



Civilian Conservation Corps
Technical Building
Historic Structure Report
Piney River, Shenandoah National Park
Luray, Virginia
September 2020

Historic Structure Report

Civilian Conservation Corps (CCC) Technical Building

Shenandoah National Park

Luray, Virginia



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Contents

ACKNOWLEDGMENTS	v
I. INTRODUCTION.....	1
Executive Summary	3
General Recommendations.....	5
Administrative Data	7
II. HISTORICAL BACKGROUND AND CONTEXT.....	9
Introduction	11
Technical Quarters and Office.....	12
III. CHRONOLOGY OF DEVELOPMENT AND USE	19
Overview	21
Introduction	21
1935–1942	23
1942–1973	27
2006–2020	38
Chronology Table	40
IV. CURRENT PHYSICAL DESCRIPTION	49
General Information.....	51
Exterior.....	51
Interior.....	58
V. PROPOSED TREATMENT AND CHARACTER- DEFINING FEATURES.....	81
Proposed Treatment	83
Character-Defining Features	85
BIBLIOGRAPHY.....	91
APPENDICES.....	A-1
Appendix A: Floor Plan	A-3
Appendix B: Building Element Table	A-5

List of Figures

Figure 2.1. Civilian Conservation Corps logo. (<i>Courtesy of Grand Canyon National Park</i>).....	12
Figure 2.2. Harry F. Byrd (<i>Courtesy of Library of Virginia</i>)	12
Figure 2.3. CCC Camp MP-3, Chancellorsville Battlefield. Example of more regimented CCC Camp Design. (<i>Courtesy of Mysteries and Conundrums</i>) ...	13
Figure 2.4. Aerial view of NP-12, 1938 (<i>Courtesy of Shenandoah National Park Maintenance Archive</i>)	13
Figure 2.5. Shenandoah National Park, Nursery at Big Meadows. (Reed L. Engle, <i>Everything was Wonderful</i>)	15
Figure 2.6. Civilian Public Service sign at Shenandoah National Park (<i>Courtesy of The Civilian Public Service Story</i>)	15
Figure 2.7. West elevation of Technical Building in early 1990s. (<i>Courtesy of Steve Bair</i>)	16
Figure 3.1. Piney River CCC Camp NP-12, looking west, ca. 1935. A: Board-and-batten walls. B: T-shaped structure. C: Tar paper roof. Pier foundation. (<i>Image courtesy of National Park Service, Shenandoah National Park Museum Collection</i>)	23
Figure 3.2. The Pinnacles CCC Structure, south elevation, Shenandoah National Park, February 26, 2020. (<i>Image by author</i>)	23
Figure 3.3. Big Meadows (NP-2), Shenandoah National Park. Barrack heated with wood stove. (Reed L. Engle, <i>Everything was Wonderful</i>).....	24
Figure 3.4. Technical Quarters and Office Building, ca. 1935. (<i>Image courtesy of National Park Service, Shenandoah National Park Museum Collection</i>).....	25
Figure 3.5. Technical Quarters and Office Building – shower room, southeast oblique, ca. 1935. (<i>Image courtesy of National Park Service, Shenandoah National Park Museum Collection</i>)	25
Figure 3.6. Original vaulted ceiling in R102, now encapsulated in the attic, 2015. (<i>Image by Eric Breitreutz</i>)	26
Figure 3.7. W102.1 window trim, February 25, 2020. (<i>Image by author</i>)	26
Figure 3.8. W104.1, February 25, 2020. (<i>Image by author</i>)	27
Figure 3.9. Ranger Office and Quarters, northeast oblique, 1943. (<i>Image courtesy of National Park Service, Shenandoah National Park Museum Collection</i>)	27

Figure 3.10. Attic above R108, 1935 roof jack framing, 2015. (<i>Image taken by Eric Breitzkreutz</i>)	28
Figure 3.11. CCC Technical Building, looking east, ca. 1995. (<i>Image courtesy of Steve Bair</i>)	28
Figure 3.12. Planning drawing, <i>SHE 2356 Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12)</i> , Shenandoah National Park, May 22, 1943. (<i>National Park Service, Shenandoah National Park Museum Collection</i>)	29
Figure 3.13. R107 sink, February 25, 2020. (<i>Image by author</i>).....	30
Figure 3.14. Planning drawing, <i>SHE 3039 Mathews Arm Developed Area, Part of the Master Plan</i> , Shenandoah National Park, March 9, 1960. (<i>National Park Service, Shenandoah National Park Museum Collection</i>)	31
Figure 3.15. Planning drawing, <i>SHE 2553 Piney River Developed Area, Part of the Master Plan</i> , Shenandoah National Park, February 6, 1962. (<i>National Park Service, Shenandoah National Park Museum Collection</i>)	31
Figure 3.16. Planning drawing, <i>SHE 3146C, Comfort Station and Utilities, Mathews Arm</i> , Shenandoah National Park, August 1965. (<i>National Park Service, Shenandoah National Park Maintenance Office Collection</i>)	32
Figure 3.17. (right) Planning drawing, <i>Trailer Layout, Piney River</i> , May 8, 1973. (<i>National Park Service, Shenandoah National Park Maintenance Office Collection</i>)	33
Figure 3.18. (below) Planning drawing, <i>134/41, 045, Mathews Arm Area</i> , Shenandoah National Park, Virginia, June 1975. (<i>National Park Service, Shenandoah National Park Museum Collection</i>).....	33
Figure 3.19. Technical Building, west façade, ca. 1995. (<i>Image courtesy of Steve Bair</i>)	34
Figure 3.20. Planning drawing, <i>134/60124, Utilities, Piney River</i> , Shenandoah National Park, Virginia, January 1989. (<i>National Park Service, Shenandoah National Park Maintenance Office Collection</i>)	35
Figure 3.21. <i>Underground Utilities</i> , Shenandoah National Park. (<i>National Park Service, Shenandoah National Park Maintenance Building Collection: July 1993</i>)	36
Figure 3.22. Plan drawing, <i>134/41106, Existing Floor Plan Technical Building Piney River- PR-0712</i> , Shenandoah National Park, August 1996. (<i>National Park Service, Shenandoah National Park Maintenance Office Collection</i>)	37
Figure 4.1. Crawlspace access door and pent roof, August 24, 2020. (<i>Image by author</i>).....	51

Figure 4.2. Crawlspace looking west, August 24, 2020. A: Center Row of pier logs. B: Replacement pier studs. C: North-south beam. D: Lap-spliced floor joists. E: Diagonal sub-floor. F: Original perimeter log pier. G: Vertical wood boards enclosing crawlspace. H: Wood bridging. <i>(Image by author)</i>	52
Figure 4.3. Crawl space, looking north at concrete block chimney and plumbing pipe, August 24, 2020. <i>(Image by Brinnen Carter)</i>	53
Figure 4.4. South elevation crawlspace wood covering, February 25, 2020. <i>(Image by author)</i>	53
Figure 4.5. West elevation shimmed rafter tails, August 25, 2020. <i>(Image by author)</i>	54
Figure 4.6. CCC Technical Building, southwest oblique, August 24, 2020. <i>(Image by author)</i>	54
Figure 4.7. Brick, stone veneered chimney; concrete block chimney; brick chimney, August 24, 2020. <i>(Images by author)</i>	55
Figure 4.8. Green, sheet, asphalt siding; black asphalt siding with wood battens; gray, sheet, asphalt siding, August 24, 2020. <i>(Image by author)</i>	55
Figure 4.9. Ell, west elevation, February 25, 2020. <i>(Image by author)</i>	56
Figure 4.10. D101.1 screen door, February 25, 2020. <i>(Image by author)</i>	57
Figure 4.11. W108.4, east elevation, February 25, 2020. <i>(Image by author)</i>	57
Figure 4.12. East elevation porch, February 25, 2020. <i>(Image by author)</i>	57
Figure 4.13. R101 looking north, February 25, 2020. <i>(Image by author)</i>	58
Figure 4.14. R101 looking south, February 25, 2020. <i>(Image by author)</i>	59
Figure 4.15. R101, west wall, February 25, 2020. <i>(Image by author)</i>	59
Figure 4.16. R101 looking south towards D101.1, February 25, 2020. <i>(Image by author)</i>	59
Figure 4.17. 1937 Box Lock <i>(The Yale and Towne Manufacturing Company, Yale Catalog No. 29) 1937.</i>	59
Figure 4.18. R101 looking south towards D101.1, February 25, 2020. <i>(Image by author)</i>	60
Figure 4.19. R102, looking southwest, February 25, 2020. <i>(Image by author)</i>	60
Figure 4.20. R102, northeast corner flooring, August 24, 2020. <i>(Image by author)</i>	60

Figure 4.21. R102, looking south, February 25, 2020. (<i>Image by author</i>).....	61
Figure 4.22. R102, Hardware on D102.1, February 25, 2020. (<i>Image by author</i>)61	
Figure 4.23. R102, looking east at W102.1, February 25, 2020. (<i>Image by author</i>).....	62
Figure 4.24. R103 looking west, February 25, 2020. (<i>Image by author</i>)	62
Figure 4.25. R103 looking north, February 25, 2020. (<i>Image by author</i>)	63
Figure 4.26. R103, looking south at D103.1, February 25, 2020. (<i>Image by author</i>).....	63
Figure 4.27. R103, looking north at D103.2, February 25, 2020. (<i>Image by author</i>).....	63
Figure 4.28. R104 looking north, February 25, 2020. (<i>Image by author</i>)	64
Figure 4.29. R104 vinyl flooring, February 25, 2020. (<i>Image by author</i>)	64
Figure 4.30. R104 looking east, February 25, 2020. (<i>Image by author</i>)	64
Figure 4.31. R104 looking north, February 25, 2020. (<i>Image by author</i>).....	65
Figure 4.32. R104 looking west at D104.3, February 25, 2020. (<i>Image by author</i>).....	65
Figure 4.33. R104 looking north towards W104.1, February 25, 2020. (<i>Image by author</i>).....	66
Figure 4.34. R105 looking west, February 25, 2020. (<i>Image by author</i>)	67
Figure 4.35. R105 looking west. Inset image: fuse box located in northeast corner, 2015. (<i>Images by Susan Hollister</i>).....	67
Figure 4.36. R105 looking west, February 25, 2020. (<i>Image by Eric Breitzkreutz</i>)..	68
Figure 4.37. R105 looking north at D105.1, February 25, 2020. (<i>Image by author</i>).....	68
Figure 4.38. R105 looking west at D105.2, February 25, 2020. (<i>Image by Eric Breitzkreutz</i>)	68
Figure 4.39. R105 looking northwest at W105.1 and W105.2, February 25, 2020. (<i>Image by author</i>).....	69
Figure 4.40. R106 ceiling (Image taken by the author) February 25, 2020. ...	70
Figure 4.41. R106 wall trim on the ceiling (Image taken by the author,	

February 25, 2020)	70
Figure 4.42. R106 flooring (Image taken by Susan Hollister) 2015.....	70
Figure 4.43. R106 looking towards north wall (Image taken by the author) February 25, 2020.	71
Figure 4.44. R106, looking east (Image taken by Susan Hollister) 2015.	71
Figure 4.45. R106 looking south (Image taken by the author) February 25, 2020.....	71
Figure 4.46. R106, looking west towards W106.1, February 25, 2020. (<i>Image by author</i>).....	72
Figure 4.47. R107 looking west, February 25, 2020. (<i>Image by author</i>)	72
Figure 4.48. R107 looking east, February 25, 2020. Note closed-up door opening below mesh screen on north wall. (<i>Image by author</i>)	72
Figure 4.49. R107, looking north, February 15, 2020. (<i>Image by author</i>)	73
Figure 4.50. R107, looking south, February 25, 2020. (<i>Image by author</i>)	73
Figure 4.51. R107, looking west, February 25, 2020. (<i>Image by author</i>)	73
Figure 4.52. R107 CL107 door. Inset A: Exterior hardware. Inset B: Interior hardware, February 25, 2020. (<i>Image by author</i>)	74
Figure 4.53. R108, looking west, February 25, 2020. (<i>Image by author</i>).....	75
Figure 4.54. R108, looking at northeast corner, February 25, 2020. (<i>Image by author</i>).....	75
Figure 4.55. R108, looking south, February 25, 2020. (<i>Image by author</i>).....	75
Figure 4.56. R108, looking west, February 25, 2020. (<i>Image by author</i>)	76
Figure 4.57. R108, looking north, February 25, 2020. (<i>Image by author</i>).....	76
Figure 4.58. R108, looking east towards W108.3, February 25, 2020. (<i>Image by author</i>).....	76
Figure 4.59. Attic over R102, looking northwest, 2015. (<i>Image by Eric Breitkreutz</i>)	77
Figure 4.60. Attic, looking north at the south face of brick chimney. Note: the stone veneer on its east face, and the painted reused bricks on its south face, August 24, 2020. (<i>Image by Brinnen Carter</i>).....	77

Figure 4.61. Attic, looking north to space over R104, 2015. (Image by Eric Breitzkreutz)	77
Figure 4.62. Attic, looking south. A: Plastic/Wire hose. B: Closed up attic hatch. C: Attic space above R107 and R108, 2015. (Image by Eric Breitzkreutz)	78
Figure 4.63. Attic, looking north. A: Framed-in attic hatch. B: Reused brick on central chimney south face. C: Attic hatch located in R102, 2015. (Image by Eric Breitzkreutz)	78
Figure 4.64. Attic, looking south, 2015. (Image by Eric Breitzkreutz)	78
Figure 4.65. Attic, looking southwest, 2015. (Image by Eric Breitzkreutz)	79
Figure 4.66. Attic, looking east, 2015. (Image by Eric Breitzkreutz)	79
Figure 4.67. Attic, looking south, 2015. (Image by Eric Breitzkreutz)	79
Figure 4.68. Attic, looking east, 2015. (Image by Eric Breitzkreutz)	79

I. INTRODUCTION

INTRODUCTION

EXECUTIVE SUMMARY

Purpose and Scope

This Historic Structure Report (HSR) focuses on the Civilian Conservation Corps (CCC) Technical Building located within the Skyline Drive Historic District in Shenandoah National Park. The goal of this project was to gain a broad understanding of the building and its history through physical and archival research/documentation, as well as to provide Shenandoah National Park with a framework for the long-term stewardship of the building.

This report is written in accordance with National Park Service (NPS) *Director's Order #28: Cultural Resource Management Guideline, Part 1 Developmental History*. The level of investigation for this report is “thorough”, as defined in NPS *Director's Order #28: Cultural Resource Management Guideline*. This report includes the following chapters: Historical Background and Context, Chronology of Development and Use, Current Physical Description, and Proposed Treatment and Character-Defining Features.

The purpose of this report is to achieve National Park Service-wide goals of providing baseline research and documentation for a nationally significant structure; to ensure the appropriate treatment is executed for upcoming preservation projects; and to enhance public awareness and understanding of a fundamental resource at Shenandoah National Park by making the HSR available to park staff, visitors, researchers, and educators.

Statement of Significance

The purpose of the statement of significance for a national park is to describe why a structure is important in a regional, National Park Service-wide, and global context. It is intrinsically linked with and supports the stated purpose and mission of the park, which reflects the scholarly facts and principles known both currently and at the time of establishment of the park.

As stated in the *Shenandoah National Park Foundation Document – Park Significance*, the park was established to:

“... preserve and protect nationally significant natural and cultural resources, scenic beauty, and congressionally designated wilderness within Virginia’s northern Blue Ridge Mountains...”¹

SKYLINE DRIVE

Skyline Drive is located within the Skyline Drive National Historic District at Shenandoah National Park and is listed as nationally significant under Criteria

1 “Foundation Document, Shenandoah National Park, Virginia”, (National Park Service, April 2015), 4. https://www.nps.gov/shen/getinvolved/upload/SHEN_FD_SP-Full-doc-final-508.pdf.

A due to its role in the history of the National Park system and park road design; federal advances in conservation and recreation; and the relief measures for the unemployed brought by the New Deal. It is also nationally significant under Criteria C for its “exemplary expression of the principles and practices of National Park Service road design, landscape naturalization, and rustic architectural design and as a showcase of the landscape conservation work of the Civilian Conservation Corps.”² The principles of naturalistic landscape design illustrated and promoted at Skyline Drive by the National Park Service were used in many state and national parks and parkways in the early 1900s.

CIVILIAN CONSERVATION CORPS (CCC) TECHNICAL BUILDING

The Technical Building was built in 1935 within one of the country’s earliest CCC camps (NP-12) and is one of only a few remaining CCC structures at Shenandoah National Park. It is located within the Skyline Drive National Historic District. Its unique construction identifies it as a high-status building among other CCC architecture. The architects and landscape architects that inhabited the building were part of the team responsible for the creation and implementation of the naturalistic landscape design used at Skyline Drive and Shenandoah National Park. In 1997, it was designated a contributing resource in the Skyline Drive Historic District boundary increase. It has also been determined to be individually eligible for listing on the National Register for Historic Places.³

The period of significance for Skyline Drive Historic District is 1931–1952.

Methodology and Research Conducted

Representatives of the Historic Architecture, Conservation, and Engineering Center (HACE) traveled to Shenandoah National Park (SHEN) on February 24, 2020. Architectural Conservator LeeAnne Brooks and William “Eric” Breitreutz, Chief of Historic Structures Research & Documentation Branch of Interior Region 1, began physical investigation of the structure. LeeAnne Brooks returned to the park on August 24, 2020, to complete the physical investigation of the structure and to conduct research at park archives.

ARCHITECTURAL INVESTIGATION

Onsite physical investigation techniques included documentation of building materials, photography, and physical examination of extant building fabric. Architectural documentation was recorded on custom-designed Piney River Technical Building PDF survey forms.

2 Lee Maddex et al., “069-0234 Skyline Drive Historic District,” (Virginia Department of Historic Resources: September 30, 1992), <https://www.dhr.virginia.gov/historic-registers/069-0234/>. Accessed January 30, 2020.

3 Carol Hooper, “Skyline Drive Historic District (Boundary Increase), National Register of Historic Places Nomination Form,” (Washington, D.C.: Robinson & Associates, Inc., September 19, 1997).

DOCUMENTARY RESEARCH

Cultural Resource Manager Anne Kain performed research at the National Archives and the University of Virginia over the course of several years. That information contributed to the research amassed for this report. On August 24 and 25, 2020, LeeAnne Brooks of the Historic Structures Research & Documentation Branch of Interior Region 1 arrived at Shenandoah National Park to complete the physical investigation of the CCC Technical Building. In addition, in-depth archival research of primary and secondary sources within the park archive and maintenance department was undertaken. Interviews of park personnel were conducted.

RESEARCH FINDINGS

Some of the more significant research findings included, but were not limited to, the following:

- The original owners of the Piney River site.
- The multiple uses and timeline of the building over the course of its existence.
- The status of the Technical Building among the other CCC buildings at Piney River.
- The context in which the Technical Building was constructed.
- The date at which the building was mothballed.

GENERAL RECOMMENDATIONS

The National Park Service is directed under Section 106 of the National Historic Preservation Act of 1966 to take into account the effects of their undertakings on historic properties and must “to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark.”⁴ With this in mind, the author has constructed the following overall long-term treatment recommendations, as well as future research recommendations:

- 1) All preservation work to be executed under The Secretary of the Interior’s Standards for Preservation, which is identified as:

“...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.”⁵

4 “Section 106 Consultation Involving National Historic Landmarks,” (Advisory Council on Historic Preservation, ND), <https://www.achp.gov/digital-library-section-106-landing/section-106-consultation-involving-national-historic-landmarks>.

5 Anne E. Grimmer and Kay D. Weeks, “The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings”, (Washington D.C.: United States Department of the Interior, National Park Service, 2017), 2.

2) The Secretary of the Interior further identifies Standards for Preservation as follows:

- A. 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.
- B. 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.
- C. 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.
- D. Changes to a property that have acquired historic significance, in their own right, will be retained and preserved.
- E. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- F. 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.
- G. 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.
- H. Archaeological resources will be protected and preserved in place.

3) Although research for this project was thorough, there is potential for future building research at the CCC Technical Building.

- A. A gap exists in the structure's chronological history. Very little information was found about building projects undertaken or planned between the 1943 renovation project and 1996. In addition, multiple elements within the building are generic types from an era spanning 60 years, from 1880 to 1950. It is highly recommended that paint analysis be conducted. Through the dating of generic elements, it may be possible to close the existing documentation gap.

ADMINISTRATIVE DATA

Location of Site

National Park:	Shenandoah National Park
Structure Name:	Civilian Conservation Corps (CCC) Technical Building
Other Names:	Technical Quarters and Office Building, Ranger Station and Quarters, Piney River Ranger Station, Maintenance Office, Residence, Residence 7-12, Ranger Residence, North Point Maintenance Headquarters, Office, North District Maintenance Office, North District Resource Management Office for Back Country Trails, Building 7-12, Technical Building.
Location:	Shenandoah National Park
County:	Rappahannock
State:	Virginia
Ownership:	Department of the Interior, National Park Service, Shenandoah National Park
GPS & UTM Location:	Latitude: 38.750747
	Longitude: -78.294291
	Zone 17.735260 E 4292380 N

Cultural Resource Information System (CRIS) Information

CRIS is a web-based inventory of all prehistoric and historic structures in the parks of the National Park System having historic, architectural, or engineering significance, in which the NPS has—or plans to acquire—any enforceable legal interest.

Preferred Structure Name:	Civilian Conservation Corp (CCC) Technical Building
Structure Number:	PR03
LCS Number:	081801
National Register Status:	Determined to be individually eligible, and as a contributing resource to Skyline Drive Historic District (NRIS: 1024-0018) by the Keeper of the National Register of Historic Places. September 19, 1997.
Virginia Historic Landmark:	Determined Eligible, Virginia Department of Historic Resources (SHPO) July 2, 1997.

II. HISTORICAL BACKGROUND AND CONTEXT

HISTORICAL BACKGROUND AND CONTEXT

INTRODUCTION

This section briefly describes the Civilian Conservation Corps (CCC) Technical Building's historical background. As with any architectural study, it is valuable to first understand the context in which the structure was created and used.

Human habitation in the Blue Ridge Mountains began as early as 8000 BCE (before common era), when Native Americans used the area for seasonal camps. Westward expansion into Shenandoah Valley and the Blue Ridge Mountains from the Tidewater area of Virginia began in the 1800s and continued well into the 1900s.¹ By 1900 there were nearly 6,000 people living in what is now Shenandoah National Park.²

Yellowstone National Park was created in 1872 as the first national park, and the creation of other western parks soon followed. But there were no national parks located east of the Mississippi until Acadia National Park was established in 1916.³ Consequently, a national park bill was floated in Congress to authorize a southeastern national park. Although the bill was not approved, many politicians and businessmen were alerted to the idea's untapped financial potential. Interest in the idea grew in Washington D.C., and after a yearlong lobbying campaign, Congress authorized Shenandoah National Park in 1926, contingent upon the Commonwealth of Virginia's ability to donate a minimum of 327,000 acres to what would become Shenandoah National Park.⁴

The government of Virginia began the long process of acquiring the needed land. In 1934 there were approximately 400 houses, with numerous outbuildings, scattered throughout the landscape.⁵ The Commonwealth negotiated and purchased property; property was donated; and for those who were unwilling to sell to the state, the Commonwealth seized their land using property condemnations. The amount of acreage required was reduced twice and in the end 166,000 acres were acquired. Many local people left to find work elsewhere, and by 1936 the population of the area was reduced to 2,250 people.⁶ Shenandoah National Park (SHEN) was created on December 26, 1935.⁷

In 1933, E.G. and J.F. Brumback sold the rocky 396-acre Piney River tract to Virginia for \$1,110. It contained a "small amount of level land" with "good soil

1 Jeffrey Killion, Nancy J. Brown, "Cultural Landscapes Inventory, Piney River" (1999, Revised 2006), 20.

2 Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997), 40.

3 Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 13.

4 Ibid., 15.

5 Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997), 40.

6 Ibid., 37.

7 Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 15.

but considerable brush.”⁸ Located somewhere on the tract was a wood-framed abandoned house that was considered to have no value.⁹

Work began on Skyline Drive in 1931 and was accomplished in three phases. The first phase of construction (Central District, from Thornton Gap to Swift Run Gap) was in progress when Franklin Delano Roosevelt was inaugurated on March 4, 1933. At the time of his inauguration there were 15 million unemployed workers in the United States. Less than a month later he signed into law the bill that created the Emergency Conservation Work (ECW) program, later known as the Civilian Conservation Corps (CCC).¹⁰ (Figure 2.1)



Figure 2.1. Civilian Conservation Corps logo. (Courtesy of Grand Canyon National Park)



Figure 2.2. Harry F. Byrd (Courtesy of Library of Virginia)

On April 25, 1933, the first CCC camps in the country were authorized to be built at Shenandoah National Park.¹¹ Created to provide training and work for unemployed young men in the country's national parks and forests, the CCC was instrumental in completing Skyline Drive and SHEN overlooks, culverts, tunnels, and infrastructure. The men working at SHEN were housed in camps built by the US Army and located near projects sites.¹² Initially, there were four camps, but that number grew to a total of ten CCC camps spread throughout the park.¹³

TECHNICAL QUARTERS AND OFFICE

1935-1942

On July 4, 1935, CCC Camp NP-9 was moved from Sperryville, Virginia, to Piney River. Its name was changed to NP-12, also known as Camp Red Bird, named for Virginia Governor and US Senator Harry F. Byrd Sr. (Figure 2.2) It was the last CCC camp built at SHEN.¹⁴ Although earlier camps were arranged

8 National Park Service, "Exploring Shenandoah National Park History." Accessed 8/27/2020, nps.maps.arcgis.com/apps/webappviewer/index.html?id=81acffc694a24f4692e704051526f61c

9 Ibid.

10 Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 66.

11 Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997), 51.

12 Ibid., 74.

13 Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 30.

14 Jeffrey Killion, Nancy J. Brown, "Cultural Landscapes Inventory, Piney River" (1999, Revised 2006), 20.



Figure 2.3. CCC Camp MP-3, Chancellorsville Battlefield. Example of more regimented CCC Camp Design. (Courtesy of *Mysteries and Conundrums*)

using a strict standardized plan centered around a company street, Camp Red Bird was built later and had a more organic development that followed the site's terrain.¹⁵ (Figure 2.3) Structure types ranged from wood-floored tents to prefabricated structures. Most of them were considered to be temporary structures made from modular wood sections bolted together. They could be constructed or dismantled quickly and easily and were shipped into the park on rail or trucks.¹⁶

At NP-12 there were more than 20 CCC structures primarily located to the south and west of the Technical Quarters and Office including barracks, mess hall, educational building, Naturalist's Office, and maintenance sheds.¹⁷ (Figure 2.4) Although many of these structures were similar in design to those in other camps, the Technical Quarters and Office, was one of only six structures in the park completely made of wood-framed construction.¹⁸ While its construction and decorative elements were unique, its design was less so. Its gable-roofed "T"-shaped plan, with open plan truss system, was commonly seen in CCC structures. As with many camp structures, the



Figure 2.4. Aerial view of NP-12, 1938 (Courtesy of *Shenandoah National Park Maintenance Archive*)

¹⁵ Ibid., 2.

¹⁶ Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 32.

¹⁷ Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997), 40.

¹⁸ Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 32.

Technical Quarters and Office Building was built upon a wood pier foundation and had walls clad in tar paper held with wood battens.¹⁹ Although it is known that the Technical Quarters and Office Building was built sometime in 1935, its exact build date is unknown. It can be assumed it was either built immediately before Camp NP-9 was moved to Piney River, or soon after.

The Technical Quarters and Office was built to house employees of the National Park Service's Branch of Plans and Design architects and landscape architects. From 1935 to the start of World War II the resident landscape architect was Harvey P. Benson, who worked at a regional office in Luray, Virginia. An assistant or junior landscape architect worked at the Technical Quarters and Office at Piney River, overseeing the landscape work in the north section of the park.²⁰ The planning accomplished at the Technical Quarters and Office Building and their end result were described as follows:

They endeavored to create roads that lay lightly on the land and flowed gently with the natural topography. By following the existing topography, they reduced the number and severity of road cuts and fills. When cutting or filling was necessary, techniques were used to reduce their visual impact.²¹

Skyline Drive was designed as a recreational park road that presented motorists with an unravelling panorama of the Blue Ridge Mountains, the Shenandoah Valley and the Piedmont Plateau. At numerous places along the drive, road widenings and parking overlooks were constructed to give the motorist an opportunity to stop, enjoy scenic vistas, and, in many cases, hike along the Appalachian Trail or follow spur trails to scenic features.²²

The sensitive road design was accompanied by a "landscape naturalization" program. A temporary nursery was built at Big Meadows that provided a holding area for plants displaced during construction. (Figure 2.5) It also allowed for the reintroduction of native trees and shrubs grown from seed back into the landscape.²³

By 1937 Shenandoah National Park and Skyline Drive were receiving more than one million visitors a year, but World War II brought gas rationing, and by 1942 visitation dropped 75 percent. The improving economy and the approach of war began to affect CCC enrollee numbers. Beginning in 1938, high desertion rates (up to 20 percent), decreased enrollment—and in extreme cases, strikes and riots—plagued the CCC for the remainder of its existence. Soon after the attack on Pearl Harbor in 1941, Congress cut funding for the CCC. By the middle of July 1942, all CCC camps at SHEN, including NP-12, were closed.²⁴

19 Jeffrey Killion, Nancy J. Brown, "Cultural Landscapes Inventory, Piney River" (1999, Revised 2006), 53.

20 Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997) 57.

21 Lee R. Maddex, et al. "National Register Nomination Form", (1992), 14.

22 Ibid., 108.

23 Carol Hooper, "National Register Nomination Form, Boundary Increase" (Washington D.C.: Robinson & Associates, 1997), 52.

24 Reed L. Engle. "Everything was Wonderful," (Luray, VA: Shenandoah National Park Association, 1999), 93.



Figure 2.5. (left) Shenandoah National Park, Nursery at Big Meadows. (Reed L. Engle, *Everything was Wonderful*)



Figure 2.6. (right) Civilian Public Service sign at Shenandoah National Park (Courtesy of *The Civilian Public Service Story*)

1942 - 2020

With projects still in progress and the loss of CCC workers, SHEN was in dire need of help. The war itself provided a solution. A new government organization called the Civilian Public Service (CPS) was created to give conscientious objectors a way to serve the country during wartime. (Figure 2.6) They served at SHEN from August 1942 dismantling the CCC camps and in 1943, completed a renovation of the Technical Quarters and Office building at Piney River.²⁵ The building was slated to become the North District ranger's station and quarters. It was also at this time that the surrounding Piney River site transitioned into a maintenance facility.²⁶

The use of the Technical Quarters and Office building as a ranger station was planned to be only a temporary arrangement. While the ranger station operations appear to have been relocated, the building continued to be used as an NPS residence well into the 1960s, with the surrounding site containing maintenance facilities. In 1970 the building was taken over by the North District Maintenance Office.²⁷ The maintenance office continued to reside in the building through the remainder of the 1970s and all of the 1980s, and was surrounded by trailers in use as offices and employee housing. During this time, the structure's ell was used for general storage and for fire cache and rescue storage. During the 1980s and 1990s the Federal Highway Administration resided within temporary mobile structures located on the site while working on Skyline Drive.²⁸ Permanent NPS structures were constructed at Piney River

²⁵ Ibid., 94.

²⁶ Jeffrey Killion, Nancy J. Brown, "Cultural Landscapes Inventory, Piney River" (1999, Revised 2006), 36.

²⁷ One source identifies the structure as the North Point Maintenance Headquarters.

²⁸ Lee R. Maddex, et al. "National Register Nomination Form, (1992), 41.



Figure 2.7. West elevation of Technical Building in early 1990s. *(Courtesy of Steve Bair)*

near the Technical Building in 1984 and 1987.²⁹ In 1992 the building began to be used by the North District Resource Management office for Back Country Trails and became known as the Technical Building 7-12.³⁰ (Figure 2.7) In 1997 the Piney River site, including the Technical Building, was added to the National Register's Skyline Drive Historic District.

The Olmstead Center for Landscape Preservation published a revised Cultural Landscape Inventory report in 2006. The report identified the building's use as a meeting space and for storage of NPS search and fire rescue trail gear, and for supplies belonging to the Potomac Appalachian Trail Club.

The building was cleaned out and mothballed in ca.2013. In 2014 and 2016, fundraising efforts to rehabilitate the Technical Building failed.

²⁹ Jeffrey Killion, Nancy J. Brown, "Cultural Landscapes Inventory, Piney River" (1999, Revised 2006), 22.

³⁰ Steve Bair (retired NPS employee and volunteer), in discussion with the author, August 24, 2020.

III. CHRONOLOGY OF DEVELOPMENT AND USE

CHRONOLOGY OF DEVELOPMENT AND USE

OVERVIEW

In many respects the chronological history of the CCC Technical Building is straightforward. It has had only one owner. Its use has changed only a few times. The integrity of the structure is mostly intact, with only a few known renovations taking place during its 85-year history. Its history spans four distinct eras. The first era covers the building from its construction in 1935, to 1942 when, due to World War II, the CCC was disbanded and the Piney River Camp was dismantled. The next period, 1942 to 1973, covers the time when the structure was renovated for use as a ranger station and residence. During the third era, 1970 to 2006, the structure was at the center of the North District Maintenance Office and NPS employee community housing. During the final and current era, 2006 to today, the building was vacated and mothballed.

The following section uses multiple source types to assist in understanding how the building has evolved throughout its history. Through the process of analyzing historic drawings, photographs; interviewing those that occupied the building during the 1980s and 1990s; and studying secondary sources, it is possible to not only track physical changes and use within the site and building envelope, but to occasionally tie those changes to events occurring specifically at the CCC Technical Building.

The architectural elements at the Technical Building have alpha-numerical labels to make their identification simpler. The labels have been added to an annotated floorplan located in Appendix A.

INTRODUCTION

In 1926 Congress authorized the creation of Shenandoah National Park (SHEN). After a ten-year project to amass the land needed to create the park, the Commonwealth of Virginia presented the land to the federal government. Soon after, on December 26, 1935, SHEN was officially created.¹

The US Army arrived in SHEN in 1933 to build Civilian Conservation Corps (CCC) camps meant to house workers needed to help construct Skyline Drive. Work on the Drive, accomplished through a collaboration of local resort owners, had been going on since 1931.² The Technical Building and Quarters (NP-12) was built in 1935. NP-12 was the last of the CCC camps built at SHEN.³

The CCC Technical Quarters and Office Building at Piney River was one of more than 20 buildings located at the camp until most of the camp structures were

1 Reed L. Engle, "Everything was Wonderful" (Luray, VA: Shenandoah National Park Association, 1999), 15.

2 Ibid., 14.

3 Ibid., 38.

disassembled or demolished in 1942.⁴ Civilian Public Service (CPS) workmen were assigned to demolish or relocate the CCC camp structures to military bases. The CCC Technical Quarters and Office Building was one of only a few structures left standing. The CPS were ordered to renovate the building in 1943 for temporary use as the North District Ranger Station and Quarters. Very few major alterations were made. An existing shower room located near to where the east porch now exists was removed and a new bathroom was constructed in its current location (R107). Multiple doors were changed to windows, while multiple windows were changed to doorways. A brick chimney was added to accommodate a gas water heater. A small, shed-roofed porch was added to the junction of the ell and the main structure north of the ell.⁵

Over the next 35 years, very little is known about alterations made to the structure. In 1960 the building was known as the Piney River Ranger Station and Piney River was known as the Sub-Maintenance Area. The Ranger Residence became a Maintenance Office in 1970. By 1975 the Piney River site was known as the North Point Maintenance Headquarters. It is at around this time that a small, roofed porch was added at the junction of the ell and gable building on the south side. Although it is known that the building was renovated in the early 1980s to house the NPS North District Maintenance Department, the exterior of the building appeared not to have been affected. In 1992 or 1993, the North District Resource Management Office for Back Country Trails and its 25 to 30 employees took over the structure.⁶ At about that time, a small stairway was added where the present door can be found on the southwest corner of the building. In 1993 the building was known as Building 7-12, and in 1996 it was known as the Technical Building 7-12.

The condition of the rear ell prompted an emergency stabilization project to support its roof and walls in November 2004.⁷ By 2006 the ell was mothballed, while the remainder of the building continued to be used as an office, meeting site, and storage building.

Although it is unknown exactly when the entire Technical Building was abandoned and mothballed, it was likely closed in August 2013. A “cleanup day” on July 25, 2013, was held in preparation for a visit by representatives of the Historic Preservation Training Center (HPTC) on August 14. Park records reveal that the building was “secured” and emptied at this time.⁸

For specific window and door hardware types see Appendix B.

4 Carol Hooper, “National Register Nomination Form, Boundary Increase” (Washington D.C.: Robinson & Associates, 1997), 40.

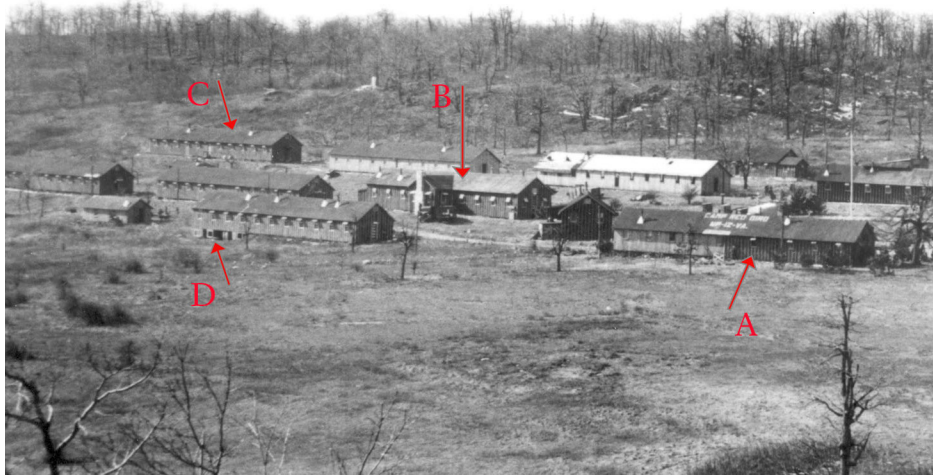
5 Shenandoah National Park, “SHE 2356, Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12)” (National Park Service: Shenandoah National Park Museum Collection: May 22, 1943), Accessed archive August 25, 2020.

6 Steve Bair (retired NPS employee and volunteer), in discussion with the author, August 24, 2020.

7 Jeffrey Killion, Nancy J. Brown, “Cultural Landscapes Inventory, Piney River” (1999, Revised 2006), 22.

8 Jennifer Flynn, email message to Steve Herzog, June 28, 2013.

Figure 3.1. Piney River CCC Camp NP-12, looking west, ca. 1935. A: Board-and-batten walls. B: T-shaped structure. C: Tar paper roof. D: Pier foundation. (Image courtesy of National Park Service, Shenandoah National Park Museum Collection)



1935–1942

1935

The Technical Quarters and Office was constructed in 1935. It is unknown who constructed the building. Although many of the CCC camp structures were built by the US Army, the Technical Quarters and Office Building and six other structures at SHEN were permanent wood-framed buildings which differentiated them from every other CCC structure. This difference suggests the possibility that the US Army may not have built them.

The design of the structure contained many elements found in other CCC buildings. Its T-shape plan and board-and-batten walls found both inside and outside of the building were common features of most CCC structures. (Figure 3.1) The Technical Quarters and Office is also missing elements commonly seen in CCC structures, such as gable-end door and window openings outlined with battens. (Figure 3.2) Additionally, its wood-framed construction differed from the wood, modular construction with tar paper roofs of most CCC structures



Figure 3.2. The Pinnacles CCC Structure, south elevation, Shenandoah National Park, February 26, 2020. (Image by author)



Figure 3.3. Big Meadows (NP-2), Shenandoah National Park. Barrack heated with wood stove. (Reed L. Engle, *Everything was Wonderful*)

which were meant to be assembled and disassembled quickly by unskilled labor.⁹ The substantial stone fireplace with live-edged wood mantel added an aesthetic as well as practical element to the building which was not found in nearly all of the CCC structures at SHEN. (Figure 3.3) The permanence of the structure, and the aesthetic elements, suggest the Technical Quarters and Office Building was a higher-status structure as compared to other temporary CCC Camp structures. Its use by NPS employees as an office and home, rather than by CCC employees as was the case with all other buildings at Piney River, set it apart as well. While the structure was built to be used during the construction of Skyline Drive, its wood-framed permanence and large stone fireplace clearly indicate that it was meant to be used by the NPS well beyond the construction of Skyline Drive.

EXTERIOR

The exterior of the building looked much as it does today. The pier foundation was made of large chestnut posts and the crawl space had “weather tight boarding along foundation.”¹⁰ The crawl space access door was sheltered by a pent roof.¹¹ Tar paper roofing covered the roof and was pierced by a large

⁹ Diane Shaw Wasch et al., “World War II and the U.S. Army, Mobilization Program: A History of 700 and 800 Series Cantonment Construction” (United States Department of the Interior, National Park Service, Cultural Resources: ND), 46.

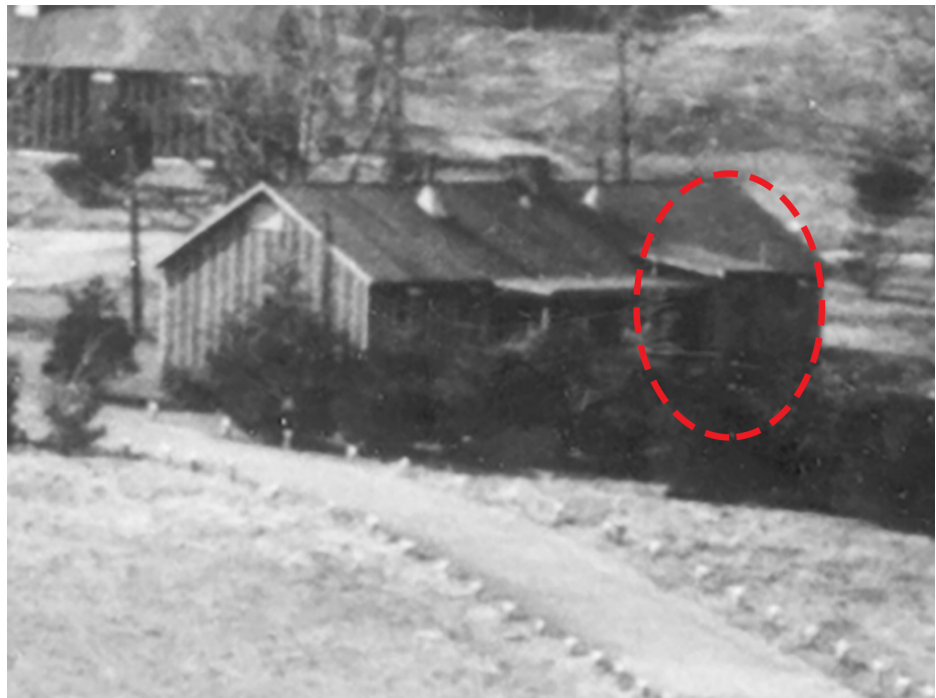
¹⁰ Shenandoah National Park, “SHE 2356, Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12)” (National Park Service: Shenandoah National Park Museum Collection: May 22, 1943), Accessed archive August 25, 2020.

¹¹ Shenandoah National Park, East Elevation Photograph, 1943 (National Park Service, Shenandoah National Park Museum Collection: 1943), Accessed August 25, 2020.



Figure 3.4. (above) Technical Quarters and Office Building, ca. 1935. (Image courtesy of National Park Service, Shenandoah National Park Museum Collection)

Figure 3.5. (right) Technical Quarters and Office Building – shower room, southeast oblique, ca. 1935. (Image courtesy of National Park Service, Shenandoah National Park Museum Collection)



stone chimney and four large roof jacks.¹² The exterior walls were uninsulated and clad in tarpaper with wood battens. (Figure 3.4) The gable ends contained louvered attic vents. A shed-roofed shower room was located on the east elevation, north of the east porch. (Figure 3.5) The east porch looked much as it does today except where it connected to the shower room on its north end. It is unknown what type of door filled D101.1. The window openings in the main section of the building contained six-over-six, double-hung, wood sashes. W103.1 was asymmetrically located on the east façade to allow room for the shower room. It is unknown what window sash type filled the ell window

¹² Unknown, "Aerial View of CCC Camp at Piney River" (National Park Service, Shenandoah National Park Museum Collection: 1938), Accessed August 24, 2020.



Figure 3.6. (above) Original vaulted ceiling in R102, now encapsulated in the attic, 2015. (Image by Eric Breitzkreutz)



Figure 3.7. (right) W102.1 window trim, February 25, 2020. (Image by author)

openings. D105.2 was filled with a vertical board-and-batten, wood door. The structure's doors and windows were framed by plain, wood, boards. D105.2 was considered the primary entrance.

INTERIOR

The floors throughout the building were covered in tongue-and-groove yellow pine floorboards. The building's walls were framed with 2-inch by 4-inch wood studs, and the attic was framed with 2-inch by 6-inch wood beams.¹³ R101 had a lean-to vaulted ceiling with floor to ceiling, chestnut, board-and-batten wall covering. R102 had an arched, vaulted ceiling with open, wood framing. The board-and-batten wall covering was applied to all surfaces including its arched ceiling. (Figure 3.6) The rest of the partition walls in the structure were framed to the roof and covered with drywall and wood battens. Currently, ceiling joists and attic drywall are not painted or stained, and the vertical attic support beams are unfinished, which calls into question whether the ceilings were ever vaulted over the remaining rooms.

The door and window openings were, and continue to be, framed with plain, wood boards. (Figure 3.7) Plain wood battens form baseboards and appear to be original. Heating was provided by the central fireplace and stoves. Water was gravity fed into the building and sewage drained into a cesspool located east of the building.¹⁴ The opening at D101.1 originally contained a double-hung window. The shower room, located on the east elevation, was accessed through a doorway located at what is now W102.2.¹⁵ The east entrance to the building

13 Shenandoah National Park, "134/41106, Prop. Bldg. Section, Technical Building Piney River – PR0712" (National Park Service, Shenandoah National Park Museum Collection: 1996), Accessed Maintenance Files August 24, 2020.

14 United States Department of the Interior, National Park Service, Denver Service Center, "Underground Utilities" (National Park Service: July 1993), Accessed Maintenance Files August 24, 2020.

15 Shenandoah National Park, "SHE 2356, Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12)" (National Park Service, Shenandoah National Park Museum Collection: May 22, 1943), Accessed archive August 25, 2020.

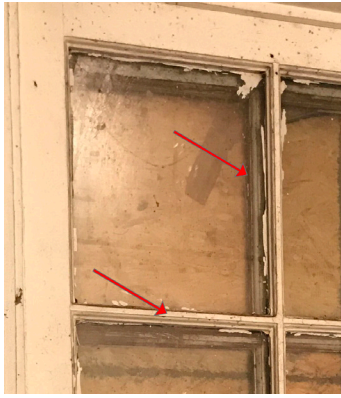


Figure 3.8. (above) W104.1, February 25, 2020. (Image by author)



Figure 3.9. (right) Ranger Office and Quarters, northeast oblique, 1943. (Image courtesy of National Park Service, Shenandoah National Park Museum Collection)

was through a door opening at where W102.1 is currently located.

It is difficult to know if the window sashes and doors are original to the building. The six-over-six, wood, double-hung sash style is commonly found in structures from this time period and there is no record of any sashes being removed or replaced.¹⁶ A window was located at where D104.3 now exists.¹⁷ W104.1 is different than all the other window openings in the building as it has three sashes. The upper and lower sash muntins are newer than all of the other muntins in the building. A third sash is located in front of the upper sash and has muntins that match those found elsewhere in the building. (Figure 3.8)

There were five original window openings in the ell, two window openings on the north wall (one of which was located where D105.2 is now located) and three on the south wall. Partition walls enclosed a small room within R105. Its original use is unknown. R106 had a doorway centrally located on the east wall and a closet in the northeast corner of the room. R107 had a doorway located on the east wall and a closet in the northwest corner of the room. W108.3 did not exist, and the opening where D108.2 is was filled with a window.

1942–1973

1943

The CCC was dissolved in 1942, and in its place, the Civilian Public Service was sent to SHEN to dismantle the camps and renovate the Technical Quarters and Office for use as a Ranger Station and Quarters. The role of Piney River as a maintenance facility likely developed at this time. In 1943, a rehabilitation project was undertaken that did little to change the footprint of the building, but numerous detailed changes were made within the building during the project.

¹⁶ D101.1 and D105.1 are located at the site of original window openings.

¹⁷ Ibid.

Figure 3.10. Attic above R108, 1935 roof jack framing, 2015. (Image taken by Eric Breitzkreutz)



EXTERIOR

The tar paper roof was covered with a standing-seam metal roof sometime between 1935 and 1943. In a 1943 photograph metal patches can be seen where old roof jacks were originally located. (Figure 3.9) One roof jack's roof framing was left in place when it was closed and can be seen in the attic on the east slope of the roof near to the south wall. (Figure 3.10) The 1943 photo also shows the north gable wall covered in wood board-and-battens while the east façade is covered with shingle asphalt sheeting. A brick chimney was situated on the

east slope. At least one stove pipe remained in the roof and was located on the west slope over the location of R108. The east facade shower room was removed, and its entry door was converted to W102.2. The structure's original east entry doorway was converted to W102.1. It is likely that the single square post on the east porch was a replacement installed when the shower room was detached from the porch and removed from the building. The east porch railing contained square wood balusters. A new shed-roofed porch was added to where the ell and main section meet north of the ell.¹⁸ (Figure 3.11)

Figure 3.11. CCC Technical Building, looking east, ca. 1995. (Image courtesy of Steve Bair)



¹⁸ Shenandoah National Park, "SHE 2356, Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12)" (National Park Service, Shenandoah National Park Museum Collection: May 22, 1943), Accessed archive August 25, 2020.

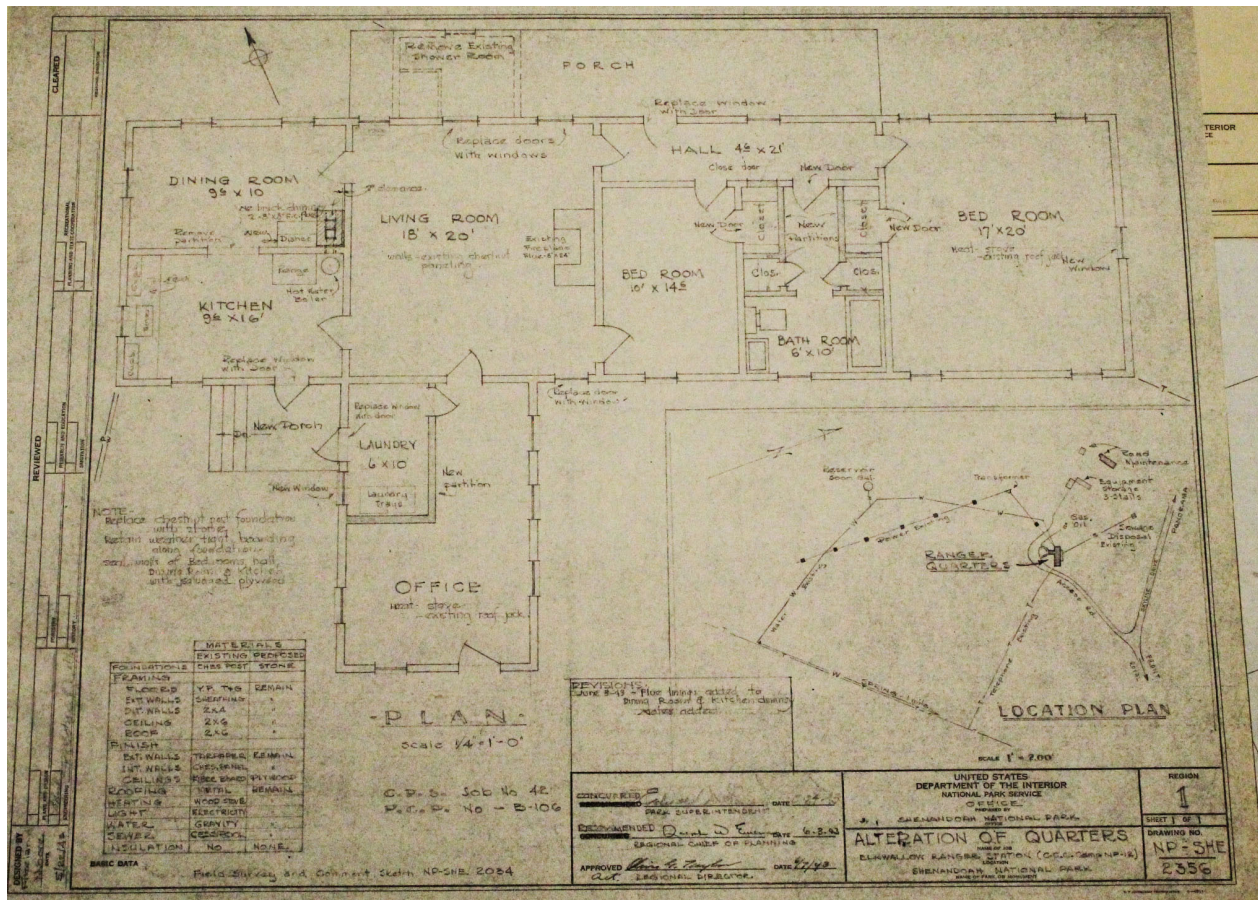


Figure 3.12. Planning drawing, SHE 2356 *Alteration of Quarters, Elk Wallow Ranger Station (CCC Camp 12), Shenandoah National Park, May 22, 1943.* (*National Park Service, Shenandoah National Park Museum Collection*)

INTERIOR

A doorway was added to the west wall in R103. A new brick chimney meant for a hot water heater located in R104 was added to the southwest corner of R103. A planning drawing from 1943 notes that a dish cabinet was to be installed next to the new chimney on the west wall of the room, but was not built until later as a stove pipe opens to the room's south wall (now within CL103). It is unknown when the existing corner hutch with double glass-paned doors or CL103 were installed.¹⁹ (Figure 3.12)

D104.3 was installed at its current site where a window opening had been. It opened off onto a new shed-roofed porch located at the joint between the ell and the main portion of the structure. R105, including partition walls in the northeast corner, were planned to be removed. Instead, R105 was retained and the small room located within R105, known as a "Laundry Room," was enlarged to 6 feet by 10 feet.²⁰ D105.2 was installed in an existing window opening, and a new window was installed on the same wall a few feet away from the door (W105.1). Both openings were located within the small laundry room. The room was heated by a stove piped to an existing roof jack.²¹

The east wall entrance door in R106 was closed up, and a new door opening was cut into R106's south wall. An existing closet located in the northeast

19 Ibid.

20 Ibid.

21 Ibid.



Figure 3.13. R107 sink, February 25, 2020. (Image by author)

corner of the room was removed. The floor was covered with square, asphalt tile that matches the tile in R107. R107 was converted into a full bathroom, and with the use of multiple partition walls, a closet was created and opened into R106's south wall, and another created on R107's north wall. An additional closet was also built on R107's south wall (CL107). The plan drawing shows a plumbing fixture configuration of a tub located on the south wall with a sink and toilet located on the north wall which is opposite of what exists today.²² As there is no new documentation of plumbing fixture arrangement, it is likely the plan was changed that reflect today's configuration. The date of "12-15-38" stamped on the existing American Standard sink indicates it was a used fixture when it was installed in 1943 or later. (Figure 3.13) R107's entry door was moved further south of its original opening (D107.1) to accommodate the new closets in R106 and R107. Although there were plans to remove R108, it remained, and very little changes were made to the room. A new closet and door (CL108) were installed on the north wall; and a new window was centrally placed on the south wall (W108.2). The room was heated by a stove piped to an existing roof jack.²³

1950s

There is very little documentation available about the CCC Technical Building during the 1950s. Wall and ceiling insulation was added in 1953 and 1954. Later drawings indicate that it probably continued to be used as a residence. Later documentation shows that very few renovations took place during that time.

1953

The ceilings were insulated in October 1953 by Insulating Company of Virginia.²⁴

1954

The walls were insulated in July 1954 by C & E Company.²⁵

1960

A 1960 site drawing labels the Technical Building as the Piney River Ranger Station at the Sub-Maintenance Area. In both documents the site appears to have continued as a multi-purpose at this time.²⁶ (Figure 3.14)

²² Ibid.

²³ Ibid.

²⁴ National Park Service, "Building Number 7-1, Piney River Ranger Station," (National Park Service, Shenandoah National Park Maintenance Building Collection: ND).

²⁵ Ibid.

²⁶ Shenandoah National Park, "SHE 3039 Mathews Arm Developed Area, Part of the Master Plan" (National Park Service, Shenandoah National Park Museum Collection: March 9, 1960), Accessed archive August 25, 2020.

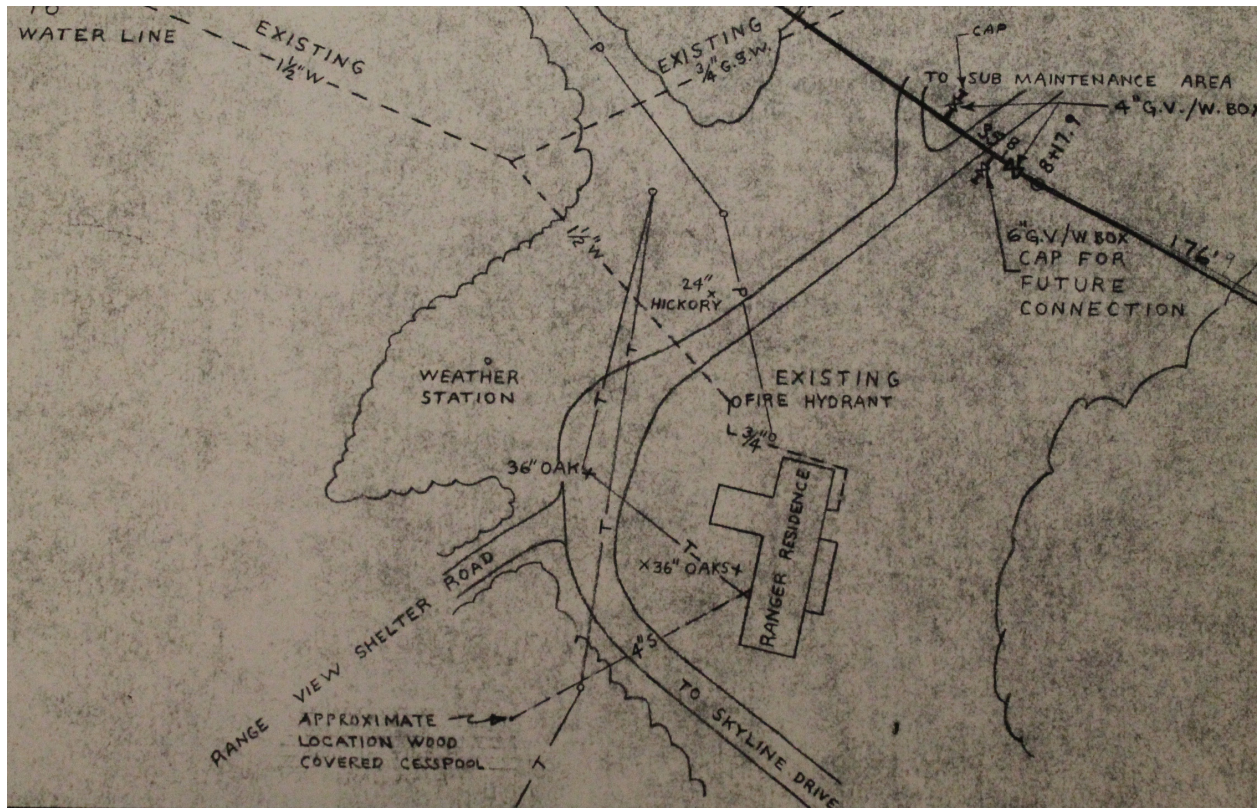


Figure 3.16. Planning drawing, SHE 3146C, *Comfort Station and Utilities, Mathews Arm, Shenandoah National Park*, August 1965. (National Park Service, Shenandoah National Park Maintenance Office Collection)

1965

The structure once again was labeled “Ranger Residence” on a planning document.²⁹ (Figure 3.16)

ca. 1970

The use of the building changed to a Maintenance Office.³⁰

1973–2006

1973

The CCC Technical Building was labeled “Maintenance Office” on a planning document. The percentage of shared space between the Maintenance Office and maintenance area appears to have increased in the maintenance facility’s favor with the addition of office trailers located southeast of the building.³¹ (Figure 3.17)

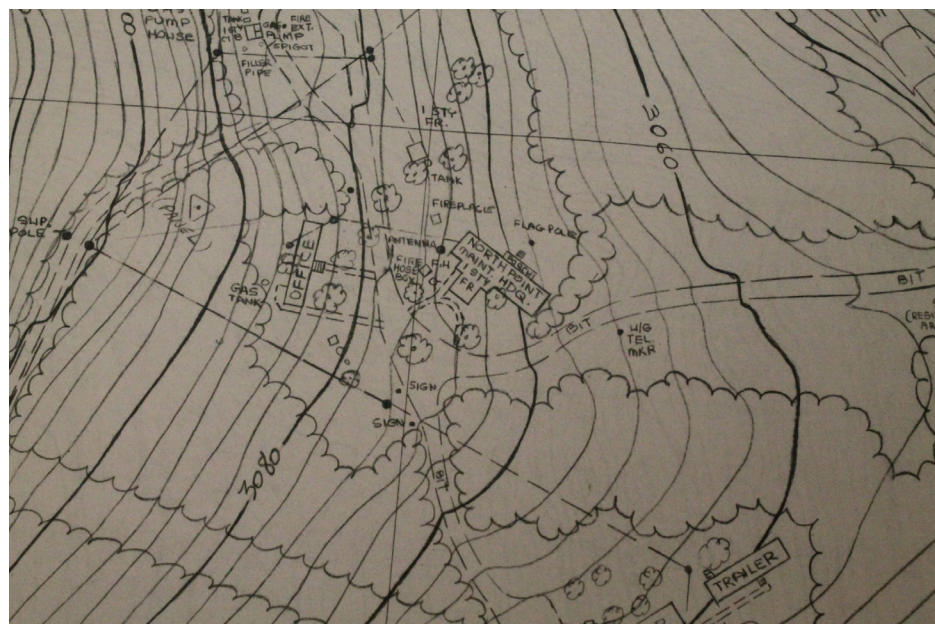
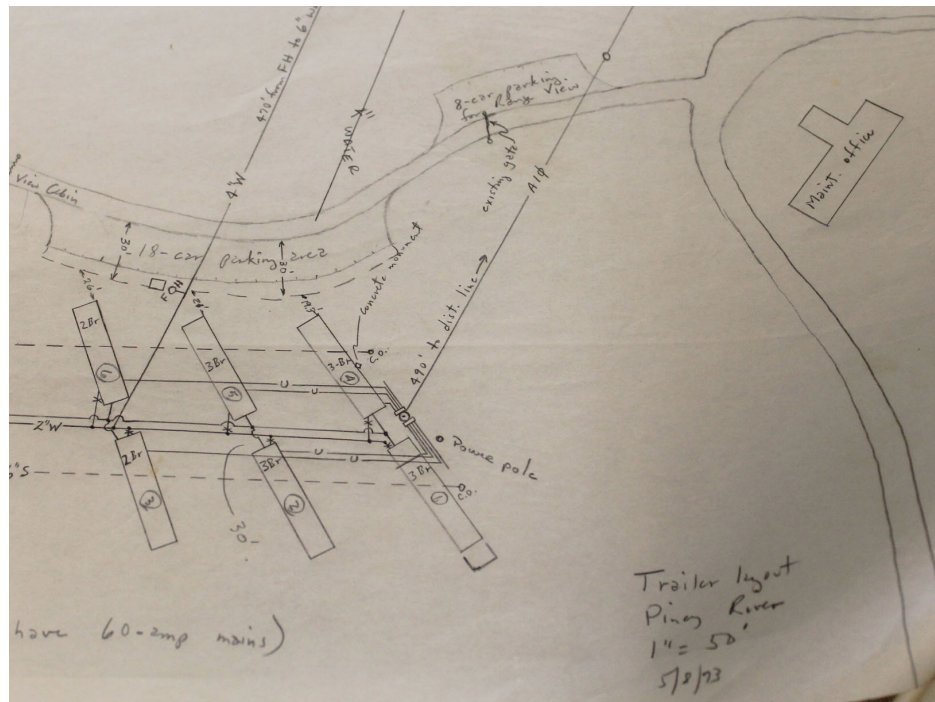
29 Shenandoah National Park, “SHE 3146C, Comfort Station and Utilities, Mathews Arm” (National Park Service, Shenandoah National Park Maintenance Building Collection: August 1965), Accessed at Maintenance Office August 24, 2020.

30 National Park Service, Maintenance Department, “Individual Building Data,” (National Park Service, Shenandoah National Park Maintenance Building Collection: May 1, 1970).

31 Shenandoah National Park, “Trailer Layout, Piney River” (National Park Service, Shenandoah National Park Maintenance Office Collection: May 8, 1973), Accessed Maintenance Office August 24, 2020

Figure 3.17. (right) Planning drawing, *Trailer Layout, Piney River, May 8, 1973.* (National Park Service, Shenandoah National Park Maintenance Office Collection)

Figure 3.18. (b e l o w)
Planning drawing, 134/41,
045, Matthews Arm Area,
Shenandoah National
Park, Virginia, June 1975.
(National Park Service,
Shenandoah National Park
Museum Collection)



1975

In 1975 the structure was known as the “North Point Maintenance Headquarters”, and the site contained trailers on the west and southeast side of the building.³² (Figure 3.18)

32 Shenandoah National Park, "134/41, 045, Matthews Arm Area, Shenandoah National Park, Virginia" (National Park Service, Shenandoah National Park Museum Collection: June 1975), Accessed archive August 25, 2020.



Figure 3.19. Technical Building, west façade, ca. 1995. *(Image courtesy of Steve Bair)*

ca. 1976

Sometime around 1976 the current sewer disposal system was installed.³³

1979

The existing electric wall heater located on R107's west wall was installed in June 1979.³⁴ A 10-gallon water heater was installed,³⁵ as well as additional roof, floor, and wall insulation.³⁶ 168 linear feet of caulking and weather stripping were applied to the windows.³⁷

ca. 1980

The early 1980s begins a 20-year period where the ell was used as storage for search and fire rescue trail gear. Although it is known that the building was renovated in the early 1980s to house the NPS North District Maintenance Department, there is no documentary evidence to show what work was completed.³⁸ Photos from that time show that the exterior of the building was not affected. (Figure 3.19)

33 United States Department of the Interior, National Park Service, Denver Service Center, "Existing Facilities and Topo for JCC Camp 335-Piney River" (July 1993), 15.

34 National Park Service, "Piney River Maintenance Office, Bldg No 7-12," (National Park Service, Shenandoah National Park Maintenance Building Collection: June 11, 1979).

35 National Park Service, "Table 6, Calculations Worksheet," National Park Service, Shenandoah National Park Maintenance Building Collection: August 1, 1979).

36 National Park Service, "Table 6, Calculations Worksheet," National Park Service, Shenandoah National Park Maintenance Building Collection: June 11, 1979). National Park Service, "Table 6, Calculations Worksheet," National Park Service, Shenandoah National Park Maintenance Building Collection: August 6, 1979).

37 National Park Service, "Table 6, Calculations Worksheet," National Park Service, Shenandoah National Park Maintenance Building Collection: July 17, 1979).

38 Steve Bair (retired NPS employee and Park volunteer), in discussion with the author, August 24, 2020.

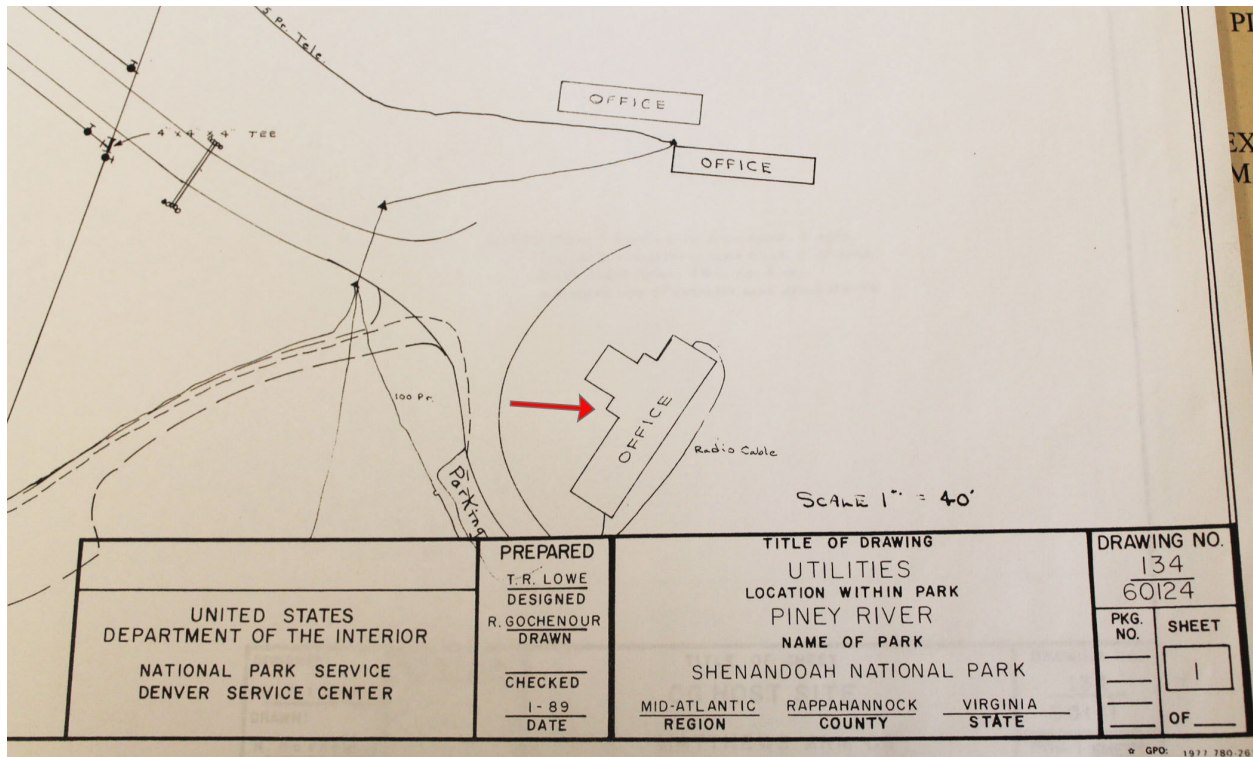


Figure 3.20. Planning drawing, 134/60124, Utilities, Piney River, Shenandoah National Park, Virginia, January 1989. (National Park Service, Shenandoah National Park Maintenance Office Collection)

1982–1987

The door opening on R104's east wall contained French doors which were removed when the wall was closed at an unknown date.³⁹ Work at the Piney River site continued with the construction of the nearby Maintenance Building (1984) and Ranger Station (1987).⁴⁰

1989

The Technical Building was labeled “Office” in a park site plan. It also shows a small, roofed porch located at the south joint between the ell and the gable structure.⁴¹ (Figure 3.20) The gravel path on the west side of the building was paved causing water to run off the paving down to the west elevation of the ell and the gable structure. Over time, this caused severe water damage to the building foundation at these locations.⁴² The parking lot located south of the structure can be seen for the first time on the 1993 site plan.

1992

The North District Resource Management Office for Back Country Trails and its 25 to 30 employees took over the building from the North District Maintenance Office.⁴³

³⁹ Ibid.

⁴⁰ Jeffrey Killion, Nancy J. Brown, “Cultural Landscapes Inventory, Piney River” (National Park Service: 1999, Revised 2006), 22.

⁴¹ Shenandoah National Park, “Utilities, Location within Park, Piney River” (National Park Service, Maintenance Office Collection: January 1989), Accessed maintenance files August 24, 2020.

⁴² Steve Bair (retired NPS employee and Park volunteer), in discussion with the author, August 24, 2020.

⁴³ Ibid.

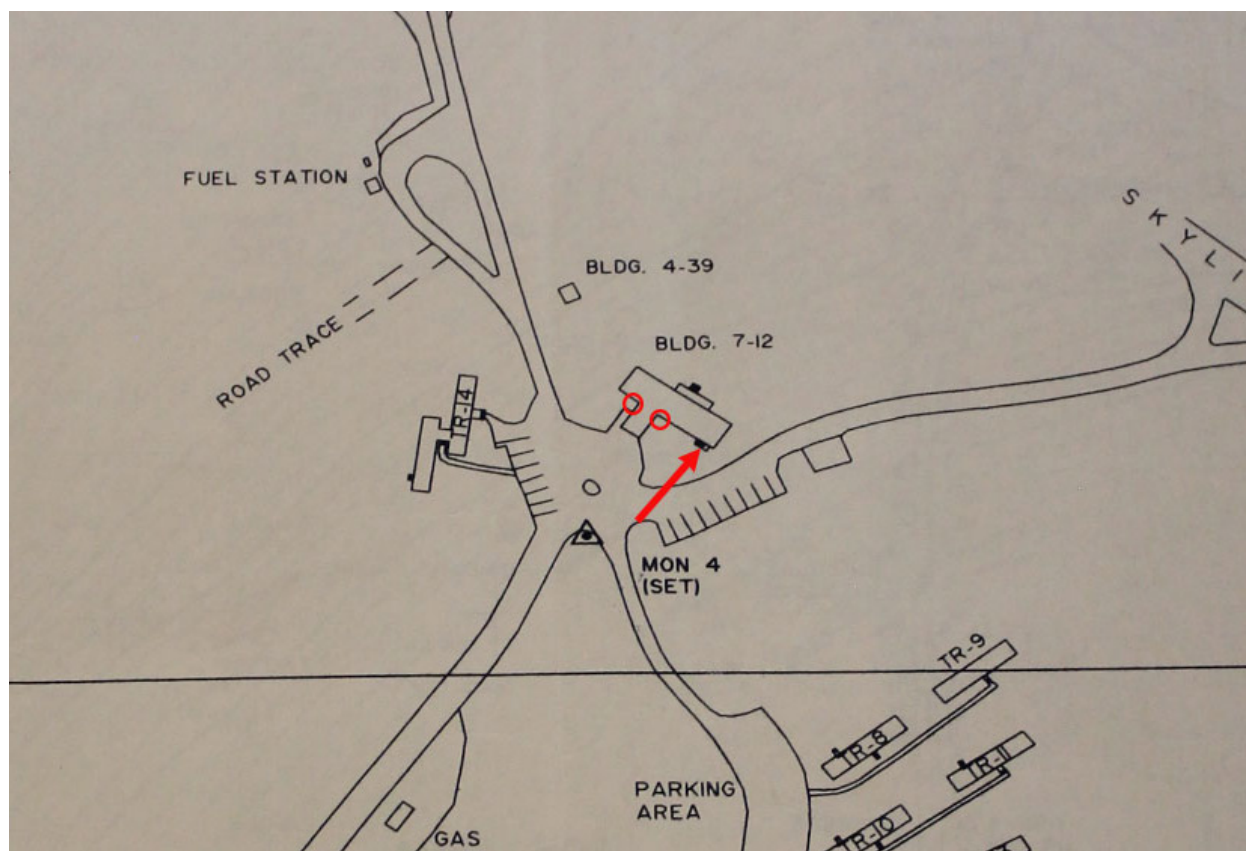


Figure 3.21. *Underground Utilities, Shenandoah National Park. (National Park Service, Shenandoah National Park Maintenance Building Collection: July 1993)*

1993

In 1993 the building was known as Building 7-12. D108.3, and exterior steps leading to it, were installed on the southwest corner of the building at around this time. The small porch located at the south ell joint is no longer visible on site plan drawings.⁴⁴ (Figure 3.21) According to an eyewitness, the ceiling in R108 as vaulted at this time.⁴⁵

Skyline Drive Historic District was nominated to the National Register of Historic Places.

1996

In 1996 the structure was known by its current name, the Technical Building. Plans were made for renovation and expansion of the building that were never implemented. A full structural description of the building was done at this time, which disclosed that asbestos containing materials are located within the building, as well as lead paint on all painted surfaces. The building was heated with a single stove; and the main roof was covered in standing seam metal.⁴⁶ The small, partitioned room in R105 was still in place and was labeled as a “Dry Valve Room.”

44 Shenandoah National Park, “Utilities, Location within Park, Piney River,” (National Park Service, Maintenance Office Collection: January 1993). Accessed maintenance files August 24, 2020.

45 Steve Bair (retired NPS employee and Park volunteer), in discussion with the author, August 24, 2020.

46 United States Department of the Interior - Denver Service Center, “Design Analysis for Piney River District CCC Buildings and Expansions to Existing Maintenance Building, Phase I” (August 1996), 4.

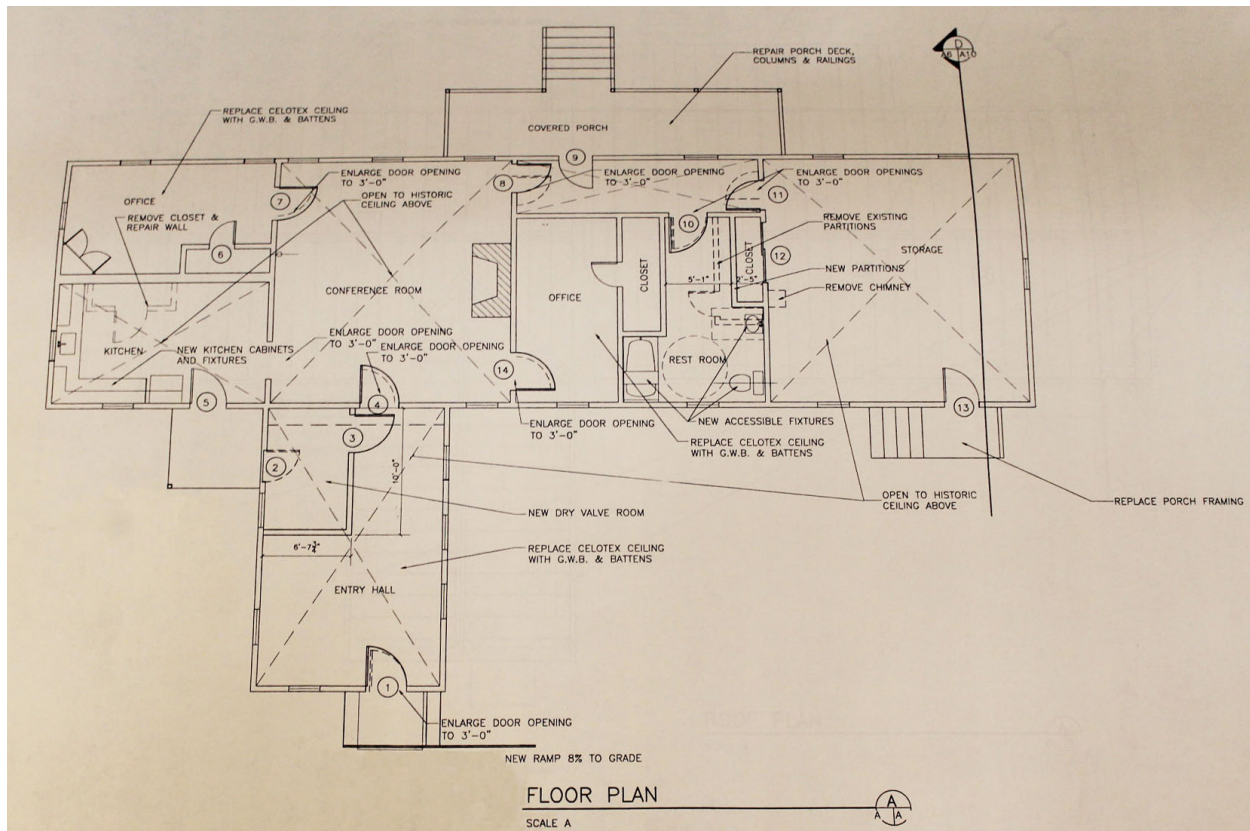


Figure 3.22. Plan drawing, 134/41106, *Existing Floor Plan Technical Building Piney River- PR-0712*, Shenandoah National Park, August 1996. (National Park Service, Shenandoah National Park Maintenance Office Collection)

Existing condition plan drawings provide a view of the building in 1996. For the first time since 1943 we are able to visualize what the interior of the structure looked like. The following is a list of the few items that were different in 1996 from what was present in the structure in 1943.⁴⁷ (Figure 3.22)

- R102 – Labeled “Conference Room.”
- R103 – Labeled “Office.” CL103 exists by 1996.
- R104 – Although it is unknown when CL104 was added, it is present on the 1996 drawing. The porch located outside D104.3 is also present.
- R105 – The 1943 added Laundry Room has been removed. Dry Valve Room metal roof flue still in place.
- R106 – Labeled “Office.” The closet that was added in 1943 is still present along the south wall but is larger, as it now includes the space once used by the north closet in R107.
- R107 – The tub, toilet, and sink are in their current locations.
- R108 – Labeled “Storage.” The concrete block chimney is present.
- Roof – The drawing contains two metal flues on the west slope of the gable structure. One of the metal flues is no longer located on west slope of the main gable structure.

⁴⁷ Shenandoah National Park, “134/41106, Existing Floor Plan Technical Building Piney River-PR-0712” (National Park Service, Shenandoah National Park Maintenance Office Collection: August 1996), Accessed Maintenance Files August 24, 2020.

1997

The CCC Technical Building and Piney River site were included in the updated National Register Nomination as a contributing resource to the Skyline Drive Historic District.

ca. 2002

Sometime between April 2002 and 2006, the porch at D104.2 was removed.⁴⁸

2004

Years of water runoff from the parking lot on the west side of the structure resulted in extreme water damage to the ell foundation and the northwest corner of the gable structure. Emergency stabilization was completed in November 2004 to support the walls and roof of the ell. The ell was closed and mothballed until further rehabilitation could be done.⁴⁹

2006

A Cultural Resource Inventory was written in 2006. At this time, the Technical Building was used as a meeting space, storage of NPS search and fire rescue trail gear, and for supplies belonging to the Potomac Appalachian Trail Club. When comparing photos taken at this time with photos taken in 2005, it is apparent that a new unknown type of roofing material was applied to the roof between 2005 and 2006.⁵⁰

2006–2020

2013

A “cleanup day” on July 25, 2013, was held in preparation for a visit by representatives of the Historic Preservation Training Center (HPTC) on August 14. Although the exact date is unknown when the entire Technical Building was mothballed, it was likely closed in August 2013. Park records reveal that the building was “secured” and emptied at this time, and an electrical meter was removed.⁵¹

2015

Susan Hollister and Eric Breitzkreutz from Region 1, Historic Structure Research and Documentation branch of the Historic Architecture Conservation and Engineering Center visited the Technical Building to gather information for a Character Defining Feature Report on the building. At that time R108 had a standard height ceiling. It is unknown when the vaulted ceiling was dropped.

48 National Park Service, “Maintenance Data Sheet,” (National Park Service, Maintenance Office Collection: April 22, 2002). Accessed maintenance files August 24, 2020.

49 Jeffrey Killion, Nancy J. Brown, “Cultural Landscapes Inventory, Piney River” (1999, Revised 2006), 22.

50 Ibid.

51 Jennifer Flynn, email message to Steve Herzog, June 28, 2013.

2016

Two rehabilitation projects were planned by the National Park Foundation in 2014 and 2016 but they did not take place.⁵² SHEN also had plans to fund interior and exterior exhibits and install a vault toilet on site in 2016, but that project also did not take place.⁵³

2020

The CCC Technical Building is currently empty and mothballed. Supplies belonging to the Potomac Appalachian Trail Club are stored in containers located on the east porch and in front of the crawlspace access door.

⁵² Susan Newton, National Park Foundation, Letter to Superintendent Jim Northrup. December 12, 2014

⁵³ Jennifer Flynn, email message to Mark DeSantis, May 6, 2016.

CHRONOLOGY TABLE

Location and Use	Element	Date
Exterior:		
Foundation	Log piers	1935 with many replacements made over time.
	Lap-spliced joists	Unknown.
	Cast Iron plumbing pipes	1943 or later.
	Diagonal sub-flooring	1935
	Vertical nailer boards	Unknown.
	Vertical board (enclosing the crawlspace) and tar paper covering	Unknown.
	Rolled asphalt siding	Unknown.
	Tar paper covering	Unknown.
Walls	Wood-framing	1935
	Rolled asphalt siding	Unknown.
	Black asphalt siding and wood battens	Unknown
	Tar paper and wood battens	Although the style of siding is original to the building, the actual date for the existing materials is unknown.
	Window and door wood trim	Unknown.
	Crawlspace door opening and pent roof	1935
	Louvered attic vents	1935
	Stabilization beams at the ell	2004
	Shed roof over D105.2	1935
	The use of D105.2 as primary entrance	1935-2004
	Shed-roofed porch at R104 west wall	1943-ca.2002
	Aluminum gutters	Unknown.
	Electrical supply receptor (located at north attic vent)	ca.1935
	Water spigot (located on east wall)	Unknown.
	East porch framing	ca.1935
	East porch shed roof	1935
	East porch turned posts	1935
	East porch square post	1943
	East porch light fixture	ca.1943
	Two-panel screen door	ca.1943

Location and Use	Element	Date
Roof	Wood barge boards	Unknown
	Tar paper roofing	Although the style of roof covering is original to the building, the actual date for the existing materials is unknown.
	Concrete block chimney	1943
	Brick chimney	1943
	Brick, stone veneered chimney	1935
Interior:		
Room 101	Chestnut board and batten wall covering	1935
1935–present – Hall	Plywood board and batten wall covering (infill)	1943
	Ceiling drywall and wood battens	Unknown.
	Wood flooring (east-west direction)	1935
	D101.1, door, trim, and hardware	Unknown
	D101.1 screen door	1943
	D101.2, D101.3 trim	ca.1945
	D101.2, D101.3 door	Door style indicates 1900-1950. ¹
	D101.2, D101.3 hardware	ca.1935 ²
	Bare bulb light fixture	Unknown, mid-1900s.
Room 102	Chestnut board and batten wall covering	1935
1935–1943 – Unknown 1943–1972 – Living Room	Door and window trim ³	ca.1945
1972–2013 – Conference Room	D102.1	Door style indicate 1900-1950. ⁴
	D102.1 hardware	ca.1935 ⁵
	D102.1 trim	ca.1945

1 Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>

Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

2 The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

3 Exception: W102.1, W102.2, W102.4

4 Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>

Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

5 The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

Location and Use	Element	Date
	W102.3 and hardware	ca.1945
	W102.1, W102.2, W102.4 sash, hardware, and trim	1943
	Celotex and batten ceiling	Unknown. Although it is unknown when the current ceiling material was installed, it is possible the ceiling was changed from vaulted to dropped in ca.1943
	Wood flooring (east-west direction)	1935
	Horizontal wood floor in northeast corner	Unknown. Changes in the battens located on the walls above this element indicate this may have been the location for a built-in corner shelf or cabinet.
	Stone veneered brick fireplace with live-edge wood mantle	1935
	Stove pipe opening for oil heater	1943
	NPS "Office" sign over D106.1	Unknown.
	Fluorescent light fixtures	ca.1980
Room 103	Board and batten wall and ceiling covering	Unknown.
1935–1943 – Unknown	Plywood infill on west wall	ca.1985 ⁶
1943–1972 – Dining Room	Carpet	Unknown. Flooring underneath was inaccessible for inspection.
1972–2013 – Office	Corner cabinet	Unknown
2013–present – Vacant	CL103	Sometime after 1943
	Door and window trim	ca.1945
	D103.1	Door style indicates 1900-1950. ⁷
	D103.1 Doorknob	ca. 1980
	D103.1 box lock	ca.1935 ⁸
	D103.2, doorknob and lock	Unknown.
	D103.2 padlock hasp	ca.1980
	W103.1, W103.2, W103.3	ca.1945
	W103.2, W103.3 hardware	ca.1945

6 Steve Bair (retired NPS employee and volunteer), in discussion with the author, August 24, 2020.

7 Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>.
Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

8 The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

Location and Use	Element	Date
	W103.1 hardware	ca.1950
	Asphalt tile flooring in CL103	c.1950
	Florescent ceiling light fixture	c.1980
	Wall heater and thermostat	Unknown.
	Brick chimney and opening	1943
Room 104	Board and batten wall and ceiling covering	Unknown.
1935–1943 – Unknown	CL104	ca.1980
1943–2013 – Kitchen	Exterior trim on CL104	ca.1980
2013–present – Vacant	D104.1 trim, and door hardware	1935
	D104.2 door hardware	Reused door (in c.1980) dating from 1900-1950. ⁹
	D104.2 hardware	ca.1935 ¹⁰
	D104.3, trim, and hardware	1943
	W104.1 sashes and hardware	ca.1950 (see page 66) These sashes are the only unique window sashes in the building.
	W104.1 sash	ca.1945 (see page 66)
	W104.2	ca.1945
	Kitchen cabinets	Unknown.
	First Aid cabinet	c.1980
	Small cabinet on south wall	c.1980
	Sheet vinyl flooring	c.1980
	Bare bulb ceiling light fixture	Unknown.
	Sink	Unknown.
	Chimney opening (east wall)	1943
Room 105	Bead board walls	Installed 1943 or later.
1935–1943 – Unknown	Board and batten ceiling	Unknown
1943 – Office, Laundry Room 1943–1980 – Unknown 1980–1996 – Storage	Laundry Room	Part of original construction. Enlarged in 1943. Removed sometime after 1943.

9 Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>.

Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

10 The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

Location and Use	Element	Date
1996–2013 – Storage/ Entry Hall	Wood flooring (east-west direction)	1935
2013–present – Vacant	Door and window trim	Unknown.
	D105.1 door and hardware	1943
	D105.2	Unknown.
	W105.1 and trim	1943
	W105.2-105.6	ca.1945
	Hinged door above D102.1	Unknown.
	Florescent ceiling lights	c.1980
	Bare bulb (2 caged + 1) fixtures	Mid 1900s.
	Smoke alarm	c.1980
	Electrical boxes (2 north wall)	Unknown.
	Electrical boxes (2 east wall)	Box located lower on east wall c.1980. Box located higher on east wall c.1945.
	Electrical junction box	Unknown.
	Emergency support beams	2004
	Wall heater	Unknown.
Room 106	Board and batten walls and ceilings	Unknown.
1935 – Unknown	North wall brick	1935. Related to R102 fireplace.
1943–1972 – Bedroom	Carpet	Unknown.
1972–2013 – Office	Asphalt tile flooring	ca. 1945
2013–present – Vacant	Door, window, and baseboard trim	Unknown.
	D106.1 and hardware	Door style indicate 1900-1950. ¹¹ Hardware c.1980
	W106.1	ca.1945
	East wall infill	1943
	East-west framing on ceiling – Original south wall of R106.	Ca.1945
	Wood and wire storage cage	c.1990
	Florescent ceiling fixtures	c.1980
	Small metal and glass ceiling fixture	c.1950

11 Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>.
Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

Location and Use	Element	Date
	Ceiling fan	Unknown.
	Wall heater and thermometer	c.1980
Room 107	Board and batten walls and ceilings	Unknown.
1935–1943 – Unknown	Asphalt tile flooring	ca.1945
1943–present – Bathroom	Sheet vinyl flooring	c.1980
	North wall infill	Sometime after 1943.
	Ceramic tile tub surround	Sometime after 1943.
	D107.1 door	Door style indicates 1900-1950. ¹²
	D107.1 hardware	ca.1935 ¹³
	D107.2 door	Unknown.
	D107.2 hardware	Unknown.
	W107.1	ca.1945
	Chimney opening	Built prior to 1996.
	Wall light over sink	c.1980
	Flush mount ceiling light fixture	ca.1980
	Bare bulb ceiling light fixture	Unknown.
	Wall heater	ca.1979
	Hot water heater	ca.1979
	Ceiling fan	Unknown
Room 108	Board and batten walls and ceilings	Unknown.
1935–1943 – Unknown	Wood flooring (north-south direction)	Unknown.
1943–1973 – Bedroom	Door and window trim	Unknown.
1973–1996 – Unknown	D108.1 door	ca.1943
1996–2013 – Storage	D108.1 hardware	ca.1935
	D108.2 door	Reused door (in c.1980) dating from 1900-1950. ¹⁴
	D108.2 hardware	ca.1993
	D108.2 trim	ca.1993

¹² Ibid.

¹³ The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

¹⁴ Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020. <https://archive.org/details/WesternSashAndDoorCo./page/n69/mode/2up>. Brockway-Smith-Haigh-Lovell Co., "Book of Designs," (Boston, MA: Brockway-Smith-Haigh-Lovell Co., 1950) 60. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

Location and Use	Element	Date
	W108.1, W108.3, W108.4	ca.1945
	W108.2	1943
	CL108	1943
	Wood shelving	Unknown.
	Concrete block chimney and opening	Built prior to 1996.
	Bare bulb (2 wire caged) fixtures	Mid-20th century.
Crawl Space	Wood piers (large, chestnut)	1935
	Wood piers (small)	ca.1965
	Wood support boards for piers	ca.1980
	Floor joists	1935
	Lap-spliced joists	ca.1980
	Center wood beam	1935
	Horizontal wood nailer boards	Unknown.
	Vertical boards enclosing crawl space	Unknown.
	Cast Iron plumbing pipes	1943
	Fiberglass insulation	ca.1980
	Concrete blocks	ca.1980
	Window Screens	ca.1945
Attic	Chestnut board-and-batten walls and ceiling	1935
	Yellow paint on walls and ceiling	Unknown.
	Plain wood support posts	Unknown.
	Wood gusset plates	1935
	Rafters	1935
	Collar ties	1935
	Floor joists	1935
	Access openings	1935
	Access opening on east wall near stone veneer fireplace	Unknown.
	Drywall throughout attic	1935
	Wood battens throughout attic	1935
	Metal piping	Unknown.
	R106 ceiling fan hose	Unknown.
	Roof jack framing	1935

Location and Use	Element	Date
	Concrete block chimney and opening	Built prior to 1996.
	Stone veneer brick chimney	1935
	Brick chimney	1943

IV. CURRENT PHYSICAL DESCRIPTION

CURRENT PHYSICAL DESCRIPTION

GENERAL INFORMATION

Piney River Civilian Conservation Corps (CCC) Technical Building is located in Rappahannock County within the Skyline Drive Historic District at Shenandoah National Park in western Virginia. The building is situated at the junction of Piney River Area Road, Piney River Maintenance Road, and Piney River Housing Road. Piney River Road joins Skyline Drive across from Mathews Arm Campground near mile marker #22. A grove of trees obscures the building from Skyline Drive. The building faces east and sits on an east-facing slope in a clearing surrounded by asphalt paved roads, parking spaces, and natural growth.¹ A small picnic area is located west of the structure, and the Appalachian Trail passes nearby to the south of the building.

Piney River CCC Technical Building is a vernacular style, one-story, nine-bay, wood-framed building. Sheet asphalt siding and tar paper with board-and-battens covers the walls of the building, with green paint covering the front elevation porch. Most of the other wood trim is unpainted. The structure's roof is covered in black asphalt roofing paper with spotty locations of asphalt roofing. All of the window openings and all but one of the four exterior door openings are covered with flakeboard sheeting. A gable-roofed ell is attached to the rear—or west—elevation.

A detailed description organized by location is listed below. For room locations, please see the building floor plan located in Appendix A.

EXTERIOR

Foundation

The CCC Technical Building is built upon a pier foundation. Crawlspace access is located on the southeast corner of the building. The opening is filled with a wood door covered in black asphalt siding and is sheltered with a small, pent roof. (Figure 4.1) A thorough inspection of the foundation by the Denver Service Center resulted in a detailed, measured description of the foundation framing:



Figure 4.1. Crawl space access door and pent roof, August 24, 2020. (Image by author)

¹ Although the building faces northeast, for ease of description, this report will refer to cardinal directions only.

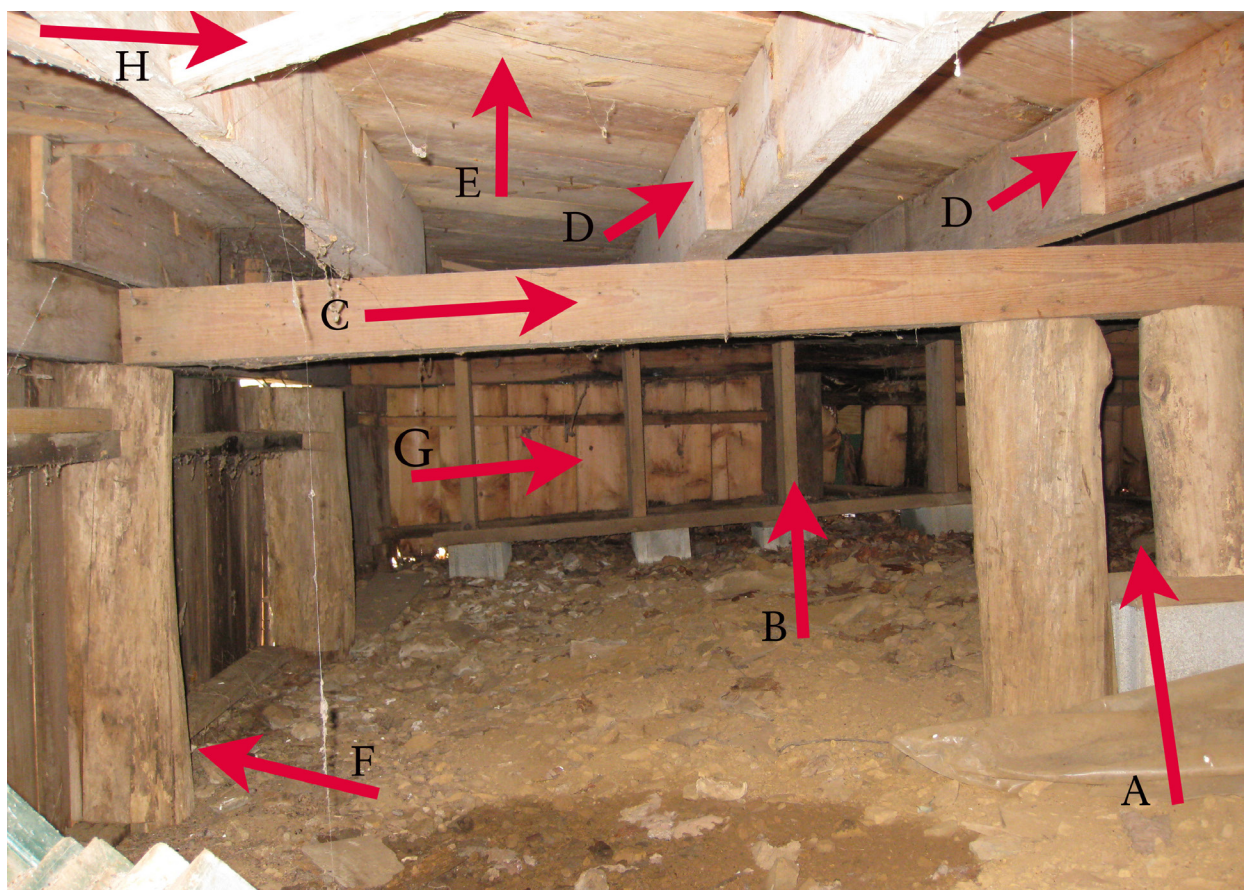


Figure 4.2. Crawlspace looking west, August 24, 2020. A: Center Row of pier logs. B: Replacement pier studs. C: North-south beam. D: Lap-spliced floor joists. E: Diagonal sub-floor. F: Original perimeter log pier. G: Vertical wood boards enclosing crawlspace. H: Wood bridging. *(Image by author)*

The original wood posts are 9 to 10 inches in diameter and vary in height. At the perimeter walls the posts support a 4" x 6" wood beam which in turn support the floor, wall and roof systems of the structure. The floor system consists of 2" x 8" wood joists spaced at 24-inches on center. The joists are lap-spliced at the center of the building and bear on a 4x6 wood beam supported on wood posts.²

The wood logs that make up the perimeter of the pier foundation are set either on the ground or resting on concrete blocks. In some cases, the logs are missing, and square wood posts are resting on a wood board straddling a row of concrete blocks. A row of log piers runs down the center of the structure. Occasionally these logs are missing or have been supplemented with smaller logs resting on concrete blocks, elevating the center wood beam above the height of the larger log. (Figure 4.2) The floor joists are resting on a wood beam running north to south. The joists nearer to the south wall and on the west side of the center beam are lap-spliced. The space between floor joists is filled with wood bridging and fiberglass insulation, which in many places has deteriorated or fallen onto the ground. The structure's subfloor is made of wood planks running diagonally from southeast to northwest. The dirt crawlspace floor is lined with plastic sheeting,

² United States Department of the Interior - Denver Service Center, "Design Analysis for Piney River District CCC Buildings and Expansions to Existing Maintenance Building, Phase I" (August 1996), 12.

in places. Cast iron plumbing pipes are centrally located near the concrete block chimney. (Figure 4.3) The central brick chimney is covered with stone veneer. The ell and northwest corner of the main structure is inaccessible to inspection, but from the exterior it is clear that floor joists are resting on the ground.

The crawlspace is enclosed with vertical wood boards covered with a mixture of materials, from asphalt siding to wood shingles. As seen from the exterior, the east elevation has a mix of textured green or black asphalt siding covering crawlspace openings. Vertical wood boards cover the south elevation crawlspace. (Figure 4.4) The west elevation crawlspace covering is vertical and horizontal wood boards. The north elevation crawlspace has vertical wood boards covering its opening. All of the crawlspace vertical wood coverings are attached to horizontal nailer boards located below the structure's plate and mortised into the top of the foundation pier logs. Another vertical board is mortised into the bottom of the foundation pier logs.

Eight, green-painted, wood windows and screens are located in the crawlspace.



Figure 4.3. (top) Crawlspace, looking north at concrete block chimney and plumbing pipe, August 24, 2020. (Image by Brinnen Carter)

Figure 4.4. (right) South elevation crawlspace vertical wood covering, February 25, 2020. (Image by author)



Roof

The main structure has a wood-frame, side-gabled roof with open rafter tails. The rafter tails on the west elevation have additional wood shims on their underside. (Figure 4.5) The west ell has a front-gabled roof covered in black tar paper and has open rafter tails. Half-round metal gutters are attached to the ell's north elevation roof line and the main structure's west wall roof line. The roof valleys and around the chimneys have spotty coverage of textured gray asphalt sheeting. (Figure 4.6)

Chimneys

The roof holds three chimneys: an interior, east slope, brick chimney; an interior, central ridge, stone chimney; and an interior, west slope, concrete block chimney. (Figure 4.7) A bathroom roof vent is located on the roof's west slope.



Figure 4.5. (top) West elevation shimmed rafter tails, August 25, 2020. *(Image by author)*

Figure 4.6. (right) CCC Technical Building, southwest oblique, August 24, 2020. *(Image by author)*

Walls

The walls are wood-framed with 2-inch by 4-inch studs and covered with textured, green, sheet asphalt siding on the south elevation; and textured, gray, sheet, asphalt siding on the primary, or east, elevation. The north and west elevations are covered with black asphalt siding and wood battens. (Figure 4.8) Electrical and phone wires are mounted to every elevation of the building. The south and north walls each have green-painted, wood, louvered, attic vents in



Figure 4.7. (above column) Brick, stone veneered chimney; concrete block chimney; brick chimney, August 24, 2020. *(Images by author)*

Figure 4.8. (right column) Green, sheet, asphalt siding; black asphalt siding with wood battens; gray, sheet, asphalt siding, August 24, 2020. *(Image by author)*





Figure 4.9. Ell, west elevation, February 25, 2020. *(Image by author)*

their gable peaks. A water spigot is located on the east elevation, north of the porch. Two propane tanks are located on the northeast corner of the building. Two electrical meters are attached to the northwest wall. The north and south walls of the ell are supported with four large wood buttresses. A metal pole with a commercial-sized streetlight is attached to the ell's west elevation. There is a fire extinguisher and box attached to the north ell wall. (Figure 4.9)

Doors

There are four exterior doors in the building.³ All but the primary entrance on the east elevation are covered with flakeboard sheeting.⁴ The main entrance is surrounded with a simple, green-painted wood, 1¾-inch casement and 4-inch wood threshold. It is filled with a green-painted, two-panel screen door with a metal door handle.⁵ (Figure 4.10)

Windows

There are 22 window openings in the building, all of which are boarded up with flakeboard sheeting. They contain six-over-six, wood, double-hung sashes in all but the ell window openings which contain six-light fixed windows. They are unavailable to exterior inspection.⁶ There are simple sills and green-painted trim visible below the sheeting. (Figure 4.11)

³ For door location see Appendix A - Floor Plans.

⁴ See internal room descriptions for descriptions of the boarded-up doors.

⁵ For the interior entrance door see R101.

⁶ See internal room descriptions for additional descriptions of the boarded-up windows.

Figure 4.10. (left) D101.1 screen door, February 25, 2020. *(Image by author)*

Figure 4.11. (right) W108.4, east elevation, February 25, 2020. *(Image by author)*



Figure 4.12. East elevation porch, February 25, 2020. *(Image by author)*

Porches

The main section of the building has a wood covered porch centrally located on the east, primary elevation. Although its shed roof covering is inaccessible to inspection, the open interior roof framing is visible. There are open rafter tails on its east edge. It is supported with four turned, wood posts and one plain wood post. The wood board deck is supported by five wood posts and is enclosed by two vertical rails with five horizontal wood supports. Plain wood pilasters are mounted to the structure's east wall. (Figure 4.12) A bare bulb light fixture covered in wire mesh is mounted to its ceiling.

The 1996 Denver Center analysis describes the porch:

The rear covered porch roof framing consists of 2" x 4" rafters spaced at 24-inches on center. The rafters span 6 feet to a 2" x 8" wood beam which is supported on 4" x 4" wood columns spaced at 6"-9" on center.⁷

The west ell has a small shed-roof porch centrally located on its west wall. The roof covering is not visible to inspection. Two, horizontal wood boards, attached to the west wall are connected to two wood horizontal braces that hold up the roof.

INTERIOR

Room 101

Room 101 (R101) is centrally located on the east side of the structure. It is accessed through an exterior door on the east elevation (D101.1). The room



Figure 4.13. R101 looking north, February 25, 2020. *(Image by author)*

measures 4 feet 11 inches wide by 21 feet 1/2 inch long. Its vaulted, sloped ceiling is covered with white-painted drywall and wood battens. The ceiling measures 11 feet 2 inches at its highest point. A portion of the drywall ceiling has collapsed, revealing wood attic framing. There is a bare bulb light fixture surrounded by a wire cage centrally located on the ceiling. Wood bracing runs from the attic framing to the east wall. Two evenly spaced horizontal wood framing members run from the east wall to the west wall. They are comprised of two 2-inch by 6-inch boards framing a 2-inch by 3-inch board. (Figure 4.13) The light is controlled by a light switch located north of D101.1. The floor is covered with 2 1/2-inch-wide wood boards running in an east-west direction.

The walls in R101 are wood-framed and covered with white-painted, 8-foot-tall chestnut board and battens. From traditional ceiling level (8 feet) to the top of the sloped ceiling, the east, west, and south walls are covered with drywall and wood battens. The south wall is covered entirely with board and battens. (Figure 4.14) Plain wood

framing reveals a closed-up door opening centrally located on the west wall. (Figure 4.15)



Figure 4.14. (above) R101 looking south, February 25, 2020. (Image by author)



Figure 4.15. (top right) R101, west wall infill, February 25, 2020. (Image by author)

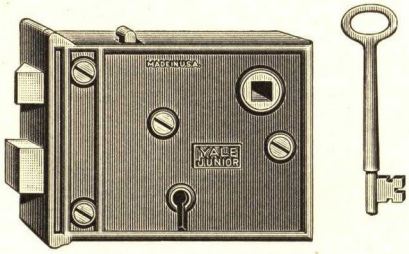
The entrance doorway to R101 is located in the northeast corner of the room (D101.1). It is filled with a 2-foot 8-inch by 6-foot 8-inch wood, raised two-panel, six light door and a 4-inch wood threshold. The interior of the door contains a metal doorknob on a metal backplate and a metal slide-lock. The exterior contains a similar metal doorknob with a metal backplate and padlock hardware. (Figure 4.16)

Figure 4.16. (right) R101 looking south towards D101.1, February 25, 2020. (Image by author)

Figure 4.17. (below) 1937 Box Lock (The Yale and Towne Manufacturing Company, Yale Catalog No. 29) 1937.

Doorway 101.2 (D101.2) is located on the north wall and leads to R102. It is filled with a 2-foot 8-inch by 6-feet 6½-inch, raised five-panel, wood door and is hung on two butt hinges. The exterior of the door has a small box lock and metal knob, with a metal knob on the interior of the door.⁸ (Figure 4.17) Doorway 101.3 (D101.3) is located on the south wall and leads to R108. Its opening is filled with a 2-foot 8-inch by 6-feet 6½-inch, raised five-panel wood door and is hung on two





No. 902 Lock

Case	3¼ x 4 x ¾ in. Japanned iron.
Reversible	For doors opening in, of either hand.
	For doors opening out (reverse bevel), to order only.
Hub	Iron, for ⅝ in. spindle.
Key	One nickel plated mall. iron, No. 507.
Backset	Key, 2 in.; knob, 3¼ in.
Packed	½ doz. in a box, with screws and key plates.

No.	Bolts	Tumbler	Changes
902	Iron	One	4

Not master-keyed.

⁸ The Yale and Towne Manufacturing Company, "Yale, Catalog No.29" (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85.



Figure 4.18. (above) R101 looking north towards D101.3, February 25, 2020. *(Image by author)*



Figure 4.19. (top right) R102, looking southwest, February 25, 2020. *(Image by author)*

Figure 4.20. (right) R102, northeast corner flooring, August 24, 2020. *(Image by author)*



butt hinges. The interior of the door has a metal backplate and the knob is missing. (Figure 4.18) The exterior of the door has a metal backplate and metal doorknob.

A single window is centrally located on the east wall. The opening measures 2 feet 5½ inches wide by 3 feet 10 inches tall and is filled with six-over-six, double-hung sashes. It has 3-inch plain wood trim. Although constructed with a rope/weight system, both ropes are missing. The top rail of the lower sash contains a window lock.

Room 102

Room 102 (R102) is centrally located within the structure. It is currently unused. The room measures 7 feet wide by 4 inches by 20 feet long. The wood-framed ceiling measures 7 feet 4 inches tall and is covered with Celotex wall board and battens. It contains two attic access doors located on either side of the fireplace. There are six fluorescent light fixtures controlled by three light switches located on the north wall. (Figure 4.19) The floor is covered with 2½-inch wood flooring running in an east-west direction. A section of wood flooring located in the



Figure 4.21. (above) R102, looking south, February 25, 2020. *(Image by author)*

Figure 4.22. (right) R102, hardware on D102.1, February 25, 2020. *(Image by author)*



northeast corner and measuring 2 feet 9 inches wide by 1 foot 3¾ inches deep is laid diagonally. (Figure 4.20)

The wood framed walls are covered with white-painted wall board and battens. The north wall contains an electrical outlet east of D104.1. A thermostat is located on the north wall east of D103.1. An open stove pipe hole is centrally located on the north wall. A wood wall shelf is located underneath the hole (and

to the west) with a sign above that reads: “PLEASE TURN OVEN OFF WHEN NOT IN USE”. Nearby, a copper pipe labeled “Propane” runs from the northeast corner and down the north wall near the stove pipe opening. The northwest corner contains a wood shelf, a “Voice Data” box, and a wood-framed bulletin board. An electrical outlet is located on the south wall east of the fireplace.

A gray ashlar granite fireplace is centrally located on the south wall. Its mantel is made of live-edge wood that measures 5 inches thick, 6 feet 6½ inches long, and is situated 5 feet above floor level. The body of the fireplace is sited 3 feet 1 inch into R102 and is 6 feet ½ inch wide. The stone chimney measures 4 feet 8 inches tall by 2 feet 6 inches wide. The opening measures 3 feet high by 2 feet 7 ½ inches wide and the hearth is made of concrete measuring 2 feet 4 ½ inches wide by 6 feet ½ inch long. The opening is filled with concrete block. (Figure 4.21)

There are five interior entrance door openings in R102. The west wall contains a door opening that measures 2 feet 8 inches wide by 6 feet 7½ inches tall (D102.1). It is filled with a white-painted, raised five-panel, wood door hung on two butt hinges with a wood threshold measuring 2½ inches. The interior of the door contains a mortised lock, a metal knob backplate with a missing doorknob, and a mortise metal lined keyhole. There are screw holes and a painted outline of another lock located above. (Figure 4.22) The exterior of the door contains a

Figure 4.23. (left) R102, looking east at W102.1, February 25, 2020. *(Image by author)*

Figure 4.24. (right) R103 looking toward west, wall infill, February 25, 2020. *(Image by author)*



metal rim lock. A hole in the door above the rim lock reveals the remains of the lock seen on the interior of the door. Two metal keepers are attached to the door trim. The plain, wood door trim measures $3\frac{3}{4}$ inches. (See R101, R103, R104, R106 for details on the other five entrance door openings.)

Three window openings are located on the east wall (W102.1, W102.2, W102.3). They each measure 3 feet 10 inches by 2 feet 5 inches and are filled with six-over-six, double-hung sashes. The top rails of the lower sashes contain window locks. Although constructed with a rope/weight system, both ropes are missing on all three windows. W102.1 and W102.3 have blinds attached to the upper trim, and all three windows have curtain rod hardware attached. The window trim measures 3 inches wide. (Figure 4.23)

Room 103

Room 103 (R103) is located in the northeast corner of the building. It is currently unused. The room measures 9 feet 9 inches wide by 16 feet $\frac{1}{4}$ inch long. The ceiling measures 7 feet 11 inches tall and is covered with white-painted, flakeboard wall board-and-battens. Two fluorescent light fixtures are centrally located in the ceiling. Electrical conduit runs from the light fixtures to a light switch on the south wall, west of D103.1. The floor is covered with carpet. It is unknown what flooring material is underneath the carpet.

The wood-framed walls are covered with wood board and battens that are painted white and lined with 2-inch, two-piece baseboard with quarter-round trim. There is a smoke alarm and thermostat attached to the exterior east wall of the closet. A metal clothing hook is mounted to the exterior north wall of the closet. Two electrical outlets are mounted on the north wall east of W103.3. Another electrical outlet is located on the south wall west of D103.1. Two "Voice Data" boxes are mounted near the floor on the east wall near the northeast corner. A Patton brand electric wall heater is centrally located on the west wall. The west wall contains a wood framed-in area where a door opening once existed. (Figure 4.24)



Figure 4.25. (above) R103 looking north, February 25, 2020. *(Image by author)*



Figure 4.26. (left) R103, looking south at D103.1, February 25, 2020. *(Image by author)*

Figure 4.27. (right) R103, looking north at D103.2, February 25, 2020. *(Image by author)*

A cupboard is located in the northwest corner of the room. It contains six wood shelves and is enclosed by two wood doors with six lights each. Each door is hung with three butterfly hinges and has thumb latches. (Figure 4.25)

A closet is located in the southwest corner of the room (CL103). A full-length wood shelf and hanging pole is located on the west wall with four wood shelves lining the north wall. A stove pipe cover is located on the south wall. The floor is covered with vinyl tile. A wall patch on the back—or west—wall is obvious due to the presence of different wall material (painted flakeboard).



Entrance to R103 is accomplished through a door opening on the south wall (D103.1). It is filled with a wood, raised five-panel door hung on two butt hinges. It measures 2 feet 7¾ inches by 6 feet 7 inches. The interior of the door has a modern brass doorknob with a rim lock located nearby. The exterior of the door has a modern brass doorknob with a mortise metal keyhole and metal backplate located below. Black paint has been used to simulate a backplate behind both brass doorknobs. (Figure 4.26)

CL103 is enclosed by a wood, raised six-panel door measuring 2 feet by 6 feet ¾ inch (D103.2). It is hung on two butt hinges. The interior of the door contains a thumb latch and a rough keyhole cut into the wood. The exterior of the door contains a metal doorknob and mortise metal keyhole. Black paint was used on the exterior to simulate a knob backplate. (Figure 4.27)



Figure 4.28. (above) R104 looking north, February 25, 2020. (Image by author)



Figure 4.29. (right) R104 vinyl flooring, February 25, 2020. (Image by author)

There are three window openings in R103 (W103.1, W103.2, W103.2). They are filled with six-over-six, double-hung, wood sashes that each measure 2 feet 4 ¼ inches by 3 feet 8½ inches. Each have a metal lock mounted to the top rail of their bottom sashes. They have 3-inch plain wood trim. Although constructed with a rope/weight system, both ropes are missing on all windows.

Room 104

Room 104 (R104) is located in the northwest corner of the structure. It is currently unused. The room measures 9 feet 10 inches wide by 16 feet 5 inches long. Its white-painted, wood-framed ceiling is 7 feet 10¼ inches high and is covered with wall board and wood battens. There are two bare bulb light fixtures, one centrally located in the ceiling and the other over the sink. (Figure 4.28) The floor is covered with rolled vinyl, simulated to appear as parquet wood flooring. (Figure 4.29)



Figure 4.30. R104 looking east, February 25, 2020. (Image by author)

The white-painted, wood-framed walls are covered with wall board and wood-battens. Plain, 5¾-inch, wood baseboard lines the walls, while 3½-inch wood baseboard can be found inside the closet (CL104). Simple, ¾-inch wood chair rail is located on all walls. Two electrical outlets are located on the west wall near D104.2. A single electrical outlet is located halfway up the east wall with a 240-volt dryer plug near the floor. The closet (C104) has an electrical outlet on its east wall. A stove pipe cover is located in the southeast corner near the ceiling. (Figure 4.30) Two four-door, wood cabinets frame a plastic



Figure 4.31. (above) R104 looking north, February 25, 2020. *(Image by author)*

Figure 4.32. (right) R104 looking west at D104.3, February 25, 2020. *(Image by author)*

laundry tub centrally placed on the north wall. Flakeboard countertop runs from the sink to the east wall. Water pipes run from inside CL104 to the sink. Additional water pipes run from CL104 along the east wall.

A closet is located on the east wall (CL104). It has four wood shelves on its south wall and four metal clothes hooks on the east wall. Electric wires and water pipes run along the base of the east wall.

There are two wood cupboards located on either side of D104.1. Located on the wall east of D104.1 is a wood, two-door cupboard that has two compartments on the inside.

Two metal, round knobs and padlock hardware are attached to both doors. On the west side of the door is wood, two-door cupboard which, on the inside, is divided into multiple compartments. Two bolts serve as door handles on each door. Both doors have a red cross painted on them indicating its use as a first aid cabinet. (Figure 4.31)

There are two entrance doorways in R104. The room can be accessed from the interior of the building through a doorway on the south wall (D104.1). The opening measures 2 feet 8¼ inches wide by 6 feet 7 inches tall and is empty. The remains of an operating door can be seen through a metal keeper on the east side of the doorframe; hinges can be found on the west side. The exterior



Figure 4.33. R104 looking north towards W104.1, February 25, 2020. (Image by author)



entrance is located on the west wall (D104.3). It is filled with a wood, raised four-panel and two-light door that measures 2 feet 4½ inches wide by 6 feet 3 inches tall. It is hung on two butt hinges. The right stile is missing the area where door hardware would normally be installed. (Figure 4.32) Access to CL104 is through a door opening filled with a wood, raised five-panel door measuring 2 feet 6¼ inches wide by 6 feet 6¼ inches tall (D104.2). The interior of the door contains a rim lock with no knob, while the exterior contains a metal knob, metal lined keyhole, and padlock hasp.

There are two windows in R104. The window opening located on the west wall measures 2 feet 5½ inches wide by 3 feet 9 inches tall (W104.2). It has 3-inch plain wood trim and is filled with six-over-six, double-hung, wood sashes. A lock is attached to the top rail of the lower sash. A window opening is centrally located on the north wall (W104.1). It measures 2 feet 5 inches wide by 3 feet 8¼ inches tall. It has 3-inch plain wood trim. There are three sashes located within the W104.1 opening. The upper and lower sash's muntins are newer than all of the other muntins in the building. A third sash is located in front of the upper sash and has muntins that match those found elsewhere in the building. The remains of a lock are mounted to the top rail of the lower sash. The opening is constructed with a rope/weight system, but both ropes are missing. (Figure 4.33)

Room 105

Room 105 is located within the gable ell attached to the west elevation of the main structure. It is currently unused. The room measures 21 feet 8 inches long by 13 feet 4 inches wide. Its wood framed ceiling is arched and measures 21 feet 7 inches at its highest point and is covered in white-painted board and battens. A smoke alarm is centrally located in the ceiling. There are two ceiling fluorescent lights that run in an east-west direction. Four bare bulb fixtures with metal cages are located on the arched ceilings' north and south slopes. (Figure 4.34) The floor is covered with wood flooring measuring 2½ inches wide and run in an east-west direction. Currently, the majority of the floor is unstable and inaccessible.

The wood-framed walls are covered in white-painted beadboard and lined with 5¾-inch wood baseboard. The west wall contains a light switch north of D105.1, and a fire extinguisher south of D105.1. On the east wall, south of D102.1 is an Eyesaline Emergency Face Wash. Located nearby is one light switch and two more circuit boxes. Electric conduit leads from the newest box to a wall-mounted, unmarked, electric heater located north of D102.1. Phone equipment and an electrical junction box are located on the east wall, with multiple strands

of wire and conduit running to the ceiling and floor. An electrical outlet is located at baseboard level in the southeast corner. The northeast corner contains two fuse boxes. Both are labeled “General Switch Co.” Two generator switches are located below the largest of the two boxes. Electrical conduit runs from the floor to an electrical outlet located west of W105.4. (Figure 4.35) A hinged opening is located above D102.1.

The majority of floor area is dominated by four 1½-inch by 9¾-inch pressure treated boards running from outside the north wall to outside the south wall. The 1¾ -inch by 7-inch boards run from the southwest and northwest corners to the southeast



Figure 4.34. (above) R105 looking west, February 25, 2020. *(Image by author)*

Figure 4.35. (right) R105 looking east. Inset image: fuse box located in northeast corner, 2015. *(Images by Susan Hollister)*



Figure 4.36. R105 looking west, February 25, 2020. *(Image by Eric Breitreutz)*

and northeast corners of the larger boards. 2-inch by 4-inch posts support the larger boards and are anchored below floor level. (Figure 4.36)

There are three entrance doors in R105 (D105.1, D105.2 & 102.1). D105.1 is an outside entry and is located on the north wall. It is currently boarded up from the outside of the building and although visible, it is inaccessible to inspection. A 5½-inch by 1½-inch board is attached to the larger support system that dominates the room and runs across D105.1 to the northeast corner. The opening is filled with a wood, raised four-panel door hung on two butt hinges and, on the interior, contains a rim lock and slide lock. D105.2 is an outside entry located on the west wall. (Figure 4.37) It also is visible but inaccessible to inspection. One of the large support boards runs up against and across the door. It is also boarded up on the exterior. The opening is filled with a wood, raised two-panel door with six lights above. It appears to be nailed into the door opening, as there are no visible hinges on which the door could hang. The door contains a slide lock and padlock



Figure 4.37. (left) R105 looking north at D105.1, February 25, 2020. *(Image by author)*

Figure 4.38. (right) R105 looking west at D105.2, February 25, 2020. *(Image by Eric Breitreutz)*





Figure 4.39. R105 looking northwest at W105.1 and W105.2, February 25, 2020. *(Image by author)*

hardware. There is a metal doorknob backplate, but the doorknob was removed to accommodate one of the large support boards. Curtain hardware is located on either side of the lights. (Figure 4.38) D102.1 is an interior entry located on the east wall (for door description go to R102). All doors are surrounded by plain, wood, 3½- to 3¾-inch trim.

There are six window openings in R105 (105. 1, 2, 3, 4, 5, 6). They are all boarded up from the outside and are inaccessible to inspection. The north wall contains two windows. W105.1 is located west of D105.1 and is filled with a wood, fixed, six-light sash. W105.2 is located on the north wall near the northwest corner. It is inaccessible to inspection as it is also boarded up from the inside. (Figure 4.39) W105.3 is located on the west wall north of D105.2. It is filled with wood, double-hung sashes. W105.4 is located on the south wall near the southwest corner. It is filled with a wood, fixed, six-light sash. W105.5 and W105.6 are inaccessible to inspection as they are also boarded up from the inside of the building. There is no visible trim around any of the windows. Although the three visible windows have sashes that are constructed with a rope/weight system, both ropes are missing from both windows.

Room 106

Room 106 is centrally located on the west side of the structure. It is currently unused. The room measures 13 feet 7 inches wide by 14 feet 8 inches long. The



Figure 4.40. (left) R106 ceiling (Image taken by the author) February 25, 2020.



Figure 4.41. (right) R106 wall trim on the ceiling (Image taken by the author, February 25, 2020).

wood-framed ceiling is 7 feet 9 inches tall and is covered with white-painted wall board and battens. The ceiling contains two fluorescent lights controlled by a light switch located east of D106.1. Electric conduit runs from one of the lights, across the ceiling, and down the north wall to an electrical outlet. Another electric conduit runs from the light to a small, round, flush-mount light fixture. A ceiling fan is located nearby. (Figure 4.40) Wood trim is attached to the ceiling at where a wall was removed. (Figure 4.41) The floor is covered with carpet. Underneath is asphalt, square tile. (Figure 4.42)

The wood-framed walls are covered with wall board and battens. A portion of 3/4-inch wood baseboard is located on the east wall. The south wall has 3/4-inch baseboard with 1/4-inch round molding. In addition to the aforementioned light switch and electrical outlet located on the north wall, there is a second electrical outlet and phone/data box located nearby. A section of the north wall board-and-batten wall covering is missing, exposing the south wall of the



Figure 4.42. R106 flooring (Image taken by Susan Hollister) 2015.

Figure 4.43. R106 looking towards north wall (Image taken by the author) February 25, 2020.



chimney located in R102. (Figure 4.43) The east wall contains a light switch, electrical outlet, two phone/data boxes, and a thermostat. Wood trim outlines the location of a closed-up door opening on the east wall. (Figure 4.44) The south wall contains an electrical outlet, Singer electric wall heater, and a wood and wire mesh enclosed storage area. The storage area features three wood shelves and a metal door handle with padlock hardware. (Figure 4.45) The west wall has electric conduit leading from the ceiling line to an electrical outlet located south of W106.1.

Figure 4.44. (below) R106, looking east (Image taken by Susan Hollister) 2015.

Figure 4.45. (left) R106 looking south (Image taken by the author) February 25, 2020.

Entrance to R106 is through a door opening located on the north wall (D106.1) It is filled with a raised five-panel wood door hung on two butt hinges. It contains modern Best brand brass knobs on both sides of the door. Black paint



Figure 4.46. (left) R106, looking west towards W106.1, February 25, 2020. (Image by author)

Figure 4.47. (right) R107 looking west, February 25, 2020. (Image by author)



has been applied to both sides to simulate backplates. A modern metal keeper has been attached to the doorframe. A large cut has been made to the door trim, indicating the site of a possible second keeper that is now missing.

A window opening is located on the west wall near D106.1 and measures 4 feet by 2 feet $\frac{3}{4}$ inches. It contains a single six-light, fixed sash with a window air conditioner located above. (Figure 4.46) Although it has sashes that are constructed with a rope/weight system, both ropes are missing.

Figure 4.48. R107 looking east, February 25, 2020. Note closed-up door opening below mesh screen on north wall. (Image by author)



Room 107

Room 107 (R107) is centrally located on the west side of the structure. It is currently unused. The room measures 14 feet 8 inches long by 4 feet wide and is lined with $\frac{1}{4}$ -inch round floor molding on all walls, except the east wall next to the toilet, which has $\frac{3}{4}$ -inch wood baseboard. The ceiling measures 7 feet 10 inches tall. A centrally located light fixture has electrical conduit leading off in three directions: east to a light switch located on the south wall near D107.1; north to an electrical junction box; and south to a light fixture located on the south wall. (Figure 4.47) A Ward ceiling exhaust fan is located near the west wall. The floor is covered with asphalt floor tile with aluminum floor transition strips dividing off the area around the toilet, which is covered with sheet vinyl flooring in a simulated stone pattern.

The wood-framed walls are covered with white-painted wall board and battens. The walls are lined with a batten-style $\frac{1}{2}$ -inch chair rail. The north wall contains a closed-up doorway which is outlined with wood trim. Above the closed-up door opening is a small opening filled with wire mesh. (Figure 4.48) There is a tub/shower enclosure located in the northwest corner of the room. The tub is covered with a raw piece of flakeboard,



Figure 4.49. (above left) R107, looking north, February 15, 2020. (Image by author)



Figure 4.50. (above right) R107, looking south, February 25, 2020. (Image by author)



Figure 4.51. (right) R107, looking west, February 25, 2020. (Image by author)

upon which sits a Kenmore hot water heater. The enclosure is covered in ceramic tile, with wood wall board and battens above. Water piping runs from the water heater to the sink and toilet located on the south wall. Additional water pipes and an electrical wire run from the water heater to the ceiling line. The water spigots are mounted on the east wall of the enclosure. (Figure 4.49)

In addition to the already mentioned wall light fixture, the south wall contains an American Standard toilet, a sink with the date “12-15-38” stamped on its underside, a Zep soap dispenser, a Zep air freshener, and a GFI electrical outlet. (Figure 4.50) The west wall contains a large toilet paper holder, two metal exhaust pipes, and a Hunter electric wall heater. The water pipes cross this wall between the hot water heater and the sink and toilet. (Figure 4.51) The east wall contains D107.1.

Figure 4.52. R107 CL107 door. Inset A: Exterior hardware. Inset B: Interior hardware, February 25, 2020. (Image by author)



A closet is located on the south wall (CL107). It has four wood shelves attached to the south wall where a stove pipe cover can be found. Four metal clothing hooks are mounted to the east wall and two are mounted on the west wall. A bare bulb light fixture is attached to the ceiling.

Entrance to R107 is through a door opening on the east wall (D107.1). It is filled with a raised five-panel wood door hung on two butt hinges and is framed with 2¾-inch plain, wood trim. Its interior has a rim lock, keyhole, white porcelain knob, and metal slide lock. The interior of the door has a white porcelain knob and no keyhole. The doorknobs and the surrounding areas are painted black to simulate large backplates.

The closet doorway (D107.2) is filled with a wood door hung on two butt hinges and is framed with 3-inch, plain, wood trim. The interior of the door is made of board and battens with “Z” framing. There is a white porcelain knob and metal backplate, and a separate metal backplate (empty), attached to the interior of the door. The exterior of the door and doorframe have padlock hardware. The exterior of the door has a rim lock and metal doorknob. (Figure 4.52)

A window opening (W107.1) is located on the west wall. It is filled with six-over-six, double-hung, wood sashes that measure 2 feet 9 inches by 4 feet. A lock is attached to the top rail of the bottom sash. Two sets of curtain hardware are attached to the window trim. The plain, wood trim measures 2¾ inches. Although it has sashes that are constructed with rope/weight construction, both ropes are missing from both windows.



Figure 4.53. (above) R108, looking northwest, February 25, 2020. *(Image by author)*



Figure 4.54. (above right) R108, looking at northeast corner, February 25, 2020. *(Image by author)*

Room 108

Room 108 (R108) is located on the east end of the structure. It is currently unused. The room measures 20 feet 1 inch long by 17 feet 8 inches wide and is lined with 1¾-inch plain, wood baseboard. The ceiling measures 7 feet 11 inches tall and contains two bare bulb light fixtures. It is covered with white-painted wall board and battens. (Figure 4.53) The floor is covered with 3¼-inch wood flooring running in a north-south direction.

The wood-framed walls are covered with wall boards and battens that are painted half-white and half-grey. The north wall contains one electrical outlet, and a concrete block chimney with a metal clean-out door and a stove pipe cover. A light switch is located on the north wall east of D108.1. (Figure 4.54) White-painted wood shelving is attached to the entire south wall. (Figure 4.55) A closet is centrally located on the north wall. A full-length wood shelf and hanging pole is located on the north wall. A bare bulb light fixture is attached to the ceiling.



Figure 4.55. R108, looking south, February 25, 2020. *(Image by author)*



There are two entrance door openings in R108. The interior door opening is located on the north wall in the northeast corner (D101.2—for full description see R101). The exterior door opening (108.2) is located on the west wall in the southwest corner and measures 3 feet by 6 feet 7 inches. It is filled with a raised five-panel wood door hung on two butt hinges. The exterior of the door is inaccessible to inspection, as it has been boarded-up on the outside. The interior of the door contains a modern silver-toned doorknob and a metal slide lock. The door is framed by 3-inch plain, wood trim. (Figure 4.56) The closet doorway located on the north wall is filled with a raised four-panel wood door hung on two butt hinges (D108.1) and measures 2 feet 6 inches by 6 feet 6½ inches. The exterior of the door has a metal rim lock with a white porcelain knob, and padlock hardware. The interior of the door contains a doorknob backplate and is missing the knob. There is a mortise, metal keyhole, and a rough keyhole, carved into the wood located on either side of the missing knob. (Figure 4.57)



There are four window openings in R108. A window opening located on the west wall (W108.1) measures 2 feet 3¾ inches wide by 3 feet ¾ inches tall. A window opening is located on the south wall (W108.2) and measures 2 feet 3 ½ inches wide by 4 feet ¼ inch tall. Two window openings are located on the east wall (W108.3, W108.4) Their openings each measure 2 feet 3¾ inches wide by 3 feet ¾ inches tall. They are all filled with six-over-six, double-hung, wood sashes and contain a lock that is attached to the top rail of each lower sash. (Figure 4.58) Although all of these windows have sashes that are constructed with a rope/weight system, both ropes are missing.

Attic



The attic of the CCC Technical Building runs the full width of the main section of the building. It is accessed via two hatches located on either side of the chimney in R102. Thorough inspection of the attic by the Denver Service Center resulted in a detailed, measured description of the attic framing:

Roof framing consists of 2" x 6" rafters spaced at 24-inches on center. Every other pair of rafters have a 1" x 6" collar tie, located at rafter midspan. Ceiling framing consists of 2" x 6" joists spaced at 24-inches on center. Joist[s] run perpendicular to the rafters and are hung from the bottom chord of built up trusses spaced at 12 feet on center.⁹

Throughout the attic there is blown-in insulation filling the spaces between the ceiling joists. Many of the framing members show machine planing marks. The space above R102 is different from all other spaces in the attic. Its walls and ceiling are lined with drywall and covered with chestnut board and battens similar to that found in R102. Two yellow-painted, boxed posts rest on ceiling joists and run to collar ties. An unfinished wood support post is evenly spaced between the boxed posts. It runs through an access hole to the unfinished space and roof structure above. (Figure 4.59) Within the unfinished attic above R102, there is another unfinished wood post connected to a wood gusset plate at the apex of the rafters. The north brick chimney is visible above the board-and-batten ceiling and from the access hole. The central chimney (R102) is also visible above the finished ceiling. It is made of reused bricks, some of which

Figure 4.56. (top) R108, looking west, February 25, 2020. (Image by author)

Figure 4.57. (center) R108, looking north at D108.1, February 25, 2020. (Image by author)

Figure 4.58. (bottom) R108, looking east towards W108.3, February 25, 2020. (Image by author)



Figure 4.59. (above left) Attic over R102, looking northwest, 2015. (Image by Eric Breitzkreutz)



Figure 4.60. (above right) Attic, looking north at the south face of central brick chimney. Note: the stone veneer on its east face, and the painted reused bricks on its south face, August 24, 2020. (Image by Brinnen Carter)



Figure 4.61. (right) Attic, looking north to space over R104, 2015. (Image by Eric Breitzkreutz)

are covered with white paint. It has a stone veneer on all but its south face. (Figure 4.60)

An access hole is framed into the north wall of the finished space that leads to attic space above R103 and R104. The space above R104 has sheets of drywall and wood battens attached to some of its wall and ceiling framing. Its north wall is made of the vertical wood boards that make up the exterior north wall of the building. The space above R103 is not visible or accessible. (Figure 4.61)

South of the central chimney are three separate spaces, divided by wall framing covered with the remains of drywall and wood battens. The space nearest to the chimney is located over R106 and contains a plastic and wire hose coming



Figure 4.62. (above) Attic, looking south. A: Plastic/Wire hose. B: Closed up attic hatch. C: Attic space above R107 and R108, 2015. (Image by Eric Breitreutz)

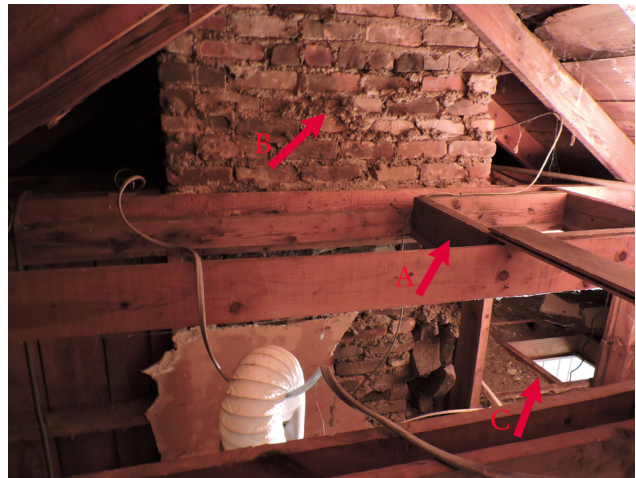


Figure 4.63. (above right) Attic, looking north. A: Framed-in attic hatch. B: Reused brick on central chimney south face. C: Attic hatch located in R102, 2015. (Image by Eric Breitreutz)



Figure 4.64. (right) Attic, looking south towards cement block chimney, 2015. (Image by Eric Breitreutz)

from the ceiling fan in R106. A closed up, wood-framed access hatch is located within the ceiling joists at the east wall near the central chimney. (Figure 4.62) Another framed-in access hatch is located between the main chimney and the nearest collar tie. The central chimney's south wall is made of reused brick. (Figure 4.63) The second and third spaces, located above R107 and R108, are located to the south of this space.

The second space (over R107) has metal piping running along the west roof slope. A plain wood post rests on a ceiling joist and runs to a collar tie above. Another wood post runs from a collar tie to the ridge board with a wood gusset plate attached to it and the rafters. (Figure 4.64) Blue paint can be seen on a joist near where the metal pipe is attached to a joist. (Figure 4.65) Drywall and wood battens are attached to some of the ceiling and walls. Drywall is attached to both sides of the east wall framing. The drywall on the outside of the framing provides a wall surface for the vaulted west wall in R101. (Figure 4.66)

The third space is located in the south end of the structure and contains a concrete block chimney. Drywall and wood battens are attached to some of the

ceiling and walls. A wood support post runs from a ceiling joist to a collar tie. Another wood post runs from a collar tie to the ridge board. A summer beam runs parallel with the rafters tying together the joists running perpendicular to the rafters. (Figure 4.67) Green paint can be seen on top of a board running east-west on the south wall. A wood-framed area between two rafters is located above the collar ties on the east slope of the roof. (Figure 4.68)

Figure 4.65. (top left) Attic, looking southwest, 2015. *(Image by Eric Breitreutz)*

Figure 4.66. (top right) Attic, looking east, 2015. *(Image by Eric Breitreutz)*

Figure 4.67. (bottom left) Attic, looking south, 2015. *(Image by Eric Breitreutz)*

Figure 4.68. (bottom right) Attic, looking east, 2015. *(Image by Eric Breitreutz)*



V. PROPOSED TREATMENT AND CHARACTER- DEFINING FEATURES

PROPOSED TREATMENT AND CHARACTER-DEFINING FEATURES

PROPOSED TREATMENT

The future treatment and use of the CCC Technical Building have yet to be determined. The method of treatment is dictated by its level of significance, architectural integrity, current condition, and its intended use. Any treatment should follow *The Secretary of the Interior's Standards for the Treatment of Historic Properties*. Every effort should be made to preserve its historic character-defining features, which are described in this report.

In addition, any work on the structure should be photographically documented and included in SHEN park files. Extensive work should be documented by both photographs and a written project completion report. If replacement materials are installed, a representative sample of the historic material should be saved, cataloged, and placed in the building's artifact collection. Every attempt should be made to replicate the size, scale, and other details of original deteriorated materials. New replacement materials should also be date-stamped to distinguish them from surviving historic building fabric.¹

The Secretary of Interior's Standards for the Treatment of Historic Properties provides four general treatment approaches for the treatment of historic buildings and are described as follows:

Preservation is defined as 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. 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. The Standards for Preservation require retention of the greatest amount of historic fabric along with the building's historic form.

Preservation would sustain the CCC Technical Building at its current appearance and configuration. Ongoing maintenance and repair of the building would continue, emphasizing the retention of the building's character-defining features. More extensive work would follow the philosophy of replacement-in-kind. Upgrading of building systems could be carried out, being careful not to damage or detract from historic character-defining features. This treatment would be appropriate if the choice were made to retain the building but not open it to the public.

¹ Barbara Yocum, "The Shelton House at Rural Plains, Historic Structure Report, Richmond National Battlefield Park" (Lowell MA: Historic Architecture Program, Northeast Region, National Park Service. August 2012).

Rehabilitation is defined as 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. The Rehabilitation Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.

Rehabilitation would adapt the CCC Technical Building to a new, compatible use. This is the most lenient treatment, allowing alterations and additions that are nevertheless both respectful of, and preserve, the building's historic character-defining features. Such a treatment would be appropriate if it is decided to use the structure as a meeting space, overnight summer housing, or museum interpretive space.

Restoration is defined as 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. The Restoration Standards allow for the depiction of a building at a particular time in its history by preserving materials, features, finishes, and spaces from its period of significance and removing those from other periods.

Restoration would return the CCC Technical Building to its historical appearance during its period of significance by preserving existing character-defining features, removing non-historic features, and reconstructing missing historic features. Building systems could be upgraded, being sensitive to the retention of historic character-defining features. Such a treatment would be appropriate if it is decided to use and interpret the CCC Technical Building solely as a museum.

A logical restoration target date for the CCC Technical Building is during its period of significance (1931–1952). Although the building has been changed over a long period of time, it is feasible to restore the structure. Such a restoration could be partial or complete, beginning with the exterior and finishing with the interior. Exterior restoration would entail conservation and repair of existing historic character-defining features, removal of non-historic features, and reconstruction of missing historic features. Likewise, interior restoration would preserve existing character-defining features, remove non-historic features, and install historically appropriate features. Restoration should employ an architectural conservator and/or historical architect to achieve an authentic reconstruction of missing historic elements based on documentary sources and physical evidence.

Reconstruction is defined as 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 Reconstruction Standards establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes.

Reconstruction is not an appropriate treatment for the CCC Technical Building since it is an intact structure.

CHARACTER-DEFINING FEATURES

Introduction

The purpose of this chapter is to identify the character-defining features of the CCC Technical Building. Through its history of changing occupants and uses, the CCC Technical Building has evolved and survived with a moderate degree of integrity. Situated within the Skyline Drive Historic District, the Technical Building stands out as an extraordinary example of CCC architecture and the era in which it was built. The identification of character-defining features outlined below is critical for the treatment and preservation of the Technical Building, so it may be enjoyed in perpetuity as a cultural and historical resource. A character-defining feature is:

“...an element or historical treatment that imparts a certain quality or distinction to the structure and without which the architectural or historical integrity of that structure would be diminished or lost.”²

And,

“...visual aspects and physical features that comprise the appearance of every historic building. Character-defining elements 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.”³

These features directly or subtly combine to create the look or feeling of a structure. They have been identified carefully and methodically with the aid of textual and photographic documentation, and on-site physical examination of the site. The features identified are from the structure’s 1935–1952 period of significance and should be of great value to the preservation of the building as well as to protecting the existing integrity of the resource.

It is important to note that a character-defining feature of a structure can be a missing element (“Missing Historic Feature”) that was extant during its period of significance. Where known, these features will be identified in the tables below. The identification of these missing historic features will be based on facts and observations from textual and photographic primary source documentation, and they will help guide any future restoration to the appearance during its period of significance.

Historic Architect Susan Hollister contributed the table of character-defining features for the CCC Technical Building.

Civilian Conservation Corps Technical Building	
Location	Location within Shenandoah National Park. Contributing structure within Skyline Drive National Historic District.
	Technical Building and Camp NP-12's central location within the North District of SHEN provided easy access to the work sites associated with the camp.
Setting	The less cohesive organizational plan of the camp layout reflects its later construction date within SHEN CCC camp chronology as a whole.
	Curvilinear site circulation, simply treated with asphalt paving, gravel, or dirt.
Approach and Access	The Technical Building is located at the apex of the camp entrance road and at the hub of camp circulation roads.
Siting	The CCC Technical Building resides at its original 1935 location.
	Relationship of the Technical Building to the modern maintenance area and buildings has preserved its historic orientation to the camp's original layout.
	The Technical Building's location on the parade loop reflected its higher status within traditional CCC camp design.
Exterior Features	Minimal architectural details reflect utilitarian CCC building styles.
	Repurposed materials, such as asphalt siding, square posts, tar paper, and local materials, reflect Depression and WWII-era construction restrictions.
	Extensive use of wood, particularly locally available and milled chestnut, for construction.
	Detailing of the skirt board enclosing the crawl space with peeled log sections rough cut to accept vertical plank skirt boards.
Mass, Scale and Shape	T-shaped plan comprised of a long rectangular block with an intersecting ell is emblematic of CCC buildings. They used repetitive standardized elements, and the truss system allowed for an open plan that could be subdivided as needed.
	The use of piers versus a poured foundation allowed for adaptation to local topography and minimized sitework. Reinforced the vision of the CCC as a temporary authorization.
	Asymmetry of long elevations. The location of the porch and ell are not centered on the primary facades of the building. They are placed based on function rather than aesthetics.
	Distinctly different treatment of the two principal elevations reflects the dual use of the building for live/work functions during both CCC and NPS occupancy. Reinforces function as primary design consideration.
Exterior Features – Doorways	Original door openings, D101.1 & D105.3.
	D104.3 original to the 1943 remodel project.
Exterior Features – Windows	Spacing and location of window openings reflect interior room arrangement rather than aesthetic design.
	6/6 double hung, or 6-light fixed sash, single glazed wood windows. Window openings are similar in size and shape in the main gable block.
	Use of wood louvers in gable ends of main block to ventilate the attic.
Roof and Roof-Related Features	Simple gable roof forms covered in tar paper for all roofs (main block and ell).
	Use of roof overhang with exposed rafter tails indicative of the most efficient and simplest details.
	Prominence and length of main block roof vs. ell. The intersection of the ell below the ridge of the main block reinforces its secondary status.
	Dominance of the central stone veneered chimney mass versus secondary chimneys or stove pipe vents.

Civilian Conservation Corps Technical Building	
Exterior – Projecting Features	The east porch is a significant element and is a reflection of domestic use of the structure, and its dual use as a residence and office space.
	The single square porch post on the east porch is significant in that it appears in the earliest photographs of the east elevation. This may indicate that the porch was constructed during CCC occupancy and was retrofitted with a square post when the nearby bathroom was removed.
	The use of shed roofs for additive projections such as canopies and porch roofs.
	The pent roof above the access door to the crawl space is likely an original feature.
	Exposed rafter tails on all exterior roof lines.
	Native stone veneered brick chimney located main roof ridge.
	Brick chimney.
	Bathroom vent located on west slope of the main gable roof.
	The use of minimal trim elements with square edge details. Simple flat stock.
	Two sections of galvanized steel gutter on the main west elevation and north ell elevation.
	East porch light fixture.
	<i>Missing Historic Feature: Shed roof over shower room located on east elevation.</i>
Exterior Materials and Craftsmanship	As one of a few remaining permanent CCC structures, it represents a level of craftsmanship present in all SHEN permanent structures from the period of significance.
	Board-and-batten cladding create a strong vertical pattern and is an example of distinctive CCC architectural style.
	Rustic, simple materials minimally finished including peeled logs, tar paper, asphalt siding, and concrete blocks.
	The use of salvage lumber, particularly chestnut, from the site or immediate surrounding. The chestnut blight killed hundreds of trees and this was reused throughout the park for construction.
	Simple installation techniques used that frequently required surface application treatments. Board-and-batten construction are easy and fast to install. Using tar paper secured with battens provided a cheap, reasonably durable, and weatherproof cladding.
	Native stone veneered brick chimney and fireplace.
Exterior Finishes	Green colored paint on battens and building trim.
Outdoor Spaces	The ambiguity of the hierarchy of the east and west entrances.
	Stand-alone, open native stone CCC-era fireplace located north of the building.
	The CCC-era Naturalist's Office located north of the building.
	<i>Missing Historic Feature: semicircular path in front of the Technical Office, the flagpole, and boulders lining the Access Road.</i>
	<i>Missing Historic Feature: Flagpole originally located within semicircular path in front of the Technical Building.</i>

Civilian Conservation Corps Technical Building	
Interior Features – Layout Plan	The original layout of rooms is mostly intact, with changes made only to doors and windows.
	Original room sizes.
	Primary space is Room 102 with massive stone veneered brick fireplace and live-edge wood mantel, original to the structure, which suggests an important gathering space. The presence of such a permanent feature within the structure identifies the building as permanent and of higher status than surrounding CCC structures.
	Secondary space is Room 105, the workroom in the ell. Unlike other spaces, this has beadboard siding and a molded baseboard that may or may not date to CCC era occupation.
Interior – Materials (Flooring, Walls, and Ceilings)	Wood strip floors laid in an east-west direction in R101, R102, R105.
	Diagonal wood strip flooring in northeast corner of R102.
	Wood strip flooring laid in a north-south direction in R108.
	Chestnut board and batten walls in R101, R102.
	Beadboard walls in R105.
	Original vaulted ceiling height exposing the structural framing and roof slope to the base of the collar ties.
	Drywall and battens in the attic.
Interior Openings	Chestnut board-and-batten ceiling in attic above R102.
	All door openings. ⁴
	All window openings.
	All chimney openings.
	<i>Missing Historic Feature: Chimney openings in R103, R108.</i>
Doors	<i>Missing Historic Feature: Historic doorway openings located at W102.1, W102.2, W102.4.</i>
	All 5-panel interior doors.
	Board and batten, with “Z” brace interior door (D107.2).
	6-light over 2-panel exterior doors (D101.1, 105.3).
	2-light over 4-panel exterior door (D104.3).
Windows	4-panel exterior door (D105.2).
	All double-hung and fixed window sashes.
	Stone veneered brick fireplace with decorative arch stones and live-edge wood mantle.
	Original chestnut board-and-batten wood siding in the R101, R102.
	The use of 1-inch battens to cover seams and joints even at the floor and ceiling intersections.
Interior Features – Finishes	The use of simple, square edge trim at window and door openings.
	American Standard bathroom sink stamped “12-15-38.”
Interior Features – Fixtures	Exposed wiring and piping.
	Surface applied locks and hardware.
Interior Features – Hardware	

4 Exception: D108.2

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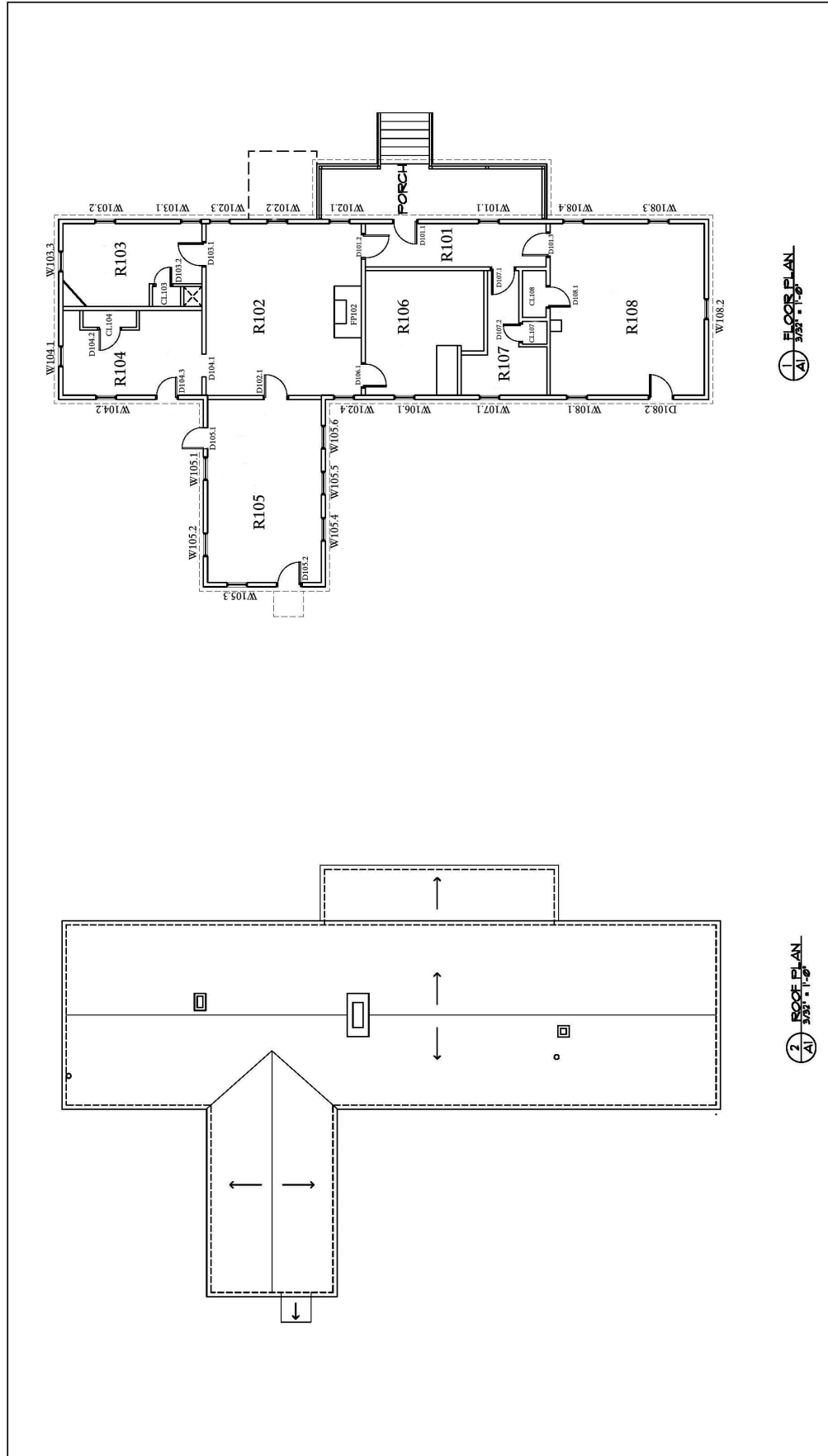
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APPENDICES

APPENDIX A: FLOOR PLAN



Existing Plans

SHEN Piney River
Maintenance Office - 9/11/2015

Drawn by Susan Hollister, Historic Architect

APPENDIX B: BUILDING ELEMENT TABLE

Doors		
		
Type: 1	Type: 2	Type: 3
Date: Unknown	Date: 1900-1950 ¹	Date: ca.1943
Location: R101, R105	Location: R101, R102, R103, R104, R106, R107, R108	Location: R103, R104
		
Type: 4	Type: 5	Type: 3
Date: ca.1943	Date: Unknown	Date: ca.1943
Location: R105, R108	Location: R107	Location: R103, R104

¹ Western Sash and Door Co., "Catalogue of Western Sash And Door Co.," (Kansas City, MO: 1899); Internet Archive, Building Technology Heritage Library. Accessed: September 10, 2020.

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Doorknobs		
	 	
Type: 1	Type: 2	Type: 3
Location: D101.1	Location: D101.2, D102.1, D103.1, D104.2, 107.1, D108.1	Location: D105.1
Date: Unknown	Date: ca.1935 ²	Date: ca.1935 ³

² The Yale and Towne Manufacturing Company, "Yale, Catalog No.29," (Stamford, CN: The Yale and Towne Manufacturing Company, 1937), 85. Internet Archive, Building Technology Heritage Library. Accessed September 10, 2020.

³ Ibid.

		
Type: 4	Type: 5	Type: 6
Date: ca.1943	Date: ca.1980	Date: ca.1993
Location: D103.2	Location: D103.1, D106.1	Location: D108.2
Door Hardware		
		
Type: 1	Type: 2	Type: 3
Location: D102.1	Location: D101.1, D105.1, D107.1	Location: D108.2
Date: Unknown	Date: ca.1943	Date: ca.1990
		
Type:4	Type: 5	Type: 6
Location: D104.2	Location: D107.2	Location: D103.2
Date: Unknown	Date: Unknown	Date: ca.1990

Window Sash		
		
Type: 1	Type: 2	Type: 3
Location: R101, R102, R103, R104 (single sash on W104.1), W105.3, R106, R107, R108	Location: W104.1	Location: W105.1, W105.2, W105.4, W105.5, W105.6
Date: ca.1945	Date: Unknown	Date: ca.1935

