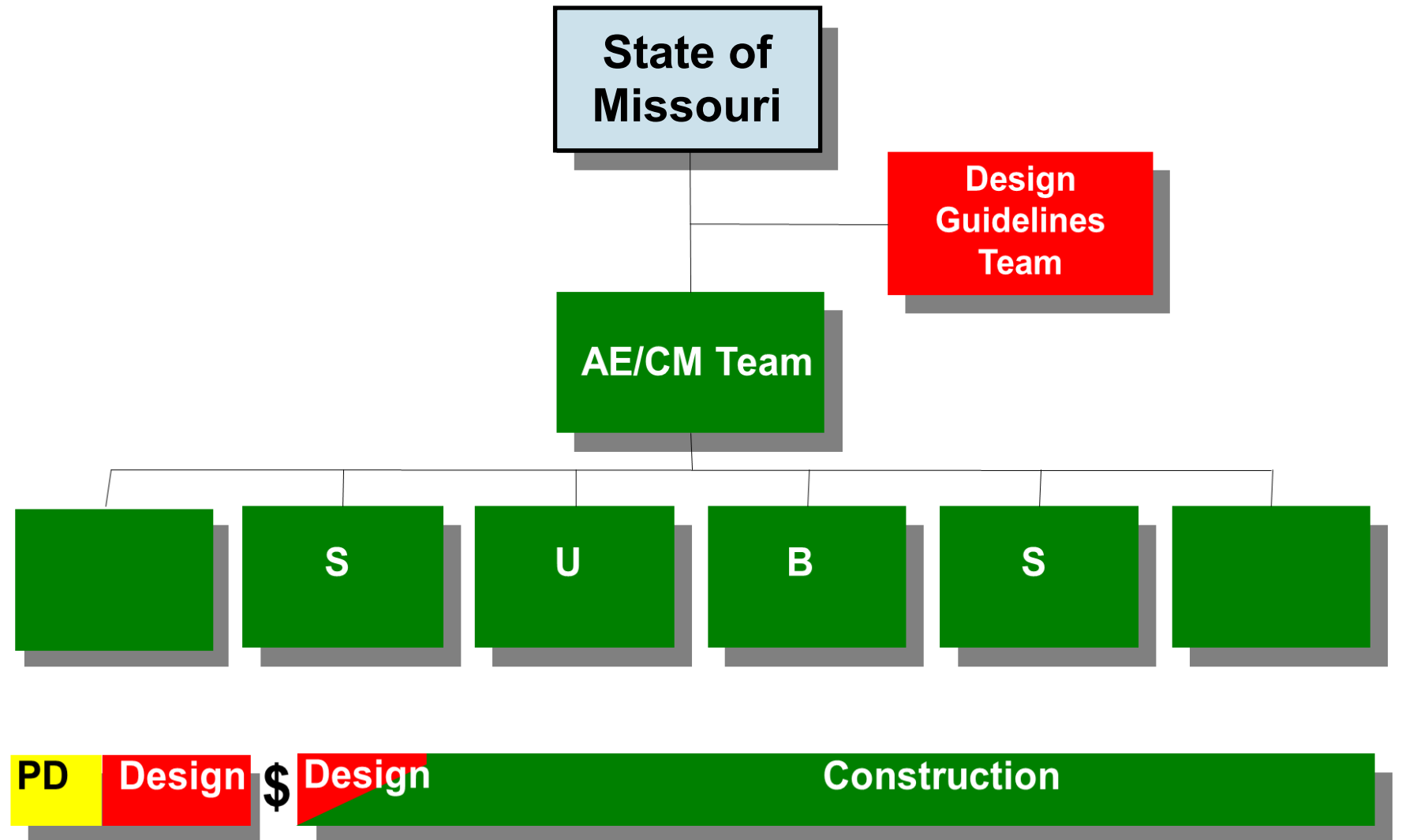


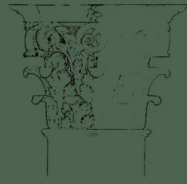
SECTION TWELVE: PROCUREMENT

Procurement Activities

is earned by satisfying the owner.

- The owner will then match the amount placed at risk by the AE/CMr. This shall be a bonus that the owner provides for satisfaction.
- The Owner shall judge the level of satisfaction on the following criteria:
 - Schedule
 - Budget
 - Quality
 - Safety
 - Relationship
- The team will rank these items and each quarter throughout the project, the owner will conduct a satisfaction review meeting. A score of 90% or better will receive 100% of the Fee/Bonus, a score of 80% but less than 90% will receive 90% of the Fee/bonus and so on. The AE/CMr will have the opportunity to earn back the portion of the lost fee at the following quarterly review, however, the bonus portion is lost as a penalty.
- The CMr may provide permanent construction with own forces upon request of CMr and review and approval of owner.
- The CMr must identify a contingency of 8-10%, which will be 100% returnable to the State. No shared savings will be accepted.
- CMr to provide 3 competitive bids for each sub-category.
- Each team member commits to designing within the established budget.
- Owner will have full Audit Privileges. All open book accounting.
- GMP at 80% of sub bids, based on 100% of bid docs.





SECTION THIRTEEN: IMPLEMENTATION PLAN

Planning

General Overview of Implementation

Within the overall plan there are three primary elements that drive both the planning and the implementation of the move and the construction. They are as follows:

1. The availability of swing space that is readily available and effective for Executive and Legislative use. After a careful review of the possibilities, the recommended solution suggests that the north and south extensions should be used initially for swing space.

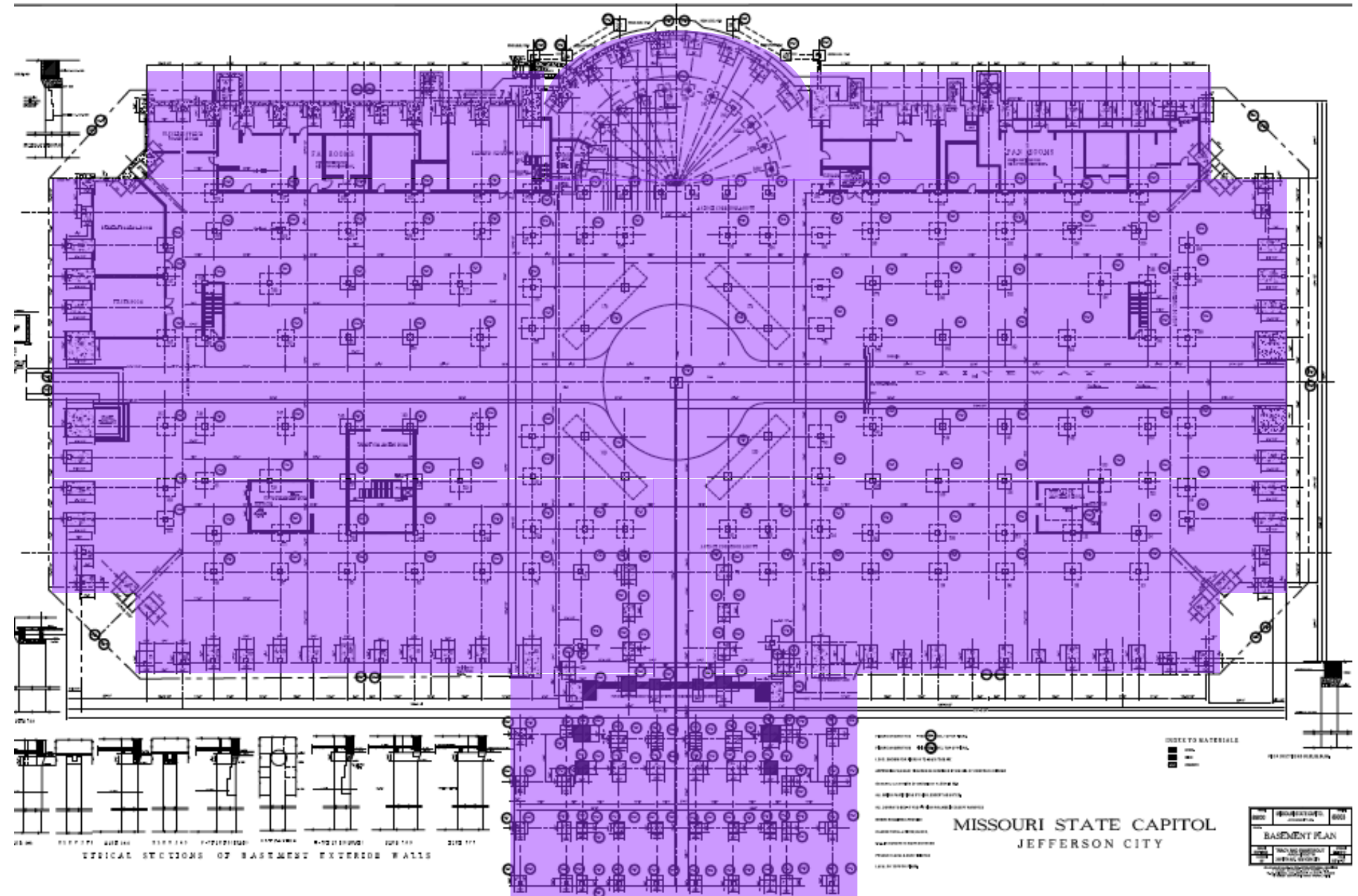
Governor and Lt. Governor offices will be relocated to the north (all other executive offices will need to be relocated out of the Capitol) while Legislative swing space will be to the south.

The South extension will initially house the legislative staff that are presently in the basement, as well as, the legislative staff and members from within the phase one area. The committee/hearing rooms for both House and Senate will be located in this south extension, as well.

2. Mechanical and Electrical systems - presently the Capitol is served by steam and chilled water. The steam is used to provide heat to the system and it is then circulated throughout the Capitol.

Presently the majority of the building is serviced by overhead duct work, requiring the lowering of the ceiling throughout the Capitol. The new plan calls for a combination of vertical systems to replace the horizontal duct work.

Forced Air systems will be used for the large areas, House, Senate Chamber and Rotunda will continue to



Sub-Basement Prep for Expansion

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement

SECTION THIRTEEN: IMPLEMENTATION PLAN

Planning - continued

use the new mechanical equipment installed in the attic. The House and Senate Lounges will continue to use equipment located in the basement, which will be relocated to a more appropriate location. The Museum space located on both the first and second floors will likewise continue to utilize forced air that is delivered through the vertical building chases that run from the basement to the under slab of the third floor.

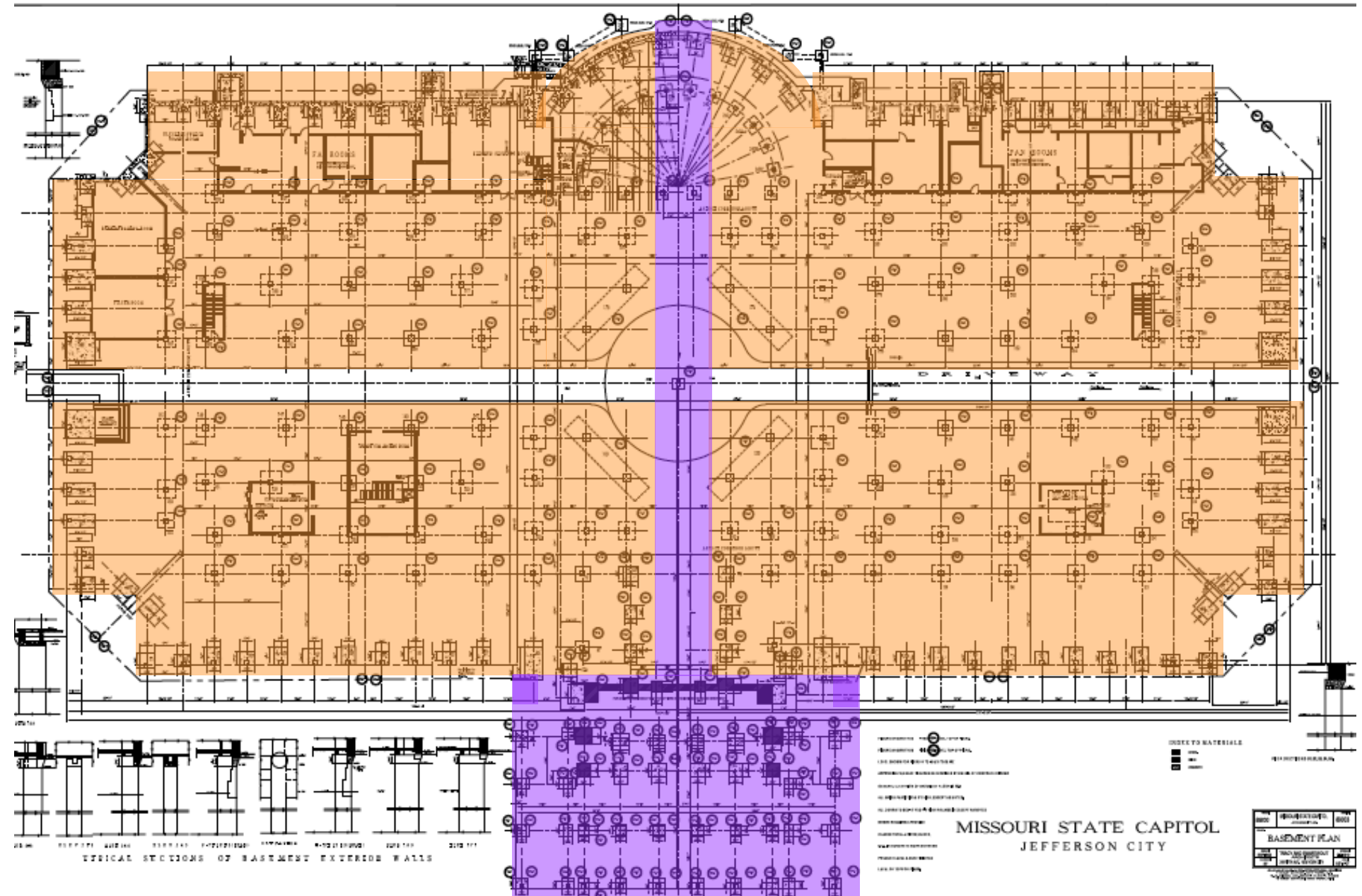
The second system is a combination of Air and Fan Coil Units (FCU). The FCU will utilize a 4 pipe system that will run in each of the perimeter offices to a FCU that is located beneath each of the window. Fresh and return air for the exterior offices and interior offices will rise vertically in each of the quadrants and past each office space in new vertical duct chases. This will require that offices along the perimeter be vacated for the vertical duct work to be installed.

The work will need to proceed first on the north and east sides of the Capitol both in the basement and vertically. The work will also require the relocation of several existing overhead mechanical ducts and piping to below the basement slab in order to improve head heights within the basement. Mechanical feeds of both hot and cold water along with forced air will need to be delivered to the south side of the Capitol basement and the best pathway is below the slab.

New north and south mechanical rooms will be developed that will house additional mechanical equipment which will be fed by below ground ducts in piping. Trenches will need to be installed that will run north and south for these mechanical feeds.

3. Limited space constraints - due to the lack of availa-

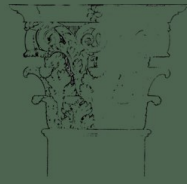
MOCA



Basement Level

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement

MASTER PLAN



SECTION THIRTEEN: IMPLEMENTATION PLAN

Planning - continued

ble existing space for swing space, the south extension will need to provide both the working space for the current legislative staff located in the basement and committee/hearing rooms, as well as the legislative members and staff that are relocated during the restoration.

The size of the south expansion is constrained by High Street to the south and the slope of the hill to the west. The proposed south extension of the Capitol is recommended as a two story below grade expansion totaling approximately 145,000 square feet.

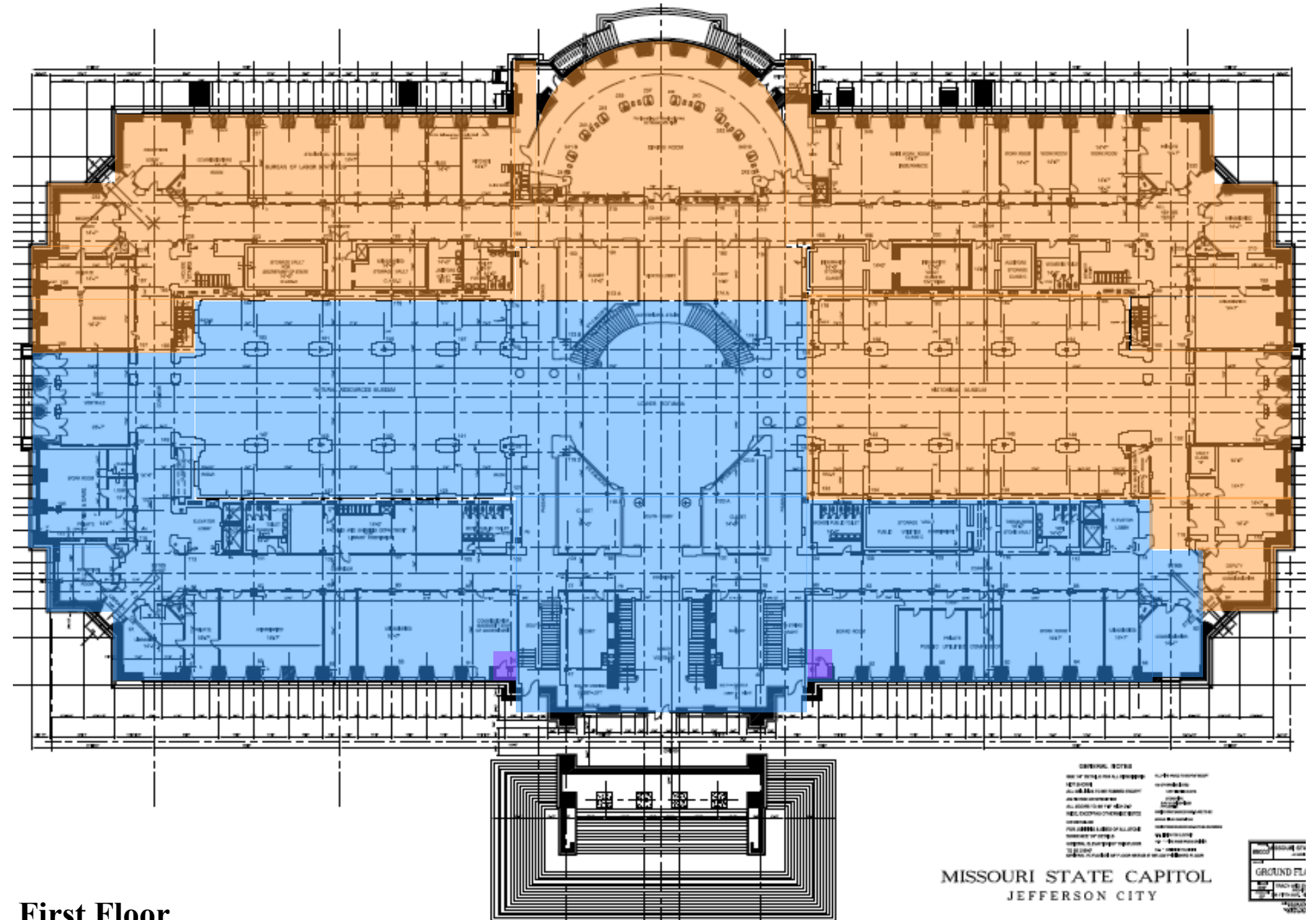
The current basement square footage that is being used for staff is approximately 52,000 square feet. Some of this is storage. The existing committee rooms consume about 10,000 square feet. The committee rooms will need to increase in size and number to both accommodate the House and Senate needs, therefore, present estimates are for approximately 20,000 square feet.

This then leaves approximately 48,000 square feet on the south and an additional 20,000 square feet on the north or a total of 68,000 square feet for swing space, less the appropriate circulation and equipment needed to maintain the facility. By reducing the office size of the members and staff to a minimum size (similar to what is presently on one of the mezzanines), allows for the ability to move approximately half of the occupants at one time. This allows for a two-phase construction sequence program as described in section seven - Space Program.

I. 2018

- Complete Comprehensive Masterplan and Historic Structures Report - December 30, 2018.

MOCA



First Floor

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement

MASTER PLAN



SECTION THIRTEEN: IMPLEMENTATION PLAN

Implementation of Activities

II. 2019

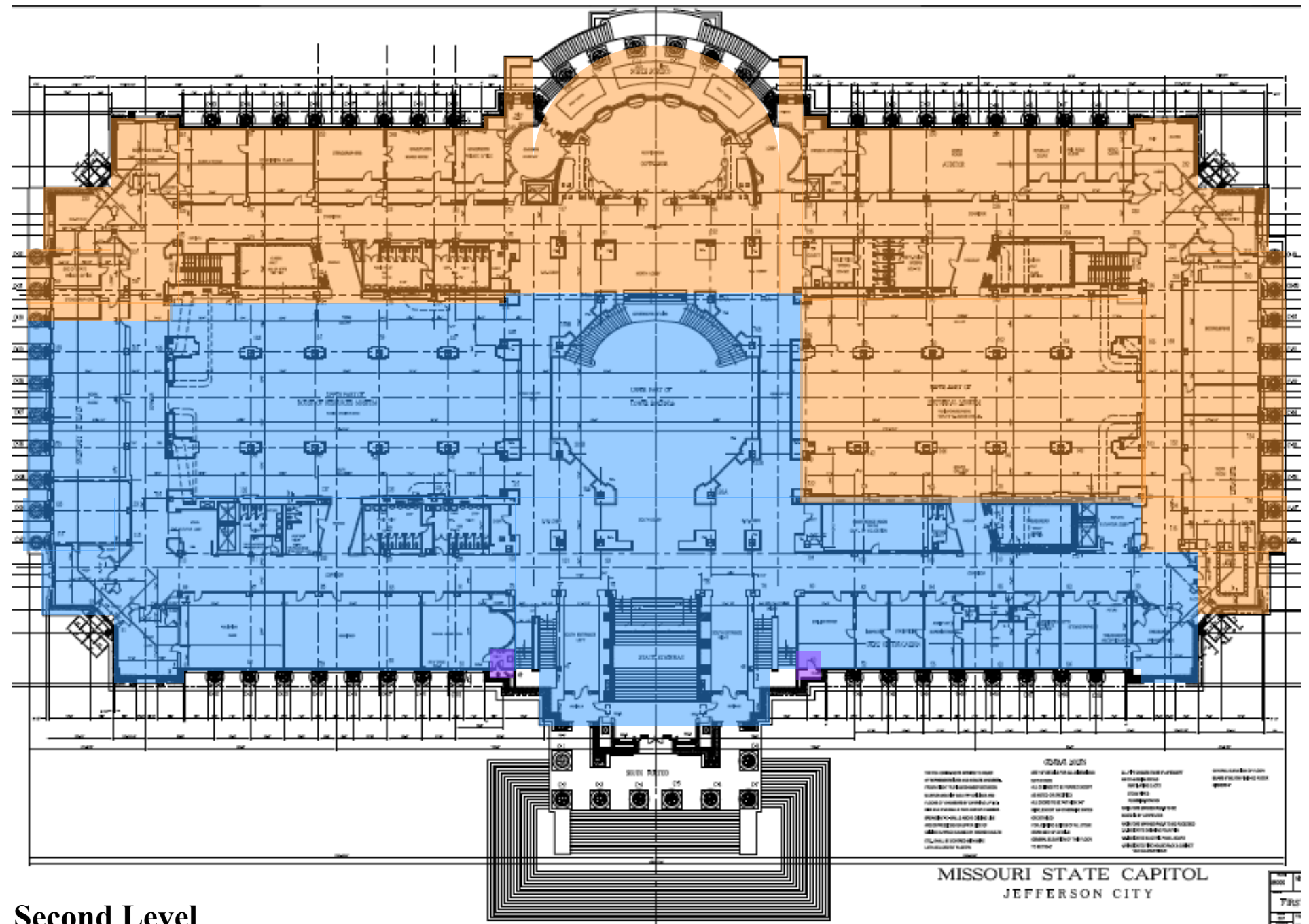
- Following the approval of the Capitol Commission (MSCC) and action by the Legislature for the funding of the Capitol, prepare and issue procurement documents for:
 - Owner Representative
The Owner Representative will update and add to the set of design guidelines and prepare the RFQ/RFP for the selection of the Architect and the Construction manager at Risk. The Owner Representative will then oversee the selection and negotiations of the:
 - Architect
 - Construction Manager at Risk
The Owner Representative will complete contract negotiations with the architect and construction manager at risk. It is anticipated that this will kick off the design scoping workshops toward the end of 2019.

III. 2020

- The Owner Representative will facilitate the 10 to 12 Design Scoping Workshops for the Total Project followed by the development of design and construction documents.

IV. 2021

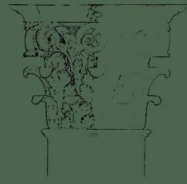
- Complete the design documents for the North and South Expansions of the Capitol for Phase One. Sign Guaranteed Maximum Price (GMP) for Phase One. It is estimated that construction will take approximately 24 months.
- Complete the design documents for the new Senate Parking Structure. Sign GMP. It is estimated that construction will take approximately 24 months.
- CMr will begin the construction of the North and South Capitol Expansions as well as the Sub-Basement work in the Capitol on the North. This will



Second Level

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement

MASTER PLAN



SECTION THIRTEEN: IMPLEMENTATION PLAN

Implementation of Activities

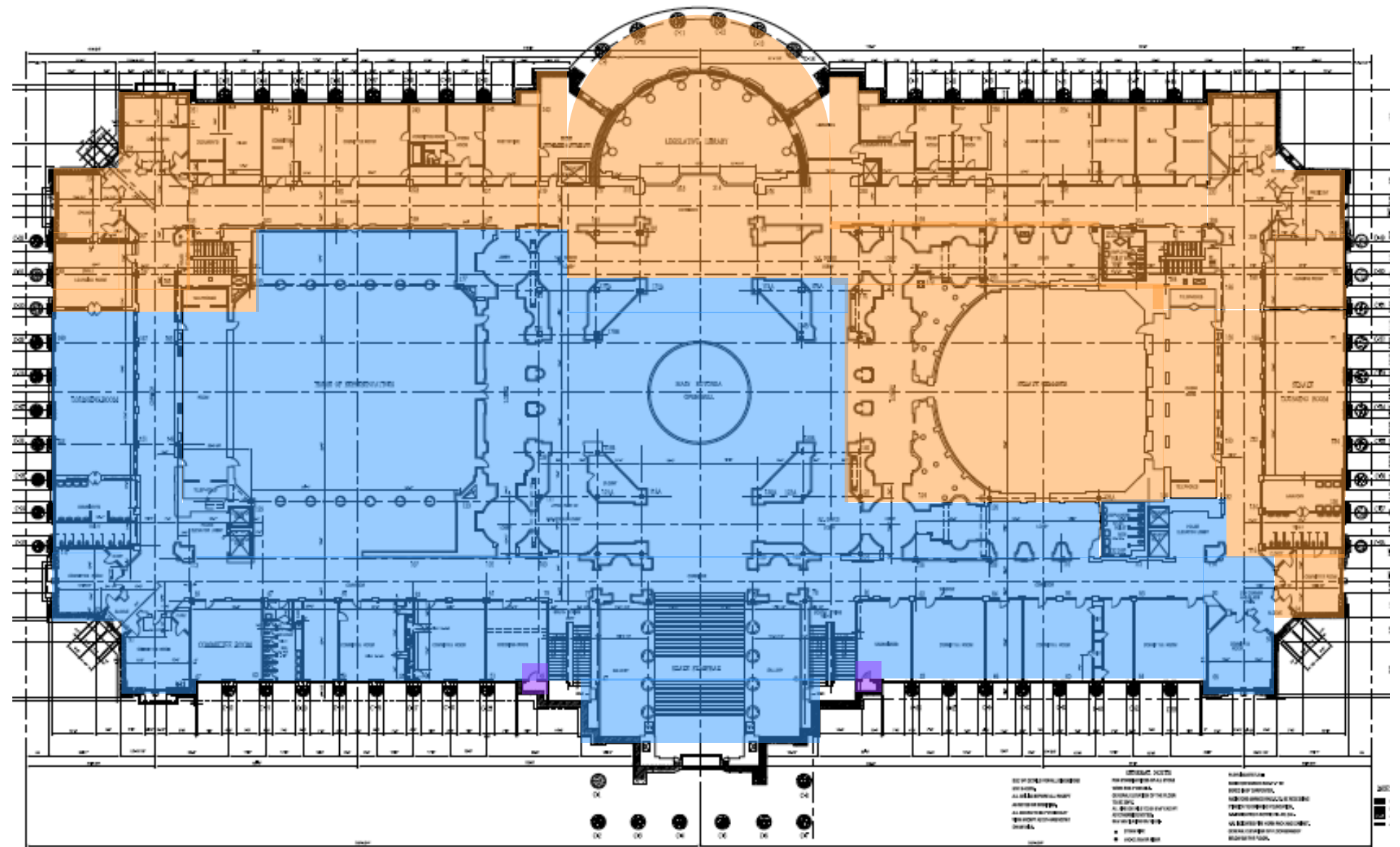
include the extension of the two elevator banks and the stairs from the basement level to the sub-basement level 18 feet below. It is anticipated that construction of the North and South Extension will be complete and ready for occupancy in June of 2023.

V. 2022

- Continue with Construction of the North and South Expansions, as well as, the Senate Parking Structure.
- Add mechanical equipment on the Roof of the Capitol to support the below grade fresh air requirements; this will require the introduction of several chases in the South side of the Capitol for ductwork.
- Architects and Engineers working on Phase Two Documents for Capitol Restoration.
- The OPM, Stakeholders and the Capitol Commission (MSCC), along with legislative leadership, shall finalize the space plan layout or office locations. This will allow the AEC team to move forward with documentation for the office and associated spaces within the east wing and throughout the Capitol.
- Develop Relocation planning for Phase Two.

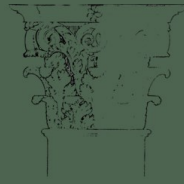
VI. 2023

- Complete north and south extension by June 2023.
- Architect to complete the renovation documents for the Capitol Phase Two, CMr to complete buyout of the project and sign Phase Two GMP.
- Relocate Phase Two (North Side of Capitol) occupants. Governor to occupy the north expansion and the Legislature to occupy the south expansion, along with the entire basement staff. Maintain a public pathway through basement during construction to access the



Third Level

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement



SECTION THIRTEEN: IMPLEMENTATION PLAN

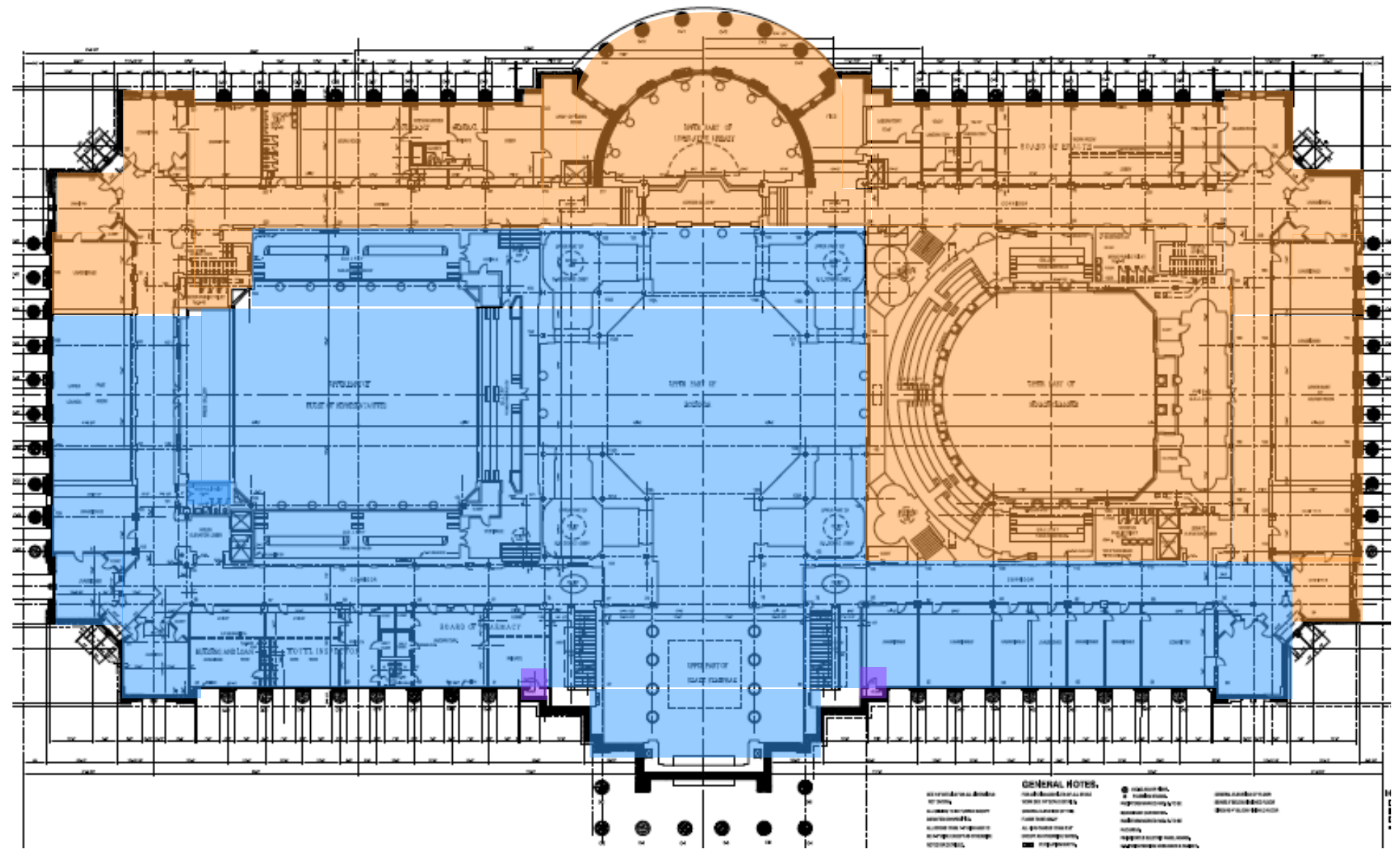
Implementation of Activities

north and south extension and to the occupied portions of the Capitol above around on levels 1-4.

- Move all historic furniture and fixtures from the Capitol to warehouse.
- Abatement and Demolition of the interior of the basement and mezzanines, as well as, other areas within the closed portion of the Capitol that are slated for abatement, demolition and restoration.

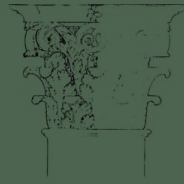
VI. 2023 to 2025 Phase One Construction

- Basement - Begin relocation of mechanical and electrical equipment and distribution from North to South.
- First through Fourth floors - Non-historic Interior and exterior offices will be demolished, mezzanines on First and Second Floors will be removed within the Phase Two zones.
- First through Fourth floors - The CMr, working with the Mechanical and Electrical contractors, will install the mechanical, electrical, communication and other systems in the vertical chases identified in the bid documents within Phase Two spaces. The stairways will be extended to the basement in the northeast and northwest corners of the Capitol.
- Installation of the east emergency exit will begin.
- Following demolition, reconstruction, restoration and finish work will begin within the Phase Two zones.
- The Architect will complete the Phase Three documents. The CMr will provide and sign the GMP Phase Three contract. The GMP Phase Two and Phase Three amount combined will not exceed the FLCC (Fixed Limit of Construction Cost) proposed in the master plan.



Fourth Level

- Phase One - North Side of Capitol
- Phase Two - South Side of Capitol
- Extension and Sub-Basement



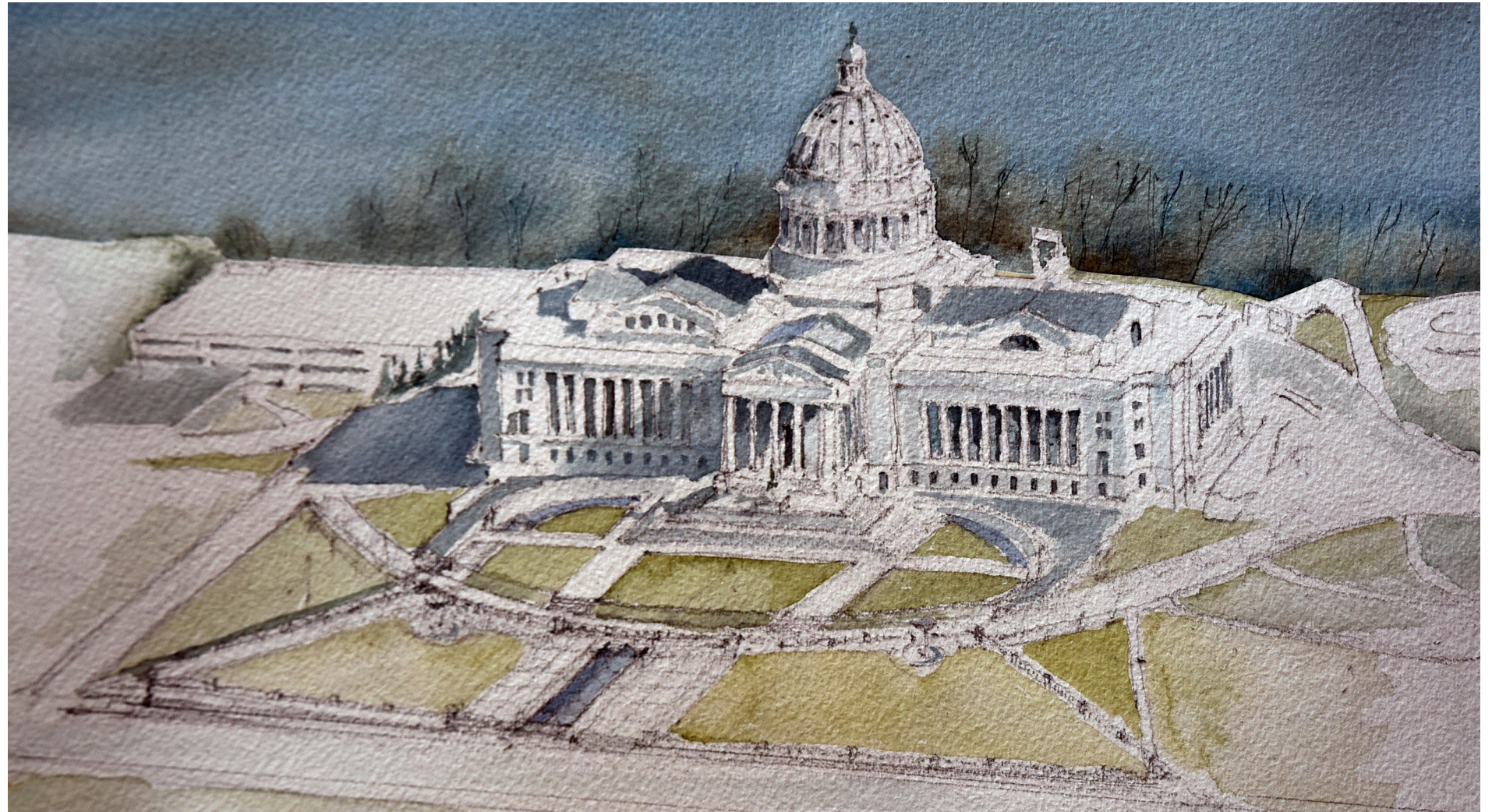
SECTION THIRTEEN: IMPLEMENTATION PLAN

Implementation of Activities

- In May of 2025, Phase Two will be complete and the Occupants that will occupy this space, including the Governor and Lt. Governor, will relocate to their completed offices.

VII. 2025 to 2028

- Basement - Continued mechanical and electrical equipment and distribution from North to South. The northern portion of the basement will have been completed with office space for legislators. The work will primarily be located in the South.
- First through fourth floors - The CMr, working with the Mechanical and Electrical contractors, will install the mechanical, electrical, communication and other systems in the vertical chases identified in the bid documents within Phase Three spaces.
- Installation of the west emergency exit will begin.
- First through fourth floors - Interior and exterior offices will be demolished, mezzanines on First and second floors will be demolished and removed from the building with in the Phase Three zones.
- Following demolition, reconstruction, restoration and finish work will begin within the Phase Three zones.
- In June/July of 2027, Phase Three will be complete and the Occupants that will occupy this space will relocate to their completed offices.
- **Grand Re-opening and Dedication Aug. 21, 2027**
- Following the completion of the Capitol restoration, the North extension will be reconfigured to provide for the visitor center. Providing space for tour groups and students, as well as, for dining activities completing in July of 2028.



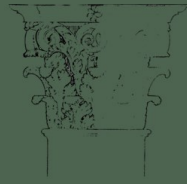
- Following the completion of the Capitol restoration, the south extension will be reconfigured to accommodate the occupants for the south extension including the hearing rooms and legislative staff office space. This will be complete in July of 2028.

VIII. 2028

- Project complete

VIV. 2029 - 2039

- Develop and implement a stewardship and governance plan for Capitol and Capitol Facilities.



SECTION FOURTEEN: COMMISSION GOVERNANCE AND STEWARDSHIP

Activities

Governance

In 2018, the Missouri Legislature passed Senate Bill 843, which established a Missouri State Capitol Commission (Commission).

The commission shall consist of nine persons, as follows:

- The commissioner of the office of administration
- One member of the senate from the majority party, appointed by the president pro tempore of the senate
- One member of the senate from the minority party, appointed by the minority leader of the senate
- One member of the house of representatives from the majority party, appointed by the speaker of the house of representatives
- One member of the house of representatives from the minority party, appointed by the minority leader of the house of representatives;
- One employee of the house of representatives appointed by the speaker of the house of representatives
- One employee of the senate appointed by the president pro tempore
- Two members appointed by the Governor with the advice and consent of the senate.
- The Lieutenant Governor shall be an ex officio member of the commission.

At the first meeting of the commission and at yearly intervals thereafter, the members shall select from among themselves a chairman and a vice chairman.

The commission shall hold at **least four regular** meetings each year and such additional meetings as the chairman deems desirable at a place and time to

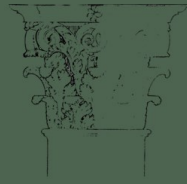
be fixed by the chairman. Special meetings may be called by five members of the commission upon delivery of written notice to each member of the commission. Reasonable written notice of all meetings shall be given by the director to all members of the commission. Five members of the commission shall constitute a quorum. All actions of the commission shall be taken at meetings open to the public. Any member absent from six consecutive regular commission meetings for any cause whatsoever shall be deemed to have resigned and the vacancy shall be filled immediately in accordance with subsection 1 of this section.

The commission shall provide a report to the Governor and the general assembly annually.

The duties of the Commission under 8.007 include:

1. Exercise general supervision of the administration of sections 8.001 to 8.007.
2. Evaluate and approve capitol studies and improvement, expansion, renovation and restoration projects [to be paid for with funds appropriated from the state capitol commission fund] including, but not limited to, the “21st-Century State Capitol Restoration Project”, which includes, but is not limited to, the development and implementation of a comprehensive master plan for the restoration, protection, risk management and continuing preservation of the Capitol building, grounds and any annex areas. For purposes of this section, "annex areas" shall mean the building currently occupied by the Missouri department of transportation located at 105 West Capitol Avenue in Jefferson City, if used to house members of the general assembly or legislative support staff, or any new building constructed for such purposes;
3. Exercise ongoing supervision and coordination of the

- Capitol building, grounds and any annex areas;
4. Evaluate and recommend courses of action on the restoration and preservation of the Capitol, the preservation of historical significance of the Capitol and the history of the Capitol;
5. Evaluate and recommend courses of action to ensure accessibility to the Capitol for physically disabled persons;
6. Advise, consult and cooperate with the office of administration, the archives division of the office of the secretary of state, the historic preservation program within the department of natural resources, the division of tourism within the department of economic development and the historical society of Missouri in furtherance of the purposes of sections 24 8.001 to 8.007;
7. Be authorized to cooperate or collaborate with other state agencies and not-for-profit organizations to publish books and manuals concerning the history of the Capitol, its improvement or restoration;
8. On or before October first of each year, submit to the budget director and the general assembly estimates of the requirements for appropriations for the Capitol building, grounds and any annex areas for the year commencing on the following first day of July;
9. Encourage, participate in or conduct studies, investigations, and research and demonstrations relating to improvement and restoration of the state Capitol it may deem advisable and necessary for the discharge of its duties pursuant to sections 8.001 to 8.007;
10. Hold hearings, issue notices of hearings and take testimony as the commission deems necessary; and



SECTION FOURTEEN: COMMISSION GOVERNANCE AND STEWARDSHIP

11. Initiate planning efforts, subject to the appropriation of funds, for a centennial celebration of the laying of the capstone of the Missouri State Capitol.

The "State Capitol Commission Fund" is hereby created in the state treasury. Any moneys received from sources other than appropriation by the general assembly, including from private sources, gifts, donations and grants, shall be credited to the state capitol commission fund and shall be appropriated by the general assembly.

The provisions of section 33.080 to the contrary notwithstanding, moneys in the second capitol commission fund shall not be transferred and placed to the credit of the general revenue fund. Moneys in the state capitol commission fund shall not be appropriated for any purpose other than those designated by the commission.

The commission is authorized to accept all gifts, bequests and donations from any source whatsoever. The commission may also apply for and receive grants consistent with the purposes of sections 8.001 to 8.007. All such gifts, bequests, donations and grants shall be used or expended upon appropriation in accordance with their terms or stipulations and the gifts, bequests, donations or grants may be used or expended for the preservation, improvement, expansion, renovation, restoration and improved accessibility and for promoting the historical significance of the Capitol.

The commission may copyright or obtain a trademark for any photograph, written work, art object or any product created of the capitol or capitol grounds. The commission may grant access or use of any such works to other organizations or individuals for a fee, at its sole discretion or waive all fees. All funds obtained through licensing fees shall be credited to the capitol commission fund

in a manner similar to funds the commission receives as gifts, donations and grants. The funds shall be used for repairs, refurbishing or to create art, exhibits, decorations or other beautifications or adornments to the capitol or its grounds.

The senate chamber, the senate committee rooms, the offices of the members of the senate on the third and fourth floors of the state capitol building and all other rooms and offices of the state capitol building designed for or assigned under section 8.007 to the use of the members and officers of the senate, and all furniture, equipment and supplies therein, are reserved for the exclusive use of the members and officers of the senate. These rooms, together with the furniture, equipment and supplies therein, are in direct charge and control of the senate accounts committee. No use of any of said quarters other than by the senate, its members or officers shall be made except with the written consent of the senator or officer occupying the office rooms and upon the order of the accounts committee.

The house chamber, the house committee rooms, the offices of the members of the house on the third and fourth floors of the state capitol building and all other rooms and offices of the state capitol building designed for or assigned under section 8.007 to the use of the members and officers of the house and all furniture, equipment and supplies therein, are reserved for the exclusive use of the members and officers of the house of representatives. These rooms, together with the furniture, equipment and supplies therein, are in direct charge and control of the house accounts committee. No use of any of said quarters other than by the house of representatives, its members or officers shall be made except with the written consent of the representative or officer occupying the office rooms and upon the order of

the accounts committee.

Recommended Organizational Structure

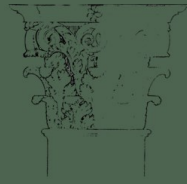
The statute gives authority for the Missouri State Capitol Commission (MSCC) to plan, develop and oversee the restoration and expansion of the Missouri State Capitol using funds from the "Missouri State Capitol Fund". This is a large undertaking for a part time appointed commission where every member of the MSCC has full time responsibilities elsewhere. In considering the organizational structure of the MSCC and the magnitude of the restoration in both time and money the MSCC should consider the appointing of an executive director to assist the board in performing its duties.

Additionally, it is recommended that to assist the project, the development of a budget and operations subcommittee be organized to review and make recommendations to the MSCC regarding:

1. the executive director's annual performance; and
2. the executive director's suggestions for staff, including staff duties, performance, compensation, and personnel;
3. make rules governing the review, compensation, and bonus process for the executive director and staff.

The executive director shall be responsible for:

1. Development and implementation of a master plan with a projection of at least 20 years concerning the stewardship responsibilities, operation, activities, maintenance, preservation, restoration, and modification of the Capitol and Capitol grounds
2. Develop a plan to restore and maintain the building:
 - Preserving the architectural integrity
 - Developed within a Campus Setting
 - Open safe and secure facility



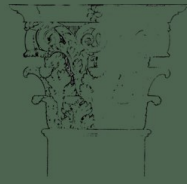
SECTION FOURTEEN: COMMISSION GOVERNANCE AND STEWARDSHIP

Duties and Responsibilities

3. Prepare, and recommend for board approval, an annual budget and work plan, that is consistent with the master plan, for all work in association with restoring and maintaining the Capitol and constructing the Capitol extension.
4. Develop, a furnishings plan.
5. Develop an operations, maintenance, and janitorial program working with the Office of Administration to implement and maintain the Capitol and extensions
6. Develop and maintain a registration system and inventory of the contents of the Capitol following the restoration.
7. Direct in matters dealing with the preservation of historic materials.
8. Make recommendations on conservation needs to the MSCC and contract for conservation services for objects of significance.
9. Prepare for MSCC all requests for all art and exhibits to be placed in the Capitol or on Capitol grounds MSCC approval. Following approval implement.
10. Employ staff to assist in duties.
11. Contract for professional services of qualified consultants, including architectural historians, landscape architects with experience in landscape architectural preservation, conservators, historians, program managers, owner representatives, architects, engineers, artists, exhibit designers, craftsmen and others as needed.
12. Prepare annually a complete and detailed written report for the board that accounts for all funds received and disbursed by the board during the preceding fiscal year.

Governance Recommendations

- Adopt by-laws for operations, including development of subcommittee, budget/operations and presentations and Art. The Development of Subcommittee that meets between the regular meeting of the commission is one way to address this (monthly).
- Commission Management - It is best to have members of the Commission make recommendations to other members of the commission for approval.
 - Subcommittees -
 - Preservation Subcommittee
 - Budget Subcommittee
 - Art and Memorial Subcommittee
 - Stewardship Subcommittee
 - Capitol Security Subcommittee
- Quarterly Commission Meetings - decision making meetings. The subcommittee will make recommendations that will go to the Commission.
- What items need to go to the MSCC:
 - Financial commitments.
 - Budgets and Budget projections.
 - Change orders above \$100,000 on construction projects where a project has been funded.
 - Reports of all approved changes and uses of contingency funds.
 - Development and approval of Guaranteed Maximum Price (GMP) for the Restoration/ Construction.
 - Changes in schedule.
 - Changes in Scope above \$100,000 of the approved GMP.
 - Approval of the Guidelines and the Summary Documents
- Annual Report
 - Financial Reporting for previous year
 - Fund Raising
 - Expenditures
 - Budget recommendations for the coming year
 - Accounting previous years budgets
- Projects
 - Planning
 - Design
 - Construction
 - Completion
- Event Management—Stewardship committee.
 - Online form to OA FMDC:
 - Guidelines need to be put in place that work with the Capitol Events Management.
 - Amend the rules—Approval of the Events needs to be brought to the subcommittee.
 - Develop a fee to use Capitol to pay for maintenance following events.
 - Create docent program for tour, working with Missouri State Parks.
 - Maintenance of historic materials- Create a stewardship manual for: Bronze, stone and other materials.
 - Art stewardship—conservation of murals and art.
 - Maintenance manual development to provide guidance—develop common guidelines for cleaning and management which OA, Senate and House may use to maintain Capitol. These need to be developed based upon the results of the preservation of the Capitol.



SECTION FOURTEEN: COMMISSION GOVERNANCE AND STEWARDSHIP

Activities

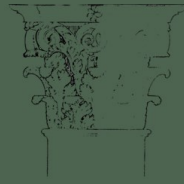
Stewardship Plan

With the completion of this restoration of the Capitol, the MSCC's primary focus will be to function as a Steward for the Capitol. This activity will focus upon the operational aspects, conservation needs and maintenance responsibilities of physical Capitol as well as art and landscaping.

It will be imperative that the Capitol be maintained in a fashion that is consistent with each of the critical materials. During the development of the restoration documents and specifications, the materials and finishes will need to have cleaning and care standards and procedures developed to avoid future damage.

Decorative Art on Walls and Ceilings:

- Stone Walls Interior
- Exterior Stone
- Bronze Light Fixtures
- Brass Fixtures:
- Decorative Rail
- Stone Floors
- Windows
- Skylights
- Stained Glass
- Painted Glass
- Bronze Sculpture
- Bronze Busts
- Bronze Plaques and Elevators



SECTION FIFTEEN: BUDGET ESTIMATE

General

General Construction Costs

The budget has been developed through a series of analysis that include:

- Benchmarking
- Systems Analysis Estimating
- Investigation of Specialty Items
- Quantity Take Off of Specific Items
- Estimating Contingency for unknowns

This information has led to a rough order of magnitude estimate for project cost of \$521,865,313.

The analysis was categorized into the following CSI sections:

- 02 Existing Conditions
- 02 Asbestos Abatement
- 04 Exterior Stone Restoration
- 05 Roofing
- 08 Exterior Window Replacement
- 08 Exterior Door Renovation
- 09 Interior Historical Painting
- 09 Interior Finish
- 09 Interior Finish
- 09 ADA Compliance and Accessibility
- 14 Freight Elevators
- 14 Passenger Elevators
- 21 Fire Protection
- 22 Plumbing
- 23 Mechanical Systems
- 26 Fire Alarms
- 26 Electrical Systems
- 26 Lightning Protection
- 26 Historical Lighting Renovation
- 26 Replica Historical Fixtures
- 27 Telecommunications
- 28 Security
- 31 Underground Excavation

Owner Costs

Owner Cost include all costs above and beyond the cost of the hard construction work. These are sometimes referred to as soft costs.

These costs include professional services such as:

- Owner program manger Fees,
- Architect and Engineering Fees,
- CM Preconstruction Services Fees
- Inspection Services Fees
- Commissioning Authority Fees
- Communication Design Services Fees

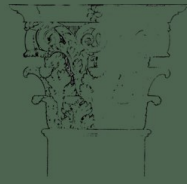
Other typical non-profession service items include:

- Contingencies
- General Expenses

However, for the restoration of the Missouri Capitol, additional owner costs must be accounted for. These include:

- Relocation and moving costs for the occupants of the Capitol as well as for the displaced occupants of the future swing space.
- Furniture designed to be sympathetic to the historic nature and design of the Capitol. This is above and beyond the typical furniture budget.
- Escalation- Presently the budget is proposing an average of 4% per year to the midpoint of construction. This is typically only 2% per year, however, due to the recent tariffs and limited labor market, we believe a higher escalation is in order.

Missouri State Capitol Restoration Budget Recommendation By MOCA		
December 30, 2018		Total Overall Costs
Program Costs		
Construction Costs - Capitol Restoration	\$ 203,294,820.07	
Construction Costs - Underground Expansion	\$ 93,582,484.62	
Construction Costs - New Senate Parking Structure	\$ 12,000,000.00	
Contractor General Conditions	\$ 30,887,730.47	10.00%
Contractors Contingency	\$ 25,608,606.24	8.29%
Contractor Fee	\$ 12,788,077.45	3.50%
Total Construction Costs	\$ 378,161,718.85	
Owner Project Costs		
Architects	\$ 39,355,670.79	10.41%
Owner Construction Contingency	\$ 42,449,055.83	11.23%
Security	\$ 5,726,922.04	1.51%
Telecommunications (voice & data)	\$ 10,786,843.91	2.85%
Inspections - Special construction and General	\$ 1,890,808.59	0.50%
Commissioning Energy services	\$ 3,781,617.19	1.00%
AV and Broadcast Media.	\$ 7,277,574.38	1.92%
Furniture	\$ 18,193,935.94	4.81%
Total Owner Project Costs	\$ 129,462,428.67	34.23%
Total Project Costs	\$ 507,624,147.52	
All costs include escalation to the midpoint of Construction		
Other Owner Project Costs		
Project Management	\$ 7,614,362.21	1.50%
Design Guidelines/Master Plan/HSR	\$ -	0.00%
CM Preconstruction	\$ 2,226,579.79	0.44%
Relocation moving costs*	\$ 3,638,787.19	0.72%
General Expenses	\$ 761,436.22	0.15%
Total Owner Costs	\$ 14,241,165.41	
Total Program Costs	\$ 521,865,312.93	
Total Estimated Cost	\$ 521,865,312.93	



SECTION FIFTEEN: BUDGET ESTIMATE

Funding

Funding is always a major concern for Capitol Restoration projects. We have identified three phases:

Phase One - 2019 Construction of the North and South Extensions.

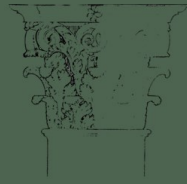
Phase Two - 2021 Restoration of Capitol North and East areas

Phase Three - 2024 Restoration of Capitol South and West areas.

Each of these have been developed based upon a full funding for the phase. The funding for each phase would need to be provided prior to the commencement of that particular phase.

Design and Construction will need to be organized to not exceed these funded amounts.

Missouri State Capitol Restoration Budget Recommendation By MOCA December 30, 2018			Phase 1 Extension Swing	Phase 2 North	Phase 3 South
Total Overall Costs			Bonding Year 2019	Bonding Year 2021	Bonding Year 2024
Program Costs					
Construction Costs - Capitol Restoration	\$ 203,294,820.07		\$ -	\$ 101,647,410.04	\$ 101,647,410.04
Construction Costs - Underground Expansion	\$ 93,582,484.62		\$ 78,329,170.20	\$ -	\$ 15,253,314.42
Construction Costs - New Senate Parking Structure	\$ 12,000,000.00		\$ 12,000,000.00	\$ -	\$ -
Contractor General Conditions	\$ 30,887,730.47	10.00%	\$ 9,032,917.02	\$ 10,164,741.00	\$ 11,690,072.45
Contractors Contingency	\$ 25,608,606.24	8.29%	\$ 4,516,458.51	\$ 10,164,741.00	\$ 10,927,406.72
Contractor Fee	\$ 12,788,077.45	3.50%	\$ 3,635,749.10	\$ 4,269,191.22	\$ 4,883,137.13
Total Construction Costs	\$ 378,161,718.85		\$ 107,514,294.83	\$ 126,246,083.27	\$ 144,401,340.75
Owner Project Costs					
Architects	\$ 39,355,670.79	10.41%	\$ 9,856,783.01	\$ 13,887,069.16	\$ 15,611,818.62
Owner Construction Contingency	\$ 42,449,055.83	11.23%	\$ 8,172,653.59	\$ 16,411,990.82	\$ 17,864,411.42
Security	\$ 5,726,922.04	1.51%	\$ 1,257,917.25	\$ 2,128,294.14	\$ 2,340,710.65
Telecommunications (voice & data)	\$ 10,786,843.91	2.85%	\$ 2,107,027.26	\$ 4,134,753.91	\$ 4,545,062.73
Inspections - Special construction and General	\$ 1,890,808.59	0.50%	\$ 537,571.47	\$ 631,230.42	\$ 722,006.70
Commissioning Energy services	\$ 3,781,617.19	1.00%	\$ 1,075,142.95	\$ 1,262,460.83	\$ 1,444,013.41
AV and Broadcast Media.	\$ 7,277,574.38	1.92%	\$ 1,864,625.90	\$ 2,524,921.67	\$ 2,888,026.82
Furniture	\$ 18,193,935.94	4.81%	\$ 4,661,564.74	\$ 6,312,304.16	\$ 7,220,067.04
Total Owner Project Costs	\$ 129,462,428.67	34.23%	\$ 29,533,286.17	\$ 47,293,025.11	\$ 52,636,117.39
Total Project Costs	\$ 507,624,147.52		\$ 137,047,581.00	\$ 173,539,108.38	\$ 197,037,458.14
All costs include escalation to the midpoint of Construction					
Other Owner Project Costs					
Project Management	\$ 7,614,362.21	1.50%	\$ 2,055,713.71	\$ 2,603,086.63	\$ 2,955,561.87
Design Guidelines/Master Plan/HSR	\$ -	0.00%	\$ -	\$ -	\$ -
CM Preconstruction	\$ 2,226,579.79	0.44%	\$ 587,468.78	\$ 1,524,711.15	\$ 114,399.86
Relocation moving costs*	\$ 3,638,787.19	0.72%	\$ 932,312.95	\$ 1,262,460.83	\$ 1,444,013.41
General Expenses	\$ 761,436.22	0.15%	\$ 205,571.37	\$ 260,308.66	\$ 295,556.19
Total Owner Costs	\$ 14,241,165.41		\$ 3,781,066.81	\$ 5,650,567.27	\$ 4,809,531.32
Total Program Costs	\$ 521,865,312.93		\$ 140,828,647.81	\$ 179,189,675.65	\$ 201,846,989.47
Total Estimated Cost	\$ 521,865,312.93		\$ 140,828,647.81	\$ 179,189,675.65	\$ 201,846,989.47
Funding Request			\$ 140,828,647.81	\$ 179,189,675.65	\$ 201,846,989.47



SECTION FIFTEEN: BUDGET ESTIMATE

Individual Project Breakdown

Extension

Phase One—North South Extensions

The north and south extensions will be the first element of the new plan constructed. Both the north and south will be constructed together. This will create approximately 163,000 square feet of space - (18,000 sq. ft. on the North and 145,000 sq. ft. on the south).

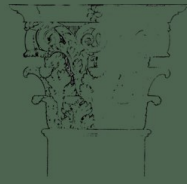
Constraints

The structural piles from the original construction documentation indicate that bedrock is approximately 16 to 20 feet below the basement level. As we expand to the North and the South, we anticipated that the excavation will encounter bedrock. We have also assumed that rock removal generally across the expansion will likewise be required to set foundations. We have therefore accommodated for this potential within the overall estimate.

Phase One - 2021 to 2023

Phase one will provide all the physical space, the public areas and the meeting space. Staff offices will be constructed. The North facility will initially be designed to house the Governor and the Lt. Governor. This will complexly fill the north extension. The south extension will initially be designed to provide 70,000 sq. ft. to be used as swing space for the legislature (house and senate) for both the first and second sequence of the project.

Missouri State Capitol Restoration Budget Recommendation By MOCA December 30, 2018			Phase 1	Phase 2	Phase 3
Total Overall Costs			Extension Swing	North	South
			Bonding Year 2019	Bonding Year 2021	Bonding Year 2024
Program Costs					
Construction Costs - Capitol Restoration			\$ -	\$ -	\$ -
Construction Costs - Underground Expansion	\$ 93,582,484.62		\$ 78,329,170.20		\$ 15,253,314.42
Construction Costs - New Senate Parking Structure			\$ -		
Contractor General Conditions	\$ 9,358,248.46	10.00%	\$ 7,832,917.02	\$ -	\$ 1,525,331.44
Contractors Contingency	\$ 4,679,124.23	5.00%	\$ 3,916,458.51		\$ 762,665.72
Contractor Fee	\$ 3,766,695.01	3.50%	\$ 3,152,749.10	\$ -	\$ 613,945.91
Total Construction Costs	\$ 111,386,552.31		\$ 93,231,294.83	\$ -	\$ 18,155,257.48
Owner Project Costs					
Architects	\$ 10,581,722.47	9.50%	\$ 8,856,973.01	\$ -	\$ 1,724,749.46
Owner Construction Contingency	\$ 8,910,924.19	8.00%	\$ 7,458,503.59	\$ -	\$ 1,452,420.60
Security	\$ 1,303,222.66	1.17%	\$ 1,090,806.15	\$ -	\$ 212,416.51
Telecommunications (voice & data)	\$ 2,517,336.08	2.26%	\$ 2,107,027.26	\$ -	\$ 410,308.82
Inspections - Special construction and General	\$ 556,932.76	0.50%	\$ 466,156.47	\$ -	\$ 90,776.29
Commissioning Energy services	\$ 1,113,865.52	1.00%	\$ 932,312.95	\$ -	\$ 181,552.57
AV and Broadcast Media.	\$ 2,227,731.05	2.00%	\$ 1,864,625.90	\$ -	\$ 363,105.15
Furniture	\$ 5,569,327.62	5.00%	\$ 4,661,564.74	\$ -	\$ 907,762.87
Total Owner Project Costs	\$ 32,781,062.35	29.43%	\$ 27,437,970.07	\$ -	\$ 5,343,092.28
Total Project Costs	\$ 144,167,614.66		\$ 120,669,264.90	\$ -	\$ 23,498,349.76
All costs include escalation to the midpoint of Construction					
Other Owner Project Costs					
Project Management	\$ 2,162,514.22	1.50%	\$ 1,810,038.97	\$ -	\$ 352,475.25
Design Guidelines/Master Plan/HSR	\$ -	0.00%	\$ -	\$ -	\$ -
CM Preconstruction	\$ 701,868.63	0.75%	\$ 587,468.78	\$ -	\$ 114,399.86
Relocation moving costs*	\$ 1,113,865.52	1.00%	\$ 932,312.95	\$ -	\$ 181,552.57
General Expenses	\$ 216,251.42	0.15%	\$ 181,003.90	\$ -	\$ 35,247.52
Total Owner Costs	\$ 4,194,499.80		\$ 3,510,824.60	\$ -	\$ 683,675.20
Total Program Costs	\$ 148,362,114.46		\$ 124,180,089.49	\$ -	\$ 24,182,024.97
Total Estimated Cost	\$ 148,362,114.46		\$ 124,180,089.49	\$ -	\$ 24,182,024.97
Funding Request			\$ 124,180,089.49	\$ -	\$ 24,182,024.97



SECTION FIFTEEN: BUDGET ESTIMATE

Individual Project Breakdown

Capitol

The Capitol will be constructed in three phases. This has been done to allow the use of a portion of the building by the legislature throughout the entirety of the renovation. While this is not the most efficient or cost effective for construction, it is overall more cost effective than trying to locate or build a temporary swing space that will house all of the legislative functions. The project is proposing to constructed approximately 163,000 square feet of additional space in order to decompress the Capitol. It is proposed that this space within the extension be use as swing space for approximately half the legislature in each phase.

Phase Two - North, East and Basement

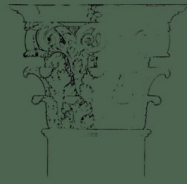
Following the completion of the North and South extension the following sequence will occur.

- Relocate all occupants from the basement to the south extension along with all occupants on the North side of the Capitol building floor 1-4.
- Demolish the basement space, provide for pathway for legislature and executive branch.
- Cut pathways in basement floor for mechanical distribution, begin vertical distribution on north side.
- Extend the north grand stairs to the basement.
- Demolish the Mezzanines.
- Restore and reconfigure all the office space and meeting space along the north side and basement.
- Begin decorative painting on the north side of the museum and in the rotunda.

Phase Three - South, West and Basement

- Relocate occupants from the south and west to the swing space.
- Demolish the Mezzanines on the first and second

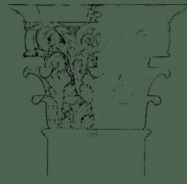
Missouri State Capitol Restoration Budget Recommendation By MOCA December 30, 2018			Phase 1 Extension Swing	Phase 2 North	Phase 3 South
Total Overall Costs			Bonding Year 2019	Bonding Year 2021	Bonding Year 2024
Program Costs					
Construction Costs - Capitol Restoration	\$ 203,294,820.07		\$ -	\$ 101,647,410.04	\$ 101,647,410.04
Construction Costs - Underground Expansion			\$ -		
Construction Costs - New Senate Parking Structure			\$ -		
Contractor General Conditions	\$ 20,329,482.01	10.00%	\$ -	\$ 10,164,741.00	\$ 10,164,741.00
Contractor Contingency	\$ 20,329,482.01	10.00%		\$ 10,164,741.00	\$ 10,164,741.00
Contractor Fee	\$ 8,538,382.44	3.50%	\$ -	\$ 4,269,191.22	\$ 4,269,191.22
Total Construction Costs	\$ 252,492,166.53		\$ -	\$ 126,246,083.27	\$ 126,246,083.27
Owner Project Costs					
Architects	\$ 27,774,138.32	11.00%	\$ -	\$ 13,887,069.16	\$ 13,887,069.16
Owner Construction Contingency	\$ 32,823,981.65	13.00%	\$ -	\$ 16,411,990.82	\$ 16,411,990.82
Security	\$ 4,256,588.28	1.69%	\$ -	\$ 2,128,294.14	\$ 2,128,294.14
Telecommunications (voice & data)	\$ 8,269,507.82	3.28%	\$ -	\$ 4,134,753.91	\$ 4,134,753.91
Inspections - Special construction and General	\$ 1,262,460.83	0.50%	\$ -	\$ 631,230.42	\$ 631,230.42
Commissioning Energy services	\$ 2,524,921.67	1.00%	\$ -	\$ 1,262,460.83	\$ 1,262,460.83
AV and Broadcast Media.	\$ 5,049,843.33	2.00%	\$ -	\$ 2,524,921.67	\$ 2,524,921.67
Furniture	\$ 12,624,608.33	5.00%	\$ -	\$ 6,312,304.16	\$ 6,312,304.16
Total Owner Project Costs	\$ 94,586,050.23	37.46%	\$ -	\$ 47,293,025.11	\$ 47,293,025.11
Total Project Costs	\$ 347,078,216.76		\$ -	\$ 173,539,108.38	\$ 173,539,108.38
All costs include escalation to the midpoint of Construction					
Other Owner Project Costs					
Project Management	\$ 5,206,173.25	1.50%	\$ -	\$ 2,603,086.63	\$ 2,603,086.63
Design Guidelines/Master Plan/HSR	\$ -	0.00%	\$ -	\$ -	\$ -
CM Preconstruction	\$ 1,524,711.15	0.75%	\$ -	\$ 1,524,711.15	\$ -
Relocation moving costs*	\$ 2,524,921.67	1.00%	\$ -	\$ 1,262,460.83	\$ 1,262,460.83
General Expenses	\$ 520,617.33	0.15%	\$ -	\$ 260,308.66	\$ 260,308.66
Total Owner Costs	\$ 9,776,423.39		\$ -	\$ 5,650,567.27	\$ 4,125,856.12
Total Program Costs	\$ 356,854,640.15		\$ -	\$ 179,189,675.65	\$ 177,664,964.50
Total Estimated Cost	\$ 356,854,640.15		\$ -	\$ 179,189,675.65	\$ 177,664,964.50
Funding Request			\$ -	\$ 179,189,675.65	\$ 177,664,964.50



SECTION FIFTEEN: BUDGET ESTIMATE

Individual Project Breakdown

- floors
- Begin the vertical distribution of the MEP.
- Extend the grand stairs to the basement
- Restore and reconfigure all the office space and meeting space along the north side and basement.
- Complete decorative painting in museum and rotunda.
- Begin decorative painting in House and Senate Chamber
- Reconfigure the North Extension for a visitor center
- Reconfigure the South Extension for permanent office space



SECTION FIFTEEN: BUDGET ESTIMATE

Activities

Parking Structure 2021 and 2022

The current Senate Parking Structure will be removed and a new 600 parking stall garage will be constructed:

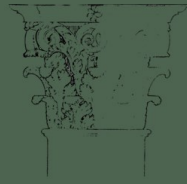
- Senate Member Parking - 34 Parking Stalls
- Senate Staff Parking - 177 Parking Stalls
- Senate visitor Parking - 25 Parking Stalls
- Executive parking - limited - 100 parking Stalls
- Public Parking - 264 Parking Stalls

It is anticipated that this parking will be between 6 and 8 stories high or approximately 80 feet tall.

Constraints

Due to the constraint of the site with the hillside and the existing historic structure on the corner of Broadway and High Streets, it is therefore anticipated that some excavation of rock will need to be removed to accommodate the foundation. This has required the addition of dollars to accommodate these constraints and excavation needs.

Missouri State Capitol Restoration Budget Recommendation By MOCA December 30, 2018			Phase 1 Extension Swing	Phase 2 North	Phase 3 South
Total Overall Costs			Bonding Year 2019	Bonding Year 2021	Bonding Year 2024
Program Costs					
Construction Costs - Capitol Restoration					
Construction Costs - Underground Expansion					
Construction Costs - New Senate Parking Structure	\$ 12,000,000.00		\$ 12,000,000.00		
Contractor General Conditions	\$ 1,200,000.00	10.00%	\$ 1,200,000.00	\$ -	\$ -
Contractors Contingency	\$ 600,000.00	5.00%	\$ 600,000.00		
Contractor Fee	\$ 483,000.00	3.50%	\$ 483,000.00	\$ -	\$ -
Total Construction Costs	\$ 14,283,000.00		\$ 14,283,000.00	\$ -	\$ -
Owner Project Costs					
Architects	\$ 999,810.00	7.00%	\$ 999,810.00	\$ -	\$ -
Owner Construction Contingency	\$ 714,150.00	5.00%	\$ 714,150.00	\$ -	\$ -
Security	\$ 167,111.10	1.17%	\$ 167,111.10	\$ -	\$ -
Telecommunications (voice & data)	\$ -	0.00%	\$ -	\$ -	\$ -
Inspections - Special construction and General	\$ 71,415.00	0.50%	\$ 71,415.00	\$ -	\$ -
Commissioning Energy services	\$ 142,830.00	1.00%	\$ 142,830.00	\$ -	\$ -
AV and Broadcast Media.	\$ -	0.00%	\$ -	\$ -	\$ -
Furniture	\$ -	0.00%	\$ -	\$ -	\$ -
Total Owner Project Costs	\$ 2,095,316.10	32.18%	\$ 2,095,316.10	\$ -	\$ -
Total Project Costs	\$ 16,378,316.10		\$ 16,378,316.10	\$ -	\$ -
All costs include escalation to the midpoint of Construction					
Other Owner Project Costs					
Project Management	\$ 245,674.74	1.50%	\$ 245,674.74	\$ -	\$ -
Design Guidelines/Master Plan/HSR	\$ -	0.00%	\$ -	\$ -	\$ -
CM Preconstruction	\$ -	0.75%	\$ -	\$ -	\$ -
Relocation moving costs*	\$ -	0.00%	\$ -	\$ -	\$ -
General Expenses	\$ 24,567.47	0.15%	\$ 24,567.47	\$ -	\$ -
Total Owner Costs	\$ 270,242.22		\$ 270,242.22	\$ -	\$ -
Total Program Costs	\$ 16,648,558.32		\$ 16,648,558.32	\$ -	\$ -
Total Estimated Cost	\$ 16,648,558.32		\$ 16,648,558.32	\$ -	\$ -
Funding Request			\$ 16,648,558.32	\$ -	\$ -



SECTION FIFTEEN: BUDGET ESTIMATE

Benchmarking

As a way of double checking the estimate, benchmarking is used to compare actual costs from completed capitols to the proposed estimate.

The complete project actual costs adjusted based upon the scope of the project. For example, in Missouri we do not need to worry about underpinning for base isolation. The scope of the Utah State Capitol has been adjusted to remove that portion of the cost associated with the base isolation.

Following these scope adjustments the costs normalize by escalating them to the current year, in this case that would be 2019. From that point forward we escalate them all to the midpoint of the proposed construction.

The Midpoint of construction for:

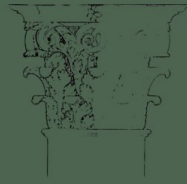
- the Capitol is 2025
- the Extension to the north and the south is 2023.

This allows for the most accurate picture of how the costs compare per square foot cost to all the other capitols for the similar scope. The only difference is the square foot of the building and the associated complexity of the project.

The smaller the capitol, for example Wyoming at 129,000 GSF, will have a higher cost/square foot than say a Minnesota at 387,000 GSF. Likewise the complexity of the project such as Wyoming where the building was constructed over three different time periods vs. Missouri that was built all at once limiting the structural, mechanical and decorative solutions.

The proposed \$900/square foot is well within the appropriate range that we would expect for the Missouri Capitol costs.

State Capitol	Escalated to 2019	Escalated to 2025	Square Footage	Escalated \$/sf
Kansas Capitol	\$281 Million	\$ 353,808,000.00	240,227.00	\$ 1,472.81
Michigan Capitol	\$109 million	\$ 138,574,800.00	225,000.00	\$ 615.89
Ohio Capitol	\$215 million	\$ 271,252,800.00	273,000.00	\$ 993.60
Texas Capitol	\$261 million	\$ 328,746,600.00	360,000.00	\$ 913.19
Utah Capitol	\$178 million	\$ 224,078,400.00	310,000.00	\$ 722.83
Virginia Capitol	\$115 million	\$ 144,471,600.00	117,000.00	\$ 1,234.80
Wisconsin Capitol	\$238 million	\$ 299,262,600.00	240,000.00	\$ 1,246.93
Wyoming	\$136 million	\$ 171,007,200.00	129,500.00	\$ 1,320.52
Minnesota	\$282 million	\$ 355,282,200.00	379,000.00	\$ 937.42
AVERAGE	\$202 million	\$ 254,053,800.00	252,636.33	\$ 1,005.61
Missouri Capitol		\$ 356,854,640.15	427,750.00	\$ 834.26



SECTION FIFTEEN: BUDGET ESTIMATE

Benchmarking

The benchmarking for the extension to the north and the south or underground portion of the project is a bit more challenging. In comparing it to Texas and Wyoming it is clear that while the scope is closer to Texas in many ways, the costs appear to be extremely low and would indicate that the work was done during a low point or downturn in the construction market.

With the current market conditions we believe that a more accurate number is similar to Idaho who's work was done during a high point in the market.

The Virginia Extension is very high in cost, this is largely due to the small size of the extension and the very difficult aspect of construction and the sensitivity of working on Thomas Jefferson's historic building.

The Wyoming Extension is unique in that it is built upon an existing foundation and within an existing structure where the top was removed yet the sidewall were retained. Therefore the cost per square foot is lower due to the reuse of these major structural elements.

Costs of Missouri Capitol Extension

The proposed cost of the Missouri Extension is higher than the represented norm for three reasons:

1. Excavation of Rock - we have worked with local contractors to develop a rough order of magnitude estimate of both the quantity and cost that would be required to develop the proposed extensions.
2. Multiple finish packages will need to be developed to provide for both the swing stage phase and the final occupancy stage. During the renovation of the Capitol the extensions will be used primarily as

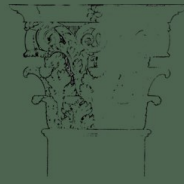
State Capitol Extension	Escalated to 2019	Escalated to 2022	Square Footage	Adjusted \$/sf
Texas Extension	158.2 Million	\$ 207,370,800.00	667,000.00	\$ 310.90
Virginia Extension	\$149.6 Million	\$ 167,637,679.48	27,000.00	\$ 6,208.80
Idaho Extension	40.4 Million	\$ 45,266,457.60	50,000.00	\$ 905.33
Kansas Extension	\$31 Million	\$ 34,726,962.82	53,400.00	\$ 650.32
Wyoming Extension	\$17 million	\$ 18,590,957.99	41,700.00	\$ 445.83
Average	\$66.4 million	\$ 94,718,571.58	\$ 167,820.00	\$ 564.41
Missouri		\$ 148,362,114.46	163,500.00	\$ 907.41

swing space for the Governor and legislature. We will only be able to accommodate a portion of the legislature at a time. The current proposal is to compress the temporary offices to those that are similar to ones found on the mezzanines, currently in the Capitol, in order to provide for as many members as possible in these temporary quarters.

Once the Capitol renovation is complete, then the interiors of the extension will need to be reconfigured to the final design. This cost has been calculated

into the total which would raise the amount by roughly 75 to 90 dollars a square foot.

3. Construction on the north and the south of the Capitol will impacts the cost due the coordination and impact of exiting infrastructure on both sides of the Capitol.



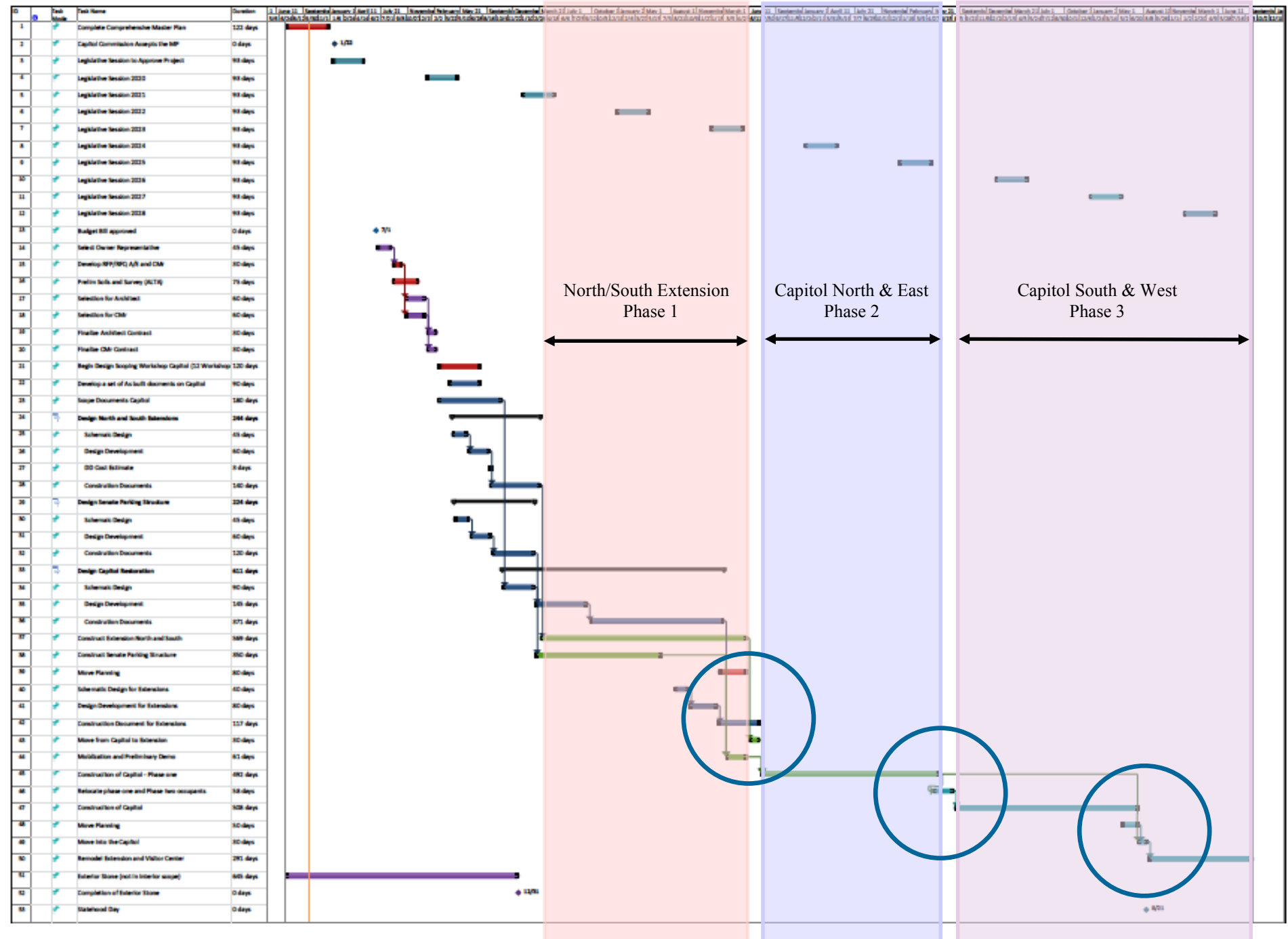
SECTION SIXTEEN: SCHEDULE

Activities

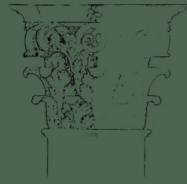
General

Schedule

- The schedule for the restoration of the Missouri Capitol has been developed around the recommendation that the procurement process will be built around CM @ Risk or CMr process. This process will allow for multiple bid packages. MOCA proposes the following:
 - Bid Package 1 - North and South Extension
 - Bid Package 2 - North and East Phase Capitol
 - Bid Package 3—South and West Phase Capitol
- The construction of the Parking Structure can be either incorporated into the Capitol Construction planning and the use of the CMr or the Parking Structure can be separate from the Capitol project and could be constructed using a more traditional (design/bid/build) procurement method which the office of Administration is familiar with. It is an independent project that is only connected to the Capitol project. Due to the removal of parking in the basement and site.
- The schedule has also been designed to allow the CMr to manager the flow of the work to minimize any down time associated with the phases of work.
- The schedule has been developed based upon the concept that approximately 85,000 sf of the north and south extensions space will be used as swing space during the restoration of the Capitol.
- The schedule has been developed to allow the Executive and Legislative Branches to remain in the building while the Capitol is restored. This will be accomplished by closing half of the building for demolition and restoration while the other half of the building is open.
- The work in the Chambers (Senate and House) will need to be carefully organized by the CMr, such that the Chambers while under restoration will be available for



MASTER PLAN



SECTION SIXTEEN: SCHEDULE

Activities

session prior to restoration being completed. We anticipate that these chambers will be completed in their associated phase.

The proposed schedule recommends that the restoration of the Capitol be completed in three phases. In between each of the three phases are activities that will require both the Executive Branch and the Legislative Branch be prepared in advance to move expeditiously to minimize the downtime between phases. These areas are highlighted on the schedule with a blue circle.

In each of these three circles, planning for the move will be critical. There will be many critical activities from working with agencies or departments to identify office space to relocate to for those who will leave the Capitol for a time, to coordinating the actual move and duration. The reason this is critical is that the contractor will be waiting on the State before they can begin work on the following phase. Therefore, delays, lost time, or unanticipated problems with the relocation can impact both the schedule and the project cost.

We recommend that these transition points between construction phases be carefully planned, analyzed and efficiently managed as possible. Lean Construction techniques offer the best opportunity to accomplish this. We recommend that the Owner Representative, the architect, CMr and MSCC use what is known as the “Last Planner System” which has been shown to reduce work time by between ten and fifteen percent. This is accomplished by a series of planning meeting where pull planning is used to identify work and schedule commitments in a 100% collaborative environment.

