# Consensus Determination of Eligibility for Walnut Canyon National Monument Headquarters Area Historic District National Park Service, Flagstaff Area National Monuments Coconino County, Arizona

### HISTORIC DISTRICT NAME

Walnut Canyon National Monument Headquarters Area

### ASSOCIATED HISTORIC CONTEXT

- Forest Service era conservation and administration of the Walnut Canyon area, 1904-1934
- Park Service conservation and administration of Walnut Canyon National Monument, including the two main infrastructure development phases and associated architectural styles in NPS history:
  - 1. Park Service Rustic architectural style and CCC/New Deal era developments throughout the National Park Service, 1933-1942
  - 2. Park Service Modern architectural style and Mission 66 developments throughout the National Park Service, 1942-1972

### PERIOD OF SIGNIFICANCE

1904-1967

### SUMMARY OF SIGNIFICANCE

The Walnut Canyon National Monument Headquarters Area Historic District (Walnut Canyon Historic District), originally known as the Walnut Canyon National Monument Headquarters Area, is comprised of multiple properties which represent the various phases of the early conservation and administrative development of the Walnut Canyon area. Both Forest Service and NPS administrative era properties are present. The NPS era component contains both Park Service Rustic style architecture constructed by the Civilian Conservation Corps (CCC) and Park Service Modern style architecture constructed as part of the Mission 66 program. The various elements of the district are connected by a network of paved and unpaved access roads. The Walnut Canyon Historic District is a contiguous unit, located within the monument boundary on the north side of Walnut Canyon, in a mixed conifer forest. The Walnut Canyon Historic District is accessed via Interstate 40, US Route 66, or Forest Road 303 (Figures 1-3).

The Walnut Canyon Historic District has historic significance at the national level as an excellent example of projects completed as part of the early conservation efforts in the United States as well as an excellent representation of the two major infrastructure development thrusts of the National Park Service, the New Deal of the 1930s-1940s and Mission 66 of the 1950s-1960s. The Forest Service era properties at Walnut Canyon National Monument are excellent examples of early conservation efforts in the United States that formed the basis for the concept and creation of the National Park Service.

The New Deal era properties at Walnut Canyon National Monument are defining examples of projects completed during the formative years of the National Park Service as part of the federal relief programs of the 1930s and early 1940s. This period of history is marked by the unprecedented intervention of the federal government in the national economy and welfare of its citizens. The federal government rapidly and effectively enacted legislation which brought about relief, recovery and reform of the bankrupt economy and depleted national resources and is generally considered one of the turning points in American history. The CCC/New Deal era

dates from 1933, when the CCC was established, to 1942, which represents the end of the CCC and the United States entrance into World War II.

Walnut Canyon National Monument's Mission 66 era properties are excellent examples of National Park Service Mission 66 planning and design. The largest multi-year construction event in NPS history, Mission 66 was a major effort by the NPS to upgrade the national parks to meet escalating demands in the post-World War II period, when the number of visitors to the parks dramatically increased. Initiated in 1956, the goal of the program was to substantially improve the parks by 1966, hence the name "Mission 66". Although Mission 66 officially extended from 1956-1966, the NPS has determined a 1942-1972 period of significance, a date range that covers the important design precedents of Mission 66 as well as later Mission 66 influenced resources (Allaback 2000). The Walnut Canyon Historic District period of significance ranges from 1904, when the US Forest Service took initial steps to protect the Walnut Canyon area, to 1967, when the last Mission 66 projects were completed at Walnut Canyon National Monument.

The Walnut Canyon Historic District is comprised of 18 separate properties that contribute to its historic significance and 13 non-contributing properties. Most of the contributing properties are in excellent condition and retain a high level of historic integrity, reflecting their original location, design, setting, materials, workmanship, feeling, and association.

The following presents a list of contributing resources for the Walnut Canyon Historic District:

## Forest Service era resources (1904-1934)

- 1. Cliffs Ranger Station (Building No. 13) and associated features
- 2. Ranger Ledge Trail and associated features
- 3. Ranger Cabin Road ("Old" 303)

### New Deal era resources (1938-1942)

- 4. Comfort Station (Building No. 12)
- 5. Residence No. 1 (Building No. 1)
- 6. Residence No. 2 (Building No. 2)
- 7. CCC entrance road
- 8. Visitor Center Parking Lot (south end) and associated features
- 9. Worm-rail boundary fence
- 10. Island Trail
- 11. Picnic Area and associated features

### Mission 66 era resources (1956-1967)

- 12. Residence No. 6 (Building No. 6)
- 13. Residence No. 7 (Building No. 7)
- 14. Utility Building (Building No. 25) and associated maintenance yard
- 15. Water Tower
- 16. Administrative Road System and associated features
- 17. Rim Trail

### Unassociated contributing resources

18. Generator Shed (Building No. 20) (1945)

## Significant Non-contributing resources (1939-1964)

19. Administration Building (Building No. 11)

The following presents a list of non-contributing resources in the immediate vicinity of the Walnut Canyon Historic District:

- WNPA (formerly SPMA) addition to VC (1996)
- WNPA shed (c. 1980s structure)
- Vehicle fuel tanks
- Maintenance carports
- Unpaved employee parking area near Mission 66 maintenance yard
- Cement trailer pad in between Residence No. 6 and the maintenance yard
- Detached garage for Residence No. 1
- Detached garage for Residence No. 2
- Entrance kiosk (c. 1980s)
- Miscellaneous utility boxes, pump houses
- Picnic area pullout along Approach Road

#### STATEMENT OF SIGNIFICANCE

The Walnut Canyon Historic District is significant under National Register <u>Criterion A</u> in the areas of Community Planning and Development [park], Conservation, Entertainment/ Recreation, Politics/Government, and Social History. The Ranger Cabin and other pre-NPS properties at the Walnut Canyon Historic District are some of the earliest examples of conservation efforts and recreation planning in the area and are also manifestations of early conservation efforts in the United States that formed the basis for the concept and creation of the National Park Service. The New Deal era properties at Walnut Canyon National Monument show a continuation of this conservation planning and are representative of not only the formative years of the National Park Service but also the achievements of the Civilian Conservation Corps, one of the most successful government relief programs of the New Deal era of the 1930s and early 1940s.

The Walnut Canyon Historic District properties are also important for their association with the Mission 66 program, which represented a significant change in NPS planning, management, and architecture. Within the NPS system, Mission 66 was an over-arching program that resulted in the construction of new housing, maintenance areas, entrance stations, roads, parking lots, comfort stations, campgrounds and concessionaire buildings, as well as the design of a new NPS arrowhead and uniform. The most significant expression of Mission 66 philosophy, however, was the visitor center, a term coined by NPS planners to describe a property type that combined multiple visitor and administrative functions into one complex. Mission 66 historian Sarah Allaback has called the visitor center "the centerpiece of a new era in planning for visitor services in American national parks," and a concept that greatly influenced the development of similar centers throughout state parks in the United States as well as national parks in the rest of the world (Allaback 2000:24).

The Walnut Canyon Historic District also meets National Register <u>Criterion C</u> for its importance in the areas of Architecture and Community Planning and Development, embodying distinct characteristics of two codified architectural styles, Park Service Rustic and Park Service Modern. Hallmarks of Park Service Rustic architecture include the subordination of architecture to the landscape through the use of natural materials and horizontal profiles. Park Service Rustic architecture became the predominant park architectural style during the formative era of the National Park Service and is embodied in numerous structures regarded today as quintessential park architecture. Park Service Modern architecture, as developed by Park

Service designers during the Mission 66 era, showcased new building materials and construction techniques available in the post-war era. Park Service Modern reinterpreted the relationship between the environment and the built environment and "became as influential in the history of American national and state park management as the Park Service Rustic style had been" (Allaback 2000:24).

Defining characteristics of the New Deal era/Park Service Rustic style buildings in the Walnut Canyon Historic District include 1) the use of locally procured materials such as stone and wood, resulting in a rustic look; 2) sensitivity to landscape preservation and harmonization with the environment, including the overall layout of the complex; and 3) excellent craftsmanship. Character-defining elements of the Mission 66/Park Service Modern buildings in the Walnut Canyon Historic District include 1) the design concept and overall layout of the facilities; 2) sensitivity to location; and 3) the use of modern building techniques with site sensitive, natural-looking exteriors that allowed the buildings to blend in with their surroundings.

In addition, the Walnut Canyon Historic District reflects several key elements of Mission 66 design. The Mission 66 era improvements at Walnut Canyon were planned and designed as part of the monument's Master Plan (NPS 1958). Defining characteristics of the Mission 66 properties at Walnut Canyon National Monument include the advent of modern architecture into the parks, a floor plan that segregates public areas from administrative areas, and the use of visible natural materials and facades that reflect the surrounding landscape.

The Walnut Canyon Historic District is also significant under <u>Criterion C</u> for possessing excellent examples of the work of a master; NPS architect Cecil Doty. Doty's NPS career spanned several decades, and his work includes designs in both Park Service Rustic style and Park Service Modern style, although he is best known for his work during the Mission 66 period. NPS historian Sarah Allaback (2000:215, 247, 220) notes that, during his career, "Doty worked with some of the Park Service's most famous designers and created many of the buildings park employees use every day. [Cecil] Doty influenced nearly every visitor center built" and was "instrumental in developing a modern visitor center design that would fulfill the programmatic demands of Mission 66". The Walnut Canyon Historic District contains three buildings designed by Doty that reflect key elements of Park Service Rustic style. While Doty did not create the final design for the Walnut Canyon Mission 66 Visitor Center addition, the original Administration and Museum Building onto which the addition was constructed is a Doty-designed building, and the Mission 66 constructed design did draw on preliminary conceptual drawings done by Doty. Doty also designed Residences 1 and 2.

Additionally, the Walnut Canyon Historic District has significance under <u>Criterion C</u> as representing the superior craftsmanship of the Civilian Conservation Corps.

Although the Walnut Canyon Historic District Mission 66 properties are less than 50 years old, they are eligible for inclusion in the National Register under <u>Criterion Consideration G</u> as exceptional examples of NPS Mission 66 planning and Park Service Modern architecture in Arizona and as having great importance in the history and development of Walnut Canyon National Monument.

The boundary of the Walnut Canyon Historic District (Figures 1-3) includes the Headquarters area as well as the footprint of the Mission 66 approach road (Route 2). The approach road begins at Interstate 40 and continues south for three miles, where it meets the Headquarters Area. The boundaries of the Headquarters Area are described as follows: The northern boundary is defined by the east-west alignment of the CCC worm-rail fence. The western

boundary of the district is defined by the western edge of the 1938 monument boundary. The eastern boundary of the area is defined by the eastern edge of the Rim Trail. The southern boundary of the area is defined by the southern end of the Island Trail.

### STATEMENT OF HISTORIC CONTEXT

### Rustic Architecture and Civilian Conservation Corps

Many people credit the original concept of a national park to artist George Catlin, who, in 1832, expressed his concerns about the "impact of America's westward expansion on Indian civilization, wildlife, and wilderness" (Mackintosh 1991:10). Catlin envisioned great areas of natural and cultural significance being preserved "by some great protecting policy of the government...in a magnificent park...a nation's park, containing man and beast, in all the wild and freshness of their nature's beauty!" (Catlin in Mackintosh 1991:10). Catlin's dream was partially realized when, in 1864, the United States Congress donated the Yosemite Valley to California for preservation as a state park. Because California did not have a state park system, this park was placed under the Department of the Interior. The nation's first national park followed eight years later, in 1872, with the Congressional designation of Yellowstone "as a public park or pleasuring-ground for the benefit and enjoyment of the people" (Mackintosh 1991:11).

Concern during this same period over the destruction of the nation's cultural resources also prompted both governmental and private action toward preservation. Many volunteer women's organizations, dedicated to the preservation of history and historic properties, were founded during this era, including the Mount Vernon Ladies' Association (founded 1853) and the Daughters of the American Revolution (founded 1890). Many later preservation organizations were modeled after the efforts of these early groups. Casa Grande Ruins in central Arizona, first preserved in 1889, became the first archeological property to be set aside as a national monument in 1892. The Antiquities Act (1906) was subsequently passed as an attempt to counteract the unregulated mining of artifacts and destruction of historic sites on federal land. It outlawed illegal excavation of archeological sites and established presidential authority to set aside "historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest" as national monuments (Antiquities Act in Mackintosh 1991:13).

By 1916 fourteen national parks and twenty-one national monuments, including Walnut Canyon National Monument, had been created but no federal agency yet existed to actively manage them. Congress remedied this problem later that year with the passing of the Organic Act, which created the National Park Service.

As the popularity of these new national parks and monuments grew, it became apparent to the fledgling National Park Service that facilities must be developed in order to accommodate the ever-increasing number of visitors as well as to provide park rangers with support infrastructure. It was recognized that a consistent, responsible master plan was needed to fulfill the demands for park development so as not to threaten the outstanding natural qualities for which each park had been designated (McClelland 1998).

In 1918, Secretary of the Interior Franklin Lane issued a policy for landscape preservation and harmonization that was to guide all park development and use. Concepts of landscape design, which were rooted in 19<sup>th</sup> century English garden tradition, became central to this park development. Using these principles of landscape design and drawing on popular Craftsman and Bungalow motifs, designs, and plans, newly hired National Park Service landscape architects, architects, and engineers worked together to design the national park infrastructure.

These designs endeavored to harmonize structures with their natural surroundings. Principles of informality and naturalism were applied to roads, bridges, trails, as well as buildings. Structures were designed and constructed to blend with the landscape by utilizing native material as well as a region's pioneering techniques. Structures took on unique character as construction followed and blended with the natural landform and character of each site and as native materials and pioneering techniques of a region were employed (McClelland 1998). By 1928, many of these practices were formulated and began to appear in the specifications for contracts and in building plans and drawings. Eventually termed rustic, this style of architecture, which became widely used in the forested national parks of the West, stressed native materials, irregular lines and horizontality. Ohio architect Albert Good defined rustic design as a style that "through the use of native materials in proper scale, and through avoidance of rigid, straight lines, and over-sophistication, gives the feeling of having been executed by pioneer craftsman with limited hand tools. It thus achieves sympathy with natural surroundings and with the past" (Good in McClelland 1998:434). The principles and philosophy of Rustic Design Style were published in the 1935 National Park Service publication Park Structures and Facilities (Good 1935). The publication was such an immediate success that it was sold out and reprinted three years later under the title Park and Recreation Structures (Good 1938).

These principles, rather than strict prototypes, guided Park Service architecture until the 1950s and the advent of Mission 66. Flexibility and creativity were encouraged. Each structure was constructed to fit into its environment. Native vegetation was to be preserved as much as possible and post-construction landscaping with native vegetation was developed to further blend structures in with their environment and to mask the disturbance caused by construction. Even color was a well planned element of architectural design. Structures incorporated colors that occurred in nature and were dominant in the immediate surroundings. For forested environments, warm browns and driftwood gray were encouraged. Green was discouraged because of the difficulty of correctly matching it to the surrounding environment (McClelland 1998). These design principles were part of the manifestation of what the National Park Service called the Master Plan, a cohesive advance planning process for the whole national park system that was to be implemented as time and money allowed.

Park development slowly continued over the next 25 years, but it was the Great Depression of the late 1920s and 1930s that stimulated a burst of development for the National Park Service. The year 1933 ushered in a new era in Park Service development, with the creation of the Civilian Conservation Corps, which would become the mechanism and the work force through which the National Park Service implemented its Master Plan.

In 1933, the Federal Government, under newly-elected President Franklin Delano Roosevelt, began a series of public works programs, his so-called New Deal, to conserve both the human and natural resources of the nation and ease high unemployment rates during the Great Depression.

Originally known as the Emergency Conservation Work program, the Civilian Conservation Corps was one of several New Deal programs set into action during Roosevelt's first 100 days in office. The program proposed to put 300,000 unemployed young men to work on rural conservation and forestry projects. From 1938 until 1942 hundreds of thousands of CCC manhours were spent replanting logged areas, building fire roads, constructing check dams, eradicating unwanted exotic plants, and fighting forest fires (Monroe 1986). Some of the crews were involved in a variety of construction projects including roads, utility systems, and buildings for state and federal government organizations. Architect Jonathan Monroe notes that "some of

the most significant and lasting [construction] projects resulted from the participation of the CCC in the development of public facilities in national and state parks and forests" (Monroe 1986:32).

Rustic style structures built by the CCC are characterized by a design related to the natural landscape and expressed in the use of materials natural to their setting and in scale and proportion to the physical features of their particular site. An important element in Rustic design was to create buildings which were subordinate to the setting, rather than an intrusion dominating the scene. The non-intrusive concept was carried out through the use of horizontal lines, low silhouette, organic forms and scale, proportion and texture of the building materials. Attention was paid to details on these structures, assuring harmony with the surroundings. Plans by the National Park Service required that attention be paid to details of all aspects of the park development, including culvert design, and trail and road patterns. The quality of craftsmanship in these structures was high, as were the CCC standards for work.

As an American architectural movement, the Rustic style is an extension largely confined to the period 1933-1942. Its beginnings are derived from Adirondack camp designs from the early Twentieth century and its end is marked by the World War II period. Such labor intensive projects were economically unfeasible and the necessary expertise in stone masonry and log building was no longer abundantly available during and after the war years.

### Mission 66

The second and largest-scale effort to upgrade the nation's parks came in the period following World War II. In 1949, NPS director Newton Drury described the parks as "victims of war." "Neglected since the New Deal era improvements of the 1930s," observes historian Allaback, "the national parks were in desperate need of funds for basic maintenance, not to mention protection from an increasing number of visitors" (Allaback 2000:1). In 1931, 3.5 million people visited the national parks; by 1948, that number had increased to almost 30 million. But, Allaback (2000:1) notes, however, that "park facilities remained essentially as they were before the war." Walnut Canyon National Monument alone experienced an increase in visitation from 13,526 people in 1938 to 58,800 people in 1958. Contributing to the growth in the number of visitors after World War II was the post-war economic boom and the ability of increasing number of Americans to buy personal automobiles, enabling them to visit their nation's treasures. Again, as in its early days, the National Park Service needed new facilities to accommodate the crowds, and it needed those facilities designed in a way that would best protect the parks from resource damage.

National Park Service Director Conrad Wirth first conceptualized the idea of modernizing parks through a massive, multi-year redevelopment program in February 1955. Wirth requested a decade of funding, rather than the traditional year-by-year funding requests, "thereby ensuring money for building projects that might last many years" (Allaback 2000:3). As envisioned by Wirth, "Mission 66 would allow the Park Service to repair and build roads, bridges and trails, hire additional employees, construct new facilities ranging from campsites to administration buildings, improve employee housing, and obtain land for future parks . . . to elevate the parks to modern standards of comfort and efficiency, as well as an attempt to conserve natural resources" (Allaback 2000:3). On January 27, 1956, Wirth introduced the Mission 66 concept to President Dwight Eisenhower and his cabinet, where it received immediate approval. The program was officially presented to the American public the following month (Allaback 2000).

At the heart of the new Mission 66 program was the concept of a visitor center. The visitor center would act as a "one-stop" service unit, equipped with an information desk, uniformed ranger, lobby exhibits, illustrated talks, museum, library, and restrooms. The center also

provided space for administrative offices, which were removed from the public areas and often accessed through a separate entrance. This type of design was a major departure from the earlier NPS concept of the decentralized "park village," where different park functions were spread out in individual, rustic-style buildings. In an efficient and economic combination of services, the Mission 66 visitor center "brought these activities together in a single, large building intended to serve as a control point for what planners called 'visitor flow,' as well as a more efficient means of serving far larger numbers of visitors and cars in a more concentrated area" (Allaback 2000:25). Like a shopping center, the visitor center made it possible for people to park their cars at a central point, and from there have access to a range of services and attractions. To accomplish the wide-ranging goals of Mission 66, the NPS master planning process utilized teams with representatives from the disciplines of architecture, landscape architecture, engineering, ecology, natural history resource management, archeology, history and other fields (Monroe 1986). In 1956, an NPS outline titled "Mission 66: To Provide Adequate Protection of the National Park System for Human Use" proposed that 100 new visitor centers would be needed. From an original request of \$786 million, Mission 66 eventually cost almost a billion dollars during its ten-year span, nearly four times the budget of the previous ten years (Wirth 1966).

In addition to a new strategy for management, Mission 66 also resulted in a distinctive new type of NPS architecture that reflected these new ideas - a style Allaback (2000) says can be described as Park Service Modern. Modern architecture was the prevalent architectural style in the postwar period, and Mission 66 brought that design ethic to the national parks. Stripped of most ornamentation, Modern architecture took advantage of new, inexpensive materials and laborsaving techniques. The flexibility of Modern architectural design also allowed for shapes and interior environments that could accommodate visitor flow, as well as offices and public spaces in the same building. By contrast, the Rustic style that the NPS had used throughout the 1920s and 1930s was too costly to build on a large scale, especially without the labor previously provided by the CCC, and, aesthetically, would result in new natural surroundings because of their picturesque design and use of natural materials. Park Service Modern notes Allaback (2000:23), "reinterpreted the long-standing commitment to 'harmonize' architecture with park landscapes," but accomplished that in a different way than rustic architecture. Rather than being designed as picturesque elements of the landscape, Mission 66 buildings were meant to be unobtrusive with their low horizontal profiles. In the same way, Mission 66 visitor centers were often constructed of stone and textured concrete that reduced visual contrasts with the landscape (Allaback 2000).

In addition to the need for public facilities such as visitor centers to accommodate the everincreasing crowds, Mission 66 also addressed the need for adequate, modern living quarters to accommodate essential operation, protection and administration employees. Mission 66 called for replacement and additional living quarters to be built in planned residential communities out of public view in the *Standard Plans for Employee Housing* (SPEH) (NPS 1957).

Employee housing constructed as part of the Mission 66 program reflects the postwar ethics and modern design principles and techniques embraced by the NPS. In order to maintain service-wide cohesiveness, design standards for Mission 66 residential construction were issued in 1957 in the NPS Standard Plans for Employee Housing (SPEH). This document featured a number of NPS-approved floor plans that were available for the construction of 2-and 3-bedroom houses, multiple unit housing, apartment buildings, and an employees' dormitory. Superintendents of the various units where housing was planned were responsible for choosing their preference of plan for construction as well as the ratio of 3- to 2-bedroom units and multiple units that suited the needs of their park. To maintain consistency, no

deviations from the plans were allowed, except where site conditions necessitated minor changes in the location of porches, garages, etc. The flexibility of this modern architecture, however, allowed the NPS to customize housing while avoiding costly individual site-designed homes. "The choice of exterior wall materials [was] determined by the availability of material in the area in which the house [was to be] erected, and to conform to the accepted design which [was] reflected in other structures in the vicinity" (NPS 1957).

The approved Mission 66 housing plans were predominantly of the Ranch Style of architecture that was so typical of the 1950s and 1960s. Although this widely-used architectural style has often been criticized as having "no style" because of its horizontal layout and lack of ornamental detail and dismissed by historians due to its prevalence throughout suburban America, many of the defining characteristics of Ranch style architecture are a reflection of the ideals and status of the nation at the time. The attached garages and carports typical of many Ranch style designs symbolized the increasing popularization of the automobile in post-war America. Their simple, open, one-story floor plans not only created an efficient use of space for growing families but also were a way to keep building costs low. Floor plans became less formal, with the dining room becoming an extension of the kitchen or living room. Extra space was "designed in" for all the "modern" appliances that people were acquiring, such as washing machines, dryers, refrigerators, ranges, and televisions.

# Walnut Canyon National Monument Headquarters Area - Background

### Forest Service Era

The various forces and concepts that shaped early conservation development in the United States are represented in the architectural legacy of the Walnut Canyon Historic District. Abandoned by its original inhabitants in the 1200s, the area around Walnut Canyon remained unknown to Anglos until the 1880s, when the arrival of the railroad in Flagstaff allowed more passage to the area. In the following years, several scientific expeditions were led to northern Arizona by the Smithsonian Institution. Locals, too, became more aware of the curiosities of Walnut Canyon, and, by the 1890s, commercial tours from Flagstaff had developed (Figure 4). At this time most tourists accessed the cliff dwellings via the Ranger Ledge Trail, a path on the North Rim that begins at Cliffs Ranger Station and follows a natural drainage into Walnut Canyon where it continues along a ledge in the Kaibab formation passing numerous cliff dwellings along the way. A typical Sunday afternoon excursion consisted of a picnic lunch followed by digging for artifacts within the smoke-covered alcove rooms. Over time, a grassroots movement to protect Walnut Canyon grew, partially due to the areas potential as a continued tourist attraction (Stein 1986).

By 1904 Walnut Canyon was under government control as part of the newly formed San Francisco Mountain Reserve (now Coconino National Forest). During the same year, as a means to protect the cliff dwellings at Walnut Canyon, William Henry Pierce was placed as forest ranger to oversee the cliff dwellings and to guide the increasing number of visitors to the ruins.

In 1915 during Pierce's tenure as ranger, Walnut Canyon became the focus of increased public attention when the Coconino County Board of Supervisors changed the route of the newly designated National Old Trails Highway (also called the Ocean to Ocean Highway), which ran from Washington, D.C. to Los Angeles, passing through Flagstaff along the way, to travel from Winona to Flagstaff through Walnut Canyon (Guthrie 1915). The movement to create a national monument quickly gained support from Forest Service officials, and Walnut Canyon received

national monument designation from President Woodrow Wilson later that same year, on November 30, 1915.

## Rustic Architecture and Civilian Conservation Corps

In early 1934 the administration and jurisdiction of Walnut Canyon National Monument was transferred to the National Park Service from the U.S. Forest Service. Shortly after being transferred to the Park Service, Walnut Canyon received its first full-time ranger, Paul Beaubien. Almost immediately after Beaubien's appointment, NPS engineers visited Walnut Canyon to lay the groundwork for future construction projects. By October 1934 engineering data had been assembled for approach roads, parking areas, trails, campgrounds, etc. for the development of both Walnut Canyon and Sunset Crater National Monuments (Beaubien 1934). Beaubien was doubtful, however, about these improvements, even stating in a monthly report that "it all sounds too good to be true" (Beaubien 1934). Engineering crews continued to visit Walnut Canyon throughout 1935, completing topographic maps for the area, which Beaubien called "the first important step toward any improvement here" (Beaubien 1934). The establishment of a CCC camp for Walnut Canyon National Monument was rumored as early as 1935, but this was not to be for several years.

In the first few years after the Park Service assumed control of Walnut Canyon National Monument, periodic small-scale, *ad hoc* repairs and improvements were completed, including maintenance of and improvements to what is now called the Island Trail. Jimmie Brewer, the first temporary NPS custodian of Walnut Canyon National Monument, wrote in a July 1934 report, "The trail from...[Observation] point to the ledge ruins, which Mr. Cox constructed, now needs minor repairs in some places where the concrete has crumbled" (Brewer 1934). Frank Cox had been the Coconino National Forest Ranger stationed at Walnut Canyon from the late 1920s until July 1934 when he was replaced by Brewer. Park Service improvements conducted during this era included widening the trail by building rock retaining walls and adding fill, removing boulders from the trail, and leveling and rerouting short portions of the trail around obstacles (Wetherill 1936).

In 1938, the boundaries of Walnut Canyon National Monument were more than doubled (from 960 to 1,920 acres) through a Presidential Proclamation by President Franklin D. Roosevelt. Because of these newly acquired lands, the NPS promised to allocate funds to update the monument facilities (Stein 1986). Also, in 1938, the NPS established Civilian Conservation Corps camp NM-5-A (later redesignated NP-12-A), also known as the Mount Elden CCC camp, at the base of Mount Elden four miles northwest of Walnut Canyon in Flagstaff. Consisting of 200 men from Pennsylvania, the Mount Elden camp provided the labor necessary for the infrastructure developments at the three national monuments in the Flagstaff area: Walnut Canyon, Sunset Crater Volcano, and Wupatki. Work began at Walnut Canyon National Monument in August 1938 shortly after the establishment of the Mount Elden camp.

When the CCC arrived at Walnut Canyon in 1938, the Walnut Canyon National Monument was accessed via the National Old Trails Highway which passed close by the Cliffs Ranger Station. From this road (Ranger Cabin Road/Old 303), main access to the cliff dwellings could be gained from the aforementioned Ranger Ledge Trail (Figures 5, 6). A secondary access road continued to the southeast from the Ranger Station and following the rim of the canyon (Figures 2, 3). This branch had been improved by the Forest Service and led to an informal parking area near a spot just below the rim that had become known as "Observation Point." From Observation Point, a somewhat improved but rough trail (now the Island Trail) descended into the canyon to a topographic feature (the "Island") separated from the rim by a small saddle of land, around which numerous cliff dwellings were located (Colton, 1932, Guthrie, 1916, NPS

Dwg NM-WAL, 2000). Since his assignment to Walnut Canyon National Monument in 1934, Custodian Beaubien had been concerned about these multiple routes of egress into the canyon, noting that they made it difficult to adequately contact visitors (Beaubien 1934).

In order to solve this problem, early NPS era development plans for the monument attempted to focus visitation around Observation Point. An Administration and Museum Building was planned for construction above Observation Point, with an employee housing area planned nearby, necessitating that the informal road system into the area be formalized. New sections of road were to be constructed by the Mount Elden CCC to connect with portions of the existing roads in order to create a formal approach road, while other sections of the existing road were to be rerouted, obliterated, or simply no longer used or maintained as public access routes (Hough 2002) (Dwg No. NM-WAL 8005) (Beaubien 1938-1951) (Figure 7).

The road that ran from the Cliffs Ranger Station southeast along the rim to the Observation Point area was planned to be improved as the formal approach road. Final plans (NPS Dwg NM-WAL 5352) for the monument approach road were drawn up by NPS Assistant Engineer J.H. Tovrea in September 1938 (Figure 8). Although preliminary plans aligned the new road with the existing road, engineering concerns deemed it necessary that the new alignment deviate from the existing road, joining Forest Road 303 farther to the east than did the existing road (Tovrea 1938). Construction of the new entrance road was completed by March 1941, and the existing road segment from the Ranger Cabin to the new entrance road was obliterated, shifting the visitor concentration to the Observation Point area and permanently bypassing the Cliffs Ranger Station and the Ranger Ledge Trail.

Another section of road to be obliterated and rerouted was "old" County Road 303 (Ranger Cabin Road), which meandered through the northern portion of the monument. Designated as CCC Job # 55-202, this project planned to reroute the county road farther north to provide greater administrative control of the road traffic through the monument as well as to lessen the impact to the area by woodcutters (Stevenson 1942). West of the monument boundary, the road was rerouted to the north near the northern boundary of the monument. The approximately one-mile stretch of the "new" (current alignment) County Road 303 running eastwest at the northern edge of the monument (currently outside monument boundary and therefore non-contributing for the purposes of this historic district) was constructed by the CCC between 1941 and 1942. The remainder of the 303 rerouting to the east and west of the monument was completed by Coconino County. A short connector road was then constructed to join the entrance road with "new" County Road 303 (Figures 9, 10, 11). While some portions of "old 303" within the monument boundary were obliterated as planned, others were preserved and remain in use today as service roads (Figures 12, 13). This new road system constructed by the CCC remained in use until 1956, when the current paved approach road (Route 2) was constructed.

In addition to formalizing the road system, infrastructure development at Walnut Canyon included the construction of new public use and administrative/service facilities. Architectural plans for an Administration and Museum Building were drawn up in November 1938 by NPS Architect Cecil Doty, following a visit to Walnut Canyon earlier in the year. Detail plans for the building were completed by Cecil Doty in January 1939 (Dwg No. NM-WAL 2029-A) (Beaubien 1938) (Figures 14, 15). This building was to serve as an initial contact point for visitors to the canyon and would replace the existing, inadequate Cliffs Ranger Station, which for years had served doubly as the initial contact with visitors as well as housing for monument Custodian (Superintendent). The design, to be located above Observation Point on the rim of Walnut Canyon, included both office and exhibit space. Low-profile and constructed of locally-quarried

stone and timbers, the Administration Building design adhered to Park Service Rustic style principles. Site excavation of the Administration Building began in late 1938 by the Mt. Elden CCC crew, and work continued on the Administration Building until late 1940.

The flexibility and innovativeness of Park Service Rustic style allowed efficient and harmonious designs to be used repeatedly in various park settings. Such was the case with the Walnut Canyon Comfort Station, located a short distance from the Walnut Canyon Visitor Center. The Walnut Canyon Comfort Station design is similar to the 1928 design for the Union Point Comfort Station at Yosemite National Park, which served as a prototype design for many New Deal era duplex comfort facilities (McClelland 1998). Plans for the Walnut Canyon Comfort Station were drawn up by NPS Architect K. Saunders in July 1940 (Dwg. No. NM-WAL 2033) (Figure 16). Construction of the Comfort Station by the Mount Elden CCC crew began in mid to late 1940, after the completion of the Mt. Elden pipeline (also by the Mount Elden CCC), which was to be the water supply for the monument (Beaubien 1940).

Architectural plans for two Rustic style employee residences, Residence No. 1 and No. 2, including plot plans for the housing loop road, were drawn up by Cecil Doty in November 1938. Minor changes and detail drawings were designed by NPS Branch of Plans and Design Architect Trent Thomas (NPS Dwg NM- WAL 2025, 2032) (Figures 17-20). Construction began on Residence No. 2 in late 1938 and Residence No. 1 in 1939. Construction and finish work on the residences, including post-construction landscaping, continued by the Mt. Elden CCC crew until late 1940. Residence No. 1 received its first occupant, Custodian Paul Beaubien, in July 1941.

The Mount Elden CCC also conducted the first formalized, large scale improvements to the Island Trail. Although a rough trail existed in 1938 when the CCC arrived, it was described as being narrow, very steep at some locations and also dangerous (Richey 1942). Beginning in the fall of 1938, under the direction of CCC Project Superintendent Bill Stevenson, the newly formed Mount Elden CCC crew conducted trail work to improve the Island Trail. Designated as Job 13-206, "Improve Ruins Trails", CCC improvements to the trail included widening the existing trail and constructing numerous steps of locally-quarried stone (Richey 1942a). When the Mount Elden CCC camp was finally disbanded in March 1942, Job 13-206 was reported as being 80% complete.

Fencing of the monument boundaries was also a priority. Local ranchers' cattle had roamed freely in the canyon since the late 1800s, causing damage to many cliff dwelling walls over the years. In 1937 Beaubien convinced the local cattlemen to fence the western boundary of the monument, from the canyon rim to the railroad (Baldwin and Bremer 1986). In September 1938, plot plans for a split-rail, worm rail boundary fence for the northern boundary of the western portion of the monument were drawn up by NPS Engineer AC Kuehl (NPS Dwg NM-WAL 2028) (Figure 21). This project was designated as CCC Job 10-131 (Richey 1942b). The original plans called for the fence to run 1100 rods (approximately 3.3 miles) along the northern portions of the 1938 monument boundary. Work on the fence began in January 1940 with the stockpiling of timber rails by the Mount Elden CCC crew (Beaubien 1940). Work on the split-rail fence by the CCC was discontinued in 1941 as other projects were deemed higher priority (Baldwin and Bremer 1986, CCC Job 11-139 Completion Record [sewer]). In March 1942 the Mount Elden CCC camp was disbanded, and the rail fence project was listed as 75% complete, or 620 rods (1.86 miles) in length. Due to the unanticipated departure of the CCC, the remainder of the fence, which was out of public view, was completed by per diem laborers with surplus CCC wire.

From the departure of the CCC until the advent of Mission 66, only minor repairs and/or improvements occurred to the facilities at Walnut Canyon. The Generator House, located between Residences No. 1 and No. 2, was constructed by Walnut Canyon National Monument Custodian George Baxter three years after the CCC crew left Walnut Canyon in 1945, using surplus quarried limestone left by the CCC. Routine maintenance as well as several improvement projects was completed on the Island Trail during this period. The existing stone water fountains in the picnic area are thought to date from this period as well, but no date can be confirmed.

### Mission 66

The second major phase infrastructure development at Walnut Canyon National Monument came as part of the Mission 66 program. The Park Service addressed the serious need to update the existing facilities at the monument. Similar to many other NPS areas, visitation at Walnut Canyon National Monument tripled within a decade of World War II. It had been recognized as early as 1945 that the Administration Building, only five years old at the time, was already too small to adequately accommodate visitors and staff needs. Preliminary plans for Additions and Alterations to the Administration Building, including a Work Room with storage and a Visitor's Lounge were drawn up in late 1945 by NPS Architect Raymond Lovelady, but these were never realized (NPS Dwg. NM-WAL 2029-C) (NPS 1948a) (Figure 22). Two additional employee residences and an apartment building were also proposed as part of the 1948 Development Outline for the monument (NPS Dwg NM-WAL 2103-C) (NPS 1948a).

The first Mission 66-era improvement to be completed was the new paved approach road, designated Route 2. Plans to construct a new approach road directly from Route 66 to the monument had been proposed in the 1948 Master Plan for Walnut Canyon (NPS Dwg NM-WAL 2102z1) (NPS 1948b) (Figure 23). This proposal planned an entrance road to connect Route 66 with the existing monument entrance at Forest Road 303. By 1953, plans for a three-mile paved approach road located to the east of the existing monument entrance at Forest Road 303 had been approved. This road was to run north-south from Route 66, through Coconino National Forest, directly to the monument headquarters area, completely bypassing the CCCera entrance road. An expanded 85-car parking lot would incorporate the CCC-era Administration Building parking lot and connect it and the housing area to the new road. The southernmost portion of the existing CCC-era lot was to be retained to the greatest extent possible, including the CCC limestone masonry curbing. Any existing CCC curbing that was necessary to remove was salvaged and reused in the new curbing. Existing vegetation and trees within the island of the CCC-era parking area as well as in the proposed island of the new parking lot were retained (NPS Dwg NM-WAL 3102) (Figure 24). Park Service engineers surveyed the location of the center line of the proposed road in April 1953. Care was taken in choosing the location of the road so as to minimize the amount of heavy construction and drainage that was necessary as well as to leave the landscape as undisturbed as possible (NPS 1948b). The route was sited so that a minimum of mature ponderosa pines had to be removed, and a significant right-of-way was established on either side of the road in order to preserve the "natural and scenic beauty" and to secure it from "unsightly or unauthorized commercial development".

Bids for this road construction project, designated as Project 2-A, "Grading and Bituminous Surfacing, Route 2, Walnut Canyon Approach Road", opened in May 1956, and the contract was awarded to Peter Kiewit Sons' Co., of Phoenix, Arizona (NPS files). Road construction was completed by 1957 (Figures 25, 26).

Walnut Canyon experienced a "rapid increase in travel" following the completion of the new paved approach road in 1956, with visitation (then at 60,000 visitors annually) expected to reach 100,000 people by 1970 (NPS files). Mission 66 planners addressed the inadequacy of the existing infrastructure development, citing that "development at Walnut Canyon, while adequate during the 'dirt road days,' has fallen behind and much is needed to keep pace with the increased use of the area by the American people" (NPS n.d.).

Needed improvements to both public use and service facilities at the monument were outlined in a 1956 Mission 66 Prospectus (NPS 1956). Proposed improvements to public use facilities included enlargement of the visitor center, further expansion of the parking lot, improvement of the trail system, and the construction of an entrance station. Service facilities improvements included boundary fencing, improvement of the utility systems, and the construction of a utility building and employee housing. Costs for the proposed physical improvements were estimated at \$357,200 with over \$56,000 allotted for Roads and Trails as well as \$276,400 for Buildings and Utilities projects (NPS 1956). Mission 66 improvements were planned to handle the expected visitor increases for years to come. Approval of the Walnut Canyon National Monument Prospectus was granted, with minor revisions, in May 1957 (Wirth 1957).

Drawings during the initial stages of planning for Mission 66 improvements included five single-story, single-family residences and one four-unit, single-story apartment building. These new residences were to be located to the north of the existing CCC-era residences (Nos. 1 and 2). An asphalt spur road was also planned to connect this new housing with the existing CCC-era housing loop road. Over the course of the planning phase, developments were scaled down several times, first reducing the number of single family homes to be initially constructed to two, and abandoning the plans for the apartment complex.

Plot and floor plans for the two new residences were drawn up by the San Francisco located Western Office of Design and Construction (WODC) in 1959. These preliminary plans were based on those approved in the 1957 *Standard Plans for Employee Housing* (NPS 1957). The 1959 floor plan (NPS Dwg NM-WAL 3112) proposed for these residences differs slightly from the interior layout that was ultimately constructed. The floor plan that was ultimately constructed is that of "Plan B, Three Bedroom Standard" (NPS Dwg. No. PG-3000), which was approved by NPS Director Conrad Wirth in February 1960 (Figure 27).

Construction of a Utility Building (NPS Dwg NM-WAL 3113) (Figure 28) was also planned to replace various existing and former utility and maintenance buildings, including one that had been destroyed by fire in 1957 (NPS 1958).

Plans and specifications for the employee residences and the Utility Building were finalized by the WODC and sent to the Regional Director in June 1960. Bids for contract were opened on July 14, 1960. The contract for construction of a Utility Building at Walnut Canyon Headquarters Area (Contract No. 14-10-1033-656) was awarded to the lowest bidder, Frontier Construction Company of Tucson, Arizona, in July 1960 in the amount of \$25,600.00. Work began on the project on August 8, 1960 and ended November 28, 1960. Although construction was completed in November, the building could not be utilized until August 1961, with the completion of the water and sewer line improvements (NPS files).

In July 1960 the construction contract for the residences (Contract No. 14-10-0333-655) was awarded to low bidder Clyde V. Hutcheson, Contractor, of Flagstaff, Arizona, in the amount of \$36,487.00. In August 1960 the proposed housing sites were staked out by WODC engineers, and salvage excavations were subsequently conducted on two archeological sites that were to

be destroyed by the construction of Residence No. 7 and the residential spur road. Construction commenced shortly after completion of the excavations with site clearing and excavation for footings (NPS files).

Work on the residences continued until February 1961, when final inspections were made by Inspector Frank Huntsman and Contracting Officer and Walnut Canyon National Monument Superintendent Meredith Guillet. Completion of the water and sewer connections did not permit the occupancy of the buildings until August 1961, however. Seeding, planting, and other post-construction landscaping was completed as a day labor project by July 1962. Several work change orders were approved and added to the contract amount, bringing the final total to \$36,567.00 (NPS 1962).

Plans and specifications for the Residential and Utility Area Spur Road project were prepared by the WODC. Bids for this project opened in April 1961, and the contract was awarded in the amount of \$11,215.90 to the Tucson Concrete Pipe Company of Phoenix, Arizona, in May (Contract No. 14-10-0333-772). Asphalt paving of the spur road to the residences and the utility area commenced shortly thereafter and was completed in October 1961. Changes to the original contract amount included costs for constructing concrete walks at the two residences and costs associated with lowering the road bed to aid with drainage, bringing the total project cost to \$11,654.92 (NPS 1962).

Enlargement of the Administration Building was planned as part of Walnut Canyon's Mission 66 improvements. Although the Mission 66 addition to the building is attributed to principal NPS Mission 66 architect Cecil Doty, further research has determined that the final, constructed design for the Walnut Canyon Visitor Center Addition was not designed by Cecil Doty, but rather another Park Service architect, Philip L. Romigh. Even though Doty had designed the existing building, he recalled that visit in a 1985 interview and remembered "talking about how you could do this and you could do that [with a new building]" (Harrison 1985). Doty drew up a preliminary design (NPS Dwg NM-WAL 2029F) (Figure 29) for a visitor center addition to the Walnut Canyon Administration Building in August 1962. This design had a horizontal profile and incorporated a lobby, exhibit and office space, and a glassed-in view lobby. A revised preliminary drawing (NPS Dwg NM-WAL 2029G) (Figure 30) was completed by WODC Architect Philip L. Romigh in March 1963 and approved by Regional Director Thomas Allen in April 1963. Romigh's design was inspired by Doty's 1962 design, as evidenced by the similar rough footprint and traffic flow, and includes many of the same characteristic elements of Mission 66 design principles including a viewing porch. However, Romigh's design differs significantly from Doty's in several aspects. While Doty's design is horizontal, Romigh designed a more dramatic two-level plan. The interior arrangement of the public and administrative areas also varies between Doty and Romigh's designs.

Designed to incorporate Doty's original 1938 Administration Building, Romigh's Mission 66 Visitor Center addition is a unique product of evolving NPS management strategies in the postwar era. The building reflects the key elements of Mission 66 design, including the architectural design and function of the building itself. Designed in Park Service Modern style, the building blends modern materials in the International style with natural materials that harmonize the building with the surrounding landscape and earlier constructed Park Service Rustic buildings. The Visitor Center addition adheres to the Mission 66 design philosophy that called for locating the visitor center near the park's major resource, using terraces and window walls to provide significant views of natural features and encouraging visitors to use the adjacent overlook and trail.

Bids for the Visitor Center Addition and Utilities improvement project (Project No. WAL-W 467) were opened in September, 1963. The Frontier Construction Company, of Tucson, Arizona, was determined to be the lowest bidder. Once project financing was secured, the construction contract (No. 14-10-0333-1127) was awarded in late September 1963; in the amount of \$120,405.00 (NPS 1963a). The Visitor Center addition was started in late October 1963 and was completed a year later, in early October 1964.

Trail improvements and construction were also planned as part of the Mission 66 improvements. Plans for Island Trail improvements were drawn up by the NPS Office of Design and Construction in February 1965 (NPS Dwg NM-WAL 3122, sheets 1-2) (Figures 31, 32). These improvements focused on creating a safer trail for the increasing number of visitors coming to Walnut Canyon. Specific improvements included widening the trail in constricted areas, replacing the trail surface, and installing handrails. Beginning in 1966, most of the existing stone steps were replaced with a series of poured concrete staircases and swept concrete landings.

Plans for the construction of a new "Rim Trail" were also included in the development plans for Mission 66. A nature trail along the north rim of Walnut Canyon, east of the Visitor Center, had been proposed as early as 1941 (NPS Dwg NM-WAL 2101A). This idea of constructing an additional trail to assist in dispersing visitors as well as to provide a less strenuous option for those visitors unable to walk the Island Trail continued throughout the years into the Mission 66 era. Working drawings for the Rim Trail were drawn up by the Office of Design and Construction in February 1966 (NPS Dwg NM-WAL 3122, sheet 3). The proposed ½ mile trail was designed in order to incorporate the existing path to the comfort station and picnic/lunch area as well as a recently excavated pueblo (WACA 85A-90). The plans also included a canyon overlook at the end of the trail. Construction of the Rim Trail was completed by the end of 1967 with "As Constructed" drawings provided (NPS Dwg NM-WAL 3122A, sheet 3) (Figure 33).

The major public use and administrative facilities in use today at Walnut Canyon have changed little since the Mission 66 era. Visitors to Walnut Canyon today arrive at the monument from the same road (Route 2) that was constructed in 1956. The Walnut Canyon Visitor Center still remains the heart of both visitor and administrative activities. The Island and Rim Trails continue to be used by thousands of visitors each year. The CCC and Mission 66-era residences are still in use as residences or employee office space, and the Utility Building continues to function as the monument's maintenance facility. The Ranger Cabin and Ranger Ledge Trail are visited and interpreted specifically for their historic value as part of Walnut Canyon National Monument's interpretive program.

### **DESCRIPTION**

### Forest Service era resources (1904-1934)

<u>1) Cliffs Ranger Station and associated features (Forest Service Era) – Original Design</u> (Ranger Cabin, Old Headquarters, Building No. 13, FMSS #46810, WACA 85A-107, LCS ID #007235)

The Cliffs Ranger Station was originally constructed by the San Francisco Mountain Reserve (now Coconino National Forest) in approximately 1904 with logs from an abandoned logging camp (Figure 34) with two additions built in 1907 and during the late 1910s or early 1920s. The entire structure is a four-room, single story, long, narrow log cabin measuring approximately 5 meters southwest-northeast by 15 meters northwest-southeast (16 x 49 ft.). The walls are

constructed with peeled round pine logs between 3½" and 7" in diameter (Figure 35). The logs are stacked 11 courses high and held together with hog-trough and saddle-notched corners. The gaps between logs are chinked with small wood pieces and chicken wire covered with a daubing varying in width between 1½" and 6." The original cabin (Room 1) was a one-room, relatively square log structure with hog-trough corners. The steeply pitched roof was covered with wood shingles. The cabin originally had a centered door and a single, four-light casement window on the north elevation. The original cabin had gable ends of vertical cedar planks, which are still intact and visible from the adjacent rooms.

Several subsequent building episodes during the cabin's period of occupation expanded it to its current layout and dimensions (WACA Ranger Cabin Archives) (Figures 36, 37). Discrepancies exist regarding the exact construction dates for the additions; however, the basic construction sequence is as follows: The first expansion was a kitchen (Room 4) with a small covered porch. Room 4 was constructed on the south side of Room 1 by 1907. The kitchen porch, located on the north (front) elevation of the cabin, incorporates a living juniper into its design, with the tree extending through and above the porch roof. The second addition, dating to the late 1910s or early 1920s, consisted of a large room (now Rooms 2 and 3) added to the north side of the original cabin. At a later date, this room was divided into its current arrangement of two rooms. The total area of the structure is 694 sq ft.

Roof pediments are encased with rough sawn, vertically applied cedar boards. The interior walls are made of a painted celotex-type material. The ceiling is headed and painted white (Figure 38), and the floor appears to be made of tongue and groove lumber and was once oiled.

Defining characteristics of the cabin include: hog trough and saddle notch construction, wood shake roof, local materials, and the juniper through porch roof.

The area around the cabin contains several features associated with its historical use as a residence and visitor contact point. Following is a description of the contributing features of the cabin:

- Terraced rock garden Adjacent to the eastern end of the cabin is a semi-circular, rock terraced area presumably used as a garden (Figure 39). A 1935 map labels this area as a "cactus garden" (NPS Dwg NM-WAL 4938, sheet 14). The diameter of the garden measures approximately 9 meters, and it extends approximately 10 meters from the cabin. The garden area follows the natural slope of the land and is supported by a retaining wall with two to four stone courses. Contained within the garden area are three circular flower beds, a bird feeder, and an underground cistern.
- Cistern An underground cistern is located within the terraced garden area (Figures 40, 41).
- Birdbath Located within the terraced garden area is a concrete mortar and rock birdbath (Figure 42). This feature is roughly square, measuring 1.2 meters by 1.1 meters at the base and stands approximately 0.9 meters high. Atop the feature is a shallow concrete basin that holds water. NPS Custodian Paul Beaubien mentioned constructing a net trap over the birdbath to trap and band birds for tracking in the canyon (Beaubien 1935, 1936).
- Outhouse (LCS ID #068219) A one-hole wooden board-sided outhouse is located approximately 13 meters southeast of the cabin (Figure 43). The outhouse measures 1.23 meters wide by 1.3 meters long. Its roof is slanted toward the back. A double-hinged door, no longer attached, is located nearby. Surrounding the outhouse are

- small, circular depressions that probably represent periodic moves of the outhouse as it became too full.
- Refuse burner— Roughly 100 meters east of the cabin there is a rock-lined trapezoidal trough 1.6 meters long, 33 centimeters on the northeast end and 87 centimeters on the southwest end, filled with historic trash. Historic documentation suggests that this feature was a refuse burner (Stein 1985; Guthrie 1915; Guthrie 1916).
- Apple tree A single apple tree (heirloom variety apple) is located a short distance in front of the cabin (Figures 3, 44).
- Trash scatters Several historic trash scatters, dating to the cabin's period of use, are located in the vicinity of the cabin (Figure 3).

# <u>Cliffs Ranger Station and associated features – Changes and Condition</u>

Today, the Ranger Cabin retains its original form and outline as well as a substantial portion of its original fabric, although it is currently considered to be in poor condition. The setting remains largely unaltered since the cabin's original period of use, and many of the historic features associated with the cabin are intact. Following are descriptions of noteworthy changes to the building since its construction:

- Stone fireplace and chimney A stone fireplace and chimney located on the south (rear) wall of the cabin was removed during the cabin's period of use, and a window was installed in the same location. It is not know when the chimney was removed.
- <u>Boardwalk</u>- A raised wooden/concrete walkway running from the front gate to the cabin was removed at an unknown date.
- <u>Fencing</u>- A three-strand wire perimeter fence and gate were removed at an unknown date.
- <u>Flagpole</u>- Historic references suggest that a flagpole, located on the north (front) side of the cabin, was removed sometime after 1938 (Figure 37).
- <u>Barn/garage</u>- A barn/garage structure, located a short distance southwest of the cabin, near where the outhouse currently stands, was present until at least 1935 (NPS Dwg NM-WAL 4938z1, sheet 17) (Figure 45).
- <u>Emergency Stabilization</u> In 1991, emergency stabilization work was performed in an attempt to improve the cabin's structural integrity and to create a water-tight building envelope. Deteriorated original materials were replaced in-kind. Specific tasks accomplished as part of the stabilization project include:
  - Replacing deteriorated wood shingle roof, including metal flashing and an underlayer of roofing felt for moisture barrier
  - o Replacing missing gutters and re-hanging for effective drainage
  - o Installing pest-proof barrier from sill log to grade on interior of stone foundation
  - Rebuilding deteriorated walls with salvaged and new peeled pine logs
  - Replacing deteriorated sill logs
  - o Installing cross ties with through-bolt connections to existing rafter pairs
  - o Installing strap connections between rafters and logs
  - o Installing angled brackets which are not visible in wall interior corners
  - o Installing vertical bracing straps (not visible) for interior walls
  - Replacing deteriorated rim joists and sleeper logs to correct center crowning of interior floors
  - o Removing, repairing, and reinstalling existing windows and doors
  - Repairing and/or replacing chinking

- <u>Interior</u>- Most of the original furnishings are gone, however, two white built in cupboards are still in the kitchen. These cupboards are likely the same ones built in conjunction with the kitchen expansion. Also, the wood burning stove that was in Room 2 was removed due to the possibility of theft. It is now stored at the curation facility located at Walnut Canyon.
- <u>Apple Tree</u> In 1997, the apple tree was trimmed by Pam Meck (Project FLAG-97-999f). The tree was also trimmed by Deborah Decovison on 8/4/2009.

Until 1940, when Residence No. 1 was completed, the cabin was the sole caretaker residence at Walnut Canyon and was lived in successively by all the caretakers from the Forest Service era as well as NPS Custodian Paul Beaubien. From 1940 through 1959, the cabin was used as a residence for seasonal NPS employees. The cabin then served as a storage facility until 1969, and it has remained vacant since that time (WACA Ranger Cabin archives).

A National Register of Historic Places nomination for the cabin was completed by National Park Service Historian F. Ross Holland, Jr. in 1972, and the cabin was officially entered into the National Register on March 31, 1975, at the local level of significance. This nomination referred to the cabin as "Old Headquarters" and encompassed an area 200 feet out in each cardinal direction from the cabin. Several of the original features associated with the cabin were mentioned in the nomination, including the cistern, terraced area, birdbath, and flower beds; however, these features were not described in detail. The interior of the cabin was not mentioned. In his nomination, Holland described the cabin as being in very bad condition and in need of exterior restoration. The inclusion of the cabin as part of the Walnut Canyon National Monument Headquarters District will supercede the 1975 nomination.

Holland's information was subsequently incorporated into a Cultural Resources Project Statement, which listed three primary needs for the cabin: a concrete or masonry foundation, chinking and grouting, and chemical preservative for the logs. Also recommended by Holland was the completion of a Historic Structures Report (HSR) to document the cabin before it completely deteriorated (Baldwin 1991).

In December 1975, a cost estimate, restoration proposal, and Classified Structures Field Inventory Report were prepared by Bob Cox of the NPS Western Region. The project, described as extensive, proposed replacing over 50% of the cabin's original fabric (Baldwin 1991).

In 1976, the Park Service "determined that the preservation needs [for the cabin] were extensive and cost prohibitive and declined to undertake the restoration of the cabin", which they stated would also involve alteration of the structure (NPS 1976a). In a letter to Dennis McCarthy, Director of [the] Arizona State Parks Board, the Western Region of [the] National Park Service decided not to undertake the restoration of the Old Headquarters Cabin, in favor of stabilizing 31 prehistoric sites that were determined significant at the national level of significance. Applying the Criterion of Adverse Effect under 36 CFR 800.9(d), they determined that this course of action would have an adverse effect resulting in the eventual loss of the structure. They proposed to mitigate this adverse effect by completing a Historic American Building Survey (HABS) on the cabin. They felt that the completion of the HABS recording, although not proposed by their office as mitigation, exercised a management option of allowing the structure to deteriorate and melt into the landscape. The HABS documentation was never started and no work was done on the cabin other than to reinforce the walls" (Baldwin 1991) through a system of "X" braces inside the cabin.

In June 1983, Western Region Historical Architect Richard A. Borjes visited the Ranger Cabin. During this visit, Borjes determined that the "cabin's structural integrity had been lost" and that the "cabin was past restoring because so much of the original historic fabric would [need to be] replaced" (Baldwin 1991).

In 1987, the cabin and its problems were once again addressed, this time as part of the 1987 Resource Management Plan. Three options with increasing levels of intervention were proposed: 1) emergency stabilization, 2) preparation of a historic structure preservation guide, and 3) comprehensive stabilization. Two funding proposals, one for emergency stabilization and one for comprehensive stabilization, were subsequently entered into the NPS funding cycle in 1987 and 1989, respectively (Baldwin 1991).

In 1989 and 1990, Craig Kenkel, the new Western Region Historical Architect, "re-assessed the condition and stabilization needs of the cabin." Kenkel's evaluation was further supported by a subsequent visit by Joe Gallagher, log cabin specialist for the US Forest Service. Their assessments deemed that more of the building's original fabric could be retained than originally estimated by Borjes in 1983, and a work plan for emergency stabilization of the cabin was then completed.

The emergency stabilization project was completed at the Ranger Cabin through a joint effort of the NPS, USFS, and the Arizona Conservation Corps (Baldwin 1991). No work has been done at cabin since then.

Currently, work has been conducted to develop a Scope-of-Work to hire a contractor to complete a Historic Structure Report (HSR) and a Historic Structure Preservation Guide (HSPG) during FY2010. These documents will guide future rehabilitation and long-term preservation efforts.

2) Ranger Ledge Trail and associated features (Forest Service Era) – Original Design (Old Trail, Cabin Trail, Ranger Trail, FMSS #48488 WACA 85A-174, LCS ID # 068199)
The Ranger Ledge Trail is referred to by several names throughout NPS archives and historic documents, including the Cabin Trail, Old Trail, and Ranger Trail. It is an unpaved, approximately 0.6 mile trail which originates near the Ranger Cabin, at the mouth of Ranger Canyon. A wooden plank bridge (WACA 85A-174) constructed of sawn lumber spans a wash in the upper part of the Ranger Canyon (Figure 46). It continues down Ranger Canyon and onto a ledge in the Kaibab formation on the north-slope of Walnut Canyon where numerous cliff dwellings are located. The trail continues east along this ledge until terminating near the present day Island Trail loop. When the Cliffs Ranger Station was constructed at the mouth of Ranger Canyon in 1904, its location was chosen because the Ranger Canyon/Ledge Trail was already a well-established route to the cliff dwellings. The path was probably first constructed by the Sinagua people 750 years ago to take advantage of the natural descent of Ranger Canyon into Walnut Canyon (Hough 2002). The trail was often used by cattle in subsequent years much to the detriment of the ruins (Baldwin 1991; Stein 1986).

While the canyon's first explorers and visitors likely used the Ranger Ledge Trail it was not until after 1890 that tourist visitation of the cliff dwellings on the north rim increased dramatically with concomitant use of the Ledge Trail. Commercialization of visitation at Walnut Canyon by companies like Grand Canyon Stage Line and Babbitt Livery saw the establishment of several trails deemed safe for tourists one being the Ledge Trail. While early accounts of visitation to Walnut Canyon do not mention the Ledge Trail (such accounts focus on the cliff dwellings and artifact collecting not the means by which the ruins were reached), photographic evidence from

the 1890s and 1900s demonstrates that the path was used heavily by visitors during this period and was the main trail to the cliff dwellings (Figures 47, 48). By 1900 thousands of tourists were using the trail every year and many inscribed their names in the rock and ruins along the path. The earliest recorded inscription dates to 1902 (Baldwin 2007; Hough 2002; Stein 1986). Basic improvements like retaining walls, water bars and markers probably date to this early period of tourist use (Hough 2002).

### Ranger Ledge Trail – Changes and Condition

The establishment of the San Francisco Mountain Reserve by the Department of the Interior in 1904 heralded a new era of Forest Service administration at Walnut Canyon. William Pierce was assigned to a ranger station at the head of Ranger Ledge Trail to oversee visitation to the cliff dwellings. Construction of the Ranger Cabin was likely accompanied by improvements to the trail. The Ranger Trail Bridge, which spans a major drainage, was likely constructed by the Forest Service sometime after 1904 (Stein 1986). Between 1904 and 1934 other elements of the trail were constructed including boulder edging and buttress walls on the upper stretch of the trail. The ledge portion of the trail also includes cement steps and buttress retaining walls at several points which probably date to the Forest Service era (Figure 49). Precise dating of these features is impossible to determine but the designation of Walnut Canyon as a national monument in 1915 and subsequent increase in visitation would have giving the Forest Service a strong impetus to improve the trail. This fact combined with evidence of other improvement made by the Forest Service near Observation Point suggests that most of the Ledge Trail elements can be dated between 1915 and 1934 the year the National Park Service assumed administration of the monument.

The trail retains its original footprint and historic features.

# 3) Ranger Cabin Road - Original Design 1915-1941

("Old 303", Rt. 0406, FMSS #111817, National Old Trails Highway)

The Ranger Cabin Road is the remaining section of the "Old 303" road (also understood as a section of the National Old Trails Highway locally) and is the oldest historic road within the Walnut Canyon Historic District. Originally, the Old 303 roughly followed current Forest Road 303 west from Winona until it reached the present-day asphalt entrance approach. Here the road turns south and passes behind the contemporary maintenance and residential area continuing west past the Ranger Cabin and eventually linking up with the current Forest Road 303 outside the monument boundary. The remaining section of road between the contemporary housing area and the Ranger Cabin, now known as "Ranger Cabin Road," remains intact and retains its original footprint (Figures 5, 6, 12, 13).

## New Deal era resources (1938-1942)

### 4) Comfort Station - Original Design

(Building No. 12, FMSS #46819, WACA 85A-241, LCS ID# 068178)

The 460 square foot Comfort Station is constructed of locally quarried, shaped Kaibab limestone blocks with a flat, asphalt-tarred roof. Rectangular in shape, it measures 23'8" northwest-southeast by 14'4" southwest-northeast and stands 8 feet high (Figure 50, 51). It is approached from the southwest via a walkway leading from the visitor center parking lot. The building is divided into separate sections for men and women, which are entered by doors on different sides of the building. The men's section is entered from the northeast, whereas the women's section is entered from the southeast. Low retaining walls, part of the original design, border the walkways to each entrance. A small, central heater room separates the two sections. The

south elevation of the building, the direction from which the building is approached, has two small, 2-pane, bottom-hinge casement windows with fixed screens, one at each end, with a central wood panel door leading into the utility room. The east elevation contains one small, 3-pane, window and a wood and frosted glass entry door to the men's section. The north elevation contains a wood and frosted glass entry door to the women's section, as well as two, 3-pane, bottom-hinge casement windows. The west elevation has a single 3-pane bottom-hinge casement window. The interior of the men's section contains two prefabricated, metal stalls with toilets, one wall-mounted sink, and one wall-mounted urinal. The women's section contains two prefabricated, metal stalls with toilets and one wall-mounted sink. The interior walls are plastered and were originally painted with cream-colored oil paint. The original design called for finished cement floors.

# Comfort Station - Changes and Condition

The Comfort Station is architecturally unmodified and retains a high degree of its historic integrity, appearing much as it did when it was constructed in 1940-1. The interior configuration (toilet partition and fixture location) remains true to the original. Following are descriptions of noteworthy changes to the building since its original construction. Changes not outlined here may include routine maintenance and fixture or appliance replacement.

- Heating System In 1949, additional vents were cut into the interior walls of the comfort station between the heater room and the men's and women's sections to facilitate warm air circulation from a heating unit located in the central heater room (NPS files). The fuel-oil heating unit that originally supplied heat to the comfort station was removed sometime after 1951.
- <u>Fixtures</u> NPS records indicate that fixtures were installed in the comfort station in May 1942, although it is unknown whether these were new or replacing existing ones. The existing toilets and partitions are not original to the building and were installed during the rehabilitation of the structure in 2005. The existing urinal in the men's restroom and the sinks in both the men's and women's sections are original to the building. Luron® powdered hand soap dispensers, thought to be original to the building, were be salvaged and curated as part of the 2005 rehabilitation project (PEPC ID #11936).
- <u>Flooring</u> In June 1946, the restrooms' finished cement floors were painted tile red. In approximately 1960, one inch square ceramic mosaic tile was laid over the cement floors. This tile extends approximately 6 inches up the interior walls as baseboard molding. The tile flooring was repaired in kind as part of the 2005 rehabilitation project.
- Roofing The composition surface of the Comfort Station roof has been periodically repaired and replaced over the years. Prior to 2005 it was surfaced with a silvery asphaltic-based roofing mastic over asphaltic-based roofing material (tarpaper or similar). In 2005 this roof surface was replaced as part of the 2005 rehabilitation project with a rubber membrane surface.
- <u>Electrical</u> Installing electricity to the building was part of the original design, and
  electricity was roughed-in during building construction. Metal plates cap probable
  electrical conduit on the interior and exterior of the building; however, no lighting fixtures
  currently exist on the interior or exterior of the building. A "red-tagged" breaker box is
  present in the utility room. New interior and exterior lighting fixtures, sensitive to the
  historic character of the building, were installed along with a new fire alarm system as
  part of the 2005 rehabilitation project.

The building served as a seasonal (warmer weather only) public restroom facility, possibly until the 1990s, when it fell into disuse due to concerns with the septic system and lack of handicapped accessibility (Zimmermann 2005). In 1998-9, a wheelchair-accessible restroom

facility was constructed to the northwest of the visitor center as a temporary replacement. Removal of the accessible restroom and the rehabilitation and re-opening of Comfort Station for public use was completed during the summer of 2005 (PEPC #11936).

## 5) Residence No. 1 Description - Original Design

(Quarters 1, Building No. 1, FMSS #48479, WACA 85A-240, LCS ID #68217) Walnut Canyon Residence No. 1 is also referred to throughout the NPS files as the Superintendent's Residence, Custodian's Residence and Q-1. It was designed by NPS Architect Cecil Doty and constructed by the Mount Elden CCC in 1940 (Figure 52). Residence No. 1 is a one-story, Park Service Rustic style, single-family residence. The exterior of Residence No. 1 is constructed of shaped, locally-procured Kaibab limestone, wet-laid with concrete: board and batten siding; and edged wood paneling and wood trim (Figure 53). The residence has a gabled roof covered with milled wooden shakes. A covered flagstone porch occupies the south end of the east side and the entire length of the south side of the residence. A flagstone path leads from the access loop (on the north side) to an open flagstone patio, defined in the original building plans as a "service area."

Residence No. 1 is roughly rectangular in shape, with approximately 1100 square feet of interior space divided and arranged to accommodate residential living. The interior space consists of a living room, dining room, kitchen, two bedrooms, one bath, and an unheated storage and utility room (the original garage). A poured concrete basement (214.5 sq. ft. – not included in area calculation) is located under the kitchen area only. Because the CCC-era entrance road along the canyon rim was originally the main access to the housing area, the house was built facing it (south). The house can be accessed from three doors; two of which are open onto the flagstone porch. A door on the east side of the house opens to the living room, while a door on the south side provides access through the dining room. A third door is located on the north side of the house and accesses the kitchen. This door is most easily accessed from the flagstone path that begins at the loop road.

The original wood 6-over-6 sash and 2-over-2 sash windows are present throughout the house. The north elevation is half red board and batten siding (extending from the NW corner to the end of the kitchen), half limestone construction and contains seven 6-over-6 sash windows. The south elevation is entirely limestone and contains nine 2-over-2 sash windows with storm windows. The covered limestone porch on this elevation wraps around to the east façade and is supported by six (originally wood, now metal) columns. The east elevation contains the aforementioned door flanked by two vertical five-pane fixed sash windows and also has limestone support column for the covered porch. Originally this elevation contained two garage doors which have since been replaced. The west elevation contains five 6-over-6 sash windows with limestone walls.

## Residence No. 1 Description - Changes and Condition

Walnut Canyon Residence No. 1 has been structurally altered since its original construction; however, it still retains a high degree of its historic integrity. Its character-defining attributes are still intact and in original form. Following are descriptions of noteworthy changes to the building since its original construction. The board and batten siding, wood paneling, and trim of the house are painted in natural earth tones, blending the structure in with its environment. Changes not outlined here may include routine maintenance including painting, replacement of flooring, installation or replacement of fixtures and appliances, and additions or changes that have been returned to their original condition.

• <u>Kitchen</u> – The kitchen was expanded in 1963-4. Although initial plans for an expansion had been drawn up in 1945 by NPS Architect Raymond Lovelady, the kitchen was not

- expanded until 1963. As part of this expansion, the north wall of the kitchen was pushed outward approximately seven feet, to line up with the existing north wall of the original garage. The exterior façade of this new addition was completed in the same construction technique, board and batten, as the original façade. The original three 6-over 6 sash kitchen windows on the north exterior were replaced by two windows of the same design (perhaps two of the original three windows).
- Garage In 1964, a private contractor began remodeling the original garage into a utility and storage room. The original garage doors were removed and a wall was framed within the open space that the original garage doors encompassed. This wall has a board and batten façade, with an access door flanked by two vertical, fixed sash windows. Also at this time, a single-car wood frame garage was constructed a short distance to the north of the residence. This added garage measures 12'8" by 24'. Although constructed during the Mission 66 era at Walnut Canyon, the garage addition does not appear to be part of the overall Mission 66 development plan for Walnut Canyon and must therefore be considered a non-contributing element of the property due to its age of less than fifty years. The garage's board and batten exterior and cedar shake roof are consistent with the historic character of the house.
- <u>Porch support posts</u> The original juniper support beams on the flagstone porch were replaced with steel posts in 1977.
- <u>Landscaping</u> The flagstone patio on the north side of the residence was doubled in size in 1960.
- Heating Systems The heating system was converted from fuel oil to propane sometime
  in the early 1990s. A 500-gallon above ground propane tank was installed in the front
  yard near the detached garage. A wood-burning stove insert was installed in the
  fireplace in 1975. The house is now heated with a natural gas heater.
- <u>Lead Abatement</u> In June 2002, a lead abatement project was undertaken with the Arizona SHPO guidance. All doors and windows which tested positive for traces of leadbased paint were removed and shipped to a commercial stripper for lead removal. All other surfaces (woodwork, etc.) were painted over (Acme Environmental, Inc.).

Character-defining attributes of Residence No. 1 include the following:

- Limestone exterior, including buttresses
- Board and batten and decorative scalloped-edged paneling on exterior
- Oak flooring in the living room, dining room, hallway, and bedrooms
- Built-in phone shelf and linen cupboard in hallway outside the master bedroom
- Built-in shelving and cupboards in the dining room
- Built-in storage in bathroom
- Decorative-edged paneling above entry from the dining room into the kitchen
- Partial limestone stem wall housing the heating vents, which partially defines the division between the living and dining rooms
- Limestone corner fireplace with flagstone hearth and wooden mantle in northwest corner of the living room (Figure 54).
- Northern wall of the living room is exposed limestone
- Interior walls throughout the house are plastered, with rounded-over, or "bull-nose," plaster windowsills

Residence No. 1 has been used continuously as an employee residence since its construction in 1940.

### 6) Residence No. 2 Description - Original Design

(Quarters 2, Building No. 2, FMSS #48480, WACA 85A-139, LCS ID #68192)

Walnut Canyon Residence No. 2 is also referred to throughout the NPS files as the Ranger's Residence and Q-2. Although smaller in size, Residence No. 2 is similar in design and layout to Residence No. 1 (Figure 55). It was designed by Cecil Doty in November 1938. Minor changes to and detail drawings of this design were executed by Western Office of Design and Construction (WODC) Architect Trent Thomas in early 1939. Construction was undertaken by the CCC in 1939-40. The building is an approximately 1,100 square foot, single story, single family dwelling. The exterior of the Residence No. 2 was constructed of wet-laid, shaped local Kaibab limestone with board and batten siding and wood trim. The residence has a gabled roof covered with milled wooden shakes. A covered flagstone porch occupies most of the east side of the house. A flagstone path leads to the porch from the asphalt housing loop road.

The interior space consists of a living room, dining room, kitchen, two bedrooms, and a bathroom. Unlike Residence No. 1, there is no basement in Residence No. 2. The interior layout of Residence No. 2 is almost identical to that of Residence No. 1, although the house is oriented with the opposite side facing the housing loop road. Residence No. 2 is oriented at a right angle from Residence No. 1, and it faces the original housing loop road, which remains the access to the house today. Access to Residence No. 2 can be gained from two doors. The main door opens into the dining/living room and is entered from the flagstone porch on the east side of the house. A rear door leads into the kitchen on the west side of the house.

The north elevation is composed of limestone exterior walls with two large 2-over-2 sash windows. The south elevation contains five 6-over-6 sash windows with limestone walls. The east elevation contains nine 2-over-2 sash windows, limestone walls and a covered limestone porch. The west elevation contains red board and batten siding with six 6-over-6 and two large 2-over-2 sash windows. A small covered limestone stoop extends out from the door.

## Residence No. 2 Description – Changes and Condition

Walnut Canyon Residence No. 2 has not been structurally altered since its original construction and therefore retains a high degree of its historic integrity (Figure 56). Following are descriptions of noteworthy changes to the residence since its original construction. Changes not outlined here may include routine maintenance, interior and exterior painting, flooring replacement, installation or replacement of fixtures and appliances, and additions or changes that have been returned to their original condition.

- <u>Garage</u> In 1964, a single-car wood frame garage was constructed a short distance to
  the north of the residence. This added garage measures 12'8" by 24'. Although
  constructed during the Mission 66 era at Walnut Canyon, the garage addition does not
  appear to be part of the overall Mission 66 development plan for Walnut Canyon and
  must therefore be considered a non-contributing element of the property due to its age of
  less than fifty years. The garage's board and batten exterior and cedar shake roof are
  consistent with the historic character of the house.
- <u>Exterior</u> In 1973, wood shingles were installed over the board and batten exterior walls
  on the west exterior façade (kitchen and boiler room). In 1990, new spouting and fascia
  boards were put up. In 2006 the wood shingles were removed and board and batten
  siding was reinstalled (PEPC ID #16999).
- Windows Storm windows, not original to the building, are present.
- Fencing In 1980, a four-foot high chain link fence was installed around the back yard
- <u>Kitchen</u> In 1963, a section of the south wall of the kitchen was removed to provide a
  wider doorway to the rear entrance vestibule.

- <u>Bathroom</u> In 2007 the drywall, tile, backer board, shower/tub fixtures, toilet, vanity, medicine cabinet and overhead cabinet light were replaced (PEPC ID #16999). The shower curtain and towel racks were replaced in kind and an exhaust fan was installed. The floor was tapered at the threshold to eliminate a tripping hazard and the subfloor was repaired.
- Sheetrock In 1984, sheetrock was installed in the interior of the house by the Kocisko Co.
- Heating Systems The heating system was converted from fuel oil to propane sometime
  in the early 1990s. A 500-gallon above ground propane tank was installed behind the
  garage. Also, possibly as early as 1976, the living room fireplace was fitted with a wood
  stove insert. The house is currently heated with the fireplace and a wall-mounted
  propane heater. The installation of a new heater is planned but has not yet occurred
  (PEPC ID #16999).
- <u>Lead Abatement</u> In June 2002, a lead abatement project was undertaken with guidance from the Arizona SHPO. All doors and windows which tested positive for traces of lead-based paint were removed and shipped to a commercial stripper for lead removal. All other surfaces (woodwork, etc.) were painted over. (Acme Environmental, Inc.)
- Roofing The residence has been re-roofed several times since its construction. The current cedar shake roof is similar in appearance, character and workmanship to the original, and therefore is consistent with the historic character of the house.
- <u>Landscaping</u> Minor improvements have been made to the landscaping over the years.
   A flagstone walk leading to the front of the house was installed in 1952. Electrically-timed lawn sprinklers were installed in 1977.

Character-defining attributes of Residence No. 2 include the following:

- Original layout and architectural footprint
- Limestone exterior, including buttresses
- Board and batten and decorative scalloped-edged paneling on exterior
- Oak flooring in the living room, dining room, hallway, and bedrooms
- Built-in linen cupboard in hallway
- Built-in shelving and cupboards in the dining room
- Built-in storage in bathroom
- Decorative-edged paneling above entry from the dining room into the kitchen
- Partial limestone stem wall housing the heating vents, which partially defines the division between the living and dining rooms
- Limestone corner fireplace with flagstone hearth and wooden mantle in southwest corner of the living room

Residence No. 2 has been used continuously as an employee residence since its construction in 1940.

# 7) Entrance Road - Original Design 1941-1956

(Rt. 0020, FMSS #47024)

Completed in 1941, the CCC era entrance road was a half-mile long 26-foot wide graveled approach that began a quarter-mile east of the Ranger Cabin on the Old 303 and curved southeast to administration building incorporating part of a preexisting Forest Service era route (NPS 1948a; Beaubien 1938) (Figures 57, 58). After the realignment of County Road 303, the entrance road was extended north by-passed the "Old 303" completely. Four steel culverts with

limestone construction were planned for the road, one of which is still visible today (NPS Dwg NM-WAL 5352) (Figure 59).

Constructed between 1940 and 1942 the realigned County Road 303, also known as Old Walnut Canyon Road or New County Road 303, runs parallel to the northern boundary of Walnut Canyon National Monument for approximately one mile (NPS 1948a) (Figures 7, 60, 61).

# Entrance Road - Changes and Condition

The CCC approach road including the monument entrance intersection with County Road 303 was obliterated with the construction of the new approach road in 1956 but evidence of this historic route remains including:

- One well preserved steel culverts with limestone construction
- A well preserved section of raised road bed
- Large red cinder used for the roadbed and pieces of crushed pavement can be found all along the route.

The section of Forest Service Road 303 (Old Walnut Canyon Road, "New" 303) retains is original footprint and has not been substantially altered since construction in 1942.

# 8) Visitor Center Parking Lot (south end) and associated features (Rt. 0918P, FMSS #47349)

The CCC also built a 35 car unpaved gravel parking loop at the end of the entrance road near the administration building. The parking loop was 42 ft wide on either side of a boulder lined vegetation island and 160 ft long enclosed with a limestone curb and walkway (NPS Dwg NM-WAL 2027b) (Figures 62, 63). Roughly 250ft north of the parking loop a service road and housing loop were constructed to provide access to the new residences from the main entrance road (NPS 1948a; Entrance road references, NPS file, Nov 1940).

### <u>Visitor Center Parking Lot – Changes and Conditions</u>

The original Administration Building parking lot was incorporated into the expanded Mission 66 parking lot (Figures 64, 65). Remaining elements such as the limestone curb (LCS ID #068200) on the current parking lot are CCC era but have been moved. The residential spur road was obliterated after the completion of the new entrance road and expanded parking lot in 1956. The CCC era housing loop has been resurfaced but retains its original footprint.

# 9) Worm Rail Boundary Fence - Original Design

## (Split Rail Fence line, FMSS #48622), WACA 85A-107, LCS ID #068203)

The boundary fence was designed by the NPS in 1938 and constructed by the Mount Elden CCC as a worm-rail fence of split pine rails harvested from nearby Forest Service land (Figures 66, 67). The fence was constructed to define the Walnut Canyon northern boundary and to keep cattle out of the monument. The fence is typically composed of split logs, four logs high with both wire and a nail between the top two rails present at each intersection, and the bottom rail at each intersection rests upon one stone to keep it off the ground.

### Worm Rail Boundary Fence – Changes and Condition

The split rail boundary fence retains its original form, outline, and design, although specific rails have been replaced over time as a result of deterioration and damage. The north-south portions of the original fence were removed at some point, possibly as late as the 1980s. Today, the remaining portion of split-rail fence begins at the northwest corner of the 1938 monument boundary. It runs approximately one mile to the east, parallel to and approximately

15-30 feet south of the current alignment (CCC constructed) of Forest Road 303, and ends at the point where the 1938 monument boundary turns to the south. The fence continues to serve as the northern boundary for the westernmost portion of the 1938 monument boundary. In 1997, portions (approximately 20-30%) of the fence were replaced with logs cut from Forest Service land (Project FLAG-97-05-M). Replacement logs were cut, peeled, and split by AmeriCorps crews and installed by park maintenance staff. It is likely that all segments that are currently five logs high are a result of this project.

In 2009 a new project was initiated to address the need to rehabilitate the fence. Approximately 30% of the rails are rotted to the point of replacement. All remaining rails and new rails will be treated with Bora-Care, a low toxicity pesticide that will eliminate current insect infestations and rot as well as protect against future infestations and the onset of rot. The project is being designed as a five-year cyclic maintenance undertaking and will begin in 2013 or 2014.

# 10) Island Trail - Original Design

(WACA 85A-241, FMSS #46822, LCS ID #068204)

It is not known when the first trail appeared around the Third Fort Island, but improvements to or formalization of a trail by the Forest Service was probably made after the designation of Walnut Canyon as a National Monument in 1915. A photograph from 1920 reveals a cable handrail and small registration station already present at this time on Observation Point suggesting the presence of an established trail around the Island's cliff dwellings (Hough 2002) (Figure 68).

The first reference to the existence of a trail on the "Island" comes from Harold S. Colton, co-founder of the Museum of Northern Arizona, who in 1932 noted a "good trail" descending from Observation Point "down a flight of steps to the 'island" where well preserved cliff dwellings could be found (Colton 1932). The trail used by Colton was probably constructed at least in part by Frank Cox, the Coconino National Forest Ranger stationed at Walnut Canyon from the late 1920s until July 1934. Jimmie Brewer, the first NPS custodian, credited Cox with the construction of the Island Trail which was already well established when the Park Service began oversight of the monument in 1934 (Brewer 1934). According to NPS plans Cox's trail included several flights of stairs and looped around the "Island" passing by all the major ruins (1934 plan, "Proposed Walk to the Ruins") (Bland 2005).

However, by 1934 the concrete on various sections of the trail had begun to deteriorate and the Park Service began planning for improvements (Brewer 1934). Plans were made for a "Proposed Walk to [the] Ruins" which established a new circulation pattern that incorporated sections of the preexisting trail (Figure 69). This plan provided a blueprint for the small-scale improvements made by NPS employees and hired laborers in the years prior to the arrival of the CCC. These improvements included widening the trail by building small rock walls and adding fill, removing boulders from the trail, and leveling and rerouting short portions of the trail around obstacles (Figure 70) (Wetherill 1936; Bland 2005).

The first large scale improvements on the Island Trail were conducted by the Mount Elden CCC crew between 1938 and 1942. CCC crews widened the existing trail and constructed new stairs of limestone slabs and concrete (Figure 71). While archival materials make it clear that CCC construction on the Island Trail was extensive it is not know which sections were improved or where these changes deviated from the existing trail (CCC Job Completion Record, Improve Ruins Trails, n.d.) (Bland 2005).

## <u>Island Trail – Changes and Condition</u>

Today, the Island Trail at Walnut Canyon is a product of the various successive improvements and modifications that it has undergone since at least the 1930s. The majority of the current features of the Island Trail were constructed as part of the Mission 66 program in 1966-7. The trail also retains remnants of earlier construction phases, including improvements conducted by the CCC. The basic historic circulation pattern of the Island Trail, formalized by the CCC, has been retained, although much of its early materials and workmanship has been obscured, altered, and/or obliterated over the years by later improvement projects. Only minor changes have been made to the Mission 66 Island Trail since its construction, and the trail therefore retains a high degree of historic integrity as a Mission 66 trail. Following are descriptions of noteworthy changes to the Island Trail since the Mission 66 improvements of the 1960s. Changes not mentioned here include routine maintenance not significantly affecting the trail and periodic resurfacing of the trail.

- In 2004 portions of asphalt in poor condition were replaced in-kind (FLAG-02-12M)
- In 2006 a section of the east side stairs on the upper portion of the Island trail was replaced with new steps due to the deterioration of the Mission 66 era concrete. The new construction mimics the Mission 66 stairs in location and design except for the presence of the color additive the existed in the original stairs (PEPC ID #12107).
- An extensive rehab of the lower Island Trail loop occurred in 2006. This project included
  the construction of a limestone and concrete mortar retaining edge on the outer edge of
  the asphalt trail. At this time several limestone retaining walls along the edge of the trail
  were rebuild with a combination of new and used rock. Finally, twenty-one new
  interpretive signs were installed along the trail to replace older, outdated signs (PEPC ID
  #17253, FLAG-02-12M).
- In December, 2007 a rockslide damaged extensive portions of the Island Trail. Two
  retaining walls and two sections of treads were damaged along with sections of the
  metal pipe hand railings. The rock slide damaged 49 ft of concrete trail and
  approximately 12 steps all of which had to be replaced. The large monolith that broke
  free and landed on the path was broken up and used to create a new limestone retaining
  wall for the damaged section of the trail (PEPC ID #21661).
- During 2009 all of the plant ID signs were removed and new plant ID signs were installed (PEPC ID #18614)

Defining characteristics of the Island Trail include the following:

- Basic circulation pattern into canyon and around island (based on CCC or earlier trail)
- Retained limestone slab steps that exist at a few places along the trail (CCC)
- CCC-constructed retaining wall incorporated by Mission 66 design (Figure 72)
- Retained rock and concrete steps with flagstone treads (pre-Mission 66)
- Formed concrete stairs/staircases and swept concrete landings with rock retaining walls (Mission 66) (Figures 73-75)
- Painted, welded metal pipe hand railings (Mission 66)

# 11) Picnic Area – Original Design

(FMSS #53389)

A designated picnic area was one of the earliest improvements at Walnut Canyon. A picnic area with "ovens, benches, and refuse cans" is referenced by the NPS as early as 1934, shortly after the NPS took over management of the area. The exact location of this early picnic area. however, is unknown. A proposed "picnic ground" is shown on a 1934 Development Plan for Walnut Canyon (NPS Dwg NM-WAL 2000) (Figure 76), but it is located slightly northwest of Observation Point, not to the northeast, as is the current picnic area. Several months before the arrival of the CCC at Walnut Canyon in August 1938, Custodian Paul Beaubien reports that "picnic tables were repaired with the hope that they would last until the CCC boys can make others" (Beaubien, [April] 1938). Although job plans were drawn up for picnic area improvements including water fountains, fireplaces, picnic tables, refuse containers, and directional signs, CCC completion reports indicate that the Mount Elden camp was disbanded before any work was conducted on the picnic area improvements. A January 1941 Headquarters Area Plan map for Walnut Canyon shows the Picnic Area in its current location with proposed trails to and around it (NPS Dwg NM-WAL 2101A) (Figure 77). During the summer of 1942, several months after the CCC departure, improvements to the picnic area were conducted by NPS staff including hauling cinders, sand, rock and pine needles for distribution as well as the construction of three fireplaces (Beaubien 1938-1951). NPS records also indicate that, in 1947, a trench for a water line to the picnic area was dug, and five prefabricated fireplaces were installed.

### Picnic Area – Changes and Condition

Since its establishment, the boundaries of the Walnut Canyon Picnic Area have been somewhat vague, and throughout the years, it is generally only indicated on maps with a dotted circle or general area label. Today, informal rock outlines partially define the edges of and walkways through the picnic area, including defined spots for picnic tables, and it remains unclear when these rock alignments were constructed. Metal picnic tables dot the picnic area; however, none are historic and none are permanently affixed to the ground.

- Stone Water Fountains Two historic stone water fountains are located within the picnic area, although a break in the water line to them from the Comfort Station in 2002 has forced them to be abandoned as functioning water fountains (Figures 78, 79). A 1938 drawing (Dwg NM-WAL 2026) (Figure 80) shows plans for water fountains and it is likely that these drawings were used during either the 1942 picnic area improvements or the 1947 waterline installation.
- The 1967 Rim Trail was designed to incorporate the picnic area and the existing trail leading to it from the parking lot. Mission 66 era documents indicate that a name change from Picnic Area to Lunch Area might discourage overnight camping and subsequently reduce the danger of wildfires caused by campers (NPS files). It may have been during this era that any existing fireplaces were removed.

## 12) Residence No. 6 Description - Original Design

(Quarters 6, Building No. 6, FMSS #48482)

Residence No. 6 is a one-story, 1,400 square-foot single family residence with an attached one-car garage. The house is set on a poured concrete perimeter foundation with poured concrete interior pillars creating a crawl space which runs under the residence portion of the building but not under the garage. The overall dimensions of the building are 66' northwest-southeast by 27.5' southwest-northeast. It was constructed as a Mission 66 project in 1960-61 as additional employee housing for Walnut Canyon National Monument (Figure 81). The original design of the building had an asphalt shingle roof and redwood shiplap and board and batten siding. The

residence is divided into 8 rooms: a combination living/dining room, kitchen, 3 bedrooms, 1½ baths, and a laundry room. An attached unheated, un-insulated garage makes up the northwest end of the building and is accessed from the kitchen. The northeast (rear) elevation of the building faces the backvard area. This elevation has seven double-hung one-over-one windows and two doors – one entryway to the dining room and one entryway to the laundry room. The dining room door is a solid hardwood door. The laundry room door is a hardwood door with an upper fixed sash window. Both doors are accessed from a raised, poured concrete stoop. The southwest (front) elevation faces a front yard area adjacent to the residential area spur road and across from Residence No. 2. The southwest elevation has one hardwood, solid panel front entryway door, one three-pane window with a central fixed sash flanked by one-over-one double-hung windows, one two-over-two double-hung window, and one one-over-one doublehung window. The single car, solid panel garage door is also located on this side of the house. The southeast elevation faces towards the maintenance yard and has two double-hung oneover-one windows. The northwest elevation faces Residence No. 7 and is the outer wall of the garage. It has one one-over-one double-hung window and a single hardwood door with an upper fixed sash window. To the greatest extent possible, the larger existing native vegetation (including ponderosa pine) was preserved around the building, and native grass was seeded and native shrubs planted after construction.

### Residence No.6 Description – Changes and Condition

Walnut Canyon National Monument Residence No. 6 has not been structurally altered since its original construction and therefore retains a high degree of its historic integrity (Figure 82). Following are descriptions of noteworthy changes to the residence since its original construction. Changes not outlined here may include routine maintenance and upgrades, interior and exterior painting, roofing and flooring replacement, and installation or replacement of fixtures and appliances.

- <u>Fencing</u> A four-foot chain link fence was constructed to enclose the backyard in 1980.
  A product of the residential nature of the structure, the fence is compatible with the historic character of the house and could be removed with no adverse effect to the structure or its surroundings.
- Heating systems The heating system was converted from fuel-oil to propane in approximately 2003. The underground fuel-oil tank was removed, and a free-standing 500 gallon propane tank was placed on the southeast side of the house. A wood stove was installed on an elevated base at the west end of the living room in 1974. The stove was vented through the roof with an exposed insulated stovepipe. The wood stove and base were removed in 2003, and the exterior stovepipe was capped. At present, the stovepipe and capped interior ceiling fitting remain.
- <u>Landscaping</u> Minor additions to landscaping have been completed over the years.
   Small rock bordered planters are located in the front yard. A patio of pavers connects the asphalt driveway with the concrete front walkway, and a worm-rail fence partially borders the eastern edge of the front yard. The native vegetation remains intact. These minor changes are compatible with the historic character and residential nature of the house.

Character-defining attributes of Residence No. 6 include the footprint and overall layout of the house, original oak flooring, original cedar shiplap exterior siding, original windows, and native landscaping.

Residence No. 6 was used as an employee residence from construction until 2003, when it was converted into additional office space for the Resource Management Division. It currently

functions as the curation facility for the Flagstaff Area National Monuments and has been additionally designated as the Ponderosa Building.

# 13) Residence No. 7 – Original Design

(Quarters 7, Building No. 7, FMSS #48483)

Residence No. 7 was constructed by a private contractor in 1960-61 as part of the Mission 66 improvements (Figure 83). Residence No. 7 is identical in size and design to Residence No. 6. Residence No. 7 is a one-story, 1,400 square-foot single family residence with an attached onecar garage. The house is set on a poured concrete perimeter foundation with poured concrete interior pillars creating a crawl space which runs under the residence portion of the building but not under the garage. The original design of the building had an asphalt shingle roof and redwood shiplap and board and batten siding. The overall dimensions of the building are 66' northwest/southeast by 27.5' northeast/southwest. The residence is divided into 8 rooms: a combination living/dining room, kitchen, 3 bedrooms, 1½ baths, and a laundry room. An attached unheated, un-insulated garage makes up the northwest end of the building and is accessed from the kitchen. The northeast (rear) elevation of the building faces the backyard area. The northeast elevation has seven double-hung one-over-one windows and two doors; one entryway to the dining room and one entryway to the laundry room. The dining room door is a solid hardwood door. The laundry room door is a hardwood door with an upper fixed sash window. Both doors are accessed from a raised, poured concrete stoop. The southwest (front) elevation faces a front yard area adjacent to the residential area spur road and across from the residence area playground. The southeast elevation has one hardwood, solid panel front entryway door, one three-part window with a central fixed sash flanked by one-over-one doublehung windows, one two-over-two double-hung window, and one one-over-one double-hung window. The single car garage door is also located on this side of the house. The southeast elevation faces Residence No. 6 and has two double-hung one-over-one windows. The northwest elevation faces a wooded area and is the outer wall of the garage. It has one oneover-one double-hung window and a single hardwood door with an upper fixed sash window. To the greatest extent possible, the larger existing native vegetation (including ponderosa pine) was preserved around the building, and native grass was seeded and native shrubs planted after construction.

## Residence No. 7 Description - Changes and Condition

Walnut Canyon National Monument Residence No. 7 has not been structurally altered since its original construction, and therefore retains a high degree of its historic integrity (Figure 84). Following are descriptions of noteworthy changes to the residence since its original construction. Changes not outlined here may include routine maintenance and upgrades, interior and exterior painting, flooring replacement, and installation or replacement of fixtures and appliances.

- Roofing The residence has been re-roofed several times since its construction. The
  current roof consists of composite asphalt/fiberglass shingles that are consistent with the
  historic character of the house.
- <u>Fencing</u> A four-foot chain link fence was constructed to enclose the backyard in 1980.
   A product of the residential nature of the structure, the fence is compatible with the historic character of the house and could be removed with no adverse effect to the structure or its surroundings.
- Heating Systems The primary heating system was converted from fuel-oil to propane
  in approximately 2002. The underground fuel-oil tank was removed, and a free-standing
  500 gallon propane tank was installed in the southern corner of the front yard. A wood
  stove was installed on an elevated base in the southwest corner of the living room in
  1974. The stove was vented through the roof with an exposed insulated stovepipe. The

- wood stove and base were removed in 2003, and the exterior stovepipe was capped. At present, the stovepipe and capped interior ceiling fitting remain.
- <u>Landscaping</u> Minor additions to landscaping have been completed over the years, but none alter the setting, and all are consistent with use as a residence. Small wood and rock-bordered planters are located in the front yard. A small rock campfire ring is located in the fenced backyard.

Character-defining attributes of Residence No. 7 include the footprint and overall layout of the house, original oak flooring, original cedar shiplap exterior siding, original windows, and native landscaping.

Residence No. 7 was used as an employee residence from construction until 2003, when it was converted into additional office space for the Resource Management Division. It is now additionally designated as the Piñon Building.

## 14) Utility Building – Original Design

(Building No. 25, FMSS #46811)

The Walnut Canyon Utility Building is also commonly referred to as the Walnut Canyon Maintenance Building. It was built in 1960 by Frontier Construction Company of Tucson, Arizona. The architectural footprint of the Walnut Canyon Utility Building measures approximately 1,950 square feet. The building is rectangular, measuring 75 feet by 26 feet. It is oriented roughly north-south and is located at the far end of a fenced, paved maintenance yard. The building has concrete block walls and a flat roof. The south or front elevation has two metal, solid panel entrance doors at the west end of the structure. A single gasoline pump was originally located at the west end between the two entry doors (Figure 85). The remaining portion of the south elevation was designed with three large, one-bay garage doors (10' high). There are no windows on the south elevation. The west elevation has one small two-pane window, one four-pane casement window, and a solid metal double door, through which the tool room is accessed. The north elevation has five large, 16-panel windows (4 central panes are casement and the remainder are fixed) evenly spaced along its length. There is also one small two-pane window at the west end. The east elevation is plain and has no windows or entry doors. The interior of the building is minimally divided; the west end of the building contains a single equipment service bay, bathroom, small tool room, and utility room. A larger equipment storage area and warehouse occupy the east end of the building.

## <u>Utility Building (Mission 66) – Changes and Condition</u>

There has been no structural modification to the Utility Building, and it retains a high degree of historic integrity (Figure 86). Following are descriptions of noteworthy changes to the Walnut Canyon Utility Building since its original construction. Changes not outlined here may include interior and exterior painting and installation or replacement of fixtures and appliances.

• Office – In 2000 the interior northeast corner of the equipment storage area was framedin to create office space for maintenance personnel (Project FLAG-00-999j). This twowalled addition measures11' east-west by 12' north-south and is constructed of 2" x 4"
stud wall construction with ½" sheetrock on the interior and T-111 (tongue and groove)
siding on the exterior walls. The south wall of the office has a sliding pane window and a
glass and wood panel entry door. There are no windows on the west elevation. The
cinder block building exterior walls create the other two walls of the office. The walls
stand 13' high. The addition does not alter the existing building frame could be removed
with no effect to the integrity of the building.

- <u>Gasoline Pump</u> The single gasoline pump located outside the south exterior of the building was removed at some point. It is unknown whether or not the underground gas storage tank was removed or left in place.
- <u>Bay Doors</u> The original large roll-back bay doors have been replaced. The original doors were 25-panel and had windows in the upper two rows. The new garage doors are white, solid panel, one-bay garage doors.

## 15) Water Tower – Original Design

Improvements to the water and sewer systems at Walnut Canyon were included as part of the park's Mission 66 Prospectus (1956). Included in these improvements was the construction of an elevated water storage tower at a height sufficient to provide water pressure for fire protection. The Walnut Canyon water tower is a three-legged, steel frame tower. Designed by the Chicago Bridge and Iron Company and constructed in 1961, the Walnut Canyon water tower stands approximately 105 feet high and has a 50,000-gallon reservoir (Figures 87-90). A well located near the Visitor Center supplies water to the tower.

## Water Tower – Changes and Condition

Routine maintenance of the water tower and associated mechanical equipment does occur; however, no significant changes have been made to the water tower since its construction in 1961. The following recent activities have not altered the structure of the tower:

- A lead abatement project was carried out in November 2001 under the guidance of the Arizona SHPO (Flag-01-05M). Activities associated with this project included sandblasting lead-based paint from the tower, followed by repainting of the interior and exterior of the tower with a non-lead based paint (NPS maintenance files).
- In 2008 an eight foot high security fence, approximately 60' x 60', was installed around the legs of the water tower (PEPC ID #21864). The fence includes a vehicle gate and "confined space" warning signs.
- Repainting of the exterior and interior in-kind is planned as are safety modifications are currently underway (PEPC ID #24386).

# <u>16) Administrative Road System and associated features – Original Design</u> (FMSS #s 47024, 47342)

The Mission 66 entrance road (Route 2), completed in 1957 is known by several names including Forest Road 622, The Walnut Canyon Entrance Road, and State Route 166 until 1970 when it reverted to Coconino County. The two lane bituminous surface approach road originally began at U.S. Hwy 66 approximately 7.5 miles east of Flagstaff extending south-east 2.5 (or 3.05) until bisecting County Road 303 a half-mile east from the original CCC era entrance. From this point the road curves south-west before connecting with the Visitor's Center parking lot. The road is 26' wide with 4' shoulders and contains five corrugated metal pipe culverts along its length.

Construction of the approach road corresponded with the expansion of the Administration Building parking lot to accommodate 85 vehicles (NPS 1963b). The expanded parking lot incorporated many features of the CCC construction including the limestone curb and surrounding walk as well as the center island and vegetation (Figures 62, 63). The eastern end of the CCC parking lot, closest to the Administration Building, was left virtually unchanged while the western section was expanded and curved northwest to connect with the new entrance road. During the expansion existing limestone curb blocks were incorporated into the new alignment.

In 1962 two short asphalt spurs for the Mission 66 residences and utility building were extended off the existing CCC residential loop totaling 0.15 miles of new construction (NPS 1963b). The housing spur road is approximately 325 ft long and provides access to Residences 6 and 7 as well as a trailer pad adjacent to Residence 6. The utility spur is approximately 150 ft long and provides access to the utility building and maintenance area.

## Administrative Road System (Mission 66) – Changes and Condition

The road system for the Walnut Headquarters Area retains a high degree of its historic integrity and visual character. Early access roads into the area were formalized as part of the monument's infrastructure development, and much of the subsequent development has followed the footprint of these early formalized roads. Some informal, unpaved spur roads have been added to the administrative road system over the years, and many have been subsequently closed; however, additions and alterations have been minor and ephemeral, and the road system still maintains the basic footprint of the original design. Following are descriptions of noteworthy changes to the administrative road system:

## 1956 Approach Road

- Parking lot expansion obliterated portion of the original road and spur to housing loop, not significant.
- Resurfaced several times.
- In 1968 the northernmost segment of the road was realigned west of the original route as part of the new I-40 interchange. A small section of the original road, 0.3 miles, was abandoned (Figures 91-93).
- Roadside picnic areas/pull outs obliterated, 2004.
- Construction of a 5x16' entrance station sometime after 1976 necessitated a widening of the entrance road at the head of the parking lot. (NPS 1976b).

# 17) Rim Trail - Original Design

### (FMSS #48486)

The Rim Trail is an approximately ½ mile asphalt trail running along the north rim of Walnut Canyon, east of the Visitor Center (Figure 94). It was constructed as a Mission 66 improvement in 1967. The original design incorporated the existing picnic area, and also included a bridge (Figure 95), several benches (Figure 96), and a canyon overlook at the end of the trail (Figures 97, 98). A retaining wall was constructed as the foundation for the overlook. This allowed the overlook to extend out over the steep slope entering the canyon.

### Rim Trail – Changes and Condition

The Walnut Canyon Rim Trail retains its original circulation pattern and has a high degree of historic integrity. Following are noteworthy changes to the Rim Trail. Changes not mentioned include periodic resurfacing of the trail.

- Spur Paths
   – Several short spur paths have been added to the overall circulation pattern over the years, mainly around the Comfort Station (Zimmerman 2005). A second canyon overlook (near the Visitor Center) was also added in 1970 (NPS files) (Figure 99). A retaining wall was also constructed as the foundation for this overlook.
- <u>Trail obliteration</u> The short segment (approximately 50 feet) of trail extending past the
  original canyon overlook to an unexcavated archeological site at the end of the Rim Trail
  was abandoned at some point (date unknown), and the asphalt pavement was removed.
  A several foot high masonry wall was built in front of the abandoned trail segment, and
  the former trail area was disguised with brush and branches.

 <u>Tree Mortality and Removal</u> – Since the construction of the Rim Trail, significant piñon pine tree death has occurred due to an extended drought and subsequent bark beetle infestation. Numerous dead hazard trees were removed from the Rim Trail area in 2004.

## **Unassociated Contributing Resources**

### 18) Generator Shed - Original Design

(Building No. 20, FMSS #48477, WACA 85A-240, LCS ID # 068215)

Located between Residence No. 1 and Residence No. 2 is a small, 120 ft² building measuring 15'3" by 7'9" (Figure 100). It was originally constructed in 1945 to house a generator and to store coal. Although built after the Mount Elden CCC camp was disbanded, the utility building was designed to blend in with the existing CCC structures at the monument. Built by Walnut Canyon Custodian George Baxter, it is constructed of CCC-quarried Kaibab limestone, with steel-frame casement windows and a gabled roof covered with cedar shakes. Two doors were originally located on the north façade of the building. Large identical twelve-pane windows are located on both the south and east elevations. The west façade contains no window or door.

### Generator Shed - Changes and Condition

The Generator House has not been structurally altered since its original construction and therefore retains a high degree of its historic integrity. Following are descriptions of noteworthy changes to the building since its original construction.

- <u>Clothesline</u> A clothesline has been attached to the exterior of the generator house for use by the nearby residents.
- <u>Door</u> The east door on the north façade to the building is currently boarded up (Figure 101).

Use of the building was discontinued in 1950 when commercial electric power was supplied to the monument (NPS files). Since its decommissioning as a utility building, the building has been and continues to be used for various storage purposes.

## Non-contributing resources of note

### 19) Administration Building (CCC and Mission 66) – Original Design

(Visitor Center, Building No. 11, FMSS #45499, WACA 85A-241, LCS ID# 068218) The Walnut Canyon Administration Building was designed by NPS Branch of Plans and Design

architect Cecil Doty. Construction was begun by the Mount Elden Civilian Conservation Corps in 1939 and continued until 1940 (NPS n.d). This 1400 square foot building may best be described as "boomerang-shaped," with two wings projecting at angles from a small, central lobby area. This lobby area (approx. 240 sq. ft.) is oriented east-west, with double entry doors facing north and exit doors to a covered portal and adjoining flagstone patio facing south towards Walnut Canyon (Figure 102). The floor of the lobby area is flagstone. The sole entrance to the building was through this lobby area, which was accessed from a walkway which ran from the nearby parking lot to a descending flight of stairs directly outside the entry doors (Figure 103). The east wing is oriented southwest-northeast and originally housed an office area as well as some of the utility systems. The east wing office area was originally divided into two separate rooms and the floor was originally cement. The west wing of the building is oriented northwest-southeast and originally housed the museum. Twelve furred-in, glass covered exhibit cases ran along the long axis of the room. Exposed hand-hewn wood beams, crossing at 90° angles, were built on the ceiling as roof support (Figure 104). The original flooring of the west wing was asphalt tile.

The exterior walls of the structure consist of large, angular blocks of locally quarried Kaibab limestone wet-laid with concrete. Each block was hand-chiseled into a rough rectangular shape for the construction. The roof was flat and supported by vigas that extend beyond the building in the rear to support a large porch, the floor of which consists of flagstone. Administration Building (CCC and Mission 66) – Changes and Condition

The Walnut Canyon Administration Building has been structurally altered since its original construction, although it still retains a degree of historic integrity. Following are descriptions of noteworthy changes to the building since its original construction. Changes not outlined here may include routine maintenance, flooring replacement, interior and exterior painting, museum display installations and replacements, installation or replacement of fixtures and appliances, and alterations to the utility systems which had no significant structural or other effect on the building.

- In 1948, the Administration Building was re-roofed. Since its initial construction, the building had leaked continually from standing water on the flat roof caused by rain and snow melt, eventually causing damage to the museum exhibits.
- In 1951, the Administration Building was once again re-roofed due to continued leaking and wind damage to the roof over the museum porch.
- Also in 1951, the flagstone patio on the south side of the building was extended as part of the R-7 Island Trail improvements.

In 1963-4, a two-story, 3690 sq. ft, addition to the Administration Building, designed in 1963 by NPS Architect Phillip Romigh, was constructed as part of the Mission 66 developments. This addition now dominates and overwhelms the original CCC-era architecture (Figures 105, 106). The original Administration Building and the Mission 66 addition collectively make up what is today called the Walnut Canyon Visitor Center. One enters the Visitor Center through a sheltered walkway with massive wood support columns (Figure 107). Once inside, visitors are directed down a short flight of stairs into a reception or lobby area, with a visitor center desk on the right and a museum with interpretive exhibits on the left. From this level, visitors descend a second, longer staircase to a glassed-in viewing area. This expansive, glassed-in observation deck affords the visitor a spectacular view of Walnut Canyon as well as access to outdoor terraces and the Island Trail. This series of terraces from entrance to canyon were designed to imitate the natural surroundings of the canyon. This design effectively segregates the public and administrative areas of the visitor center, yet retains efficient visitor flow (Figures 108-111) (Allaback 2000).

Following are descriptions of the noteworthy alterations that occurred to the original Administration Building portion of the Visitor Center as part of the Mission 66 improvements.

- West Wing (Museum) The Mission 66 addition significantly altered the interior of the
  west wing. This wing, formerly the museum, was gutted, framed in, and divided into
  three separate offices, connected in series. A drop ceiling and exposed ductwork were
  added and skylights were constructed (Figures 112, 113). Portions of many of the handhewn beams were removed during the skylight installation.
- <u>East Wing (Office)</u> The dividing wall between the two main rooms in the east wing administrative area was removed during construction of the Mission 66 addition. Also during this time, the darkroom and storage room were enlarged slightly (Figures 114, 115).

Portions of the Mission 66 addition have also been altered since initial construction. Following are noteworthy changes to the Mission 66 portion of the Visitor Center. Changes not outlined

here may include routine maintenance, flooring replacement, interior and exterior painting, museum display installations and replacements, installation or replacement of fixtures and appliances, and alterations to the utility systems which had no significant structural or other effect on the building.

- Roof The flat roofs of both the original Administration Building and Mission 66 addition were covered with a pitched corrugated steel roof in 1979. This change was prompted by continual leaking of both the original Administration Building and the Mission 66 addition flat roofs. The new roof does not affect the interior space of the building. It does, however, dominate the exterior of the structure, resulting in a visual impact that affects the visitor experience. Due to the existence of the modern, pitched roof, both the CCC and Mission 66 portions of the visitor center are ineligible for inclusion in the National Register of Historic Places. If the pitched-roof structure were removed and the roof structures of both the CCC and Mission 66 portions of the building returned to their historic configuration, the building as a whole might be eligible for listing on the National Register (Figures 116-122).
- WNPA addition In 1996, an approximately 12' by 24' (288 sq. ft.) wood frame addition
  was constructed off the upper lobby to serve as a sales area for the cooperating
  association, Western National Parks Association (formerly Southwest Parks and
  Monuments Association).
- <u>Information Desk</u> The information desk has been replaced over the years. The current desk is wooden, curved, and has a central, handicap accessible counter (Figures 123, 124).
- Handicap Accessibility and Safety Modifications, building interior In 1998-9, two wheelchair lifts were added to the interior of the Visitor Center as part of a SHPO-approved project, FLAG-98-01-M, Handicap Accessibility Modifications, Visitor Center, Walnut Canyon National Monument. This project was conducted to temporarily address the immediate needs of handicap visitors and to comply with federal mandates concerning the Americans with Disabilities Act (1990). The lifts are located near each of the separate stair landings in the Visitor Center. The door into the lower office area (Administration Building) was moved slightly and re-framed to allow continued access into the office despite the construction of the lower wheelchair lift. Also as part of this project, tempered safety glass was installed along the railings of the lower staircase as a fall prevention measure.
- Entrance The front entrance doors have been replaced for handicap accessibility. The
  current doors (installed 2003-4) are self-opening, glass and metal bi-fold doors with a
  motion sensor. The exterior water fountain was also been removed, and a floormounted pay telephone booth was installed and then removed. Glass and metal wallmounted bulletin boards have also been installed on the exterior stone façade (Figures,
  125, 126).
- Restrooms In 1972, new restroom entry doors were installed in both restrooms to accommodate wheelchairs (Figures 127, 128). The metal door was removed from the handicap stall in the women's restroom at some point and a shower curtain hung in its place to allow for easier access. A skylight was installed in the women's restroom by Childress Roofing in May 1975. In 2005-2006, rehabilitation of existing restrooms at the Visitor Center (originally constructed as part of the 1964 addition) was undertaken (PEPC ID# 11936). The work included new doors, new floor and ceiling finishes, relocation or replacement of plumbing fixtures, new toilet partitions, and other miscellaneous work.

- <u>Approach</u> In 2004, several large hazard trees (bark beetle casualties) were removed outside the Visitor Center, between the building and the parking lot.
- Modular Restroom In 1998-9, as part of project FLAG-98-01-M, a prefabricated restroom facility was installed a short distance northwest of the Visitor Center, near the parking lot. The modular restroom facility and concrete pad were removed as part of the 2005-2006 restroom rehab project (PEPC ID #11936).
- <u>Back Patio Flagstone Repair</u> In 2006 damaged flagstone paving on the patio area behind the Visitor Center leading to the Island Trail was replaced (PEPC ID #14534). This area is divided into two sections: one is directly behind the original CCC era administration building, composed of rectangular stone and covered by a porch roof; the other composes the entire area exposed to the elements and is characterized by irregular paving stones. The former is CCC era construction and was not replaced; the former was Mission 66 construction and had deteriorated badly with many stones missing, cracked, or loose. All of the stone from this area was removed and replaced with new flagstones color matched to the reusable material. This project retained the original footprint of the Mission 66 patio (Figures 129, 130).
- <u>Visitor Center Line Item</u> The Flagstaff Area National Monuments are currently planning a visitor center line item project planned for implementation in 2014. One of the alternatives being considered is to remove the Mission 66 portion of the visitor center and restoring the CCC portion to its original configuration including removal of the modern, pitched roof. This alternative is consistent with the preferred alternative from the Walnut Canyon General Management Plan (NPS 2007). If the CCC portion, once the Mission 66 portion is removed, is returned to its original configuration, it might be eligible for listing in the National Register.

Although visually dominated and obscured by the Mission 66 addition, the CCC Administration Building retains its original footprint and exterior appearance. As noted above (pgs. 37, 38), the CCC portion of the visitor center is ineligible for inclusion in the National Register of Historic Places due to the existence of the modern, pitched roof. If the pitched roof structure and the Mission 66 portion were removed and the roof structure of the CCC portion of the building returned to its historic configuration then it might be eligible for listing on the National Register.

Although the interior of the Mission 66 addition has been altered over the years, these alterations are ephemeral and able to be removed with little impact to the building. The building still retains essential elements of Romigh's Mission 66 design. The overall feeling and appearance of the Visitor Center remain true to the original design. The pattern of visitor flow remains the same. The building continues to function as the hub of visitor and administrative activities. The Mission 66 addition, as part of the overall Mission 66 improvements to Walnut Canyon, is important in the history and development of Walnut Canyon National Monument. The Mission 66 portion of the visitor center is also currently ineligible for inclusion in the National Register of Historic Places. If the pitched-roof structure were removed and the roof structures of both the CCC and Mission 66 portions of the building were returned to their historic configuration, the building as a whole might be eligible for listing on the National Register.

## **Registration Requirements**

## NPS Rustic Architecture and the Civilian Conservation Corps

The buildings and features constructed at Walnut Canyon National Monument by the Civilian Conservation Corps (described above) meet the registration requirements listed below.

In *Building the National Parks: Historic Landscape Design and Construction* (1998) author Linda McClelland outlines the registration requirements for considering National Register eligibility of New Deal era properties and landscapes. According to McClelland (1998:511) properties should possess the following characteristics to be eligible under Criteria A and/or C, in the context of the New Deal era:

- Be associated with the twentieth-century movement to develop national parks for public enjoyment, to conserve natural features and scenic areas as public parks, to organize statewide systems of state or local parks, or to develop natural areas, including submarginal lands, for public recreational use;
- 2. Retain several or all of the physical characteristics listed above which were developed for that area during or before the New Deal era (1933-42);
- Reflect the following principles and practices of park landscape design developed and used by the National Park Service in national parks from 1916 to 1942 and in state and national parks through Emergency Conservation Work (ECW), Civilian Conservation Corps (CCC), Public Works Administration (PWA), or Works Progress Administration (WPA) projects from 1933 to 1942:
  - a. Protection and preservation of natural scenery and features
  - b. Prohibition of exotic plants and wildlife
  - c. Presentation of scenic vistas through the location of park facilities and development of overlooks
  - d. Avoidance of right angles and straight lines in the design of roads, trails, and structures
  - e. Use of native materials for construction and planting
  - f. Use of naturalistic techniques in planting, rockwork, and log work to harmonize constructed development with natural surroundings
  - g. Adaptation of indigenous or frontier methods of construction
  - h. Transplanting and planting of native trees, shrubs, and ground covers to erase the scars of construction and earlier uses of the land
- 4. Possess historic integrity of location, setting, design, materials, workmanship, feeling, and association and overall reflect the physical appearance and condition of the landscape during the period of significance. Changes and additions to the landscape since the period of significance, including new campgrounds, buildings, trails, roads, lakes, and recreational areas, diminish historic integrity and are considered noncontributing. Historic park landscapes containing such changes are eligible for listing despite these changes if the overall historic plan is intact and a substantial number of historic characteristics possessing integrity of design, location, materials, and workmanship are present.

#### Mission 66 and NPS Modern Architecture

The NPS theme study, *Mission 66 Visitor Centers: The History of a Building Type* by Sarah Allaback (2000), provides a contextual basis for considering National Register eligibility of the over 100 Mission 66 visitor centers throughout the United States. Allaback (2000) outlines the registration requirements for Mission 66 visitor center complexes. To be eligible under Criteria A and/or C in the context of the Mission 66 era, according to Allaback (2000:273), properties should possess the following characteristics:

- 1. It should be a precedent of Mission 66 design (1945-1956), originally planned and built as part of Mission 66 (1956-1966), or built as part of the Parkscape program (1966-1972); and the property's period of significance should fall between 1945 and 1972.
- 2. The visitor center complex should retain most or all of the distinguishing characteristics of a Mission 66 design. It should be a centralized facility that includes multiple visitor and administrative functions within a single architectural floor plan or compound. Programming elements should include interpretive displays, space for slide shows and films, visitor contact areas, restrooms, and other public services. The visitor center should be intended to serve the public by interpreting scenery, natural resources, and cultural sites; and should be a major point of visitor arrival, orientation, and service.
- 3. It should possess physical integrity. It must have integrity evident through historic qualities including location, design, setting, materials, workmanship, feeling, and association.
- 4. It should be a successful reflection of the principles of Park Service Modern style. Distinguishing characteristics of this style include: location that emphasizes efficient "visitor flow;" segregation of administrative areas from public areas; centralization of services; use of contemporary modern architecture stylistic elements; free floor plans; integration of interior and exterior public spaces through the use of windows; wide open sheltered entryways that promote easy movement of crowds; views of park landscapes; location near a landscape of attraction to be interpreted; building profiles with low horizontal effect; buildings that "harmonize" with natural landscapes through the use of horizontality of massing, and color and texture of materials; L-shaped or rectangular buildings or around a central courtyard; use of native plants in landscaping; and outdoor public spaces often incorporated into the visitor center.

Allaback (2000) notes that "For any property achieving significance within the last 50 years, National Register 'Criterion Consideration G' requires that the property must be of 'exceptional importance'..." Therefore, a visitor center less than 50 years old should possess the following characteristics (in addition to meeting the registration requirements for Criteria A and C):

- 1. It should possess substantial physical integrity held to higher standards than for properties older than 50 years, and elements critical to distinguishing the property's artistic merit as an example of NPS Modern design should be unaltered.
- The property should possess exceptional importance in one or more of the following ways:
  - a. as an outstanding example of the NPS Modern style
  - b. as the work of a regionally, nationally, or internationally recognized architect or firm working for NPS
  - c. as an example of distinctive programming, planning, or design that affected the evolution of the visitor center as a building type
  - d. as an essential part of Mission 66 development that had great importance in the history and development of an individual park
  - e. for association with events and activities that made contributions to the history of local communities or native groups

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Figures and Illustrations

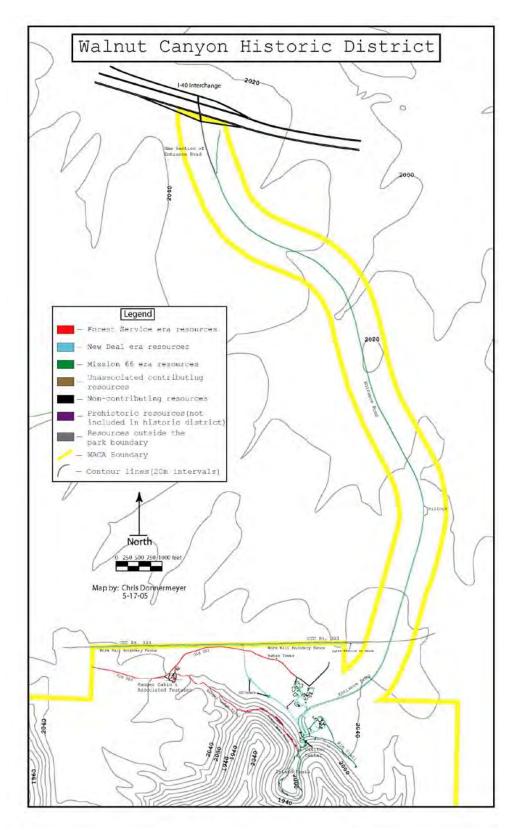


Figure 1. Walnut Canyon Historic District overview.

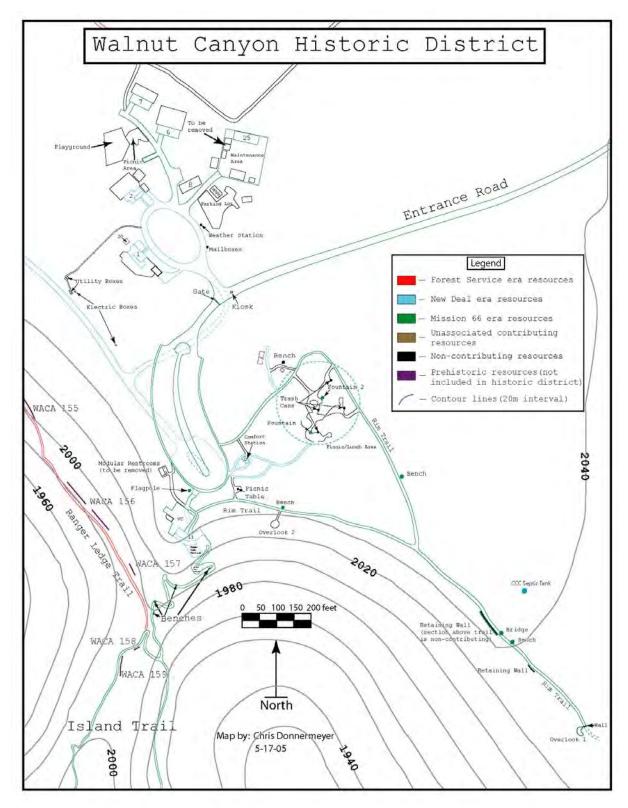


Figure 2. Walnut Canyon Historic District, administrative area.

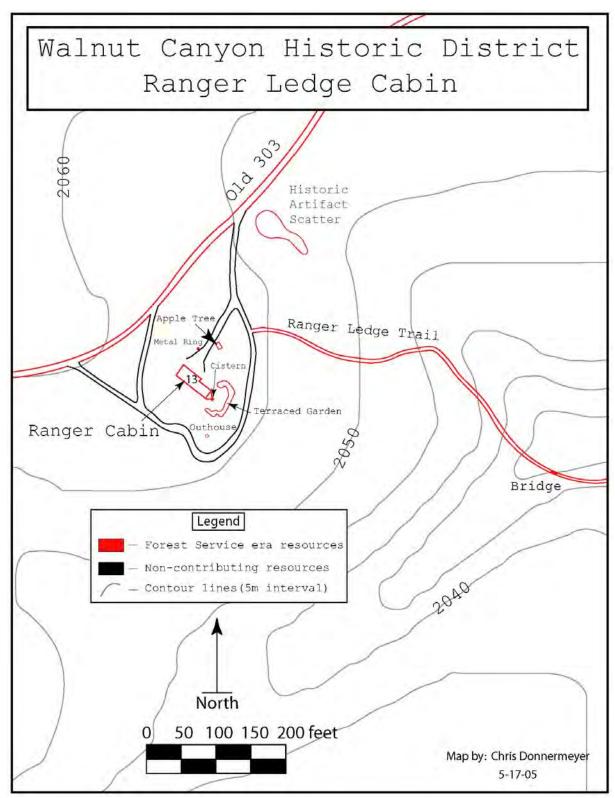


Figure 3. Walnut Canyon Historic District, Ranger Cabin.



Figure 4. Picnickers at Walnut Canyon, ca. 1890 (cline library photo item 8065).

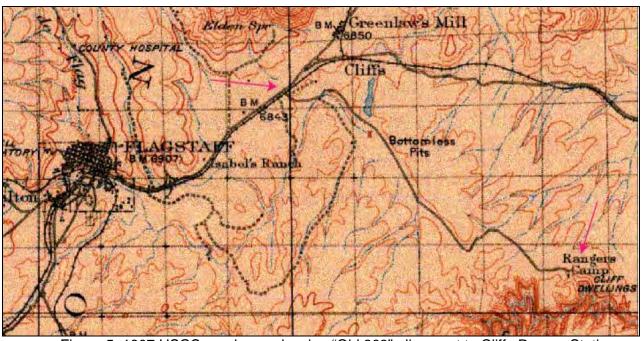


Figure 5. 1907 USGS quad map showing "Old 303" alignment to Cliffs Ranger Station (arrows added)

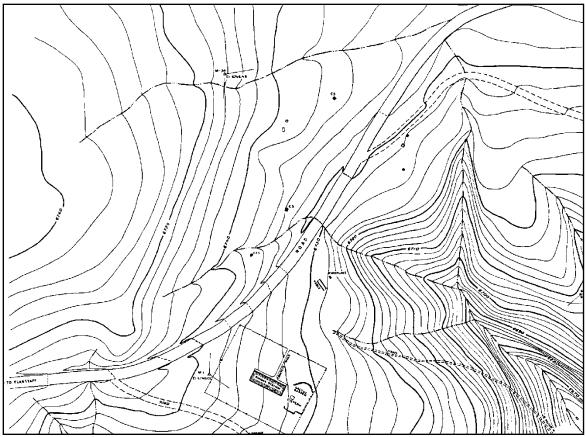


Figure 6. Detail of 1935 Topographical map (NPS Dwg NM-WAL 4938, sheet 14), showing Cliffs Ranger Station (bottom), "Old 303", and Ranger Canyon trail (bottom right).

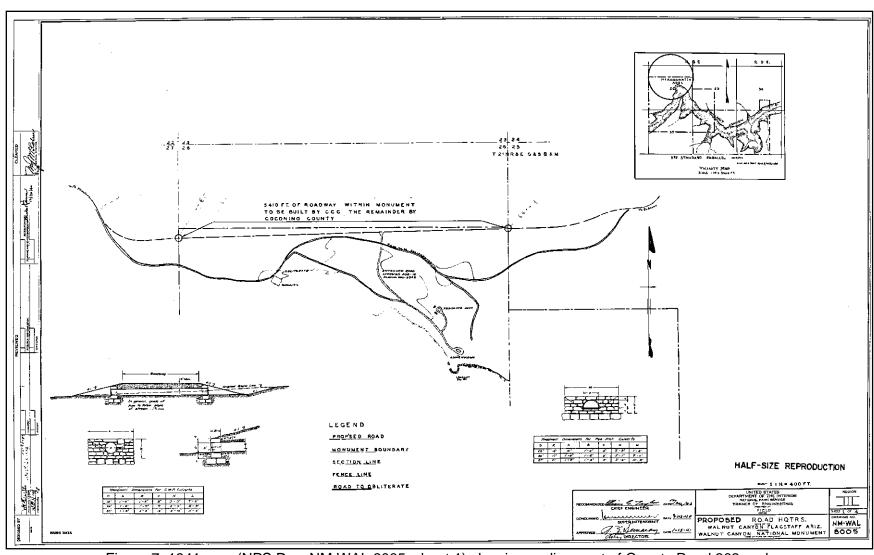


Figure 7. 1941 map (NPS Dwg NM-WAL 8005, sheet 1) showing realignment of County Road 303 and construction of new spur road to connect with CCC-constructed entrance road (note culvert design).

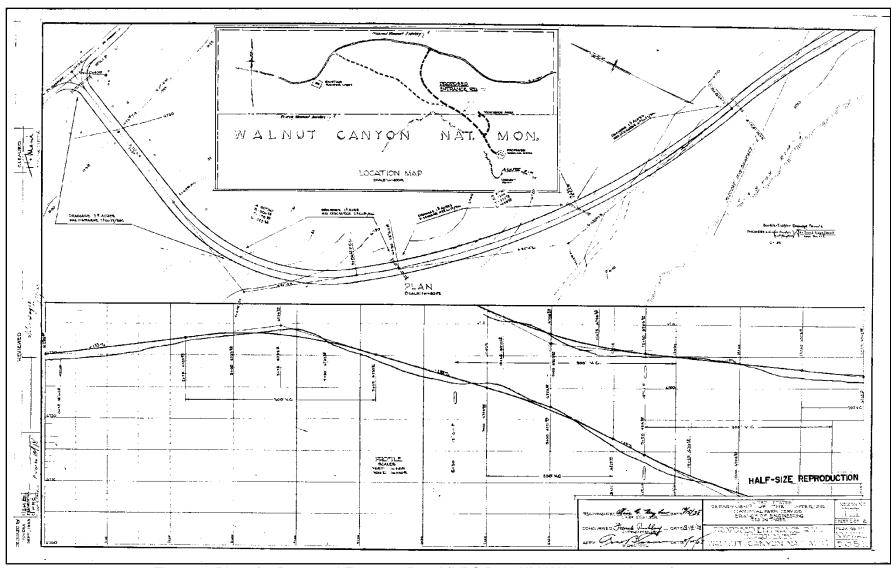


Figure 8. Plans for Proposed Entrance Road (NPS Dwg NM-WAL 5352, sheet 1), 1938.

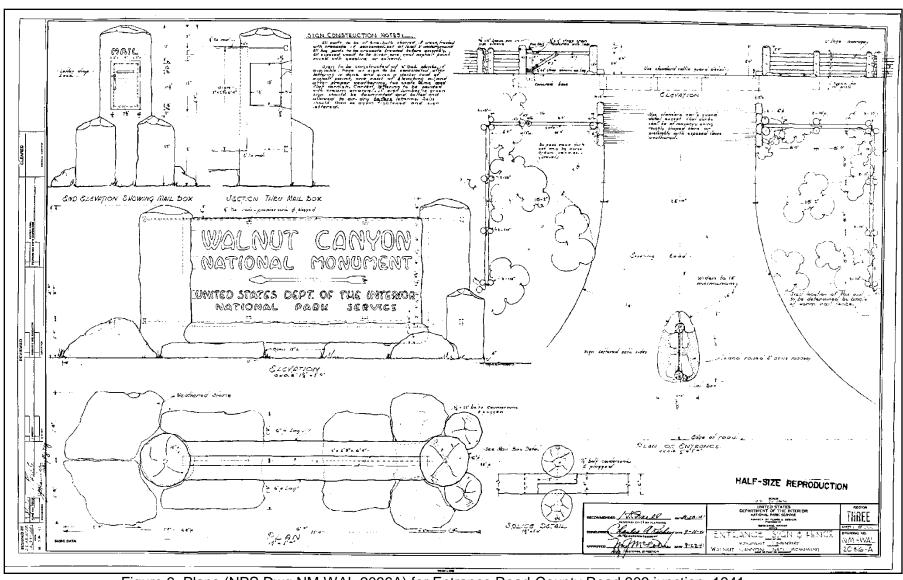


Figure 9. Plans (NPS Dwg NM-WAL 2036A) for Entrance Road-County Road 303 junction, 1941.



Figure 10. Monument entrance at County Road 303, ca. 1942 (NPS photo).



Figure 11. Abandoned monument entrance at County Road 303, 2005 (Note forked tree) (NPS photo).



Figure 12. "Old 303" in proximity to Ranger Cabin, 2005 (NPS photo).



Figure 13. "Old 303" alignment, 2005 (NPS photo).

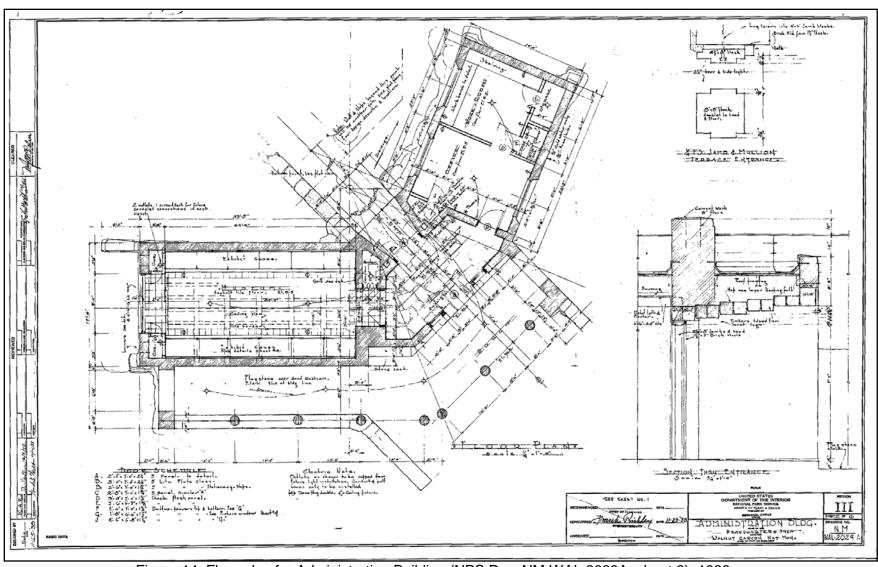


Figure 14. Floor plan for Administration Building (NPS Dwg NM-WAL 2029A, sheet 2), 1938, drawn by Cecil Doty.

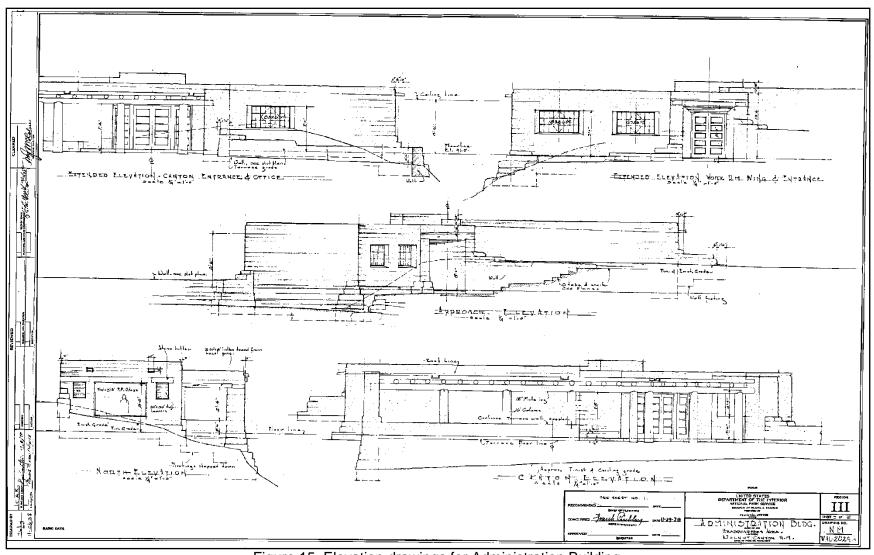


Figure 15. Elevation drawings for Administration Building (NPS Dwg NM-WAL 2029A, sheet 3), 1938, drawn by Cecil Doty.

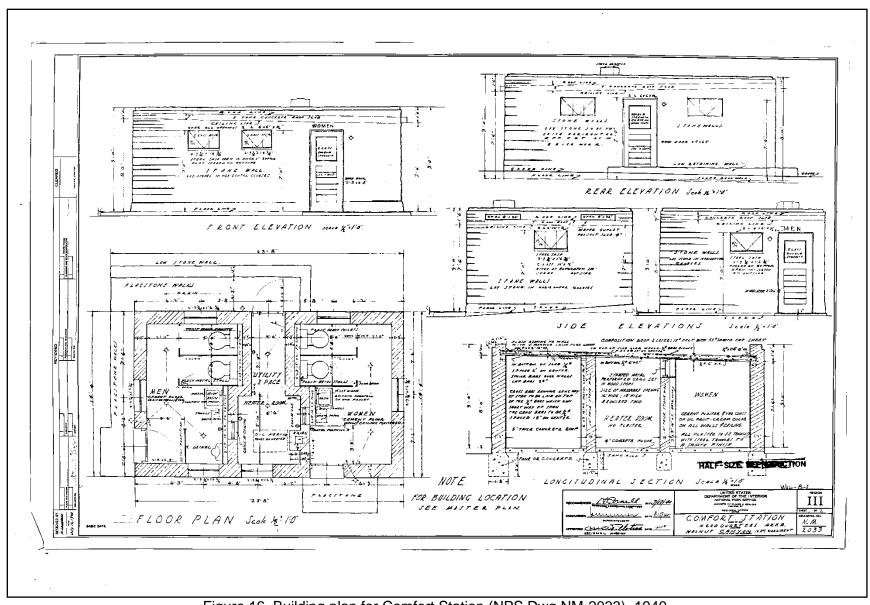


Figure 16. Building plan for Comfort Station (NPS Dwg NM-2033), 1940.

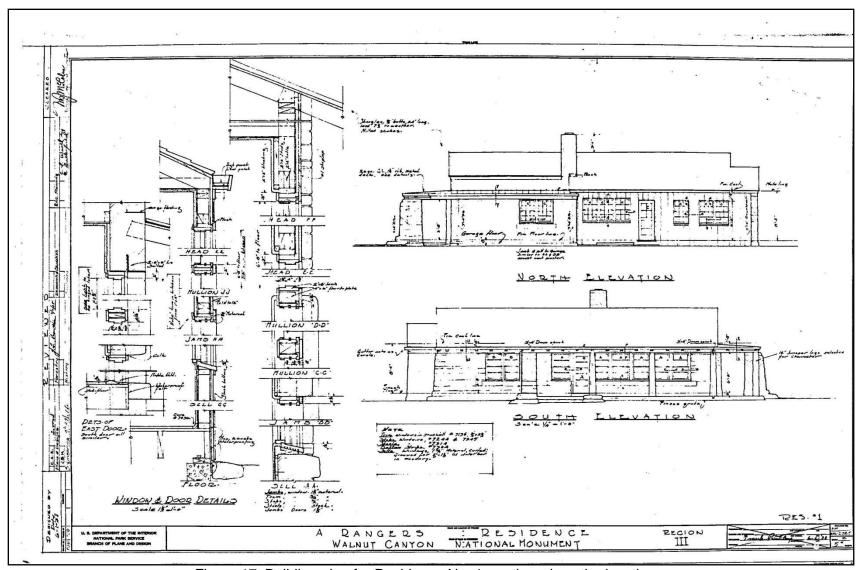


Figure 17. Building plan for Residence No. 1, north and south elevations, (NPS Dwg NM-WAL 2025, sheet 3), 1938, drawn by Cecil Doty.

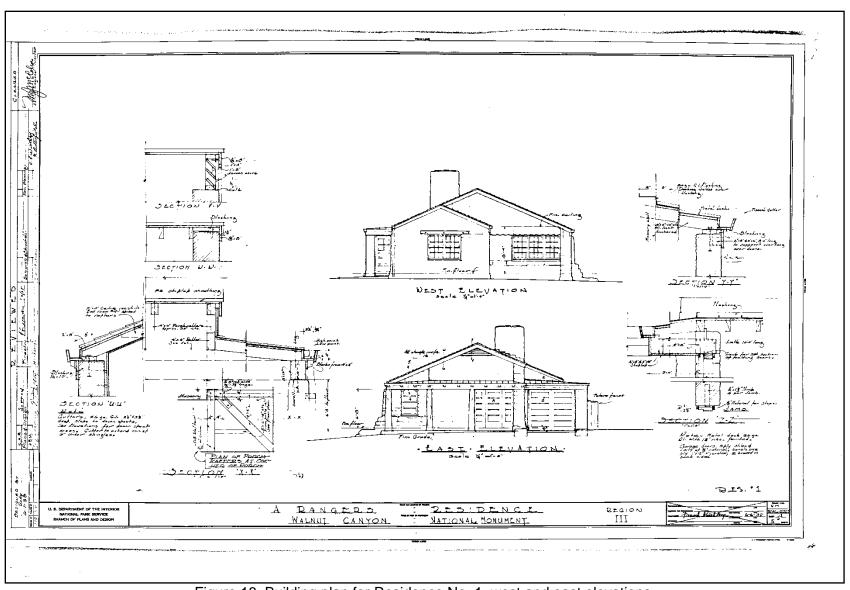


Figure 18. Building plan for Residence No. 1, west and east elevations, (NPS Dwg No. NM-WAL 2025, sheet 4), 1938, drawn by Cecil Doty.

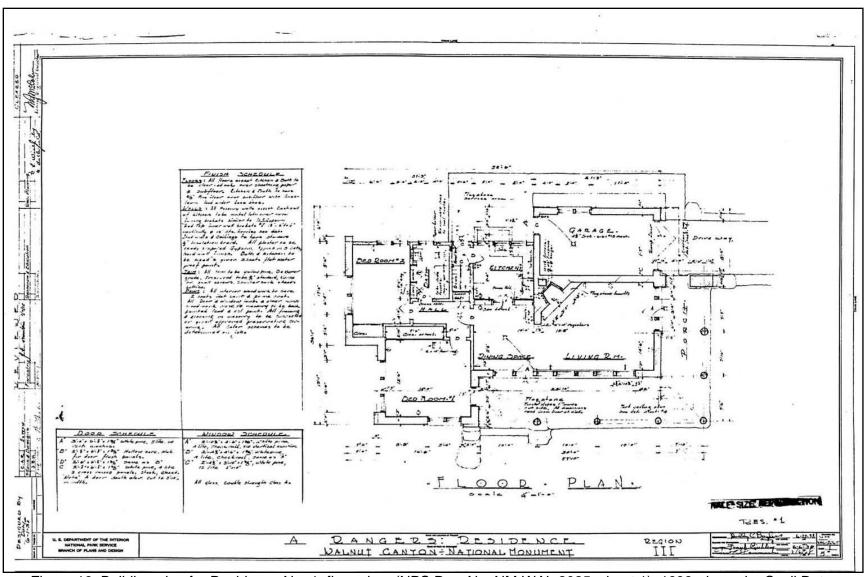


Figure 19. Building plan for Residence No. 1, floor plan, (NPS Dwg No. NM-WAL 2025, sheet 1), 1938, drawn by Cecil Doty.

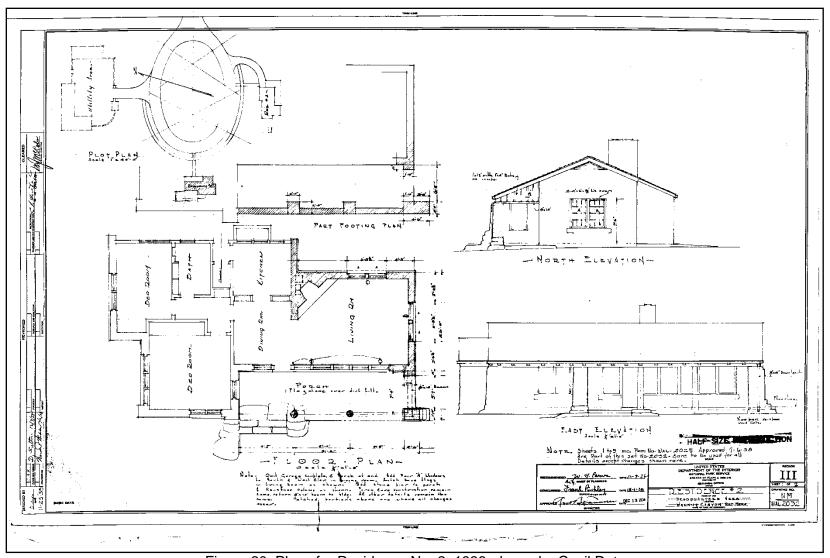


Figure 20. Plans for Residence No. 2, 1938, drawn by Cecil Doty (NPS Dwg NM-WAL 2032, sheet 1).

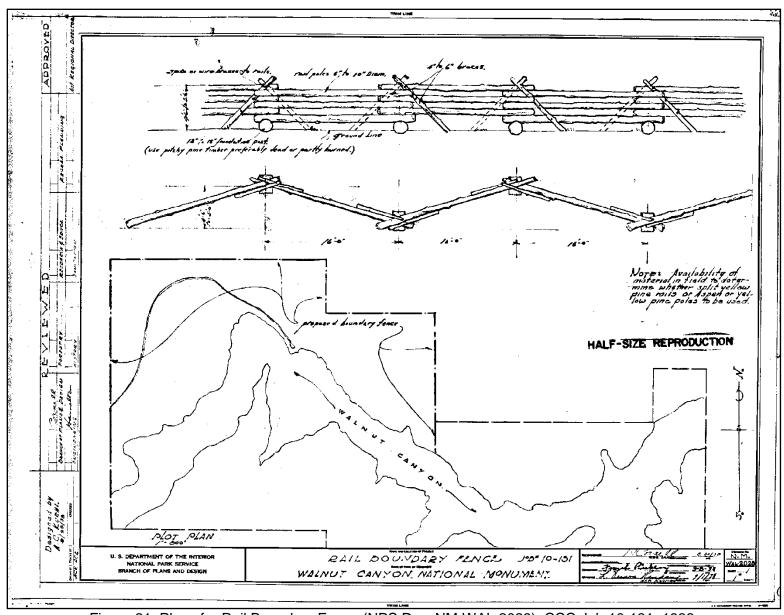


Figure 21. Plans for Rail Boundary Fence (NPS Dwg NM-WAL 2028), CCC Job 10-131, 1938.

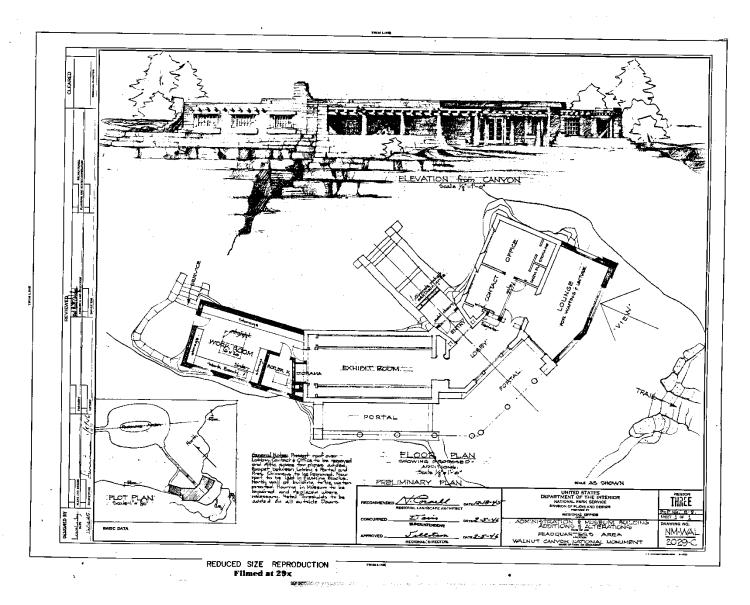


Figure 22. Preliminary plans for additions to the CCC Administrative Building that were never realized (NPS Dwg. NM-WAL 2029-C).

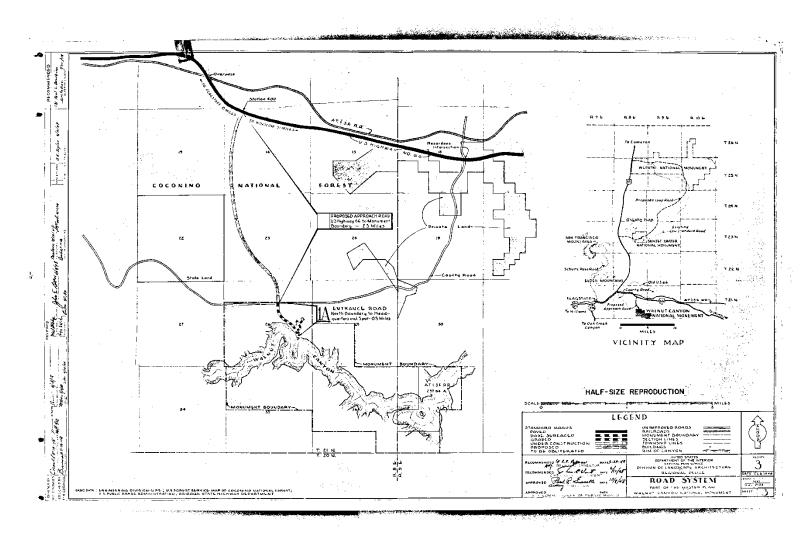


Figure 23. Proposed Walnut Canyon entrance road from the 1948 Master Plan (NPS Dwg NM-WAL 2102z1).

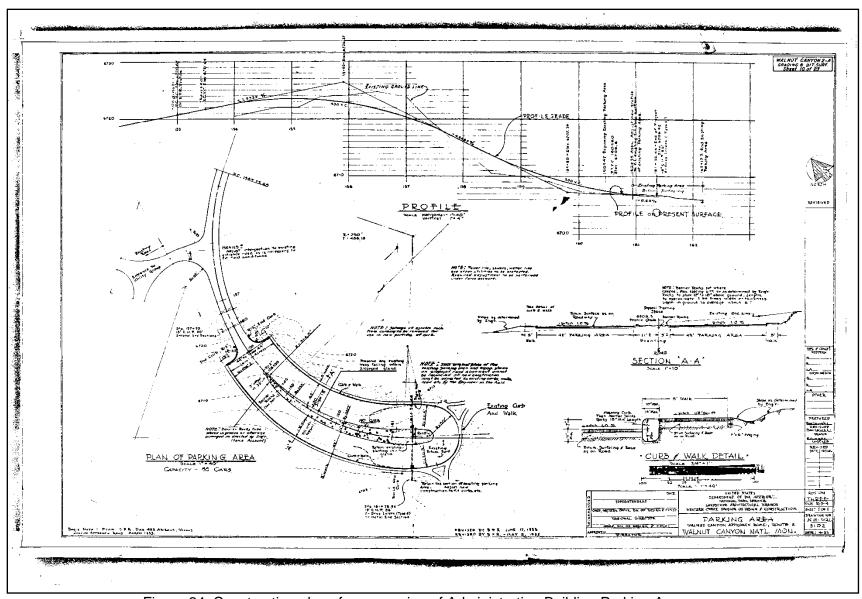


Figure 24. Construction plans for expansion of Administration Building Parking Area, as part of Route 2 construction (NPS Dwg NM-WAL 3102), April 1955.



Figure 25. Newly constructed Approach Road, ca. 1956-7 (NPS photo).



Figure 26. Approach Road, 2005 (NPS photo).

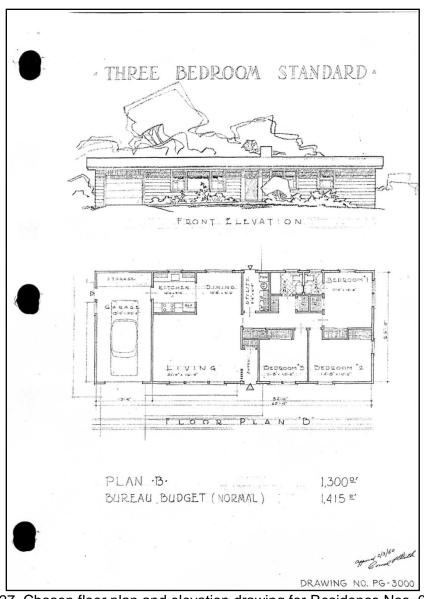


Figure 27. Chosen floor plan and elevation drawing for Residence Nos. 6 and 7, (NPS Dwg No. PG-3000), approved 1960.

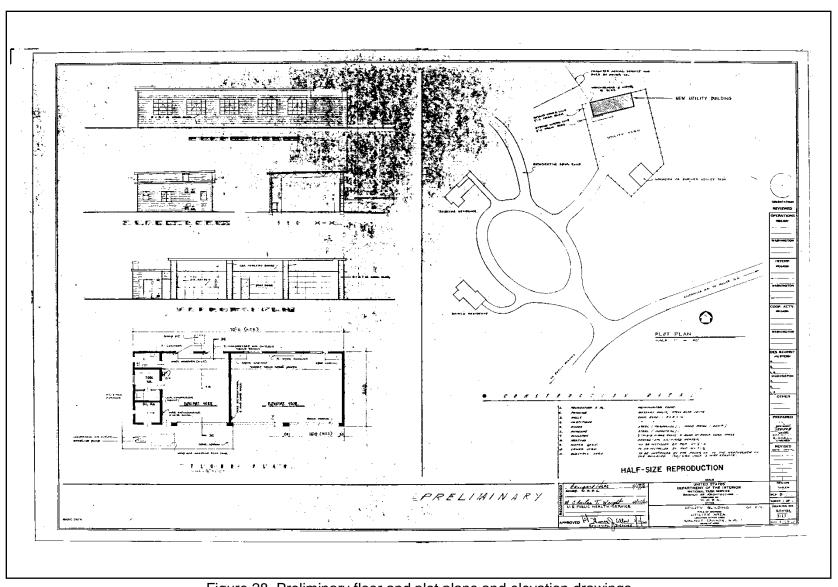


Figure 28. Preliminary floor and plot plans and elevation drawings for Utility Building, 1960 (NPS Dwg NM-WAL 3113).

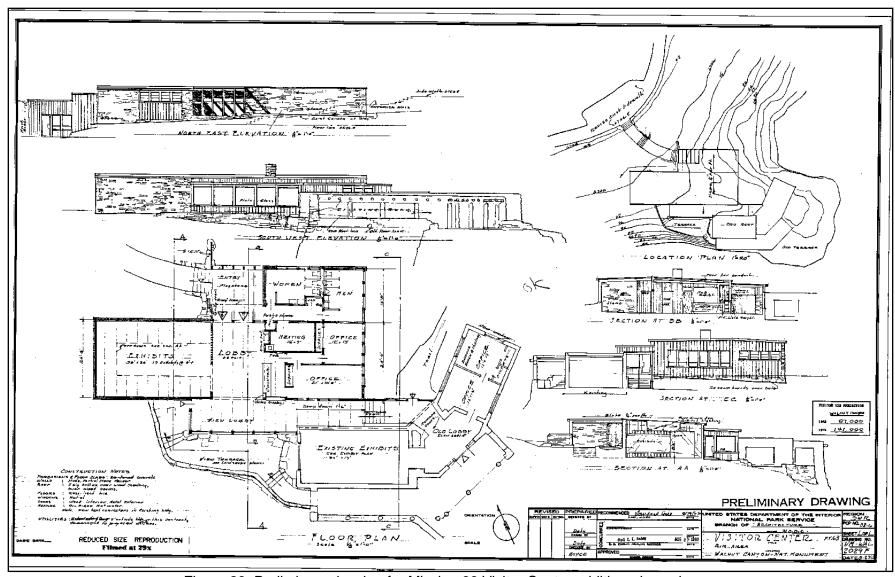


Figure 29. Preliminary drawing for Mission 66 Visitor Center addition, drawn by Cecil Doty, (NPS Dwg NM-WAL 2029F), August 1962.

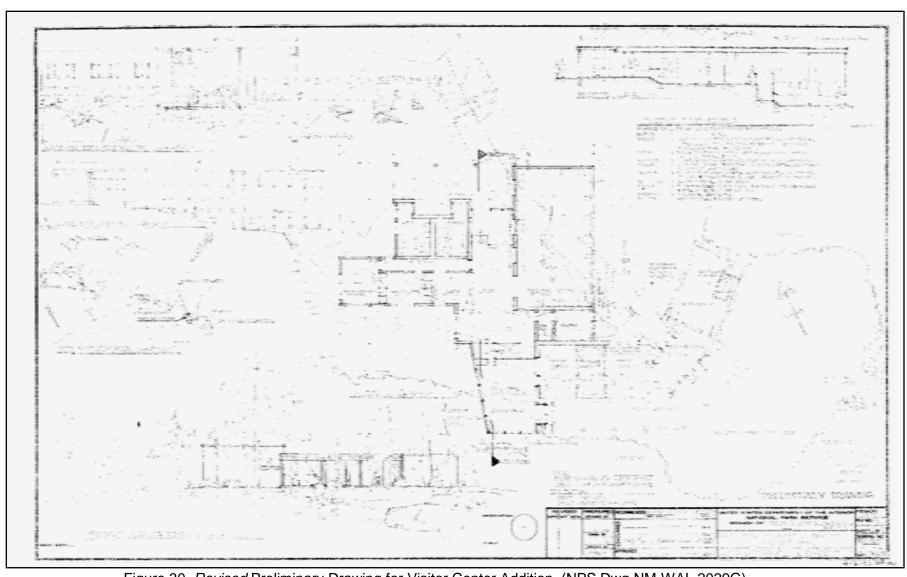


Figure 30. *Revised* Preliminary Drawing for Visitor Center Addition, (NPS Dwg NM-WAL 2029G), drawn by Philip Romigh, March 1963, showing current design.

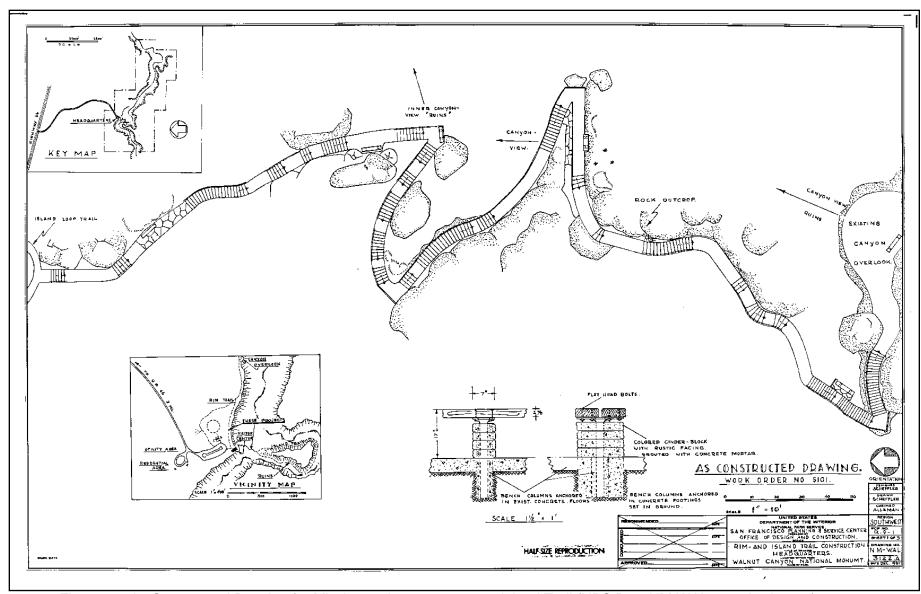


Figure 31. As Constructed Drawing for Mission 66 Improvements to Island Trail (NPS Dwg NM-WAL 3122A, sheet 1).

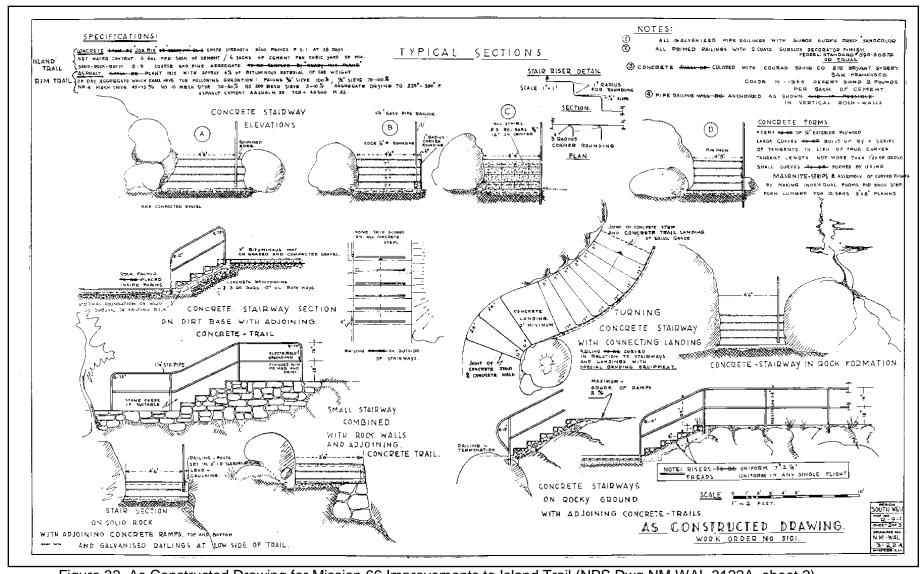


Figure 32. As Constructed Drawing for Mission 66 Improvements to Island Trail (NPS Dwg NM-WAL 3122A, sheet 2).

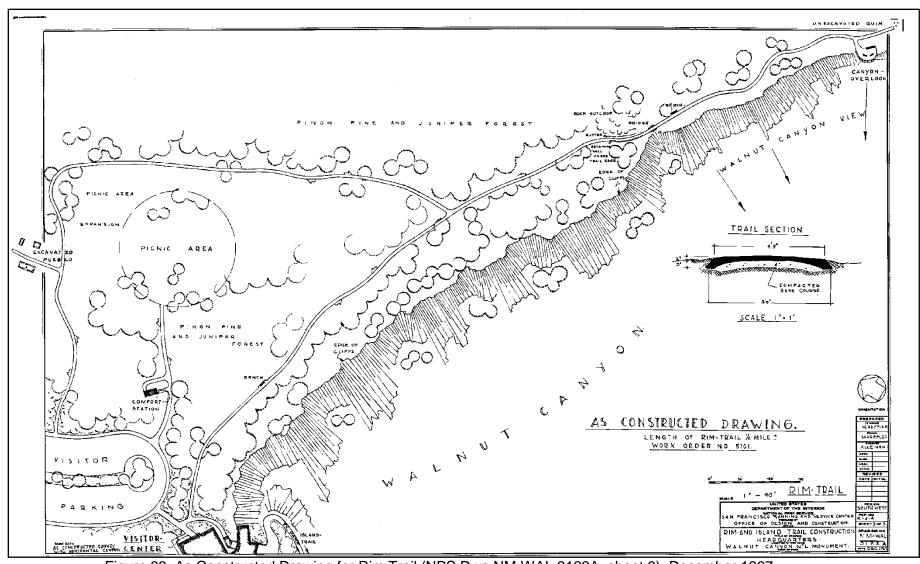


Figure 33. As Constructed Drawing for Rim Trail (NPS Dwg NM-WAL 3122A, sheet 3), December 1967 (Note absence of 1<sup>st</sup> Canyon Overlook).



Figure 34. Ranger William Pierce and his wife, Mattie Pendley, at Cliffs Ranger Station, ca. 1904 (NPS photo).



Figure 35. Ranger Cabin Log Construction, 2009. (NPS photo).



Figure 36. Postcard of Ranger Cabin at beginning of NPS era, ca. 1938 (NPS photo).

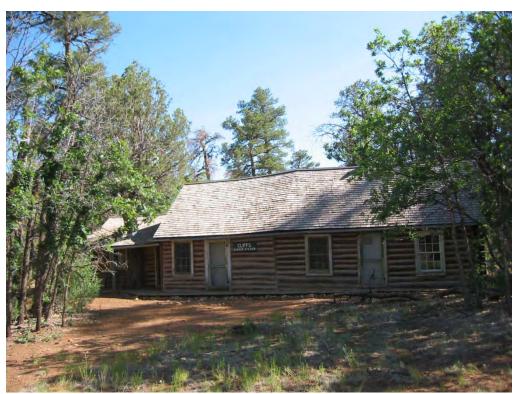


Figure 37. Ranger Cabin, 2004 (NPS photo).



Figure 38. Ranger Cabin Ceiling, 2009. (NPS photo).



Figure 39. Ranger Cabin Terraced Garden, 2009. (NPS photo).



Figure 40. Ranger Cabin Cistern, 2009. (NPS photo).



Figure 41. Ranger Cabin Cistern, 2009. (NPS photo).



Figure 42. Ranger Cabin Stone Birdbath, 2009. (NPS photo).



Figure 43. Ranger Cabin Outhouse, 2009. (NPS photo).





Figure 45. Barn that was near the Ranger Cabin (background right) until approximately 1935, date taken unknown (NPS photo).



Figure 46. Bridge along canyon section of Ranger Ledge trail, 2002 (NPS photo).



Figure 47. Visitors at WACA 155, along the Ranger Ledge trail, ca. 1890 (NPS photo).



Figure 48. Visitors on Ranger Ledge Trail, ca. 1920 (NPS photo).



Figure 49. Cement and boulder step in front of WACA 154, along Ranger Ledge trail, 2002 (NPS photo).



Figure 50. Comfort Station, ca.1950 (NPS photo).



Figure 51. Comfort Station, 2004 (NPS photo).



Figure 52. Residence No. 1 nearing completion, ca. 1940 (NPS photo).



Figure 53. Residence No. 1, 2003 (NPS photo).



Figure 54. Residence No. 1, Stone Fireplace, 2000 (NPS photo).



Figure 55. Residence No. 2, date taken unknown (NPS photo).



Figure 56. Residence No. 2, 2004 (NPS photo).

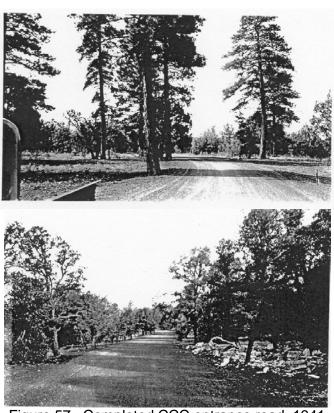


Figure 57. Completed CCC entrance road, 1941 (NPS photos).



Figure 58. CCC entrance road, 2005 (NPS photo).



Figure 59. Stone culvert along CCC entrance road, 2005 (NPS photo).



Figure 60. During the construction of the new 303 alignment (NPS photo).



Figure 61. After the construction of the new 303 alignment.



Figure 62. View of Administration Building parking lot, 1941 (note stone curbing and landscaped "island") (NPS photo).



Figure 63. Close-up of stone curbing and sidewalk, south end of Administration Building parking lot, 1941(NPS photo).



Figure 64. Newly expanded Visitor Center parking lot, 1956 (note stone curbing and island) (NPS photo).



Figure 65. Visitor Center Parking lot, 2004 (NPS photo).



Figure 66. CCC Rail Boundary Fence south of current County Road 303, 2005 (NPS photo).



Figure 67. Closeup of worm-rail fence. corner construction, 2005 (NPS photo).



Figure 68. 1920 photo showing visitors at Observation Point (note cable railing and registration building) (NPS photo).

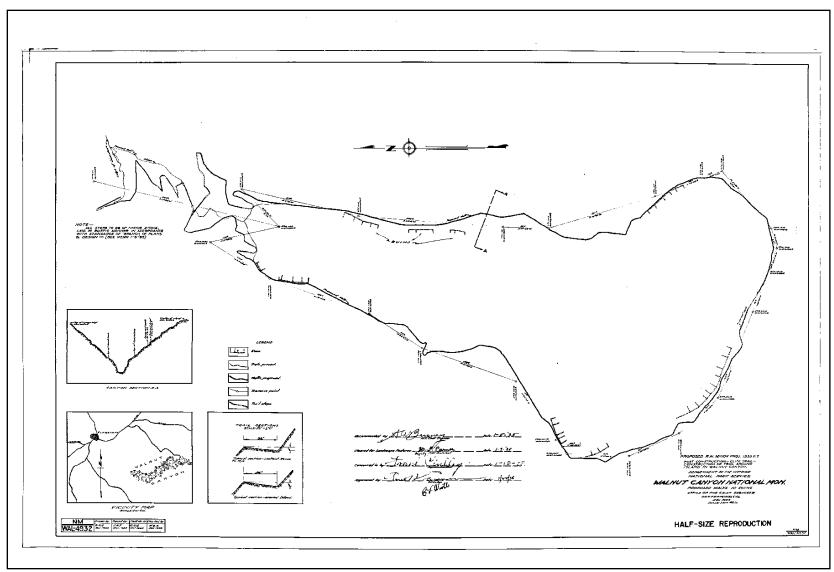
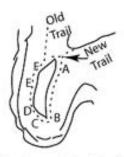
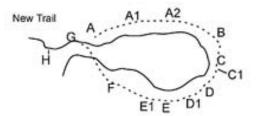


Figure 69. Plans for proposed "walk to ruins" (Island Trail) (NPS Dwg NM-WAL 4932), 1935.



- A. A small rock wall and fill in a draw, wall about three feet high and four feet long. This wall and fill widen the trail on a bad corner.
- B. A small rock wall and fill on a steep slope, wall about four feet long and two feet high.
- C. Removed a large rock over which the trail went. By buring this large rock into wash, I lower the trail in the middle and raised it on both sides with a rock wall and fill. (Some improvements can be made with powder.)
- D. By moving a few large rocks I straightened the trail and lowered it about three feet. Fifteen feet of trail was straightened and lowered.
- E. A large rock wall and fill. Wall 18 feet long and six feet at the highest point.
- F. A rock wall and fill. Wall ten feet long and four feet at the highest point

Loose rock and gravel removed from between these points.



- A1. Shot and removed large rock which was in the center of the trail.
- A2. Shot and removed a large rock. With the removal of this rock, I was able to grade the trail and avoid steps which would have been necessary if the rock had not been removed.
- C1. Finished trail at point C of last month; this leaves a level trail and removes what was a bad place in the trail.
- D1. Widen the trail by building a small rock wall. This was done because the trail passed under a leaning. Douglas Fir, which made it a bad place to pass.
- E1. Built a new trail around a large rock over which the trail went. New trail continued on for a distance of fifty feet on an easy grade. This section of new trail is about six feet lower than the old trail and eliminates a steep place that was on the old trail. This part of the trail was bad when there was snow on the ground.
- G. Widen the trail which at this point went between two large rocks. The old trail was too narrow and had a right angle turn in it. With the widening of the trail at this point the right angle turn was eliminated.
- H. Widen the trail which at this point was partly stairs. Also cut in a new twenty foot trail part of which was built by rolling large rocks in a draw and building up a wall.

Figure 70. Notes (reproduced) outlining work conducted on Island Trail, written by Milton Wetherill, temporary Ranger-in-Charge, (Wetherill 1936).



Figures 71. CCC trail construction, ca. late 1930s (NPS photos).



Figure 72. CCC-constructed rock wall, retained by Mission 66 improvements, 2005 (NPS photo).



Figure 73. Form for Mission 66 poured concrete stairs, May 1966, note rubble and rebar under form (NPS photo).

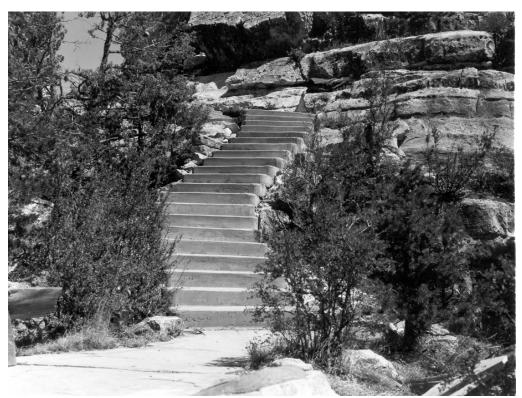


Figure 74. Mission 66 staircase directly above loop level of Island Trail, 1966 (NPS photo).



Figure 75. Mission 66 staircase above loop trail, 2005 (NPS photo).

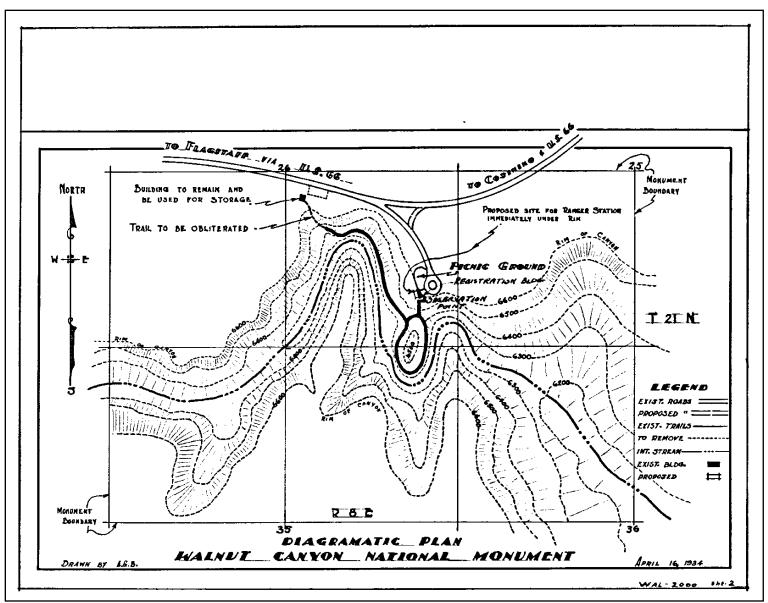


Figure 76. 1934 development plan map showing the proposed "Picnic Ground" (NPS Dwg WAL-2000).

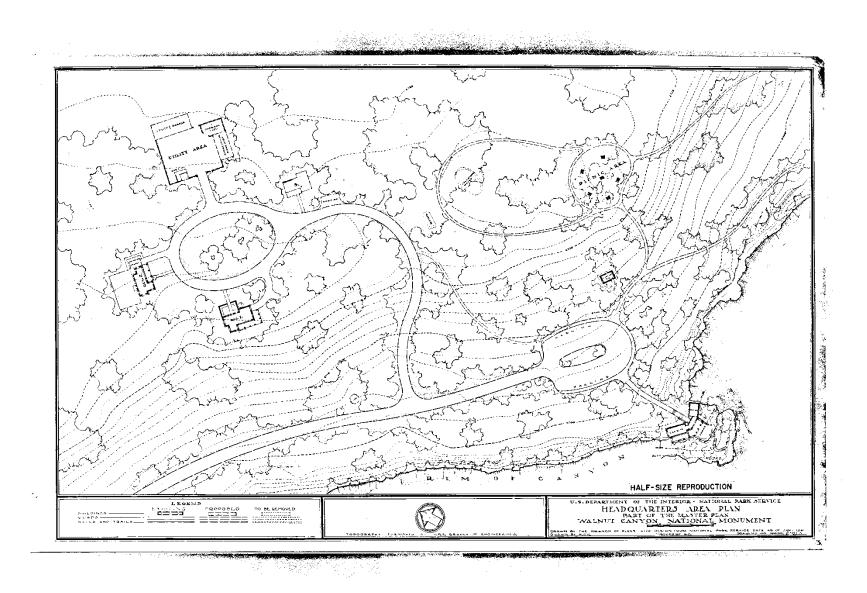


Figure 77. Map from 1/1/1941 showing the proposed location of the picnic area in its current location.



Figure 78. Stone water fountain #1 in picnic area, 2005 (NPS photo).



Figure 79. Stone water fountain #2 in picnic area, 2005 (NPS photo).

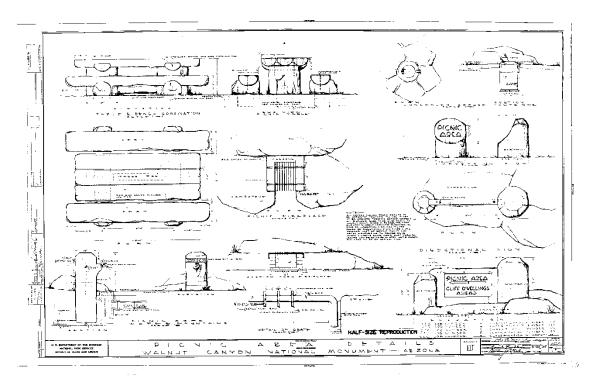


Figure 80. 1938 drawings showing preliminary plans for the installation of water fountains at the picnic area.



Figure 81. Residence No. 6 after completion, 1961 (NPS photo).



Figure 82. Residence No. 6, 2004 (NPS photo).



Figure 83. Residence No. 7 after completion, 1961 (NPS photo).



Figure 84. Residence No. 7, 2004 (NPS photo).



Figure 85. Utility Building after completion, n.d. (NPS photo).



Figure 86. Utility Building, 2004 (NPS photo).

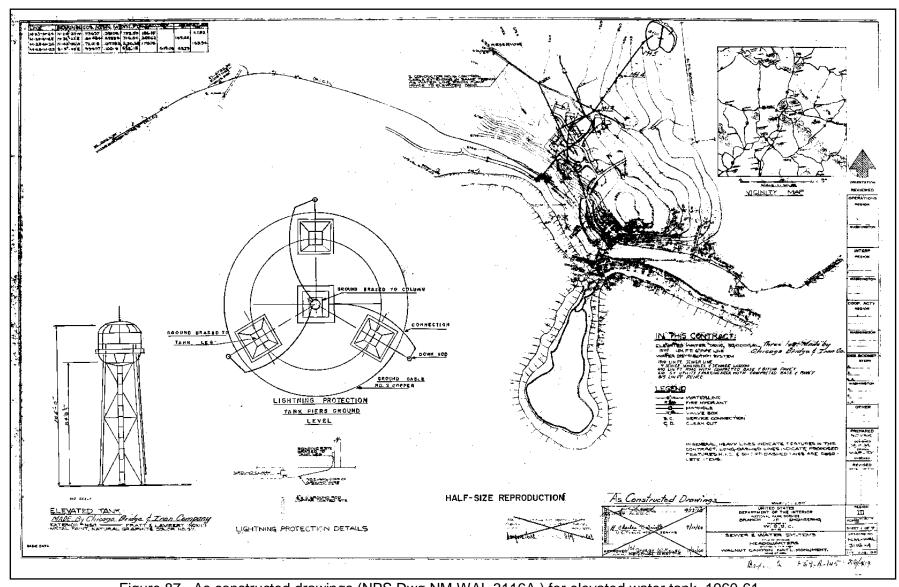


Figure 87. As constructed drawings (NPS Dwg NM-WAL 3116A) for elevated water tank, 1960-61.



Figure 88. Elevated water tower under construction, 1961 (NPS photo).



Figure 89. Completed water tower seen from residential spur road, 1961 (NPS photo, arrow added).

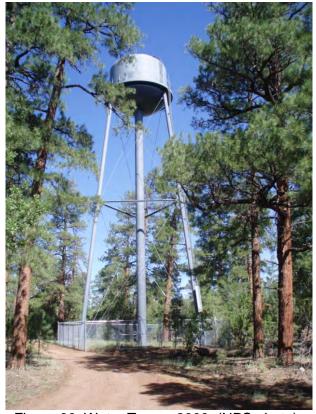


Figure 90. Water Tower, 2009. (NPS photo).

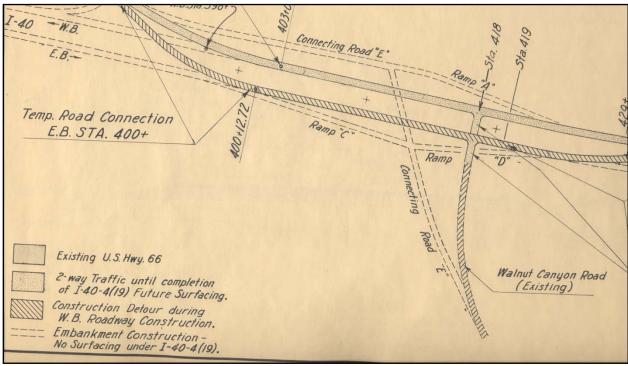


Figure 91. Detail of construction plans for Walnut Canyon-Interstate 40 interchange and realignment of Walnut Canyon Approach road, 1963 (NPS files).

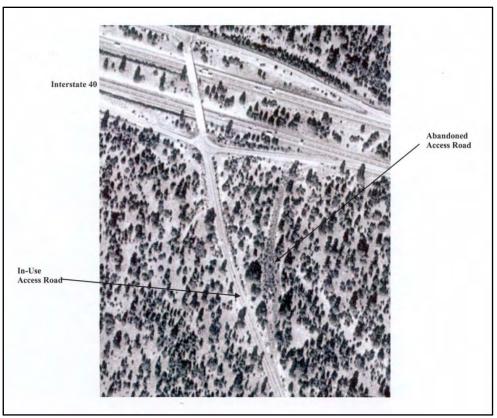


Figure 92. Aerial photo showing current alignment and abandoned segment.



Figure 93. Abandoned segment of 1956 Approach Road (Route 2), looking north, 2005 (NPS photo).



Figure 94. Rim Trail (loop section) overview, 2005.



Figure 95. Rim Trail bridge, September 1967 (left), 2005 (right)(note addition of trail wall in foreground) (NPS photos).



Figure 96. Rim Trail and bench, September 1967 (left) and 2005 (right), (note 1970 asphalt spur addition to overlook) (NPS photos).



Figure 97. Canyon Overlook from abandoned Rim trail segment, 2005 (NPS photo).



Figure 98. Original Rim Trail Canyon Overlook with retaining wall at the end of the trail, September 1967 (left) and the overlook from the trail, n.d. (right) (NPS photos).



Figure 99. 1970 constructed overlook at the beginning of the trail.

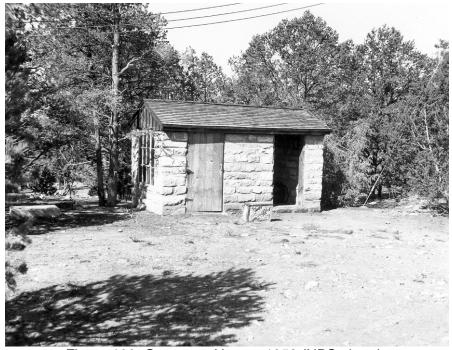


Figure 100. Generator House, 1952 (NPS photo).



Figure 101. Generator House, 2004 (NPS photo).



Figure 102. Back Porch of Administration Building, 1942 (NPS photo).



Figure 103. Entrance to Administration Building, 1959 (NPS photo).



Figure 104. Walnut Canyon Administration Building Exhibit Room, 1959 (note the hand hewn wooden beams) (NPS photo).



Figure 105. Administration Building, viewed from island, 1948 (NPS photo).

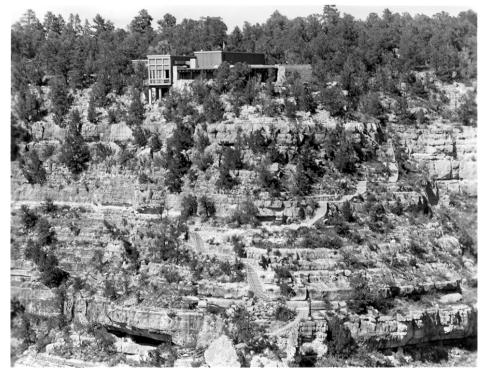


Figure 106. Administration building with Mission 66 addition, c. 1966-1979 (NPS photo).



Figure 107. Entrance to Mission 66 Visitor Center ca.1965 (NPS photo).



Figure 108. Mission 66 Visitor Center lobby and front desk area, July 1966 (NPS photo).



Figure 109. Mission 66 Visitor Center lobby and front desk area, with WNPA addition, 2005 (NPS photo).



Figure 110. Staircase to viewing area, 1965 (NPS photo).





Figure 112. Walnut Canyon Exhibit Room after Mission 66 remodeling into office space, 1965 (note painted wooden viga at the top of the photo) (NPS photo).



Figure 113. Walnut Canyon office space, 2004 (note painted wooden viga at the top of the photo) (NPS photo).



Figure 114. Work room after Mission 66 remodel, 1965 (NPS photo).



Figure 115. Work room, 2005 (NPS photo).



Figure 116. CCC Adminstrative Building, date unknown (NPS photo)



Figure 117. Back Porch of Administration Building with pitched roof, 2004 (NPS photo). The area constructed with limestone is the CCC portion of the visitor center. Note the round vigas.

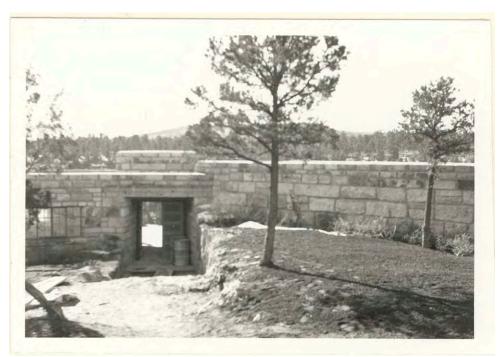


Figure 118. Entrance to the CCC portion of the visitor center, date unknown (NPS photo).



Figure 119. Entrance to the CCC portion of the visitor center with Mission 66 addition (wall on right) and pitched roof, 2004 (NPS photo).



Figure 120. Visitor Center entrance with pitched roof, 2004 (NPS photo).



Figure 121. Visitor Center with pitched roof, 2009 (NPS photo), as compared to the structure before the roof in Figure 104.



Figure 122. Mission 66 portion of the VC with the pitched roof, taken from within the canyon, 2009 (NPS photo).

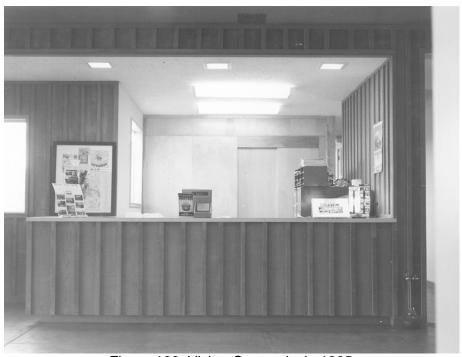


Figure 123. Visitor Center desk, 1965 (NPS photo).



Figure 124. Visitor Center desk, 2004 (NPS photo).

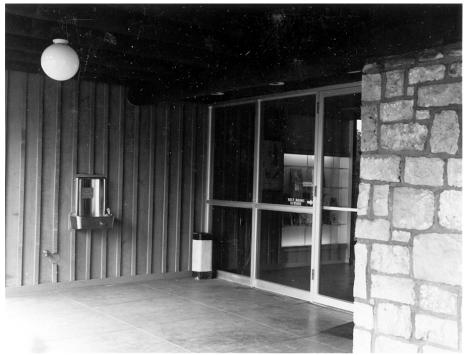


Figure 125. Visitor Center entrance after completion, 1965 (NPS photo).



Figure 126. Visitor Center entrance, 2009 (NPS photo).



Figure 127. Entrance to restrooms, exterior of Mission 66 Visitor Center, 1965 (NPS photo).



Figure 128. Entrance to restrooms, exterior of Mission 66 Visitor Center, 2005 (NPS photo).



Figure 129. Transition between CCC era and new flagstone on the back porch of the Visitor Center, 2006 (NPS photo).



Figure 130. New flagstone on back porch of the Administration Building, 2009 (NPS photo).