Finding aid for the Land Survey Field Books

Louis Knecht
Sequoia & Kings Canyon National Parks
47050 Generals Highway
Three Rivers, CA 93271-9700
Phone: (559) 565-3133
Fax: (559) 565-3133
Email: Ward_Eldrege@nps.gov
URL: http://www.nps.gov/seki
© 2017
National Park Service, Sequoia & Kings Canyon NP. All rights reserved.
Finding aid for the Land Survey Field Books

Collection number: SEKI 23696

Museum and Archives
Sequoia & Kings Canyon National Parks
Three Rivers, California

Processed by:
Louis Knecht

Date Completed:
2017

Encoded by:
Louis Knecht

© 2017 National Park Service, Sequoia & Kings Canyon NP. All rights reserved.

Descriptive Summary
Title: Land Survey field books
Dates: 1924-1970
Bulk Dates: 1924-1962
Collection number: SEKI 23696
Collection Size: 4 linear feet
Repository: Sequoia & Kings Canyon National Parks, Museum and Archives.
Three Rivers, CA 93271-9700
Abstract: A collection of 112 field surveyor notebooks and five indexes containing field survey notations for park construction projects.
Languages: Languages represented in the collection: English
Access
Collection is open for research by appointment.

Publication Rights
Many collections are former federal government records and are in the public domain. Other collections are from private sources; copyright has been transferred to the NPS on most. Some collections have publication restrictions. Staff will assist researchers in determining copyright status of selected materials. Researchers are required to properly credit all materials used. The researcher assumes responsibility for acquiring copyright permissions when needed.

Preferred Citation
Land Survey field books , SEKI 23696. Courtesy of the National Park Service, Sequoia & Kings Canyon National Parks.

Biography / Administrative History
Sequoia National Park, founded in 1890, was the second national park to be established by the federal government. General Grant National Park, the third national park, was created later that same year. In 1926, Congress expanded the boundaries of Sequoia National Park east to Mount Whitney to encompass both the Kaweah and Kern watersheds for a total park area of 604 square miles.
Visitor use in the early 1900s to the Giant Forest area posed major challenges for the park with a disorganized assortment of temporary buildings, scattered and unmaintained campsite, and inadequate water and sewage systems. In the 1920s, Superintendent John R. White and NPS Director Stephen Mather outlined a program to organize park-run campsites and to construct basic infrastructure such as water piping, sewage systems, garbage dumps, and parking lots. In the 1920s and late 1930s, recreational facilities such as amphitheaters, museums, visitor centers, and scenic overlooks were constructed to manage the visitor experience. A prime example of this development is the granite staircase constructed to the top of Moro Rock in 1934. After World War II, park visitation increased from 483,743 people to 1,074,134, a 122% increase between 1940 and 1955. During World War II, budget cuts and the decay of park structures built in the previous two decades resulted in a dire need for another phase of development. Overuse of the parks was beginning to show as trails
became impassable, forests became denuded, campgrounds displayed tire damaged sites, and meadows turned to muddy bogs.

To combat this, legislation heavily endorsed by President Dwight D. Eisenhower was proposed and passed by Congress in 1956. Titled “Mission 66,” this legislation provided $800,000,000 of funding for a ten year plan to reverse the physical decline that had beset the National Parks Service for more than 15 years. Sequoia and Kings Canyon National Park’s response to the proposed “Mission 66” involved great enthusiasm and opportunity for restructuring park facilities and for “adequate and appropriate developments required for public use and appreciation of an area, and for prevention of overuse.” Eivind Scoyen, superintendent during the time of Mission 66’s proposal, made a vigorous plan to assemble data, inventory and survey facilities that needed refurbishment. These plans led to major projects including new visitor centers in Lodgepole, Grant Grove, and Cedar Grove, the new Ash Mountain administrative complex, the refurbishment or construction of new water, sewage, and trash facilities, and additional employee residences.

This collection includes land survey field books from the years 1924-1970 and include both the period of initial development as well as the mid-century redevelopment of Sequoia and Kings Canyon National Park’s infrastructure. Trails, employee residences, campgrounds, trash facilities, and water, sewage, and electrical systems are examples of the development intentions that guide these surveys throughout the park. Noteworthy to the early development of the Sequoia National Park is engineer John Diehl, who appears as a manager of many of these surveys, and designed the project to build the High Sierra Trail which would link the Giant Forest area to the mountain range of the Great Western Divide. Other engineers involved in the land surveys are Walter Attwell and J.B. Frisbee, whose names appear on the covers of the field survey books.

Scope and Content of Collection

Between 1924 and 1970, these surveys were recorded throughout Sequoia & Kings Canyon National Park. The land survey field notebooks record the collection of data measuring the landscape for proposed trails, buildings and other structures, campsites, parking lots, and water, sewage, and electric infrastructure. The measurements capture a range of information including cadastral (or boundary) survey, leveling, and construction survey.

The tool prominently used to conduct this survey in the early-mid 20th century was the "theodolite". This tool sat on a tripod where a surveyor would record measurements while other individuals stood at reference points known as the "foresight" and "back-site" to measure the change in elevation and land gradient. Distance was measured with a metal rod with a typical length of 5 1/2 yards. Many angle measurements are also featured within the data of these field books to record direction changes and construction project dimensions. Each point that is measured in elevation change and distance is labeled as a benchmark, which can serve as a reference point for civil engineers and the re-conducting of land surveys. Physical indicators such as trees, rocks, or artificial elements are marked as monuments, which typically have physical properties that distinguish the point such as visibility, durability, and stability without requiring measurements to identify.

Arrangement

The collection has been arranged in two series: the first for the field notebooks and the second for their corresponding indexes. There are 112 total field books found within this collection with 96 of these books bearing a number label (ranging from 1 to 207 non-inclusively). Of the 96 numbered field books, about half also have an alphabetical prefix the meaning of which is not immediately clear.

These books have been arranged in numerical order; for numbers with more than one book, the books are then in chronological order. The remaining sixteen books are unnumbered. Unnumbered books succeed the numbered items and are arranged chronologically from earliest to latest. These indexes are arranged at the end of the collection and are placed in order by the earliest date featured on the index.

Indexing Terms

The following terms have been used to index the description of this collection in the library’s online public access catalog.

Sequoia and Kings Canyon National Park (Calif.)
Cadastral survey
Theodolites
Land surveying