National Park Service
U.S. Department of the Interior

Prince William Forest Park
Virginia



Prince William Forest Park
Camp #4 Recreation/Theater Building

Historic Structure Report • *100% Draft* • *October 21, 2022*

US Department of the Interior • National Park Service • National Capital Region • Resource Stewardship and Science • Washington, DC



This Historic Structure Report is available in two formats – a printed version for study at the park, the National Capital Area headquarters offices, and other repositories, and in electronic format (PDF) through the NPS Data Store and NPS Technical Information Center.

Historic Structure Report

Prince William Forest Park
Camp #4 Recreation/ Theater Building



Prepared by:

MTFA Architecture, PLLC

with

McMullan Consulting Engineers

2RW Consultants Inc.

Jensen Hughes

US Department of the Interior • National Park Service • National Capital Region • Resource Stewardship and Science •Washington, DC
2022

As the Nations's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under US administration.

US Department of the Interior
National Park Service
Resource Stewardship and Science
Washington, DC

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Cover Photo: Camp #4 Recreation/Theater Building, interior view looking east, 2021.

Title Page: Camp #4 Recreation/Theater Building, exterior view looking north-west, 2021.

Prince William Forest Park

Camp #4 Recreation/Theater Building

Historic Structure Report

Approved:

Superintendent, Prince William Forest Park Date

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Foreword

We are pleased to make available this Historic Structure Report, part of ongoing efforts to provide comprehensive documentation for the historic structures in Prince William Forest Park. This body of knowledge provides historical information about the origin of this unique structure, one of the only remaining physical remnants from the occupation of the former Chopawamsic Recreation Demonstration Area by the Office of Strategic Services. This document will provide park management with information for the use, preservation, and protection of this resource. We would like to thank the authors and technical experts from MTFA Architecture, PLLC, McMullan Consulting Engineers, 2RW Consultants Inc., and Jensen Hughes for the preparation of the this report.

The report was also made possible through the contributions of a number of individuals from the park and the National Capital Regional Office:

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Executive Summary

This Historic Structure Report was produced for Prince William Forest Park and the National Capital Regional Office to deepen the park's understanding of the history of the building, and to develop preliminary approaches to reusing the structure as a Theater. Maintaining the building in active use is preferred according to National Park Service policies, Cultural Resource Management Guideline (NPS-28), and Executive Order 130006: Locating Federal Facilities on Historic Properties. This HSR will guide further treatment and use of the building.

A Historic Structure Report is the National Park Service's primary guide to the treatment and use of a historic building as is required by Cultural Resource Management Guideline (NPS-28). It is prepared to identify and minimize the loss of character-defining features and materials and provides a basis upon which to address anticipated management objectives. This HSR provides current understanding of the Prince William Recreation/Theater Building and meets the following goals: providing a historical background for the building; supplying a current physical description and timeline for changes to the building; identifying character-defining features for the building; document the condition of the building; and providing treatment recommendations for the reuse of the building as a theater in good condition.

The history, building chronology and technical evaluations provide an understanding of the integrity of the Recreation/Theater Building. This information is valuable for guiding the sustainable use of the Theater by offering research and insight to park management. The contents are used by the park when scoping new projects that complement resource protection and preservation goals. This HSR informs management and directs planning and construction alternatives.

The New Deal Chopawamsic Recreation Demonstration Area (later renamed Prince William Forest Park), a federal park with several self-contained camps as well as hiking and other recreational opportunities began construction in 1936. As a part of that effort, in the final months of 1938, the Prince William Theater was built, providing the only sizable interior assembly space in the park. In 1943, during World War II, the federal government reassigned the park to the Office of Strategic Services, and the Theater came to serve

the training and recreation needs of this new group. Following the war, the park and the Theater returned to their intended recreational use.

METHODOLOGY

MTFA Architecture, Inc. (MTFA) collaborated with an experienced team to complete this HSR for Camp #4 Recreation/Theater Building. The team includes the following disciplines and consultants:

Architecture	MTFA Architecture
Structural	McMullan Consulting Engineers
Plumbing	2RW
Mechanical	2RW
Electrical	2RW
Fire Protection & Life Safety	Jensen Hughes
Cost Estimate	RIB US Cost

In order to appropriately evaluate the building, the team began their assessment by reviewing existing documentation made available by NPS staff. Each discipline utilized drawings or reports that would aid in identifying system repairs, rehabilitations, additions, or alterations to the Recreation/Theater Building. The team reviewed existing reports, photographs, and plans to note condition locations and to understand the building's evolution. Materials supplied by NPS were supplemented with additional research in archives and repositories such as the Library of Congress and National Archives Records Administration. After reviewing all sources, MTFA developed a historic context and building history for the Recreation/Theater Building. These efforts enabled the consultant team to perform field work with an informed history of the building.

Upon entering the field, the consultant team broke into smaller subconsultant specialties to examine specific building systems and components. The teams conducted investigations of the building. Depending on each team's specialty and schedule, investigations occurred over a period of months in March 2021 through April 2021.

Each team's specialty determined the depth of the investigation. As a baseline, all investigations required the consultant team to visually assess and document

with photographs and field notations. Many of the specialties required physically examining by measurement or touch to evaluate the existing system's condition or level of deterioration. Select teams required in-depth investigations of hard-to-reach areas of the building such as the foundation or roofing systems. Survey was limited to what was visible without destructive investigation or the use of ladders or lifts. When examining each of these areas, the consultants were overseen or aided by NPS staff.

Following survey work, all disciplines evaluated their findings and, when necessary, compiled observations to be circulated to the various consultants for collaboration. Next, the team worked on synthesizing their photographs, notes, and drawings into the report. Each team provided a condition assessment and recommendations for their specific area. Results of the research, identification of character-defining features, and the condition assessment are used to provide treatment recommendations, which will guide the maintenance repair, and preservation of the Recreation/Theater Building. The condition assessment contains photographs, a narrative description of findings, a condition rating, and an estimate of the remaining life. The recommendations contain suggested changes for a building system or component as well as a proposed treatment drawings with additional information.

CONDITIONS ASSESSMENT SUMMARY

The condition assessment of the Recreation/Theater Building was conducted using the NPS Facility Maintenance Software System (FMSS). FMSS is organized using the Uniformat II method for describing various assets and determining their Qualitative Condition Rating and their Maintenance Deficiency Rating. The condition assessment was based upon visual observation and limited, non-invasive investigative methods. Once identified, each building feature is assessed using the Qualitative Condition Rating system to determine if each feature is in Good, Fair or Poor condition. Each feature is also assigned a Maintenance Deficiency Rating of Critical, Serious, or Minor which allows for the development of immediate, short-term, and long-term treatment strategies. Definitions of these terms can be found at the beginning of the Condition Assessment section of the report.

EXTERIOR

Overall Condition Rating: Poor

The asphalt shingle roof of the Recreation/Theater Building has suffered from persistent leaking for some time. Park maintenance staff fix leaks as they develop. These measures manage the condition, but a new roof is required to halt the leaking and provide long-term stability for the structure. There is some siding failure and areas of wood rot. Existing ramps are not compliant with contemporary codes, but in general these other aspects of the envelope are in Good and Fair condition.

Overall Deficiency Rating: Critical

The roof is critical to creating a weather-tight envelope, and this roof has widespread and persistent leaking. Careful and diligent maintenance is keeping these leaks from damaging the historic interior of the structure for now, but the issue will result in the failure of a feature if not corrected within 1 year.

INTERIOR

Overall Condition Rating: Fair to Good

The stair leading from the first floor to the mezzanine does not meet code requirements, but the interior is generally stable and free from ongoing deterioration.

Overall Deficiency Rating: Serious.

If not corrected, within one to three years, the stair poses a threat to the health and safety of users of the building.

RECOMMENDATIONS FOR TREATMENT AND USE SUMMARY

Recommendations for the treatment and use of the Prince William Forest Theater follow the strategies outlined in the National Park Service's 1995 Cultural Resources Management Guideline (NPS-28, see Chapter 8: Management of Historic and Prehistoric Structures).

TREATMENT

Preservation of the exterior and interior provides for the continued maintenance and repair of exterior materials and features. Treatment does not contemplate

any new additions but does allow for the limited and sensitive upgrading of systems and code-required work, including the alteration and addition of stairs and ramps to meet contemporary requirements.

USE

Designed and built to serve as a flexible theater and recreation space for the Cabin Camps at Prince William Forest, the Ultimate Use of the Prince William Theater is to continue that use.

PERIOD OF SIGNIFICANCE

Previous documentation identified the historic district's period of significance as 1933-1943 (1989) and 3800 BC to 1945 (2011). The findings of this HSR determined the period of significance for the Camp #4 Recreation/Theater Building as 1938 to 1972, which encompasses the construction of the building, occupation and use of the building by the OSS, and its modern-day use up to the fifty-year mark.

Administrative Data

Name and Location data:	Camp #4 Recreation/ Theater Building, Prince William Forest Park, 16590 Pleasant Road, Dumfries, VA 22025
Preferred structure name:	Camp #4 Recreation/ Theater Building
Other Historic Names Used:	Recreation Hall and School Headquarters, Building #91
Park:	Prince William Forest Park
Structure State:	Virginia
NPS Region:	National Capital Region
Administrative Unit:	PRWI
NPS Property Number:	3700-0250
Cultural Resource Inventory System - Historic Structures No.:	005335
Square Feet:	3,700 square feet
National Register of Historic Places Status:	Entered
	Emergency Conservation Work Architecture at Prince William Forest Park, 1933-42 (1989), Prince William Forest Park Historic District (2011)
Date:	1989, 2011

National Historic Landmark:	No
Significance:	Contributing
NR Information System No.:	076-0146-0035

List of Acronyms

ABAAS	Architectural Barries Act Accessibility Standard
CCC	Civilian Conservation Corps
CDF	Character-Defining Features
ECW	Emergency Conservation Work
FERA	Federal Emergency Relief Administration
HVAC	Heating, Ventilation, Air Conditioning
IBC	International Building Code
IEBC	International Existing Building Code
IMC	International Mechanical Code
IPC	International Plumbing Code
LEM	Local Experienced Men
MDF	Medium-Density Fiberboard
NARA	National Archives and Records Administration
NEC	National Electrical Code
NPS	National Park Service
NRHP	National Register of Historic Places
OSB	Oriented Strand Board
OSS	Office of Strategic Services
POW	Prisoner of War
PRWI	Prince William Forest Park
PWA	Public Works Administration
RA	Resettlement Administration
RDA	Recreational Demonstration Area
SO	Special Operations
SSU	Strategic Services Unit
WPA	Works Progress Administration
YCC	Youth Conservation Corps

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MAPS

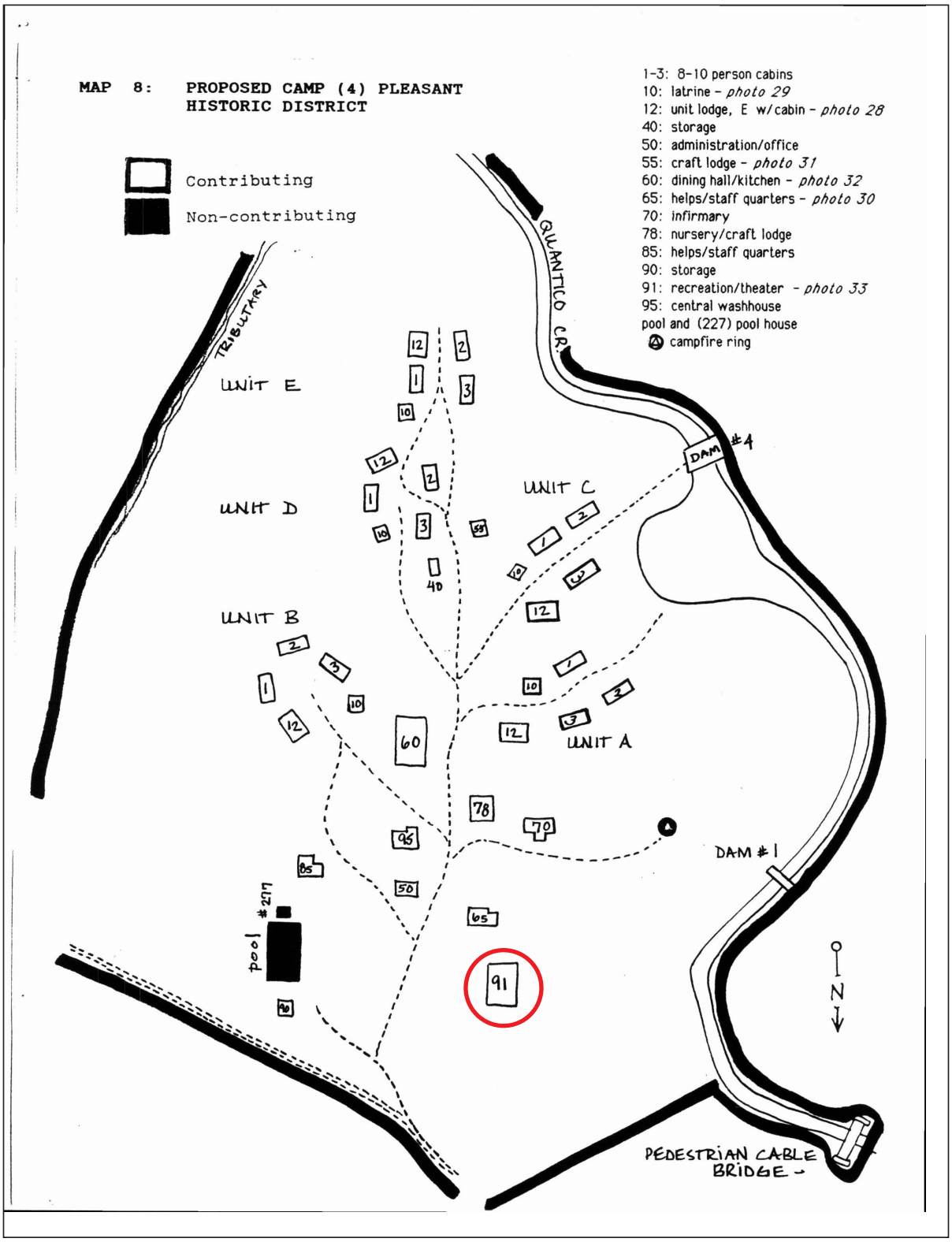


Figure 1. Map of Camp #4 at Prince William Forest Park with Recreation/Theater Building indicated with red circle, 1989

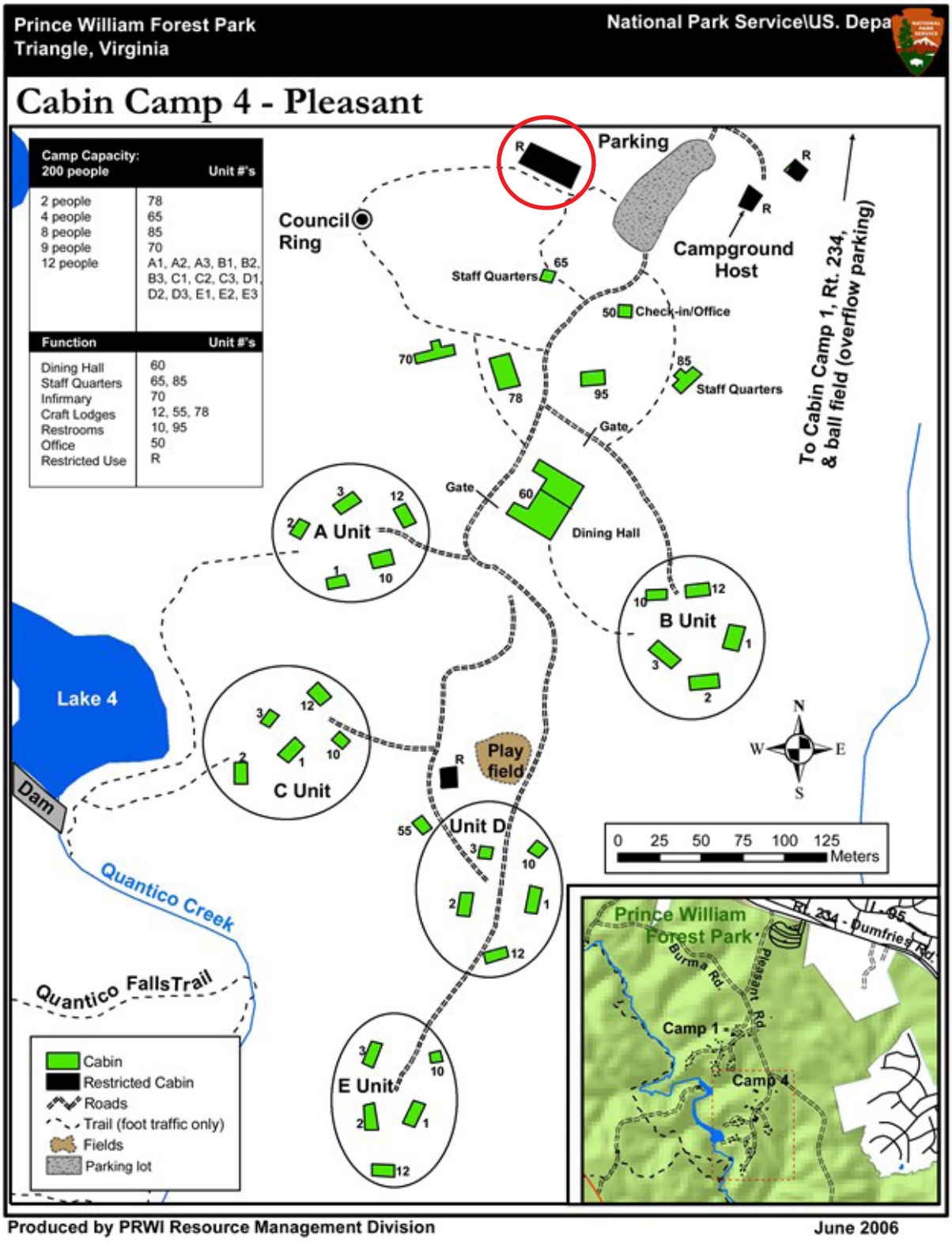


Figure 2. National Park Service Map of Camp 4 of Prince William Forest Park, 2006

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Part I: Developmental History

Historical Background and Context
Chronology of Development and Use
Physical Description
Character Defining Features
Condition Assessment

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Historical Background and Context

LAND HISTORY

Native Americans and Pre-European Contact

From 9000 to 8000 BC, Native Americans inhabited the hills within the current bounds of Prince William Forest Park (PRWI), leaving artifacts and other traces of their lives behind. This era is referred to as the Paleoindian Period and is the earliest fixed cultural era in the eastern United States. As North America experienced the Ice Age during this period, the Paleoindians, who were mobile hunters, traversed their extensive territories ranging approximately 200 miles in diameter. Archaeological artifact data patterns of the Paleoindians include high-quality cryptocrystalline lithic materials for large, fluted spear points, scrapers, gravers, and blades. Though archeologists have identified innumerable Paleoindian-Period sites throughout the Middle Atlantic region, no sites have been found in PRWI.[1]

The earliest evidence of human activity within the park boundaries is a single Palmer spear point datable to approximately 11,000 years ago in the Late Archaic Period, 8000 to 1200 BC. With the waning of the Ice Age and arrival of a modern climate, the Native American population grew considerably and led to the settlement of larger sites. The Late Archaic people settled on the shores of the Potomac River, which they used for food and other resources, while continuing to hunt and gather in nearby woodlands.[2]

The subsequent Woodland Periods from 1200 BC to 1600 AD were an epoch of growth and thriving culture, including the adoption of horticulture, wider production of decorative pottery, and introduction of the bow and arrow. Throughout the Early Woodland Period, Native Americans of Virginia and the Middle Atlantic transitioned from a nomadic lifestyle to an increasingly sedentary one revolving around villages or base camps. Fortified villages dotted the Chesapeake Bay and tributaries, like Quantico and Chopawamsic Creeks. Native Americans created trails to connect these villages and cleared nearly land for agricultural use. Near PRWI, Woodland people utilized the Potomac Path which likely passed through the eastern part of the park and was a precursor to a colonial-era road which later evolved into U.S. Route 1.

1 National Register of Historic Places, "Prince William Forest Park." Triangle, Virginia, National Register #076-0299, 1, 64.
2 Ibid., 67.

Additional Woodland-era paths within the bounds of the park include the former Ridge Road, which ran through the center of the park, as suggested by the presence of Late Woodland pottery found at sites along Quantico Creek.[3]

Early European Settlement

In 1607, English colonists arrived in Jamestown marking the beginning of an era of considerable and devastating changes for the Native Americans and their environment. Though colonists remained distant from inland tribes, the Europeans brought diseases which ravaged the Native populations. Additionally, skirmishes with coastal tribes caused widespread displacement of Natives throughout eastern North America. As the colonists expanded westward, war over land and resources broke out with the remaining tribes.

In the early 1600s, the Doegs, or Tauxenents Tribe, occupied the area of PRWI in a village called Pamacocack along the Potomac River between Quantico and Chopawamsic Creeks. The Doegs' territory extended north along both sides of the Potomac into modern-day Maryland and westward across the Allegheny and Appalachian Mountains. Though also an Algonquin speaking tribe, the Doegs directly abutted the powerful Powhatan Tribe. Additionally, the Doegs never joined the Powhatan Confederacy, an alliance which could have helped them with the English colonists encroaching on their land.[4]

As the English colonists slowly expanded into Virginia throughout the 1620s and 1630s, the Powhatan Confederacy began a series of attacks and subsequent wars in 1644 and 1646. The Second Powhatan War (1646) ended with an English victory and occupation of the upper Potomac region and into the Piedmont to the west. In the 1650s, an English craze for land began with the seizure of thousands of acres of land along navigable parts of the Potomac and its tributaries. Wealthy and well-connected Englishmen claimed and patented large tracts of land, including the site of the Doegs' main village. After 1650, the Doegs moved eastward across the Potomac or northwest into the Maryland and Virginia backcountry to join the Susquehannocks, an Iroquois group.[5]

3 Ibid., 67-68.
4 Ibid., 68-70; Stephen Potter, *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley*, (Charlottesville, Virginia: University Press of Virginia, 1993).
5 Ibid., 68-70; Stephen Potter, Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley,

Initial colonial settlement was rife with land disputes due to an inept and unethical land-patenting system which led to numerous settlers owning the same tracts or ones with overlapping boundaries. Eventually, legislation added a requirement that patenting alone would not guarantee land ownership, but instead the land would need to be "seated" meaning the portion of the land must be cleared and settled with a structure before ownership became legal. Confusion continued well into the mid-seventeenth century as surveys and land patenting revealed overlapping tracts, competing claims, or even abandoned and unoccupied properties. During this time, most of the lands within present-day PRWI belonged to large landowners, such as Governor Samuel Mathews and families by name of Gilson, Morris, Beck, and Hatoft, who lived elsewhere at larger plantations in Virginia or Maryland. The few historical or archeological records of this time suggest that the land was sparsely settled. In the late 1600s, English landowners began to alter their tracts by thinning the dense woods to accommodate roads, some of which followed old Doeg trails. Colonists formed small communities, such as nearby Dumfries, across the late seventeenth and early eighteenth centuries. The area within present-day PRWI became known as hill country and consisted of several roads and plantations, which were worked by their owners, the enslaved people on the property, or leased to tenants. [6]

Farmsteads in the Eighteenth and Nineteenth Centuries

A Shift Towards Owner-Occupied Farms

Until the American Revolution, nearly all land within current-day PRWI belonged to the well-to-do descendants of the first colonial patent holders. The landowners lived at their primary homes located in Virginia or Maryland, and they often leased the land to tenant farmers. By the late eighteenth century, several roads and a handful of plantations existed including: Tacketts Road (now State Route 234) which ran from Dumfries to Tacketts Ford near the Occoquan River; an unnamed road from Dumfries to Elk Run Church (now State Route 619); and a route known as "the road from Samuel Jackson's" to Chopawamsic Creek (now Joplin Road and Route 619). These roads would later come to form the northern, southern, and

(Charlottesville, Virginia: University Press of Virginia, 1993).

6 National Register of Historic Places, "Prince William Forest Park," 1, 68-69.

western park boundaries, respectively. Additionally, Ridge Road ran along Mine Road near Samuel Jackson's to the north bank of Quantico Creek.[7]

During the late eighteenth century, the area remained largely undeveloped with approximately twenty families living within PRWI at a given time. The families most likely constructed their houses with wood frames and ground-set posts or log cabins with shallow brick or fieldstone foundations. Two plantations existed in the area during this time: Bennet Plantation, a collection of frame houses with brick foundations and chimneys; and Westwood Plantation at the upper branch of the South Fork Creek, an imposing brick house with gardens, vast fields, and cabins for the enslaved.[8]

Between 1770 and 1830, the descendants of the first generation of White landowners began to sell off land and most large patents were subdivided into lots of 100 to 400 acres. A majority of new landowners purchased these smaller lots, yet several astute, local farmers were able to purchase swathes of smaller lots to form estates of several hundred acres. A societal shift towards owner-occupied and operated farms created a starkly different culture from the absentee colonial landowner society that preceded it; The new resident farmers and their families lived in modest frame houses on their property, as they were unable to participate in the cosmopolitan practice of keeping a townhouse in merchant centers like Dumfries.

By 1830, at least half a dozen family-owned farms were established in the area. The farms were typically comprised of 2-5 acres and included a house, vegetable gardens, orchards, and livestock. Buildings within each homestead consisted of a two-story frame dwelling with at least two rooms to each floor, a one-story kitchen house, a well, and several outbuildings constructed with split logs or wood frame finished with a whitewash. Smaller-scale subsistence farms were typically more successful than plantations on the land that would become PRWI. This is most likely because residents supplemented

7 Ibid., 70-71.

8 Research did not examine the exact history of the two plantations within PRWI, however, existing histories of the park found that during the land acquisition of 1934-1935 for the development of the Recreational Demonstration Area, over thirty farms had been abandoned in the past fifteen years. Several factors contributed to the families leaving their small-scale and large-scale farms, such as poor farming practices which depleted the land, the closing of the Cabin Branch Pyrite Mine, and the economic downturn of the Great Depression Era. The exact reasons for the abandonment of Bennet and Westwood Plantations remains unknown.

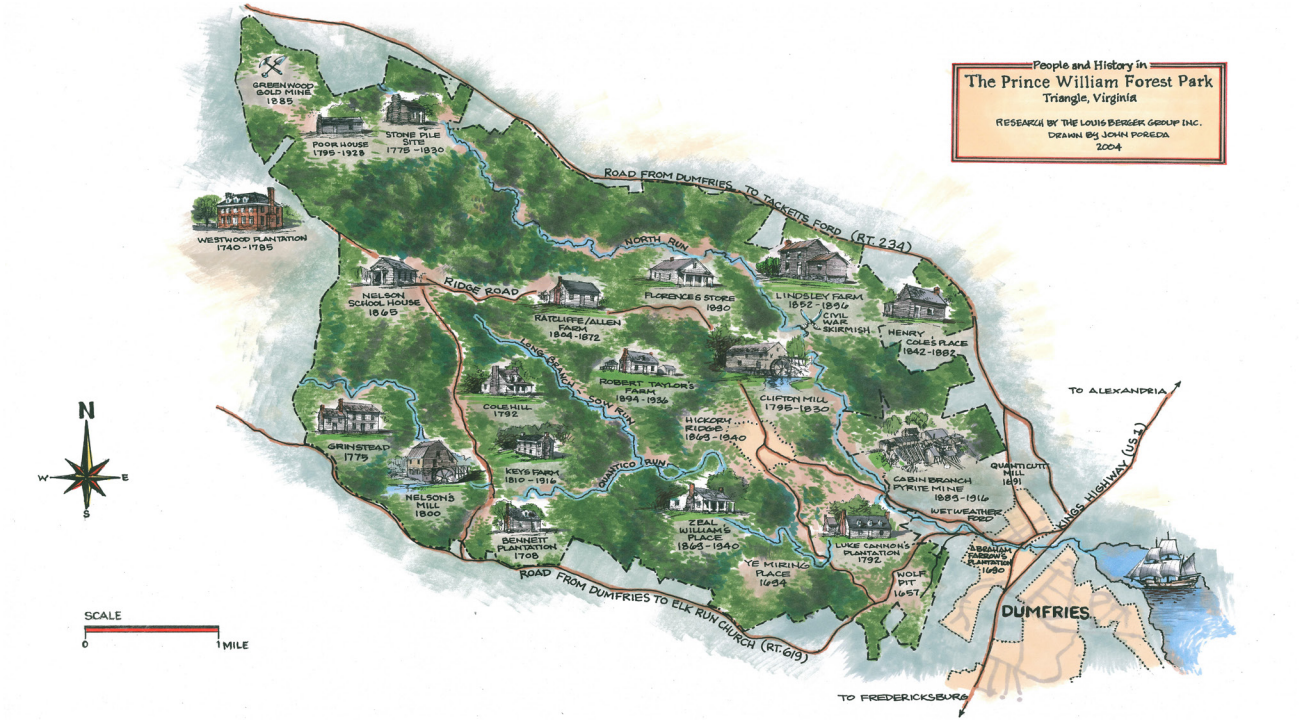


Figure 3. Map illustrating eighteenth and nineteenth century settlements within Chopawamsic RDA. Although not indicated on the map, Batestown was situated between the areas labeled as Cabin Branch Pyrite Mine and Luke Cannon's Plantation. Image courtesy of the National Park Service.

their subsistence farming with outside income as laborers. Male residents would travel daily to towns such as Dumfries, or remain local to work. Later in the twentieth entry, it was not unheard of for a person to travel further to Fort Belvoir, Quantico Marine Base, or the Washington Navy Yard for employment opportunities. Additionally, the land was well-known as being submarginal and could likely only support small-scale farming and not the large-scale yields needed to maintain the plantations. Larger estates, such as Bennet and Westwood Plantations, included two-story frame and brick masonry, respectively, dwellings with foundations and chimneys of local stone, fireplaces on each floor, glass windows, and often a cellar or full basement. Similar to the smaller farms, outbuildings encircled the large houses. Other landscape elements included fields of wheat or tobacco, orchards, vegetable gardens, and often a family graveyard. Archaeological records indicate there are at least forty-five family graveyards within present-day PRWI, as well as evidence of foundations from numerous houses and outbuildings.

Owner-occupied farms persisted throughout the remainder of the nineteenth century, though many changed family ownership from one generation to another. Despite the shift for a majority of owners, a small minority of land continued to be leased by absentee owners. Though many tenant farmers were able to buy affordable parcels and become owners themselves, some tenants chose to remain renters rather than personally take on the risks of land ownership. Regardless of the perceived distinction, little economic difference existed between land owners and tenants. Further, there was little cultural separation as these groups often intermarried.[9]

The Establishment of African American Communities in PRWI

The African American experience of colonial and antebellum Virginia is embedded into the history of Prince William County and PRWI. Parish and county court records indicate that free Blacks have been present in Prince William County as early as 1767. However, tracing generations of Black families presents difficulties as the earliest surviving census documentation dates to 1810 and none of the free persons owned land within the area that would become PRWI. Yet, despite these challenges, prior to the 1810 census it is evident through county court records that African-American families were living in Prince William County as early as 1767. Phoebe Cole and her six children, Robert, Catherine, Thomas, Joseph, Eleanor, and Sarah, are recorded as the first Black family to live within the county in 1767. This specific reference is notable as documentation of a free Black person, especially a woman, living in eighteenth-century Prince William County is rare in the historical record. Available documentation confirms that by the time of the 1810 census, a sizeable mixed-race community lived near Dumfries, and Mine or Batestown Road in the southeastern region of PRWI.[10]

Though no battles, encampments, or other occurrences related to the Civil War took place within the present boundaries of the park, the populations of small communities such as Batestown increased at the conclusion of the war. Located near the present-day eastern boundary of PRWI, Batestown became a popular enclave for recently emancipated African Americans to settle as it had historically been a mixed-race community. Scottish merchant

[9] National Register of Historic Places, "Prince William Forest Park," 72-74.
[10] Ibid, 76.

John Gibson of Dumfies inadvertently established Batestown in 1807 when he left his land and fortune to freed Black woman, Nancy Mackie (McKee) and her seven children, whom she presumably shared with John Gibson. Around 1830, a formerly enslaved woman, Betsy Bates, settled nearby the Mackies at Cabin Branch Creek and present-day Batestown Road. As the Bates and Mackie children grew and began to intermarry in the following decades, the community became known as Batestown in honor of their matriarch, Betsy.

Regardless of the persistent discrimination of the period, the people of Batestown continued to build wealth and accumulate acreage along Cabin Branch Creek. By the mid-nineteenth century, descendants of the early Coles, Mackies, and Bateses purchased acres of fields and unimproved forest, soon becoming the largest African-American landowners in antebellum Prince William County. Black families often maintained ownership of their land across several generations with many descendants still living near Batestown to this day. The African-American landowners typically left family land to their children jointly or divided it evenly amongst them. Although White families also divided land among heirs, the subsequent generations typically sold or exchanged parcels, resulting in increasingly divided and patch-like acreage owned by unrelated landowners. The succeeding generations of Bateses, Mackies, Coles, Kindles or Kendalls sustained the community and culture of Batestown for decades after its establishment. By the end of the nineteenth century, the population of Batestown numbered 150 people.

During the late nineteenth century, a community known as Hickory Ridge developed to the southwest of Batestown. The town grew from property purchased in 1869 by Zeal Williams, the property's first African- American owner. As the land became subdivided among heirs and sold to relatives, the property extended further into the eastern part of present-day PRWI and along Ridge Road. Unlike Batestown's all African-American population, Hickory Ridge was a mixed community of Whites and African Americans. The land remained owned by the original families: the Williamses, Kindles or Kendalls, Reids, and Byrds.

In 1899, Cabin Branch Pyrite Mine opened directly east of Hickory Ridge. Miners extracted iron pyrite which was used to create sulfuric acid. The mine provided the community nonagricultural blue-collar

jobs in an otherwise devastated economy after the Panic of 1893 and the Panic of 1896. A decade later, the population of Hickory Ridge boomed and reached nearly 300. The town included over 150 houses, a company store, machine shop, blacksmith, a small-gauge railroad, Cabin Branch School, an Odd Fellows Hall that functioned as a church, and a small crop field. The agricultural industry of Hickory Ridge supplied the locals with produce as well as markets in northern Virginia and Washington, DC.

As Virginia passed a variety of Jim Crow laws forbidding integrated public facilities, the community of Hickory Ridge acted as somewhat of a safe haven for its African-Americans residents. While segregation laws were upheld elsewhere in the state, life in Hickory Ridge contrasted drastically. Hickory Ridge's African Americans held leadership positions and sufficient sway to disregard Virginia's new laws and the mine remained an integrated work place.[11]

In 1920, the Cabin Branch Pyrite Mine workers went on strike. Union activity and subsequent strikes became a nationwide occurrence across all labor forces. Concurrent to a rise in unions and a demand for a 50-cent raise, pyrite prices continued to drastically drop following World War I. Unfortunately, before an agreement could be made to raise wages, a cheaper source of sulfur was found overseas and the mine closed within the year. Many miners returned to work on their family farms or found work at nearby institutions such as recently established U.S. Marine Corps Base Quantico (1917) located to the south of the area that would become PRWI. Due to a lack of preventative measures at the time of the mine's closing, environmental effects such as acidic runoff into Quantico Creek, occurred throughout the following decades until the Clean Water Act of 1970. [12]

[11] National Park Service, "Cabin Branch Pyrite Mine (1889-1920)," https://www.nps.gov/PRWI/learn/historyculture/cabin-branch-mine.htm.; "Jim Crow to Civil Rights in Virginia," Virginia Museum of History and Culture, https://virginiahistory.org/learn/jim-crow-civil-rights-Virginia.

[12] National Park Service, "Cabin Branch Mine." https://www.nps.gov/prwi/learn/historyculture/cabin-branch-mine.htm.

The New Deal's Recreation Demonstration Area Program (1934-1942)

In 1933, President Franklin Roosevelt's administration introduced the New Deal, a series of programs and reforms to alleviate the economic collapse caused by the Great Depression. In the broadest sense, the New Deal's mission was relief, recovery, and reform to bring economic stability. Throughout Roosevelt's three presidential terms, the New Deal created or enhanced eighty-seven government programs. The New Deal increased the federal government's role in national affairs and imbued an unprecedented level of responsibility for the welfare of the American people. [13]

The policies and programs of the New Deal era touched on nearly every aspect of American life, including reforming bank laws, emergency relief programs, work relief programs, and agricultural programs. Later, the Second New Deal (1935-1936) and Third New Deal (1937-1938) phases evolved to mitigate union protection, the Social Security Act, and programs to aid migrant workers and tenant farmers. Yet, one of the common themes from its inception was President Roosevelt's passion for resource management. Roosevelt felt that conservation, planned land use, and improvement of rural life would be detrimental in bolstering the spirit of the United States, especially considering agriculture was upheld as the "greatest economic success story." Programs such as the Civilian Conservation Corps (CCC), Federal Emergency Recover Agency (FERA), and Public Works Administration (PWA) provided a relief to unemployment while improving the nation's public roads, parks, soil conservation, and reforestation. Additionally, FERA and PWA worked with federal agencies and states to provide grants and loans via a contracting system with the private sector. Roosevelt added more land to the national forests than all preceding presidents, extended the national park system, provided the framework for a subsidized system of state parks, established a soil conservation division within the Department of Agriculture, and reinforced federal control over western grazing lands.[14]

[13] Richard Walker, "The New Deal in Brief," The Living New Deal. https://livingnewdeal.org/wp-content/uploads/2012/01/New-Deal-in-Brief.pdf; Paul Conkin, *The New Deal* (New York: Crowell, 1967), 47-60; The Living New Deal, "Programs Created or Enhanced by the New Deal (Alphabetical)," Department of Geography, University of California, https://livingnewdeal.org/programs-created-or-enhanced-by-the-new-deal/.

[14] Library of Congress, "President Franklin Delano Roosevelt and the New Deal." https://www.loc.gov/classroom-materials/united-states-history-primary-source-timeline/great-depression-and-world-war-ii-1929-1945/franklin-delano-roosevelt-and-the-new-deal/; Conkin, *The New Deal*, 47-48.

The Recreational Demonstration Area (RDA) program emerged out of a planning effort of both existing federal agencies and Roosevelt's New Deal programs. These entities sought to determine how best to improve land which possessed poor agricultural potential, either due to inherent qualities or the result of poor management. The government viewed these submarginal lands as areas which failed to merit the public expense required for the local residents' schools, roads, and other government-provided services. Instead, the New Deal planners believed that the lands could be put to a more valuable public use. Recreation was deemed a viable use for the lands due to the concentration of such property near population centers. Most of the sites eventually selected for the forty-six RDAs were located within thirty-five miles of urban areas.

In 1934, President Franklin Roosevelt established a Land Planning Committee consisting of WPA Administrator Harry L. Hopkins, Secretary of the Interior Harold L. Ickes, Secretary of Agriculture Henry A. Wallace, and W. I. Myers of the Farm Credit Administration. The committee was charged with proposing new programs for conservation and land utilization across the country. The four participating agencies provided coordinators to implement the initiatives from the committee. The Department of the Interior selected Conrad L. Wirth, an NPS employee trained as a land planner and landscape architect, to serve as its committee coordinator. Wirth would become one of the most significant figures in the RDA program as well as in the establishment of Chopawamsic.

Beginning in the late-nineteenth century, the practice of organized camping became increasingly popular in the United States. With the rise of Progressives seeking vast societal reforms, the concept of relief from harsh urban environments through natural settings led various organizations to adopt camping as a practice.[15] The RDA program was also inspired in part by the travels of NPS employee Matt Happuch through Switzerland. Happuch took note of the benefits of recreation in nature camp settings and proposed an initiative to provide similar opportunities to Americans.[16]

[15] Harlan D. Unrau and Frank G. Williss, Administrative History: Expansion of the National Park Service in the 1930s (Washington, DC: Government Printing Office, 1983.

[16] Wirth, *Parks, Politics and the People*, 177.

With the endorsement of the Land Planning Committee, in 1934 FERA directed a portion of its $25 million allocation toward the acquisition of submarginal property to establish recreational areas. Wirth and Huppuch led the site selection process with a focus on properties possessing a range of recreational possibilities and lacking agricultural viability. The sites required natural sources of drinking water and raw materials for construction of the camp. Natural beauty and diversity all while in proximity of metropolitan areas further increased the appeal of a site to the planners. So as to maximize the program's potential, Wirth targeted areas which met these goals and where land could be purchased at a low cost between five and ten dollars per acre.[17] Often these prices were imposed upon the local residents and few landowners were capable of withstanding the pressure of the federal government. As a result, many rural communities were demolished to facilitate increased recreational spaces for the public.

At the outset, all forty-six RDAs were expected to be returned to their twenty-four home states for administration. Between 1935 and 1940, however, a series of legislative changes made the NPS responsible for the disposition of the RDA camps to state control. Ultimately, all but two of the RDAs were returned to the states. Part of Catoctin RDA in Maryland and Chopawamsic RDA were retained by the NPS as national parks. It is possible that one reason Chopawamsic was never returned to state control was the subsequent inability to guarantee access for African-Americans. However, the public reasons given for both parks remaining under federal control were tied to their use by federal agencies based in Washington, DC.[18]

At its core, the RDA program was another of the Roosevelt administration's New Deal initiatives that employed the vast resources of the federal government. The RDA program utilized innovative methods to improve the lives of the public, albeit to the detriment to many of the residents on which parks were built. Similar to many of the other initiatives, it also sought to benefit middle- and lower-income Americans, in this case, by offering recreational opportunities not otherwise available to those in urban areas.

17 Strickland, 5-6; Wirth, *Parks, Politics and the People*, 188.

18 Strickland, 6. The two parks remained under federal control as Catoctin RDA in Maryland was the location of the presidential retreat, Camp David, while various DC-based social agencies continued to use Chopawamsic RDA.



Figure 4. Laborer and resident of Batestown within Chopawamsic RDA, ca. 1936. Photograph courtesy of the Library of Congress.

Becoming Chopawamsic Recreational Demonstration Area

On May 1, 1935, the New Deal implemented a new program, the Resettlement Administration (RA) to serve two purposes: first, to aid poor farmers in moving from small, exhausted plots of land to more fertile locations; and the second, to create recreational areas for the urban poor.[19] Land designated infertile would provide communities with pleasant and accessible recreational areas. In 1935, the land of present PRWI was selected by the Roosevelt Administration as the new site for Chopawamsic RDA. The RDA would provide weekend and day-use recreation where low-income families from Washington, DC could experience nature and participate in healthful living.[20]

In 1935, the land encompassing Hickory Ridge, Joplin, and portions of Batestown was established as the Chopawamsic RDA and on February 19, 1935, FERA, under the guidance of the National Park Service (NPS) and Land Committee, began land acquisition.[21] As part of the effort, the U.S. government identified the forty most underprivileged families of the 150 living within the newly established RDA as candidates for relocation to better land or those "better suited for other occupations." The forty families were identified by the government as having "irregular or no employment or cash income."[22] These people, Whites and Blacks, resided in the communities of

19 National Park Service, "Hickory Ridge, Joplin & Batestown." https://www.nps.gov/PRWI/learn/historyculture/hickory-ridge-joplin-and-batestown.htm.

20 National Register of Historic Places, "Prince William Forest Park," 1; Patti Kuhn and Sarah Groesbeck, *Prince William Forest Park: Administrative History*, Prepared for the U.S. National Park Service by the Louis Berger Group, 2014, National Park Service, Prince William Forest Park Archives, 8-9

21 Kuhn and Groesbeck, *Prince William Forest Park: Administrative History*, 9. In January 1934, the federal government allocated $25 million to the acquisition of submarginal agricultural lands, $5 million of which was allocated for land that would be converted to recreational areas. Later in the year, the federal government transferred the funds to the FERA who would purchase the land with support from NPS. At this time, FERA purchased the land from families within future Chopawamsic RDA. In May 1935, Executive Order No. 7027 created the RA which absorbed FERA. By 1936, NPS assumed complete control of the RA program, including the acquisition and development of RDA projects.

22 Susan Cary Strickland, *Prince William Forest Park: An Administrative History,* Prepared for the U.S. National Park Service, (Washington, DC, January 1986), 10,

Hickory Ridge, Joplin, Batestown, or in small houses scattered throughout the wooded area. Although the Roosevelt Administration had insisted that the people located within the new RDA needed the help of the U.S. government to escape poverty, many of the local people did not consider themselves to be poor and did not want to be forced out of their homes.

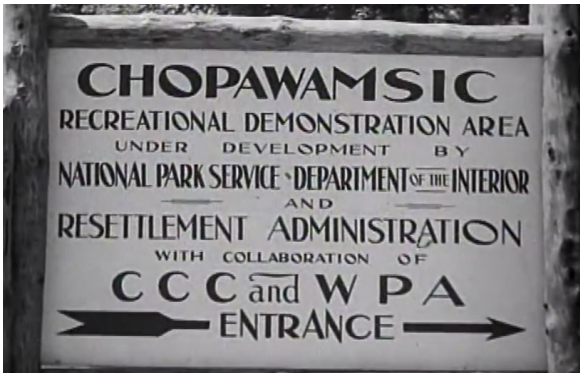


Figure 5. Entrance sign to Chopawamsic RDA. Still images from the NPS film Human Crop.

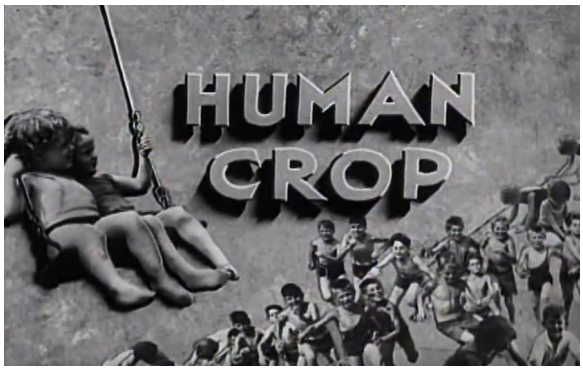


Figure 6. Title Card from the NPS film Human Crop on the Chopawamsic RDA.

The land acquisition process deeply sowed mistrust of the government in the people of Hickory Ridge and Batestown. Landowners felt pressured by the federal government to sell their property to create the RDA or face seizure by eminent domain. Land acquisition records indicate that project manager William Hall and NPS manager of Chopawamsic Ira B. Lykes accepted 115 tracts of land for a total of $138,938.88, a sum approximately $40,000 less than the appraised value of the land.[23] Many owners and their families contested condemnation hearings and, as a result, legal fees depleted their life savings.

Many sold their land without opposition in hopes that the government would provide relief. Yet, the government offered little to no relief to residents of Hickory Ridge and Batestown as they did not qualify as eligible farmers for the Rural Rehabilitation Program or Rural Resettlement funds. Of the approximately 150 families identified within the RDA, only twenty qualified for direct assistance or work relief funds from the Rural Rehabilitation Program or Rural Resettlement funds because they were full-time farmers. The other twenty did not because they were subsistence farmers with a supplemental outside income. Both in spite of and as a direct result of these irrevocable changes, many residents remained in the area. Some stayed to preserve their families and community, while others were offered so little assistance that they were unable to start again elsewhere (Figure 4). [24]

18; Kuhn and Groesbeck, *Prince William Forest Park: Administrative History,* 45.

23 William R. Hall, "Status of Certain Vendors at Chopawamsic with Reference to Payment for Lands Optioned and Accepted by the Government, 5 August 1935," Record Group 79, Records of the National Park Service, Entry P100, Box 124, NARA, College Park, MD; Strickland, *Prince William Forest Park: An Administrative History*, 14.

24 Kuhn and Groesbeck, *Prince William Forest Park: Administrative History*, 46-47.

Chopawamsic RDA was one of the first RDAs established by the NPS and its proximity to Washington, DC provided prominent stature for the park (Figure 5). Conrad L. Wirth, the assistant director of the NPS and a key individual in the creation of the RDA program, called Chopawamsic "a model area." Wirth argued that the park occupied an outsized role in establishing the reputation of the entire program as a success or a failure.[25] The publication of Recreational Demonstration Projects as Illustrated by Chopawamsic, Virginia pamphlet and the short film The Human Crop, both from 1936, offered the program's advocates an opportunity to publicize and explain their efforts (Figure 6). These documents outlined the outstanding natural characteristics of the site while evangelizing the potential of nature to improve the lives of all citizens, especially those denizens of Washington, DC. The pamphlet also claimed benefits for the local community, finding its residents to be living in "dire circumstances" as a result of limited agricultural potential and loss of foresting and mining work.[26] Meanwhile, by repurposing the land for recreational opportunities, the program's advocates argued, Chopawamsic offered the "greatest use to the masses."[27]

Planning of Chopawamsic was underway as the land acquisition and resettlement of former residents proceeded. Project manager William R. Hall was tasked with achieving these goals as well as coordinating with various Washington, DC-based social agencies to establish the design goals. These groups sought an area for group camping which was becoming increasingly rare around the nation's capital. With their direction, Hall with the various professionals and craftsmen employed under the various agencies, including the CCC, Works Progress Administration (WPA), and PWA, began to develop the RDA.

The methods and execution of the Chopawamsic RDA were representative of the program and were utilized across the country during the program's ten years of existence. Arno B. Cammerer, director of the NPS, wrote that the program sought to minimize "intrusions" into the natural landscape and produce "attractive" areas that "appear to belong to and be a part of their

[25] Conrad L. Wirth to Arthur E. Demaray, April 22, 1935, Record Group 79, Entry 100, Box 124, National Archives and Record Administration [NARA], College Park, Maryland.
[26] U.S. Department of the Interior, *Recreational Demonstration Projects as Illustrated by Chopawamsic, Virginia* (New York, New York: Sanborn Map Co. 1936), 4.
[27] *Recreational Demonstration Projects as Illustrated by Chopawamsic, Virginia*, 1.

settings."[28] NPS architect Albert H. Good noted that the "rustic" architecture of the parks sought to avoid "rigid, straight lines, and over sophistication" seeking to invoke "the feeling of having been executed by pioneer craftsman with limited hand tools." He continued, arguing that the approach "achieves sympathy with natural surroundings and the past."[29] The use of local materials rendered in a naturalistic manner supported this conception. The bulk of the workers for Chopawamsic came from the surrounding counties and the building materials were sourced from inside the park boundaries, with the exception of the wood flooring and interior woodwork, which were sourced locally.[30] The planning and design efforts were on going with various agencies maintaining review authority and requiring extensive coordination.

Upon completion of the park, Chopawamsic RDA included five cabin camps capable of hosting 150 campers each. Two camps were located in the central eastern part of the park: Camp 1 (Camp Goodwill) and Camp 4 (Camp Pleasant); Two camps were located at near the southwest boundary of the park: Camp 2 (Camp Mawavi) and Camp 5 (Camp Happyland); and one camp was at the southern boundary near the maintenance area, Camp 3 (Camp Orenda). The cabin camps consisted of clusters of buildings and structures which provided sleeping, kitchen, dining, and lavatory facilities as well as staff quarters and service buildings. Each camp sat on top of a ridge or rise within the park to offer optimal views and privacy. The five camps were situated so that they were isolated from one another. Aside from a network of foot trails, an internal road system did not exist within the park until after World War II.[31]

To ensure the broad impacts of the new recreational programs, the NPS and other agencies established campgrounds for both White and Black children including separate entrances. Chopawamsic RDA became the first park in the program to offer campgrounds dedicated to use by African Americans. Given the park's high profile and its location in the former Confederacy, NPS pursued a biracial use of the park while accepting the segregation practices of Virginia. Though the NPS did not endorse segregation, officials bowed to local and state laws regarding separate facilities for Black and White campers.

28 Arno B. Cammerer in Albert H. Good, *Park and Recreation Structures* (Rahweh, NJ; Quinn & Boden, 1935), 1.
29 *Park and Recreation Structures,* 4.
30 *Prince William Forest Park: An Administrative History,* 19.
31 National Register of Historic Places, "Prince William Forest Park," 8.

NPS worked on a camp-by-camp basis to provide equal facilities for Black campers; however, it is evident that the development of the park followed patterns defined by the New Deal and reflects an era where separate but equal was a justification for segregation. In 1937, Chopawamsic welcomed its first Black campers, a group of mothers and children, to Camp 4. The following year, Camp 1 welcomed a group of African-American boys from a Washington, DC YMCA. Meanwhile, Camps 2, 3, and 5 were reserved for White use. [32]

Civilian Conservation Corps Program (1933-1942)

President Franklin D. Roosevelt introduced the Emergency Conservation Work Act (ECW) in the first hundred days of his administration as a part of his bold New Deal program seeking to support an ever-increasing number of unemployed workers and energize a collapsed economy. Congress approved the ECW on March 31, 1933, shortly after FDR's inauguration. The bill included the CCC which employed out-of-work, unmarried men between the ages of 18 and 25 years to maintain and conserve the United States' natural resources.[33]

The U.S. Departments of War, Interior, Agriculture, and Labor administered the CCC as a cooperative effort. The Department of Labor recruited men in conjunction with state officials utilizing a quota based on the state's population. Responsibility of the recruits was then passed to the U.S. Army who oversaw the conduct and care of the men. Lastly, the projects and workday tasks were directed by the Departments of Agriculture and Interior.

Throughout the early years of the program, CCC employment proved advantageous to both the nation and American youth. Enrollees not only found gainful employment to support themselves and their immediate families, but also benefited from improved health via access to health clinics and regular meals, as well as opportunities for education and training programs. Nearly three million young American men were able to experience nature in an unfamiliar setting and connect with

[32] *Prince William Forest Park: An Administrative History,* 14, 45-47, 78.

[33] "Chapter 1: The Creation of the CCC" from The Civilian Conservation Corps, 1933-1942: A New Deal Case Study by Duke University for the National Park Service, 2008, https://www.nps.gov/parkhistory/online_books/ccc/salmond/chap1.htm.; "Chapter 4: New Deal: The First Hundred Days" from Parks, Politics, and People by University of Oklahoma Press, 21 September 2004, https://www.nps.gov/parkhistory/online_books/wirth2/chap4b.htm.

communities outside of their socioeconomic background. Enrollees emerged from the camp with a greater understanding of their fellow Americans and the physical landscape of the country.

The CCC's most notable contribution was the labor force it provided to the country's park system. The program's work included the planning and development of state, county, and municipal parks in nearly every state and territory across the United States. CCC projects were designated into four types: wayside parks, national park and monument expansions, state scenic extensions, and vacation developments near urban centers. Under the guidance of the Departments of the Interior, Agriculture, and Labor, CCC employees promoted environmental conservation by handling forest fire suppression, planting trees as the "Forest Army," clearing and maintaining access roads, establishing campgrounds and trails, managing grazing lands, and applying soil-erosion controls.[34]

On April 8, 1935, Congress approved the Emergency Relief Appropriation Act of 1935 which extended the ECW and continued funding for the CCC program through March 31, 1939. The act also decreased the age minimum from eighteen to seventeen and increased the maximum from twenty-five to twenty-eight. Between 1933 and 1935, the program size more than doubled, employing approximately 250,000 men in 1,463 camps in 1933 to over 505,000 across 2,900 camps in August 1935. Between 1933 and 1942, the CCC employed more than 3,000,000 men.[35]

Following the CCC's rapid growth, President Roosevelt and agency officials began efforts to make the ECW a permanent government agency. One of the first steps included a personnel reduction for a smaller agency and budget, resulting in the closure of twenty CCC camps at parks in 1936. Additional steps included focusing the program's efforts on one united purpose and converting

[34] Such vacation developments were the predecessors to recreational demonstration areas (RDA). Conrad L. Wirth, *Parks, Politics, and the People* (Norman, OK: University of Oklahoma Press, 1980), 176-178; National Register of Historic Places, "Prince William Forest Park,"81; John C. Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History*, Prepared for the National Park Service, http://npshistory.com/publications/ccc/adhi-ccc.pdf.

[35] Robert Allen Ermentrout, *Forgotten Men: The Civilian Conservation Corps,* (Smithtown, NY: Exposition Press, 1982), 15-33; National Register of Historic Places, "Prince William Forest Park," 81; *Paige, The Civilian Conservation Corps and the National Park Service,* 1933-1942, 21.



Figure 7. Local Experienced Men (LEM) member making shakes for CCC-era buildings, ca. 1936. Photograph courtesy of the Library of Congress.

temporary ECW positions to meet permanent civil service requirements. On June 28th, 1937, Congress passed legislation to formally establish the CCC. However, the legislation merely extended funding for three years and did not make the CCC a permanent agency. Though the act failed to achieve Roosevelt's vision, progress continued. Roosevelt designated ECW Director Robert Fechner as the director of the CCC and an advisory council was formed including the NPS and the Department of the Interior's representative Conrad Wirth. Soon after formally establishing the CCC in 1937, Secretary of the Interior Harold L. Ickes announced an extension from the CCC state parks program: NPS would undertake a nationwide recreation study in cooperation with the state and municipal authorities to determine regional recreational needs as well as inventory existing and potential park and recreation areas.[36]

The CCC worked in Chopawamsic RDA from May 13, 1935 to June 30, 1941. Three CCC companies were assigned to specific locations in the park, including Company No. 1374 to SP-22-VA, Company No. 2349 to SP-25-VA, Company No. 2383 to SP-26-VA.[37] Prior to construction of the permanent RDA camps, CCC companies and WPA laborers would construct a camp for enrollees as well as spaces for staging the next phases of construction. The first camps constructed consisted of rigid, fixed structures such as cabins, staff quarters, storage spaces, office/administration buildings, and recreation buildings. However, two years into the new program, the Army instructed that any new CCC enrollee camps needed to consist of temporary and/or portable structures which could move from site to site throughout the RDA.

[36] Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942*, 25; National Register of Historic Places, "Prince William Forest Park," 81.
[37] National Register of Historic Places, "Prince William Forest Park," 87.



Figure 8. CCC Company No. 2349, SP-25 in Chopawamsic RDA, ca.1935. Photograph courtesy of the National Park Service.

Following building of the temporary enrollee camps, CCC companies would begin construction of the specific RDA camps. At the program's peak, the three companies of 100 to 120 men per camp were assigned to constructing the buildings within Chopawamsic RDA. In addition to the CCC companies, WPA funds were used to hire local skilled workers, known as Local Experienced Men (LEM), who could impart local building traditions on the CCC workforce. As seen in Figure 7, LEMs led workshops on techniques such as splitting logs for waney board siding and cedar shingles. In September 1938, the CCC implemented a new policy limiting the cost of buildings to $15,000 excluding CCC labor. The policy provided a detailed outline for factors in estimating and construction scheduling. The total cost for materials, skilled labor, or local participation could no longer exceed $15,000, and would have applied to construction of the Recreation/ Theater Building as it was constructed after the policy's implementation.[38]

[38] "Memorandum for the Regional Director, Region I," September 20, 1938, Record Group 79, Box 88, Entry 90, NARA II, College Park, Maryland; "Chapter 2: The CCC

Though the NPS provided guidance on budgeting, scope, and schedule in Standard Plan No. 1, in early 1939 the agency still had not released instructions for buildings that fell outside of the typical proportions or purposes of the CCC camp.[39] Fixed, or sometimes rigid, type buildings, such as garages, repair shops, equipment storage sheds, and other similar buildings did not fit the prescribed NPS plan. Many of the CCC enrollee camps expressed that they did not have covered nor indoor facilities to repair vehicles or do routine maintenance to camp equipment. The uncertainty of the matter led the Army to enlist their Technical Services Branch which proceeded randomly, sometimes enlarging and slightly modifying a new building according to the standards, and other times completely improvising. Buildings built by the Technical Services Branch did not follow the rustic style and local building traditions of the CCC camps. They were simpler, boxy, and ranged from 20 to 30 feet wide and 70 to 90 feet long. Among the four cooperating federal departments, the Army's Technical Services and War Department functioned as the human resources for the CCC: hiring and firing CCC, LEM, and other employees, administrative tasks, and implementing camp policy. Though not explicitly credited as a building constructed by Technical Services, the Recreation/Theater Building's construction type, date, and exclusion from the CCC's Standard Plan 1 suggest this building was likely constructed by the Technical Services Branch. [40]

On February 3, 1939, Fred T. Johnson, Assistant Supervisor of Recreation and Land Planning of the NPS, wrote to the Regional Director of Region 1 in Richmond, Virginia that "In many existing camps of both

is Mobilized" from *The Civilian Conservation Corps, 1933-1942: A New Deal Case Study by Duke University for the National Park Service,* 2008; Robert Allen Ermentrout, *Forgotten Men: The Civilian Conservation Corps*, (Smithtown, NY: Exposition Press, 1982), 15-33; National Register of Historic Places, "Prince William Forest Park," 81; Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942*, 21.

39 Research did not find a copy of Standard Plan 1, however, several correspondence letters between the CCC and NPS officials imply that Standard Plan 1 addressed typical small-scall, portable buildings constructed by the CCC. The document was perhaps a collection of plans for buildings, or simply one building that could be customized depending on its use. For future research, consider the following sources: "Memorandum for the Director, April 17, 1939," Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland; "Memorandum for the Director, May 9, 1939," Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland.

40 "Memorandum for the Acting Regional Director, Region I, June 7, 1939," Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland; "Chapter 4: The Problems of Administration, 1933-1937," from The Civilian Conservation Corps, 1933-1942: A New Deal Case Study by Duke University for the National Park Service, 2008, https://www.nps.gov/parkhistory/online_books/ccc/salmond/chap4.htm. Research remains inconclusive if Technical Services designed and constructed the buildings alone or in tandem with the CCC camps.

portable and fixed types… together with some minor structures, which have been erected by the various Technical Services for their own use…" Johnson then proceeded with "No building will be constructed in a CCC camp area by Technical Service without the prior approval of the Corps Area Commander or his designated representative, as to the type of construction, and location with the camp area."[41]

However, Johnson's warning did not stop the Army. In April 1939, Conrad L. Wirth addressed the Region 1:

> Recently my attention has again been called to numerous CCC camps where a number of buildings have been erected by the Technical Services doing the work projects for the camp. In some cases this number of extra buildings has been quite large…It is my understanding when the current plans for buildings for a standard CCC camp were approved, they provided for all of the anticipated needs of the camp. I realize that there may be some instances where it is desirable and justifiable to erect additional buildings. It would appear however, that some of the Technical Services seem to feel that there is no restriction on the number or type of these additional buildings that can be erected. I do not agree with this view…You know, of course, that a portable type for CCC buildings was adopted more than three years ago but it would appear that all of the extra buildings erected in CCC camps by Technical Services are of the rigid type. [42]

Wirth noted that the exemption to this fixed type rule did not apply if materials were salvaged from existing fixed buildings to erect new CCC camps.

Though correspondence between 1938 and 1939 did not explicitly state that buildings like the Recreation/Theater Building were part of this issue, it is possible that the construction type, date, and its exclusion from the

41 "Memorandum for the Regional Director, Region 1 from SGD Fred T. Johnston, February 3, 1939," Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland.

42 "Memorandum for Acting Regional Director, Region 1, from SGD Conrad L. Wirth, April 17, 1939," Record Group 79, Box 88, Entry 90, NARA II, College Park, Maryland.

Standard Plan No.1 suggest that it was constructed by Technical Services. The Recreation/Theater Building's large, box-like shape and wood weatherboard siding eschewed the principals of NPS rustic architecture in favor of simple and utilitarian design. Furthermore, the Repair Shop (now known as Building 39) formerly located in the maintenance area, could be considered a “repair garage” that was potentially constructed by Technical Services and the two buildings had similar massing and materials.

From the end of the 1930s to the early 1940s, the need for work relief declined and national defense preparation further reduced CCC camp funding. Many camps were directly transferred to the military to carry out national defense work with NPS only retaining its authority to perform technical supervision of work projects. In the few NPS-controlled camps that remained, the agency was required to construct rest areas for on-leave military men that included barracks and recreation facilities.

The entry of the United States into World War II signaled a sudden end to the CCC program. By December 1941, all CCC projects not directly related to national defense were terminated, leaving only eighty-nine of the thousands of camps operating throughout the country. The remaining NPS camps were located at fifty military and naval areas, twenty national parks and monuments, nine state parks, and ten recreational demonstration areas. On December 24, 1941, Congress urged President Roosevelt to terminate the CCC program no later than July 1, 1942 to reallocate its funding to the war effort. With the support of the House and Senate, the CCC program formally ended on July 2, 1942. [43] Despite its short nine-year run, the CCC has remained one of the most celebrated of the Roosevelt-era New Deal programs.

[43] Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942*, 1-30. Joseph M. Speakman, "Into the Woods: The First Year of the Civilian Conservation Corps," *Prologue Magazine*, vol. 38, no. 3 (Fall 2006), https://www.archives.gov/publications/prologue/2006/fall/ccc.html. Over the course of the CCC program, approximately 3 million men were employed across 4,500 camps throughout the country. Research found varying numbers for the amount of CCC camps existing year to year, however, based on the approximate 1000 camps per year it is likely that this reduction was from at least 1000 camps to eighty-nine.

Chopawamsic Becomes a Military Camp (1942-1945)

Six months after the United States entered World War II, on June 13, 1942 President Roosevelt signed a military order establishing a new federal intelligence agency, the Office of Strategic Services (OSS). The OSS would focus on special operations and unconventional warfare, such as espionage, counter-intelligence, disinformation, and guerilla warfare. To accomplish these goals, the OSS needed training schools to prepare personnel before deployment. Chopawamsic's proximity to Washington, DC and its naturally isolated setting quickly made it the focus of the federal government's search for a new training area. The new intelligence agency required a location with privacy, acreage, natural water resources, and ideally some form of established infrastructure. Additionally, the OSS established training schools in the following areas: Areas A and C at Chopawamsic RDA in Virginia, Area B at Catoctin Mountain Park in Maryland, Area D at Smith Point in Maryland, two horse farms in rural Maryland known as Area D, and Area F at Congressional Country Club in Bethesda, Maryland.[44]

Nearly all American Special Operations (SO) teams trained at the OSS Training Area B at Catoctin Park in Maryland or Training Area A at Chopawamsic RDA in Virginia. The training for SO teams focused on infiltration and preparation, sabotage and subversion, and direct support to guerilla units. Nearby, radio operators who accompanied the SO officers or Operational Groups trained at Area C at Chopawamsic RDA. The Operational Group teams underwent their initial OSS training at Area F, the Congressional Country Club in Bethesda, Maryland, and were then assigned to Area B, or less often Area A, for additional training before deployment. [45]

In early 1942, after Chopawamsic RDA was selected to be an OSS training center, the War Department proposed a plan for military occupation to the NPS. However, the restricted use of any national park was against the NPS's mission to conserve natural resources while providing access to all present and future generations of Americans. Yet, the NPS sought to aid the war

[44] Chambers, "A Wartime Organization for Unconventional Warfare," from *OSS Training in the National Parks and Service Abroad in World War II*, https://www.nps.gov/articles/a-wartime-organization-for-unconventional-warfare.htm. Area D included additional facilities in the Caribbean and California.

[45] Chambers, "A Wartime Organization for Unconventional Warfare."

effort. Newly appointed director, Newton B. Drury, offered provisions that would allow the OSS to use the space while limiting its control over the park. Drury's proposal included a requirement that once military occupation concluded, the army would repair damage and restore the property to the condition in which it was found. Further requirements included filing use permits--at first with a two-month expiration and eventually with no expiration date--for its occupation of the park and no changes were allowed without the review and agreement of the NPS. Changes included any physical alterations to the buildings or site. NPS required their written consent prior to any physical changes within Chopawamsic RDA.[46]

In addition to these provisions, the Secretary of the Interior established a requirement that any private lands purchased or acquired by the Army during its occupation would then be transferred to the Department of the Interior upon departure. Within the Army's first year of occupation, the War Department acquired private land adjacent to the OSS training area, including the area of Batestown. NPS Manager Ira B. Lykes advocated for the importance of acquiring property in Batestown as "this so-called community is a hot-bed of bootleggers, thieves and vice and is likewise a potential health hazard to the adjoining Camps 1 & 4 and the Quantico Creek Watershed."[47] Some Batestown residents were approached with financial offers, but many more were simply evicted from their property. Within the year, the War Department expanded the park by approximately 1,500 acres.[48]

In 1943, The NPS purchased 4,862 acres to the south of Route 619 for the development of Chopawamsic RDA. That same year, NPS loaned "the permit land," as it became known, to the Quantico Marine Corps Base. The permit allowed the Marine Corps to use the land during World War II as it directly abutted the massive tract of 50,420 acres south of Route 619 that the Corps used for a major expansion of the base facilities. The NPS's permit expired at the end of the war and a title was issued for the tract of land in 1948. There are few official sources documenting the negotiations pertaining to the permit

46 National Register of Historic Places, "Prince William Forest Park," 97-98; National Park Service, "Creating the OSS," https://www.nps.gov/prwi/learn/historyculture/beginnings.htm, Last updated April 10, 2015.

47 Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 142.

48 National Register of Historic Places, "Prince William Forest Park," 99; Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 142-143.

land and the agreement between NPS officials and Quantico. The one official source includes Lykes's personal memos documenting his conversations with Marine Corps generals and NPS officials. Therefore, when the conversion of the permit to a legitimate legal title occurred there was little other documentation substantiating the terms of the title. This unclear precedent set by Lykes's administration ignited decades of disagreements between the NPS and Marine Corps over which entity had valid and legal claim to the land.[49]

Concurrent to the expansion of Quantico Marine Corps Base to the south, the Army planned to use the existing CCC cabins, administrative and maintenance buildings for a training center. The Army's new projects included construction of roads and trails, extension and improvement of sanitary systems and water supply systems, grading and landscaping for military purposes, removal of some buildings and roads, and other incidental work. Kent and Company of Richmond, Virginia, a private contracting firm, performed nearly all construction work for OSS military personnel in Chopawamsic RDA. Unlike the CCC era, the Army shifted to hiring private contractors rather than employing laborers directly to construct the new infrastructure in Areas A and C.[50]

Neighboring communities watched as barbed-wire fencing lined the park now patrolled by armed military men and guard dogs. Many suspected that a German prisoner of war (POW) camp occupied Chopawamsic RDA, much like Fort Hunt in Northern Virginia. The two OSS-occupied were both initially constructed by the CCC, Fort Hunt in 1933 and Chopawamsic in 1935, and were similarly selected by the OSS as domestic military intel centers.[51]

On April 1, 1942, the OSS "brought spies to the park" and began the transformation of Chopawamsic RDA into a military training center. The northeast region of Chopawamsic RDA was designated Area A Special

49 Strickland, 51, 53-57; National Register of Historic Places, "Prince William Forest Park," 102.

50 Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 141.

51 National Park Service, "POWs and Intel at Fort Hunt in World War II." https://www.nps.gov/articles/forthuntww2.htm . At this time and considering available declassified information, it is not known if Fort Hunt was directly associated with the OSS. Fort Hunt was home to at least three secret programs including a temporary detention center for high value POWs who were interrogated by the Army's Military Intelligence Service (MIS) and the Navy's Office of Naval Intelligence (ONI), the Escape and Evasion Program (E&E), and a military intelligence research service.

Operations and Area C Communications. Area A included Cabin Camps 2, 3, and 5 and approximately 5,000 acres for advanced paramilitary training, guerilla activity, and varied methods of unconventional warfare. To the north, Cabin Camps 1 and 4 became Area C for the Communications Branch for the training school (Figure 9). Catoctin RDA (now Camp David in Catoctin Mountain Park) became Area B and functioned as a basic training camp for the Special Operation and Communications branches of the OSS. Catoctin and Chopawamsic were the only National Parks selected and used as OSS training areas for the duration of World War II.[52]

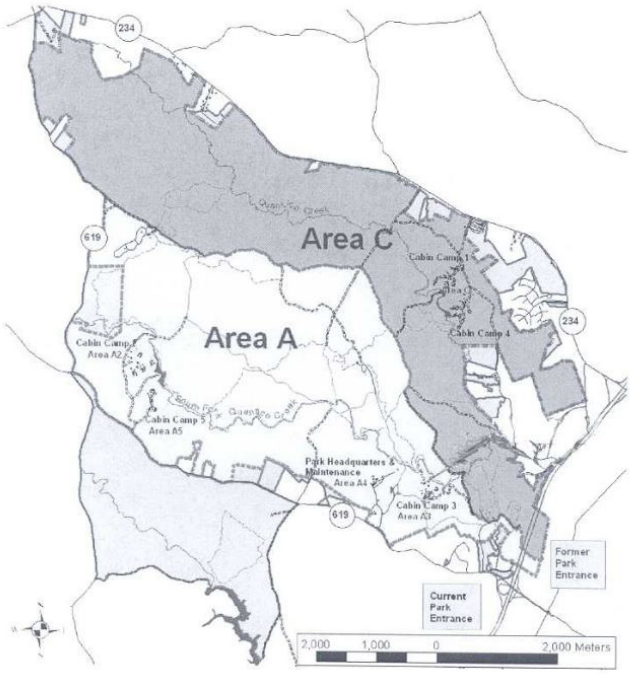


Figure 9. Office of Strategic Services' Areas A and C. Image courtesy of John Whiteclay Chambers II's OSS Training in the National Parks and Service Abroad in World War II.

[52] National Register of Historic Places, "Prince William Forest Park," 1.

Office of Strategic Services Period: Area C

Communications Branch

In September 1942, Director William J. Donovan formed the Communications Branch of the OSS to combine the separate efforts of the Special Operations and the Secret Intelligence Branches. The primary objective of the Communications Branch was to create a swift and secure global communications system through which agents could correspond with regional bases and OSS message centers. OSS Branch veteran Arthur Reinhardt summated the role of the branch: "Commo underpinned everything OSS did." Without secure and effective communications, any of the OSS's planning and implementations of operations would have been at risk.[53]



Figure 10. A Communications Branch instructor demonstrates a radio to OSS trainee in Area C, ca. 1941-1945. Photograph courtesy of the US Army.

OSS men and women of the Communications Branch specializing in cryptology trained in Washington, DC; radio operators, all of whom became military servicemen, and men stationed in war zones underwent training at Area C at Chopawamsic RDA.[54] The Communications Branch utilized the northeastern section of Chopawamsic RDA at Camp 1 and Camp 4 (also referred to as C-1 and C-4, respectively). The training school focused on educating personnel on clandestine radio operations and equipment, specifically secret cipher, International Morse Code, direction finding, as well as radio repair. Additionally, the OSS offered short radio and code courses



Figure 11. OSS "Commo" trainees at the Craft Lodge at Camp 4, ca. 1942-1945. Photograph courtesy of the National Park Service.

[53] Chambers, "A Wartime Organization for Unconventional Warfare."
[54] Chambers, "A Wartime Organization for Unconventional Warfare."

for other OSS personnel. Between 1942 and 1945, approximately 1,500 Communications Branch personnel trained at Area C.[55]

The Communications Branch recruited radio operator trainees from the radio, radar, and other electronic schools of the Army, Army Air Force, and Navy for field agents and regional bases of the OSS. Most were former civilians, not career military persons, who enlisted or had been drafted into the armed forces during the war. Prior to the war, many "Commo" recruits were amateur short-wave radio operators known as "hams" with a personal interest in voice or wireless code communication and tinkering with the cutting-edge equipment of the day. The amateur radio hobbyist made for the ideal recruit, as they needed highly specialized skills to operate equipment and manage cryptography. [56]

Recruit trainees typically arrived at Chopawamsic RDA, a newly classified location, by canvas-covered Army truck. Upon arrival, OSS trainees received fictitious code names to keep their identity secret and turned in all personal possessions, including all identification materials and the uniform in which they arrived. Trainees then received a new Army uniform. Additionally, cameras were confiscated as photographing trainees or staff could lead to future identification of field agents and reveal the location of the secret camp. Identities were on a need-to-know basis and only instructors and Army officers knew one another's real names. A majority of trainees assigned to Area C were base station operators or technical men who would then be stationed at OSS base stations in foreign theaters. The remaining were undercover operators who were being trained for other branches before deployment as field agents.[57]

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55 Chambers, "A Wartime Organization for Unconventional Warfare"; National Register of Historic Places, "Prince William Forest Park," 101; Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 171.

56 Arthur Reinhardt, "Deciphering the Commo Branch," OSS Society Newsletter, Fall 2006, 6-7; Chambers "Daily Life in Camp Park and Town," from *OSS Training in the National Parks and Service Abroad in World War II*, https://www.nps.gov/articles/daily-life-in-camp-park-and-town.htm.

57 Chambers "Daily Life in Camp Park and Town," from O*SS Training in the National Parks and Service Abroad in World War II*, https://www.nps.gov/articles/daily-life-in-camp-park-and-town.htm.; Headquarters, Detachment A, "Standard Operating Procedure," 13 April 1944, OSS Records, Record Group 226, Box 174, Entry 136, NARA II, College Park, Maryland; "Schools and Training, October 1943," 4, OSS Records, Record Group 226, Folder 1723, Entry 136, NARAII, College Park, Maryland.

The average training period lasted three months with a maximum of fourteen weeks. Courses varied in length depending on the trainee's previous experience using communication equipment. The OSS training school functioned as a loose quasi-military facility, promoting individual initiative and responsibility rather than regimentation. The school provided a basic daily schedule for trainees: a 6:15 a.m. wake up call, 7:00 a.m. breakfast, classes through the morning and resuming after lunch, 6:00 p.m. supper, and recreation time until lights out at 11:00 p.m. Interestingly, instead of the expected bugle call or trumpeter playing taps, Area C's camp commanders allowed contemporary music to be played on the public address system from the company clerk's office. Additionally, trainees were not required to march between buildings and could instead simply walk to their assignments for the day. [58]

Upon arrival, the Army began retrofitting and winterizing the summer camps for year-round occupation and learning centers. The OSS and Army winterized all existing buildings at C-1 and built several temporary buildings, including a radio repair shop, radio transmitter building, and guard houses. More extensive renovations occurred at C-4 including the construction of a Bachelor Officers' Quarters for $12,000 and a large addition and modification to the Recreation/Theater Building for $24,000. Smaller new structures included a 100-man latrine/washroom, three plywood buildings measuring 16' x 16', and an addition to the mess hall. Additionally, the Army installed various housing options within C-4 such as a prefabricated, metal Quonset hut and a "tent city" consisting of twenty-five wood and canvas tents capable of housing 100 men. Aside from buildings, the OSS also constructed weapons practice spaces within Area C including outdoor pistol, rifle, and hand grenade ranges. New recreation spaces in Area C provided basketball and volleyball courts, a baseball field, and a swimming pool. [59]

[58] Schools and Training, October 1943," 4, OSS Records Record Group 226, Entry 136, Folder 1723, National Archives II, College Park, Maryland; Chambers, "A Wartime Organization for Unconventional Warfare"; Chambers "Daily Life in Camp Park and Town"; Arthur Reinhardt, interview with author at Prince William Forest Park, VA, 14 December 2004.."

[59] National Register of Historic Places, "Prince William Forest Park," 101; Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 171, 509; Col. W.I. Rehm, Acting Assistant Director for Services, Strategic Services Unit (SSU), for the Director, to Commanding General, Army Service Forces, Mobilization Division, 19 October 1945, subject: Chopawamsic National Recreational Demonstration Area, Estimates #1, #2, and #3, in OSS Records Record Group 226, Entry 146, Box 8, Folder 199, National Archives II, College Park, Maryland; "Occupation of Areas A and C by Army Lease from Lt. Colonel Ainsworth Blogg, 27 January 1944." 2 Record Group 226, Entry 137, Folder 24, NARA II, College Park, Maryland; "Repairs and Improvements



Figure 12. OSS-era interior of Recreation/Theater Building during training session of Area C personnel, ca. 1942-1944. Image courtesy of OSS Training in the National Parks and Service Abroad in World War II.

The Recreation/Theater Building became the primary gathering space for schooling, training, entertainment, and other assemblies. During the day, the Recreation/Theater Building, then known simply as the Recreation Hall, functioned as the schooling headquarters with a large auditorium space full of chairs for lectures, a mezzanine projector room for screening training films or footage from the war front, and bulletin boards along the perimeter of the main room. In Figure 12, General William J. Donovan is shown giving a lecture for trainees while a dummy used for combat exercise is visible at the left rear corner of the room. In the evenings, the Recreation Hall could be retrofitted into a theater for Hollywood films on the big screen, or a gathering space to play pool or ping-pong. If the weather restricted activity, trainees could even play basketball with hoops located at either end of the Recreation/Theater Building.[60]

Early in the war, the OSS determined Area C's capacity of 240 students. However, due to the demand and duration of the courses, the camp quickly became overcrowded. The Communications Branch hoped to enlist trainees who had previous radio training. Yet, even those with previous radio experience still required approximately a month to learn the special OSS radio equipment and the OSS operation procedures. The Communications Branch reported to the OSS that the Area C had an average production of about thirty students per month, falling dramatically short of the anticipated 144 trainees per month. In attempts to remedy the shortcoming, the OSS acquired Camp M in Illinois as a second training Camp in addition to the base station formerly located on Mackinac Island, Michigan.[61]

Throughout the OSS's occupation of Chopawamsic, the organization dealt with persistent capacity issues. As of October 1943, nearly 100

at Areas A and C to Mr. Charles S. Cheston from A. William Asmuth, Jr., 16 May 1944." 2 Record Group 226, Entry 137, Folder 24, NARA II, College Park, Maryland.

60 Arthur Reinhardt, interview with the author at Prince William Forest Park, VA, 14 December 2004; Obie L. Etheridge, telephone interview with the author, 14 January 2008; Chambers "Daily Life in Camp Park and Town."

61 Schools and Training, October 1943. Figures prepared as of October 1, 1943 expected a total number of 430 Communications personnel (not including agent personnel) to be trained by December 31, 1943.

Communications personnel awaited deployment from Training Area C. The overcrowding and delayed deployment contributed to a severe downturn in morale.[62] The largest problem the OSS dealt with was housing the trainees prior to their training and the personnel who had already completed it. Memorandums amongst OSS commanders described a growing concern that if the housing problem increased, they would be unable to bring in any new recruits. Solutions to the overcrowding included releasing personnel to hotels in or near Washington, DC while they awaited further instruction. In a Schools and Training Memorandum dated October 1943, the OSS noted another alternative to keeping personnel at the training centers:

> It is suggested that Schools and Training should provide a large number of rooms scattered in various hotels throughout the Military District, which would be held available for these graduate agents. From current figures it appears that we will need about 50 rooms. At an average rental of $5.00 per room per day, this will cost $7,500.00 per month. . .it looks, therefore, as if Schools and Training will have to add a rental agency department along with the other departments previously mentioned.[63]

When not dealing with on-going capacity issues, Commo graduates would be deployed to their assignments upon completion of their training. Ideally, the OSS assigned Communications Branch personnel to either the main message center, regional relay base stations, or operated as communications agents in the field. To network across their various centers, the Communications Branch developed a system of quick communication between OSS locations worldwide. The OSS headquarters provided wireless and cable communication with fixed and mobile relay base stations located in secure areas behind Allied lines in nearly every major theater. Base stations then communicated with agents in the field who used small, portable equipment that were restricted by range. The base stations acted as liaison between the field agents and OSS headquarters, providing coded instructions from headquarters to the agents and receiving or decoding information from the agents. Base stations operated twenty-four hours per day, seven days per week to code and decode

62 Schools and Training, October 1943, 4.
63 Schools and Training, October 1943, 10.

messages prior to duplication and distribution to headquarters and agents. The Commo men and women handled massive amounts of radio and cable traffic. For example, in April 1945, the Communications Branch, including twenty-five locations in fifteen countries, processed 60,500 messages comprising 5,868,000 code groups. Throughout the duration of the war, there were no known compromises of the OSS's secure coding system or cable traffic.[64]

After the Office of Strategic Services Period

After the end of World War II in 1945, the Army certified that Training Areas A and C were no longer needed and that Chopawamsic RDA would be returned to the NPS. On October 16, Lieutenant Colonial Ainsworth Blogg, former commander of Area B and Executive Officer of the Schools and Training Branch, officially reported that Areas A and C were considered surplus property to the branch and were to close by November 1, 1945. Blogg reported that both areas "present condition is equal to or better than the condition when received by OSS. Certain changes made in existing buildings, but by and large the property is an excellent condition."[65]

Prior to returning the RDA to NPS, the War Department's Quartermaster Depot Office at Ft. Belvoir, Virginia prepared estimate prices for each building within Chopawamsic RDA. The list included buildings that were built, remodeled, or enlarged by the OSS and detailed the building type, number, cost to construct, cost to remove, and approximate salvage value. The NPS required the War Department to remove structures of a strictly military or technical nature and restore the area as nearly as possible to its previous condition. However, in many cases the NPS retained the OSS's improvements, such as winterization, to the buildings.[66]

64 "William J. Donovan to Assistant Chief of Staff, G-1 [Personnel], 10 June 1943, subject: Request for Priority to Procure Communications Personnel from the Signal Corps, OSS Records, Record Group 226, Director's Office Files, microfilm M1642, Roll 42, Frames 1319-1321, National Archives II, College Park, Maryland; OSS, *War Report of the O.S.S.*, 141; Arthur Reinhardt, "Deciphering the Commo Branch," OSS Society Newsletter, Fall 2006, 6.

65 Lt. Colonel Ainsworth Blogg to General Counsel Office, SSU. 16 October 1945, subject: Liquidation of Areas "A" and "C," OSS Records Record Group 226, Entry 136, Wash S&T OP89, Box 174, Folder 1841, National Archives II, College Park, Maryland; Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 509.

66 "H.L. Robinson to Capt. Howard J. Preston, 10 January 1946." ; Col. W.L. Rehm, "MEMORANDUM FOR: The Commanding General, Army Service Forces, Mobilization Division. 19 October 1945"; "Occupation of Areas A and C by Army Lease from Lt. Colonel Ainsworth Blogg, 27 January 1944." 2 Record

In 1946, the War Department officially returned Chopawamsic RDA to NPS. Once the OSS was disbanded, the soldiers' "tent cities" were dismantled throughout the park and the new wooden buildings were retained by NPS. The OSS left the park in good condition and even improved park infrastructure. However, there were several dangerous areas marked "Do Not Cross—Mine Areas" where "dud" shell fragments and remnants of mortar shells or anti-personnel mines were found. [67] The Army Corps of Engineers was procured to help remove dangerous materials as well as construct a network of internal roads to connect the cabin camps. Before these efforts, camps in the northeastern and southeastern areas were only accessible via external roads, a design feature which reinforced the segregated use of the different camps. With the receipt of $35,000 in September 1946, NPS partnered with the Army Corps of Engineers after NPS obtained $35,000 for materials to build roads, bridges, dams, and other facilities. Historically, the northeast camps, Camp 1 and Camp 4, were designated areas for underprivileged black children from Washington, DC and, poignantly, many of the Army Corps' engineers were Black soldiers, some of whom were previous campers at the RDA.

The partnership between NPS and Army Corps of Engineers lasted from 1946 to the outbreak of the Korean War in 1950 and produced many administrative and physical changes. Notably, on August 20, 1948 Chopawamsic RDA was renamed Prince William Forest Park. Physical changes included the construction of a new entrance at U.S. Route One, forty-seven miles of internal roads and trails, two bridges, an earth-filled dam, a swimming area, administration building, and two ranger stations. Demolished buildings included portable and temporary buildings constructed by the OSS near Camp 4. An OSS-era boat house was relocated from Camp 5 to Camp 2. It is estimated that in a four-year period that the Army Corps of Engineers provided NPS with labor valued at well over one million dollars.[68]

Notably, in 1948 congressional action was taken regarding the long-awaited transfer of "the permit land" from the Chopawamsic RDA to the Quantico Marine Corps Base. Between 1943 and 1946, confusion occurred when

Group 226, Entry 137, Folder 24, NARA II, College Park, Maryland.

67 Chambers, *OSS Training in the National Parks and Service Abroad in World War II,* 509-510.

68 Strickland, P*rince William Forest Park: An Administrative History*, 36. Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 171, 513.

committees assigned to draft legislation in order to transfer the permit land were given inconsistent ownership and legality information from both NPS and the Quantico Marine Corps Base. From the NPS perspective, Lykes believed he had secured a verbal agreement from base personnel to purchase the 1,900 acres surrounding the Quantico watershed in exchange for the 4,862 acres on loan to the Marine Corps. Meanwhile, the Marines practically razed the land for lumbering, training exercises, and other operations during the war, leaving the land unsuitable for recreational use.[69]

Upon realization of the current state of the land, NPS officials decided that funding should not go towards securing this land, particularly if a sudden end of the war would leave them with further complications regarding financial responsibilities. Matters were made worse as the Navy Department resisted any efforts to transfer the land prior to 1948 and frequent leadership turnover occurred at the Marine Corps Base.

In 1946, the original 1943 permit expired, however, the 4,862 acres continued to function as permanent property of the Marine Corps Schools. NPS and the Department of the Navy continued to negotiate, though it was now managed at the secretarial level between the real estate and legal divisions of each. Additional confusion occurred with the conclusion of the war as the Army had acquired new land. A total of approximately 1,138 acres located within the boundaries of the park were acquired by the Army and then declared surplus once the war ended. The land was then added to the negotiations for the transfer legislation even though it was comparable in acreage to the land the NPS asked the Navy to purchase, further muddying the negotiation process.[70]

In 1948, the NPS once again permitted the Marines to occupy the 4,862 acres previously used during World War II back to Quantico Marine Base. In June 1948, Congress passed Public Law 736 which allowed for the transfer of land to the Secretary of the Navy with the agreement that the secretary would protect the Quantico Creek watershed. The law also authorized $10,000 for the purchase of up to 1,500 acres of private land to

[69] Stickland, *Prince William Forest Park: An Administrative History,* 51-71.
[70] Ibid, 51-71.

aid the park in rounding out its boundaries. The stipulation being that the NPS would only transfer the land after all acquisitions were made. [71]

In 1948, Conrad Wirth, Lykes, and other Washington officials expressed interest in changing the name from Chopawamsic with its "certain stigma" as "the name Chopawamsic would no longer have any particular significance after [the land transfer] as the Chopawamsic River [typically referred to as Chopawamsic Creek] would be outside of the park area."[72] On August 20, 1948 Lykes received correspondence from Capital Parks Superintendent Irving Root who advised renaming Chopawamsic RDA to Prince William Forest Park.[73]

BUILDING HISTORY

The Recreation/Theater Building is a prominent and distinct feature within Camp 4 and the larger context of Prince William Forest Park. Amid the densely forested landscape, the large, box-like building faces east towards the main gravel road which travels from north to south through Camp 4. The substantial, one-and-a-half story, wood frame building was erected in 1938 by the CCC, or possibly by the Army's Technical Services.[74] Though not expressly credited as a building constructed by Technical Services, the Recreation/Theater Building's construction type, date, and exclusion from the CCC's Standard Plan 1 suggest this. In addition, unlike contemporary CCC-era buildings, the Recreation/Theater Building does not adhere to the principles of NPS rustic architecture and instead displays a simple, utilitarian style with wood weatherboard cladding.

71 Kuhn and Groesbeck, *Prince William Forest Park: Administrative History*.

72 Strickland, *Prince William Forest Park: An Administrative History*, 51-71; Secretary of the Interior to Secretary James E. Webb, Director of the Bureau of the Budget, 17 June 1948, Record Group 79, File Number 1460/6, Suitland Record Center, Suitland, Maryland; I. Lykes to I. Root, 21 September 1945, Prince William Forest Park Archive.

73 Kuhn and Groesbeck, P*rince William Forest Park: Administrative History*, 22-26; Stickland, *Prince William Forest Park: An Administrative History*, 37.

74 "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch," September 1951, U.S. National Park Service, Prince William Forest Park Archives; Department of Interior Map, November 7, 1938; Construction memorandum, 1941, Record Group 79, Box 88, Entry P90, NARA II, College Park, Maryland.

Under the occupation of the OSS, the building underwent renovations to enlarge and winterize the structure as well as a new addition on the east elevation to accommodate the training program. At the subsequent departure of the OSS and return to NPS, NPS staff most likely required OSS to remove the addition in 1946, although based on historic images it appears that potions of the OSS addition remained in the subsequent years. Later material updates occurred between 1975 and 1976 when NPS partnered with U.S Youth Conservation Corps Program (YCC) to replace select portions of siding and install new nails at all existing siding. Additionally, the YCC added insulation and new plywood to the interior walls of the building. More recent renovations occurred in 2005 and 2016, significantly altering the exterior and interior of the building. The renovation included new siding and roofing materials as well as new window frames and sashes. On the interior, the spaces at the east end of the building were wholly replaced and new finishes were applied to the bathrooms, mezzanine, storage areas, and hall area. Despite alterations at various times, the rectangular building retains its original form as well as its full-height hall with exposed modified king-post truss system supporting a low-profile, front-facing gable roof.

The history of the land and its inhabitants before construction of the Recreation/Theater Building is described in a previous section. Additionally, discussion pertaining to the larger patterns of development around the site, social or political events that contributed to it, and important persons related to the building are all considered in the previous section. The following section pertains to the specific use and material changes of the Recreation/Theater Building. Throughout this section of the report, though the historic record uses a variety of names including the Recreation Hall, Recreation and Training School, or Recreation and Theater Building, the structure will be referred to as the Recreation/Theater Building. Historic names will be included within their context or within footnotes, though the building will be referred to as its current name.

Constructing Camp 4 and the Recreation Hall (Building 4-91)

The CCC worked in Chopawamsic RDA from May 13, 1935 to June 30, 1941. In the fall of 1937, the CCC slated company SP-25 to construct the nearly approved Camp 4. However, disagreements arose on the layout of

Camp 4, delaying the effort well into the following year. The design and construction of Chopawamsic RDA was a coordinated effort between NPS's Branch of Planning and the state-level office of the agency based in Richmond. Throughout the construction of the RDA, frequent changes from both parties required chaotic emergency field approvals and led to inconsistencies in planning. Camp 4 underwent a similar process where the proposed plan was approved, only to have approval revoked as phases of construction continued throughout the site.[75]

On January 29, 1938, Carl P. Russell, Regional Director of NPS's Region 1 Richmond office, wrote to Chopawamsic RDA Project Manager, William Hall, that NPS had performed a technical review and approved the revised layout plan for Camp 4, referencing drawing number RDP-CA-CHO-9180-A. The revised location was at the south end of the camp near the craft lodge and nature hall. However, correspondence within the same year between Chopawamsic RDA and NPS Region 1 Richmond office indicates that throughout the late summer and fall of 1938 the location of the Recreation/Theater Building shifted to the north end of the camp. At this time, a majority of Camp 4 had already been constructed, leaving only two proposed buildings for deliberation. Record plans from November 7, 1938 suggest the Recreation/Theater Building was still a proposed building at the time. Though with only seven weeks left in the calendar year, the NPS's 1951 building file substantiates that SP-25 concluded construction of the building that same year in late November or December of 1938.[76]

The Department of the Interior's November 7, 1938 map of Camp 4 provides insight into the first iteration of the Recreation/Theater Building, then known as the Recreation Hall. Oriented ninety degrees from its constructed location,

[75] Miscellaneous letters, NARA, Record Group 79, Entry 100, Box 14, Folder 1 "General Publications 1934-1937," NARA II, College Park, Maryland; Herbert Evison to Mr. Huppuch, August 25, 1936, Record Group 79, Entry 100, Box 124, NARA II, College Park, Maryland; Chambers, *OSS Training in the National Parks and Service Abroad in World War II*, 171, 509-513; National Register of Historic Places, "Prince William Forest Park," Section 8, Page 84.

[76] NPS Inspector R. M. Schenck to the Project Manager, September 7, 1938. U.S. National Park Service, Prince William Forest Park Archives; U.S. Department of the Interior, *Chopawamsic – R.D.P. Organized Camp 4-F Record Plan,* November 7, 1938, Hyattsville, Maryland: The Museum Resource Center; U.S. Department of the Interior, C*hopawamsic RDP Property Map, Part of the Master Plan*,1938, Hyattsville, Maryland: The Museum Resource Center.



Figure 13. Chopawamsic RDA Work Plan illustrates proposed and final location of the Recreation/ Theater Building in red, dated November 1938. Map courtesy of the National Park Service, Prince William Forest Park Archives.

the map's footprint of the Recreation/Theater Building specifies that it was a primarily rectangular-shaped structure with a small recess and porch on the east elevation. In addition, the 1951 NPS building file matches the massing of the 1938 map and provides further confirmation of the building's shape: a loosely rectangular footprint measuring approximately 75'-4" x 30'-4" with a 15'-0" x 3'-0" recess and 30'-0" x 8'-6" porch. It is likely that Technical Services constructed the relatively simple structure as a communal space within Camp 4.

Though records did not provide specific information to the construction process or building cost of the Recreation/Theater Building, a memorandum to the Regional Director of Region 1 in Richmond, Virginia dated September 20, 1938 reveals the construction process and budget of the CCC which likely directly affected the building. The memorandum came from Arthur E. Demaray, Acting Director of NPS, in an effort to provide updated instructions in preparing a building proposal, estimates and building costs, as well as effective schedule maintenance. The memorandum dictated that all future work, including buildings constructed by the CCC, for the "total cost of materials, skilled labor, local participation, etc. shall not exceed

$15,000 [exclusive of CCC labor]."[77] Additionally, Demaray instructed that when building or additions were larger, or did not fit the criteria of the NPS's Standard Plan No. 1, additional review was required and "should be supported by Job Application Form 10-352, itemized estimates, plans, justifications, and Army approval for location within the camp area."[78] The instructions, effective September 1938, encouraged the development and construction of buildings that were not elaborate or costly. This likely restricted the design of the Recreation/Theater Building, driving camp architects to focus on the scale of the building and simplify materials.

Likely completed between November and December of 1938, the large, boxy building consisted of wood framing on brick piers and supporting built-up wood roof trusses. The building's exterior cladding included weatherboard siding and 24-26"-long cedar roof shingles. The weatherboard cladding deviated from typical decorative waney board as seen on surrounding buildings and was the only of its kind in Camp 4. The interior of the building included an open-truss roof system. The open layout accommodated indoor recreation and provided enough space for assemblies. The original interior wall cladding and finishes are not known. However, the surrounding buildings and future finishes suggest Celotex panels were applied to all interior walls.[79] Site plans indicate that other large buildings were planned, although never constructed. Due to the recent budget restrictions and scale of the Recreation/Theater Building, it is likely that the camp architects decided against applying typical rustic aesthetic, which favored small buildings like the cabins or staff quarters.[80]

Following the construction of the Recreation/Theater Building, NPS correspondence from the fall of 1941 illustrates that the buildings within

77 "Memorandum for the Regional Director, Region I, September 20, 1938," Record Group 79, Box 88 Entry P90, NARA II, College Park, Maryland.

78 "Memorandum for the Regional Director, Region I from SGD Fred T. Johnston, December 9, 1939," Record Group 79, Box 88 Entry P90, NARA II, College Park, Maryland.

79 National Register of Historic Places, "Pleasant Historic District, Chopawamsic RDA Camp 4, Pleasant," National Register #89000459, 1989, 3; "Memorandum for the Director," November 26, 1941, Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland, 6; "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch," September 1951, U.S. National Park Service, Prince William Forest Park Archives

80 National Register of Historic Places, "Pleasant Historic District, Chopawamsic RDA Camp 4, Pleasant," 3-5; *U.S. Department of the Interior, Chopawamsic – R.D.P. Organized Camp 4-F Record Plan*, November 7, 1938, Hyattsville, Maryland: The Museum Resource Center.

Region One, including Chopawamsic RDA, stood as examples to later CCC camps as successful executions of atypical buildings and economical material choices. A. P. Bursley, Assistant Regional Director of NPS, stated that "the simple structural system used in Region One is less costly in both material and labor than the use of built-up sections [applied in Region Two] . . ."[81] A memorandum dated November 26, 1941 from A. P. Bursley to all regions recommended implementing masonry pier, wood girder, and wood floor construction instead of concrete floors and foundation walls, which were more costly. Additionally, NPS recommended double-height rooms in spaces with high condensation and activity, such as the kitchens or recreation spaces. In theory, the heat and condensation would dissipate while rising to the roof framing and be carried through the louvered vents near the roof. The Recreation/Theater Building met such material and construction choices which were considered "adequate for the life of the building."[82]

Previous studies of the structure hypothesized that the Recreation/Theater Building was a temporary Army structure retrofitted into a permanent one. Though simpler than neighboring buildings within Camp 4 and potentially perceived as temporary, the Recreation/Theater Building does not meet the Army's typical characteristics of a portable structure. Company SP-25 constructed all CCC-enrollee buildings of non-rigid, light materials which could easily be transported or reassembled at the next site. Army-approved CCC buildings were typically prefabricated structures consisting of one room. Variations of temporary buildings included wood-frame cabins with tent roofs. Yet, the Recreation/Theater Building does not fit the NPS's preference for rustic architecture applied to all permanent buildings in the park. Due to the design, scale, and material choice of the original construction, the Recreation/Theater Building was built during the CCC era and likely built as a permanent structure within Camp 4 by the Army's Technical Services.[83]

First Renovation: Office of Strategic Services Period

81 "Memorandum for the Director," November 26, 1941, Record Group 79, Box 088, Entry P90, NARA II, College Park, 2.

82 "Memorandum for the Director," November 26, 1941, Record Group 79, Box 088, Entry P90, NARA II, College Park, Maryland, 6. The memorandum specifically recommended scissor trusses for vaulted ceilings, referencing the Region One typical drawings. It remains unclear if scissor trusses were installed at the Recreation/Theater Building.

83 Chambers, OSS Training in the National Parks and Service Abroad in World War II, 161.



Figure 14. Chopawamsic RDA Work Plan illustrates early design of Camp 4, dated November 4, 1937. The red circle indicates future location of Recreation/Theater Building. Map courtesy of the National Park Service, Prince William Forest Park Archives.



Figure 15. Chopawamsic RDA Work Plan illustrates existing settlements vs. suggested design of park, dated September 1938. Map courtesy of the National Park Service, Prince William Forest Park Archives.

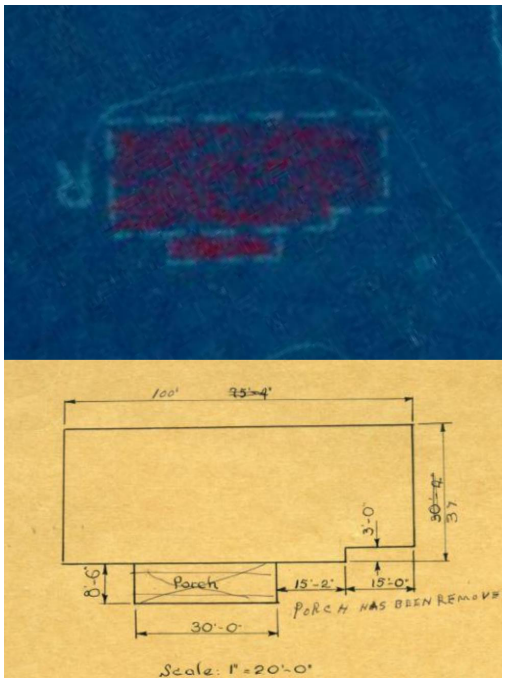


Figure 16. Comparison between the November 1938 Chopawamsic RDA Work Plan and NPS's 1938/1951 building survey sketch. Note the exact same footprint in both images. Map and image courtesy of the National Park Service.

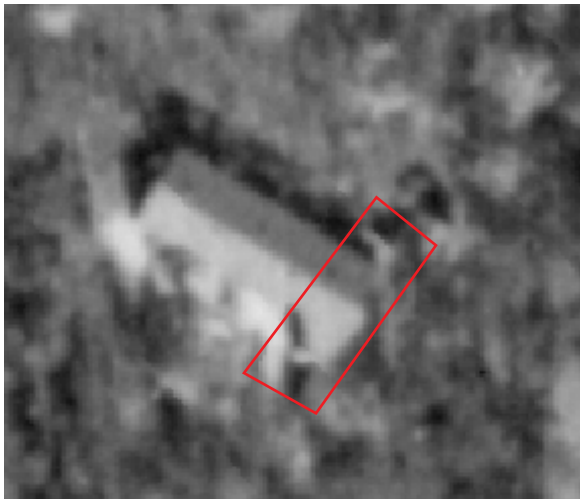


Figure 17. 1943 aerial photograph shows the enlarged footprint of the Recreation/Theater Building and the addition on the east elevation in red. Photograph courtesy of the National Park Service.

When the OSS moved into Chopawamsic RDA in 1942, their first initiative focused on addressing the programmatic needs of the new training school. In Area C (or Camps 1 and 4), the OSS planned to construct new buildings or additions to existing buildings including officers' quarters, a mess hall addition, 25- and 100-men latrines, two rifle ranges, a transmitter building, guard shacks, several moveable living quarters, and a multi-purpose building. There would need to be a headquarters for the training school and lecture room for required lessons. In addition, all CCC-era buildings would need to be winterized to support year-long occupancy.

The OSS commissioned a local contractor firm, Kent and Company of Richmond, Virginia, to build new structures and additions to the OSS camps. As Camp 4 became the primary training area for the Communications Branch, the OSS planned to construct a new recreational hub known as the Multi-Purpose Building. In June 1943, correspondence between OSS leadership and General Donovan detailed the agency's request for a new structure costing $23,000. On June 16, 1943, General Donovan approved the construction of the proposed building. However, the 1945 liquidation memorandum of Area C stated that the OSS constructed a "Recreation Hall" for the sum of $24,000 with no mention of the "Multi-Purpose Building." John Whiteclay Chambers II's OSS Training in the National Parks and Service Abroad in World War II posits that the Multi-Purpose Building became the current Recreation/Theater Building. The historical record does not explain how or why the plans for the Multi-Purpose Building shifted from constructing a new building towards renovating the existing CCC-era Recreation/Theater Building. However, similar construction costs, use, and the location of the planned building and existing Recreation/Theater Building point to the two being one and the same.[84]

[84] Capt. Duncan C. Lee to Brig. Gen. William J. Donovan, 11 and 15

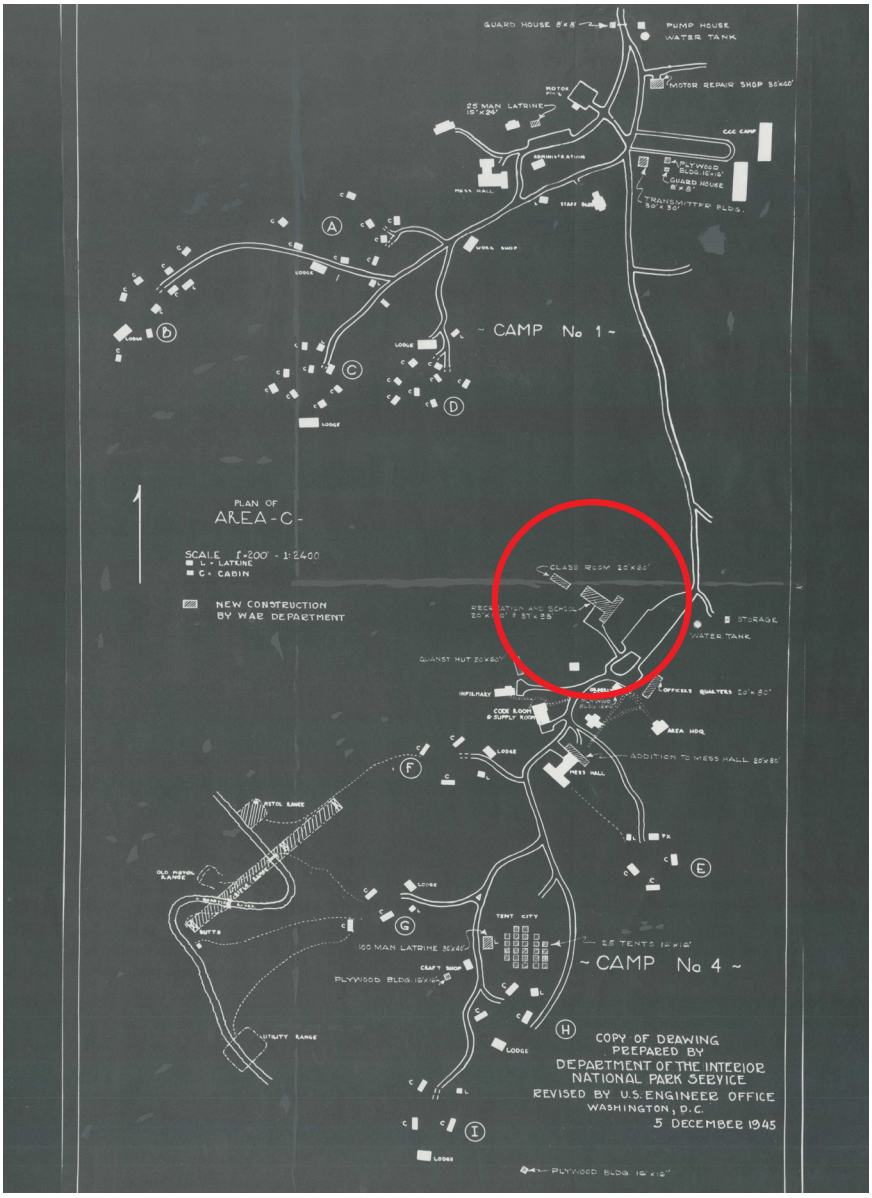


Figure 18. ca. OSS Map illustrating CCC-era buildings versus new construction by the War Department, dated 5 December 1945. Map courtesy of the National Park Service.

June 1943, subject: new building for Area C; Lee to Commanding Officer Hq. and Hq. Detachment, 16 June 1944, subject: erection of multi-purpose building at Area C, 16 June 1944, all in OSS Records, Record Group 226, Entry 137, Box 3, Folder 24, NARA II, College Park, Maryland; Col. W. L. Rehm, Acting Assistant Director for Services, Strategic Services Unit [formerly OSS], for the Director, to Commanding General, Army Service Forces, Mobilization Division, 19 October 1945, subject: Chopawamsic National Recreational Demonstration Area: Liquidation of Areas A and C, Estimates #1, #2, #3 in OSS Records, Record Group 226 Entry 146A, Container 8, Folder 199, National Archives II, College Park, Maryland. The first three citations capture the



Figure 19. Ca. 1942-1945 photograph of General Donovan visiting an unnamed OSS camp. Based on the building's gable end details, the roof of the one-story addition, white "Recreation Hall" sign, and volleyball and basketball courts, it is believed that this is Camp 4 and the Recreation/Theater Building. Photograph courtesy of the National Archives and Records Administration.



Figure 20. Ca. 1942 photograph of the east elevation of the building displays the large addition constructed by the OSS. The existing louvered vent is visible beyond the addition at the east gable. Photograph courtesy of the National Park Service.

In 1943, Kent and Company completed the renovation of the Recreation/Theater Building and construction of the new school headquarters.[85] Construction included enlarging the Recreation/Theater Building and installing new sheathing on the exterior. A 1943 aerial photograph and 1945 map by the Department of the Interior and U.S. Engineer Office substantiate extensive alterations occurred using the basic footprint and massing of the existing building, as seen in Figures 17 and 18. The 1943 aerial photograph shows a larger, rectangular footprint with a perpendicular addition on the east elevation. Likewise, the 1945 map of Camp 4 illustrates the new T-shaped footprint as well as valuable measurements of the Recreation/Theater Building, then known as the Recreation Hall and School Headquarters.

Prior to OSS alterations, the Recreation/Theater Building measured 75'-4" x 30'-4" and included a 30'-0" x 8'6" porch and 15'-0" x 3'-0" recess. OSS and Kent and Company likely removed the porch and built out the 15'-0" x 3'-0' recess prior to beginning additions to both the east and west elevations. The overall increased measurements from 75'-4" x 30'-4" to 100'-0" x 37'-0" suggests that the stage area was added onto the west side of the existing building. By examining the east elevation in historic photographs such as Figure 20, it is evident that the east elevation was not extended, but instead a 100'-0"

on-going correspondence between OSS leadership on the decision to construct a multi-purpose room. The source's folder and larger box did not include any drawings of the proposed building, as mentioned in the correspondence. The fourth citation provides context at the end of the OSS period and their documented construction projects which include the Recreation Hall and not a multi-purpose building.

85 Aerial photograph, dated 1943, U.S. National Park Service, Prince William Forest Park Archives; "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch," September 1951, U.S. National Park Service, Prince William Forest Park Archives; Department of the Interior, *Plan of Area C, 5 December 1945,* revised by U.S. Engineer Office, Washington, DC; Chambers, Camp No. 4 from OSS Training in the National Parks and Service Abroad in World War II. The U.S. Engineer Office's map uses the name "Recreation and School" instead of Recreation Hall. Meanwhile, Chambers' illustration of the OSS at Camp C-4 names the building "Recreation Hall and School Headquarters."

x 20'-0" was appended directly to the facade. If the east elevation had, in fact, been extended it likely would have met the perpendicular, one-story addition with a cold joint that would avoid blocking windows or prevent water entrapment at the roof line. The construction type and date of the east addition suggest that it was most likely envisioned as a temporary solution to accommodate training spaces for the OSS. Therefore, it is believed that the increased square footage was added to the west elevation, including filling in the existing recess, extending the interior space approximately 25'-0" x 37'-0", and providing a stage area. The stage included a raised platform with two sets of stairs at stage left and stage right, and an exterior door located at the center of the elevation. The door provided easy access to a 20'-0" x 60'-0" classroom building to the west of the Recreation/Theater Building.[86]

Simultaneous to the construction of the additions, the OSS winterized the building and upgraded heating and recreation equipment throughout the fall and winter of 1943. Historic photographs show small, one-story spaces on the north and south elevations which were constructed as service additions. As seen in Figure 20, the east addition included a chimney and most likely a boiler to heat the building. The exact function of the identical north elevation space remains unknown. Additional efforts to winterize the building included replacing the original hand-hewn cedar shingles with asbestos ones, applying plywood in replacement of Celotex on the interior, and installing new weatherboard on the entirety of the structure.[87] Historic photographs do not show any mismatched portions of siding and instead flow seamlessly along the entirety of the elevations, suggesting total replacement of the existing weatherboard at this time.

Throughout the OSS period, the interior spaces continued to facilitate recreational activities, such as basketball, billiards, and playing cards, as well as new opportunities to host performances and film screenings. Most importantly for the OSS, the building provided a large lecture space for the Communications Branch. Figure 12 depicts the interior of the building being used as an assembly hall for a visit from General Donovan. As evident in the photograph, finishes

[86] Evidence of the west elevation's exterior door is visible in the 2003-2004 renovation photographs (Figure 24) which show a filled-in door opening. Additionally, MTFA Architecture's field work found remnants of stair piers at the center of the west elevation.

[87] Chambers, OSS Training in the National Parks and Service Abroad in World War II, 509; "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch."

included dark paint on the lower third of the walls and a light paint finish on the upper two thirds. The walls featured simple wood-frame bulletin boards.

The renovation and substantial investment into the building facilitated the continued growth of the Communications Branch. The most extensive construction in Areas A, B, and C occurred in Camp 4 for the Recreation/Theater Building. The $24,000 paid for by the OSS and U.S. Army was the largest building expenditure of any of the East Coast training camps. Perhaps due to the massive alterations to the building, the OSS categorized the work as "new construction by the war department."[88] However, the massing, measurements, and documentation of the building support that the CCC-era structure was extensively altered by the OSS and not wholly constructed by them.[89]

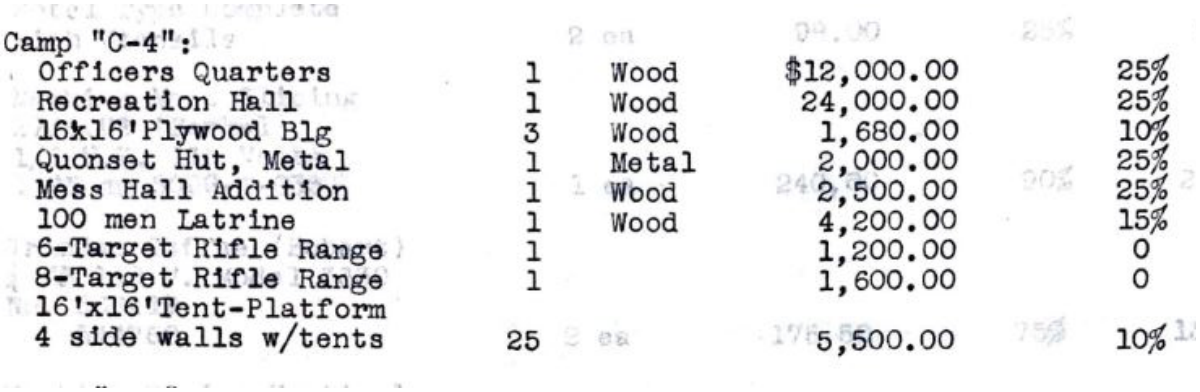
After the Office of Strategic Services: The Park is Returned to NPS

In 1945, the U.S. Army certified that Training Area C was a surplus property and would no longer be needed by the OSS, thereby starting the process to return Chopawamsic RDA back to the NPS. After declaring the area surplus, the Strategic Services Unit (SSU) of the War Department (agency after OSS) stated "that is would not be advisable to remove the buildings or to put remodeled buildings into former condition. In our opinion the buildings as they now stand are desirable and useful to the National Park Service if they resume occupancy of the area."[90] The SSU then inventoried all OSS-era

88 Department of the Interior, P*lan of Area C, 5 December 1945*, revised by U.S. Engineer Office, Washington, DC.

89 Capt. Duncan C. Lee to Brig. Gen. William J. Donovan, 11 and 15 June 1943, subject: new building for Area C; Lee to Commanding Officer Hq. and Hq. Detachment, 16 June 1944, subject: erection of multi-purpose building at Area C, 16 June 1944, all in OSS Records, Record Group 226, Entry 137, Box 3, Folder 24, NARA II, College Park, Maryland; Col. W. L. Rehm, Acting Assistant Director for Services, Strategic Services Unit [formerly OSS], for the Director, to Commanding General, Army Service Forces, Mobilization Division, 19 October 1945, subject: Chopawamsic National Recreational Demonstration Area: Liquidation of Areas A and C, Estimates #1, #2, #3 in OSS Records, Record Group 226 Entry 146A, Container 8, Folder 199, NARA II, College Park, Maryland; Department of the Interior, *Plan of Area C, 5 December 1945,* revised by U.S. Engineer Office, Washington, DC; "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch."; National Register of Historic Places, "Prince William Forest Park,", 101.

90 Col. W. L. Rehm, Acting Assistant Director for Services, Strategic Services Unit [formerly OSS], for the Director, to Commanding General, Army Service Forces, Mobilization Division, 19 October 1945, subject: Chopawamsic National Recreational Demonstration Area: Liquidation of Areas A and C, Estimates #1, #2, #3 in OSS Records, Record Group 226 Entry 146A, Container 8, Folder 199, NARA II, College Park, Maryland



Camp "C-4":				
Officers Quarters	1	Wood	$12,000.00	25%
Recreation Hall	1	Wood	24,000.00	25%
16x16'Plywood Blg	3	Wood	1,680.00	10%
Quonset Hut, Metal	1	Metal	2,000.00	25%
Mess Hall Addition	1	Wood	2,500.00	25%
100 men Latrine	1	Wood	4,200.00	15%
6-Target Rifle Range	1		1,200.00	0
8-Target Rifle Range	1		1,600.00	0
16'x16'Tent-Platform 4 side walls w/tents	25		5,500.00	10%

Figure 21. Estimate 1 from the War Department listed the Recreation Hall as "No:1, Type: Wood, Cost: $24,000, Salvage Value: 25%." Table and image courtesy of the National Archives and Records Administration.

work and provided three types of estimates to NPS: Estimate 1 included a list of buildings by area showing the type, cost, and salvage value; Estimate 2 provided a list of equipment in the various buildings with estimated cost, life expectancy, and estimated unit value; and Estimate 3 projected the cost of labor and material required to restore Chopawamsic to its previous condition. Estimate 1 detailed Camp 4's improvements by building noting the Recreation/Theater Building as "Recreation Hall- No: 1, Type: Wood, Cost: $24,000, Salvage Value: 25%." Estimate 2 did not provide any equipment specific to the Recreation/Theater Building. Estimate 3 provided a vague statement of "Possible work that might be required: Removal of Recreation Hall, No Estimate" with a note below reading "(no request made to this date)."[91]

By 1946, the SSU removed the last of the "tent city" and officially returned Chopawamsic RDA to the NPS. Prior to Camp 4's return to the NPS, the SSU most likely removed the 100'-0" x 20'-0" addition from the east elevation of the Recreation/Theater Building. A 1951 photograph from an NPS survey indicates that the majority of the addition had already been removed, as seen in Figure 22. Based on this photograph and NPS's request to return the park to

[91] Col. W. L. Rehm, Acting Assistant Director for Services, Strategic Services Unit [formerly OSS], for the Director, to Commanding General, Army Service Forces, Mobilization Division, 19 October 1945, subject: Chopawamsic National Recreational Demonstration Area: Liquidation of Areas A and C, Estimates #1, #2, #3 in OSS Records, Record Group 226 Entry 146A, Container 8, Folder 199, NARA II, College Park, Maryland; Memorandum for the Commanding General, Army Service Forces, Mobilization Division, Chopawamsic National Recreational Demonstration Area, 19 October 1945, Miscellaneous Washington Files; Budget, Record Group 226, Entry 146A.



Figure 22. 1951 Survey photograph of Recreation/Theater Building showing partial one-story wings on north and south elevations of the building. Photograph courtesy of the National Park Service.

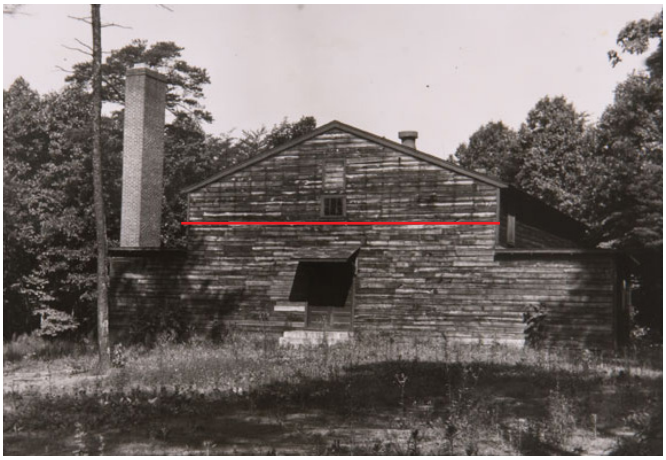


Figure 23. Ca. 1951 photograph of Recreation/Theater Building showing in red where addition's roofline once attached to the building. Photograph courtesy of the National Park Service.

its former condition, the one-story addition was most likely viewed as a temporary and unpractical element to keep on the Recreation/Theater Building. The location of the addition's roof line overlapped a window and could have created an ongoing source of moisture infiltration and deterioration, not only at the window opening but across the entire elevation. It would have also left the elevation without a defined primary entrance. Additionally, the 1951 photograph offers evidence of a potential selective weatherboard replacement. As seen in Figure 23 ca. 1951, the weatherboard above where the addition previously was shows evidence of warping, misalignment, and general deterioration. However, those weatherboards below the window all appear in good condition and suggesting they were replaced ca. 1946.

In 1951, the NPS conducted a survey of all existing buildings within newly renamed Prince William Forest Park, including the "Recreation Building, 4-91." The survey recorded the buildings original build date, subsequent renovation during the OSS period, materials, and a basic sketch of the building's footprint with measurements. As mentioned above, the survey photograph, Figures 22 and 23 illustrate the materials and conditions of the building in September 1951. The survey provided further conflicting information as the sketch of the building did not include the two one-story spaces on the south and north elevations. Yet, the attached photograph indicates that the one-story wings were still partially in place and the south elevation retained its tall, brick chimney. An out-swinging, casement window was located directly below the

louvered vent in the east gable end and it most likely dates to the building's original construction to provide ventilation for the recreation space.[92]

Research found few events occurring between 1951 and the end of the twentieth century. One change that occurred was the removal of the small north and south additions, including the brick chimney, sometime between 1951 and 2003. Figure 24 shows where the addition once connected to the main building. Additionally, across 1975 and 1976, NPS enlisted the help of the YCC to replace select portions of siding and install new nails at all existing siding. The YCC added insulation and new plywood to the interior walls of the building. The 1976 Building Survey by NPS documented that the asbestos roof shingles were replaced by asphalt ones, though the date of replacement is not indicated.[93] Throughout the twentieth century, the building continued to be used as a gathering space and theater for campers at Camp 4. In recent years, use of the building has become less frequent than its peak use during the CCC and OSS periods.



Figure 24. Ca. 2003 photograph of the south elevation indicates where the addition once connected to the main building. Wood rot is apparent where the addition's roofline once existed and a pipe in the foreground could suggest a potential boiler was once here. Photograph courtesy of the National Park Service.

92 "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch."

93 "NPS Building File: Recreation Building No. 4-91 and CC4 Theater Sketch"; "NPS Building File: Recreation Building 91." 1976. U.S. National Park Service, Prince William Forest Park Archives. Photographs from 2003-2004 during the phased renovations show that the two one-story additions were removed prior to this project.

Twenty-First Century Renovations

Extensive renovations occurred from 2005 to 2015. NPS records indicate that work began in 2005 and included installation of approximately 6,000 square feet of wood siding, new roofing materials, and new window frames and sashes. These changes were significant and overhauled nearly the entire exterior of the building and including insensitive changes. The new weatherboard matched the existing's siding profile and stain in-kind. Additionally, roofing material replacement included new copper flashing and asphalt shingles. All original six-over-six, double-hung wood windows were replaced with one-over-one, aluminum-clad, double-hung wood windows. Also, new metal doors were installed that did not match the original design.

The work continued through 2007 with exterior repairs and expanded renovations to the interior of the Recreation/Theater Building. Exterior alterations included re-staining the wood siding. On the interior, the full height wall and mezzanine located at the east end of the building were wholly replaced by new framing to accommodate an increased back-of-house area needed for new bathrooms and storage. New tile and gypsum wall board finish was utilized in the bathrooms while the east wall of the Recreation Hall matched the painted plywood finish in-kind. Other than those finishes remaining, the second-floor mezzanine and storage area received utilitarian finishes and wall framing was mostly left exposed. The most recent alterations occurred in 2015 when the exterior siding was again refinished.

The rustic aesthetic of Camp 4 and PRWI generally, reflects a distinctive form of public recreational architecture characteristic to the period of construction. The design of PRWI exhibits the increasing popularity of rustic architecture in the mid-twentieth century and the progressive ideals of the New Deal, an era of constructing model resource-reclamation projects. Within the otherwise unified design of the park, the Recreation/Theater Building is a distinct outlier. Unlike the surrounding buildings, it is devoid of telltale rustic architecture materials such as rough-hewn waney board, hewn logs, fieldstone, or wood roof shingles. In contrast, the Recreation/Theater Building is a large and simple structure with subtle nods to the building's natural surroundings, such as the utilization of locally available materials. Most clearly, the straight-

edged Dutch lap siding on the exterior offered a more practical finish in lieu of the unfinished, natural edge waney board used elsewhere at the park.

Prior to the commencement of construction at Camp 4 in 1937, NPS issued A Portfolio of Buildings for Organized Camps, a collection of recommended park building designs, including designs used at Camp 1, for use by park officers.[94] Additional reference materials, such as Park and Recreation Structures and Park and Recreation Structures II by NPS architect Albert H. Good, were suggested to park officers to aid in building successful nature-conscious park structures.[95] The sample designs underscored the NPS's preferred style which emphasized harmony between the building and its natural setting. Timber was used for all buildings and the exterior often featured rough-hewn waney board siding, board and batten siding, cedar shingles, or hewn logs in gable ends. The lumber was then treated with creosote, a toxic preservative once believed to dissipate over time, which produced a dark stain. The deep-brown color of the creosote finish became a defining characteristic of national park architecture in many locales. Fieldstone was another common natural material, and it was used in foundations, chimneys, and walls. Overall, the design of the new parks reflected a combination of quality craftsmanship with naturalistic architecture which was sympathetic to its landscape and aligned with the ethos of NPS.

Currently, there are no existing buildings within PRWI that resemble the Recreation/Theater Building at Camp 4. Research found that a similar building once stood at Camp 3 (Orenda/SP-26) near the Park Maintenance Area in the southern section of the park. The building was the former Repair Shop (39/U-I) and consisted of a modest, wood frame with horizontal weatherboard siding and sat upon a brick pier foundation. The CCC constructed the building in 1935, and it was demolished at an unknown date. As discussed earlier in the historic context and building history, it is most likely that the Technical Services of the Army constructed these two buildings due to the construction type, date, and their exclusion from the Standard Plan No.1. Ultimately, at the time of construction, the Recreation/Theater Building did not fit into the CCC's existing building typology and would need to be designed and constructed in a

94 National Register of Historic Places, "Chopawamsic RDA – Camp 4 Pleasant Historic District," 1.

95 Albert H. Good, P*ark and Recreation Structures Parts I, II, III*, Prepared for the U.S. Department of the Interior and U.S. National Park Service, (Washington, DC, 1938) viii-ix.

manner that was neither elaborate or costly. Such parameters and the OSS-era utilitarian design choices are why the building is an outlier within PRWI.[96]



Figure 25. The CCC constructed Building 39 in 1935. Photograph courtesy of the National Park Service.

[96] National Register of Historic Places, "Prince William Forest Park," 15.

Chronology of Development and Use



Figure 26. View of northwest corner of Recreation/Theater Building, March 2021

Ca. 1600	The Doegs or Tauxenents Tribe occupied present-day Chopawamisc RDA in a village called Pamacocack along the Potomac between Quantico and Chopawamsic Creeks.
1606	Virginia Company granted a charter to establish Virginia Colony after King James I issued a charter for two companies to settle area between Passamaquoddy Bay, Maine, and Cape Fear River, North Carolina.
May 13, 1607	English colonists arrived in Jamestown signifying an era of considerable and devastating changes for the Native Americans.
1610-1649	Anglo-Powhatan Wars fought across the span of four decades. A series of attacks on the encroaching settlers of the Virginia Colony by the Powhatan Confederacy touched off several subsequent wars. The Second Powhatan War (1646) ended with an English victory and occupation of the lands along the Potomac and into the Piedmont to the west.

Ca. 1650	After English victory and occupation of the Doegs' main village, the Doegs left and relocated across the Potomac and northwest into Maryland and Virginia backcountry.
1730	The Virginia General Assembly established an approximately 2,000-square-mile-area as Prince William County, named after King George II's second-born son. Prince William County encompassed all of present-day Northern Virginia including Arlington, Fairfax, Loudoun, and Fauquier Counties.
1775-1783	American Revolution occurred throughout the Thirteen Colonies.
June 25, 1788	After ratifying the U.S. Constitution, Virginia became the 10th state.
1807	Informal establishment of Batestown when Scottish merchant John Gibson left his land and fortune to Nancy Mackie (McKee) and her seven children, whom she presumably shared with Gibson. Mackie and her children settled near Cabin Branch Creek at present-day Mine Road.
1830	Betsy Bates settled near the Mackie family. Batestown was later named in her and her family's honor by the founding families of the village, the Mackies, Bateses, Coles, Kindles or Kendalls.
April 12, 1861	The Civil War began when Confederates bombarded Union soldiers at Fort Sumter, South Carolina.
April 17, 1861	Virginia Convention held in Richmond and a majority of Virginians voted in facor of secession. Virginia succeeded from the Union along with Arkansas, Tennessee, and North Carolina and joined the Confederacy.
April 9, 1865	Robert E. Lee surrended to Ulysses S. Grand at Appomattox Courthouse, ending the Civil War.
1870	Virginia re-admitted back into the Union after fulfilling the requirements of the Reconstruction Acts.
1899	Opening of Cabin Branch Pyrite Mine, located directly east of Hickory Ridge.
1919	Cabin Branch Pyrite Mine closed.

1933	The Resettlement Administration (under the authority of the National Industrial Recovery Act) given authority to acquire nearly 17,000 acres of land, which became the Chopawamsic Recreational Demonstration Area (RDA).
April 5, 1933	The Civilian Conservation Corps (CCC) created by executive order of President Franklin Roosevelt under the auspices of the Emergency Conservation Works Act passed only days earlier. Subsequently, CCC became responsible for constructing recreational facilities at all RDAs.
1935-1936	Chopawamsic RDA formed from land purchased from residents.
February 19, 1935	Federal Emergency Relief Administration gave permission to the Land Committee to begin land acquisition within present-day PRWI.
Spring 1935	CCC Company 1374 arrived at Chopawamsic RDA to begin constructing housing for the CCC-enrollee camp, SP-22, near present-day ball field at Cabin Camp 1.
July 23, 1935	CCC Company 2349 arrived at Chopawamsic to construct SP-25 & SP-26 near present-day gravel road fork between Camps 2 and 5.
1936	All land purchases from local landowners finalized to complete the proposed Chopawamsic RDA. Department of Interior (DOI) published "Recreational Demonstration Projects as Illustrated by Chopawamsic, Virginia," citing Chopawamsic RDA as a model program for the forty-four RDAs across the United States.
November 14, 1936	Executive Order 7496 required Chopawamsic RDA land be turned over to the National Park Service (NPS).
Fall 1937	CCC enrollees at SP-25 dispatched to begin construction of Camp 4 in northeast area of the RDA. Disagreements occurred between NPS's Branch of Planning and Region 1 Richmond over placement of the buildings within Camp 4.
November-December 1938	Camp 4 Recreation/Theater Building constructed. The building was one of the final buildings completed at Camp 4.

August 30, 1940	The Congressional Act 54 Statute 785 required that Chopawamsic RDA be administered as a part of the National Capital Park system, a program to provide recreational opportunities for visitors within the capital region.
June 30, 1941	CCC concluded work and vacated Chopawamsic RDA.
December 11, 1941	The United States officially entered World War II.
June 13, 1942	Executive Order signed by President Franklin Roosevelt created the Office of Strategic Services (OSS). The secret intelligence unit utilized Chopawamsic RDA's existing camps to train agents throughout World War II.
July 2, 1942	End of CCC program and funding reallocated towards war effort.
Winter 1943	OSS designates Recreation/Theater Building as the Recreation Hall and School Headquarters for Training Area C. This includes extensive alterations to the building and construction of a classroom directly west of the building. OSS winterized all CCC-era RDA buildings. At Camp 4 this includes replacing wood shingles with asbestos shingles, and adding insulation and plywood sheathing. Existing Recreation/Theater Building expanded to the west and one-story addition constructed on east side of building.
October 1, 1945	President Harry Truman disbanded the OSS, including the units at Chopawamsic RDA.
October 16, 1945	OSS commander reported that all training facilities within Chopawamsic RDA, specifically Areas A (Special Operations) and C (Communications) in the northeast area of the park, were considered surplus and would be closed as of November 1, 1945.
November 1, 1945	Army certified that Areas A and C were surplus, beginning the process of returning Chopawamsic RDA to the NPS.

1946	Chopawamsic RDA returned to the NPS. Unlike other RDAs, Chopawamsic was returned to the NPS rather than the state government.
1946-1951	Recreation/Theater Building's one-story addition on the east elevation partially removed.
June 12, 1948	Secretary of the Navy requested usage of land at Chopawamsic RDA for training purposes for the duration of World War II and six months thereafter. Secretary of the Interior (SOI) agreed to allow Navy use of 4,862 acres if the Navy agreed to purchase lands north of Route 619 which would extend the RDA and create a rounder boundary and future site of Quantico Marine Base.
June 22, 1948	Public Law 736 authorized transfer of 4,862 acres of land from the NPS to the Department of the Navy.
August 20, 1948	Official name changed from Chopawamsic RDA to Prince William Forest Park.
1950	Public Law 640 approves giving the SOI authority to make land exchanges with RDA lands.
1951-2003	NPS removed small north and south additions and chimney (partial additions left from 1946) of the building.
1975-1976	U.S. Youth Conservation Corps Program (YCC) replaced roof shingles and select portions of siding on Recreation/Theater Building. The YCC added insulation and new plywood to the interior walls of the building.
July 20, 1988	ECW Architecture at Prince William Forest Park, 1933-1942 is listed in the National Register of Historic Places.
June 12, 1989	Four of the five CCC-era camps are listed in the National Register of Historic Places including: Goodwill Historic District, Chopawamsic RDA Camp 1; Mawavi Historic District , Chopawamsic RDA Camp 2; Orenda/SP-26 Historic District, Chopawamsic RDA Camp 3; and Pleasant Historic District, Chopawamsic RDA Camp 4.
December 12, 2002	Cabin Branch Pyrite Mine Historic District is listed in the National Register of Historic Places.

2005-2007	Rehabilitation of Recreation/Theater Building occurred and included installation of new wood siding, roofing materials, louvered vents, doors, window frames, and accessible exterior ramps. On the interior of the building the historic mezzanine and rear wall were removed to allow for the construction of a larger mezzanine with restrooms and storage areas on the main level. New floor and wall finishes were installed for the new mezzanine.
October 2011	The 1989 nomination is updated as Prince William Forest Park Historic District and listed in the National Register of Historic Places.
2015	Exterior siding of Recreation/Theater Building refinished.

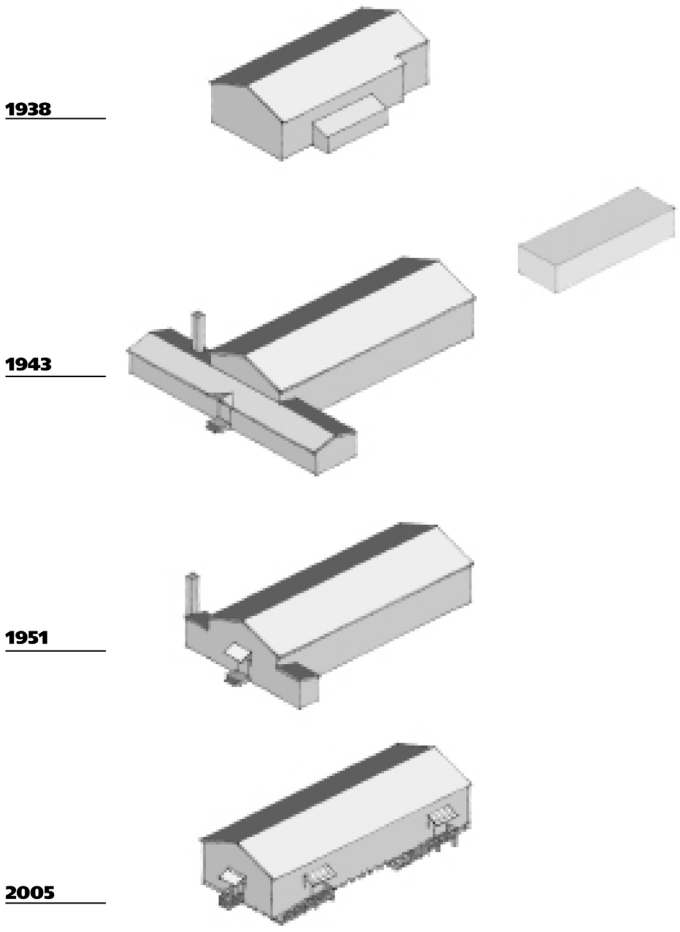


Figure 27. Sequence of major alterations over history of building

Physical Description

The Camp #4 Recreation/Theater Building is located in Prince William Forest Park (PRWI), 16590 Pleasant Road, Dumfries, VA 22025. It is sited at the north end of Camp 4, also referred to as Camp Pleasant. Nearby buildings typically serve administration and service functions.

SITE

The surrounding site is heavily wooded with a gentle slope from east to west. A gravel drive leads up to the building from the east and connects to a large parking area and the principal route through Camp 4. South of the building are the staff quarters and office for the camp. The nearby buildings are examples of Prince William Forest Park's historic rustic architecture (Figures 28 and 29). In general, the park's architectural design is typified by gabled wood frame structures clad in irregular waney board siding finished historically with a dark, creosote-based preservative stain. Due to its environmental impact, creosote is no longer considered an acceptable treatment in most situations. In the immediate vicinity of the Recreation/Theater Building are two remnants which no longer have an active use. A square concrete slab is located just above grade to the south of the building (Figure 30). This element is shown on a 1945 NPS map of the site, but its purpose is unclear. There are also two small masonry piers to the west of the building. Historical documentation suggests that these piers appear to have served as foundation a rear entrance stair that is no longer extant (Figure 31).



Figure 28. View of Camp #4 Central Bath Building near Recreation/Theater Building



Figure 29. View of Camp #4 Administration/Office building near Recreation/Theater Building

The immediate vicinity of the Recreation/Theater Building was heavily altered during the OSS occupation, most noticeably with the construction of several nearby buildings and an addition to the Recreation/Theater Building. A classroom building was constructed to the west, a Quonset hut was

built to the south, an officers' quarters was located across the road to the east, and the Recreation/Theater Hall was expanded. These buildings were removed once the OSS occupation ended and ownership of the property reverted to the NPS. No visible traces of these structures remain at the site.

Archaeological survey was performed in the immediate vicinity of the Recreation/Theater Building as a part of 2004 study by Louis Berger. Shovel testing was executed around the north, west, and south sides of the building. The pits to the west and south of the building returned positive results for historic material likely connected to the Clifton Mill Plantation, which existed near the site as recently as the late-eighteenth century. Much of the area was heavily disturbed during construction of the camp. The report's conclusion notes that the shallow deposits were likely destroyed, but that other deep features may remain underneath the building.



Figure 30. View of concrete pier to the south of Recreation/Theater Building



Figure 31. View of masonry remnants at west end of Recreation/Theater building

EXTERIOR

The Camp 4 Recreation/Theater Building has a simple, linear gable form. The utilitarian, box-like shape of the building is complicated only by projecting awnings and porches located at each exterior door. The building measures approximately 37'-1" in width, 99'-8" in length, and 26'-1" in height from grade to the roof ridge line at the front elevation. The building lacks exterior ornament of any kind. Although the original appearance has been generally been maintained, almost none of the extant exterior materials date to its period of significance.

The exterior of the Camp 4 Recreation/Theater Building is clad in Dutch lap wood siding with flat corner boards. The face of each siding board is approximately 6 7/8” in height. The siding boards are finished with a dark stain, which is a modern replication of the historic color of the wood structures throughout the park and many other National Park Service sites. The original siding color resulted from the application of creosote-based preservative for the wood elements. NPS records indicate that approximately 6,000 square feet of wood siding was replaced in 2005. This quantity suggests that the entire building was re-clad at that time. The siding was milled to match the original siding profile (see Figure 32). Prior to installation, the siding was primed on both sides and stained. The siding was re-stained two



Figure 32. East elevation of building

years later and again in 2016. In 2018, the building was included in a large-scale proposal to refinish thirty buildings in the park.

The roof is clad in asphalt shingles, which are light brown in color. A ridge vent runs along the peak of the gable roof and plumbing vents are situated above the first floor restrooms. Copper flashing, finished in dark brown, lines the perimeter of the roof and laps onto the cornice and rake boards. Several areas on the asphalt shingle roof have been marked with white paint, identifying potential water leaks for ongoing monitoring and future repairs. The current roofing was installed in 2005. The roof edge has a boxed cornice finished with a plain boards for the fascia and soffit. Along the west and east elevations, a plain rake board lines the top of the wall.

The wood frame walls and floor structure are supported on brick masonry piers. The crawl space is open from the perimeter on the south, west, and north sides. The crawl space at the east end of the building is enclosed under the restrooms by a brick foundation wall at the east elevation and by wood siding infill between masonry piers on the south elevation. The masonry piers are executed in common red brick laid in a running bond pattern, and they are visible from all elevations along the base of the building below the wood siding. The piers are located at the column locations and the midpoint of each bay, measuring three brick units in width and two brick units in width, respectively. The floor of the crawl space is exposed soil. The underside of wood floor structure is also visible overhead in the crawl space. Some areas of the wood floor structure have fiberglass insulation between the floor joists, while in other locations little to no insulation remains. Weather and pests have likely contributed to the building's loss of insulation.

Windows are typically centered on each structural bay on the north and south elevations, alternating between single and paired windows. All windows are aluminum clad, double hung insulated wood windows equipped with metal insect screens. The windows date to the 2005 renovation. The current one-over-one windows do not match the historic fenestration pattern of six-over-six double



Figure 33. Detail view of typical window



Figure 34. Detail view of main entrance stair on east side of building

hung windows. The existing doors are paneled metal doors set in pairs and covered by a wood framed cantilevered awning at all locations. All doors are accessed via a stair or ramp (Figure 34). Similar to the windows, the doors, stairs, and ramps date to the 2005 renovation. The interior paneling does not suggest alteration to the location of the original openings since the OSS period. Without performing additional removals, the significant alterations since the original construction combined with minimal historical documentation inhibit the verification of original window and door locations.

EAST ELEVATION

The main entrance to the building is located on the center of the east facade (see Figure 32). A pair of paneled metal doors is accessed via a wood stair with three risers and a rectangular landing (see Figure 25). Wood handrails span between chamfered wood posts on both sides of the stair. The landing is supported on two brick masonry piers. A wood awning covers the landing. The awning is supported by angled wood legs attached to a vertical board fastened to the exterior wall of the building. The awning is finished with Dutch lap wood siding on the sides and an asphalt shingle roof, matching the balance of the building (Figure 35). A rectangular wood vent with wood louvers is located near the peak of the gable centered on the east facade. Historically, a single window with one sash, presumably casement in operation, was located below the vent. Prior to 2003 this window was removed and the opening was covered over by siding. The framing on the interior side of the wall displays the former location of the window.



Figure 35. Detail view of typical wood weatherboard

SOUTH ELEVATION

The south elevation is ten bays in width and has two matching wood porch entrances (Figure 36). Both wood stairs date to the 2005 renovation. They abut the exterior wall on one side with a wood handrail along the outer side. The handrail fails to comply with building code, refer to Assessment for additional information. Both stairs are covered by a projecting awning similar to the one at the front entrance. In addition, the stairs stand on brick masonry piers. The eastern stair is five risers in height and the western stair is seven risers in height, responding to the slight grade change across the length of the building. A pair of paneled metal doors is located at each landing. Six windows, alternating single and paired double-hung wood windows, are located between the doors. A single window located in the side stage room window is higher on the wall, reflecting the higher floor level at this area. The easternmost bay is blank.



Figure 36. Overall view of south side of building



Figure 37. View of east stair on south side of building



Figure 38. Detail view of west stair on south side of building

WEST ELEVATION

The west elevation is the rear of the building. It is clad in wood siding and has a single vent opening near the gable peak, but is otherwise blank. The rectangular wood vent matches the one located on the east elevation. It has wood louvers and is located centered on the elevation. Also similar to the east elevation, the wood window that was previously located below the vent no longer exists. The masonry foundation piers are tallest along this face of the building and the crawl space is fully open and easily accessed. Two square masonry piers with a mortar cap are located just to the west of the building. Ghosting of a round post is evident in the cap, see Figure 31. These piers may be the remnants of a stair at the rear of the building serving to connect to the since-removed school building constructed by the OSS. The 2003 photographs support this suggestion as they depict an infilled door opening at this location.



Figure 39. View of west elevation

NORTH ELEVATION

The north elevation is very similar to the south elevation. It is ten bays in width and generally mirrors the south elevation. Instead of stairs, the two entrances are equipped with wood ramps. The ramps date to the 2005 renovation. Both ramps abut the exterior wall on one side with a wood guardrail along the outer side. The ramp landings are covered by a projecting wood awning similar to the one at the front entrance. The western ramp is longer and taller than the eastern ramp, showing a similar grade change to the opposite side of the building. Neither ramp meets all requirements of the Architectural Barriers Act (ABA) as they have non-compliant railings, landing arrangements, thresholds, and slopes. A pair of paneled metal doors is located at each landing. Six alternating single and paired double-hung wood windows are located between the doors. A single window located in the easternmost bay is higher on the wall. This window is located in the side stage room and reflects the higher floor level at this end of the building. The

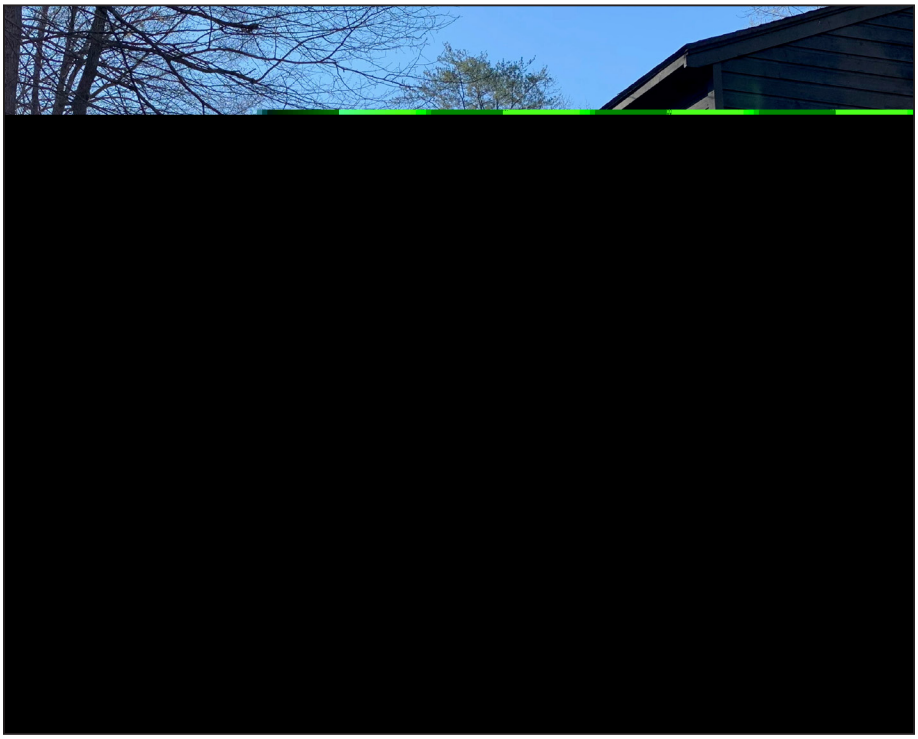


Figure 40. View of north side

westernmost bay has a single, double-hung window at each floor, including the building's sole second floor window located at the mezzanine.

INTERIOR

The interior of the Recreation/Theater Building follows a basic theater plan. A corridor centered on the entrance leads to a single large open space at the west end of the building (Figure 43). This large Hall (101) is the building's principal and largest space. A raised Stage (102) and two small Side Stage rooms (102A and 102B) are situated at the west end of the hall. The Entry (100) hallway is flanked by a few small rooms and a mezzanine on the east end of the building, all of which were constructed as a part of the 2005 renovation. These rooms include Restrooms (103 and 104), Storage Room (105), and other back of house functions. The Mezzanine (200) serves as a storage area and has a projector opening in the wall shared with the Hall.

The finishes throughout the building are utilitarian. Tongue-in-groove pine flooring is used in the majority of spaces. The plain sawn floor boards are 3 1/4" wide and range generally from 11'-0" to 14'-1 1/2" in length. The flooring is continuous from the entrance through the hall and up to the stage, which has a raised floor also of wood. Painted 3/8" thick plywood panels are used as the wall finish, excepting limited areas of gypsum wallboard. Wall trim

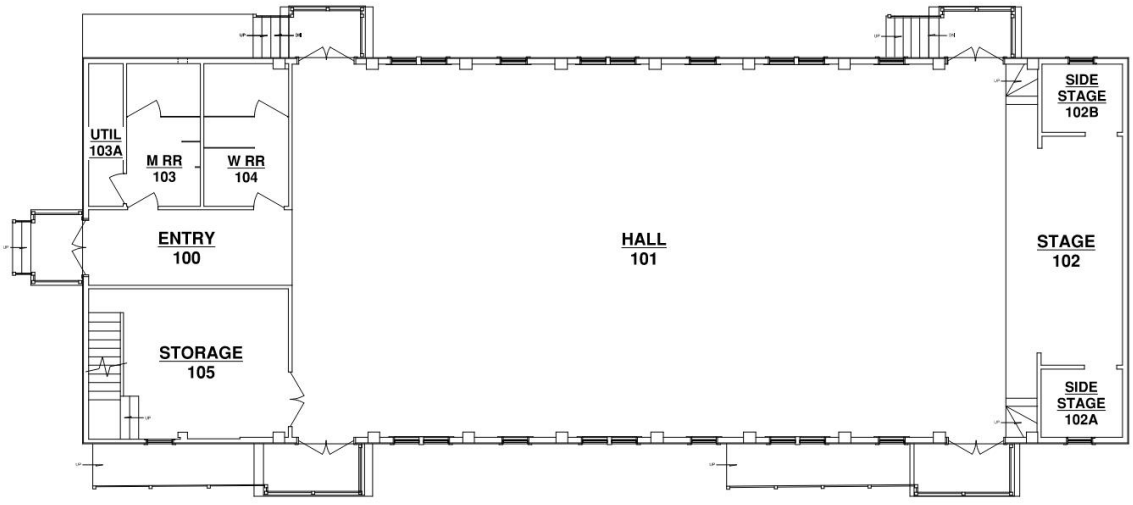


Figure 43. Main Floor Plan of Recreation/Theater Building



Figure 44. View to west in Hall (101)

typically only consists of a small quarter round shoe molding. Windows are trimmed with plain painted plywood measuring 6 1/2" wide. Painted hollow metal paneled doors are set in modern metal frames which abut the wall surface. The columns are expressed on the interior side of the wall as the paneling steps in to accommodate their depth. At each column wood truss kickers extend through the wall finish and up to the roof trusses above. The ceiling is generally unfinished. The roof structure is exposed above a plastic sheet fastened to the bottom chord of the built-up wood trusses. The sheet was installed as temporary measure to retain conditioned air from portable units.

ENTRY (100)

The Entry (100) area on the east side of the building is a small hallway flanked by back of house spaces and leading to the main hall space (101) (Figure 45). It is accessed from the exterior by a pair of paneled metal doors set in a metal frame, all of which is painted dark brown (Figure 46). The door does not have trim where it meets the wall finish. Flooring in the Entry consists of pine wood boards oriented north to south. The walls are finished with painted plywood paneling with a small area of gypsum wallboard on the wall shared with the restrooms. The wall finishes date to the 2005 renovation of the building, and

they are generally are in good condition. The finishes generally match the appearance and condition of the original wall panels. Doors to the Mens (103) and Womens (104) restrooms are located on the north wall. Exhibit panels framed with wood are mounted on both sides of the Entry hallway.

The Entry ceiling is 7'-8 ¾" in height and has no finish (Figure 47). The floor framing for the mezzanine above is exposed. As noted earlier, the wall and ceiling framing dates to the 2005 renovation, and includes contemporary wood framing elements such as galvanized joist hangers. The 2005 renovation removed a small room in the northeast corner of the building and expanded the enclosed space across the full width of the building. In addition, the enclosed space was expanded into the hall about one-half bay and now extends just beyond the second set of columns from the east wall. The current arrangement reflects the interior layout and appearance as depicted in the only archival image of the interior (see Figure 12).

HALL (101)

The main space in the building is the Hall (101). It is located to the west of the Entry (100), Utility (103A), and Restroom (103 and 104) areas. A



Figure 45. View to west in Entry (100)



Figure 46. View of east wall of Entry (100)



Figure 47. Detail view of ceiling in Entry (100)

raised Stage (102) and two Side Stage (102A and 102B) areas are located at the west end of the Hall (see Figure 44). During the OSS periods, the space held numerous gatherings and exhibitions. The space continues to serve as the assembly area for the building. Although the Hall had long included a basketball hoop and acted as an interior recreation space, the recreational component of the hall has been reduced in use. The current use focuses on the theatrical component of the space and it is capable of accommodating various performances and other modes of assembly.

The large, full-height volume of the Hall is, save a temporary plastic sheet at the bottom chord of the roof truss, open to the structure above and bound by walls with painted plywood finish. The space, excluding the stage area, is a single bay wide by eight bays long and measures 35'-10" by 68'-0". The bays are expressed on the exterior walls and the exposed roof trusses overhead (Figure 48). The north and south walls have six window openings each which are centered on each structural bay and which alternate between single and paired double-hung wood windows (Figure 49). A pair of paneled metal doors occupy the easternmost and westernmost bays on each wall (Figure 50). These doors access the exterior stairs and ramps and provide egress for building occupants.

The replacement windows have double-hung wood sashes with double-pane glazing (Figure 51). The simulated divided light windows are one-over-one and do not match the original six-over-



Figure 48. View of east wall of Hall (101)

six fenestration pattern. The windows were installed during a 2005 renovation. All windows are trimmed with plain board trim.

The Hall flooring consists of pine wood boards oriented from north to south (Figure 52). The flooring is continuous with the entry and storage areas in the east end of the building.

The walls are finished with painted plywood paneling extending from the floor to the bottom chord of the roof trusses. The columns are wrapped by the plywood paneling, which steps in 6" from the exterior wall at each column (see Figure 52). Truss kickers extend through the plywood paneling at all column locations (Figure 53). All wall surfaces are painted white. However, the backside of the wall paneling has traces of a dark-colored wainscot at approximately 5'-0" above the floor which has since been painted over. An historic photograph shows this band and the Storage (105) room still has this treatment (see Figure 12). The walls appear, in most cases, to have the original wall panels with limited instances of in-kind replacement. The east wall of the Hall dates to the 2005 renovation and the plywood paneling on this wall does not match the other surfaces. A quarter round wood shoe molding lines the base of all walls, excepting at the column locations.

Interpretive panels are mounted in rustic wood frames on the east walls (Figure 54). An historic photograph shows a wood-framed bulletin board on the northern portion of the east wall. Due to the different configuration and recent alterations to the east walls, these wood frames are likely a recent alteration.

The Hall has no ceiling finish. Based on research of similar buildings from the period, it is expected that the hall was originally open to the roof structure above. Plastic sheeting was installed at the ceiling level in recent years to retain conditioned air from portable mechanical units. Above this plastic sheeting, the roof structure is fully exposed (Figure 55). The bottom chords of the roof trusses are 15'-3" above the finished floor. The roof decking is visible and consists of tongue and groove wood decking. The decking consists of unpainted pine boards at 1" x 5 ¼" size.

Several lighting fixtures are mounted at the bottom chord of the roof trusses. Two rows of round utilitarian fixtures with metal shades are installed along

sides of the space with square utilitarian lighting fixtures installed in the center of the space. Refer to the electrical section for additional information.



Figure 49. View to west along north wall



Figure 50. View of northwest door in Hall (101)



Figure 51. Detail view of interior side of window



Figure 52. Detail view of base of column at exterior wall



Figure 53. Detail view of truss kicker at column



Figure 54. Detail view of east wall of Hall (101)



Figure 55. View of roof structure above existing plastic sheeting

STAGE (102)

The Stage (102) is located at the west end of the Hall (101) and it is undivided from the larger assembly space (Figure 55). The floor of the Stage area is raised from main floor level approximately 3'-0". The stage currently lacks an accessible route. The knee wall of the stage is finished with plywood paneling with ovolo base trim molding (Figure 56). Both the paneling and the base trim are painted black. Two stairs with five winders each are located at the north and south corners of the Stage (Figure 57). The stairs are finished with pine boards, rounded nosing, and quarter round molding, all painted black. The stage surface has 3 1/4" wide pine floor boards which are oriented west to east, perpendicular to the flooring of the main hall, and a square-edged wood trim board. The finishes of the Stage area match that of the main hall and appear to consist of original materials with limited instances of in-kind replacement.

Matching the rest of the Hall (101), the walls are finished with painted plywood paneling extending from the floor to the underside of the roof trusses. The rear Stage wall is painted in a different hued white, potentially reflecting the use of the wall as a projection screen. The side walls appear to be painted the same tone of white used throughout the building. The walls



Figure 56. View of Stage (102)

are in good condition and appear, in most cases, to be the original wall panels with limited instances of in-kind replacement. Four interpretive panels are mounted in rustic wood frames on the west wall of the stage area. Fasteners are located across all surfaces of the Stage walls, including staples, nails, and brads, and likely stem from various installations of stage scenery.

The Stage area has no ceiling finish. Plastic sheeting has been installed at the ceiling level, similar to the main Hall space. The roof structure is fully exposed above the plastic sheeting. A row of surface-mounted utility lighting fixtures is mounted at the bottom of the trusses aligned with the side wall of the Stage.



Figure 57. Detail view of south stair at Stage (102)



Figure 58. View of cased opening in north Side Stage room (102A)



Figure 59. View of window in north Side Stage (102A)

SIDE STAGE ROOMS (102A AND 102B)

Two rooms are located off the north and side sides of the stage. The north Side Stage is room 102A and the south Side Stage is room 102B. The rooms are mirrored but otherwise nearly identical.

Both rooms are accessed via a cased opening towards the back of the stage. Similar to the rest of the building, the door openings are not trimmed out (Figure 58). These openings have gaps between the plywood wall paneling and the jamb boards. Doors were previously installed at both openings, evidenced by scarring at hinge locations and the presence of extant hasps.

The wood flooring of the Side Stage rooms is continuous with the stage floor. There is no threshold at the door openings.

The walls are finished with painted plywood paneling extending from the floor to the underside of the roof trusses. All wall surfaces are painted white. The walls appear to be the original wall panels. No wall base is present, although ghosting of a shoe molding is visible in the north Side Stage room (Figure 59).

The north and south Side Stage rooms have a window on the north and south exterior walls, respectively (see Figure 59). Similar to the cased opening, the windows have wide gaps between the wall paneling and the opening. One distinction between the rooms is that the north Side Stage room has a bookshelf. The utilitarian bookcase has five shelves and it is painted white (Figure 60).

The two Side Stage rooms have no ceiling finish (Figure 61). Unlike the adjacent hall, plastic sheeting has not been installed at the ceiling. As such, the roof structure above is fully exposed. A single light fixture is mounted in the center of each room.



Figure 60. Wood shelf in north Side Stage (102A)



Figure 61. View of open ceiling in Side Stage

MENS RESTROOM (103)

The Mens Restroom (103) is accessed from the entry hallway via a single door. This room was constructed as a part of the 2005 renovation.

The door into the Mens Restroom is hollow metal with six recessed panels and it is equipped with a door closer, fixed pull, and keyed deadbolt lock. The floor is finished with 2" x 2" ceramic floor tile. The tile is beige in color with white speckles. The walls have a 4 1/4" x 4 1/4" ceramic tile wainscot, white in color with dark speckles, installed on fiber cement board. Painted gypsum wall board is used on the walls above the wainscot. A cove ceramic tile is used along the bottom of the wall. The ceiling consists of a suspended grid of 2'-0" by 4'-0" with lay-in acoustical ceiling tile, white in color. The ceiling height is 7'-3 ½" above the finished floor.

There is a single accessible water closet compartment with floor-mounted plastic partitions and two wall-mounted urinals separated by plastic wall-mounted partitions (Figure 62). The water closet compartment has a plastic toilet paper dispenser and stainless-steel grab bars. A single wall-mounted lavatory is located on the north side of the room. Above the sink are a stainless-steel soap dispenser and an angled stainless-steel mirror. Adjacent to the sink on the south wall is a wall-mounted electric hand dryer. A changing station is mounted on the east wall.



Figure 62. View of south wall of Mens Restroom (103)

UTILITY CLOSET (103A)

The Utility Closet (103A) is located off of the Mens Restroom (103) in the northeast corner of the building. This room was created as a part of the 2005 renovation. The Utility Closet is unfinished. The main electrical panel and the sprinkler main for the building are located in the closet. The Utility Closet is also used for miscellaneous storage.

The Utility Closet is accessed through the Mens Restroom via a hollow metal door with six recessed panels with a fixed pull and keyed deadbolt lock. The floor is unfinished oriented strand board (OSB) paneling. The walls are a mix of unfinished exposed wood framing and angled 1x6 sheathing boards (Figures 63 and 64). The ceiling is unfinished and the mezzanine framing and subflooring are visible overhead.



Figure 63. View of south wall of Utility Closet (103A)



Figure 64. View of north wall of Utility Closet (103A)

WOMENS RESTROOM (104)

The Womens Restroom (104) is located off the entry hallway directly adjacent to the mens restroom. The room was constructed as a part of the 2005 renovation.

The door into the Womens Restroom is hollow metal with six recessed panels and it is equipped with a door closer, fixed pull, and keyed deadbolt lock. The floor finish consists of 2” x 2” ceramic floor tile which is beige in color with white speckles. The walls have a 4 1/4” x 4 1/4” ceramic tile wainscot, white in color with dark speckles, on fiber cement board with painted gypsum wall board above. The ceiling consists of a suspended grid of 2’-0" by 4’-0" with lay-in acoustical ceiling tile, white in color. The ceiling height measures 7’-3 ½” above the finished floor.

The restroom has two water closet compartments with floor-mounted plastic partitions (Figures 65 and 66). Both compartments have a wall-mounted toilet paper dispenser and a sanitary napkin disposal receptacle. A single wall-mounted lavatory is located on the north side of the room. Above the sink are a stainless-steel soap dispenser and an angled stainless-steel mirror. Adjacent to the sink on the south wall is a wall-mounted electric hand dryer. A changing station is mounted on the toilet partition adjacent to the lavatory.



Figure 65. Accessible water closet stall in Womens Restroom (104)



Figure 66. Sink area in Womens Restroom (104)

STORAGE (105)

The Storage (105) area is a back-of-house space located off the Hall (101) in the southeast corner of the building. This room was constructed as a part of the 2005 renovation. The room is generally secured as it serves storage needs and acts as a basic kitchenette (Figure 67). For the latter function, the room holds a range-oven and a kitchen sink. The Mezzanine (200) is accessed through the Storage room.

The storage flooring consists of pine wood boards which are continuous with the entry area and the hall. However, the flooring in the Storage lacks the layers of floor finish applied to those public spaces. It is expected that the flooring finish in the Storage area more closely reflects the unfinished, or minimally finished, original appearance of the flooring (Figure 68).

The north and east walls in the Storage area are unfinished wood framing, revealing the rear of the gypsum wall board and the plywood paneling in the Entry (100) and Hall spaces. The interior faces of the south and west exterior walls are finished with 3/8" plywood paneling. These



Figure 67. View to west from stair in Storage (105)

exterior walls display the paint scheme employed during the OSS occupation of the building (Figure 69). An historic image from the period shows the dark band at the base of the wall with a lighter-colored upper wall above (see Figure 12).

The Storage area is accessed from the Hall through a pair of hollow metal paneled doors in the east wall. These doors have six recessed panels and are finished in a dark color matching all other doors. A wood stair to the Mezzanine occupies the northeast corner of the space, and it will be described in more detail in the following section.

There is no ceiling in the Storage area. The exposed floor framing of the mezzanine is visible overhead.



Figure 68. View of Storage (105) flooring



Figure 69. View of east wall in Storage (105), note dark painted band along base of wall



Figure 70. Stair to Mezzanine (200) from Storage (105)



Figure 71. View of south wall of Mezzanine (200)



Figure 72. Projection opening at west wall of Mezzanine (200)

MEZZANINE (200)

The second-floor Mezzanine (200) space is accessed via a modern stair located in the first-floor Storage (105) area situated in the northeast corner of the building (Figure 70). The space is generally unfinished and serves as a back of house storage space at present (Figure 71). The current Mezzanine was constructed in 2005. The opening in the west wall shared with the Hall (101) matches a similar projection opening in the since-removed mezzanine shown in an historic photograph.

The Mezzanine flooring is unfinished OSB panels. The walls of the mezzanine are a mix of painted plywood panels and exposed framing. The west interior wall has a projection opening into the hall (Figure 72). The unpainted rear face of the plywood paneling is visible through the wall framing. The north wall is finished with plywood panels similar to the Hall, as is a portion of the east and south walls. The exposed framing on the south wall is a recent repair while the visible framing on the east wall has sporadic locations of fiberglass insulation, also suggesting some alteration over time. It appears likely that all exterior walls were finished with plywood.

There is no ceiling finish in the Mezzanine. Unlike the adjacent Hall, no plastic sheeting was installed overhead and the space is open to the roof structure. Replacement of several areas of roof sheathing is evident from this space.

STRUCTURAL

There are no original structural or architectural drawings for the Camp 4 Recreation/Theater Building. NPS provided MTFA with recent plans of the building based off measurements taken of the existing conditions. Figure 73 shows a cross section of the building with the typical framing construction at the roof trusses.

The Camp 4 Recreation/Theater Building is a one-story building with an additional mezzanine space above the restrooms and storage room at the front of the building. The building was originally constructed with wood framing supported on brick masonry piers elevated above grade. The typical first floor wood framing consists of 2" x 8" wood floor joists spaced 16" on center supported on top of three side-by-side 2" x 8" wood girders bearing directly on the masonry piers. The piers below the stair and ramp landings are 12" x 12". The piers below the main building are typically 16" x 16" and 16" x 24" under the columns, except for the corner of the building where the piers make a 24" x 24"x 16" thick L-shaped pier. The height of the piers varies from 12" or less at the front of the building to a maximum height of 3'-4" at the back corner of the building. Metal straps and bolts are used to attach the columns and girders to the masonry piers.

The roof framing consists of wood decking planks supported on 2" x 8" purlins spaced 3'-0" on center. The sloped purlins are supported by blocking members on their low side, and bear on the sloped top chord of the roof trusses which are spaced 9'-0" on center. See Figure 73 for a typical section of the building with labeled framing members. The trusses span approximately 35'-9" and bear on two side-by-side 3" x 12" columns at the exterior walls. There were no mechanical connectors observed between the truss bearing and end columns. The columns, top chords and bottom chords of the trusses all consist of two members with the kickers and truss diagonals framing between. The exterior walls are framed with 2" x 6" studs spaced between the truss support columns, and diagonal interlocking wood decking members attached to both the studs and the columns. The mezzanine floor and wall framing below for the storage room and restrooms are newer construction, likely dating to the 2005-2007 renovation projects. Grade stamps visible on the framing members and plywood were documented during the field investigation. The mezzanine

floor joists consist of 2" x 8" SPF No. 2 spaced at 16" on center. The stairwell header beam consists of two side-by-side 2" x 8" members and the main beam over the storage room is three 2" x 8" members. At each entrance to the building there is an overhead awning attached into the building wall framing.

The first floor and roof framing were all exposed during the time of inspection. However, the reduced headroom in the crawl space toward the front of the building below the Storage (105) room and Restrooms (103 and 104) prevented direct access to the front 40'-0" of the floor framing. Based on the photos taken of this limited access area, the typical joist size and configuration appeared to be consistent in these areas. At the bottom of the roof trusses, plastic was stapled to the wood framing which was removed in some areas to access the roof framing above. Plywood finishing was removed by NPS to reveal the column construction in two locations, one on each side of the building. NPS also removed deteriorated batt insulation and leaves from under the building to expose the first-floor framing in the crawl space underneath the building. The existing stage floor framing was not exposed during the inspection, however the first floor framing below the stage was consistent with the main first floor area, so the capacity of the stage is assumed to be similar to that of the first floor.

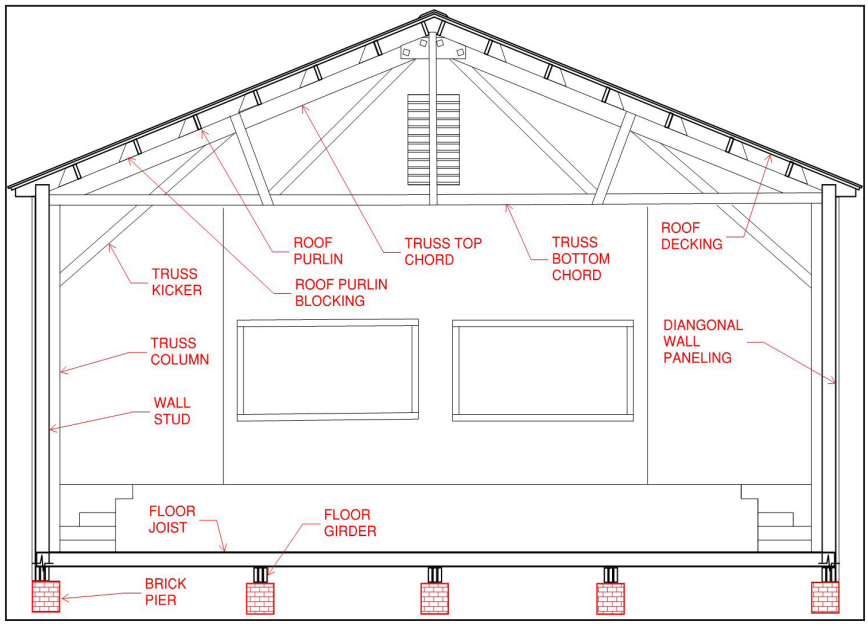


Figure 73. Building Cross Section with Typical Framing Construction at Roof Trusses

Character Defining Features

Character-defining features include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment. Identifying character-defining features is imperative in preserving features that are important to the building's significance. By identifying visual and tangible aspects of the building, the planning process for future restoration or rehabilitation can be better informed.

A character-defining feature (CDF) is defined in Director's Order 28, Cultural Resources Management Guidelines, (Appendix A: Glossary) as:

> A prominent or distinctive aspect, quality, or characteristic of a historic property that contributes significantly to its physical character. Structures, objects, vegetation, spatial relationships, view, furnishings, decorative details, and materials may be such features.

The process used in assessing Camp 4 Recreation/Theater Building's character-defining features was guided by NPS Preservation Brief #17: "Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character," and are in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and NPS Management Policies and Guidelines, specifically Director's Order 28, *Cultural Resource Management Guidelines*.

The results of the historic structure report investigations provide a fully-integrated narrative of developmental history of the extant building, including changes made over the years by former owners and the National Park Service. This portion of the report also will educate users of the building about the integrity of the historic fabric and the character-defining features so that it may be uncovered, interpreted, and preserved for future generations.

The following list identifies existing character-defining features of the exterior and interior of the Camp 4 Recreation/Theater Building:

Overall Visual Aspects - Exterior

Shape, Mass, and Scale

A key feature of the design is the overall rectilinear shape and box-like massing of the one-and-a-half-story building. These elements, combined with the front-facing gable, brick piers, and slope of the site contribute to the building's sizeable stature within the context of the surrounding buildings in Camp 4. The Recreation/Theater Building is the only building within Camp 4 of this substantial scale (Figure 74).

Setting

The building is surrounded by dense woods and sits upon a gentle rise, sloping from east to west. Within Camp 4, the Recreation/Theater Building is located at the northern boundary with three cabins, a recreation center lodge, latrines, a craft lodge/nursery, a dining hall, and an office/administration building situated to its south and east. The building is accessed from the gravel drive which bisects Camp 4 via a large gravel parking lot.



Figure 74. View of the Theater's front-facing gable and centered entrance from the east elevation.

Character, Materials, and Craft Details

The majority of the building features have been replaced in-kind to reflect the historic appearance. Contributing character, materials, and craft details of the exterior include:

Openings

The regularly-spaced single and paired window openings along the north and south elevations are important contributors to the character of the building. The rhythm and size of the window openings provide ample natural daylighting and views of the surrounding woods. Simple, flush board trim bounds the painted double-hung window sashes and frames (Figure 74).

The east elevation features a centrally located, paired door entrance (see Figure 74). Two openings with paired doors are located at the north and south ends of the Recreation/Theater Building (Figure 76).

All door openings appear to date to the original construction or OSS period and feature simple, flush wood frames. There are no door openings on the west elevation.

Additional openings include the louvered ventilation openings located at the gable ends of the east and west elevations of the building. The vents within the openings were replaced, likely during the 2005 renovation. However, the location and purpose of the vents are original to the construction of the building, (Figure 77).



Figure 75. Original eight window openings are located on both the north and south elevations.



Figure 76. Paired door opening on the south elevation.



Figure 77. Louvered ventilation opening at east elevation.



Figure 78. Weatherboard siding

Weatherboard

All exterior wall cladding is stained Dutch lap weatherboard with plain cornerboards. The cladding has been replaced in-kind in several previous renovations, most recently in 2005. Based on historic research, the existing siding should be used for purposes of matching dimensions. Profile, material, and finish of the weatherboard are character-defining features (Figure 78).

Roof and Related Features

The roof of the Recreation/Theater Building is distinctive for its low-profile, front-facing gable. In addition, the cornice of the building is unornamented (Figure 79). Original materials included metal coping and wood shingles. The wood roofing was replaced with asbestos shingles during the OSS period in World War II. The asphalt shingles were first installed sometime prior to 1976.



Figure 79. Low-profile front gable with metal coping.

Brick Piers

The building is supported on load-bearing, exposed-brick piers and has an open crawl space on all but the easternmost bays of the structure. Visible from all elevations along the base of the building, the square and rectangular piers are located at the column lines and at the midpoint of each bay across the full width of the building. The piers are executed in a running bond pattern of common red brick with a light-colored, Portland cement-based mortar. The overall composition of the materials, color, texture, and size of the brick units, coursing pattern, mortar color are all character-defining features of the piers (Figure 80).



Figure 80. Original, load-bearing brick piers.

Overall Visual Aspects - Interior

Shape and Mass

The interior layout has generally remained the same and is therefore a character-defining feature. The interior's largest and most notable space includes a full-height hall. At the west end of the hall is a stage with two small side stage areas located at stage right and stage left. Smaller spaces include the east entrance vestibule and an enclosed second-floor mezzanine and projector room (Figure 81).



Figure 81. Enclosed second-floor mezzanine.

Character, Materials, and Craft Details

The majority of the building features are original or have been replaced in-kind to maintain the historic appearance. Character-defining character, materials, and craft details of the interior include:

Plywood

The interior of the building is finished with plywood wall paneling which extends from the floor to the bottom chord of the roof trusses. Vertical framing elements are encased with plywood and affixed to the plywood-clad walls within the hall. The majority of the plywood wall paneling dates to the OSS period at the park and it is a distinctive material within the context of Camp 4's buildings (Figure 82).

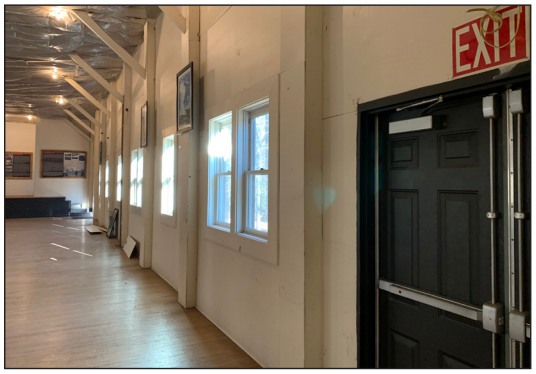


Figure 82. Original plywood paneling and plywood-encased framing members within the hall.

Wood

The hall, stage, entry, and storage floors have narrow tongue-in-groove pine floor boards (Figure 83). The floors are oriented north to south in all spaces excepting the stage area, where they are oriented east to west. Portions of the flooring were replaced in-kind in 2002 and match the original design. The entire space is topped with a modified and exposed king post truss roof system.



Figure 83. Tongue-in-groove pine floor boards.

Finishes

The interior finishes of the building are simple and utilitarian, including a white paint finish applied to all plywood elements. The color selection and overall spartan aesthetic date to the OSS period.

Conditions Assessment

The following section reviews each component of the building and assesses their condition and maintenance priority. Each discipline is presented separately. The individual elements are reviewed in an overall table for the corresponding discipline and then discussed in detail either individually or in small groups of related elements. The standard National Park Service condition and maintenance priority rating systems are outlined below and on the following page.

QUALITATIVE CONDITION RATINGS

GOOD

- Routine maintenance should be sufficient to maintain the current condition; and/or
- A cyclic maintenance or repair/rehabilitation project is not specifically required to maintain the current condition or correct deficiencies

FAIR

- The feature generally provides an adequate level of service to operations, but
- The feature requires more than routine maintenance, and
- Cyclic maintenance or repair/rehabilitation work may be required in the future

POOR

- Feature requires immediate attention
- Routine maintenance is needed at higher level of effort to meet significant safety and legal requirements
- Cyclic maintenance should be scheduled for the current year
- A special repair/rehabilitation project should be requested consistent with park requirements, priorities, and long- term management objectives

MAINTENANCE DEFICIENCY PRIORITY RATINGS (10-YEAR RATING PERIOD)

MINOR- Short Term/ Long- Term Priority

- This rating indicates standard preventative maintenance priorities and preservation methods have not been followed
- There is reduced life expectancy of affected adjacent or related materials and/or systems within 5 to 10 years and beyond;
- There is condition with long-term impact within 5 to 10 years and beyond

SERIOUS- Immediate/Short- Term Priority

- This rating defines a deteriorated condition that if not corrected within 1 to 5 years will result in the failure of the feature
- A threat to the health and/ or safety of the user may occur within 1 to 5 years if the ongoing deterioration is not corrected
- There is ongoing deterioration of adjacent or related materials and/or features as a result of the feature's deficiency

CRITICAL- Immediate Priority

- This rating defines an advanced state of deterioration which has resulted in the failure of a feature or will result in the failure of a feature if not corrected within 1 year
- There is accelerated deterioration of adjacent or related materials or systems as a result of the feature's deficiencies if not corrected within 1 year
- There is immediate threat to the health and safety of the user
- There is failure to meet a legislated requirement

NOT RATED

- The feature was not rated as it was not extant at the time of the report or is non-contributing, removed, and is not planned to be replaced.

ASTM UNIFORMAT II CLASSIFICATION FOR CAMP THEATER

Discipline	Major Group Element	Group Elements	Individual Elements
Architectural, Structural	A Substructure	A10 Foundations	A1010 Standard Foundation
	B Shell	B10 Superstructure	B1010 Floor Construction
			B1020 Roof Construction
		B20 Exterior Enclosure	B2010 Exterior Walls
			B2020 Exterior Windows
			B2030 Exterior Doors
		B30 Roofing	B3010 Roof Coverings
			B3020 Roof Openings
	C Interiors	C10 Interior Construction	C1010 Partitions
			C1020 Interior Doors
			C1030 Fittings
		C20 Stairs	C2010 Stair Construction
			C2020 Stair Finishes

Discipline	Major Group Element	Group Elements	Individual Elements
MEP	D Services	D20 Plumbing	D2010 Plumbing Fixtures
			D2020 Domestic Water Distribution
			D2030 Sanitary Waste
		D30 HVAC	D3010 Energy Supply
			D3020 Heat Generating Systems
			D3040 Distribution Systems
		D40 Fire Protection	D4010 Sprinklers
			D4020 Standpipes
		D50 Electrical	D5010 Electrical Service & Distribution
			D5020 Lighting & Branch Wiring
			D5030 Communications & Security
Architectual	E Equipment & Furnishings	E20 Furnishings	E2010 Fixed Furnishings

SUMMARY OF ARCHITECTURAL CONDITIONS

Major Group Element	Group Elements	Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
A Substructure	A10 Foundations	A1010 Standard Foundation	Full building	Fair	Serious
B Shell	B10 Superstructure	B1010 Floor Construction	Exterior ramps and stairs	Poor	Critical
			First Floor and Mezzanine	Good	Minor
		B1020 Roof Construction	Northwest awning	Fair	Serious
	B20 Exterior Enclosure	B2010 Exterior Walls	East elevation	Poor	Serious
			North, South, and West elevations	Good	Minor
		B2020 Exterior Windows	All elevations	Fair	Minor
		B2030 Exterior Doors	All elevations	Fair	Serious
	B30 Roofing	B3010 Roof Coverings	Full building	Poor	Critical
C Interiors	C10 Interior Construction	C1010 Partitions	First Floor	Good	Minor
		C1020 Interior Doors	Storage	Fair	Minor
			Mens RR, Womens RR, Utility	Good	Minor
	C20 Stairs	C2010 Stair Construction	Storage	Poor	Critical
			Stage	Fair	Critical
		C2020 Stair Finishes	Storage	Poor	Serious
			Stage	Good	Minor
	C30 Interior Finishes	C3010 Wall Finishes	Interior	Fair	Minor
		C3020 Floor Finishes	Interior	Fair	Minor
		C3030 Ceiling Finishes	Mens RR, Womens RR	Fair	Minor
E Equipment & Furnishings	E20 Furnishings	E2010 Fixed Furnishings	Side Stage Shelf	Good	Minor

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
A1010 Standard Foundation	Full building	Fair	Serious
B1010 Floor Construction	Exterior ramps and stairs	Poor	Critical
	First Floor and Mezzanine	Good	Minor
B1020 Roof Construction	Northwest awning	Fair	Serious

SUPERSTRUCTURE CONDITIONS

The foundation of the building exhibits various issues at the brick masonry piers and exterior ramps and stairs. Approximately twenty brick piers show signs of cracked masonry or open joints (Figures 84 and 85). These conditions are common at the piers for the landings at the stairs and ramps, as well at those supporting the building. There are limited instances of displaced brick units at the exterior wall immediately below the girders. The wood wall girders also show deterioration at several locations stemming from the prolonged presence of moisture and infestation by termites. The insulation at the underside of the floor displays extensive deterioration (Figure 86).

The exterior stairs and ramps are in poor condition. The ramps on the north side of the building do not comply with accessibility requirements due to the slope, handrail configuration, and threshold height change (Figure 87). The stairs do not comply with current building codes due to handrail configuration and, at the east entrance stairs, the variation in riser height. Compounding these non-code compliant conditions are a series of other issues. As noted above, the brick masonry piers show cracking and open joints. Also the wood of the ramps and stairs displays significant deterioration due to wood rot and termite infestation (Figures 88, 89 and 90). One south side stair is currently held together with clamps, suggesting potential failure. The wood siding directly adjacent to these stairs and ramps is rotted in many locations. (Figure 91).

The awnings are generally in good condition. However, the northwest awning displays extensive deterioration due to a carpenter bee infestation (Figure 92). Repair is required to improve this element located along an egress route as well as to prevent additional issues at the adjacent exterior wall.



Figure 84. Displaced masonry and deteriorated wood structure at perimeter of building



Figure 85. Masonry crack and open joints at brick foundation pier at north side ramp



Figure 86. Deteriorating fiberglass insulation at crawl space



Figure 87. East ramp at north side of building



Figure 88. Deteriorated wood landing and post at south stair, showing splitting and warping at boards and termite damage at post.



Figure 89. Termite damage at underside of south stair



Figure 90. Splitting post at north side ramp



Figure 91. Rotted wood at south stair



Figure 92. Carpenter bee damage at north side awning

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
B2010 Exterior Walls	East elevation	Poor	Serious
	North, South, and West elevations	Good	Minor
B2020 Exterior Windows	All elevations	Fair	Minor
B2030 Exterior Doors	All elevations	Fair	Serious
B3010 Roof Coverings	Full building	Poor	Critical

EXTERIOR ENCLOSURE CONDITIONS

The exterior walls consist of wood framing with wood sheathing and weatherboard. The east elevation exhibits signs of deterioration in the weatherboard across the full facade, such as warping and rotting (Figures 93 through 97). The remaining facades display localized areas of wood rot or finish deterioration and biological growth on the weatherboard (Figure 98). Refer to the structural section for additional information on the structural issues at the exterior walls.

The windows are generally in fair condition. The aluminum-clad wood replacement windows demonstrate issues tied to their operation, including difficulty opening/closing the sashes as well as noisy operation. All windows require cleaning to remove debris and insect infestation, and several locations are missing insect screens (Figure 99). On the interior, the wood sashes show minor soiling and small gouges at various locations (Figure 100). The current fenestration pattern does not match the historic pattern. Replication of the historic fenestration pattern should be a consideration in future replacement of windows.

The paneled, hollow metal exterior doors are in fair condition. The most significant issue is tied to the inability of the doors along the path of egress to open fully and maintain the required egress width in the event of an emergency. As a result, alterations are recommended later in the report to resolve this condition. Various doors have other operability issues and require attention to return them to proper working order. In addition, all doors have holes in their exterior face apparently at locations where hardware was

previously installed and removed (Figure 101). The north ramp door threshold exceeds the IEBC code maximum of 3/4" for height change and its beveled shape also failed to comply with accessibility requirements (Figure 102).

The asphalt roofing shingles are in poor condition. The park staff have performed various repairs to protect the building from the active roof leaks, including sealing various holes in the roofing system. The roof was installed in 2005 and, depending the system purchased, may be nearing the end of its useful life. Other elements of the roofing system – flashing, ridge vent, and fascia boards – appear to be in good condition.



Figure 93. Deteriorated wood siding at east elevation



Figure 94. Detail view of warped wood siding on east wall



Figure 95. Deteriorated finish on wood siding at east gable end

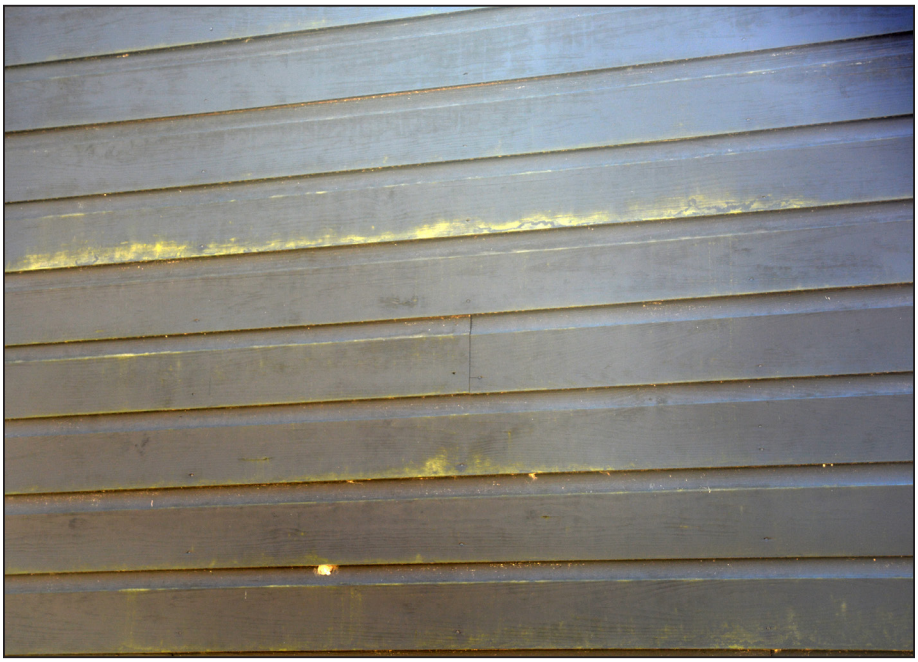


Figure 96. Biological growth on west elevation



Figure 97. Localized wood rot at corner board at southeast corner of building



Figure 98. Warped wood siding at south stair.



Figure 99. Debris and bent screen at window



Figure 100. Detail view of typical minor surface damage at interior of wood windows



Figure 101. Holes at location of removed hardware



Figure 102. Non-compliant height change at exterior door threshold



Figure 103. Detail view of roof leak location. Overall view of roof.

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
C1010 Partitions	First Floor	Good	Minor
C1020 Interior Doors	Storage (105)	Fair	Minor
	Mens RR (103), Womens RR (104), Utility (103A)	Good	Minor

INTERIOR CONSTRUCTION CONDITIONS

The condition of the interior construction is typically good with localized minor issues. The interior partitions at the east end of the building are new, and no locations suggest any repairs beyond typical maintenance upkeep. The only historic partitions remaining are those bounding the two side stage areas. These partitions are in good condition with no signs of deterioration and minor finish damage.

The doors on the interior match those on the exterior. All doors are paneled, hollow metal doors painted a dark bronze color. The doors at the Restrooms (103 and 104) and Utility Closet (103A) are in good condition with no repairs required. The hardware at the Storage (105) room doors is damaged and no longer sits flush in the door panels (Figure 104). The missing doors at the Side Stage (102A and 102B) cased openings require replacement to improve usability of the rooms (Figure 105). See Figures 46, 67 and 81 for views of doors in wider context.



Figure 104. Storage (105) room door



Figure 105. Scarring at Side Stage (102A) cased opening jamb indicated location of removed door.

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
C2010 Stair Construction	Storage (105)	Poor	Critical
	Stage (102)	Fair	Critical
C2020 Stair Finishes	Storage (105)	Poor	Serious
	Stage (102)	Good	Minor

STAIR CONDITIONS

The existing stairs on the interior of the building range in condition and priority.

The two sets of stairs at the Stage (102) are in fair condition. Both stairs lack a handrail, and therefore do not comply with the building code (Figure 106 and 107). A single handrail located on the wall side of these winder stairs would be sufficient to comply with the code requirements for an existing building. The painted finish on the wood stage stairs requires typical maintenance repairs and repainting.

As the Stage is accessed only by the two sets of stairs, it is does not comply with accessibility requirements for the building. Compliance with federal accessibility code should be completed in the near term. A fixed solution is preferable to a portable method of achieving the improved access.

The stair to the Mezzanine (200) located in the Storage (105) room does not meet code due to the variation in height and the open riser design (Figure 108). The variation in heights exceeds the allowable difference in height between risers. In addition, the stair currently lacks a guardrail. These issues require attention and should be considered in context with any upcoming work in these areas. The finishes at the Mezzanine stair include unfinished oriented strand board (OSB) at the landings and wood boards at the treads. Improved finishes are recommended to increase the durability of the stair elements.



Figure 106. View of north stage stairs



Figure 107. Detail view of south stage stairs



Figure 108. View of stair in Storage (105), note shorter riser height at bottom two steps in comparison to the risers in the upper run.

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
C3010 Wall Finishes	Interior	Fair	Minor
C3020 Floor Finishes	Interior	Fair	Minor
C3030 Ceiling Finishes	Mens RR (103), Womens RR (104)	Fair	Minor
E2010 Fixed Furnishings	Side Stage (102A) Shelf	Good	Minor
	Restroom (103 and 104) Accessories	Good	Critical

INTERIOR FINISHES AND FURNISHINGS CONDITIONS

The interior finishes and furnishings range from fair to good condition, although the current issues are generally aesthetic in nature with a small number of higher priority conditions. The walls are typically finished in painted plywood which exhibits the utilitarian nature of the building's design intent. There are currently numerous minor finish issues and deficiencies. In general, areas displaying minor wear and tear are not recommended to be repaired beyond typical maintenance such as repainting. In some cases, the wall panels require remounting and a small number require replacement, typically as a result of water damage or modern alterations (Figures 109 through 118). Gypsum wall board is used in the Restrooms (103 and 104) and is in good condition. At the Entry (100) area and at the Storage (105) door, the drywall finish does not match the original plywood panel wall finish and there are instances of damage.

The floor throughout the building ranges in condition. In general, all floors have limited quantity of soiling and debris (Figure 119). The wood flooring throughout the Hall (101), Stage (102), Entry (100), and Storage (105) areas is likely the original tongue-and-groove wood flooring with limited replacement and repairs over time. The flooring is in fair condition with a small number of gaps and general wear and tear throughout (Figures 120, 121 and 122). The restrooms have ceramic tile floor finish that is in good condition. The utility room floor is unfinished OSB paneling. Exposed OSB finishes the floor at the Mezzanine (200). These unfinished OSB floors have a higher potential for deterioration given the susceptibility of OSB to moisture.

Only a few spaces in the Recreation/Theater Building have a finished ceiling. The Entry (100), Storage (105), and Utility Closet (103A) do not have a ceiling finish and it allows for the contemporary framing system to be visible. The restrooms have suspended acoustical tile which has localized instances of staining and broken tiles (Figure 123 and 124). In the main Hall (101), the plastic sheeting obscures that the space was originally open to the roof structure above. The Side Stage rooms (102A and 102B) and the Mezzanine (200) are open to the roof structure above.

The building has few fixed furnishings. The wood shelf installed in the north side stage is in good condition and requires basic maintenance. The restroom accessories in the accessible restroom stalls in the Mens (103) and Womens (104) restrooms are currently installed above the maximum mounting height and conflict with the wall-mounted grab bars. The toilet paper dispensers require remounting to adhere to accessibility regulations (Figure 125).

There are also a series of interpretive panels installed on the east wall of the Hall and at the west wall of the Stage (102). These panels are in good condition. No recommendations have been prepared for these items as interpretation is beyond the scope of this report.

All doors have photoluminescent exit signs located on the wall above the opening (Figure 126). Improvements to the signage should be considered in a future renovation in coordination with emergency lighting and code requirements.



Figure 109. Damage to plywood wall paneling in Hall (101)



Figure 110. Damaged wall paneling at Mezzanine (200) stair



Figure 111. Misaligned patch of drywall at northeast corner of Hall (101)



Figure 112. View at northeast corner of Hall (101) showing water damaged plywood paneling



Figure 113. Damaged edge of plywood paneling in Hall (101)

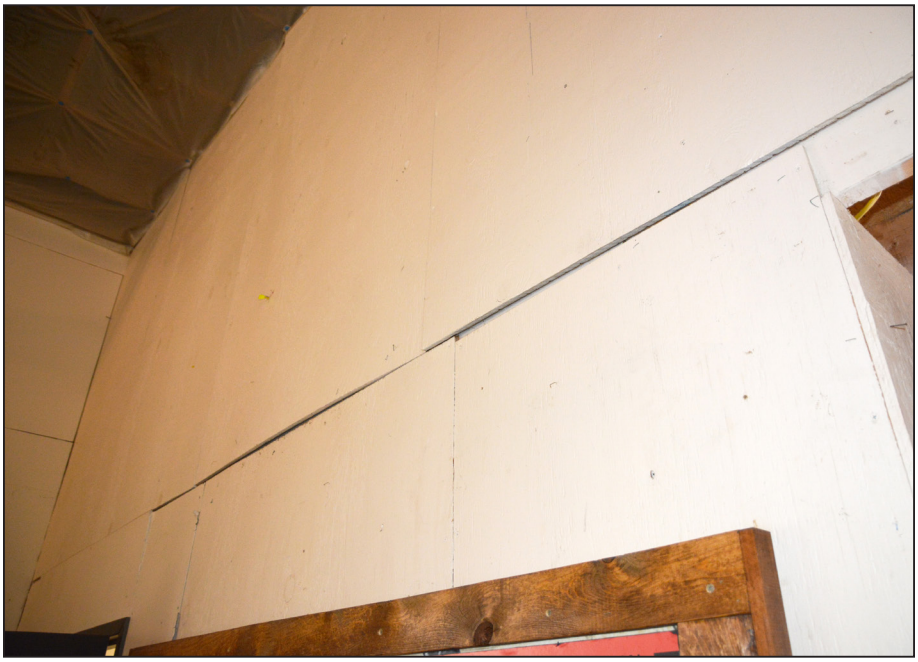


Figure 114. Poorly aligned replacement plywood panels on east wall of Hall (101)



Figure 115. Damaged drywall at Storage (105) door



Figure 116. Damaged plywood wall panel at exterior door



Figure 117. Damaged plywood wall panel at face of Stage (102)



Figure 118. Corrosion staining on Mens Restroom (103) wall



Figure 119. Rodent guano on Womens Restroom (104) floor



Figure 120. Discoloration in floor finish at north Side Stage (102A).



Figure 121. Localized area of damage to wood floor boards



Figure 122. Detail view of wood flooring at stage with tape remnants on surface



Figure 123. Stained acoustical ceiling tile at Mens Restroom (103)



Figure 124. Damaged acoustical ceiling tile in Womens Restroom (104)



Figure 125. Non-compliant location of toilet paper dispenser in accessible restroom stall



Figure 126. Typical existing photoluminescent wall-mounted exit sign

SUMMARY OF STRUCTURAL CONDITIONS

Major Group Element	Group Elements	Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
A Substructure	A10 Foundations	A1010 Standard Foundations	Unknown (Hidden)	Unknown (Hidden)	Not Rated
		A1020 Foundation Piers	Brick Masonry	Poor	Serious
B Shell	B10 Superstructure	B1010 Floor Construction - Floor Framing, Exterior Stair, and Ramps	Timber	Fair	Serious
		B1020 Roof Construction - Main Building	Timber	Fair	Serious
	B20 Exterior Enclosure	B2010 Exterior Walls	Timber	Good	Minor
C Interiors	C10 Interior Construction	C1010 Floor Construction - Mezzanine	Timber	Good	Minor
		C1020 Floor Construction - Stage	Timber	Unknown (Hidden)	Not Rated
		C1030 Partitions	Timber	Good	Minor
	C20 Stairs	C2010 Interior Stair Construction	Timber	Fair	Serious

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
A1010 Standard Foundations	Unknown (Hidden)	Unknown (Hidden)	Not Rated
A1020 Foundation Piers	Brick Masonry	Poor	Serious

SUBSTRUCTURE CONDITIONS

The brick masonry piers are exposed below the first floor framing of the building. The foundations below grade supporting the piers were not excavated during the inspection and are unknown. The brick masonry piers vary in size alternating between the exterior columns and vary in height as the grade slopes down towards the back of the building. An L-shaped wall partially encloses the crawl space below the restrooms in the southeast corner of the building. Figure 127 shows the wall and pier foundation layout of the building. The masonry piers are spaced in five rows down the length of the building approximately 9'-3" apart across the building width. The three interior rows of piers are spaced at 6'-0" o.c. and the piers at the exterior walls are more tightly spaced at approximately 4'-6" o.c. During the survey, most of the brick masonry piers appeared to be in good condition with minimal or no cracking. Despite being exposed to the elements beneath the building, the mortar is generally in good condition. Four landings around the building for stair and ramp access have smaller 12"x12" masonry piers that are in worse condition with horizontal and vertical step cracking. These piers support less weight, are more slender and more exposed to the elements away from the main footprint of the building (Figure 128). Out of the 105 masonry piers, approximately 20 piers with a few located at the landings have cracking, missing mortar and/or missing bricks that need repair. Most of these piers are located at or near the exterior. It appears that the piers appear to not be reinforced. The building does not have roof gutters, and rainwater dripping from the roof appears to have degraded the condition of the exterior brick piers over time (Figures 129 and 130).

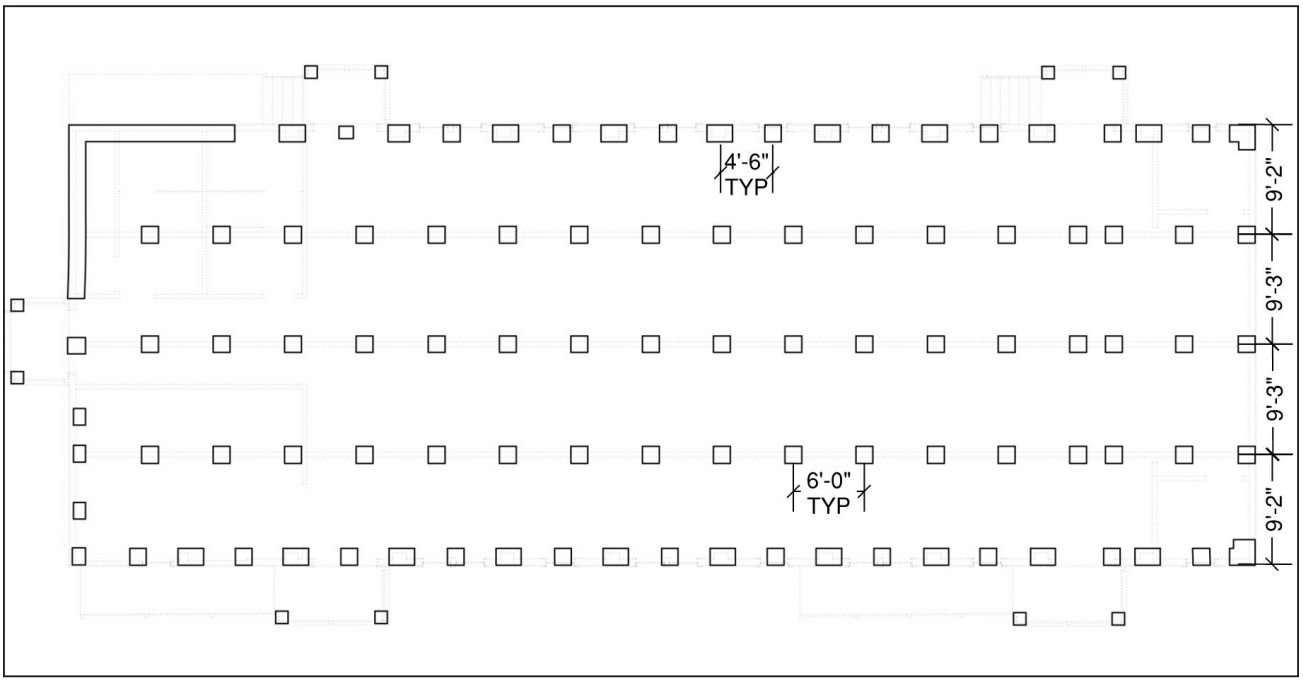


Figure 127. Wall and Pier Foundation Layout of the Building



Figure 128. Brick Masonry Piers



Figure 129. Affected Exterior Brick Piers



Figure 130. Affected Exterior Brick Piers

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
B1010 Floor Construction - First Level	Timber	Fair	Serious
B1020 Roof Construction - Main Building	Timber	Fair	Serious
B2010 Exterior Walls	Timber	Good	Minor

SHELL CONDITIONS

The first floor framing is visible from the exposed crawl space area below the building. In general, the timber joists appear to be good condition, although the eastern portion could not be viewed as head height is too low for access. The 40'-0" of the building length on the east side of the building could not be accessed from below due to the low headroom less than 2'-0" high. This area of the floor framing could not be accessed to determine the general condition, but the size and spacing of the members appeared to match the rest of the floor framing. In some locations, there are cracks in the joists (Figure 131) and insect damage (Figure 132) in approximately five locations where the condition is rated fair and of a serious maintenance priority. The insects may not be active, because no frass was observed. As discussed in the Substructure Conditions Section, the floor girders bear directly on top of the masonry piers. Some of these piers have crumbling mortar or missing bricks at the top that are limiting the bearing area of the floor framing and the truss columns (Figure 133). Underfloor insulation, previously installed between the floor joists, has largely failed and fallen away, exposing the girders, joists and the underside of the diagonal floor decking (Figure 134). The exterior stairs and ramps were observed to be in fair condition. The southwest corner stair riser was attached to the first floor landing with metal clamps, and no permanent attachment. At each entrance to the building there is an overhead awning attached into the building wall framing. The awning framing and connection of the awnings to the wall framing could not be accessed to determine the general condition.

The roof framing (Figure 135) is exposed from the mezzanine and theater space below. The roof decking appears to have been replaced recently in some areas

due to water damage as seen on many of the remaining roof decking members (Figure 136). Roof purlins spanning on top of the trusses also have signs of water damage in some locations and repairs have been made by sistering beams of equal size, except for one location where the new member is a significantly smaller section and attached to an existing purlin with water damage and cracking along a knot in the bottom of the member (Figure 137). To support the 2”x8” purlins, additional blocking was added to the downward facing side of the sloped members to transfer the load from the roof diaphragm into the truss top chords, as seen in Figure 138. During the inspection, blocking appeared to be missing in 15 locations along the full length of the building.

The roof truss members appeared to be in good overall condition and have not been exposed to the same amount of water damage seen in the roof decking and purlins. The trusses have diagonal 2”x6” bracing out-of-plane that is nailed into the center vertical member. In several locations, the nailing of the diagonal members to the vertical truss members has broken loose or is no longer adequately connected (Figure 139).



Figure 131. Cracks in Joists



Figure 132. Insect Damage



Figure 133. Piers with Crumbling Mortar or Missing Bricks



Figure 134. Insulation Between Floor Joists, Removed with Fully Exposed Girders, Joists and Underside of Diagonal Floor Decking



Figure 135. Exposed Roof Framing From Mezzanine and Theater Space Below



Figure 136. Replaced Roof Decking



Figure 137. Existing Purlin with Water Damage and Cracking



Figure 138. Backing is Used to Support Roof Purlins



Figure 139. Broken Nailing, Diagonal Members to Vertical Truss Members

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
C1010 Floor Construction - Mezzanine	Timber	Good	Minor
C1020 Floor Construction - Stage	Timber	Unknown (Hidden)	Not Rated
C1030 Partitions	Timber	Good	Minor
C2010 Exterior Stair Construction	Timber	Fair	Serious
C2020 Interior Stair Construction	Timber	Good	Minor

INTERIORS CONDITIONS

The mezzanine floor, stair, and interior wall framing are exposed from within the storage room (Figure 140). The existing studs, joists and plywood sheathing appear to be newer construction, in good condition, and are supported by a triple 2 x 10 girder. The interior wall and mezzanine floor framing at the corridor and Restrooms (103 and 104) were covered during the time of the inspection. This area of the mezzanine floor framing and interior partition wall framing could not be accessed to determine the general condition, but the size and spacing of the members appeared to match the rest of the floor framing.

The stage floor framing and stage access stair framing are covered, and the condition of the framing is not visible (Figure 141). The interior stair framing up to the Mezzanine (200) is in good condition (Figure 142). The exterior building access stairs and ramps are considered in fair condition with minor to serious maintenance priority due to the termite damage observed on stair framing members.



Figure 140. Exposed Mezzanine Floor and Interior Wall Framing



Figure 141. Covered Stage Floor Framing and Stage Access Stair Framing in Stage (102)



Figure 142. Interior Stair Framing up to Mezzanine (200) Level

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SUMMARY OF MEP CONDITIONS

Major Group Element	Group Elements	Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
D Services	D20 Plumbing	D2010 Plumbing Fixtures	Water Closet	Fair	Minor
			Lavatory	Fair	Minor
		D2020 Domestic Water Distribution	Pipes & Fittings	Good	Minor
			Instantaneous Electric Water Heater	Fair	Minor
			Insulation	Poor	Serious
		D2030 Sanitary Waste	Waste, Vent, Pipe & Fittings	Fair	Minor
			Floor Drains	Fair	Minor
	D30 HVAC	D3020 Heat Generating Systems	Portable, Plug-In Electric Heaters	Fair	Serious
			Heat Trace	Good	Minor
		D3040 Distribution Systems	Air Distribution	Building Does not Have	Critical
	D50 Electrical	D5010 Electrical Service & Distribution	MDP, Branch Circuit Panels	Good	Minor
			Circuit Breakers	Good	Minor
			Conduit and Wiring to Panels	Good	Minor
		D5020 Lighting & Branch Wiring	Electrical Wiring	Good/Poor	Minor/ Serious
			Lighting Fixtures	Good/Poor	Minor/ Serious
		D5090 Other Electrical Systems	Emergency Lighting System	Poor	Serious

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
D2010 Plumbing Fixtures	Water Closet	Fair	Minor
	Lavatory	Fair	Minor
D2020 Domestic Water Distribution	Pipes & Fittings	Good	Minor
	Instantaneous Electric Water Heater	Fair	Minor
	Insulation	Poor	Serious
D2030 Sanitary Waste	Waste, Vent, Pipe & Fittings	Fair	Minor
	Floor Drains	Fair	Minor

PLUMBING CONDITIONS

A 1" underground water service line enters the building through the floor of the Utility Closet (103A) adjacent to the Mens Restroom (103) at the southeast corner (Figure 143). There is no internal water meter. The utility is metered outside the building for the site water distribution. The copper main water service rises from along the wall of the closet and runs in the space just below the structural framing to the adjacent Mens Restroom, Womens Restroom (104), and Storage (105) closet to supply water to the plumbing fixtures in the restrooms and laundry sink in the Storage closet (Figure 144). Within the closet a service isolation valve has been provided. The copper domestic cold-water piping is in good condition, but the distribution piping has not been provided with exterior insulation which is not a code requirement for domestic cold-water distribution. Heat trace has been installed on the domestic water distribution piping for freeze protection. There is no domestic hot water distribution piping as all domestic hot water is generated locally at the individual lavatory or mop sink. Based on the good condition of the domestic distribution piping, it is recommended for re-use and reconfiguration as necessary for any proposed renovations.

Domestic hot water is generated by three (3) individual electric instantaneous water heaters rated at 3.0 kW (Stiebel Eltron – DHC 3-1) located at the individual lavatories and at the laundry sink. The water heaters were

manufactured in 2007 and appear to be in good condition (Figure 144). The capacity of water heaters is adequate to support the current domestic hot water demand. However, the water heaters are approaching their ASHRAE life expectancy (15-20 years) and should be considered for replacement for any proposed renovations.

The plumbing fixtures in the Mens (103) and Womens (104) restrooms located on the main level near the building entrance include manual flush-tank, floor-mounted water closets, manual flush-valve, wall-mounted urinal, and wall-mounted lavatories with accessibility-compliant center set faucet and drain piping guards. These fixtures appear to be in fair condition with some minor deterioration due to the building's seasonal use and operation (Figures 146, 147, and 148). The restrooms and fixtures comply with accessibility regulations and the quantity meets the requirements for assembly use. A plastic floor-standing laundry sink is provided in the Storage (105) closet on the main level (Figure 149). The plumbing fixtures do not meet current water conservation codes and standards. It is recommended to replace all fixtures with low flow/water-conserving types in any rehabilitation project.

Wastewater and gases from these fixtures are conveyed through PVC sanitary and vent pipes. The sanitary waste pipes from the fixtures combine to a single 4" sanitary gravity line that runs below the main level slab within the open crawl space (Figure 150). This 4" gravity line elbows below the southeast corner of the building and exits the building to an exterior sanitary sewer lateral clean-out (Figure 151). The sanitary piping and distribution are in good condition and are recommended for reuse and reconfiguration as necessary for any proposed renovations.

The building does not have any exterior gutters and downspouts to convey storm water (Figure 152). Refer to section B3010 Roof Coverings for more information. Gutters and downspouts would provide control of runoff. However, given that the building is raised above grade on open piers, located on a sloping site, and did not have gutters originally, it is not recommended to provide gutters.



Figure 143. Incoming water service



Figure 144. Domestic cold-water piping



Figure 145. Instantaneous electric water heater



Figure 146. Flush-tank, floor mounted water closet



Figure 147. Flush-valve, wall urinal



Figure 148. Wall-hung lavatory



Figure 149. Laundry sink



Figure 150. PVC sanitary piping in crawl space



Figure 151. Sanitary lateral clean-out



Figure 152. Exterior view of building, note that there are no gutters or downspouts

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
D3020 Heat Generating Systems	Portable, Plug-In Electric Heaters	Fair	Serious
	Heat Trace	Good	Minor
D3040 Distribution Systems	Air Distribution	N/A	Critical

MECHANICAL CONDITIONS

Only partial heating is provided in the building to provide freeze protection for plumbing and utility service areas. There are no overall HVAC systems providing conditioning of the whole building and there are no air conditioning systems for cooling or ventilation air.

Heating in the building is provided in the Mens (103) and Womens (104) restroom by portable, plug-in electric radiator heaters (Figure 153). These heaters serve as freeze protection during the winter season. Electric heat trace wiring has also been provided at the incoming water service main piping and the incoming fire service main piping for freeze protection during the winter season (Figure 154). These seasonal freeze protection systems are in operating condition but should be replaced as part of the proposed renovations with permanent heat generation systems. While the exact installation date of the heat trace is unknown, it is assumed to have been installed during the 2005 rehabilitation project. Heat trace wiring has an expected life span of 5-10 years on exposed applications.

Natural ventilation in the building is provided through operable windows on first and second floors as well as from end wall louvers at the building's gables (Figure 155). Mechanical ventilation should be provided through the building HVAC systems for any proposed renovations. Ceiling exhaust fans in the Mens and Womens Restrooms discharge to the building exterior. The exhaust fans are in operating condition. Currently, there are no HVAC systems to provide air-conditioning of the building. Uninsulated ductwork was installed prior to the 2005 renovation and remains in the attic space above the main level assembly area as provisions for potential connection to future HVAC air distribution systems (Figure 156). The ductwork is in



Figure 153. Portable, plug-in electric radiator



Figure 154. Electric heat trace wiring

fair to poor condition and should be removed for the proposed renovations. The existing ductwork is not suitable for the required air distribution for assembly use nor configured to compliment the architectural intent of for exposing the structure in the assembly area. The building requires a complete HVAC system as part of the proposed renovations.



Figure 155. Natural ventilation louver at gables



Figure 156. Unconnected ductwork distribution in attic

Individual Elements	Material	Qualitative Condition Rating	Maintenance Deficiency Priority
D5010 Electrical Service & Distribution	MDP, Branch Circuit Panels	Good	Minor
	Circuit Breakers	Good	Minor
	Conduit and Wiring to Panels	Good	Minor
D5020 Lighting & Branch Wiring	Electrical Wiring	Good/Poor	Minor/ Serious
	Lighting Fixtures	Good/Poor	Minor/ Serious
D5090 Other Electrical Systems	Emergency Lighting System	Poor	Serious

ELECTRICAL CONDITIONS

The existing incoming 120/240-volt single phase electric service is routed from the Camp 4 site electrical distribution from two (2) 120/240-volt single phase 200 ampere (A) disconnect switches via below grade conduit and feeders to two interior distribution panels rated at 200 (A) located in the utility room adjacent to the Mens Restroom (103) (Figures 157 and 158). These panels serve all electrical loads in the building. Each panel has an internal main circuit breaker disconnect electrical service as needed. The main distribution panel equipment is in good condition and no immediate concerns were noted. Sufficient load capacity and spare breaker/space capacity have been provided for future building loads associated with the proposed renovations. The branch circuits utilize NM-B (Romex) wiring with some limited MC cable wiring throughout the building with several instances of surface-mounted raceway wiremold being used for circuits and distribution added over the years. While the NM-B (Romex) wiring is acceptable by code for a Type V building construction type such as the Recreation/ Theater Building, it is generally not standard practice for it to be installed in a commercial building. Power distribution impacted by the proposed renovations should be replaced with MC cable or wiring within conduit.

Lighting in the building is a mix of incandescent and surface-mounted wraparound lens linear fluorescent fixtures (Figures 159 and 160). While most fixtures are in working condition, several are damaged and/or non-

functional. Lighting controls consist of wall-mounted occupancy switches in each room. Replacement of all general light fixtures is recommended as a part of the proposed renovations to provide appropriate lighting levels and meet current energy requirements for lighting power density allowances. None of the existing fixtures appear to be historic. The building does not appear to be provided with any emergency lighting (egress lighting) throughout the building and photoluminescent exit signs are provided at egress doors (Figure 161). Code compliant emergency lighting should be provided for the proposed renovations.



Figure 157. Camps 4 Site electrical service distribution



Figure 158. Electrical distribution panels



Figure 159. Interior incandescent lighting



Figure 160. Interior fluorescent lighting



Figure 161. Photoluminescent exit sign

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
D4010 Sprinklers	N/A	N/A	N/A
D4020 Standpipes	Utility Closet (103A)	N/A	N/A
D4030 Fire Protection Specialties	Entry (100) - Fire Extinguisher	Fair	Minor

FIRE PROTECTION CONDITIONS

BUILDING CONSTRUCTION AND FIRE AREA

The Camp 4 Recreation/Theater Building is constructed of wood framing on a masonry foundation. The building construction classification is Type VB as defined by the International Building Code (IBC), and Type V(000) as defined by NFPA 101 Life Safety Code. The building is a single fire area of approximately 3,600 square feet as defined by the IBC and International Fire Code (IFC).

OCCUPANT LOAD

The building occupancy classification is Assembly Group A-3, with accessory low-hazard storage, Storage Group S-2.

A posted sign in the Hall (101) indicates 325 persons as the maximum occupant load for the building. The gross area of the main hall and entry is approximately 2,575 square feet. The calculated occupant load based upon an assembly space without fixed seats, persons standing only scheme, yields 325 persons occupant load when an occupant load factor of 1 person / 7.92 sf is applied. This equates to approximately 63 percent of the gross floor area being occupied by persons standing at 1 person / 5 sf whilst the remaining 37 percent of the floor area is open for exit access. As such, the posted sign of 325 persons maximum occupant load is reasonable for this building.

EXITS AND EXIT ACCESS

A minimum of two exits are required when the occupant load per story is 500 or less. The building is provided with five exits: the main entrance on the east side and two exits on the building's north side and two exits on the building's south side. Each exit opens onto an exterior landing that provides direct access to grade via either a stair or a ramp.

The building's main entrance exit connects to grade via a 60-inch clear width stair. The building's south side exits connect to grade via 44 inches clear width stairs. The building's north side exits connect to grade via 48 inches clear width ramps. The capacity of each exit is indicated in the table below. The building's total available exit capacity is 814 persons and exceeds the 325 persons required exit capacity.

Building Exits and Capacity					
Exit Location	Door Width (Inches)	Door Capacity (persons)	Stair/Ramp Width (Inches)	Stair/Ramp Capacity (Persons)	Exit Capacity (Persons)
Main Entrance	64	320	60	200	200
Northeast	32	160	44	147	147
Northwest	32	160	44	147	147
Southeast	32	160	48	240	160
Southwest	32	160	48	240	160
Total					814

Figure 162. Building Exits and Capacity Table

The exit access travel distance is less than 200 feet, the maximum allowable distance in a non-sprinklered building. The exit remoteness and common path of travel comply with IBC. There are no dead-end corridor conditions.

All exit doors swing in the direction of egress travel. The building's north side and south side exits have paired doors. The doors are provided with closers that limit the door opening to approximately 90 degrees. When door leaf located nearest the steps or ramp opens to its limit, the door blocks passage down the stair or ramp. Accordingly, the closer and hinges on these doors should be replaced with hardware that allows 180 degree

opening or the door leaf should be locked in the normally closed position and the panic bar hardware on the door removed so to prevent unintended opening that would block egress down the stair or ramp and delay building evacuation. This alteration would reduce the exiting capacity.

FIRE ALARM SYSTEM

A fire alarm system is not provided. Single-station type smoke detectors are provided on the east and west wall of the Hall (101) and Stage (102) area. The detector appears to be provided with an integral sounder alarm.

NFPA 101 section 13.3.4.1.1 requires a manual fire alarm system in an assembly occupancy with an occupant load 300 or more persons. The building occupant load is 325 persons.

AUTOMATIC SPRINKLER SYSTEM

The building is not provided with an automatic sprinkler system.

IFC, IEBC and NFPA 101 do not require the retrofit installation of automatic sprinklers in the Camp 4 Recreation/Theater Building, an existing single-story 3,600 sf building that is classified as Assembly Group A-3 occupancy with a maximum 325 persons occupant load.

PORTABLE FIRE EXTINGUISHERS

At least one fire extinguisher was observed in the facility. The fire extinguisher did not have a valid inspection tag. The fire extinguisher was located on the floor adjacent to the main exit. A mounting bracket was observed to be in place on the wall.

IFC section 906.3.1 requires that two fire extinguishers of minimum 2-A rating per NFPA 10, Standard for Portable Fire Extinguishers, be provided for the size and arrangement of the building.

SIGNIFICANCE & INTEGRITY

NATIONAL REGISTER OF HISTORIC PLACES

The National Register is the United States' inventory of historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966 and overseen by the National Park Service, the National Register of Historic Places (NRHP) is an integral part of the national program to coordinate and sponsor public and private efforts to identify, evaluate, and protect America's historical and archeological resources.[1]

The significance evaluation identifies vital associations of the resource and applies criteria to evaluate its historical, architectural, archaeological, engineering, or cultural value. The Criteria provide broad parameters to recognize the wide variety of historic properties associated with our nation's prehistory and history. The historic resource's significance is directly tied to a discrete period of time in which its important contributions were made, and to relevant national, state, and local historic contexts.[2]

SIGNIFICANCE CRITERIA

For a property to be eligible for inclusion in the National Register, it must attribute significance under at least one of four criteria. The Criteria for Evaluation are as follows:
The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable

[1] National Park Service, "National Register of Historic Places." https://www.nps.gov/subjects/nationalregister/index.htm
[2] National Park Service, National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, (Washington, DC: National Park Service, National Register of Historic Places, 1990, rev. 1997), https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

entity whose components may lack individual distinction; or

D. That has yielded, or may be likely to yield, information important in prehistory or history.

CRITERIA CONSIDERATIONS

Ordinarily cemeteries, birthplaces, graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have reached significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

b. A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life; or

d. A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent of design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance[3].

[3] Code of Federal Regulations, Title 36, Part 60, "The National Register Criteria for Evaluation" (36 CFR Part 60).

NATIONAL REGISTER STATUS OF THE RECREATION/THEATER BUILDING

The Recreation/Theater Building was previously identified and administratively listed in the NRHP as a contributing resource in 1989 and 2011. In 1989, the Multiple Property Documentation Form (MDF) for Emergency Conservation Work (ECW) Architecture at Prince William Forest Park, 1933-42 identified the Recreation/Theater Building within Camp Pleasant (Camp 4) as significant at a state and local level. Simultaneous to the MDF, the four camps within Chopawamsic, including Camp Pleasant (Camp 4), were listed in the National Register of Historic Places under Criteria A and Criteria C. Most recently in 2011, the Recreation/Theater Building was listed in the National Register Nomination Prince William Forest Park Historic District under Criteria A and C. The new district included the historic boundaries of Chopawamsic Recreation Demonstration Area and recognized the district's national role, in addition to its previously recognized state and local ones, while adding Criterion D to the established Criteria A and C. The Recreation/Theater Building was identified as a contributing building within the historic district.

EMERGENCY CONSERVATION WORK ARCHITECTURE
AT PRINCE WILLIAM FOREST PARK, 1933-42 (1989)
MULTIPLE PROPERTY DOCUMENTATION

In 1989, Prince William Forest Park was recognized for the national significance of its collection of early twentieth-century, federally-funded recreational facilities. The MDF for ECW Architecture at Prince William Forest Park, 1933-42 consisted of a comprehensive survey and inventory of buildings, structures, and sites in the park. The MDF identified three distinct typologies of the significant resources based on National Park Service organization of its park structures: administration/service, recreational/cultural, and sleeping quarters, all of which fall into the category of public recreation facilities. Additionally, the MDF determined that PRWI is culturally significant for its rustic architecture, as well as natural and sympathetic park design, and historically significant as one of six recreational demonstration areas established in the state by the Civilian Conservation Corps and Works Progress Administration laborers from 1935 to 1942.

The multiple property area included the historic boundaries of Chopawamsic Recreation Demonstration Area, now present-day Prince William Forest Park. Under the MDF, four camps were listed as historic districts in the National Register of Historic Places: Camp Goodwill (Cabin Camp 1), Camp Mawavi (Cabin Camp 2), Camp Orenda/SP-26 (Cabin Camp 3), and Camp Pleasant (Cabin Camp 4).

CHOPAWAMSIC RDA – CAMP (4) PLEASANT HISTORIC DISTRICT (1989)

In conjunction with ECW Architecture at Prince William Forest Park, 1933-42, in 1989 Pleasant Historic District (Cabin Camp 4) was listed in the NRHP for its state and local significance as a recreational demonstration area established by the federal government. The National Register district was nominated under the following criteria:

- Criterion A (Event) in part for association with "the social welfare efforts of the New Deal manifested in the CCC, the trend in outdoor recreation and mobility, and the National Park Service role in land reclamation—all movements of the 1930s."[4]
- Criterion C (Design/Construction) in part for "the rustic styling embodied in the public recreational architecture at Chopawamsic is distinctive to this period, which roughly coincides with the existence of the CCC, 1933-42. While not individually noteworthy, the buildings, structures, and sites, that compose this organized campground collectively represent a design harmony with the natural and man-made landscape as well as an attention to indigenous materials and promotion of hand-crafted elements."[5]

The period of significance for the National Register historic district was 1933 to 1942, encompassing the development of the RDA and construction of the structures within Camp 4. At the time of the nomination, though the resources within Camp 4 did not meet the NRHP 50-year requirement, their integral role within the district's design lent to their early nomination. Additionally, the nomination suggested that because previous nominations justified rustic architecture from 1933 to 1942 for early inclusion in the National Register,

4 National Register of Historic Places, "Chopawamsic RDA – Camp 4 Pleasant Historic District," 3.
5 National Register of Historic Places, "Chopawamsic RDA – Camp 4 Pleasant Historic District," 3.

that Camp 4 also be considered NRHP-eligible before reaching fifty years. The Recreation/Theater Building is listed as individual resource #250/91.

PRINCE WILLIAM FOREST PARK HISTORIC DISTRICT (2011)

Most recently, the 2011 designation of Prince William Forest Park Historic District included overlap with the 1989 NRHP-listed historic districts of Camp Goodwill (Cabin Camp 1), Camp Mawavi (Cabin Camp 2), Camp Orenda/SP-26 (Cabin Camp 3), and Camp Pleasant (Cabin Camp 4) to create a larger historic district. The designation included the historic boundaries of Chopawamsic Recreation Demonstration Area, now present-day Prince William Forest Park, and emphasized the district's nationally significant role in addition to its previously recognized statewide and local ones. The 2011 nomination recorded over 500 resources in PRWI Historic District with 200 resources previously listed in the NRHP. The National Register district was nominated under the following criteria:

- Criterion A (Event) in part for association with the nationwide RDA program and as the first RDA to designate camps specifically for African Americans. Additionally, PRWI is nationally significant "for its role in the development and training of the first United State intelligence agency, the OSS. … On the local and regional levels, PRWI also meets Criterion A for its association with the board cultural changes that occurred in northern Virginia."[6]
- Criterion C (Design/Construction) in part for association as an intact collection of CCC-built camp buildings which "not only convey the goal of the RDA program to utilize CCC labor, NPS rustic architecture, and the NPS guidelines for camp buildings and arrangement, they also illustrate the use of the park by the OSS."[7]
- Criterion D in part for association with "the archeological record which contains important information about prehistoric settlement patterns at the interface of the Coastal Plan and Piedmont provinces and about the historic lifeways of the rural populations who occupied the landscape from colonial times until World War II."[8]

6 National Register of Historic Places, "Prince William Forest Park Historic District," 60.
7 Ibid.
8 National Register of Historic Places, "Prince William Forest Park Historic District," 60.

The period of significance for the National Register district was given as 3800 BC to 1945, approximately encompassing when Native Americans created their first large settlement to the end of the Office of Strategic Services period in the park. The Recreation/Theater Building is listed as individual resource #076-0146-0035 within Cabin Camp 4.

SIGNIFICANCE OF THE RECREATION/THEATER BUILDING

The Recreation/Theater Building was most recently evaluated for significance under NRHP Criteria A, C, and D using guidelines set forth in the NRHP Bulletin "How to Apply the National Register Criteria for Evaluation." The findings of this HSR concur with those of the previous National Register documentation that the Recreation/Theater Building is a contributing feature of the Prince William Forest Park Historic District which meets Criteria A, C, and D.

PERIOD OF SIGNIFICANCE

Previous documentation identified the historic district's period of significance as 1933-1943 (1989) and 3800 BC to 1945 (2011). The findings of this HSR determined the period of significance for the Camp #4 Recreation/Theater Building as 1938 to 1972, which encompasses the construction of the building, occupation and use of the building by the OSS, and its modern-day use up to the fifty-year mark.

ASSESSMENT OF INTEGRITY

Assessing the integrity of a property involves the evaluation of the existing condition of physical features, particularly those within the property's period of significance, which define why the property is significant in accordance with the National Register criteria. In order to be listed in the NRHP, the property must not only show significance by meeting one of the four criteria, but it must have integrity. To fully evaluate integrity, the assessment must fully examine the physical features of the property and how each aspect relates to its significance.[9]

[9] National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation,* (Washington, DC: National Park Service, National Register of Historic Places, 1990, rev. 1997), 44.

The seven aspects of integrity as defined in the National Register Criteria for Evaluation are location, design, setting, materials, workmanship, feeling, and association. As notes in *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*:

> Location is the place where the historic property was constructed or the place where the historic event occurred… Design is the combination of elements that create the form, plan, space, structure, and style of the property. Setting is the physical environment of the historic property… Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property… Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history of prehistory… Feeling is a property's expression of the aesthetic or historic sense of a particular period of time… Association is the direct link between an important historic event or person and a historic property.[10]

The following discussion considers each of the seven aspects of integrity as they relate to the Recreation/Theater Building.

INTEGRITY OF LOCATION

Integrity of location is determined by assessing the place where the historic property was constructed, particularly if the property has been moved or relocated. The Recreation/Theater Building's location has remained unchanged since its construction in 1938, therefore, the building retains integrity of location.

INTEGRITY OF DESIGN

Integrity of design is comprised of the form, plan, space, structure, and style of the property. The Recreation/Theater Building's form has evolved from its construction in 1938, specifically during the OSS period from 1942 to 1945. During the OSS's occupation, the building underwent winterization including new sheathing and roofing materials, and various additions to the east, north,

[10] National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, (Washington, DC: National Park Service, National Register of Historic Places, 1990, rev. 1997), 44-45.

and south elevations. After the OSS vacated PRWI, NPS removed additions resulting in a hybrid interpretation of the 1938 box-like form and plan with a ca. 1942-1945 scale and design of the building. It is notable that all changes are within the period of significance, specifically CCC construction and OSS occupation and remodeling. The Recreation/Theater Building retains its characteristic open-truss roof system and open layout to accommodate indoor recreation and space for assemblies. Therefore, the plan, form, space, structure, and style of the Recreation/Theater Building remain intact and the building retains integrity of design to the period of interpretation.

INTEGRITY OF SETTING

Integrity of setting refers to the physical environment of the property which illustrates the character of the place. The Recreation/Theater Building remains within the context of Prince William Forest Park and Camp 4. The surroundings of the building continue to consist of dense woods, gravel drives, and the nearby camp facilities. The Recreation/Theater Building retains integrity of setting.

INTEGRITY OF MATERIALS AND WORKMANSHIP

Integrity of materials is determined by the physical elements "combined in a particularly pattern or configuration to form a historic property"; Integrity of workmanship is the physical evidence of the craft, or methods, of construction. The Recreation/Theater Building retains integrity of materials and workmanship to the 1942-1945 era. Renovations in the late twentieth and early twenty-first century changes utilized in-kind materials in an effort to maintain the appearance at the period of interpretation. The construction methods used to construct the original 1938 building and its subsequent remodel during the OSS period were determined by the NPS and used by local craftsman. The craftsmanship visible at the exterior and interior of the building displays plain and effective finishes, typical of vernacular building methods. Succeeding material replacements were made in kind to retain the original methods and aesthetic of the building. The Recreation/Theater Building retains its integrity of material and workmanship.

INTEGRITY OF FEELING

Integrity of feeling is the ability of a historic property to evoke the aesthetic or historic sense of the past. Feeling is highly dependent on the property's physical characteristics which convey its historic properties. Despite changes in materials and design, the building continues to convey the historic and aesthetic feeling of its CCC and OSS-era construction as a recreation and theater building. The building retains the floor plan with spacious, double-height layouts to support an assembly and theater space. Therefore, the Recreation/Theater Building retains integrity of feeling.

INTEGRITY OF ASSOCIATION

Integrity of association is determined by the direct link between a property and the event for which the property is significant. The six other aspects of integrity contribute to a property's integrity of association. The Recreation/Theater Building retains high levels of integrity of location, design, setting, and feeling. Additionally, the Recreation/Theater Building retains integrity of association as it has been continuously used for camping purposes since its construction, aside from the period of OSS occupation.



Part II: Treatment and Use

Treatment & Use Overview
Treatment Recommendations
Alternatives for Treatment
Requirements for Treatment & Use

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Treatment & Use Overview

Built in 1938, the Camp #4 Recreation/Theater Building is a contributing structure to the Prince William Forest Park Historic District. This assembly building serves as one of the few interior gathering spaces within the park. NPS has identified that this building is intended to continue to serve this assembly use. As a result, no alternative uses were considered during the preparation of this report. Rather, the intended goal of this project is to assess the condition of the building, define the requirements for this use, and to analyze the existing building for improvements which facilitate its use during all four seasons.

The treatment standard applied to this building for the report is preservation. The preservation standard is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties as follows:

> [T]he act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. However, new exterior additions are not within the scope of this treatment.[1]

The assessment and recommendations were developed to comply with the applicable codes, including the International Existing Building Code (IEBC) and the Architectural Barriers Act Accessibility Standards (ABAAS). As the Recreation/Theater Building is a contributing building for a listed historic district, the principal driver of code compliance is Chapter 12 of the IEBC. It should be noted that the IEBC is referenced and also references the International Building Code, so in several instances the recommendations refer to both codes.

[1] Kay D. Weeks and Anne E. Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties: With Guidelines for Preserving Rehabilitating Restoring & Reconstructing Historic Buildings*. Revised by Anne E. Grimmer. (Washington D.C.: U.S. Department of Interior National Park Service Technical Preservation Services), 2.

NPS identified a series of elements which required recommendations from the A/E team. These categories included the following: HVAC system, accessibility, fire protection and detection systems, and theatrical/electrical improvements. In some cases, these categories offered the potential for alternative treatments and in others they did not. The treatment recommendations, alternatives for treatment, and treatment drawings provide description and location information for these items.

A Class C cost estimate was developed for all recommendations to meet the project goals. The cost estimate was issued separately to NPS.

The following section describes the treatment recommendations. The selected treatment recommendations principally alter or replace non-historic elements of the building, and will not impact the historic integrity of the structure.

Treatment Recommendations

ARCHITECTURAL & STRUCTURAL

Several components of the Camp #4 Recreation/Theater Building require immediate attention to prevent further deterioration or to comply with various regulations. The areas of greatest concern architecturally are at the exterior of the building, including the deterioration of the exterior envelope and non-compliant exterior egress and accessible routes.

EXTERIOR OVERVIEW

There are exterior issues which require attention, the most prominent of which are itemized below. Additional items which are occurring are not discussed explicitly below but these are typically minor in scope, such as cleaning, localized patches, provision of insect screens, among others. Refer to the condition assessment for more information, the proposed exterior recommendations below and the proposed treatment drawings for additional information.

ROOFING SYSTEM

The failing roofing system presents the greatest threat to the building. The roof has several leaks to which the park staff has actively attended with a series of repairs. These efforts should be considered a temporary measure. The roof was installed in 2005, and it is at the end of its useful life. Given these conditions, a full roofing replacement is recommended in the near term. The addition of exterior roofing insulation and replacement of damaged roof sheathing are recommended as a part of the roofing scope of work. These alterations are intended to resolve any active leaks while improving the thermal envelope at the roof in concert with the provision of new HVAC systems. Given its exposure, the roof offers the greatest potential for maximizing the efficiency of the new mechanical system. This alteration will raise the roof line by approximately 3", although this dimension could be reduced if necessary by providing a lower thermal insulation value. It is expected that this alteration to the exterior roof line would not diminish the integrity of the character-defining feature in a significant manner. The roof alterations should be reviewed thoroughly with all reviewing entities to confirm this interpretation. The team also reviewed the potential for insulation on the interior side of the roof.

However, without much thicker continuous insulation than is proposed above, the addition of inboard insulation could create an unvented assembly, leading to propagation of moisture within the wood assembly, or, if vented, wholly obscure the relationship of the roofing members. See the alternatives section for discussion of near term repairs and in-kind replacement of the roofing system.

INSULATION AT EXISTING EXTERIOR ASSEMBLIES

Another approach to improve the thermal envelope could include additional insulation at the exterior walls. The most effective approach which also mitigates against the potential for condensation to develop within the wall system is to utilize outboard continuous insulation in combination with insulation between framing members. This approach would require extensive alterations that would heavily alter the relationship of various architectural elements, most noticeably the relationship of the wall surface and the openings. The change would incur a substantive cost and also require the removal of the exterior siding. Only adding insulation between framing members would be a minor improvement due to thermal bridging and existing gaps in the exterior assembly. Further without continuous exterior insulation, the potential for creating a dew point within the wall assembly could produce deleterious effects on this wood frame building. Given these potential costly and significant impacts, the treatment recommendations do not include the improvement of the thermal envelope at the walls.

The provision of insulation to the underside of the wood floor in the crawlspace is included as a recommendation. This improvement will address heat loss to the crawlspace with no impact to the historic fabric. The remnants of fiberglass insulation from a previous installation are extant in the crawlspace. Given its resistance to moisture, mineral wool is a viable insulation product when installed on an exterior-rated metallic, non-chewable sheet product. The properties of mineral wool are superior to the fiberglass product previously used, including hydrophobic properties and a higher R-value per inch. The proposed approach would allow for monitoring of the floor framing for rodents or other infestation while the metallic sheet should minimize the potential for intrusion. Rigid foam board insulation could also be installed to the face of the existing structural members. However, depending on the design, this approach may prevent monitoring of the floor

structure. Also, foam board insulation products are typically flammable, and careful analysis of this hazard is necessary if this approach is selected.

DETERIORATION OF WOOD ELEMENTS

Various exterior wood elements are displaying signs of deterioration either due to warping, rot, or insect infestation. For the wood siding, the east elevation exhibits the most extensive damage by far. The instigating factor behind the extent of warping and deterioration on this facade in comparison to the other elevations is not clear, but it may stem from the lack of back-priming prior to installation as raw wood is visible at various exposed edges. The siding on the east side of the building should be addressed in the near term to prevent the deterioration from impacting adjacent elements. It is recommended to remove the east elevation siding, salvaging as many wood weatherboards as possible, and providing new siding where necessary. The siding on the remaining elevations requires limited replacement, primarily along the base where either incipient rot or termite damage has occurred. During the siding replacement work, it is recommended to restore the casement windows in the upper gable ends on the east and west sides of the building. The insect infestation will require repair of various wood elements and a termite bait control system, such as Sentricon, should be installed to mitigate future termite damage. This type of termite control system requires routine monitoring and maintenance to maximize its impact.

ACCESSIBILITY ISSUES

The exterior egress routes are not compliant with the IBC, IEBC or ABAAS to varying degrees. The site lacks an accessible path from the building to an accessible parking space. The scope of this HSR did not include site work, but there is relatively level space to the northeast of the Theater, appropriate for an accessible parking space. A minimally intrusive paved surface which complies with ABAAS and NPS standards and which complements the rustic surroundings should be provided from the building to a designated parking space near the building.

ISSUES AT EGRESS PATHS

The handrails on the three stairs and two ramps into the building fail to meet grasp requirements. The handrail posts impede the transition onto and from the stair, and none have a 12-inch extension at the top landing. In addition,

the risers at the main east stairs vary between seven and nine inches in height, exceeding the maximum variation allowed by code. The two ramps at the north facade exceed the maximum permitted slope, the 54" deep existing landings fail to meet the 60" requirement, and the beveled threshold at the door opening exceeds the maximum permitted 1:8 slope and height change. Additional issues are extant at these locations, including deterioration of wood and masonry elements. The exterior egress stairs, ramps, and one awning also display signs of damage stemming from termite or carpenter bee infestation along with moisture-related deterioration. Given these deficiencies, it is recommended that all exterior stairs and ramps be reconstructed, including all masonry piers, to comply with the regulatory requirements and to address any active deterioration. So as to reduce costs, the southwest stair may be repaired if the doors at this location are blocked by a new interior accessible ramp. Note that eventual replacement of this stair will be necessary due to the state of deterioration. As these are non-historic stairs and ramps, no loss of historic fabric is expected in these alterations. The reconstruction of the stairs and ramps will necessitate the guardrail be redesigned to comply with the 4” maximum opening requirement. The new northeast ramp is expected to be approximately 2'-9" longer than the current ramp so as to comply with slope requirements. The ramp design should be carefully executed to limit the extent to which the end of the ramp extends beyond the east wall of the building. It appears that moving the sloped portion of the ramp to the west and widening the landing may help resolve this issue. In addition, it is recommended to replace the northwest ramp with a stair to avoid the challenges with creating a non-required accessible path to this end of the building. So as to minimize the potential for deterioration stemming from roof runoff at the new wood landings and egress paths, rain diverters are included in the recommendations as a part of the previously discussed roof replacement.

The doors at the exterior landings on the north and south sides of the building currently impede the egress routes in all four locations. When both doors of each pair are fully open, the leaf opening along the egress route only opens to a 90-degree swing. The door hinges and closers should be replaced to allow for a full 180-degree swing to prevent the door leaf on the egress path from impeding exiting by occupants. In addition, it is recommended to replace the doors to address the various areas of damage. The original design of the east main entrance doors are documented in an

historic image as a pair of wood doors with five horizontal panels. However, the remaining four paired doors are not confirmed to be located in original openings neither are their original door designs documented. For these reasons, it is recommended to restore the wood doors of the east entrance, while the remaining doors are recommended to be of a complementary design, unless further historical documentation is uncovered.

WINDOWS

Although not a pressing issue, the existing windows do not match the historic fenestration pattern. The windows are one-over-one aluminum clad windows with spring-action operation which replaced original six-over-six wood weighted double-hung sash. These windows were installed in the 2005 renovations and do not appear to have markedly reduced the overall size of the opening as often occurs with modern window replacement. The contemporaneous replacement of the wood siding and trim may have prevented this common problem. At present, the windows generally only require simple near- or medium-term repairs, such as replacement of springs and surface repairs. When the windows reach the end of their useful life, replace all windows with new wood windows that match the historic fenestration. In addition, the restoration of missing casement window openings in the gable ends at the east and west elevations should be considered in any future large-scale project.

FOUNDATION

Out of the 105 brick masonry piers which support the building, approximately twenty piers require repair, including repointing, replacement of missing bricks to provide full bearing capacity to the columns and floor framing prior to use as assembly/theater. The floor framing should be shored prior to masonry pier repairs so that any loose bricks can be fully mortared. All piers at several stair and ramp landings exhibit damage and do not appear to be reinforced and will need to be reconstructed in concert with ramp and stair reconstruction efforts. Termite caps should be installed on top of the masonry piers to deter future insect damage. The caps will require the staggered removal of brick units to allow for the insertion of these elements. If the caps are visible after installation, they should be finished to minimize the visual appearance from the exterior; one approach would be the painting of the caps to match the brick color. Additionally, five first-floor joists should

be sistered or replaced due to insect damage or splitting. The repair quantities are approximate and are expected to increase over time. A detailed inspection is required prior to providing design documents for future renovations.

ROOF STRUCTURE REPAIRS

As noted earlier, a roof replacement is one of the most critical recommendations of the report. This work is typically performed as part of a larger rehabilitation project. However, given the urgency, it may be necessary to replace the roof in the near term to prevent more extensive damage to the rest of the building. One such area of impact is the roof structure. Several locations of roof decking and purlins display moisture-related deterioration. All roof leak locations should be documented and addressed to prevent further water damage to the roofing. These areas will require the removal and in-kind replacement of wood components. Alternatively, roof purlin members may be sistered with additional purlins of equal size. During a roof replacement project, it is recommended to remove and replace approximately 250 sf of roof decking, repairing about twenty roof purlins by sistering, and replacing purlin blocking at about fifteen locations. Routine insect inspections throughout the building, including of the roof structure, are recommended annually to monitor this condition and check for new insect damage.

SITE LIGHTING

At present, illumination is provided at each exit stair and ramp exterior landing exit discharge. However, no illumination is provided for the egress path along the north and south sides of the building, extending from the bottom of the exit stair / ramp, to the automobile parking area adjacent to the building's main entrance. The current paths around the building are loosely defined, creating a challenge in providing code-compliant egress lighting. Improved definition may be necessary to coordinate the recommended egress lighting. Given the park setting and minimal exterior lighting utilized to preserve the natural surroundings, additional exterior lighting has not been included in the recommendations. Depending on the interpretation of the public way by a code official, such lighting may or may not be required. This matter should be reviewed in more detail as a part of any renovation project.

EXTERIOR RECOMMENDATIONS:

1. Remove existing asphalt shingle roof. Replace deteriorated wood sheathing. Install new asphalt shingle roofing on new exterior sheathing on R-10 rigid foam board insulation. Modify rake boards and roof cornice to accommodate increased height. Assume roof area of 4200sf. Install metal run-off diverters above each stair and ramp on the north and south sides, a total of four locations.
2. As a part of the roofing project, replace damaged sheathing. Approximately twenty purlins require replacement or reinforcement by sistering and purlin blocking replacement in about fifteen locations.
3. Complete foundation repairs around base of building. Repair and replace damaged masonry piers, about twenty locations. Install termite caps at all locations.
4. Repair cracked first floor joists by sistering in at least five locations.
5. Remove 100% of wood siding from east elevation. Salvage boards exhibiting minimal warping and rot. Inspect sheathing and building paper, replace deteriorated elements. Provide new pine droplap siding to match existing. Backprime all sides and ends. Install siding and stain all visible sides to match existing. Assume 75% replacement, or approximately 540 sf.
6. Remove and replace deteriorated wood siding from north, south, and west elevations, estimated to be 5%, or approximately 80 sf. Provide new pine droplap siding to match existing. Backprime all sides and ends of siding with alkyd primer paint. Install siding and stain all visible sides to match existing. Apply a gentle biocide to remove approximately 40 sf of biological growth along the base of the building. As a part of siding repair project, restore wood casement window openings on the east and west elevations.
7. Remove carpenter bee-damaged elements of north side awning. Replace with matching wood members. Assume 50% replacement.
8. Reconstruct entrance stairs at three locations to provide uniform height per IBC. Replace 100% of floorboards and wood structure.
9. Rebuild northeast ramp to comply with ABAAS slope and to eliminate non-complaint threshold condition. Replace 100% of floorboards and wood structure.
10. Provide subterranean termite colony or carpenter bee elimination system around full perimeter of building, such as Sentricon or other comparable system. Provide ongoing maintenance and monitoring by exterminator.
11. Provide paved surface from accessible ramp at northwest corner of building to a designated accessible parking space near the building. Coordinate location with park staff.
12. Provide suspended mineral wool insulation on metallic, non-chewable sheet product throughout underside of floor structure, assume 3600sf.
13. Remove and replace exterior doors and door hardware, including door hinges and closers, to provide full 180 degree swing for doors in path of egress. Provide new wood doors with panic hardware, exterior grade hinges, exterior levers, lock, closers, exterior door stop, and sweep at bottom of door. Doors at east elevation to be wood doors with five horizontal panels and remaining doors to be doors of a complementary design.
14. Install insect screens where missing at nine locations. Replace damaged screens at four locations. On interior side of windows, provide wood filler at damaged sash locations at 6 locations. Paint interior of all sashes and trim. Clean all windows on all facades, replace springs and/or lubricate as required to return to full, smooth operability.
15. Provide site lighting for the full length of all egress paths from the building to the gravel parking lot to ensure safe passage for occupants in the event of an emergency. Assess with the building official the need to formalize the existing site paths.
16. As windows reach end of useful life, replace with wood windows that match the historic fenestration pattern of six-over-six.

INTERIOR OVERVIEW

The interior of the building has a small number of critical issues. All interior spaces require typical maintenance such as cleaning, painting, and minor repairs. Those critical deficiencies on the interior are tied to the failure of the existing building components to comply with applicable regulations, primarily IBC/IEBC and ABAAS.

ACCESSIBILITY TO STAGE

The Stage (102) area in the main Hall (101) is not accessible. After review with NPS, it is preferred that any alteration to comply with accessibility regulations be fixed, but reversible. A new wood framed ramp measuring approximately 5'-5 1/2" wide and 40'-0" long is included in the treatment drawings along the south wall. The rise required to reach the stage level will create a large ramp that will impact adjacent existing elements. The proposed location will block one pair of exterior doors and it will be installed on top of one of the existing stage stairs. As discussed in the life safety section, the building will remain in compliance with exiting requirements, even with the paired doors blocked in this location. The ramp construction should be reversible and installed such that the stairs remain in situ. A floor-mounted handrail attached to the ramp surface is recommended along the wall side in front of the wall columns. A guardrail will be required along the open side of the ramp. Construction of the ramp will have a significant impact on the interior of the building. This alteration must be designed to mitigate the extent to which it negatively affects the primary historic space in the building. Careful consideration will also be necessary to mitigate the impact and coordinate with the adjacent existing construction. Another approach was reviewed consisting of a portable lift or ramp which could be stored in the building and moved into place when needed. NPS determined that a non-permanent solution like a portable lift does not meet accessibility standards. Providing access to the stage level via the exterior was reviewed. This approach proved to be not viable due to the challenges with the sloping topography of the site and the major intrusion on the exterior views of the building.

Various restroom accessories are currently not located to meet ABAAS requirements. The grab bars and toilet paper dispensers are not compliant in their current arrangements. These items should be relocated or replaced to meet the requirements and the wall surface patched and painted.

NON-CODE COMPLIANT MEZZANINE STAIRS

The stair to Mezzanine (200) is not code compliant for several reasons, most critically the lack of a uniform riser height and handrail arrangement. At the first stair and at the transition to the landing, the stair exceeds the maximum in height change. As such, it is recommended to replace the stair in its current location to meet the code requirements including the provision of the necessary handrails and guardrails. The stage stairs also lack a handrail and thereby fail to meet current code requirements. Provision of a handrail on the wall side of the stair will resolve this issue.

REPAIR AND REPLACEMENT OF INTERIOR FINISHES

The historic finishes on the building interior display typical minor wear and tear. In general, it is the intention of these treatment recommendations to avoid treating each minor imperfection. The utilitarian nature of the finishes is part of the building's historic character and should be protected. Any new finishes should reflect the simple materials and unornamented assemblies executed by the CCC workers during the building's period of construction. General refinishing instead should seek to provide typical upkeep so as to mitigate deterioration.

The wood flooring in the Hall (101), Stage (102), Entry (100), and Storage (105) rooms displays signs of wear and tear as well as limited areas of deterioration. Gaps wider than 1/8" should be patched to provide a smooth, safe walking surface. Any floor refinishing should prepare the wood using the gentlest means possible, especially during the removal the existing layers of floor finishes. New linseed oil finish with recurring applications of floor wax are recommended after the floors are prepared.

In some locations, new interior finishes are recommended. The Entry area currently lacks a ceiling finish. As the exposed framing above is clearly contemporary, new painted gypsum board is recommended at the ceiling to minimize the unsightly intrusion in this space and

further delineate the distinction with the historic finishes. Portions of the walls in the Entry area and Hall side of the Storage room utilize gypsum wall board patches. The repairs should be done in-kind with the balance of the adjacent finish, either gypsum wallboard or plywood.

An historic photograph of the interior of the Hall during its OSS occupation shows painted wainscoting along the base of the walls during its period of significance. Investigation of the back side of the original paneling confirms that this painted band on the face of the plywood wall paneling, dark brown in color, was approximately 5'-0" tall and lined all interior walls of the building. This painted band remains in the storage room. The recommendations include repainting the wall paneling to restore this paint scheme.

The mezzanine is another space where new finishes have been recommended. The exposed OSB at the Mezzanine and stair should be finished with a more cleanable and durable material. Given that this space was fully rebuilt within the last two decades and its back of house nature, an economical and durable contemporary material, such as vinyl sheet flooring, is suggested at the stair and Mezzanine (200). Also at the Mezzanine, it appears that much of the original plywood wall paneling has been removed. As a portion remains, it is recommended to restore the missing paneling on the balance interior face of the exterior walls of the Mezzanine.

IMPROVEMENT OF KITCHENETTE

The kitchenette in the Storage area was deemed insufficient in its current condition by NPS. So as to improve the usability of this area, new casework, countertops, and wall finishes have been included in the treatment recommendations. The existing appliances are expected to remain.

REPAIR AND REPLACEMENT OF INTERIOR DOORS

Minor alterations are recommended at the interior doors. The Storage room door hardware is damaged and no longer fits flush into the door panel. The hardware is recommended to be replaced. New plywood panel doors with hardware are recommended to be installed at both side stage doors. The door material and hardware installation should be confirmed as part of a future design project.

INTERPRETIVE PANELS

The interpretive panels were not considered as a part of this report. It is recommended that these elements be reviewed as a part of any future renovation projects, especially those panels on the backstage wall which have the potential to impede the new theater equipment.

STRUCTURAL LOAD ANALYSIS

The IBC 2021 required minimum live load for assembly/theater use is 100 pounds per square foot (psf), for stage floor use is 150 psf, light storage is 125psf, stairs and corridors are 100 psf, and restrooms are designed for 60 psf. A loading plan is shown in Figure 163 to clarify the code minimum for floor live loading conditions in the building based on usage. A preliminary check of the potential live load capacity at the raised stage areas was performed by assuming that it was framed similarly as the main floor, with wood of similar strengths, producing similar design values. A more detailed structural floor load analysis was not part of the scope.

The size and spacing of the timber joists on the first floor were measured during the survey. However, material testing to determine the species and grading of the joists that would be needed for a detailed analysis was not part of the scope. Instead, assumptions were made in this preliminary analysis for the

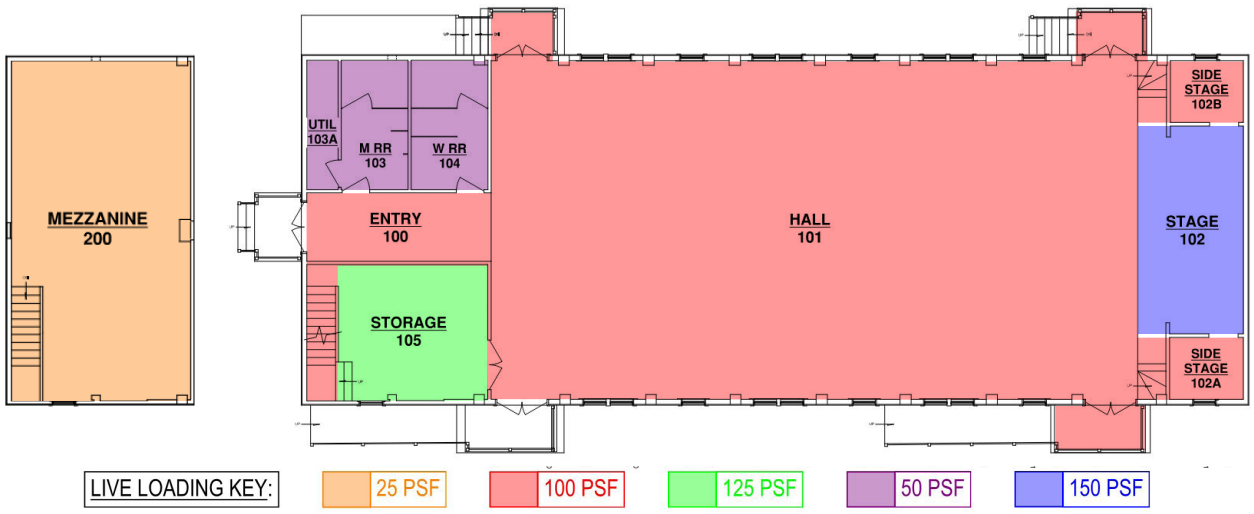


Figure 163. Load Surveying Analyses

wood design values, including for bending strength, modulus of elasticity, and other values, based on the limited visual assessment and commonly accepted properties found in documentation from the 1930s when the structure was built. The existing framing is assumed to be a common grade Southern Yellow Pine Species and was assigned a bending strength of 1,150 psi, shear strength of 128 psi and compression strength parallel to grain of 1,027 psi. Based on these measurements, assumptions and historical data, the estimated live load capacity of typical first-floor framing meets the code minimum of 100 psf.

As the structural members of the Stage (102) are not observable, an additional study is required to determine the stage's live load capacity. A preliminary check of the potential live load capacity at the raised Stage and Side Stage (102A and 102B) areas was performed by assuming that it was framed similarly as the main floor, with wood of similar strengths, producing similar design values. Based on these assumptions, the estimated live load capacity of the stage floor and below the storage room is probably on the order of 100 psf, which does not meet the code-required minimum 125 psf and 150 psf for storage and stage floors. If the NPS desires verification of the stage live load capacity, a more detailed structural investigation should be performed. Openings could be provided to allow measurement of the framing size and spacing, and testing should be performed to determine the type of wood.

The code-minimum 150 psf required for stages is intended to be used for commercial stages such as Kennedy Center where complex stage sets or other potentially heavy equipment is used. If the stage in this building is used without heavy loads, such as by groups of people or speakers with a loading similar to the audience, then the existing structure will likely support that type of loading. If additional load support is required at specific locations, such as stacks of speakers or other equipment, it might be possible to provide additional temporary or permanent supports under the stage floor at those locations. Should the NPS desire to use the stage for performances, a more detailed structural investigation is recommended and it would involve accessing the underside of the stage floor to see how it is supported from the main floor. This can be done by removing and replacing the wood finishings near the existing stage stairs, without having to remove the stage flooring. It may be possible to reinforce the existing framing to support 150 psf loading, by doubling the joists

and reinforcing existing girders. The existing footings should be exposed and measured and the allowable soil bearing verified as part of this effort.

Likewise, the code requirement for light storage load of 125 psf is based on commercial buildings with rows of shelving filled with material. If the Storage area is used for light weight materials placed more like one would find in a residential use, then the structure is likely sufficient to support that load. This room is also not solely utilized for storage, as it serves as a kitchenette and a landing for the stair to the mezzanine.

No repairs are needed to the interior mezzanine floor joists, girders, and stud walls below due to the condition of this framing. Although the newer mezzanine floor members were observed to be in good condition, they do not appear to be designed for code required live loading of 125 psf for storage. The limited assessment of the mezzanine floor girder over the middle of the storage room below found that the available live load capacity was only 25 psf for the girder. This loading is more consistent with residential attic space design. If the NPS uses the mezzanine for storage, a detailed structural load analysis is needed and reinforcing design will likely be required. The size, spacing, condition, species, and grading of the mezzanine floor framing above the corridor and bathrooms was hidden and not observed, but it is assumed to match the rest of the mezzanine floor framing. Any new mechanical equipment will likely require floor framing upgrades at the Mezzanine (200), and those projects should be undertaken in coordination with mechanical work.

Current IBC 2021 wind speeds of 118 mph and snow loads were also used for a quick check of the typical building truss framing members for a risk category III required for assembly spaces with occupancy over 300 people. The gabled roof structure was also checked for a sloped roof snow load of 17 psf and a minimum roof live loading of 30 psf. The maximum combined windward and leeward wall pressures used in our quick check on the enclosed one-story building lateral framing were 22 psf, with additional roof pressure of 16 psf and -5 psf applied to each side of the gable. Based on the same wood species and grading assumptions used to check the floor framing, we found the typical building framing members should have sufficient capacity to safely support the building structure under these combined loads. However, several connections appear to need strengthening at the trusses. A more detailed structural analysis would

be needed to verify these findings, but according to our preliminary analysis the strengthening would involve adding metal plates at each connection between the bottom of the truss and top of the column, and new larger bolts or additional metal plates to be installed at the connection between the kicker and the column. This will require the removal and replacement of finishes around the top of the column and where the kicker attaches into the column.

INTERIOR RECOMMENDATIONS

1. Perform detailed structural analysis of truss framing to confirm the sizing of connections that are required, such as adding metal plates and new larger bolts where the kicker attaches into the column. Remove and replace finishes as needed for access.
2. Remove one damaged plywood panel at face of the stage. Document and inspect stage framing. Repair panel and reinstall. Paint stage wall.
3. Review and confirm the intended loading for theatrical use. Perform a detailed structural investigation and analysis to confirm the sizing of all hidden framing and reinforce existing framing by sistering and or replacement.
4. Review and confirm the extent of storage needs for the Mezzanine (200). Perform detailed structural analysis to confirm sizing of the reinforcement of the existing girder.
5. Construct 5'-5 1/2" wide by 40'-0" long wood-framed painted accessible ramp along south wall of Hall (101). Provide handrail along wall side and guardrail along open side. Fix southwest doors in closed position. Remove exit sign.
6. Reconstruct mezzanine stair to comply with IBC requirements. Provide finish on treads. Provide guardrail on stair open side. Provide handrail on short stair section.
7. Provide handrail on wall side of north stage stairs in Hall (101). If ramp is not installed, provide handrail on south stair.
8. Restore approximately 540 sf of painted 3/8" plywood paneling on existing wall framing at east and south exterior walls of Mezzanine (200).
9. Remove seven damaged plywood panels in Hall (101) and Storage (105). Provide new 3/8" thick plywood replacement panels to match finish quality and wood of original plywood panels.
10. Remove and remount six existing-to-remain plywood panels in Hall (101) providing new fasteners.
11. Prepare wall surfaces and remove debris in entire interior. Paint all wall surfaces, windows, and bookcase. Restore 5'-0" tall painted wainscot band along base of walls.
12. Remove instances of damaged gypsum wallboard totaling approximately 75 sf. Replace in-kind with gypsum wallboard.
13. Replace latch hardware at doors into first floor Storage Room (105).
14. Install new painted plywood door panels and door hardware at the existing Side Stage (102A and 102B) cased openings.
15. Install new painted gypsum wallboard ceiling finish in Entry (100).
16. Remove and replace two soiled 2x4 acoustical ceiling tiles in Restrooms (103 and 104).
17. Clean entire interior of building.

MECHANICAL, ELECTRICAL AND PLUMBING

MECHANICAL

Work shall comply with all applicable code requirements outlined in IBC 2021, IEBC 2021, International Mechanical Code (IMC) 2021 and IECC 2021.

HVAC SYSTEM

To facilitate the proposed renovations for the existing building to all-year use as an assembly area, the existing mechanical systems must be removed. The portable electric heaters should be replaced by permanent conditioning systems. The incomplete existing ductwork should be removed and replaced with ductwork to meet the system requirements and design intent. To achieve NPS's goals a new split-system, air-cooled heat pump system should be provided to condition the building spaces. The system should utilize Direct Expansion (DX) heat pump refrigerant coils located within a new Air Handling Unit (AHU) in the storage mezzanine area where the previous film projector was located. Structural improvements may be necessary to accommodate the AHU. Refrigerant piping would connect the AHU to an exterior high-efficiency heat pump condensing unit located at grade on a building pad along the south side of the building. The system should be provided with variable speed compressors at the exterior heat pump condensing unit and/or multiple compressors and refrigerant circuits to address part load capacity control and provide appropriate dehumidification control for the building. The AHU should incorporate an energy recovery section to recover energy from the building exhaust/relief air and pre-treat the required ventilation air for the assembly space during high occupancy conditions. An auxiliary electric heat section should provide emergency heat capacity if the heat pump condensing unit is not able to meet demand due to low outdoor ambient air temperature conditions. The AHU should be configured to operate as a variable air volume single zone with space temperature and humidity control. The unit will also be provided with demand control ventilation to adjust the volume of outside air based on space occupancy. Based upon initial space calculations, a unit rated at 10-tons and delivering 4000 cubic feet per minute of supply air is required to treat the Recreation/Theater Building.

DUCTWORK

New air distribution ductwork, diffusers, grilles, and registers should be provided for the building. All main ductwork associated with this system should run within the roof truss areas. All refrigerant piping will be insulated appropriately in accordance with code requirements. The layout of the mechanical distribution systems must be coordinated with the architect and structural engineers to ensure structural stability and minimize impact on the historic character of the building.

VENTILATION

Mechanical ventilation should be provided via the new AHU system distribution. New bathroom exhaust fans are to duct to the energy recovery section of the new AHU and direct to the building exterior. Installing high volume, low-velocity ceiling fans within the main assembly space is recommended to provide increased thermal comfort and address temperature stratification within the space.

The recommended mechanical system provides the required thermal conditioning for the space use while balancing system initial costs, energy efficiency, and low maintenance requirements. The system also does not require the use of fossil fuels.

ELECTRICAL

The existing electrical distribution system and panels are rated for a total capacity of 400A at 120/240V and should be sufficient to support the new mechanical, lighting, and power distribution loads for the proposed renovations. Work will comply with all applicable code requirements outlined in IBC 2021, IEBC 2021, National Electrical Code (NEC) 2017 and IECC 2021.

LIGHTING

All lighting in the building should be replaced with new LED lighting in accordance with the IECC requirements and NEC recommended light levels. New LED lighting fixtures should include lensed strip lights in storage/support/back of house areas and pendant direct and direct/indirect fixtures within the open ceiling of the assembly areas. A lighting track system provided at the stage area to facilitate the flexible placement of track-mounted lighting fixtures would

support different presentation and meeting formats for the assembly space. Lighting controls with basic scene control should be provided for the assembly and stage areas. Lighting controls for the support spaces are recommended to include occupancy/vacancy sensors. New exit signs and egress emergency lighting should be provided as required by code. Exits require emergency lighting along the route away from the building. Exterior wall-mounted fixtures at each exit are necessary to comply with this code requirement. All emergency lighting fixtures should be provided with integral or remote battery back-up power.

ELECTRICAL AND DATA WIRING

All surface-mounted receptacles and data outlets on existing to remain walls should be demolished. New receptacles and data/AV outlets should be installed throughout the building as required to meet the programming requirements of the assembly areas and in accordance with the NEC for receptacle locations and spacing. As noted in assessment, it is recommended to upgrade the existing romex wiring with MC cable.

A new telecom/data demark location should be provided for incoming services. Data/AV outlets should be provided within the assembly and stage areas to support presentation methods. An Extron (or similar) AV control system is recommended and would be provided with input locations at the stage and assembly areas for various audio and video input configurations for presentations. A projector system is needed for visual presentations, as is a sound system for the assembly area. The projector may be suspended from the ceiling structure or located within the existing mezzanine area. The AV system should be flexible to allow support for speeches, movies, and small-scale theater productions. The system is recommended to provide an accessible assistive listening system for the hearing impaired. The system must be easy to use by all occupants and include microphones, audio/video inputs for presentations via projector and speakers.

SECURITY SYSTEM

A new intrusion detection system is included in the recommendations. The system is to include door/window sensors, glass break sensors, and motion detection. The system should be provided with cellular remote monitoring.

PLUMBING

No upgrades to the existing water or sanitary services are anticipated for the proposed renovations. All applicable code requirements outlined in IBC 2021, International Plumbing Code (IPC) 2021 and International Energy Conservation Code (IECC) 2018 shall be complied with in any future alterations.

The existing building fixture count is adequate for the proposed assembly use, although the building lacks a code-required drinking fountain. Existing plumbing fixtures and accessories should be removed and replaced at their current locations with new low water consumption fixtures and dual flush manual operators. All new fixtures shall be ABAAS compliant. All existing piping should remain and be re-used to the extent possible and provided with new piping insulation. New instantaneous, point-of-use electric water heaters should be provided. A new accessible drinking fountain should be provided and it is proposed to be located in the rear of the Hall (101).

MAINTENANCE

The proposed MEP systems would require limited routine maintenance which would include routine changing of mechanical air filters, lubrication of the AHU fan motors, and general inspection and monitoring for repairs and replacement.

LIFE SAFETY

FIRE PROTECTION

Extensive upgrades for fire protection are recommended to protect the building's occupants and its historic fabric. The previous extension of a sprinkler water main to the building alleviates the greatest disturbance in providing a new fire protection system. Although not required by IEBC for a single story existing building, a new dry-pipe sprinkler system is recommended so as to align with the standards of new construction. Any provided sprinkler system must be a dry-pipe system, instead of a wet-pipe system, given the minimal conditioning and potential seasonal use of the building. A dry-pipe system protects against the potential for water damage due to a burst pipe and eliminates the need to provide auxiliary heating to protect the

piping. However, a dry-pipe system does require additional maintenance to prevent corrosion within the piping. This issue is unlikely to occur in a wet-pipe system in the same timeframe as it might in a dry-pipe system.

As discussed in more detail in the treatment alternatives, the single-story nature of the historic building does not require a sprinkler system be provided. Refer to the earlier life safety assessment for more detail on the code analysis. Despite this code interpretation, a sprinkler system is recommended given the direction provided by NPS, the protection of the historic building, and the previous investments made to extend service to the building.

FIRE ALARM

At present the building has single-station type smoke detectors, but does not have a code-compliant fire alarm system. Per NFPA 101 13.3.4.1.1, a fire alarm system will be required by code regardless of whether or not a new sprinkler system is provided as a result of the building's use and occupant load. In the event a sprinkler system is provided, the fire alarm system is required to monitor and alarm the sprinkler system.

EGRESS

The building has sufficient egress capacity to comply with code. If the recommended accessible ramp is installed in the Hall (101), and thereby blocks the southwest doors, the egress capacity will be reduced from 814 to 654 persons. This reduced figure is well above the 325 posted capacity. Further, the proximity of the existing exits is sufficient to comply with applicable codes.

RECOMMENDATIONS

1. Provide automatic sprinklers throughout the building per IBC section 903.2.1.3, Assembly Group A-3 occupancy with an occupant load of 300 or more, requirements for new construction. The automatic sprinkler systems must be monitored by a fire alarm system and, upon sprinkler system water flow, activate audible and visual alarm indicating appliance throughout the building per IBC section 907.2.1. Manual fire alarm boxes are not required per IBC section 907.2.1. The fire alarm system must be monitored by an approved supervising station in accordance with NFPA 72 per IBC section 907.6.6.
2. Provide one additional Type 2-A portable fire extinguisher in proximity to the raised platform (stage) in accordance with IFC.

Alternatives for Treatment

ARCHITECTURAL

In lieu of the more extensive roofing repairs suggested in the treatment recommendations section of this report, a series of localized repairs may be performed to protect the building in the near term. A partial reroofing of the known failure areas could be performed to attempt to resolve the issue for the medium term. The current roof was installed in 2005. Asphalt roofing systems are often rated for 20 to 30 years. However, based on the present leak issues the roof has reached or is nearing the end of its useful life and requires replacement. It is recommended to consider the reroofing effort in concert with the installation of a new mechanical system to maximize the efficiency of the system and coordinate the various alterations in a single, combined effort. Although these systems are not physically dependent upon one another, the new roof insulation will affect the design capacity of the mechanical system, and therefore these items must be considered intertwined from a design, if not construction, perspective. If the installation of the HVAC system is unlikely within the next 5-10 years, then the park and NPS may desire to pursue a more cost-effective approach, such as an in-kind replacement of the roofing in lieu of the installation of insulation and the corresponding changes along the perimeter of the roof.

In review with NPS, an alternative treatment for the underfloor insulation at the crawlspace was reviewed. As noted earlier, foam board insulation may provide a more sturdy installation. Foam board typically has a higher R-value per inch and also may last longer than mineral wool when not exposed to UV light. Depending on the approach taken, the insulation may create sizable voids which could not be monitored or incur higher costs to install tight to the numerous framing members.

The recommended accessibility improvements also have alternative treatments. The northwest ramp may be replaced in-kind with a code-compliant ramp rather than by a new stair if NPS deems there to be some useful purpose for a ramp at this end of the building. Providing a paved exterior path to the accessible parking space may not be required if the park can maintain a complaint path without installing permanent paving. On the interior, the new ramp to the stage may be substituted

with a movable motorized lift. However, NPS must review and confirm that this non-permanent solution complies with ABAAS goals.

On the interior, an alternative approach to installing a new painted gypsum board ceiling in the Entry (100) could consist of painting the existing exposed framing and subfloor elements. Either the recommended approach noted earlier or this alternative would offer an approach that clearly delineates the modern finishes from the historic finishes elsewhere in the building.

STRUCTURAL

There are a number structural alternatives to the treatments recommended. A portion of the mezzanine floor framing will need to be strengthened below the new mechanical equipment, however in lieu of improving the full floor structure, the remaining mezzanine level can remain as existing if the space is not used for storage.

The brick piers at all the landings need to be replaced. In lieu of replacing individual missing units, a more robust approach may be taken. For this course, hollow brick masonry with vertical reinforcing bars for improved strength are recommended since the existing ones do not appear to be reinforced. Masonry piers that are in poor condition should be repaired within the next five years even if the building is to remain unoccupied to preserve the structural integrity of the building. The masonry piers and the first-floor wood framing should be monitored for any further deterioration due to the exposure to the elements, especially now that all of the insulation under the first floor has been removed.

The first-floor framing does not require repair until future renovations are completed for the support of higher assembly live loads at which point the cracked floor joists should be reinforced by sistering.

If the stage is used for presentations and events that don't require support for heavy live loads such as a theater production, then no structural work appears needed. However, in order to use the stage for theater productions, then a more detailed structural analysis is needed and reinforcing of the existing framing is likely.

MECHANICAL

An alternate treatment for the mechanical systems to achieve NPS's goals would be to provide a new water-cooled, geothermal heat pump system to condition the building spaces. The system should utilize Direct Expansion (DX) heat pump refrigerant coils located within a new Air Handling Unit (AHU) within the storage mezzanine area where the previous film projector was located. A new exterior geothermal well borefield would supply water to the water-cooled DX AHU condenser section. The AHU should be provided with variable speed compressors to address part load capacity control and provide appropriate dehumidification control for the building. The AHU would incorporate an energy recovery section to recover energy from the building exhaust/relief air and pretreat the required ventilation air for the assembly space during high occupancy conditions. In this design, the AHU is to be configured to operate as a variable air volume single zone with space temperature and humidity control. The unit will also be provided with demand control ventilation to adjust the volume of outside air based on space occupancy. Based on initial space calculation a unit rated at 10-tons and delivering 4000 Cubic Feet per Minute (CFM) of supply air.

The site geothermal borefield will consist of eight vertical closed loop wells at 300 to 400 feet depth and spaced 20' apart. The final depth and quantity would be determined after a test well is provided to determine conductivity. The wells will be separated into four reverse return circuits manifolded into a supply and return header within the building. The geothermal condenser piping should be HDPE to be buried a minimum of 3 feet below grade. Locating the geothermal borefield below the existing parking and pathway area to the building is recommended to limit disturbance to the site and related archaeological study in the area. The installation of the geothermal system will require an archaeological investigation for the distributed site areas for the borefield and related piping distribution. Two (2) geothermal water circulator pumps rated at 24 GPM should be provided in an operating/standby configuration. The units should cycle based upon building heating/cooling demand in a prescheduled alternating sequence to balance run-time.

New air distribution ductwork and diffusers/grilles/registers will be provided for the building. All main ductwork associated with this system should

run within the roof truss areas. All refrigerant piping will be insulated appropriately in accordance with code requirements. The layout of the mechanical distribution systems will be coordinated with architect and structural engineers and remediated accordingly to preserve the structural integrity of the building and the historic nature of elements of the building.

Mechanical ventilation should be provided via the new AHU system distribution. New bathroom exhaust fans should duct to the energy recovery section of the new AHU and direct to the building exterior. High volume, low velocity ceiling fans will within the main assembly space will provide increased thermal comfort and address temperature stratification within the space.

Work will comply with all applicable code requirements outlined in IBC 2021, IEBC 2021, IMC 2021 and IECC 2021.

The alternative mechanical system recommended provides the required thermal conditioning for the space while increasing the energy efficiency and sustainability of the system. The initial installation costs for the geothermal heat pump are significantly higher than the air-cooled heat pump system and the maintenance requirements increase with the introduction of the hydronic pump and system components. The alternative mechanical system does not require the use of fossil fuels.

MAINTENANCE

The proposed alternate MEP systems would increase routine maintenance which would include routine changing of mechanical air filters, lubrication of the AHU fan motors, water treatment of the geothermal distribution, distribution pump maintenance, and general inspection and monitoring for repairs and replacement.

ELECTRICAL

As an alternative treatment AV system with reduced permanent audio/visual systems could be provided. Electrical outlets and conduit/cable pathway infrastructure would be provided to allow users to bring their own audio/visual equipment for presentations. Any accessible

assistive listening system for the hearing impaired would need to be available through the equipment brought by the specific user.

As an alternative treatment the type and number of required instruction detection system sensors could be reduced not to include motion detection.

PLUMBING

An alternative treatment for plumbing could include the installation of heat trace on piping for the various components on the systems if the building is to be conditioned only seasonally. This item should be considered as a part of a future design project.

FIRE PROTECTION

The IFC does not require automatic sprinklers or a fire alarm system in an existing single-story building of Assembly Group A-3 occupancy. The existing building conditions comply with IFC.

The IEBC classification of the work identified in the treatment recommendations is an Alteration – Level 1. Per IEBC section 703.1, a Level 1 alteration requires alterations be done in a manner that maintains the level of fire protection provided. IEBC does not require automatic sprinklers or a fire alarm system in an existing single-story building of Assembly Group A-3 occupancy If NPS does not wish to install automatic sprinklers in the building at this time, then a manual fire alarm system is required in the building per NFPA 101 section 13.3.4.3.1. This system is to consist of manual fire alarm stations installed at each exit. Occupant notification should be by automatically transmitted voice evacuation instructions per NFPA 101.

Requirements for Treatment and use

LEGISLATION

This project is subject to numerous laws and regulations which guide and control the use and treatment of the historic building. These requirements serve to protect the cultural resource while addressing issues of human safety, fire protection, energy conservation, abatement of hazardous materials, and accessibility.

The treatment and use of the Prince William Theater must be considered within a framework of applicable laws, agreements and policies. These mandates govern a wide range of management issues beyond the preservation, protection and interpretation of Prince William Forest Park's cultural resources, and extend to issues of visitor and staff use, safety, universal accessibility, and resiliency to natural hazards, among others. Some of these requirements may contradict or be at cross purposes with one another if they are rigidly interpreted. Any treatment must be carefully considered to ensure the historic fabric of the structure is preserved.

The following entries outline those laws and regulations which have the most significant impacts on the consideration of treatment and use for the Recreation/Theater Building.

NATIONAL HISTORIC PRESERVATION ACT

National Historic Preservation Act Section 106 of the National Historic Preservation Act (NHPA) mandates that federal agencies, such as the NPS, consider the effects of their actions on properties listed or eligible for listing on the National Register of Historic Places and allow the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment.[2] The Prince William Theater listed as a contributing structure in the Prince William Forest Park Historic District (2011) and any undertakings involving the expenditure of federal funds will be reviewed in accordance with NPS policy and federal historic preservation laws including the service-wide Programmatic Agreement Among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the

[2] The NHPA of 1966 was last amended in 2006. A downloadable copy is located at (http://www.achp.gov/nhpa.html).

National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act (2008).[3]

Section 110 of the NHPA clarifies the broad historic preservation responsibilities of federal agencies with the intention of ensuring that historic preservation is fully integrated into the ongoing programs of all federal agencies by identifying, protecting, and avoiding unnecessary damage to historic properties. Additionally, each agency is required to use historic properties available to it and when managing these properties, must consider preservation of their historic, archaeological, architectural, and cultural values.[4]

EXECUTIVE ORDER 11593

Executive Order 11593: Protection and Enhancement of the Cultural Environment (1971) mandates that "the Federal Government shall provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation." Responsibilities of federal agencies include:

• Nominating "...to the Secretary of the Interior all sites, buildings, districts, and objects under their jurisdiction of the control that appear to qualify for listing on the National Register of Historic Places."

• Exert caution "...during the interim period until inventories and evaluation...are completed to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered."

• "Initiate measures to assure that where as a result of Federal action or assistance a property listed on the National Register of Historic Places is to be substantially altered or demolished, timely steps be taken to make or have made records, including measured drawings, photographs, and maps, of the property, and that copy of such records then be deposited in the Library of Congress as part of the Historic

[3] A copy of this agreement can be found on the NPS's website at (http://www.nps.gov/policy/106agreement.pdf).

[4] More information on Section 110 can be found on the NPS's website at (http://www.nps.gov/hps/fapa_110.htm).

American Buildings Survey or Historic American Engineering Record for future use and reference." • "Initiate measures and procedures to provide for the maintenance, through preservation, rehabilitation, or restoration, of federally owned and registered sites professional standards prescribed by the Secretary of the Interior."

EXECUTIVE ORDER 13006

Executive Order 13006: Locating Federal Facilities on Historic Properties (1996) mandates that "the Federal Government shall utilize and maintain, wherever operationally appropriate and economically prudent, historic properties and district. . .." Furthermore, "any rehabilitation or construction that is undertaken pursuant to this order must be architecturally compatible with the character of the surrounding historic district or properties."[5]

SECRETARY OF THE INTERIOR'S STANDARDS

Treatment of the Prince William Theater is to be guided by The Secretary of the Interior's Standards for Historic Preservation Projects. Descriptions of the four standards are as follows:

Preservation is "the act or process of applying measures necessary to sustain the existing form,integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project."

Rehabilitation is "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values."

[5] A copy of this agreement is located on the ACHP's website at (http://www.achp.gov/EO13006.html).

Restoration is "the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project."

Reconstruction is "the act or process of depicting, by means of new construction, the form,features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location."

The preferred option for the ultimate treatment of the Theater is preservation of both the exterior and interior including maintenance and retention of character-defining features. Because the structure stands intact, reconstruction is not a treatment consideration.

DIRECTOR'S ORDER-28

DO-28 Cultural Resource Management Guideline is intended to guide the National Park Service through successful cultural resource management through three steps:

1. Research: "identify, evaluate, document, register, and establish other basic information about cultural resources;"

2. Planning: "ensure that this information is well integrated into management processes for making decisions and setting priorities;" and

3. Stewardship: "planning decisions are carried out and resources are preserved, protected, and interpreted to the public."

Through the development of this HSR, the research and planning (for treatment and use) of this historic building is addressed. The general

preservation philosophy integrated into this HSR is best represented by the following: "Better to preserve than to repair, better repair than restore, better restore than [re]construct. It is ordinarily better to retain genuine old work of several periods, rather than arbitrarily to 'restore' the whole, by new work, to its aspect at a single period." The demolition of a structure listed or eligible for listing on the National Register is allowable "only when all alternatives have been determined infeasible in the planning process."

Decisions for the future stewardship of the Prince William Theater are under the purview of PRWI. As part of NPS-28, "stewardship focuses on five major activities:

- Control of treatment and use,
- Monitoring conditions of deterioration and structural failure,
- Protecting from human and environmental threats,
- Retaining or delegating responsibility for structures, and
- Developing the skills, knowledge, and attitudes needed to support the program.

DO-28 provides standards for each of the SOI's Standards. Preservation sustains the existing form, integrity, and materials of a historic property. Work generally focuses the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. Sensitive upgrading of systems to ensure the long-term functionality and code-compliance of a property is appropriate within a preservation project. The following standards based on the Secretary's Standards apply:

- A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.

- The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

- Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.

- Changes to a property that have acquired historic significance in their own right will be retained and preserved.

- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

- The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.

- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

- The following additional standards apply to all treatments:

- Use is monitored and regulated to minimize both immediate and long-term damage.

- Use of destructive techniques, such as archeological excavation, is limited to providing sufficient information for research, interpretation, and management needs.

- All work that may affect resources is evaluated by an historical architect and other professionals, as appropriate.

- All modification, repair, or replacement of materials and features is preceded by sufficient study and recording to protect research and interpretive values.

- New work, materials, and replacement features are identified, documented, or permanently marked in an unobtrusive manner to distinguish them from original work, materials, and features. The manner and location of identification is recorded using the Inventory and Condition Assessment Program (ICAP).

- A proposed treatment project is initiated by the appropriate programming document, including a scope of work and cost estimate from an HSR or ICAP. Such projects include preservation maintenance as well as major treatment. No treatment is undertaken without an approved HSR or work procedure documenting the work, and Section 106 compliance.

- A treatment project is directed by a historical architect and performed by qualified technicians.

- Representative features salvaged from a historic structure are accessioned and cataloged, provided that they fall within the park's scope of collection statement.

- All changes made during treatment are graphically documented with drawings and photographs. Records of treatment are managed as archival materials by a curator or archivist within the park's museum collection.

INTERNATIONAL EXISTING BUILDING CODE

According to The Public Buildings Amendments of 1988, any building constructed or altered by a Federal agency must, “to the maximum extent feasible, be in compliance with one of the nationally

recognized model building codes and with other applicable nationally recognized codes." The International Existing Building Code (IEBC) is one of the allowable recognized model building codes.[6]

Treatments of the buildings and site are to be guided by the IEBC.[7] Threats to public life, safety, and welfare are to be addressed; however, because this building is historic, alternatives to full legislative and code compliance are recommended where compliance would needlessly compromise the integrity of the historic building such as the removal of character-defining features or infringement upon the national register characteristics of the site and/or structures. Both NPS policies and federal regulations stipulate that when a historic structure is preserved and/or rehabilitated, attempts should be made to meet applicable nationally-accepted model building codes to the maximum extent feasible. Compliance with nationally accepted codes does not automatically trigger a complete code-based upgrade. Alternative criteria exist for alterations to historic structures which typically encourage flexibility in the literal application of the code intent. The Public Buildings Amendment of 1988 instructs Federal agencies to follow "to the maximum extent feasible," as determined by the administrator or head of the agency, the "… nationally recognized model building codes and other applicable nationally recognized codes such as electrical codes, and fire and life safety codes." The NPS consults pertinent national, state, and local codes, and typically adheres to the most strident code requirements. The NPS National Capital Regional Office Structural Fire Officer is the Authority Having Jurisdiction (AHJ) for final determination of code applications for these structures.

The NPS has prepared Design Standards for all construction projects, including those affecting historic structures. The design standard presents all codes that should be reviewed and includes the most recent copies of the following major codes and applicable laws, policies, codes, directives, standards, and NPS guidelines. The design standards present requirements for accessibility, civil, and environmental engineering, landscape architecture,

6 The General Services Administration has more information on this amendment and other accepted building codes at (http://www.gsa.gov/portal/content/101288).

7 IEBC is overseen by the International Code Council. More information is located at http://www.iccsafe.org/CS/Pages/default.aspx.

architecture, including roofing and waterproofing, structural, mechanical, safety and fire protection, electrical, lighting, and sustainability disciplines.

ARCHITECTURAL BARRIERS ACT

This law serves as the accessibility standards for this property. The standards provide guidance on federal accessibility requirements for existing buildings and alterations within existing building. Note that although a residential alternative use has been included in this analysis, the Uniform Federal Accessibility Standards (UFAS) do not apply as the proposed alternative use does not include four or more residential units.

NPS PRESERVATION BRIEF 31

This document provides the basis for interventions recommended during the mothballing phase of this report. Special attention was paid to the brief's discussion of proper interior ventilation to discourage moisture- and temperature-related decay processes.

The following items should also be reviewed as appropriate for all future work at the building:

- National Historic Preservation Act of 1966 (NHPA), amended
- The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (36 CFR 68), 1995
- The Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes
- The Secretary of the Interior's Standards and Guidelines for Archeological Documentation
- Uniform Code for Building Conservation
- Building Construction and Safety Code (NFPA 5000)
- Installation of Lightning Protection Systems (NFPA 780)
- Code for the Protection of Cultural Resource Properties (NFPA 909)
- Code for the Fire Protection of Historic Structures (NFPA 914)

- Safeguarding Construction, Alteration, and Demolition Operations (NFPA 241)
- Director's Order (DO) 50B, Risk Management (Manual 50B)
- Director's Order (DO) 58, Structural Fire Management (Manual 58)
- 5 U.S.C § 7902 (Safety Program)
- 15 U.S.C § 2225 (Fire Prevention and Control)
- 29 U.S.C § 668 (Occupational Safety and Health)
- 40 U.S.C § 619 (Construction, Alteration, and Acquisition of Public Buildings)
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- National Electrical Code (NEC)
- National Fire Protection Association (NFPA) Standard for the Installation of Sprinkler Systems NFPA 13

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Appendices

Bibliography
Condition Assessment Table
Existing drawings
Proposed Treatment Drawings

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Condition assessment table

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
A1010 Standard Foundation	Full building	Fair	Serious
Summary: Approximately twenty brick piers show signs of cracked masonry or open joints. These conditions are common at the piers for the landings at the stairs and ramps, as well at those supporting the building. There are limited instances of displaced brick units at the exterior wall immediately below the girders. The wood wall girders also show deterioration at several locations stemming from the prolonged presence of moisture and infestation by termites. The insulation at the underside of the floor displays extensive deterioration.			
B1010 Floor Construction	Exterior ramps and stairs	Poor	Critical
	First Floor and Mezzanine	Good	Minor
Summary: The ramps on the north side of the building do not comply with accessibility requirements due to the slope, handrail configuration, and threshold height change. The stairs do not comply with current building codes due to handrail configuration and, at the east entrance stairs, the variation in riser height. The wood of the ramps and stairs displays significant deterioration due to wood rot and termite infestation . One south side stair is currently held together with clamps, suggesting potential failure. The wood siding directly adjacent to these stairs and ramps is rotted in many locations.			
B1020 Roof Construction	Northwest awning	Fair	Serious
Summary: The northwest awning displays extensive deterioration due to a carpenter bee infestation. Repair is required to improve this element located along an egress route as well as to prevent additional issues at the adjacent exterior wall.			
B2010 Exterior Walls	East elevation	Poor	Serious
	North, South, and West elevations	Good	Minor
Summary: The east elevation exhibits signs of deterioration in the weatherboard across the full facade, such as warping and rotting. The remaining facades display localized areas of wood rot or finish deterioration and biological growth on the weatherboard.			
B2020 Exterior Windows	All elevations	Fair	Minor
Summary: The aluminum-clad wood replacement windows demonstrate issues tied to their operation, including difficulty opening/closing the sashes as well as noisy operation. All windows require cleaning to remove debris and insect infestation, and several locations are missing insect screens. On the interior, the wood sashes show minor soiling and small gouges at various locations. The current fenestration pattern does not match the historic pattern. Replication of the historic fenestration pattern should be a consideration in future replacement of windows.			

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
B2030 Exterior Doors	All elevations	Fair	Serious
Summary: The most significant issue is tied to the inability of the doors along the path of egress to open fully and maintain the required egress width in the event of an emergency. As a result, alterations are recommended later in the report to resolve this condition. Various doors have other operability issues and require attention to return them to proper working order. In addition, all doors have holes in their exterior face apparently at locations where hardware was previously installed and removed. The north ramp door threshold exceeds the IEBC code maximum of 3/4" for height change and its beveled shape also failed to comply with accessibility requirements.			
B3010 Roof Coverings	Full building	Poor	Critical
Summary: The park staff have performed various repairs to protect the building from the active roof leaks, including sealing various holes in the roofing system. The roof was installed in 2005 and, depending the system purchased, may be nearing the end of its useful life.			
C1010 Partitions	First Floor	Good	Minor
Summary: The interior partitions at the east end of the building are new, and no locations suggest any repairs beyond typical maintenance upkeep. The only historic partitions remaining are those bounding the two side stage areas. These partitions are in good condition with no signs of deterioration and minor finish damage.			
C1020 Interior Doors	Storage	Fair	Minor
	Mens RR, Womens RR, Utility	Good	Minor
Summary: The doors at the restrooms and utility room are in good condition with no repairs required. The hardware at the storage room doors is damaged and no longer sits flush in the door panels. The missing doors at the side stage cased openings require replacement to improve usability of the rooms.			
C2010 Stair Construction	Storage	Poor	Critical
	Stage	Fair	Critical
Summary: The two sets of stairs at the stage lack a handrail, and therefore do not comply with the building code. As the stage is accessed only by the two sets of stairs, it is does not comply with accessibility requirements for the building. The stair to the mezzanine located in the storage room does not meet code due to the variation in height and the open riser design. In addition, the stair currently lacks a guardrail.			
C2020 Stair Finishes	Storage	Poor	Serious
	Stage	Good	Minor
Summary: The finishes at the mezzanine stair include unfinished oriented strand board (OSB) at the landings and wood boards at the treads. Improved finishes are recommended to increase the durability of the stair elements. The painted finish on the wood stage stairs requires typical maintenance repairs and repainting.			

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
C3010 Wall Finishes	Interior	Fair	Minor
Summary: In general, areas displaying minor wear and tear are not recommended to be repaired beyond typical maintenance such as repainting. In some cases, the wall panels require remounting and a small number require replacement, typically as a result of water damage or modern alterations. Gypsum wall board is used in the restrooms and is in good condition. At the entry area and at the storage room door, the drywall finish does not match the original plywood panel wall finish and there are instances of damage.			
C3020 Floor Finishes	Interior	Fair	Minor
Summary: In general, all floors have limited quantity of soiling and debris. The wood flooring throughout the hall, stage, entry, and storage areas is likely the original tongue-and-groove wood flooring with limited replacement and repairs over time. The flooring is fair condition with a small number of gaps and general wear and tear throughout. The restrooms have ceramic tile floor finish that is in good condition. The unfinished OSB floors at the utility room and mezzanine have a higher potential for deterioration given the susceptibility of OSB to moisture.			
C3030 Ceiling Finishes	Mens RR, Womens RR	Fair	Minor
Summary: The entry area, storage room, and utility room do not have a ceiling finish and it allows for the contemporary framing system to be visible. The restrooms have suspended acoustical tile which has localized instances of staining and broken tiles. In the main hall space, the plastic sheeting obscures that the space was originally open to the roof structure above. The side stage rooms and the mezzanine are open to the roof structure above.			
E2010 Fixed Furnishings	Side Stage Shelf	Good	Minor
	Restroom Accessories	Good	Critical
Summary: The wood shelf installed in the north side stage is in good condition and requires basic maintenance. The restroom accessories in the accessible restroom stalls in the mens and womens restrooms are currently installed above the maximum mounting height and conflict with the wall-mounted grab bars. The toilet paper dispensers require remounting to adhere to accessibility regulations.			

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
A1010 Standard Foundations	Unknown (Hidden)	Unknown (Hidden)	Not Rated
Summary: The foundations below grade supporting the piers were not excavated during the inspection and are unknown.			
A1020 Foundation Piers	Brick Masonry	Poor	Serious
Summary: The brick masonry piers vary in size alternating between the exterior columns and vary in height as the grade slopes down towards the back of the building. Out of the 107 masonry piers, approximately 20 piers with a few located at the landings have cracking, missing mortar and/or missing bricks that need repair. Most of these piers are located at or near the exterior. The building does not have roof gutters, and rainwater dripping from the roof appears to have degraded the condition of the exterior brick piers over time.			
B1010 Floor Construction - 1st Level	Timber	Fair	Serious
Summary: In general, the timber joists appear to be good condition, although the eastern portion could not be viewed as headheight is too low for access. The 40'-0" of the building length on the east side of the building could not be accessed to determine the general condition, but the size and spacing of the members appeared to match the rest of the floor framing. In some locations, there are cracks in the joists and insect damage in approximately five locations where the condition is rated fair and of a serious maintenance priority. Underfloor insulation, previously installed between the floor joists, has largely failed and fallen away, exposing the girders, joists and the underside of the diagonal floor decking (Figure 134). The exterior stairs and ramps were observed to be in fair condition. The southwest corner stair riser was attached to the first floor landing with metal clamps, and no permanent attachment. At each entrance to the building there is an overhead awning attached into the building wall framing. The awning framing and connection of the awnings to the wall framing could not be accessed to determine the general condition.			
B1020 Roof Construction - Main Building	Timber	Fair	Serious
Summary: The roof framing is exposed from the mezzanine and theater space below. The roof decking appears to have been replaced recently in some areas due to water damage as seen on many of the remaining roof decking members. Roof purlins spanning on top of the trusses also have signs of water damage in some locations and repairs have been made by sistering beams of equal size, except for one location where the new member is a significantly smaller section and attached to an existing purlin with water damage and cracking along a knot in the bottom of the member. To support the 2"x8" purlins, additional blocking was added to the downward facing side of the sloped members to transfer the load from the roof diaphragm into the truss top chords, as seen in Figure 138. During the inspection, blocking appeared to be missing in 15 locations along the full length of the building			
B2010 Exterior Walls	Timber	Good	Minor

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
Summary: The roof truss members have not been exposed to the same amount of water damage seen in the roof decking and purlins. In several locations, the nailing of the diagonal members to the vertical truss members has broken loose or is no longer adequately connected.			
C1010 Floor Construction - Mezzanine	Timber	Good	Minor
Summary: The mezzanine floor, stair, and interior wall framing are exposed from within the storage room. The existing studs, joists and plywood sheathing appear to be newer construction, in good condition, and are supported by a triple 2 x 10 girder. The interior wall and mezzanine floor framing at the corridor and restrooms were covered during the time of the inspection. This area of the mezzanine floor framing and interior partition wall framing could not be accessed to determine the general condition, but the size and spacing of the members appeared to match the rest of the floor framing.			
C1020 Floor Construction - Stage	Timber	Unknown (Hidden)	Not Rated
Summary: The stage floor framing and stage access stair framing are covered, and the condition of the framing is not visible.			
C1030 Partitions	Timber	Good	Minor
Summary: The interior wall and mezzanine floor framing at the corridor and restrooms were covered during the time of the inspection. This area of the mezzanine floor framing and interior partition wall framing could not be accessed to determine the general condition.			
C2010 Exterior Stair Construction	Timber	Fair	Serious
Summary: The exterior building access stairs and ramps are considered in fair condition with minor to serious maintenance priority due to the termite damage observed on stair framing members.			
C2020 Interior Stair Construction	Timber	Good	Minor
Summary: The interior stair framing up to the mezzanine level is in good condition.			

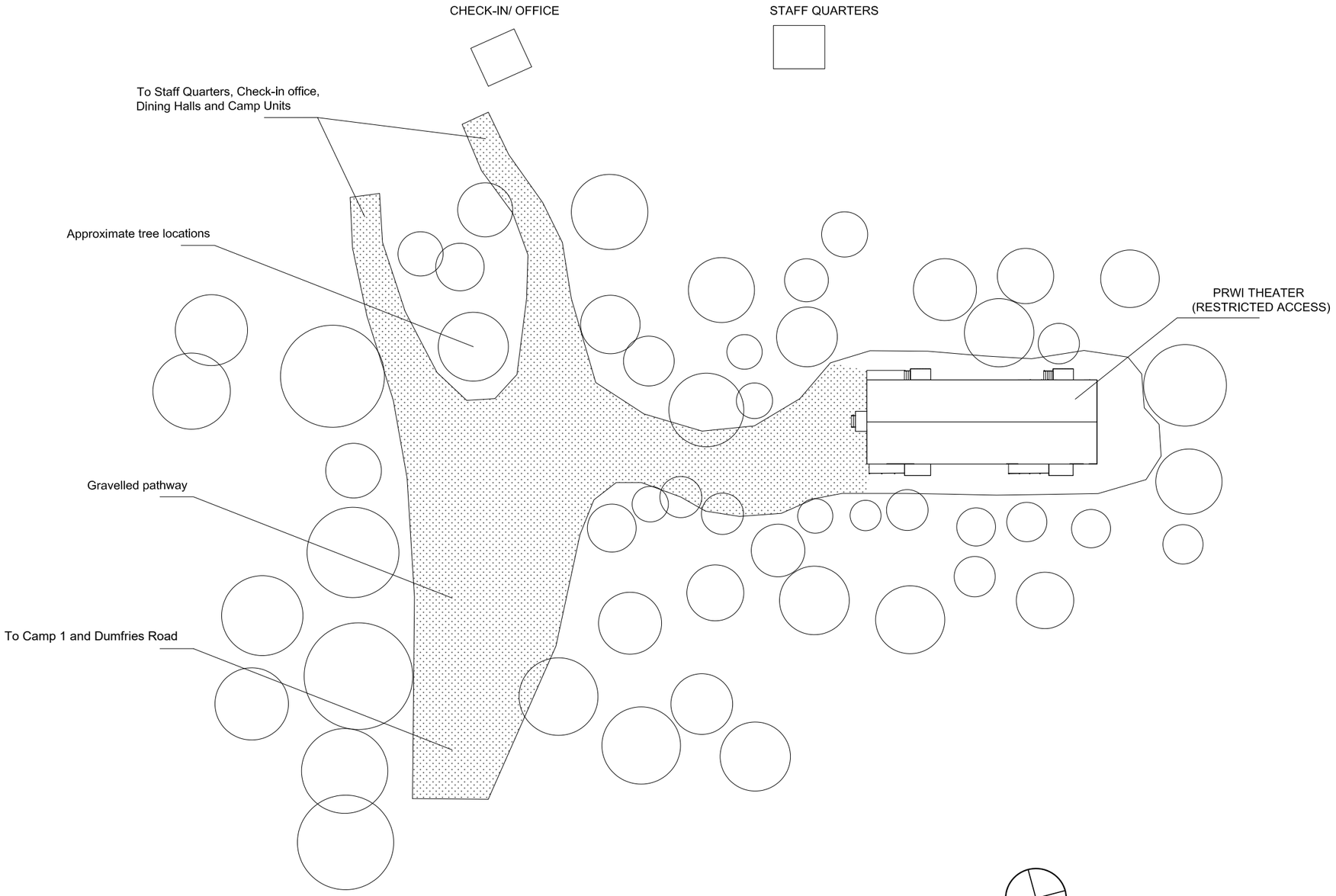
Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
D2010 Plumbing Fixtures	Water Closet	Fair	Minor
	Lavatory	Fair	Minor
Summary: The copper main water service rises from along the wall of the closet and runs in the space just below the structural framing to the adjacent mens restroom, womens restroom, and storage closet to supply water to the plumbing fixtures in the restrooms and laundry sink in the storage closet. Within the closet a service isolation valve has been provided. The plumbing fixtures in the mens and womens restrooms located on the main level near the building entrance include manual flush-tank, floor mounted water closets, manual flush-valve wall mounted urinal and wall mounted lavatories with accessibility-compliant center set faucet and drain piping guards. These fixtures appear to be in fair condition with some minor deterioration due to the building's seasonal use and operation. The restrooms and fixtures comply with accessibility regulations and the quantity meets the requirements for assembly use. The plumbing fixtures do not meet current water conservation codes and standards. It is recommended to replace all fixtures with modern low flow/water conserving type for any proposed renovations.			
D2020 Domestic Water Distribution	Pipes & Fittings	Good	Minor
	Instantaneous Electric Water Heater	Fair	Minor
	Insulation	Poor	Serious
Summary: The copper domestic cold-water piping is in good condition, but the distribution piping has not been provided with exterior insulation which is not a code requirement for domestic cold-water distribution. Heat trace has been installed on the domestic water distribution piping for freeze protection. There is no domestic hot water distribution piping as all domestic hot water is generated locally at the individual lavatory or mop sink. Based on the good condition of the domestic distribution piping, it is recommended for re-use and reconfiguration as necessary for any proposed renovations. Domestic hot water is generated by three (3) individual electric instantaneous water heaters rated at 3.0 kW (Stiebel Eltron – DHC 3-1) located at the individual lavatories and at the laundry sink. The water heaters were manufactured in 2007 and appear to be in good condition. The capacity of water heaters is adequate to support the current domestic hot water demand. However, the water heaters are approaching their ASHRAE life expectancy (15-20 years) and should be considered for replacement for any proposed renovations.			

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
D2030 Sanitary Waste	Waste, Vent, Pipe & Fittings	Fair	Minor
	Floor Drains	Fair	Minor
Summary: Wastewater and gases from these fixtures are conveyed through PVC sanitary and vent pipes. The sanitary waste pipes from the fixtures combine to a single 4" sanitary gravity line that runs below the main level slab within the open crawl space. This 4" gravity line elbows below the southeast corner of the building and exits the building to an exterior sanitary sewer lateral clean-out. The sanitary piping and distribution are in good condition and are recommended for reuse and reconfiguration as necessary for any proposed renovations.			
D3020 Heat Generating Systems	Portable, Plug-In Electric Heaters	Fair	Serious
	Heat Trace	Good	Minor
Summary: There are no overall HVAC systems providing conditioning of the whole building and there are no air conditioning systems for cooling or ventilation air. Heating in the building is provided in the mens and womens restroom by portable, plug-in electric radiator heaters. These heaters serve as freeze protection during the winter season. Electric heat trace wiring has also been provided at the incoming water service main piping and the incoming fire service main piping for freeze protection during the winter season. These seasonal freeze protection systems are in operating condition but should be replaced as part of the proposed renovations with permanent heat generation systems. While the exact installation date of the heat trace is unknown, it is assumed to have been installed during the 2005-2007 rehabilitation project. Heat trace wiring has an expected life span of 5-10 years on exposed applications.			
D3040 Distribution Systems	Air Distribution	Building Does Not Have	Critical
Summary: Currently, there are no HVAC systems to provide air-conditioning of the building. Uninsulated ductwork was installed prior to the 2005 renovation and remains in the attic space above the main level assembly area as provisions for potential connection to future HVAC air distribution systems. The existing ductwork does not appear to be sized correctly for the required air distribution for assembly use and is not configured for the architectural intent of for exposing the structure in the assembly area. The building requires a complete HVAC system as part of the proposed renovations.			
D5010 Electrical Service & Distribution	MDP, Branch Circuit Panels	Good	Minor
	Circuit Breakers	Good	Minor
	Conduit and Wiring to Panels	Good	Minor

Individual Elements	Location	Qualitative Condition Rating	Maintenance Deficiency Priority
Summary: The existing incoming 120/240-volt single phase electric service is routed from the Camp 4 site electrical distribution from two (2) 120/240-volt single phase 200 ampere (A) disconnect switches via below grade conduit and feeders to two interior distribution panels rated at 200 (A) located in the utility room adjacent to the mens restroom (Figures 157 and 158). These panels serve all electrical loads in the building. Each panel has an internal main circuit breaker disconnect electrical service as needed. The main distribution panel equipment is in good condition and no immediate concerns were noted. Sufficient load capacity and spare breaker/space capacity have been provided for future building loads associated with the proposed renovations. The branch circuits utilize NM-B (Romex) wiring with some limited MC cable wiring throughout the building with several instances of surface-mounted raceway wiremold being used for circuits and distribution added over the years. While the NM-B (Romex) wiring is acceptable by code for a Type V building construction type such as the Recreation/Theater Building, it is generally not standard practice for it to be installed in a commercial building. Power distribution impacted by the proposed renovations should be replaced with MC cable or wiring within conduit.			
D5020 Lighting & Branch Wiring	Electrical Wiring	Good/Poor	"Minor/ Serious"
	Lighting Fixtures	Good/Poor	"Minor/ Serious"
Summary: While most fixtures are in working condition, several are damaged and/or non-functional. Lighting controls consist of wall-mounted occupancy switches in each room. Replacement of all general light fixtures is recommended as a part of the proposed renovations to provide appropriate lighting levels and meet current energy requirements for lighting power density allowances. None of the existing fixtures appear to be historic.			
D5090 Other Electrical Systems	Emergency Lighting System	Poor	Serious
Summary: The building does not appear to be provided with any emergency lighting (egress lighting) throughout the building and photoluminescent exit signs are provided at egress doors. Code compliant emergency lighting should be provided for the proposed renovations.			

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EXISTING DRAWINGS



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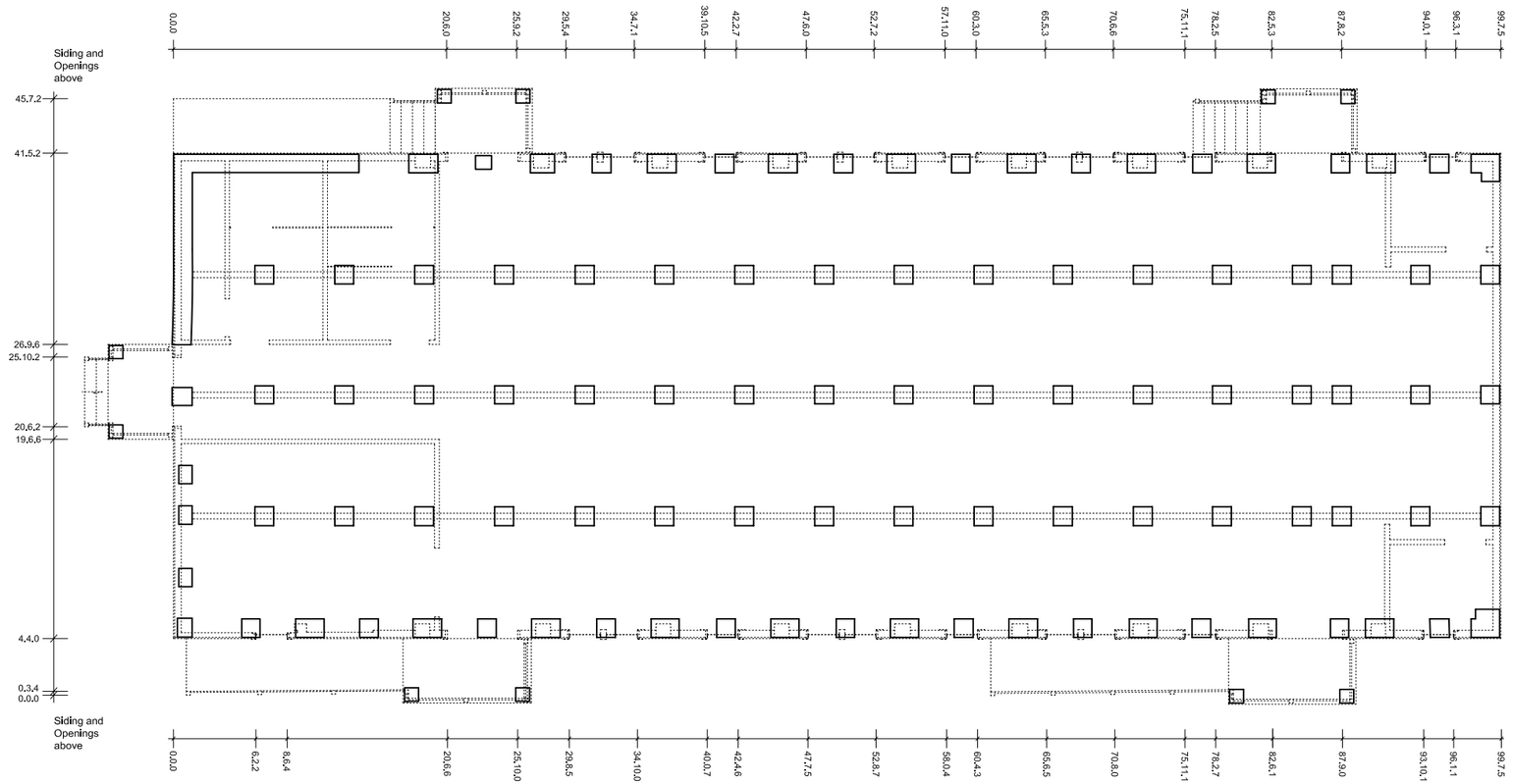
NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

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N.T.S.

SITE PLAN

Existing



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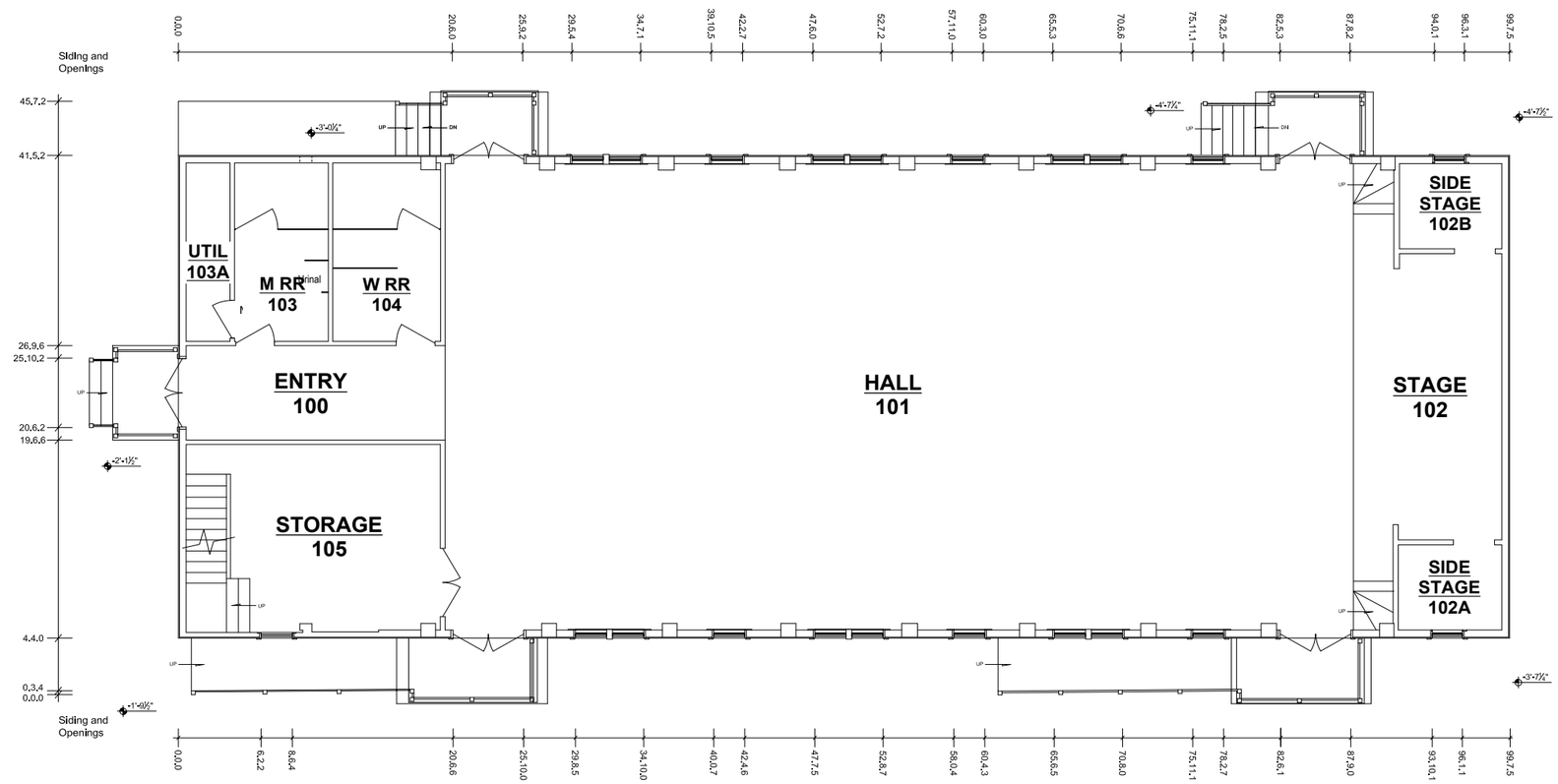
NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

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FOUNDATION PLAN

Existing



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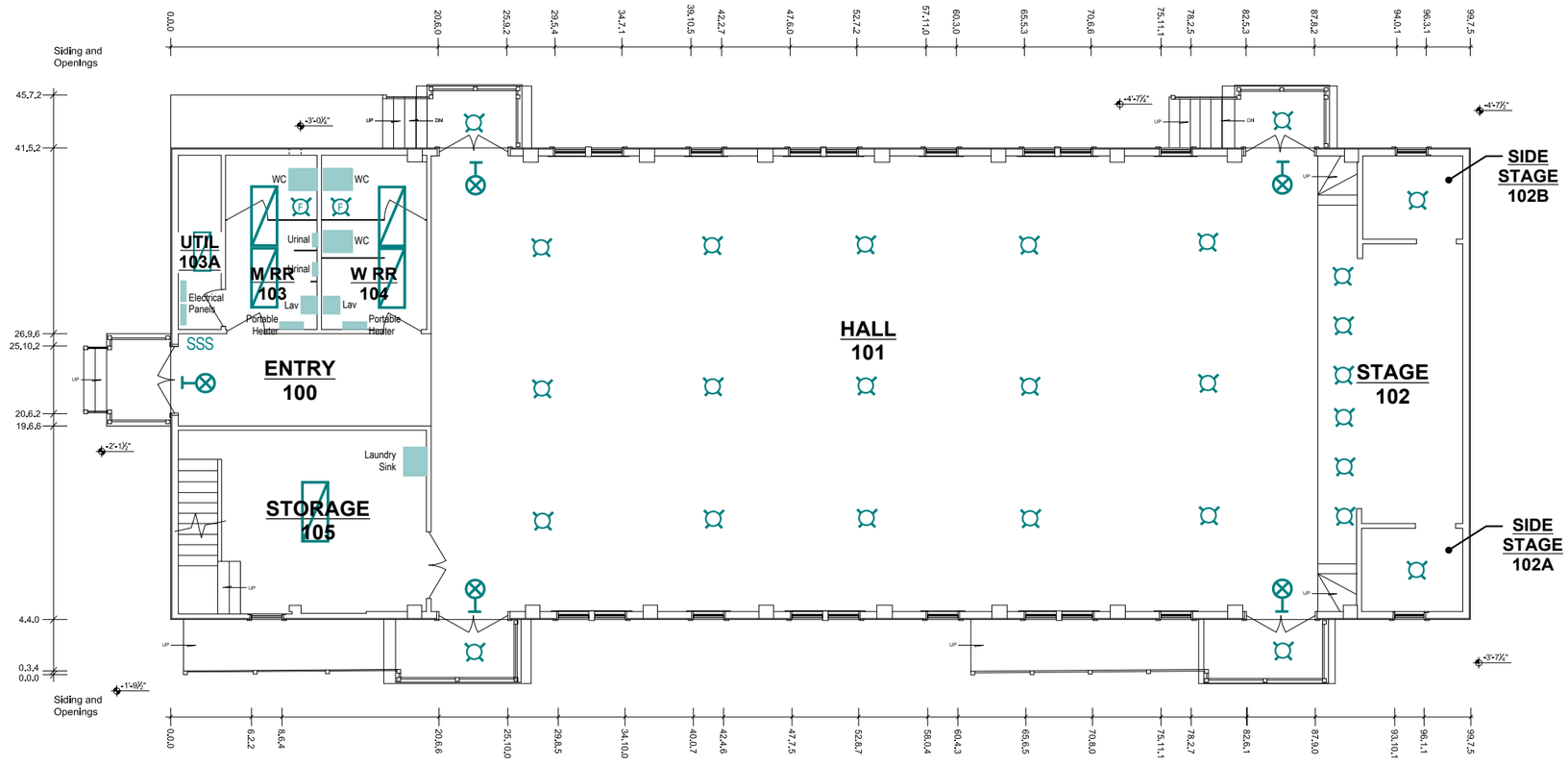
N.T.S.

MAIN FLOOR PLAN

Existing

MEP LEGEND

- Text — MEP Eqpt/Panel
- Ceiling Mtd. Light Bulb/Outlet
- Surface Mtd. Fluorescent Light Fixture
- Wall Mtd. Exit sign
- T — Toilet Exhaust Fan w/ Integrated Light
- S — Wall switch



N

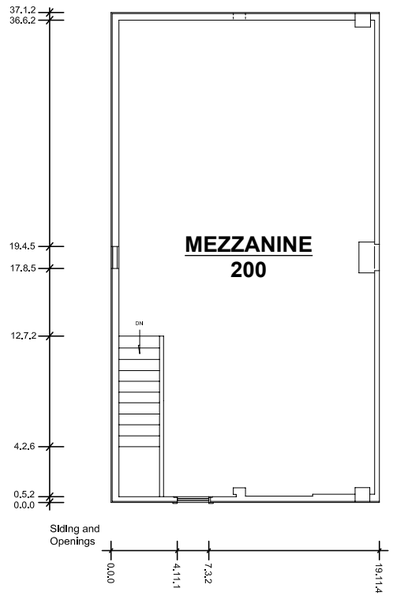
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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

MAIN FLOOR PLAN - MEP

Existing



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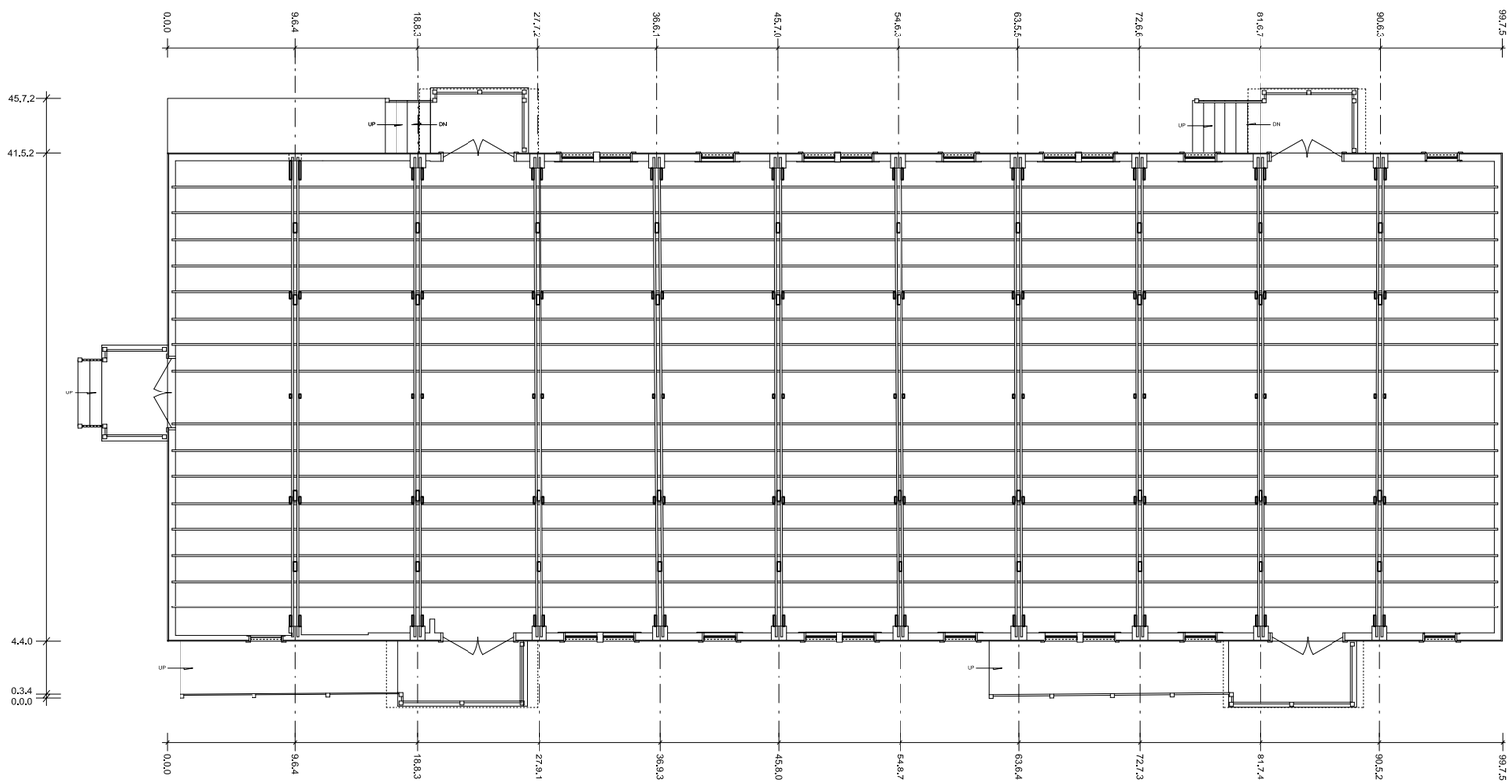
NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

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MEZZANINE FLOOR PLAN

Existing



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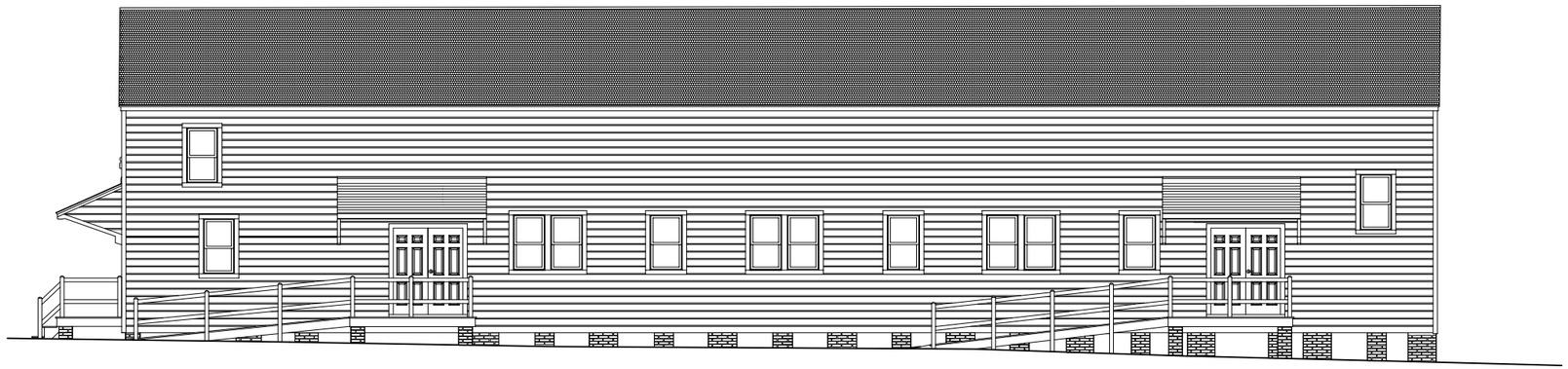
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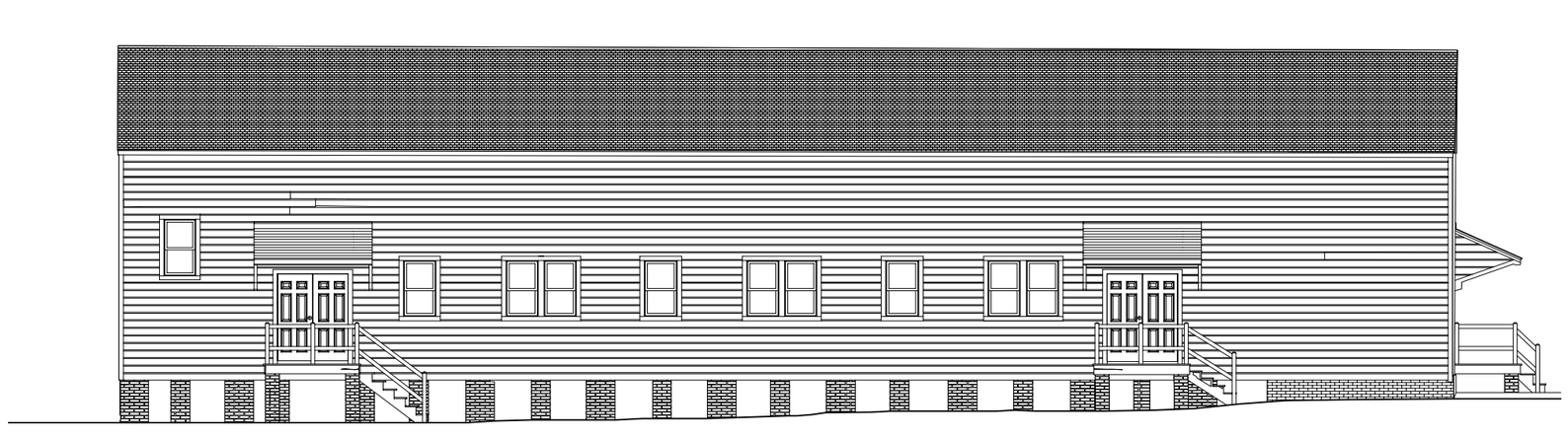
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REFLECTED CEILING PLAN

Existing





SOUTH ELEVATION

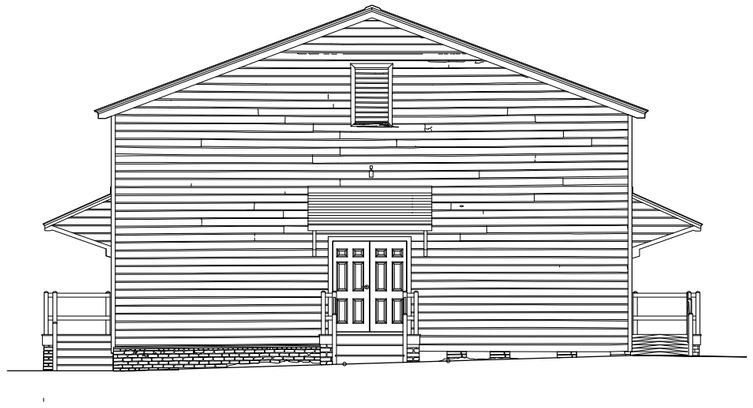
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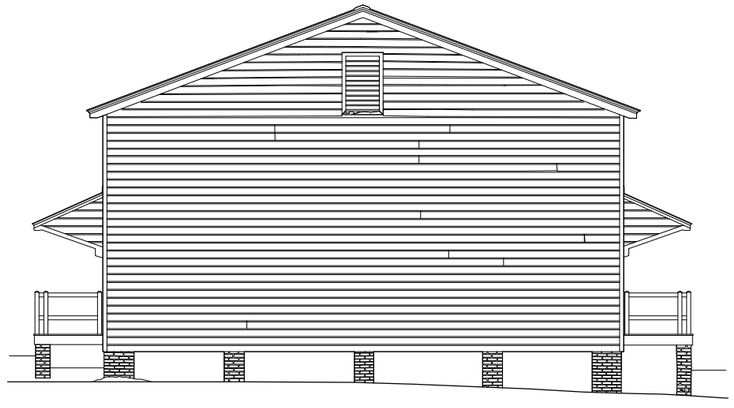
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NORTH & SOUTH ELEVATIONS

Existing



EAST ELEVATION



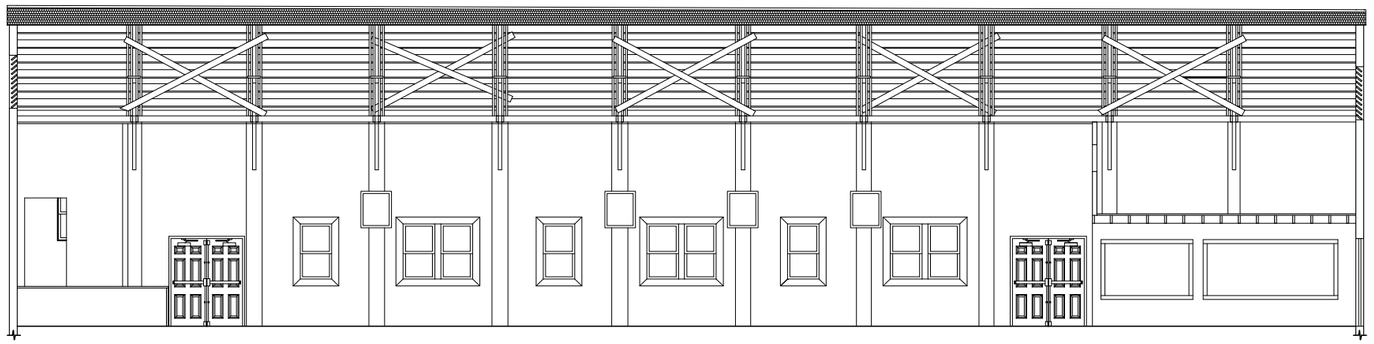
WEST ELEVATION

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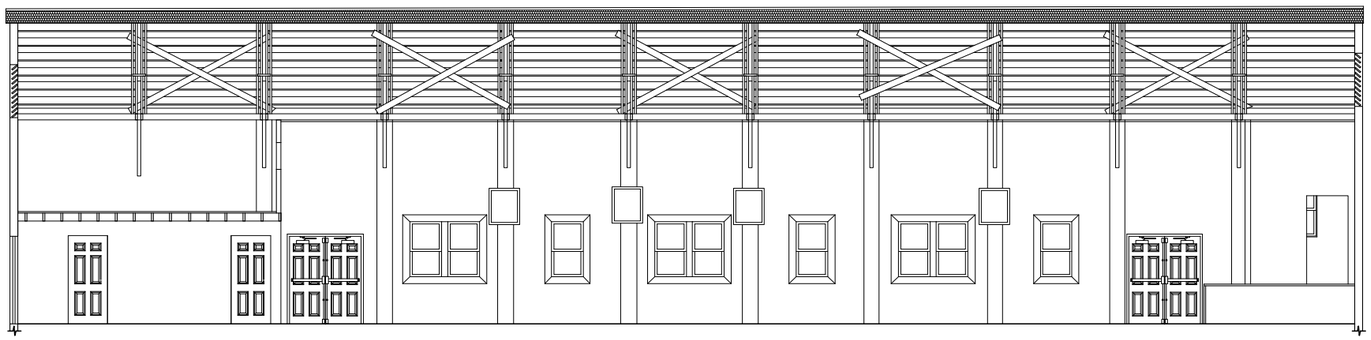
NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

EAST & WEST ELEVATIONS
Existing



BUILDING SECTION, LOOKING SOUTH



BUILDING SECTION, LOOKING NORTH

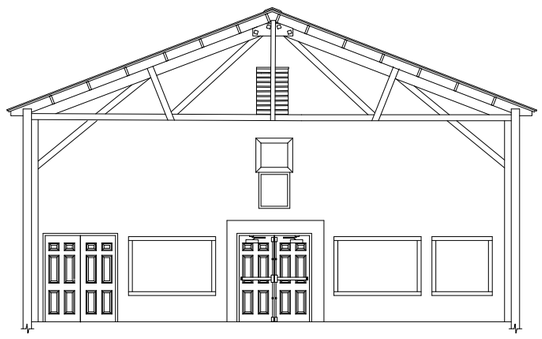
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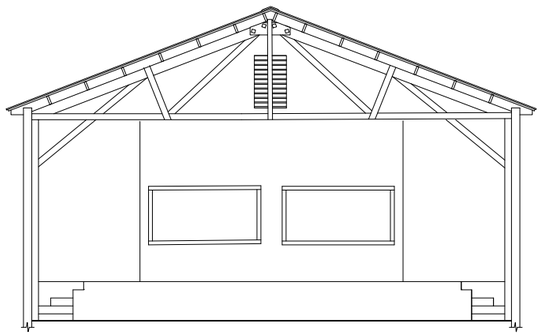
N.T.S.

LONGITUDINAL SECTIONS

Existing



BUILDING SECTION, LOOKING EAST



BUILDING SECTION, LOOKING WEST

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

TRANSVERSE SECTIONS

Existing

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Proposed Treatment Drawings

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

FP NOTES

OPTION #1

FIRE PROTECTION

- New dry-pipe sprinkler system to connect to existing 4-inch diameter underground fire sprinkler water main located in existing electrical closet. Extend existing water main from electrical closet into storage room in northeast corner of the building.

OPTION #2

FIRE PROTECTION

- Building code does not require sprinkler system. Do not provide new sprinkler system. No additional work required.

OPTION #2

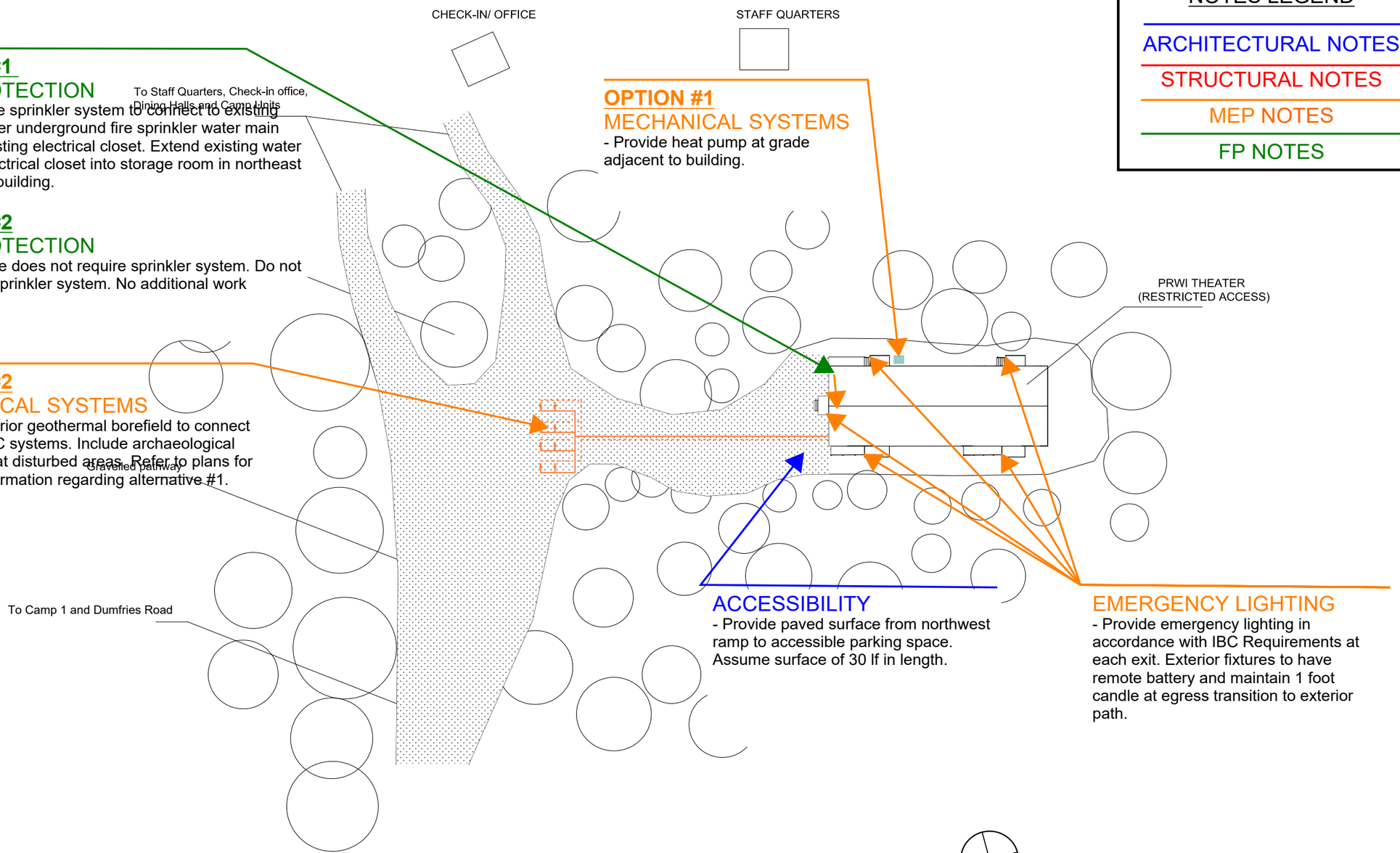
MECHANICAL SYSTEMS

- Provide exterior geothermal borefield to connect building HVAC systems. Include archaeological investigation at disturbed areas. Refer to plans for additional information regarding alternative #1.

OPTION #1

MECHANICAL SYSTEMS

- Provide heat pump at grade adjacent to building.



ACCESSIBILITY

- Provide paved surface from northwest ramp to accessible parking space. Assume surface of 30 lf in length.

EMERGENCY LIGHTING

- Provide emergency lighting in accordance with IBC Requirements at each exit. Exterior fixtures to have remote battery and maintain 1 foot candle at egress transition to exterior path.

N

N.T.S.

OCTOBER 21, 2022
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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

SITE PLAN

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

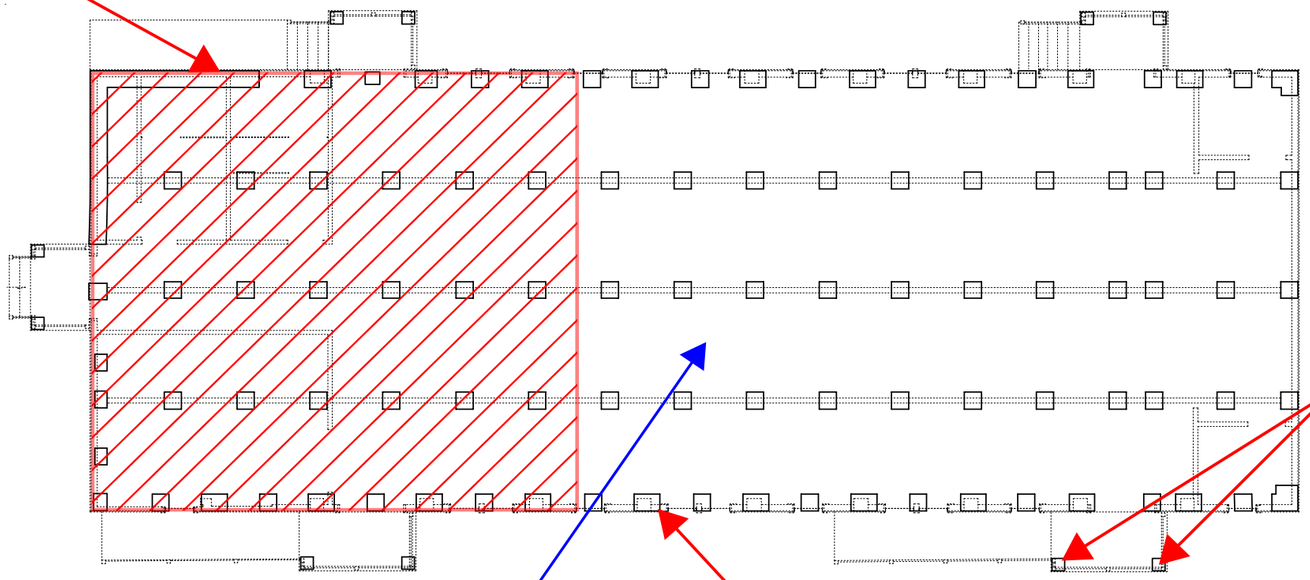
FP NOTES

FOUNDATION

- Provide subterranean termite colony elimination system around full perimeter of building (such as Sentricon or other comparable system). Provide ongoing maintenance and monitoring by exterminator.
- Provide galvanized steel sheet metal termite shield flashing at top of all masonry piers. Install to prevent visibility of sheet metal cap from exterior sides of building.

FUTURE INSPECTION

- Crawl space below first floor is less than 2ft in this area and was not accessed from below.



PIER CRACKING

- Remove and replace brick piers with hollow brick masonry and vertical reinforcing bars in piers at all stair and ramp landing locations. Existing piers do not appear to be reinforced.

CRAWLSPACE

- Provide suspended mineral wool insulation in exterior-rated netting throughout underside of floor structure (assume 3600sf).

PIER CRACKING

- Salvage and reinstall, or replace bricks at 20 locations.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

FOUNDATION PLAN

Proposed Treatment

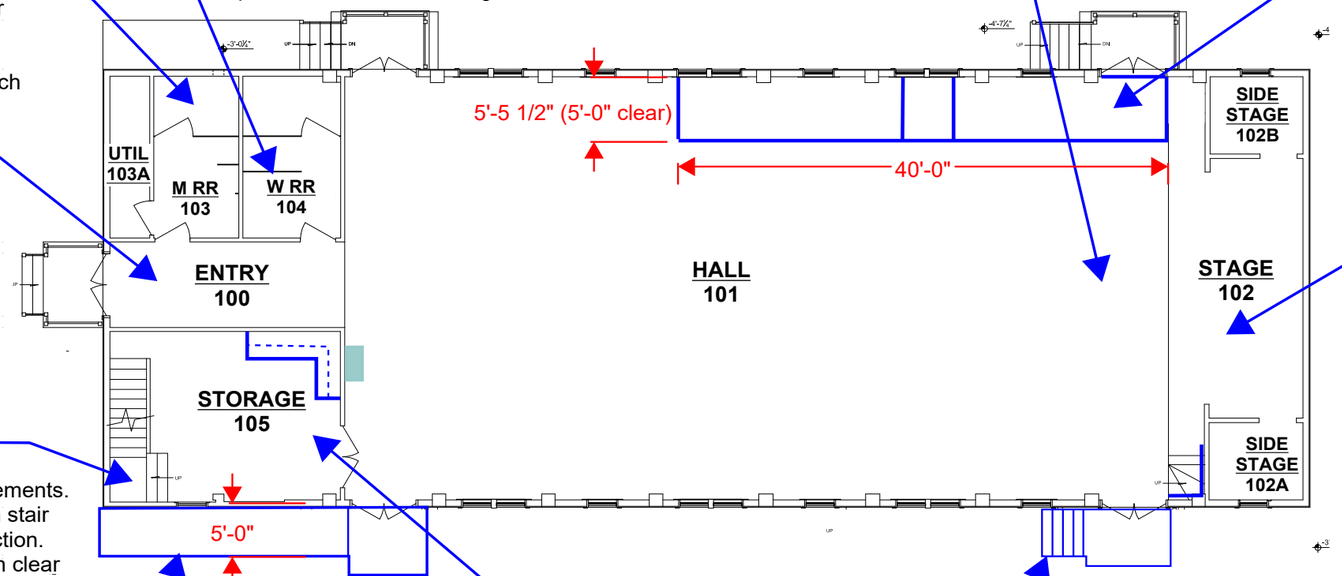
WOMENS RR (104)
- Replace (2) soiled 2x4 acoustical ceiling tiles
- Remove and remount toilet paper dispenser to meet accessibility requirements.
- Provide toilet paper dispenser for non-accessible toilet stall.
- Clean room of staining, debris, and guano.
- Remove corrosion from toilet wall escutcheon and soap dispenser.
- Determine location of rodent infiltration. Patch and repair location.

MENS RR (103)
- Replace (2) soiled 2x4 acoustical ceiling tiles
- Remove and remount toilet paper dispenser to meet accessibility requirements.
- Clean room of debris and guano.
- Determine location of rodent infiltration. Patch and repair location.

ENTRY (100)
- Remove finish on surface of existing wood floor. Prepare wood floor. Refinish wood floor with clear low-VOC floor finish rated for high traffic (assume 140sf).
- Install new painted 1/2" thick GWB ceiling finish.
- Patch and repair 15 sf of damaged GWB wall surface.
- Provide 120 VAC exit signs above (1) exit door.

STORAGE (105)
- Reconstruct stair to comply with IBC requirements. Provide finish on treads. Provide guardrail on stair open side. Provide handrail on short stair section.
- Prepare wood floor. Refinish wood floor with clear low-VOC floor finish rated for high traffic (assume area of 220 sf).
- Replace latch hardware at doors at Hall opening.
- Remove deteriorated wood adjacent to windows. Provide (1) new 3/8" thick plywood panel. Paint interior of (2) wood windows and provide painted plywood trim to close gap at wall paneling.
- Install plastic laminate base cabinets, counters and upper cabinets (assume 10lf). Install painted GWB wall finish on existing walls at location of new cabinets (assume 10lf).

HALL (101)
- Remove finish on surface of existing wood floor. Prepare wood floor, including filling gaps between floorboards in wood floor 1/8" in width or larger (assume area of 100sf). Refinish wood floor with clear low-VOC floor finish rated for high traffic (assume area of 2450 sf).
- Remove (6) damaged plywood panels. Provide (6) 3/8" thick plywood replacement panels to match finish quality of original plywood panels.
- Prepare wall surfaces and remove debris. Paint all wall surfaces. Restore dark band (5'-0" in height) along base of walls.
- Remove and remount (6) existing plywood panels.
- Remove limited instances of GWB and replace with painted 3/8" thick plywood panels (assume 75sf)
- Provide 120 VAC exit signs above (4) exit doors.
- Provide wing wall or floor-mounted model to comply with ABAAS requirements at new drinking fountain



RAMP
- Reconstruct exterior ramp to comply with ABAAS requirements, suggested schematic layout shown. Minimize extension of ramp beyond east wall.

OPTION #2
ACCESSIBILITY
- Provide portable motorized vertical platform lift to provide accessible route to stage on an as-needed basis. Lift to be stored in Storage 105.

STAIR
- Remove ramp and provide new stair. Refer elevation for additional information.

OPTION #1
ACCESSIBILITY
- Provide wood-framed accesible ramp with wood walking surface and guardrail to reach level of stage (approx. 3'-0" height). Existing stage stairs to remain in place.
- Fix exterior doors in closed position and remove exit sign.

STAGE (102) & SIDE STAGE (102A & B)
- Paint interior of (2) wood windows and provide painted plywood trim to close gap at wall paneling.
- Refinish floor surface (see Hall (101) notes for details)
- Prepare wall surfaces and remove debris. Paint all wall and bookcase surfaces.
- Provide new painted plywood panel door at existing side stage door openings. Provide hasps and hinges.
- Remove (1) damaged plywood panel at face of stage. Document and inspect stage framing. Repair panel and reinstall. Paint stage wall.
- Provide one Type 2-A portable fire extinguisher.

NOTES LEGEND
ARCHITECTURAL NOTES
STRUCTURAL NOTES
MEP NOTES
FP NOTES

N

N.T.S.

OCTOBER 21, 2022
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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

FLOOR PLAN - ARCHITECTURAL

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

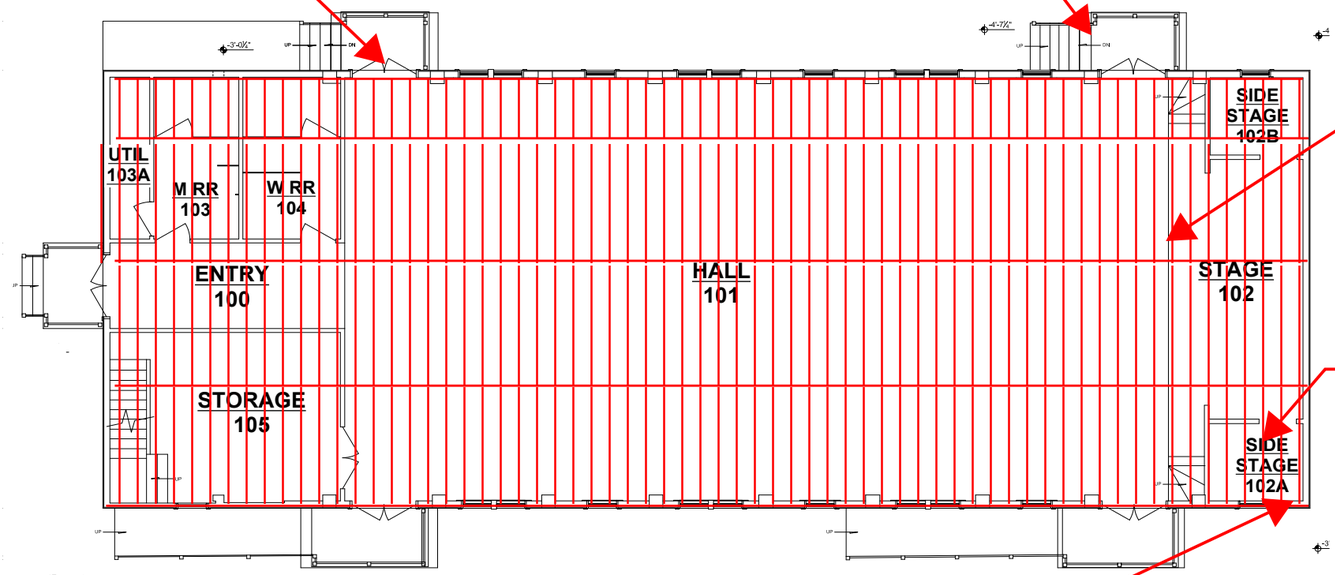
STRUCTURAL NOTES

MEP NOTES

FP NOTES

AWNING CONNECTION
- Remove plywood paneling at one door location on the inside and wood siding on the exterior to verify attachment of awning to the wall framing.

STAIR LANDING RECONSTRUCTION
- Insect damage to stair landing framing. Termite inspections to be performed annually to monitor this condition and check for new insect damage. Clamps to be removed and permanent fixed connection of stair to landing to be installed as a part of stair reconstruction.



STAGE FRAMING
- Remove plywood paneling front of stage and at stairs for inspection of existing framing.

JOIST SPLITTING
- Serious floor joist splitting in bottom of member. Provide sistered 2x8 full length of joist, typical 2 locations.

INSECT DAMAGE (TERMITE)
- Serious insects damage to perimeter girder at joist bearing. Sister 2x8 full length of damaged member, typical 3 locations. Termite inspections to be performed annually to monitor this condition and check for new insect damage.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

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FLOOR PLAN - STRUCTURAL
Proposed Treatment

PLUMBING SYSTEMS
- Replace existing water fixtures with new low consumption flow model with manual dual flush operators.
- Replace existing instantaneous electric domestic water heaters.
- Reconnect/Reuse existing domestic water and sanitary distribution systems.
- Provide new drinking fountain.

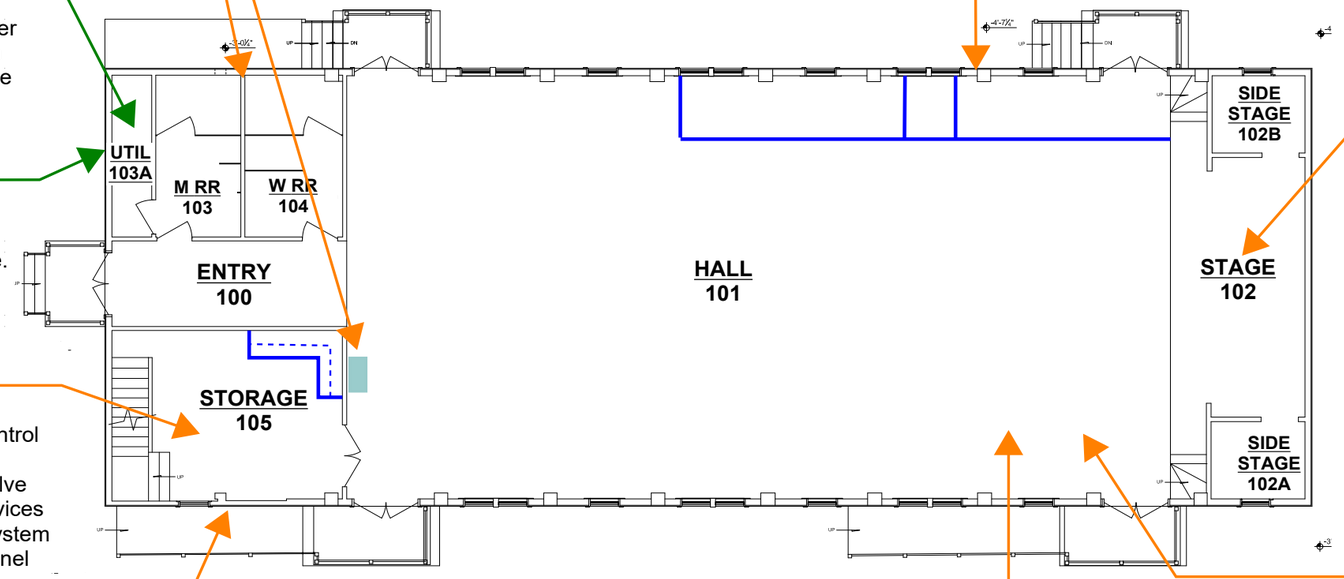
OPTION #1
FIRE PROTECTION
- Provide 4-inch diameter dry pipe sprinkler system riser and appurtenances this area
- Provide RPZ back flow prevention device

OPTION #2
FIRE PROTECTION
- Sprinkler system is not required by code. No sprinkler system to be added.

FIRE ALARM SYSTEMS
- Provide 4-zone hardwired fire alarm control panel in store room
- Provide sprinkler system water flow, valve supervisory, low air alarm monitoring devices
- Provide remote monitoring fire alarm system
- Provide 120VAC power to fire alarm panel

SECURITY SYSTEMS
- Provide intrusion security system with glass break, motion detectors, and door/window sensors. System to employ cellular communication for external monitoring at park headquarters.

ELECTRICAL SYSTEMS
- Reuse existing electrical service and panels.
- Replace all power distribution devices/outlets.
- Replace all lighting fixtures and controls.
- Provide code required egress emergency lighting.



OPTION #1
MECHANICAL SYSTEMS
- Provide complete heating/cooling air distribution system with exposed ductwork in Hall.
- Connect restroom exhaust to AHU energy recovery.
- Install high-efficiency heat pump at grade.
- Provide high volume, low velocity ceiling fans in Hall.

AV SYSTEMS
- Provide Extron or equivalent AV system with audio/visual input panels located at the Stage.
- Provide projector system for visuals.
- Provide speaker sound system for audio.
- Locate AV equipment in one of the Side Stage rooms.

OPTION #2
MECHANICAL SYSTEMS
- Provide complete heating/cooling air distribution system with exposed ductwork in Hall.
- Connect restroom exhaust to AHU energy recovery.
- New high efficiency geothermal heat pump air handling unit with energy recovery section.
- Geothermal water distribution pumps and controls.
- Provide high volume, low velocity ceiling fans in Hall.

NOTES LEGEND
ARCHITECTURAL NOTES
STRUCTURAL NOTES
MEP NOTES
FP NOTES

N

N.T.S.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

FLOOR PLAN - MEP

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

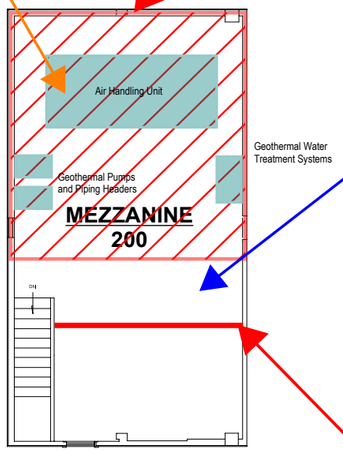
MEP NOTES

FP NOTES

FUTURE INSPECTION
- Floor framing above bathroom was not accessed, however framing is assumed to be consistent with the area above the storage room.

OPTION #1
MECHANICAL SYSTEMS
- New high efficiency heat pump air handling unit with energy recovery section.

OPTION #2
MECHANICAL SYSTEMS
- New high efficiency geothermal heat pump air handling unit with energy recovery section.
- Geothermal water distribution pumps and controls.



MEZZANINE (200)
- Repair (1) instance of damaged plywood paneling.
- Restore plywood paneling on east and south exterior walls (approx. 340sf).
- Install painted 3/8" plywood wall finish on existing wall framing bordering stair (approx. 170sf).
- Install vinyl sheet flooring over underlayment on existing OSB floor panels (approx. 650sf).

FLOOR STRENGTHENING
- Beam above storage room will be strengthened or removed and replaced to support increase in mezzanine floor loading for live load and installation of mechanical equipment.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

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MEZZANINE FLOOR PLAN

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

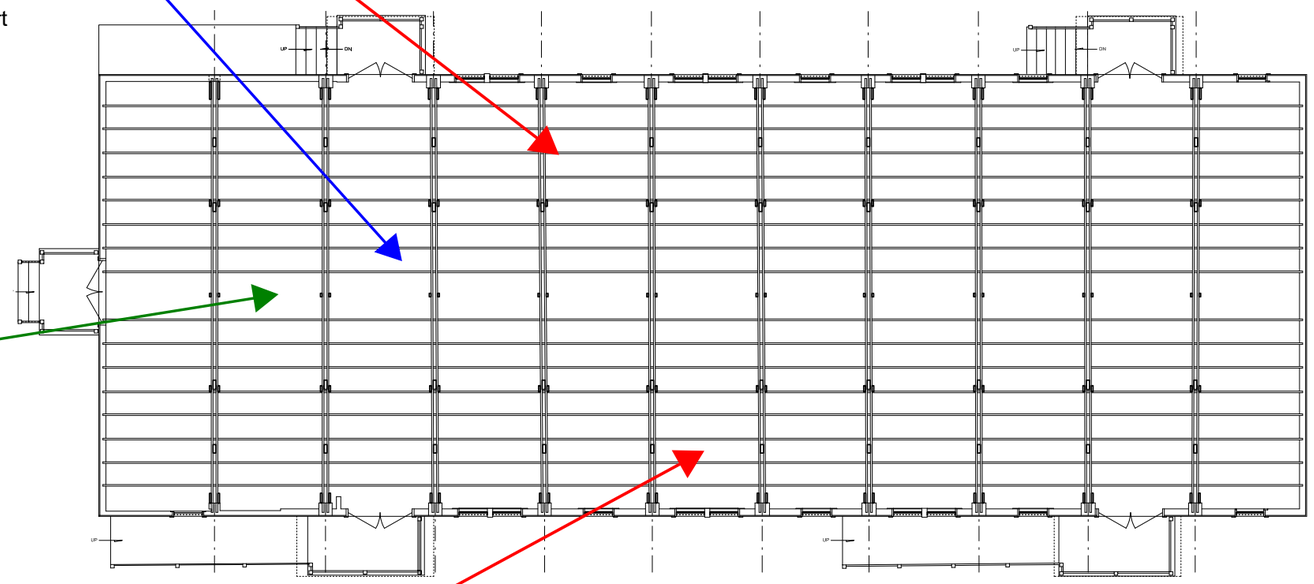
STRUCTURAL NOTES

MEP NOTES

FP NOTES

PURLIN WATER DAMAGE
- Water damage observed at approximately 20 roof purlins. Remove and replace before reroofing.

CEILING / UNDERSIDE OF ROOF
- Remove plastic sheeting at bottom chord of roof trusses.
- Remove various 2x framing installed to support removed equipment.



OPTION #1
FIRE PROTECTION
- Provide dry-pipe automatic sprinklers throughout the ceiling area of all spaces

OPTION #2
FIRE PROTECTION
- Sprinkler system is not required. Do not provide sprinkler system.

ROOF DECK WATER DAMAGE
- Water damage observed at approximately 250 sf on the bottom of the roof decking. Remove and replace before reroofing.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N

N.T.S.

REFLECTED CEILING PLAN

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

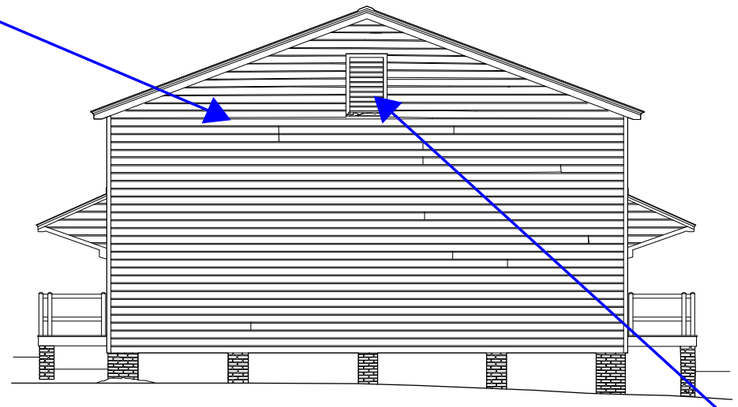
STRUCTURAL NOTES

MEP NOTES

FP NOTES

WOOD SIDING

- Remove and replace 5% of wood siding from west facade. Provide new droplap pine siding to match existing. Backprime all sides and ends of clapboard with alkyd primer paint. Install siding and finish all visible sides to match existing. (approx. 36 sf).
- Remove localized instance of biological growth (assume 20 sf) with biocide.



WEST ELEVATION

WINDOW

- Provide divided light wood casement window in place of existing louver. Match historic design.

WOOD SIDING

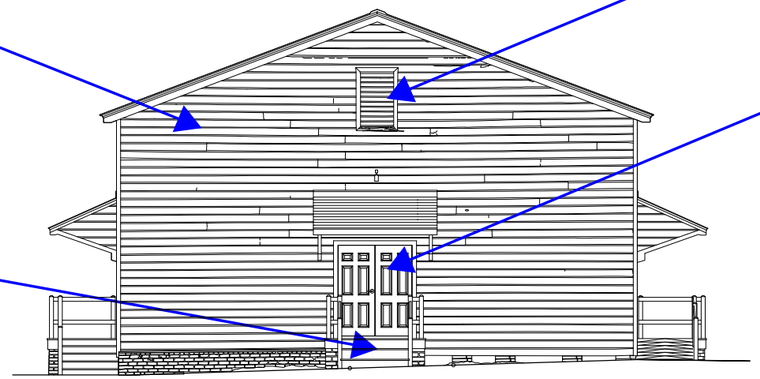
- Remove 100% of wood siding from east elevation. Salvage boards exhibiting minimal warping and rot. Provide new droplap pine siding to match existing. Backprime all sides and ends. Install siding and finish all visible sides to match existing. Assume 75% replacement (approx. 540 sf).

EXTERIOR DOORS

- Remove and replace pair of doors. Provide new wood doors with panic hardware, exterior grade hinges, exterior levers, lock, closers, exterior door stop, and sweep at bottom of door.
- New doors to be five horizontal paneled type to match historic design.

ENTRANCE STAIR

- Reconstruct entrance stair to provide uniform height per IBC. Replace termite damaged elements (assume 50% of floorboards and wood structure)
- Provide painted wood handrail and guardrail on both sides of stair.



EAST ELEVATION

OCTOBER 21, 2022
100% DRAFT

NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

EAST & WEST ELEVATIONS

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

FP NOTES

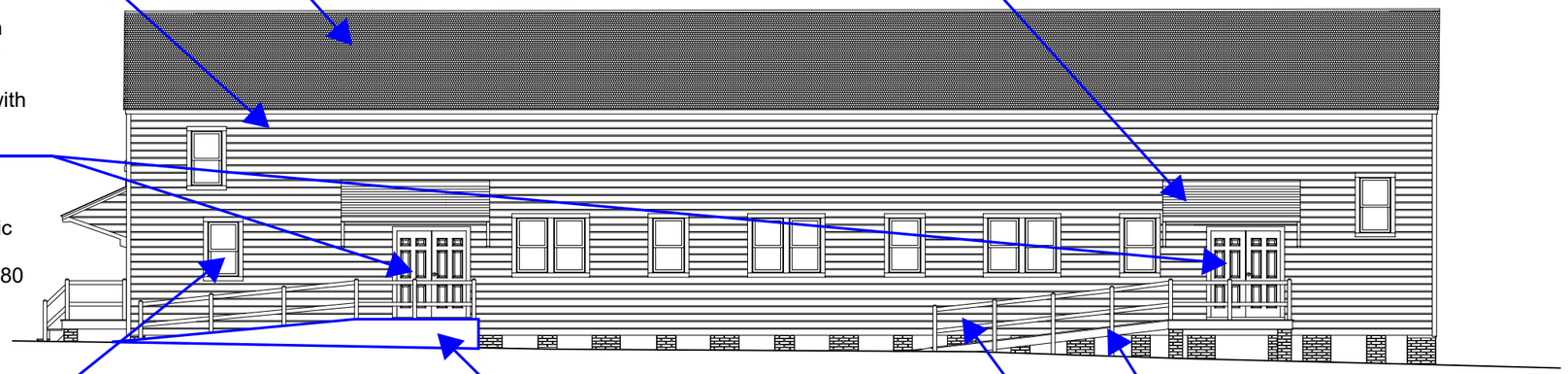
ROOF
- Remove existing asphalt shingle roof. Replace deteriorated wood sheathing. Install new asphalt shingle roofing on new exterior sheathing on R-10 rigid foam board insulation. Modify rake boards and roof cornice to accommodate increased height. Assume roof area of 4200sf. Install rain diverters at each entrance (4 total).

WOOD SIDING
- Remove and replace 5% of wood siding from north elevation. Provide new pine droplap siding to match existing. Backprime all sides and ends of siding with alkyd primer paint. Install siding and finish all visible sides to match existing. (approx. 80 sf).
- Remove biological growth along base of building with biocide (assume 20sf).

EXTERIOR DOORS
- Remove and replace both pairs of doors. Doors to be of a complementary design to the paneled historic doors documented on the east elevation.
- Provide exterior grade hinges which allow for full 180 degree swing for door in path of egress. Provide exterior door stop.

WINDOWS
- Install insect screens where missing (assume 9 total). Replace damaged screens (assume 4 total).
- On interior side of windows, provide wood filler at damaged sash locations (assume 20 small instances total). Paint interior of all sashes and trim.
- Clean all windows on all facades and lubricate/replace springs as required to return to full, smooth operability.

AWNING
- Remove damaged elements. Replace with matching wood members (assume 50% replacement).



ENTRANCE RAMP
- Rebuild ramp to reduce slope and to eliminate non-complaint threshold condition per ABAAS. Approximate increased length shown in sketch above.
- Provide code-compliant painted wood handrail on both sides of ramp. Provide code-compliant painted wood guardrail along length of ramp.
- Replace deteriorated elements (assume 25% of floorboards and wood structure)

OPTION #1
ACCESSIBILITY
- Replace ramp with wood stair. Match existing stair designs, including brick piers, wood structure and walking surface. Provide code compliant guardrail.

OPTION #2
ACCESSIBILITY
- Rebuild ramp to reduce slope and to eliminate non-complaint threshold condition per ABAAS.
- Provide painted wood handrail on both sides of ramp. Provide painted wood guardrail along length of ramp.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

NORTH ELEVATION

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

FP NOTES

WOOD SIDING

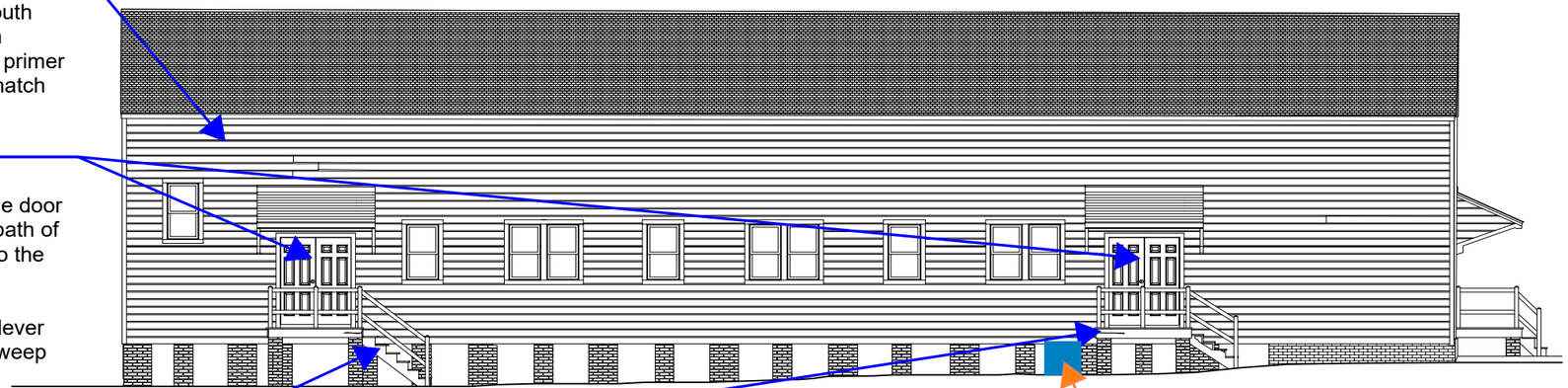
- Remove and replace 5% of wood siding from south facade. Provide new droplap pine siding to match existing. Backprime all sides and ends with alkyd primer paint. Install siding and finish all visible sides to match existing (approx. 80 sf).

EXTERIOR DOORS

- Remove and replace both pairs of doors. Provide door hinges to allow full 180 degree swing for door in path of egress. Doors to be of a complementary design to the paneled historic doors documented at the main entrance.
- At east doors, provide panic hardware, exterior lever hardware, door closers, exterior door stop, and sweep at bottom of door.
- At west doors, fix doors in closed position and install sign reading "Not An Entrance" on exterior. No hardware to be provided for fixed door.

ENTRANCE STAIRS

- Reconstruct entrance stair to provide uniform height per IBC. Replace termite damaged elements (assume 50% of floorboards and wood structure).
-Provide painted wood guardrail and handrail along both sides of stair.



OPTION #1

MECHANICAL

- Exterior mechanical equipment. Provide equipment pad. Refer to plan for additional information.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

SOUTH ELEVATION

Proposed Treatment

NOTES LEGEND

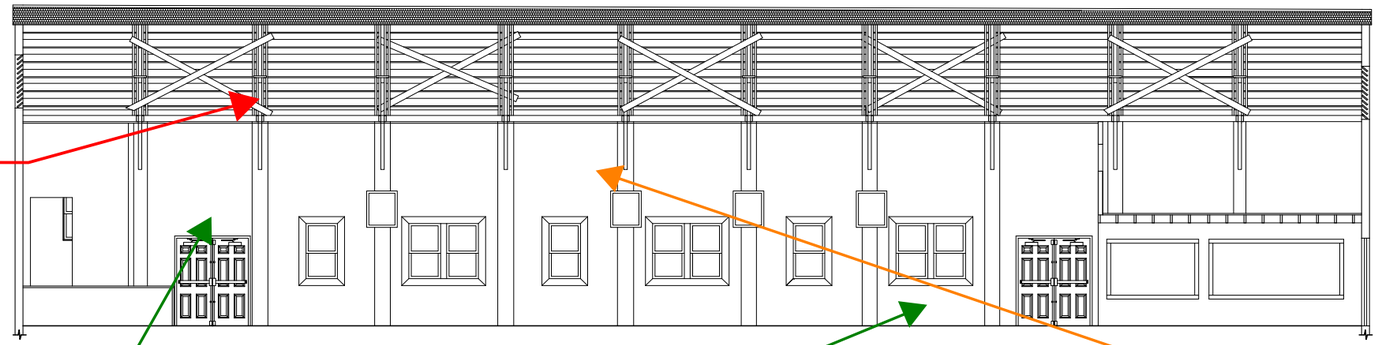
ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

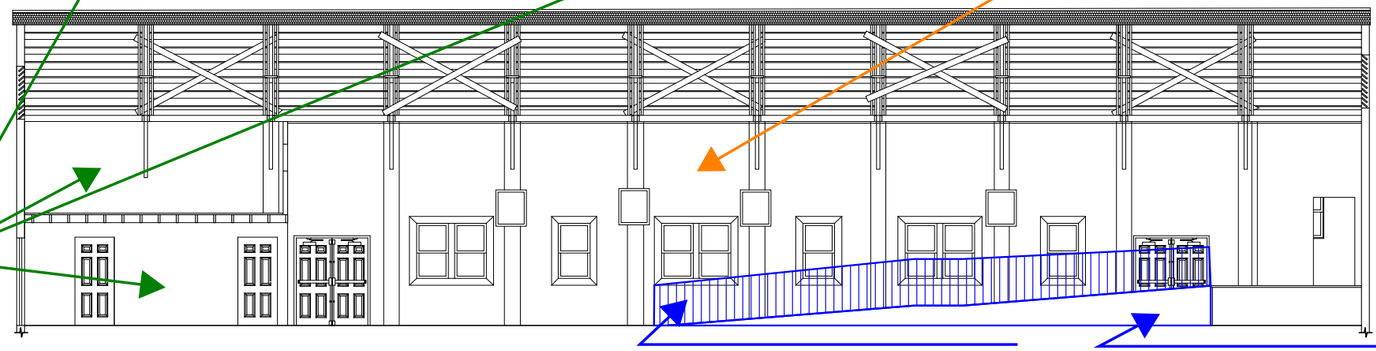
FP NOTES

BRACING CONNECTION
- Diagonal braces at the middle of the trusses are not connected or missing nails. Repair connection in approximately 5 locations.



BUILDING SECTION, LOOKING SSE

EMERGENCY LIGHTING
- Provide emergency lighting per IBC



FIRE ALARM SYSTEM
- Provide horn/strobe connected to fire alarm system in Hall (101) and Mezzanine (201)
- Provide strobe in Side Stages (102A & 102B), Restrooms (103 & 104), and Storage Room (105)

BUILDING SECTION, LOOKING NNW

OPTION #1
ACCESSIBILITY
- Provide accessible wood ramp with guardrail adjacent to south wall. Refer to plan for additional information.

OPTION #2
ACCESSIBILITY
- Provide portable motorized vertical platform lift to create temporary accessible route to stage.
- Historic stairs to remain in situ obscured by new ramp construction.
- Remove exit sign. Fix exterior doors in closed position.

OCTOBER 21, 2022
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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

LONGITUDINAL SECTIONS

Proposed Treatment

NOTES LEGEND

ARCHITECTURAL NOTES

STRUCTURAL NOTES

MEP NOTES

FP NOTES

OPTION #1

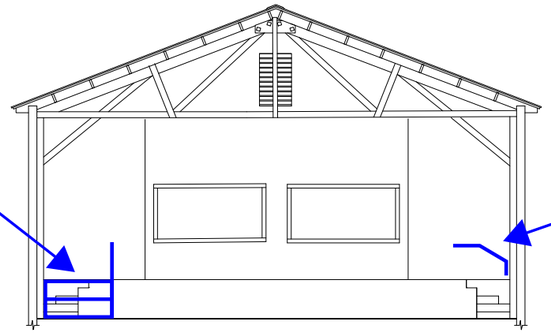
ACCESSIBILITY

- Provide accessible wood ramp with guardrail adjacent to south wall. Refer to plan for additional information.

OPTION #2

ACCESSIBILITY

- Provide portable motorized vertical platform lift to create temporary accessible route to stage.



BUILDING SECTION, LOOKING WEST

STAGE STAIR

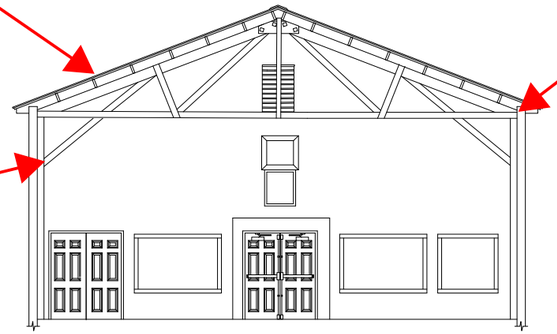
- Provide handrail on wall side of north stage stairs

MISSING BLOCKING

- Wood blocking members at down sloping side of roof purlins are missing at approximately 15 locations. Install new blocking at all locations to match existing.

KICKER CONNECTIONS

- Size of existing bolt connection from kicker to column could not be verified. Install new connectors at all locations.



BUILDING SECTION, LOOKING EAST

TRUSS CONNECTIONS

- No metal connection observed at top of column to truss. Install new connectors at all locations.

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NPS PRWI CAMP #4 THEATER/RECREATION BUILDING

N.T.S.

TRANSVERSE SECTIONS

Proposed Treatment

National Park Service
U.S. Department of the Interior

Prince William Forest Park
Virginia



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