

Section 8 : Sequence of Implementation & Schedule

8. Sequence of Implentation & Schedule

PROJECT SCHEDULE

The required renovation and restoration work is highly invasive and disruptive. It requires:

- Erection of both exterior and interior scaffolding
- Opening of walls, ceilings, and floors
- Trenching or excavation below slabs at the basement to create pathways for utilities
- Removal and reinforcing of structural systems to insert mechanical equipment and elevator shafts
- Possible insertion constructing new stairs, etc.
- Extensive cutting and patching of interior ceilings, walls and floors
- Use of scaffolding in the interior to access all surfaces of the monumental space

Very few states have elected to perform this type of work while the building has remained in use, generally with construction being limited to brief periods when their respective legislatures are not in session.

This approach results in multiple phases of construction lasting for several years and, in some cases, decades. Activities and costs escalate exponentially as each phase includes separate mobilization and demobilization; and there is no continuity in the coordination and quality of the work since each phase is bid separately.

While this may be perceived as a way to minimize disruption of the government, in virtually all cases, it leads to the exact opposite, i.e. construction fatigue and very expensive construction.

After careful consideration, the State has very wisely elected to vacate the Capitol for the duration of the construction.



Figure 8.1: Wyoming State Capitol Building Under Construction, ca. 1889.



This prudent approach would ensure that the project:

- Is not burdened by complicated construction logistics, such as special protection, premium off-hours labor, regular work stoppages, etc., thus being able to perform the construction work in the most efficient and cost effective manner possible
- Overall construction duration is minimized
- Construction costs are contained
- Overall quality of the project remains high and consistent from beginning to end

With this important premise in place, i.e. the building will be vacant during construction, some additional critical factors and parameters needed to be evaluated and included in overall planning of the project:

- Exterior masonry repairs require that the work is performed between 38 °F and 90°F. Exterior painting also needs to be undertaken between 40°F and 90°F. Relative humidity must remain below 90%. While relative humidity will not be a major concern in Cheyenne, temperature will be.

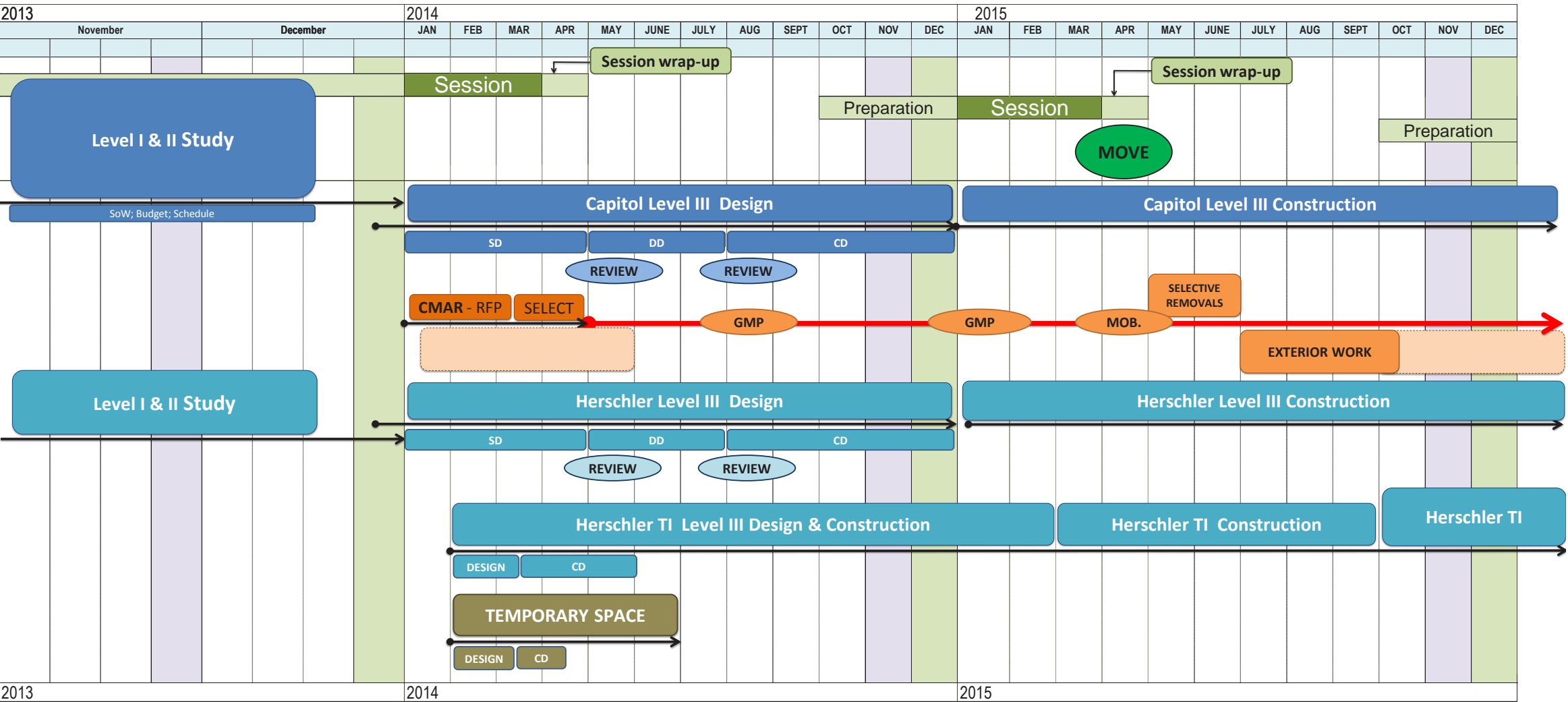
Exterior work should ideally be planned and limited to the period between **late March** [the earliest] and early **November** [the latest] or **a maximum of eight [8] months at best**. Given the amount of work needed to be performed on the Dome and the entire exterior of the building, it is forecasted that two full construction seasons – or windows of opportunity – would be needed.

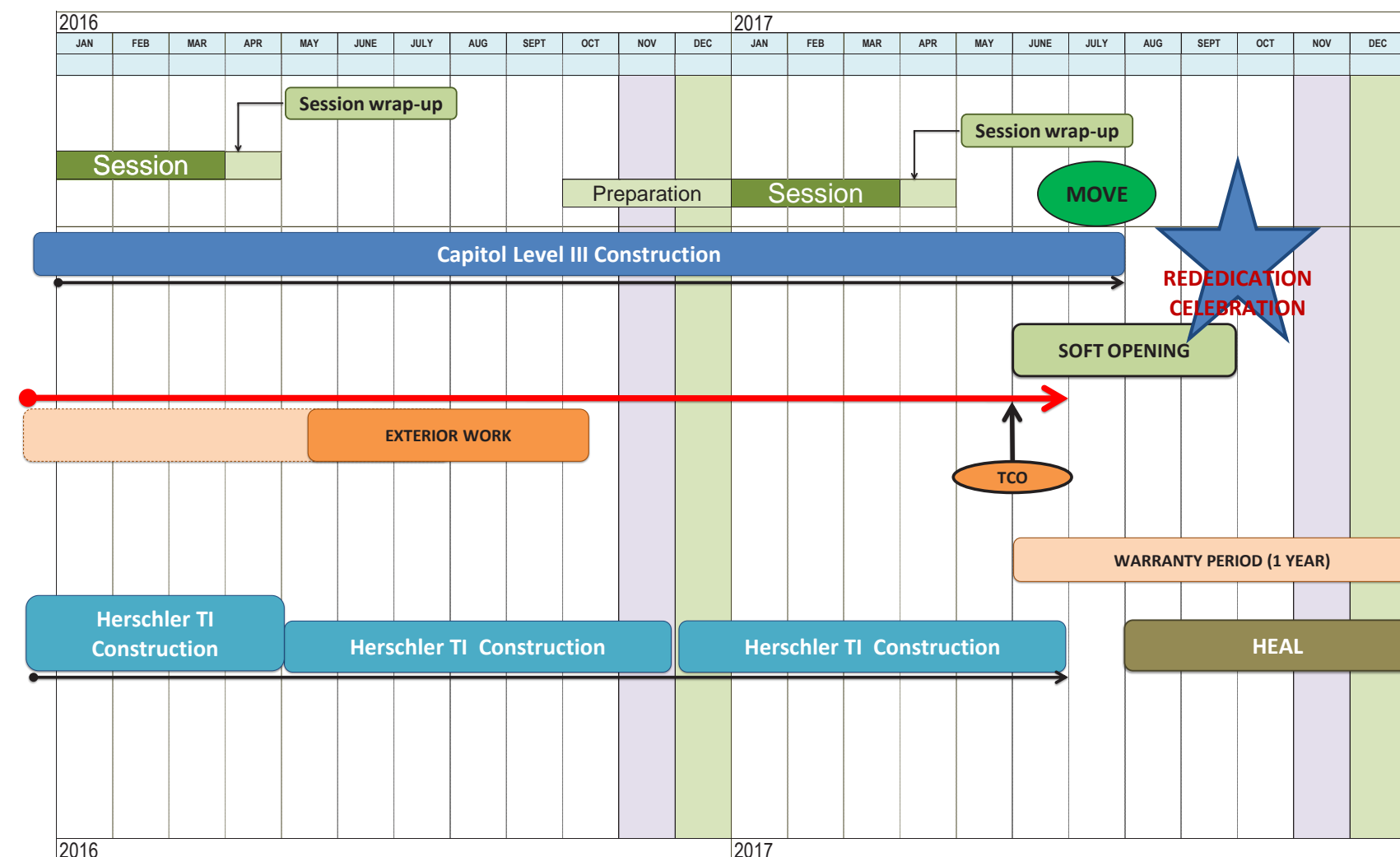
The condition of the building and the state of the building infrastructure indicate that the work should not be delayed further unless costly temporary repairs are done, which have no long term value.

The proposed schedule, while it appears aggressive, is carefully planned to address all of the above issues: to reduce the overall duration of the project to the extent possible and to optimize the value of the investment the State will make to protect its best interests.

Based on the above assumptions, the Capitol will be unoccupied for two sessions.

Wyoming State Capitol Complex - Proposed Project SCHEDULE





Schedule to Date:

- Level I & II Study for the Capitol Restoration & Renovation March 2013
- Level I & II Study for the Connector and the Herschler Building September 2013
- Preliminary Findings / Report for the Capitol November 2013
- Preliminary Findings / Report for the Herschler December 2013
- Authorization to Proceed with Preliminary Design Work January 2013

Key Dates to Be Considered and Confirmed During the 2014 Legislative Session:

- Level III Design and Construction Funding February / March 2014
- Notice to Proceed with Level III Work March 2014
- Design and Construction Documentation January to December 2014
- Construction [Approximately 30 months] March 2015 to August 2017
- Furniture, Fixtures and Equipment Installation August / September 2017
- Re - Occupy Capitol [early date] Late September 2017
- Preparation for 2018 Session 3 months

An important component of this overall schedule is the selection of a qualified Construction Manager who will participate in the Design process and help organize, sequence and execute the work. The Design Team will prepare a full set bid documents for all the required work and the Construction Manager will ensure that the bid package remains within the project budget through the Development of a Guaranteed Maximum Price [GMP] and will determine the sequence the work and all project logistics. This schedule includes work related to the Herschler building as presented in *Volume IV - Herschler Supplement*.

This schedule has the potential of completing the project in time for the Centennial Celebration of the Completion of the Capitol [1917 to 2017], a desired goal expressed by the Joint Legislative and Executive Task Force.





THIS PAGE INTENTIONALLY LEFT BLANK



Section 9 : Budget

PROJECT COST SUMMARY				
Capitol Renovation		\$113,000,000	44%	\$978 / SF
Herschler & Connector		\$86,000,000	33%	
Connector and Central Utility Plant [CUP]	\$25,800,000			\$458 / SF
Herschler Renovation [Including Site & Parking]	\$48,100,000			\$134 / SF
Herschler Addition	\$12,100,000			\$160 / SF
Estimated Construction Costs		\$199,000,000	77%	\$329 / SF
Temporary Accommodations Allowance		\$2,000,000	1%	
Furniture, Fixtures & Equipment Allowance		\$8,500,000	3%	\$14 / SF
Estimated Project Costs		\$29,500,000	11%	\$49 / SF
State’s Project Contingency		\$20,000,000	8%	\$33 / SF
Total Estimated Project Costs		\$259,000,000	100%	\$428 / SF

PROJECT COST

In general, cost estimating at Level I [Reconnaissance] and Level II [Feasibility] Studies is performed with generally high unit prices and assumptions and contingencies, since key decisions will be made and finalized during the Level III Design Phase.

Since the project however involves the renovation and restoration of a National Historic Landmark, the HDR / PDP / Plan 1 team proposed and undertook a robust, focused and highly detailed Level I and II Study that utilized state - of - the – art technology and scientific analysis, specialized expertise in the treatment of such buildings and expert cost estimators who have detailed cost indices for projects involving historic buildings.

The Project Cost Estimate was based on the following:

- Extensive research on the construction of the Capitol Building, as well as the Connector and the Herschler Building
- Intensive surveys and non – destructive evaluation [NDE
- Highly detailed design studies
- Cost indices from several similar construction projects undertaken by the team and cost estimators over the last ten years
- The procurement structure of the State of Wyoming
- The use of local labor and out-of-state labor for specialized trades
- A specific sequence of implementation
- Prudent contingencies for open items
- Proper escalation factors based on today’s market data
- The current state of the building and its continuing deterioration until construction commences in 2015
- The mid-point of the project completion being in 2016 when all construction and procurement contracts will be in place and only occasional and minor items will be open
- A comprehensive list of hard construction costs, soft construction costs [design and construction fees]
- Moving and relocation costs
- A project contingency for the State to ensure that key future decisions can be covered by the current project cost estimate
- The assumption that the renovation / restoration costs for the Capitol and those for the renovation / retrofit of the Connector and the Herschler Building are based on a minimum of a 30 year life expectancy
- Stately and dignified environment suitable for a Capitol Complex that would be based on the history, and tradition of the State of Wyoming
- Guidance by the Joint Legislative and Executive Task Force
- Achieving a long term value for the State of Wyoming

The cost estimating process, guiding principles, factors used and level of detail have produced a reliable Total Project Cost Budget that would allow the State to safely implement this project.

This budget is presented as on integrated project and includes work related to the Herschler building as presented in *Volume IV - Herschler Supplement*.



THIS PAGE INTENTIONALLY LEFT BLANK



Section 10 : Summary

The Wyoming State Capitol is a National Historic Landmark of exceptional architectural, cultural, and historic significance. Constructed in a three-phase sequence [1888, 1890, and 1917], it has housed the Legislature, the Governor’s Office, and other elected officials for over 125 years.

Today, the Capitol has extensive and multiple deficiencies that are **a significant risk to life safety** and to the long-term protection of this venerable resource and its contents.

The Capitol lacks the required **smoke detection, fire suppression, and smoke evacuation systems** necessary to create tenable conditions for the safe evacuation of the building and its protection in the event of a fire.

In addition to the lack of these essential systems, all other infrastructure and building systems are **failing, obsolete, and inadequate**. This includes heating, ventilation, air conditioning, electrical, fire alarms, plumbing, and other systems.

There are also significant code and ADA compliance deficiencies throughout the entire building which need to be corrected, to bring the entire building to contemporary code and building performance standards.

From the outset of the project, it became clear that the Capitol also has major space issues that impair the open participation of the citizens of Wyoming in the political process:

- Committee Rooms, the most critical space that allows the engagement and participation of the public in the political process, are grossly inadequate at several levels.
- Space use and space planning have significant deficiencies as well, including:
 - Overall organization and adjacencies
 - Logical layout and clustering
 - Hierarchy of spaces and equity in assigned work areas
 - Meeting rooms

In other words, the Capitol is in need of **a comprehensive planning and space use rehabilitation** that would allow the building to meet contemporary standards of building performance, and be a 21st-century working Capitol for the benefit of all citizens of the State of Wyoming.

Finally, the study concluded that the exterior building envelope is also in need of a comprehensive restoration program, from the top of the dome to the base of the masonry walls.

The findings, i.e. that the building is in critical need of a comprehensive exterior and interior rehabilitation and restoration, is something that the State of Wyoming was aware of and has been contemplating for several years. The study demonstrated:

- how acute the conditions are, and
- why such a project should not be deferred any further nor be approached in an incremental way.

The study also concluded that the Capitol has serious space-use deficiencies. Correcting these deficiencies would require that additional space be found outside the footprint of the building. The driving factors are:

- To meet current code requirements, new service areas would be required for mechanical rooms and spaces, electrical closets, pathways and systems, code and ADA compliant restrooms, etc. This would result in **a net loss of 10,576 net assignable square feet or useable space**.
- Addressing the space needs of the Capitol would require the creation of properly-sized and supported committee rooms. Sufficient space does not exist nor can be created within the footprint of the Capitol, to provide all of the needed rooms without significant structural risk an cost, not to mention major alteration of the historic design of this unique National Historic Landmark.
- The total program request for the Capitol is 89,480 net assignable square feet. This request exceeds the proposed available space in the Capitol by approximately 39,856 net assignable square feet. This need should be fulfilled as close to the Capitol as possible.

Recognizing this critical dimension, the State of Wyoming engaged the Design Team to prepare a Level I / Level II study of space utilization in the connector area between the Capitol and the Herschler building, and/or the Herschler building, itself. The study concluded that the connector and the Herschler building offer unique opportunities to meet the needs of the Capitol occupants, as well as additional benefits for temporary space during the construction phase of the project, and additional long-term space for consolidating other users currently occupying leased space scattered around the city of Cheyenne.

The combined Capitol / Herschler Level I / Level II Study proposes:

- A \$259 million program that would address all critical needs of the Capitol.
- A comprehensive rehabilitation and restoration of the Capitol and its site.
- A re-envisioned Connector that provides appropriate committee rooms and support to make Wyoming government accessible to its citizens.
- Updating 189,693 net assignable square feet in the Herschler building for efficient, flexible state office.
- An addition to the Herschler building of approximately 56,510 net assignable square feet.
- A Central Utility Plant [CUP] that would provide secure and necessary infrastructure to support the new loads of the combined Capitol / Connector / Herschler complex.
- A furniture, fixtures, and equipment program for the renovated and restored areas of the complex.

The proposed schedule anticipates that Level III [Design and Construction] would be completed for full occupancy of the Capitol and Herschler building in the fall of 2017.





HDR

HDR Architecture, Inc.
1670 Broadway
Suite 3400
Denver, CO 80202
303.764.1520

PDP

Preservation Design Partnership, LLC
30 South 17th Street
Suite 1301
Philadelphia, PA 19103
215.842.3388

PLAN

ARCHITECTS

Plan One/Architects
4020 Dewar Drive
Suite A
Rock Springs, WY 82901
307.352.2954