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A HISTORY OF ARCHEOLOGICAL INVESTIGATIONS AT FORT UNION NATIONAL MONUMENT

By Frances Levine, Ph.D
William Westbury
with contributions by
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prepared by

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Writing a history of archeological investigations more than thirty years after the work took place is almost certain to cause some problems of interpretation for the modern researcher. It could also be embarrassing for the original recorders if they were judged by today's standards. Throughout this project George Cattanach and Rex Wilson have answered my probing questions and explained how the project was seen by the National Park Service in the context of the time when they did the work. George also sent me additional notes, and called frequently to add details to previous conversations. I hope that they will not feel judged by the questions that this report raises about the stabilization and archeological recovery program at Fort Union. I appreciated their candor, their enthusiasm, and their pioneering efforts to grapple with so large a project.

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Lisa Nordstrum assembled the chronology that appears as Appendix A, and the bibliography. Both of these tedious tasks she did with her usual competence and foresight.

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Frances Levine
Santa Fe, New Mexico
May 30, 1990

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PART I: INTRODUCTION

Background

Fort Union National Monument was authorized by Public Law 83-429 on June 28, 1954 to preserve and protect the ruins of the fort in the public interest. Within the 721 acres that comprise the monument are the remains of three periods of fort construction and clearly visible ruts of the Old Santa Fe Trail. First Fort, constructed between 1851 and 1861, is located in a detached park area one mile west of the main park unit. Second Fort is the earthen Star Fort within the main park area. It was built and utilized between 1861 and 1862. Third Fort, built and occupied between 1863 and 1891, contains more than 60 buildings and associated features such as wells, patios, parade grounds and privies. The Arsenal complex for the Third Fort is located in the detached park unit also containing the remains of First Fort. Third Fort and the Arsenal are the largest complex of the historic cultural resources and have been the focus of the most intensive investigations. There is no record of any archeological investigations at Star Fort.

This report summarizes the scope of archeological investigations that took place at the Fort between 1956 and 1961. It is not intended to be a comprehensive or interpretive report on the archeology of Fort Union. An archeological survey recently completed by National Park Service staff provides the first systematic inventory of historic and archeological resources within the monument. The results of this survey are not yet available, and have not been included in the discussion below.

Prior to formally establishing the monument on April 5, 1956, the National Park Service appraised the task of preserving and protecting the crumbling ruins.[1] Stabilization of fragile adobe walls, preservation of brick chimneys, and general cleanup operations to ensure visitor safety guided most of the early investigations at the fort. Stabilization efforts were supervised by park archeologists between 1956 and 1961. While this seems to imply a recognition that stabilization would unearth artifacts, there was little attention to "salvaging" archeological information from features disturbed by stabilization activities. Salvage archeology was undertaken in conjunction with other aspects of development of the monument, such as when construction activities disturbed buried remains. The archeological investigations that accompanied stabilization, however, did not adhere even to the standards of salvage archeology as practiced in the 1950s.[2]

Organization of the Report

The history of archeological investigations summarized below does not proceed in a strictly chronological order. A chronology compiled from annual, monthly and daily reports is included as Appendix A. The discussion is divided into a number of topics. Following the introduction, in Part II, is a discussion of the impact of stabilization methods and techniques on the archeological record at Fort Union. In Part III, the types of available records documenting previous archeological investigations are identified. Part IV is an overview of the archeological investigations that accompanied the stabilization of Third Fort. The next section of the report, Part V, summarizes the archeological investigations that have been performed at First Fort and the Arsenal. Part VI contains a detailed review of the archeological work accomplished to date in each of the structures. An overview of previously published archeological reports, focusing on selected classes of artifacts and an

historic mass burial, is found in Part VII. Our recommendations for further archeological studies at the fort conclude this report.

PART II: IMPACT OF STABILIZATION ON THE ARCHEOLOGICAL DEPOSITS AT FORT UNION

Stabilization at Fort Union had a devastating effect on the archeological deposits located in the Third Fort area. The stabilization methods were destructive and little information on the archeological deposits was recorded. Minimal stabilization has occurred at the Third Fort Arsenal and First Fort, exposing foundations and trenching along the walls. The notes do not reflect any stabilization or excavations that have occurred at Star Fort.

During stabilization at Third Fort, a bulldozer was used extensively on the exterior of the various structures to clear deposits that had built up against the walls.[3] These efforts, which removed deposits to the wall footings or below them, also removed any archeological evidence for the construction or demolition sequences of the various structures. Evidence of drip lines, which would have provided the archeologist and historical architect with the measurement of roof overhangs, was bulldozed away or was not recorded. The location of sidewalks or paths, unless they were substantial in construction, was lost. Window glass concentrations, which may have revealed the location of windows in the melted adobe walls, was lost. Window frames and nails, evidence for the size and type of windows that may have been present, was bulldozed away. By clearing the debris of fallen chimneys, information that may have been used to reconstruct their original height was lost. Clearing by bulldozer also removed any evidence for specific activities that may have occurred in the streets or along them. For instance, were picket posts for horses placed along the streets or in front of the various buildings? Information relating to the location and size of any pickets that may have existed is also now lost. The archeological evidence for shrubbery and trees that were planted at the post was destroyed. No mention is made in the various field notes of fence lines. This information is now archeologically irretrievable, although historic photographs might be useful in supplying some information on the landscaping and organization of yards.

Large areas, such as the Mechanics' Corral and the backyards of the Officers' Houses, were scraped clean and restored to original ground level. This clearing of the deposits and "restoration" to original ground level destroyed any evidence of specific human activities that occurred in these areas. As an example, several bases for machinery were located in the Mechanics' Corral courtyard. What happened at the location of each of these bases is unknown because the associated deposits and artifacts were removed without adequate recording. Historically, it is known that the area burned at least once, but no evidence for this burning is recorded in the written field notes.[4]

The cleaning and clearing activities that occurred in the interior of the structures was as devastating to the archeological record as those which occurred on the exterior. Although field records use the term "excavation", more often than not this meant clearing the room of fill without any attempt to record and control the provenience of archeological information. Upon entering a room to begin stabilization, the surface was generally cleared of brick and rubble. The removal of collapsed fireplaces would have destroyed any evidence of fireplace mantles, which may have been made of brick, and of the facings of the fireplaces themselves. Once the surface was cleared of rubble, the walls of the rooms were generally trenched. This trenching destroyed any evidence of builder's trenches and construction techniques. It would have also removed any glass concentrations indicating the location of windows and doors and other interior architectural features in the melted adobe walls.

Once the walls were trenched, the interiors of the rooms were excavated either by hand or with the aid of the bulldozer. Excavation removed any evidence of interior partition walls or alterations to the structure after the initial building phase. This wholesale removal of the interior contents of the structure would have removed any architectural evidence that remained for the construction or demolition phases of the building. For example, archeological evidence of roof fall or wall fall would have been removed by these excavations. Other stabilization techniques, such as trenches that held "dead men" for rods to prop up walls, destroyed the archeological record.

The methods used by the National Park Service to stabilize Fort Union caused the loss of an archeological record of immense value to the historian, historical architect, historic archeologist, and park interpreter concerned with presenting the fort to the public. This is not a criticism of the archeologists who worked at Fort Union. It must be remembered that at the time the stabilization work at Fort Union was performed, historic sites archeology was just beginning to be developed as a specialty of archeological study. It would be years before the field methodologies used by present-day historic archeologists would become an integral part of the science of historical archeology. In hindsight, we can only wish that the stabilization program had proceeded more slowly to permit adequate recording and analyses of the archeological information.

PART III: ARCHEOLOGICAL RECORDS

No true archeological records exist at Fort Union. There are, however, various administrative reports, stabilization reports, and a series of field notebooks that relate to the stabilization efforts. These have been used to assemble an overview of the archeological work performed at Fort Union. The ten field notebooks, with their authors and dates, are listed below. In the primary source bibliography, these citations are listed under "Field Notebooks."

Volume 1, George Cattanach, August 1, 1956 to November 19, 1956
Volume 2, George Cattanach, November 19, 1956 to March 25, 1957
Volume 3, George Cattanach, May 5, 1957 to August 21, 1957
Volume 4, George Cattanach, August 22, 1957 to June 18, 1958
Volume 5, George Cattanach, June 19, 1958 to September 10, 1958
Volume 6, Rex Wilson, September 12, 1958 to March 27, 1959
Volume 7, Rex Wilson, March 30, 1959 to July 10, 1959
Volume 8, Rex Wilson, July 13, 1959 to November 29, 1959
Volume 9, Rex Wilson, November 25, 1959 to August 2, 1960
Volume 10, Rex Wilson et al., August 3, 1960 to September 21, 1962

George Cattanach was hired as the monument archeologist in August 1956. He supervised the stabilization and excavations until September 1958. Rex Wilson was monument archeologist from September 1958 to August 1961 when he was transferred to Fort Laramie. At this time the supervision of the stabilization and maintenance crews at Fort Union became the responsibility of Park Superintendent Homer F. Hastings, acting under the guidance of Regional Archeologist Charlie Steen. The records from Wilson's arrival until August 1962 are very brief, although some additional details of Wilson's work at the fort are contained in his published studies of the archeology of Fort Union.[5]

Other records that provide some information on the archeological studies at the fort include annual stabilization and completion reports for 1956 through 1961, officially titled Completion Report of Construction Project. These reports were written by the archeologist in charge of the project, except for the last one, which was written by Homer Hastings, Superintendent. These are listed in the Bibliography of Secondary Sources under the name of the author.

Additional reports that contain information pertaining to the archeological excavations are Monthly Stabilization Reports. These reports were submitted by the archeologist to the park Superintendent each month from August 1956 through August 1960. These reports contain information on the progress of stabilization and on the excavations that occurred incidental to the stabilization. They are compilations of notes taken from the field notebooks. On occasion they amplify and clarify notebooks. This information is also contained in a file on each structure, maintained at Fort Union.

A progress report submitted by Cattanach in March, 1957 entitled FORT UNION: Rehabilitation of Historic Structures, is a summary of the stabilization and archeological work performed between August 1, 1956 and December 31, 1956, with particular emphasis on the stabilization efforts.

Rex Wilson prepared an undated report entitled Fort Union National Monument, New Mexico, Rehabilitation of Historic Structures 1956-1960. He discussed, in a general way,

the stabilization that had taken place at First and Third Forts and the structures that had been excavated. A second volume by Wilson, Fort Union National Monument, New Mexico: Rehabilitation of Historic Structures 1961 Fiscal Year, was concerned with the final stabilization work at the fort under his direction. It concerned the wells and cisterns that had once been used around the fort. Most had been filled in after the fort was abandoned and when the area became part of the Union Land and Grazing Company.

The Superintendent's Monthly Narrative and Yearly Reports contained information of only a very general nature, but were important sources for a broad chronology of work at the fort. A reasonably complete photographic record was made during the stabilization work.[6] These photographs serve to emphasize that adequate archeological records were not kept. They show trenches being cut through rooms and along walls; it is known that no profiles were kept of the stratigraphy in these trenches. These photographs vividly show the destruction of the archeological record. No grid or specific provenience controls were used in the excavations (Figure 1). Excavation of the sinks required an elevator to lift the fill from the deep holes (Figure 2).

Far more important than what records are available is what records are not available. There is a complete absence of stratigraphic profiles and floor plans of excavated levels, detailed drawing of excavated structures, stratigraphic level records, and artifact provenience records. Occasional drawings in the field notebooks are rare and incomplete--detailed measurements are usually missing. These records have not been lost, they were simply never kept.

Figure 1. Photo, Excavation of Building 1-110, view from the south end. No grid or specific provenience controls were used in the excavations at Fort Union. [Wilson 8/1/1960 Neg FOUN-744(s)]

Figure 2. Photo, Excavation of sink, Room 2-715 showing the elevator used to lift the fill from the deep structures. [Cattanach 9/13/1957 Neg FOUN-168(s)]

The virtual absence of artifact provenience records is among the most serious losses of information.[7] During the period that George Cattanach supervised the stabilization, he recorded the provenience information on paper sacks used to collect the artifacts in the field. When Arthur Woodward was hired to prepare the analyses of the artifacts for interpretive exhibits, he disposed of the sacks, destroying the only record of provenience. He defended this with a curious twist of logic, arguing that patterns of refuse disposal and building construction and demolition resulted in horizontal and vertical "blurring" of provenience. Since his goal was to examine the types and range of materials found at the fort, he argued that provenience control was not necessary. The loss of this critical information makes it impossible to use artifacts to help date the sequence of construction, use and demolition for specific structures and features. It is also not possible to compare the material culture of the officers, enlisted men, and civilians who resided at the fort.

Throughout the stabilization notebooks and field reports there are references to hauling building debris and backdirt for disposal in arroyos surrounding Third Fort. Not

Figure 3. Photo, Dirt and Debris accumulation between Warehouse Buildings 3-410 and 3-420, view from the west side. [Wilson 4/6/59 Neg FOUN-297(s)]

Figure 4. Same view after removal of dirt and debris. [Wilson 4/29/59 Neg FOUN-356(s)]

every reference to hauling included a calculation of the amount hauled, but the entries that do include some quantification total well over 16,000 cubic yards of building debris removed from stabilized structures. Figures 3 and 4 are before and after photographs of the Warehouses 3-410 and 3-420 showing the vast amount of dirt and debris removed from that structure. George Cattanach recalled dumping backdirt north and west of the Clerk's Quarters [Structure 3-160] at the north end of Officer's Row. Wilson recalled dumping debris north and west of the Warehouses in a series of arroyos that had also been used for trash disposal when the Third Fort was occupied (Figure 5). Wilson may have been indicating the same area as Cattanach. Fill was also hauled from the Arsenal area and redeposited around the Visitor Center and the employee housing area.[8]

The structure numbering system used by Cattanach and Wilson during their stabilization efforts is retained for this report because it is the only means of assuring the correspondence between the original records and the structures. Under their system, the fort was divided into 11 areas and each area was assigned a number. Each numbered area was then subdivided into sections that were given numbers. Within the various sections, subsections were assigned numbers, and within the subsections, rooms or sub-features were given numbers. Thus, a number such as 1-321 signifies Area 1, which contained the Post Officers' Row and Company Quarters. The number 3 designates the section as one of the Company Quarters. The number 2 designates the northern block of Company Quarters in Area 1, Section 3, and the number 1 signifies Room 1 of the northern block. (See Appendix B for a cross-listing of building numbers assigned by Cattanach and numbers used in the Historic Structures Report). Rooms that occurred underneath ground-floor rooms, such as basements, were given decimal designations. Thus 1-151.1 would be the basement under Room 1 in Building 50, Section 1, Area 1.

Figure 5. Photo, Dumping debris and dirt removed from the ruins into an arroyo. The workman is identified as Margarito Lovato. [Wilson 10/6/58 Neg. FOUN-219(s)]

Although this system was generally followed, there are inconsistencies. The designations appearing below correspond to the original reports and notes. The end map, Figure 6, shows the numbering system for all structures and features as designated by the stabilization crews.

Architectural features were generally measured in English units of measure and archeological contexts in metric. For consistency, all measurements in **Part VI: Summary of Work Performed** are recorded first in English units, followed by the metric equivalent in parentheses.

PART IV: ARCHEOLOGICAL EXCAVATIONS IN THIRD FORT

Introduction

The discussion below is an overview of the excavations and archeological testing that accompanied the stabilization of Third Fort. This summary was compiled from fiscal year planning studies, stabilization monthly summaries, and annual completion reports. For that reason the field seasons are reported by fiscal years. A summary of the work accomplished, by individual structure, can be found in Part VI of the report. In that discussion, which is based largely on field notebooks and monthly reports, the field work is reported by calendar years.

In September 1955, Regional Archeologist Charlie Steen outlined a plan to guide the stabilization and interpretation of ruins at the fort.[9] It called for clearing debris and fallen walls from the Hospital, the Company Areas, the Officers Quarters, depots and shops. The plan also spelled out preliminary methods for bracing and capping standing walls and chimneys, and grading to promote positive drainage.

Superintendent Kittridge A. Wing's report on the first working season emphasized the urgency that underlay the initial stabilization efforts at the fort:

> After almost seventy years of decay, neglect, vandalism and scavenging, the buildings of Fort Union came under protection of the National Park Service on March 29, 1956, with the establishment of the national monument. Preservation of the remaining ruins of the Fort became a problem of the greatest urgency.

The rate of destruction of the brick chimneys became a measure by which the deterioration of the fort could be assessed. A photograph of the site taken in 1945 showed over two dozen chimneys. Charlie Steen's overall plan written in September of 1955 listed eight standing chimneys. By December 1955, only six remained. At the beginning of field work in August 1956, only five remained.[10] These five chimneys, two in the Commanding Officer's Quarters [Building 1-150], two in the northernmost Post Officers' Quarters [Building 1-190], and one in the Mechanics' Quarters [Building 3-320] were the first priority for stabilization.

The First Field Season 1956-1957 [FY 1957]

George S. Cattanach was hired as the monument archeologist in August 1956. He and a crew of laborers worked steadily through the Fall of 1956 on stabilization priorities including clearing debris from structures and stabilizing chimneys. In the Spring of 1957 they resumed the stabilization work, but they also began to excavate selected rooms and features which they hoped would provide interesting in situ exhibits or significant details about the construction of the fort.

Cattanach prepared a number of reports covering the accomplishments of the stabilization undertaken between August 1, 1956 and June 30, 1957.[11] They identify each room or feature excavated, but do not always make clear the extent of archeological investigations. In some cases, the work was described as clearing fill and debris or exposing the outline of foundations. It seems that these activities did not warrant archeological recovery or recording methods. The emphasis in the early months of the

first field season was to preserve the five standing chimneys and to remove fallen and scattered building materials.

Excavations began in the yard of the Commanding Officer's Residence [Building 1-150] where three outbuildings were dug. The excavated features included a slab-lined privy [Room 1-253], and two other outbuildings [Rooms 1-251 and 1-252] whose original functions were not determined by excavation. The foundations of another structure [Room 1-255], also located in the backyard of the Commanding Officer's Quarters, were outlined. Later in the season all of the rooms and hallways in Building 1-150 were excavated to a depth of 6 in (15 cm).

In the Mechanics' Quarters [Building 3-320] six of seven rooms in the building were "completely excavated," which seems to mean that fill was removed to the first floor levels encountered. The only room not cleared was 3-326, which was only partially excavated. In Room 3-325, a brick floor laid in a herring-bone pattern was revealed by the excavation. A well [Feature 3-350] in the Mechanics' Corral was excavated to a depth of only 3 ft (1 m) to expose the stone lining. Three cisterns [Features 3-510, 6-410 and 6-420] were excavated partially and stabilized in the same manner as the well.

Excavations in the Carpenter's and Blacksmith Shops [Building 3-330] exposed a brick and stone floor in Room 3-333. Room 3-332, a shop, was cleared to expose the remains of the original wooden floor. Cattanach reports that all of the rooms in this structure were "completely" excavated.

The work performed in the Saddle and Wheelwright's Shop and in the Telegraph Office, consisted of clearing the fill that lay against the inside walls. None of the rooms in this complex [Building 3-310] was completely cleared or excavated.

Flagstone walks were exposed for a distance of 1,204 ft (370 m) in sections around the Third Fort complex (Figure 7). One segment was between the Laundresses' Quarters [Building 2-130] and the Prison [Building 2-110]. Another section of walk was found between the Chapel [Building 2-250] and the Bakery [Building 1-510]. The walk in front of the Company Quarters extended between Buildings 1-510 and 1-520. A segment of walk was also found between the Commanding Officer's Residence [Building 1-150] and the northernmost Post Officers' Quarters [Building 1-190]. Test excavations showed another stretch of walk between the Bakery and the Band's Quarters [Building 2-720].

The final work performed in the first field season centered on exploratory testing on the Good Templar's Building [6-510] and the southernmost flagpole [Feature 1-710]. At the site of the Good Templar's Lodge, excavations were begin in an attempt to outline the wooden foundations, and to determine the method of construction of that building. Ultimately the excavations exposed the complete outline of the octagonal, vertical pole structure. The flagpole excavations found evidence of the pole base at a depth of 8 ft (2.4 m).

By June 1957, Cattanach had completed most of the urgent priorities. He then turned to the question of defining the policy and overall goals for preservation and protection of the ruins.[12] Excavation was not examined as a goal, nor was in-situ stabilization. Limited reconstruction was proposed as a component of interpretation, but the course ultimately followed was more modest, consisting mainly of bracing and stabilizing walls and features.

Figure 7. Photo, Sidewalk east of Post Officers' Quarters during excavation, and before realignment of flagstone. [Cattanach, 3/20/1956; Neg FOUN-77(s)]

The Second Field Season 1957-1958 [FY 1958]

The second field season covers the work performed between July 1, 1957 and June 30, 1958. The goals for this field season were: (1) to complete stabilization of the five remaining chimneys; (2) to clear the fill from within and around as many buildings as possible; (3) to remove backdirt from the ruins area; and (4) to plan for the long-term stabilization and maintenance of the ruins.[13] The amount of excavation and dirt removed accelerated with a crew of ten full-time and three part-time laborers. Cattanach continued to supervise the excavations and direct the stabilization. The large number of buildings excavated leaves little doubt that controlled archeological excavation and recording was not the aim.

Excavations were completed in the Commanding Officer's Quarters [Building 1-150]. A basement room, designated 1-154.1, was excavated to a depth of six feet, exposing a brick floor and stone walls. After all the rooms in the structure had been excavated, they were backfilled, leaving only 6 in (15 cm) of the footings exposed. This same procedure was followed in Building 1-190, the northernmost of the Post Officers' Quarters.

Excavation of two flagpole sites: Feature 1-710, the southernmost, and Feature 1-720, the middle of three flagpoles, was completed in the summer of 1957. In each a segment of the base of the wooden poles was found.

Excavations in the Laundresses' Quarters [Buildings 2-520 and 2-530] cleared the fill from Rooms 2-521, 522, 523, 524 and 531. The location of doors and hallways found in the excavations suggest that Room 2-521 may once have been part of the bakery complex. Excavations in the Bakery [Building 2-510] concentrated on clearing fill from Rooms 2-511, 512 and the hallway 2-514 located east of the Bakery. A bake oven, Room 2-513, was also excavated in the 1957-1958 field season. Three rooms in the Guardhouse [Building 2-540] were "completely excavated."

Building 2-550, thought to be the post Chapel, did not contain artifacts that could confirm its original use. More than 600 lead bullets, part of a gun, and a fire-hose nozzle were found in the room, leading Cattanach to suggest that the Chapel was presided over by a "hellfire-and-brimstone" preacher.

The men's sinks, two stone-walled structures [Features 2-711 and 2-712] were excavated to a depth of 13 ft (4 m). An associated lime storage room [Feature 2-713] was also excavated. Feature 2-712 showed a secondary use. It had been filled with "sterile" dirt, and the upper levels were then converted to a kitchen, designated Building 2-715. The wooden floor joists of the kitchen were exposed by the excavation.

The Officers' Quarters [Buildings 3-110 and 3-120] and the Quartermaster's Residence [Building 3-130] were "completely" excavated. A basement room, designated 3-135.1, had brick walls and a brick floor. Partial excavations in the "backyard" of the structure exposed a brick patio and brick walk leading to the privy.

In some areas of Third Fort, the work undertaken was characterized as removal of the recent fill and restoration of the surface to the historic ground level. The fill in these rooms was then removed. The complex of buildings comprising the Quartermaster's Office [3-140], the Commissary Office [3-150], and the Clerk's Office [3-160] of the Depot were treated in this way. Rooms 3-141, 3-162 and 3-163 were not excavated.

Excavations were completed in the shop area of Buildings 3-310, 3-320 and 3-330. Rooms 3-321, 3-322, 3-323, 3-324 and 3-326, which had been partially excavated in 1956, were cleared of all fill. With the exception of Room 3-326, the rooms in this complex were then backfilled to allow for visitor access. The Mechanics' Corral in Section 3-3 of the site was cleared. Footings and trenches for machinery, tanks and outbuildings were exposed.

Warehouses in the Depot [Buildings 3-410, 3-420, 3-430, 3-440 and 3-450] were completely excavated. The basement of Building 3-450 was excavated to a depth of 10 ft (3 m), where the remains of a wooden floor was found. Excavations in the warehouse complex also exposed a system of drainpipes leading to a cistern located near the north end of the Parade Ground. Excavations of the northern cistern [Feature 3-520], begun in 1956, were continued. Remnants of a loading platform were found on the north side of Building 3-410.

In the vicinity of the Hospital [Section 6-1 of Third Fort], a vast amount of wall fall and debris was hauled from inside and around the building. Cattanach estimated that 60 cubic yards of dirt was removed from each of several rooms in the building. Rooms 6-

164 and 6-165, which were basement rooms underneath the Hospital dining room were excavated. The rooms were then backfilled. Hallways 6-174, 6-175, 6-176 and 6-177 were partially backfilled to restore the outward grade as originally built by the Army.

Finally, the sidewalk north of Buildings 2-710 and 2-720, the Company and Band Quarters, was excavated. Excavations also were started in Room 2-176 of the Company Quarters.

In addition to the herculean labor undertaken in the second field season, an emergency salvage excavation was accomplished. During construction of the employee residences in May, 1958 a burial was exposed. Salvage excavations continued through June and July, ultimately exposing a mass grave with four burials and numerous grave goods.

The Third Field Season 1958-1959 [FY 1959]

The third field season ran from July 1, 1958 to June 30, 1959. Cattanach was transferred to Mesa Verde National Park in September, 1958 and Rex Wilson assumed the position of archeologist for the fort stabilization and excavation program. This was the last year in which a large amount of excavation was performed. Many of the excavations begun in 1957 and 1958 were completed, and the major "cleanup" activities were finished. About 12,875 cubic yards of backdirt from the excavations and debris from the deteriorating structures was hauled from the ruins area. A crew of 15 to 20 laborers made more than 12,000 adobes for use in stabilizing features.

Excavations were completed in the Laundresses' and Company Quarters [Buildings 2-530, 2-520, 2-710, 2-510, 2-110, 1-130, 2-140 and 2-150]. The purpose of these excavations was to expose the foundations of the complex and to provide better interpretation of the ruins. The Mechanics' Corral complex [Building 3-380] was bulldozed to clear the accumulation of debris and fallen building materials. Excavations in the Depot Warehouse [Building 3-420] and the Quartermaster's Office [Building 3-141] were also completed in the third field season.

Dirt and debris were cleared from the base of walls in the Hospital [Area 6-1] to protect the standing walls. Many rooms in the Hospital [Rooms 6-211, 6-212, 6-213, 6-222, 6-223, 6-224] were dug and a privy [Feature 6-223] was excavated to a depth of 9 ft (2.9 m). Two cisterns [no feature numbers given] and one room [6-221] were the only unexcavated areas of the Hospital at the end of the fiscal 1959 field season.

Following the completion of excavations and cleanup in the summer of 1958, the emphasis of the program changed from excavating to stabilizing the structures and cataloging the immense artifact collection unearthed. Under Wilson's direction, the bottle collection from the fort was classified and catalogued. Most of the artifact processing was done by Dick Godfrey. A type specimen collection of almost 500 different types of bottles was assembled, and other artifact classes were inventoried. Unfortunately, by this time the field recorded proveniences for the majority of the artifacts had already been destroyed. The largely unclassifiable collection of metal artifacts and debris was reburied in a specially prepared "vault" adjacent to the "left" corner of Apartment 4-B in the employees residence. The rest of the artifacts were placed in storage in the Visitor Center.

Arthur Woodward's report[14] on the artifacts from the fort was submitted in September, 1958. His reports is not a comprehensive study of material culture of the fort,

nor is it an analysis of the complete archeological assemblage. Rather, it is a guide for the interpretation of selected artifacts recovered from the fort, and a description of artifact groups that are typical of western forts.

Archeological Analysis and Clean-up [FY 1960]

Fiscal year 1960, July 1, 1959 to June 30, 1960, brought to a close the project to stabilize and preserve the ruins at Fort Union. In August 1960, Rex Wilson was transferred to Fort Laramie National Park. The remaining excavations and cleanup operations were supervised by Park Superintendent Homer Hastings, under the direction of Regional Archeologist Charlie Steen.

Prior to leaving, Wilson completed excavations in the Post Officers' Quarters begun in 1960. Hastings then excavated and stabilized the last four units of the Post Officers' Quarters [Buildings 1-110, 1-120, 1-130 and 1-140]. These units had been left until the end of the project because of their advanced state of deterioration.

Hastings also found that a segment of the flagstone walk in front of Building 1-110 had been moved many years before the stabilization project began to the Tipton House in Tiptonville, New Mexico. He purchased the stone and relaid the walk during this final year of the stabilization project.

Epilogue

The stabilization of Third Fort was completed in 1961, but annual and cyclical maintenance are necessary to keep the fragile ruins safe for visitors. The foundations of the buildings in Officers' Row were stabilized in 1973 by the Western Region's Ruins Stabilization Unit, under the direction of George Chambers.[15] No archeological excavations were undertaken during that project.

During the early 1970s, Superintendent's Monthly Reports occasionally mention that archeologists from the Regional Office were called out to inspect trenches dug in and around the fort. There does not appear to be any documentation of these "excavations." Now, however, there is an established policy for archeological monitoring of maintenance activities. The documentation for these projects is kept on a standardized form (the XXX form). This review of the archeological field notes and stabilization reports makes it clear that there are in situ cultural deposits in most of the structures of Third Fort. Future projects that might impact any undisturbed subsurface deposits should anticipate the need for prior archeological testing to ensure that the remaining archeological information is not disturbed without adequate recording and analyses.

PART V: ARCHEOLOGICAL STUDIES AT FIRST FORT AND THE ARSENAL

Introduction

First Fort and the Arsenal complex associated with Third Fort are located in the detached area a little over one mile to the west of the main monument (Figure 8). Although there has been no systematic archeological studies of the ruins associated with either First Fort or the Arsenal, it does seem from historic documents that some of the Arsenal buildings may have been built and first used during the construction of the earlier fort.[16] Many of the original buildings at First Fort were constructed of unpeeled, unseasoned logs. The fort began to deteriorate within a few years, and was abandoned after only ten years of service.[17] The short period of occupation, and the original methods of construction produced meager archeological evidence of this early occupation. The Park Service studies of the First Fort and Arsenal complex have been aimed primarily at emergency stabilization and mapping projects that attempt to relocate the structures associated with the military occupations of the site.

Impacts of Stabilization on First Fort and the Arsenal Complex

The first reference to any Park Service activities at First Fort and the Arsenal was in March of 1959. During the third field season [FY 1959] of the stabilization project, emergency stabilization was performed on four structures associated with the Arsenal [Buildings 9-110, 9-230, 9-240 and 9-310].[18] Six inches (15 cm) of dirt was removed to expose the foundations of the buildings to facilitate the stabilization. The notes do not record any of the artifacts or cultural deposits impacted by this activity.

Figure 8. Photo, Overview of the Arsenal complex taken from the talus slope to the west of the site. [Wilson 4/20/60 Neg FOUN-610(s)]

Archeological Testing at First Fort

In June 1960, Rex Wilson excavated a cellar at First Fort. According to the Superintendent's Monthly report the cellar was located between the boundary fence and the southwest corner of the stone wall that surrounds the Arsenal. It was not given a number or name designation, and the reason for excavating the structure is not stated in the notes.

Wilson also located some other structures associated with the First Fort. He trenched the outlines of the foundations and staked the corners of five structures, but did not describe or number these buildings.[19]

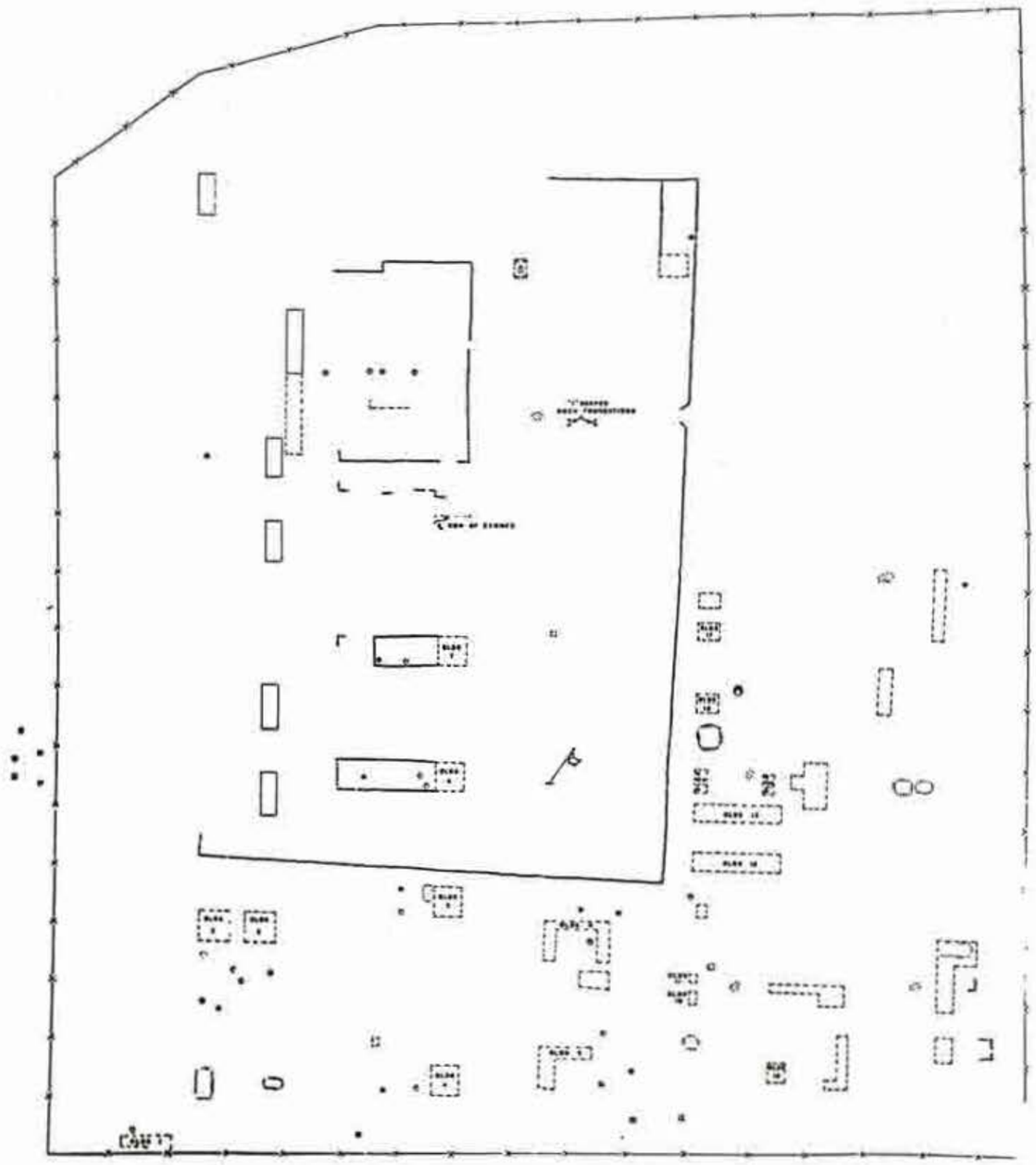
After Rex Wilson was transferred from Fort Union, Superintendent Hastings assigned laborers to continue to outline the foundations of the buildings and to locate wells and cisterns at First Fort. There are no archeological field notes summarizing the results of their investigations. The only reference is found in the Superintendent's Daily Log entry for October 5, 1960.

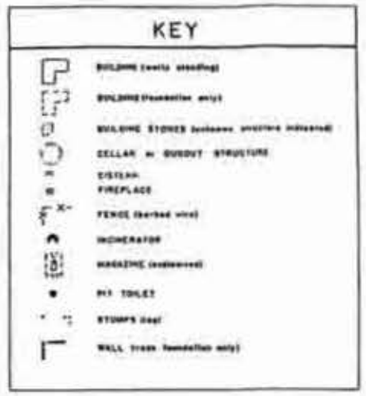
Mapping First Fort

Southwest Regional Office Engineers Wohlbrandt and Colton, and Landscape Architect Marsh mapped the foundations of First Fort and the Arsenal in September 1960, and completed the mapping in July 1961. The map they produced [Figure 9] appears to have some inaccuracies regarding the distance between structures and features. An in-depth analysis of the Wohlbrandt/Colton map will be included in Jake Ivey's architectural history and archeological reconnaissance of First Fort. The field notes and measurements used to produce the map have not been relocated.

Nicholas Bleser, an Administrative Assistant at the monument in 1965, and later the Historian at Fort Union, developed a fascination with First Fort. On his own time, he continued to research the probable location of First Fort buildings. He compiled a sketch of the locations, based upon his examination of historical photographs, military period maps, and field reconnaissance. He also made some surface collections from the area. His notes would be useful if a systematic survey of the area is performed.[20]

The archeological and stabilization studies at First Fort and the Arsenal complex have been so haphazard that the notes raise more questions than they answer. It is clear that subsurface deposits have been disturbed immediately adjacent to the walls of most structures, but it seems likely that much archeological information remains in tact at the site. A comprehensive field survey to relocate, describe and systematically record the structures and archeological remains at the site should be a priority.





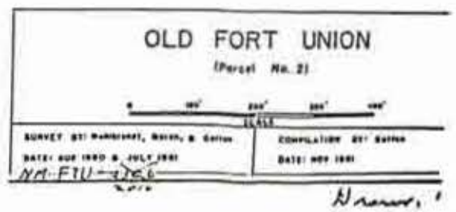


Figure 9. Plan of "Old Fort Union"--First Fort and Third Fort Arsenal [Wohlbrandt and Colton 1960-61]

PART VI: SUMMARY OF WORK PERFORMED BY STRUCTURE

BUILDING OR FEATURE: 1-110 Post Officers' Quarters

LOCATION: Southernmost building in the southern block of Officers' Quarters; located at the southwest corner of the Parade Grounds (Fig. 10).

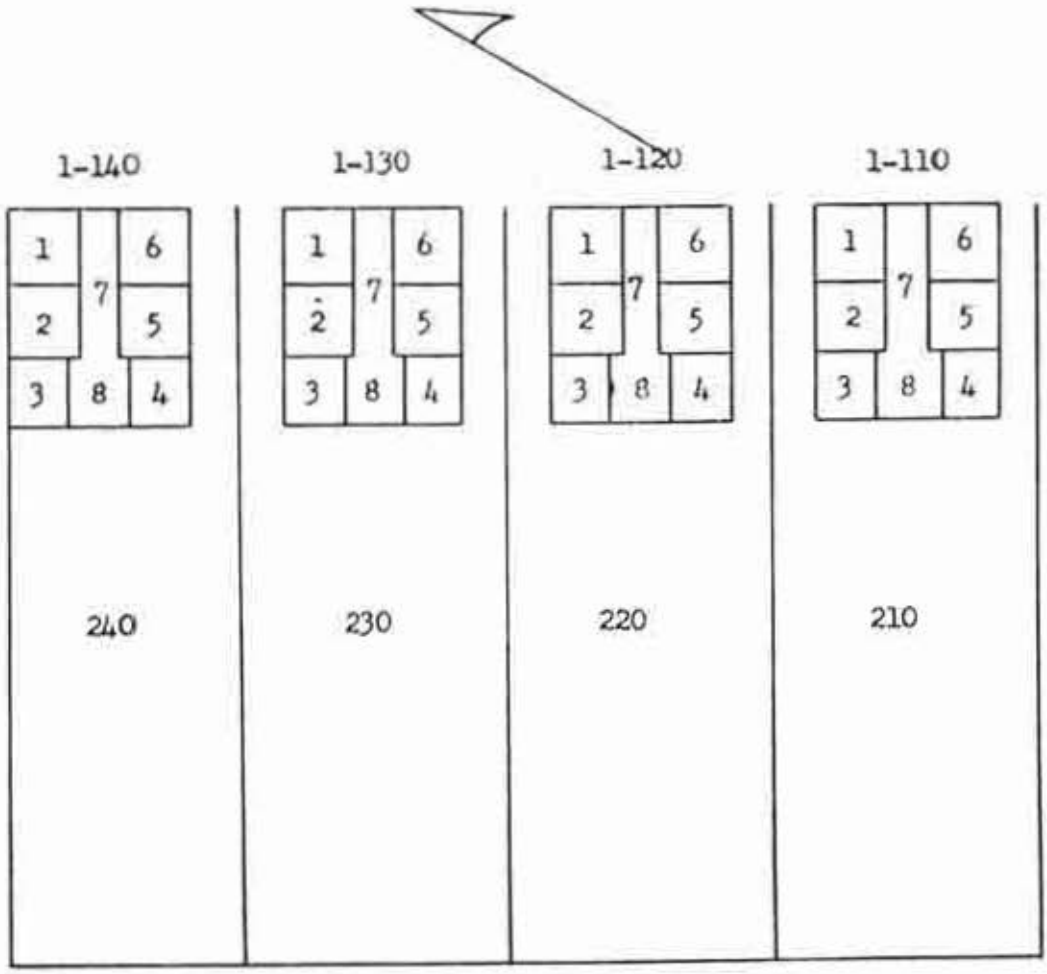
DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vols. 9-10, August 1-4, 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:

The notes indicate only that this structure was excavated and that its excavation completed the excavation of all the structures on the west side of the Parade Grounds. The extent of "excavation" is not defined in the notes.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The backyard and the associated outbuildings can provide in situ artifacts for a material culture study and for dating of construction and use sequences in this building. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies could be undertaken to determine the activities performed in the yards of the Officers' Quarters. Within the structure itself, testing is needed to determine if subsurface cultural deposits remain in situ.



POST OFFICERS' QUARTERS

Scale 1 inch equals 50 feet

Figure 10. Numbering Plan for Post Officer's Quarters, Buildings 1-110 to 1-140.

BUILDING OR FEATURE: Building 1-120 Post Officers' Quarters

LOCATION: Southern block of Post Officers' Quarters, second structure northward from the south end; located at the southwest edge of the Parade Grounds (Fig.10).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, July 26-29, 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The notes indicate only that this structure was excavated. However, testing within the structure is recommended to determine if intact cultural deposits exist.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the buildings associated with it can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible.

BUILDING OR FEATURE: 1-130 Post Officers' Quarters

LOCATION: Southern block of Officers' Quarters, third building northward from the south end; located at the southwest corner of the Parade Grounds (Fig. 10).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, July 19-26, 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:

The notes indicate only that this structure was excavated. Testing within the structure is recommended to determine if intact cultural deposits exist.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The backyard and the outbuildings associated with it can provide artifacts for a material culture study. Excavation of the yard also would provide information on the location of paths and their construction. Specific activity area studies might be possible if in situ cultural deposits are preserved.

BUILDING OR FEATURE: 1-140 Post Officers' Quarters

LOCATION: Southern block of Officers' Quarters, fourth building northward from the south end; located at the southwest corner of the Parade Grounds (Fig.10).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebooks, Wilson, vol.9, July 12-19, 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The notes indicate only that this structure was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the associated outbuildings can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible if in situ cultural deposits are preserved. Within the structures, testing is needed to determine if cultural deposits are preserved.

BUILDING OR FEATURE: 1-150 Commanding Officer's Quarters

LOCATION: This is the fifth structure from the north end of Officers' Row, located on the southwest corner of the Parade Grounds. It is the largest of the ten Officers' Quarters in this block and the central structure of the row of Officer's Quarters (Fig.11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, August 10 through November 1, 1956
Field Notebook, Cattanach, vol. 3, May 11 through June 14, 1957
Field Notebook, Cattanach, vol. 4, August 29, 1957 through June 14, 1958
Monthly Stabilization Report, August 1956
Monthly Stabilization Report, September 1956
Monthly Stabilization Report, October 1956
Monthly Stabilization Report, May 1957
Monthly Stabilization Report, June 1957
Monthly Stabilization Report, August 1957
Monthly Stabilization Report, October 1957
Monthly Stabilization Report, November 1957
Monthly Stabilization Report, April 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

Trenches were placed in the center of the structure around the perimeter of the fireplace slabs to prepare them for a concrete apron, which was then poured around and over them. The trenches were a minimum of 24 in (60 cm) in depth and extended below the base of the fireplace slabs. A portion of a wooden stool was found during this trenching. The walls that extended north and south from the fireplaces to meet east-west walls were trenched, exposing their bases. These adobe walls rested on rock footings. Excavations were carried to a depth of 6 in (15 cm) below the tops of the footings. Room 151 was excavated to the top of the wall footings.

Test trenches were placed in the backyard of the structure to locate outbuildings and define the walls that bordered the yard. These trenches were laid perpendicular to the south wall of the yard. Upon intersecting this wall, the trenches ran along the wall for a distance of about 5 ft (1.5 m). The north and south walls were trenched along their interior and the west wall was trenched on both sides. Three structures found in the backyard were assigned numbers 1-251, 1-252, and 1-253. These rooms are described in more detail below (Fig. 12).

The sidewalk immediately east of 1-150 and to the north end of Officers' Quarters, Structure 1-170, was cleared of fill (2 to 16 in [5 to 40 cm] in depth). The sidewalk averaged 9 ft (2.60 m) in width. The remains of a wooden porch in front of Room 1-151 were located beneath 10 to 20 in (25 to 50 cm) of fill.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

On the interior of the structure, excavations began in the east end of the hall (1-159) and in Rooms 1-151, 1-152 and 1-153, 1-154, 1-155, 1-156, and 1-157. Rooms 1-151 and 1-152 were excavated completely. The excavations in the remaining rooms were taken to just below the level of the wall footing, which was the top of the building collapse. The back steps into the hall were excavated and rebuilt. On the exterior of the structure, the fill against the back of the house and from the south wall of the house was completely cleared. This fill was cleared with bulldozer and shovels. Both sides of the

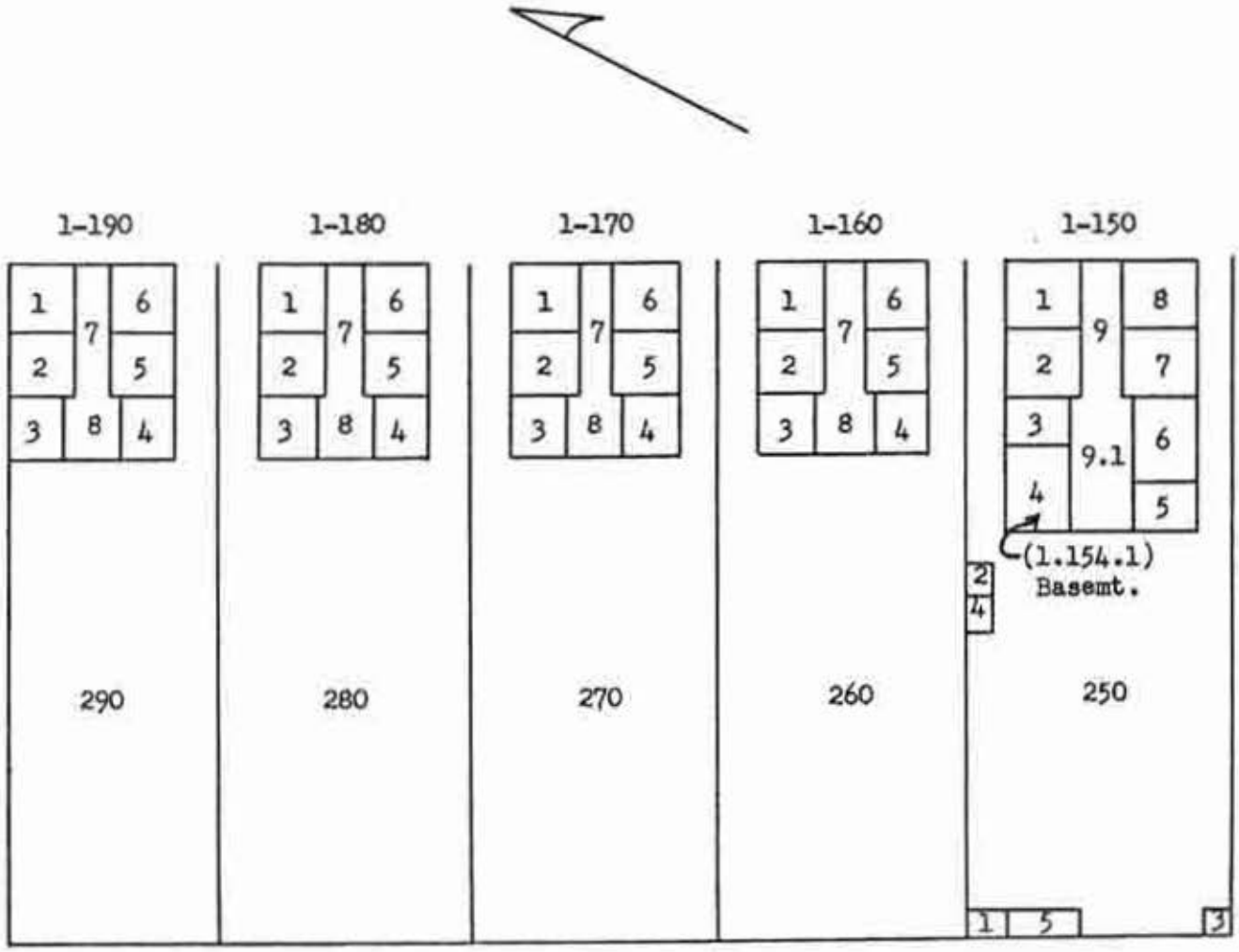
walls surrounding the backyard were cleared with the use of the bulldozer and shovels.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Excavation in the eastern half of the hall was completed down to native or natural soil. Rooms 1-155, 1-156, 1-157, 1-158, and 1-159 were excavated to sterile soil. All of the rooms that made up the ground floor of the structure and the basement, Room 1.154.1, were excavated completely. The basement was excavated to a depth of 6 ft (1.8 m) where a brick floor was encountered. The walls were stone and a ledge formed by an offset in the rock walls on the north and west sides of the room was located about 45 in (1.15 m) above the floor. The basement was excavated in its entirety and nothing was found in the fill.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the main residence and the structures in the yard have been completely excavated, testing is recommended to verify the extent of the in situ cultural deposits. The outbuildings found here indicated that the yards of all the PO's Quarters might contain important information concerning space use and special activities.



POST OFFICERS' QUARTERS

Scale 1 inch equals 50 feet

Figure 11. Numbering Plan for Post Officer's Quarters, Buildings 1-150 to 1-190.

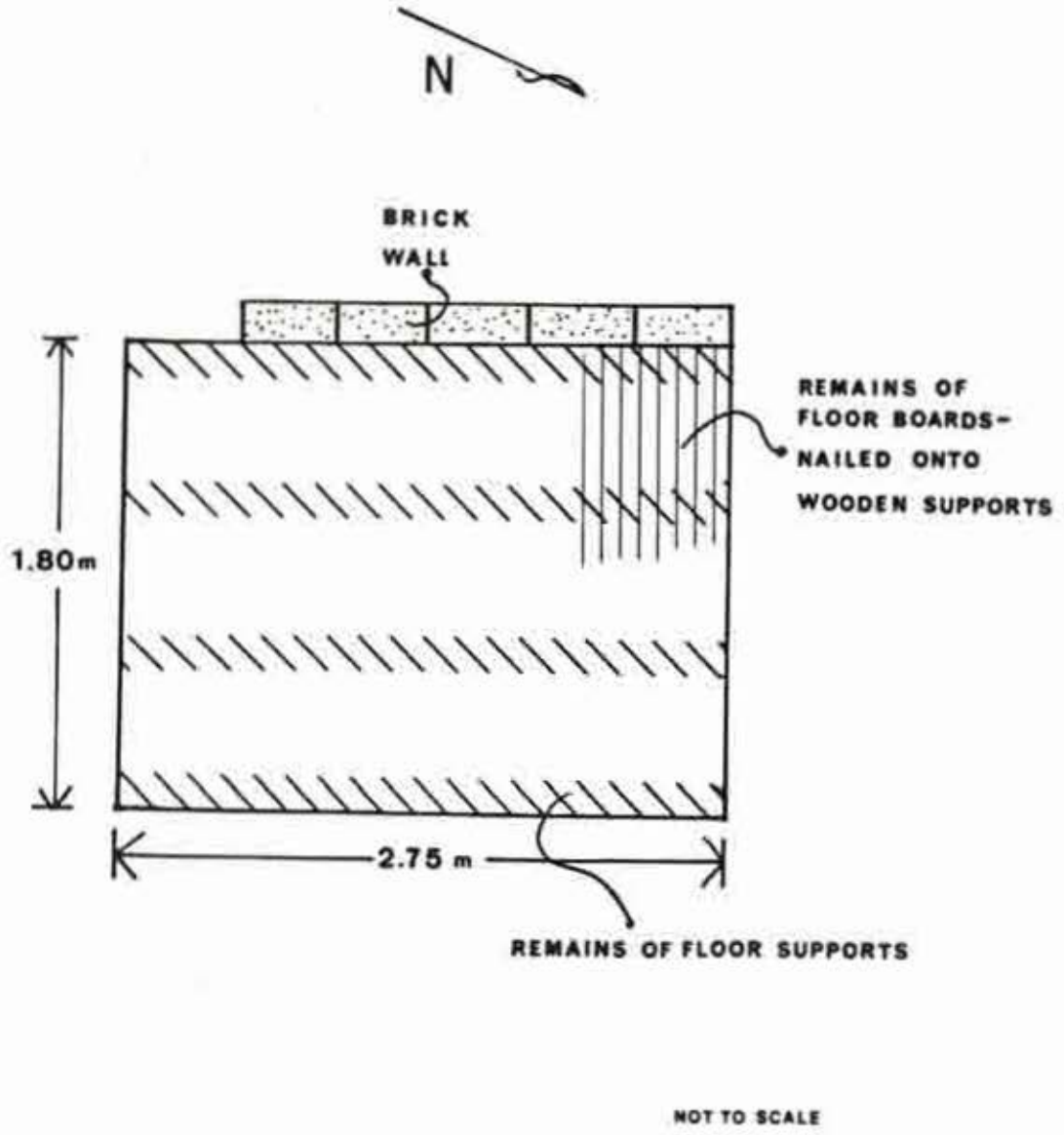


Figure 12. Plan of floor features in Room 1-251. [Field Notebook, Cattanach, vol.1, 9/20/56]

BUILDING OR FEATURE: 1-160 Post Officers' Quarters

LOCATION: South block of Officers' Quarters, fifth building northward from the south; located at the southwest corner of the Parade Grounds (Fig.11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 27, 1957
Field Notebook, Wilson, vol. 9, June 24 through July 11, 1960
Monthly Stabilization Report, June 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
Debris was cleared from the sidewalk on the east side of the structure, and from the front of this structure and the adjoining structure, number 1-170.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The notes only indicate that this structure was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the outbuildings associated with it can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible if in situ deposits are found in the yards. Within the structure, test excavations should be undertaken to determine if in situ cultural deposits remain.

BUILDING OR FEATURE: 1-170 Post Officers' Quarters

LOCATION: South block of Officers' Quarters, seventh building northward from the south end; located at the southwest corner of the Parade Grounds (Fig.11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 16-28, 1960
Monthly Stabilization Report, June 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The notes only indicate that this structure was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the associated outbuildings can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible if in situ deposits remain in the yard. Within the structure, tests are needed to determine if any cultural deposits have been preserved.

BUILDING OR FEATURE: 1-180 Post Officers' Quarters

LOCATION: South block of Officers' Quarters, eighth building northward from the south end; located at the southwest corner of the Parade Grounds (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 2-13, 1960
Monthly Stabilization Report, June 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The notes only indicate that this structure was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the associated buildings can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible.

BUILDING OR FEATURE: 1-190 Post Officers' Quarters

LOCATION: South block of Officers' Quarters, northernmost building; located at the southwest corner of the Parade Ground (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 7 through October 6, 1956
Field Notebook, Cattanach, vols. 4-5, June 13-20, 1958
Monthly Stabilization Report, September 1956
Monthly Stabilization Report, October 1956
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
The fireplace slabs were trenched in preparation for a concrete apron to be poured for stabilization purposes. The walls abutting the fireplaces were cleared and trenched to below the top of the footing and a concrete apron was poured around them. On the exterior of the structure, the sidewalk on the east side was cleared of debris.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
All of the rooms in this structure were excavated and backfilled. The rooms were backfilled to a depth of about 6 in (15 cm) below the top of the rock footings.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the associated buildings can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible. Within the structure, testing is needed to determine if any cultural deposits remain.

BUILDING OR FEATURE: 1-251 Outbuilding

LOCATION: Northwest corner of backyard of Structure 1-150 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 20-22, 1956
Monthly Stabilization Report, August 1956

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

The fill from this structure was removed to a partially in situ plank floor (Fig. 12). Testing between the floor joists revealed hard-packed dirt with small gravel. A test trench, cut down 20 in (50 cm) in the north side of the room, yielded numerous large rocks (4-18 in [10-45 cm]) used to support the floor joists. All of the walls, except for a small portion of the west wall, 17 in (44 cm) in height, had collapsed. The walls were constructed of brick. The structure had dimensions of 6 ft by 9 ft (1.8 by 2.75 m). The east and south walls had a thickness of 12 in (30 cm).

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the building has been excavated in its entirety, testing is recommended to determine if intact cultural deposits exist.

BUILDING OR FEATURE: 1-252 Outbuilding

LOCATION: Backyard of Structure 1-150, abutting north wall of backyard (Fig.11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 20, 1956
Field Notebook, Cattanach, vol. 1, November 1, 1956
Monthly Stabilization Report, August 1956
Monthly Stabilization Report, November 1956

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

This structure, measuring 6 ft north-south by 15 ft east-west (1.8 m by 4.55 m), was excavated to floor level. Adobe brick walls were still standing on the north, east, and west sides of the building. The highest wall was 33.5 in (85 cm). A trench was cut along the western edge of the room to determine the depth of the walls. Natural horizons occurred just below the bottom of the floor level. The remains of floor joists and plank flooring (Fig. 13) were not considered worth preserving.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the building was excavated in its entirety, testing is recommended to determine if intact cultural deposits exist.

Figure 13. Photo, Room 1-252 during excavation. Note planking and floor joist. [Cattanach 11/8/56 Neg FOUN-98(s)]

BUILDING OR FEATURE: 1-253 Privy

LOCATION: The southwest corner of the backyard of Structure 1-150 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 20-26, 1956
Field Notebook, Cattanach, vol. 1, November 9, 1956
Field Notebook, Cattanach, vol. 5, June 20-26, 1958
Monthly Stabilization Report, September 1956
Monthly Stabilization Report, November 1956
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

This structure was initially excavated to a depth of 4 ft (1.25 m) where walls of well-shaped stone were encountered. Excavations continued to a depth of 6 ft (1.85 m) where the amount of cultural materials increased. The fill was removed in approximate 20 in (50 cm) levels. Between 6 and 7 ft (1.85 and 2 m) in depth, a sealed bottle containing perfume (Lubin Parfumes, Paris) was found along with about 20 whole bottles of various types (syrup of figs, cod liver oil, whiskey, perfume, etc.). Also found was a large assortment of broken bottles and glassware, chamber pots, military and civilian buttons, fragments of cloth and shoes, a glass syringe, and an eyedropper. Two pistols were found in the fill.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Excavation terminated at a depth of 9 ft (2.7 m). The sides of the privy were slab lined to the bottom; the bottom was dirt.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The field notes indicate that the building has been completely excavated. No further work is recommended within the structure. Testing in the yard could yield additional information about site specific activity areas.

BUILDING OR FEATURE: 1-255 Outbuilding

LOCATION: Northwest corner of backyard of Structure 1-150 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vols. 1 and 3, November 2, 1956 and July 20, 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
This room is the southern extension of 1-251 and is 19 ft 6 in (6 m) in length and 6 ft 10 in (2 m) wide. Excavations in the western half of the room revealed floor joist and floor planking. An area of horizontally laid brick was found in the southwest corner of the room. This brick base measured 55 in north-south and 21 in east-west (1.4 m by 53 cm). The base began 56 in (142 cm) north of the southwest corner of the room. Figure 14 is a plan of the floor features found in this room.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the building was excavated, testing is recommended to determine if intact cultural deposits exist.

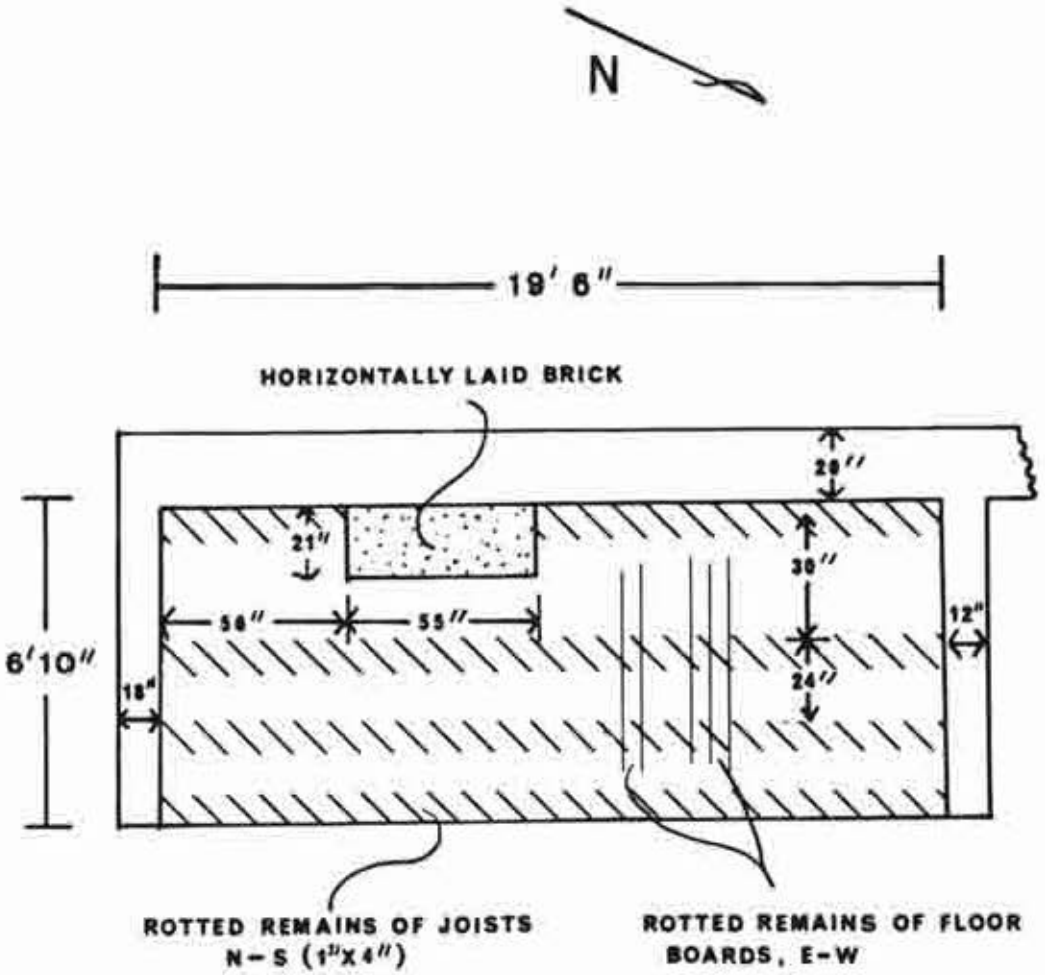


Figure 14. Plan of Room 1-255 floor features. [Field Notebook, Cattanach, vol. 3, 7/20/57]

BUILDING OR FEATURE: 1-270 Outbuilding

LOCATION: Backyard of Post Officers' Quarters 1-170 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 16, 1960
Monthly Stabilization Report, June 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The structure was excavated in two days. No other information is available.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the structures located in it should be tested to provide information about specific activity areas. In situ artifacts and the location of paths and lanes between structures would provide additional details about the function of yard areas.

BUILDING OR FEATURE: 1-280 Outbuilding

LOCATION: Backyard of Post Officers' Quarters 1-180 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 14-15, 1960
Monthly Stabilization Report, June 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The structure was excavated in two days and no other information is available.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and the associated buildings can provide artifacts for a material culture study. Excavation of the yard would provide information on the location of paths and their construction. Specific activity area studies might be possible.

BUILDING OR FEATURE: 1-290 Outbuilding

LOCATION: Backyard of Post Officers' Quarters 1-190 (Fig. 11).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 15-16, 1960
Monthly Stabilization Report, June 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
The structure was excavated in two days. No other information is available.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure has been excavated, testing is recommended to determine if intact cultural deposits exist.

BUILDING OR FEATURE: 1-310 Company Quarters

LOCATION : Southwest block of Company Quarters; located on the southeast edge of the Parade Grounds (Fig. 15).

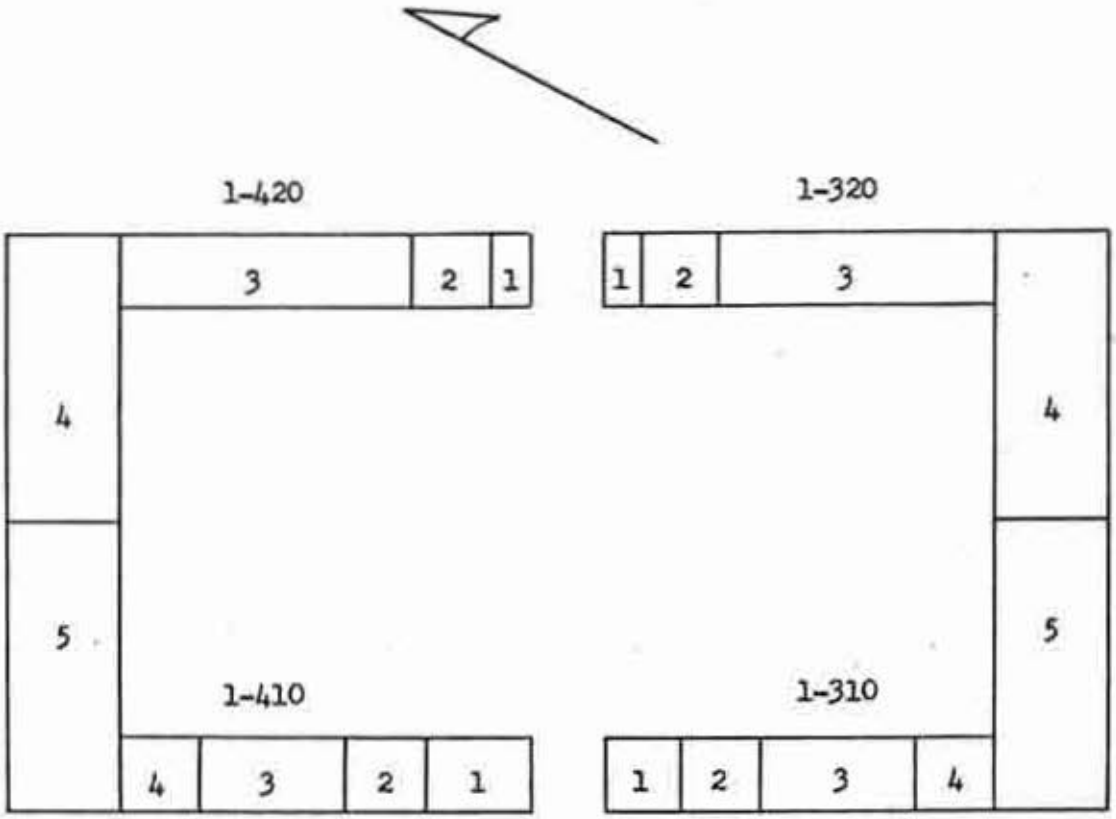
DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 8, August 27 and September 3, 1959
Monthly Stabilization Report, July 1959
Monthly Stabilization Report, September 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:

Excavations in Building 1-310 revealed flagstone terraces in the interior of the U-shaped structure, similar to those uncovered in the northernmost Company Quarters area. The terraces were excavated to expose gutters that ran along them. Dirt and debris were removed from the bases of large sections of the walls in Rooms 314 and 315.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Intact archeological deposits may still be present in all rooms of this structure, particularly in rooms 1-311, 1-312, and 1-313. Any maintenance work in this structure that involves subsurface excavation has the potential of disturbing intact cultural deposits.



COMPANY QUARTERS

Scale 1 inch equals 50 feet

Figure 15. Numbering Plan for Company Quarters, Buildings 1-310, 1-320, 1-410, 1-420.

BUILDING OR FEATURE: 1-320 Company Quarters

LOCATION: East wing of southernmost section of Company Quarters; located at southeast corner of Parade Grounds (Fig. 15).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, February 20 through March 9, 1957
Monthly Stabilization Report, February 1957
Field Notebook, Wilson, vol. 7, May 26, 1959
Field Notebook, Wilson, vol. 8, July 29, 1959
Monthly Stabilization Report, September 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The fill was removed from against the external walls of 1-320 and 1-420 with the aid of the bulldozer and shovels. The cleared area sloped east to a gutter that served both the Company Quarters and Company Street. The gutter had a rock-slab bottom and wooden sides.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:

Test excavations in the interior courtyard revealed the existence of cobble terraces. Excavations were carried down to the fireplace foundation to allow for construction of a wall on a solid footing. Room 1-323 might have been completely excavated, however, the notes are not clear.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Intact archeological deposits may be found in all of the rooms located in this structure. Disturbance of these deposits should be preceded by testing and recording.

BUILDING OR FEATURE: 1-410 Company Quarters

LOCATION: Block of Company Quarters located in second U-shaped structure from the south (Fig. 15).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 8, July 28-29, 1959
Monthly Stabilization Report, July 1959
Monthly Stabilization Report, September 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:

Excavations in Building 1-410 revealed flagstone terraces in the interior of the U-shaped structure, similar to those uncovered in the northernmost Company Quarters area. Trenches were excavated along the bases of the walls of Room 415 to remove the dirt and debris. The room was then completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Intact archeological deposits may be present in Rooms 1-411, 1-412, 1-413, 1-414 and 1-415.

BUILDING OR FEATURE: 1-420 Company Quarters

LOCATION: East side of second U-shaped structure; north of the southeast corner of the Parade Grounds (Fig. 15).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, February 22-28, 1957
Monthly Stabilization Report, February 1957
Field Notebook, Wilson, vol. 8, July 22-28, 1959
Monthly Stabilization Report, July 1959
Monthly Stabilization Report, September 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The fill that rested against the external walls on the east side of the structure was removed with the use of a bulldozer and shovels. A gutter was exposed just east of the structure. The gutter had a slab-lined bottom and wooden sides. A keyhole drainstone was connected to the gutter by a slab-lined side gutter that then joined the main gutter at a perpendicular angle (Fig. 16). The gutter paralleled Building 1-420.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:
The dirt and debris were removed from the base of the walls in Room 1-424. Test trenches placed in the interior of the U-shaped structure revealed the existence of rock terraces. Room 1-424 was completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
All of the rooms of this structure, except for 1-424, may have intact archeological deposits. Although the field notes indicate that Room 1-424 was fully excavated, a testing program is recommended to determine if intact deposits exist.

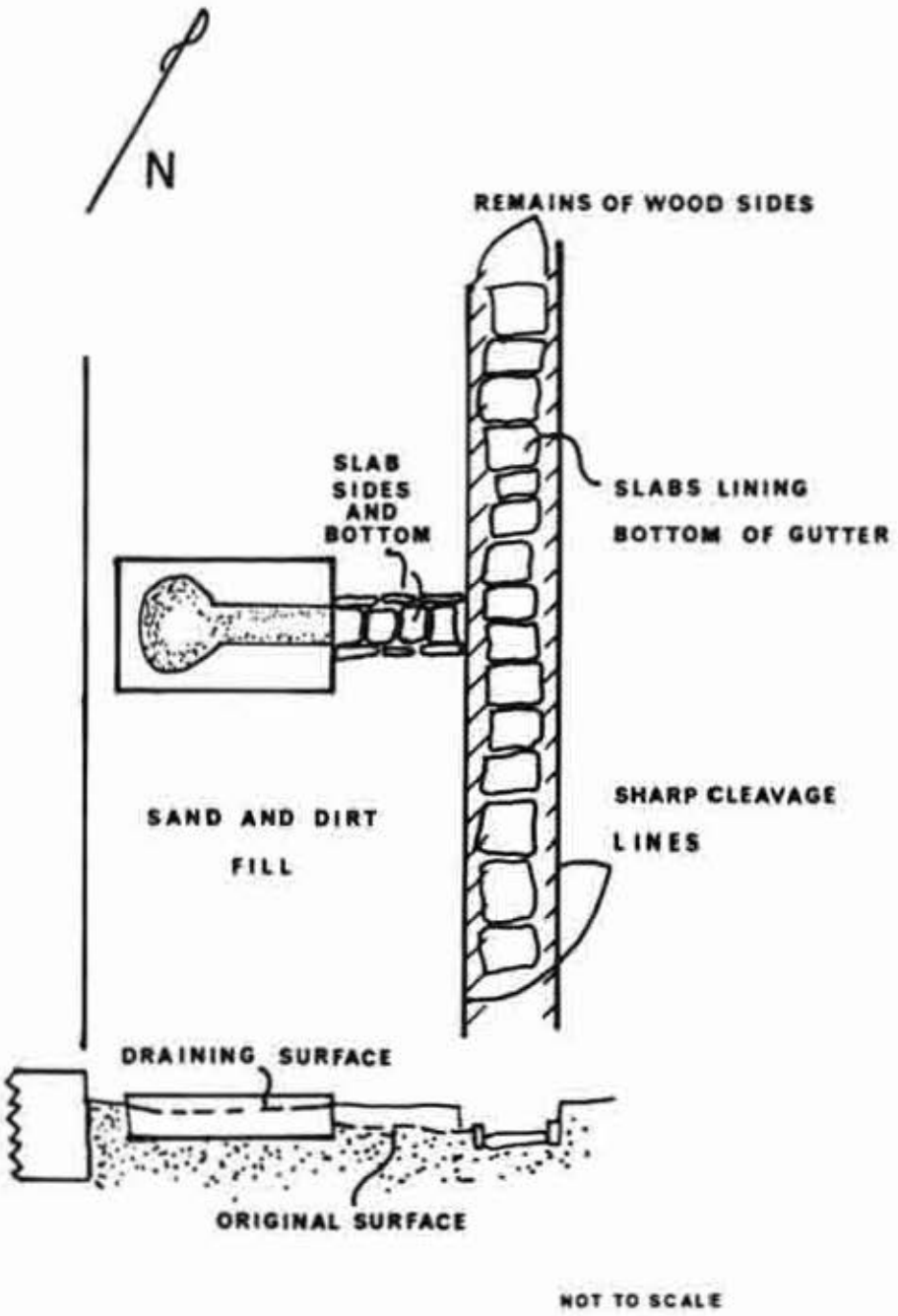


Figure 16. Plan of Building 1-420, gutter and drainage design. [Field Notebook, Cattanach, vol. 2, 2/23/57]

BUILDING OR FEATURE: 1-510 Company Quarters

LOCATION: West block of Company Quarters located in the third U-shaped structure; north of the southeast corner of the Parade Grounds (Fig. 17).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 12, 1956
Field Notebook, Cattanach, vol. 2, March 11-23, 1957
Field Notebook, Wilson, vol. 8, July 30-31, 1959
Field Notebook, Wilson, vol. 8, August 25-29, 1959
Field Notebook, Wilson, vol. 8, September 3-8, 1958
Monthly Stabilization Report, July 1959
Monthly Stabilization Report, August 1959
Monthly Stabilization Report, September 1959
Monthly Stabilization Report, December 1959
Monthly Stabilization Report, March 1960
Field Notebook, Wilson, vol. 9, March 15-21, 1960

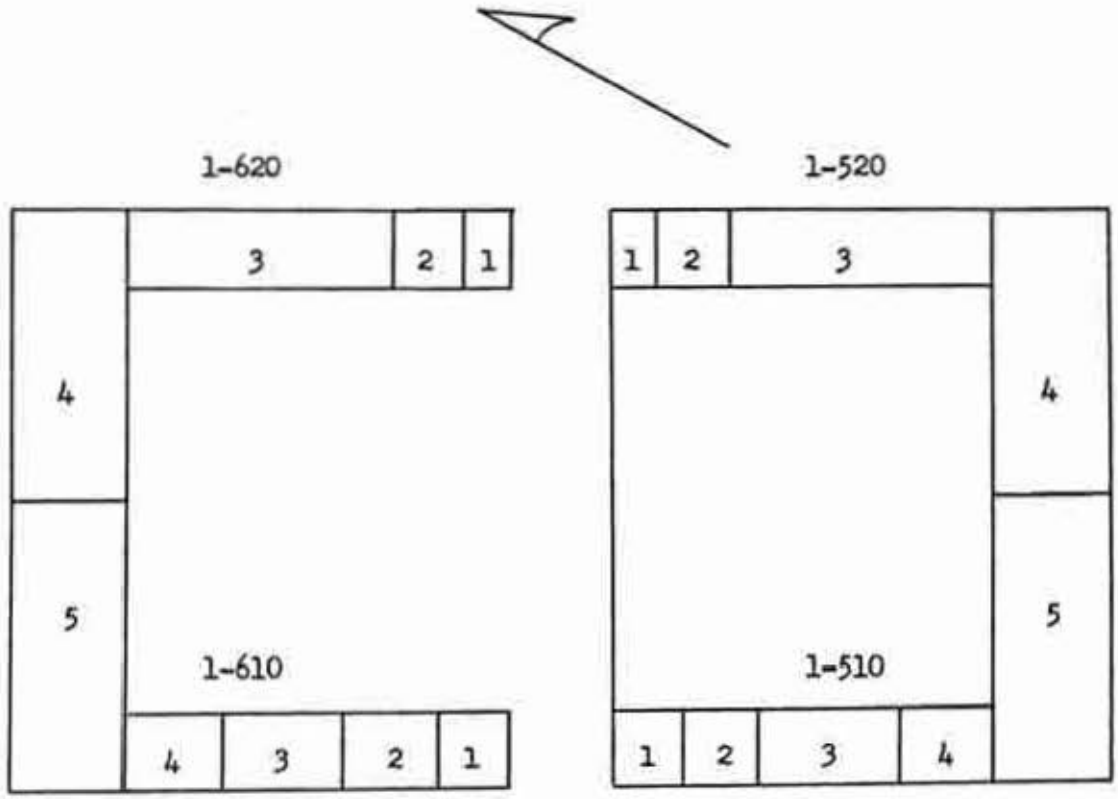
SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
Clearing of the sidewalk south of 1-510 and 1-520 was completed.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
A bulldozer was used to clear the fill from the external side of the east wall of the structure, exposing the cobble sidewalk. The cobble sidewalk and its associated slab-lined drain with wooden sides were partially exposed.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:
The dirt and debris were removed from large sections of the walls in Rooms 1-511 through 1-515. More than 121 bottles, 59 of which were beer bottles, were found in Room 1-512 along with a mass of cartridges below what would have been the floor level. A flagstone terrace was found along the east side of Rooms 1-511, 1-512, 1-513, and 1-514, and north of 1-515. The terrace on the west side was 14 ft 8 in wide (4.4 m) and that on the south side was 15 ft 4 in wide (4.67 m). A stone-lined gutter paralleled the terrace on the west and south sides (Fig. 18). Room 1-514 was excavated and Room 1-515 was partially excavated.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
Room 1-515 was completely excavated with a front-end loader and a bulldozer. Excavations in Room 1-512 were resumed.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Rooms 1-511, 1-512, and 1-513 are likely to contain intact archeological deposits. It is not likely that much of the cultural deposit remains in rooms 1-514 and 1-515. Testing should be undertaken to determine if any cultural material remains.



COMPANY QUARTERS

Scale 1 inch equals 50 feet

Figure 17. Numbering Plan for Company Quarters. Buildings 1-510, 1-520, 1-610, 1-620.

Figure 18. Photo. Stone-lined gutter east of Building 1-510. [Cattanach 6/20/57 Neg FOUN-153(s)]

BUILDING OR FEATURE: 1-520 Company Quarters

LOCATION: East block of Company Quarters located in the third U-shaped structure; north of the southeast corner of the Parade Grounds (Fig. 17).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 12, 1956
Field Notebook, Cattanach, vol. 2, March 11-23, 1957
Monthly Stabilization Report, March 1957
Monthly Stabilization Report, May 1957
Field Notebook, Wilson, vol. 8, August 25-26, 1959
Field Notebook, Wilson, vol. 7, September 3-8, 1959
Monthly Stabilization Report, August 1959
Monthly Stabilization Report, September 1959
Field Notebook, Wilson, vol. 8, November 24, 1959
Monthly Stabilization Report, November 1959
Field Notebook, Wilson, vol. 9, November 30 through December 12, 1959
Monthly Stabilization Report, December 1959
Monthly Stabilization Report, March 1960
Field Notebook, Wilson, vol. 9, March 22-31, 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
The clearing of the sidewalks south of 1-510 and 1-520 was completed.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
A bulldozer was used to clear the fill from the east external wall of the structure, exposing the sidewalk and a gutter.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:
Room 1-521 was completely excavated and produced a large number of artifacts. Room 1-522, which was also completely cleared, contained a large quantity of china, bottles, and cattle bones. The flagstone terrace on the west side of Rooms 1-521, 1-522, and 1-523, and on the north side of 1-524 was cleared. The terrace was 14 ft 8 in wide (4.4 m) on the west side and 15 ft 4 in wide (4.67 m) on the south side.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
Rooms 1-523 and 1-524 were completely excavated. Room 1-524 was excavated with a front-end loader and a bulldozer. A number of bottles were found in this room.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure was completely excavated, testing for intact cultural deposits is recommended.

BUILDING OR FEATURE: 1-610 Company Quarters

LOCATION: Western block of Company Quarters in northernmost U-shaped structure; located on southeast edge of Parade Grounds (Fig. 17).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES
Field Notebook, Wilson, vol. 8, August 27-28, 1959
Field Notebook, Wilson, vol. 8, September 17-25, 1959
Monthly Stabilization Report, August 1959
Monthly Stabilization Report, September 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:

Rooms 1-611, 1-612, 1-613, and 1-614 were excavated to remove the dirt from the base of the standing walls. A 15 ft wide (4.5 m) terrace was exposed along the west side of the enclosure opposite these rooms. A 12 ft wide (3.6 m) terrace was found at the north end, opposite room 1-615. The excavations were completed in all of the rooms.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

It is likely that archeological deposits will be found in all rooms, particularly Room 1-615. The stabilization field notes seem to indicate that subsurface deposits were not disturbed in all areas of stabilized rooms.

BUILDING OR FEATURE: 1-620 Company Quarters

LOCATION: East block of rooms in northernmost U-shaped structure; on southeast edge of the Parade Grounds (Fig. 17).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Monthly Stabilization Report, March 1957
Monthly Stabilization Report, May 1957
Field Notebook, Wilson, vol. 8, September 28 through October 2, 1959
Field Notebook, Wilson, vol. 8, November 5-20, 1959
Monthly Stabilization Report, September 1959
Monthly Stabilization Report, November 1959

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The fill was removed from the external walls with the aid of a bulldozer and shovels. The clearing of the sidewalks and gutter east of the structure was completed.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:

Rooms 1-621, 1-622, 1-623, and 1-624 were completely excavated. A 12 ft wide (3.6 m) terrace was exposed in front and to the south of Room 1-625. A terrace 15 ft 8 in wide (4.7 m) was cleared along the west side of Rooms 1-621 through 1-624. A basement room, assigned the number 1-623B, was located under the south end of Room 1-623. The entrance was from the west. It did not appear that construction of the basement was ever completed. The poorly defined walls were natural earth. The fill was basically sterile. All rooms were excavated and the basement was backfilled.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that all of the rooms were excavated, testing is recommended to determine if any cultural deposits exist. The notes are ambiguous regarding the extent of excavation in the basement. Testing in this area is needed to determine the extent of undisturbed deposits.

BUILDING OR FEATURE: 1-710 Southernmost Flag Pole

LOCATION: South end of Parade Grounds (Fig. 6).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 29 through July 3, 1957
Monthly Stabilization Report, June 1957
Monthly Stabilization Report, July 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The excavations extended to a depth of approximately 8 ft (2.4 m). A remnant of the flag pole was found at this depth. The remnant was 18 in (46 cm) in height with a diameter of between 20 and 22 in (51 and 56 cm). The wood was identified as Pinus ponderosa. River cobbles and boulders were found packed around the flag pole remnant. The remaining pole fragment was removed and the excavations continued another foot below the base of the pole. Nothing was found.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the area of the flag pole has been excavated in its entirety, testing is recommended to verify this.

BUILDING OR FEATURE: 1-720 Middle Flag Pole

LOCATION: Center of Parade Grounds (Fig. 6).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, July 9-19, 1957
Field Notebook, Cattanach, vol. 4, October 1-3, 1957
Monthly Stabilization Report, July 1957
Monthly Stabilization Report, October 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The site was excavated to a depth of 8 ft (2.4 m). Four diagonal braces running at 45 degree angles to the pole were found (Fig. 19). The pole was Pinus ponderosa and had a circumference of 6 ft 3 in (1.9 m) at the base. The pole was seated with a mortise-and-tenon joint on a base of two notched-and-crossed timbers. Each timber was about 16 ft long (4.8 m), 20 in wide (50 cm), and 12 in thick (30 cm). The diagonal braces used to align the central pole were also seated with mortise-and-tenon joints into the cross braces. Wedge-shaped pegs were driven into the mortise to make the joint tight. Excavations beneath the pole failed to reveal evidence of anything being placed under the pole.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The field notes indicate that the area around the flagpole has been excavated in its entirety. Testing is recommended to verify this, before any subsurface modifications are undertaken.

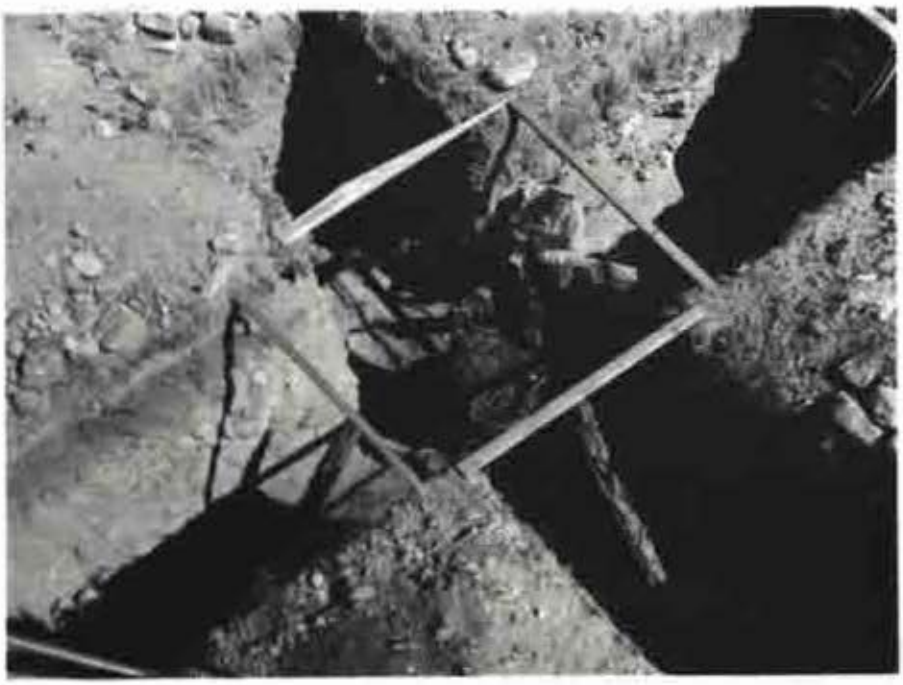


Figure 19. Photo, Feature 1-720, Middle Flagpole after excavation. [Cattanach 10/2/57, Neg FOUN-170(s)]

BUILDING OR FEATURE: 2-110 Prison

LOCATION: North end of last structure on the east side of Company Street (Fig. 20).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, August 29-31, 1956
Monthly Stabilization Report, August 1956
Field Notebook, Cattanach, vol. 1, September 29, 1956
Monthly Stabilization Report, September 1956
Field Notebook, Cattanach, vol. 2, November 22, 1956
Field Notebook, Cattanach, vol. 2, March 5-19, 1957
Monthly Stabilization Report, March 1957
Field Notebook, Cattanach, vol. 3, May 14, 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

The ten cells and the flagstone slab (7 ft [2.18 m] in width on the west side) were cleared of dirt and debris. The fill contained roofing tin, nails, burned and unburned wood, chisels, brass pipes, and other miscellaneous materials. A large amount of fallen brick on the exterior seems to indicate that there was a brick coping on the jail. The jail entrance was located on the north side of the structure and entry was through an adobe wall. Only fragments of the adobe wall remained. Traces of colored plaster were found on the adobe wall. Fragments of blue-gray, yellow, and white plaster were found, the blue-gray was the earliest and the white the latest. A brick alignment inside of the wall in the northwest corner was probably the remnant of a base for a stove.

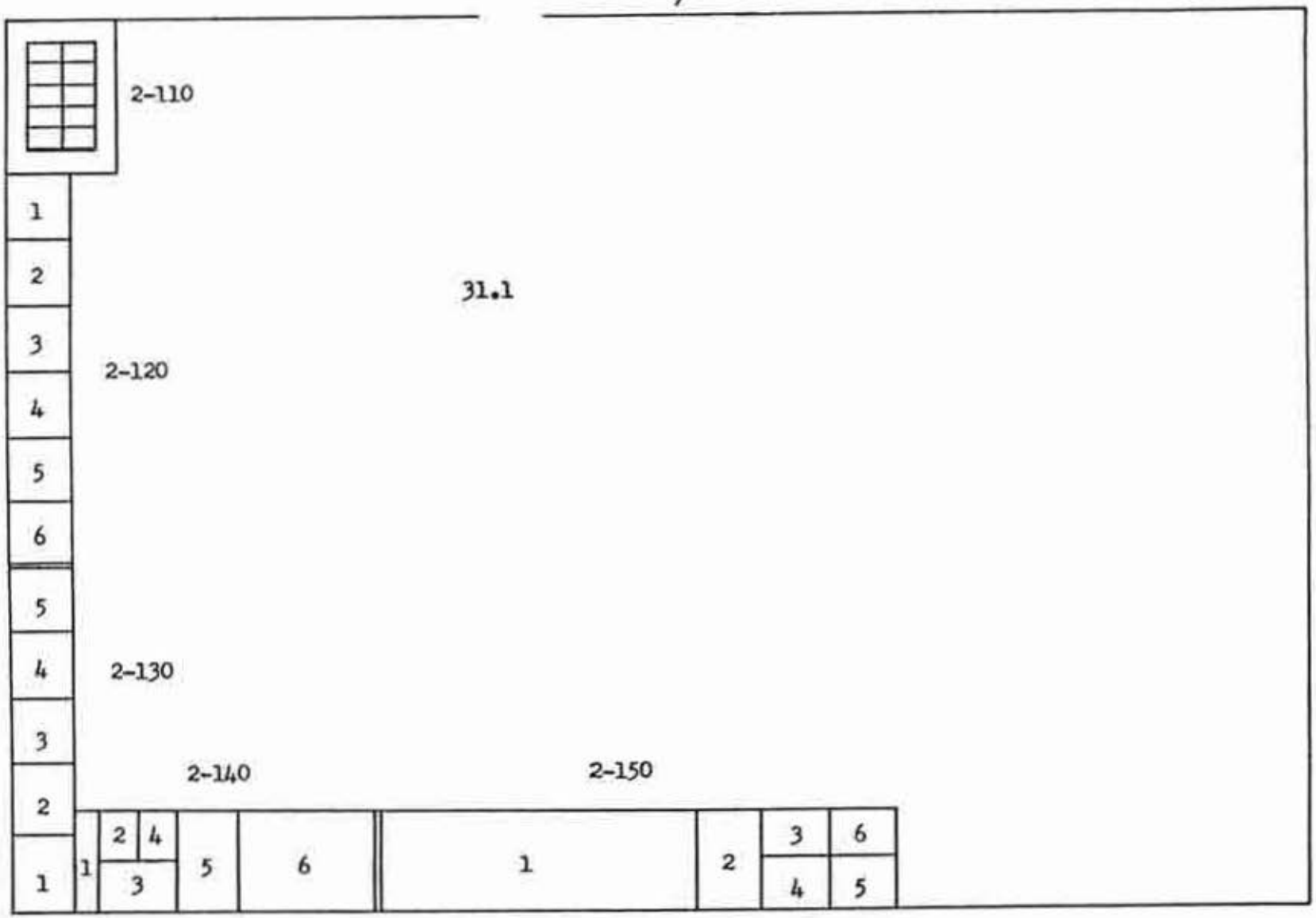
Clearing of the flagstone sidewalk, which was 8 ft 6 in (2.6 m) in width and extended south of the jail, continued to Structure 2-130, the Laundresses' Quarters. This clearing covered a distance of 302 ft (92 m). The fill ranged in depth from 4 to 24 in (10 to 60 cm).

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The remaining fill was cleared from the outside of the adobe walls, which had at one time surrounded the prison. These walls were trenched on the outside.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the jail has been excavated in its entirety, testing in the yard area surrounding the structure is recommended to determine if any intact cultural deposits exist.



LAUNDRESSES' QUARTERS - COMPANY QUARTERS

Scale 1 inch equals 50 feet

Figure 20. Numbering Plan for Prison, Laundresses' Quarters-Company Quarters.

BUILDING OR FEATURE: 2-120 Laundresses' Quarters

LOCATION: South of prison; in last structure on east side of Company Street (Fig. 20).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, August 5-9, 1958
Field Notebook, Cattanach, vol. 5, August 19-30, 1958
Field Notebook, Cattanach, vol. 5, September 3-6, 1958
Monthly Stabilization Report, August 1958
Monthly Stabilization Report, September 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The notes indicate only that Rooms 2-121, 2-122, 2-123, 2-124, 2-125, and 2-126 were completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure has been excavated in its entirety, testing is recommended to determine if intact cultural deposits exist. The yards surrounding the structure are the most likely places where in situ materials and deposits would be found. The field notes are not detailed enough to determine what materials were associated with this structure.

BUILDING OR FEATURE: 2-130 Laundresses' Quarters

LOCATION: A series of rooms oriented roughly north-south; located in the southernmost block of rooms in the southernmost structure; on the east side of Company Street (Fig. 20).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, July 11 through August 6, 1958
Monthly Stabilization Report, August 1958
Monthly Stabilization Report, September 1958
Field Notebook, Cattanach, vol. 5, September 6-10, 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
Rooms 2-131, 2-132, 2-134, and 2-135 were excavated. The fill against the east wall of the structure was removed with a bulldozer. The south wall of 2-130 and 2-140 were cleared of debris.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure has been excavated in its entirety, testing is recommended to verify this. The field notes do not contain details about the associated artifacts or cultural deposits.

BUILDING OR FEATURE: 2-140 Company Quarters

LOCATION: Southernmost block of rooms on Company Street. These rooms are oriented east-west (Fig. 20).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, July 30 through August 20, 1958
Monthly Stabilization Report, July 1958
Monthly Stabilization Report, August 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Rooms 2-141, 2-142, 2-143, and 2-144 were completely excavated. The fill from the south side of 2-140 and 2-150 was removed with the bulldozer. No sidewalk was present. Excavation started in Room 2-145.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the structure has been excavated in its entirety, testing is recommended to verify this. In Room 2-143 a subsurface feature was excavated by a stabilization maintenance crew in January, 1964. This feature should be added to the base map of the site. Any subsurface disturbance in this structure is likely to encounter intact cultural deposits. The extent of excavation in Room 2-145 could not be determined from the field notes. Testing in this room is recommended.

BUILDING OR FEATURE: 2-150 Company Quarters

LOCATION: Southernmost structure running perpendicular to Company Street; immediately east of 2-140 (Fig. 20).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 13, 1956
Monthly Stabilization Report, September 1956
Field Notebook, Cattanach, vol. 4, June 18, 1958
Monthly Stabilization Report, July 1958
Field Notebook, Cattanach, vol. 5, August 19-21, 1958
Monthly Stabilization Report, August 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Room 2-153 was excavated. Wilson stated that this building was completely excavated, but nothing in the notes support this statement. The area to the south of 2-150 was tested for the presence of a sidewalk. None was present. The south wall was cleared towards the east and along the corral wall with a bulldozer.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The notes are ambiguous concerning the extent of archeological excavation in this structure. Testing in the interior and exterior of the structure is needed to determine where in situ remains might be found.

BUILDING OR FEATURE: 2-510 Post Bakery

LOCATION: North end of northernmost Laundresses' Quarters; west end of the Company Band Quarters (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Monthly Stabilization Report, September 1956
Field Notebook, Cattanach, vol. 1, October 2, 1956
Monthly Stabilization Report, October 1956
Field Notebook, Cattanach, vol. 2, December 2-3, 1956
Field Notebook, Cattanach, vol. 3, August 17-28, 1957
Monthly Stabilization Report, August 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

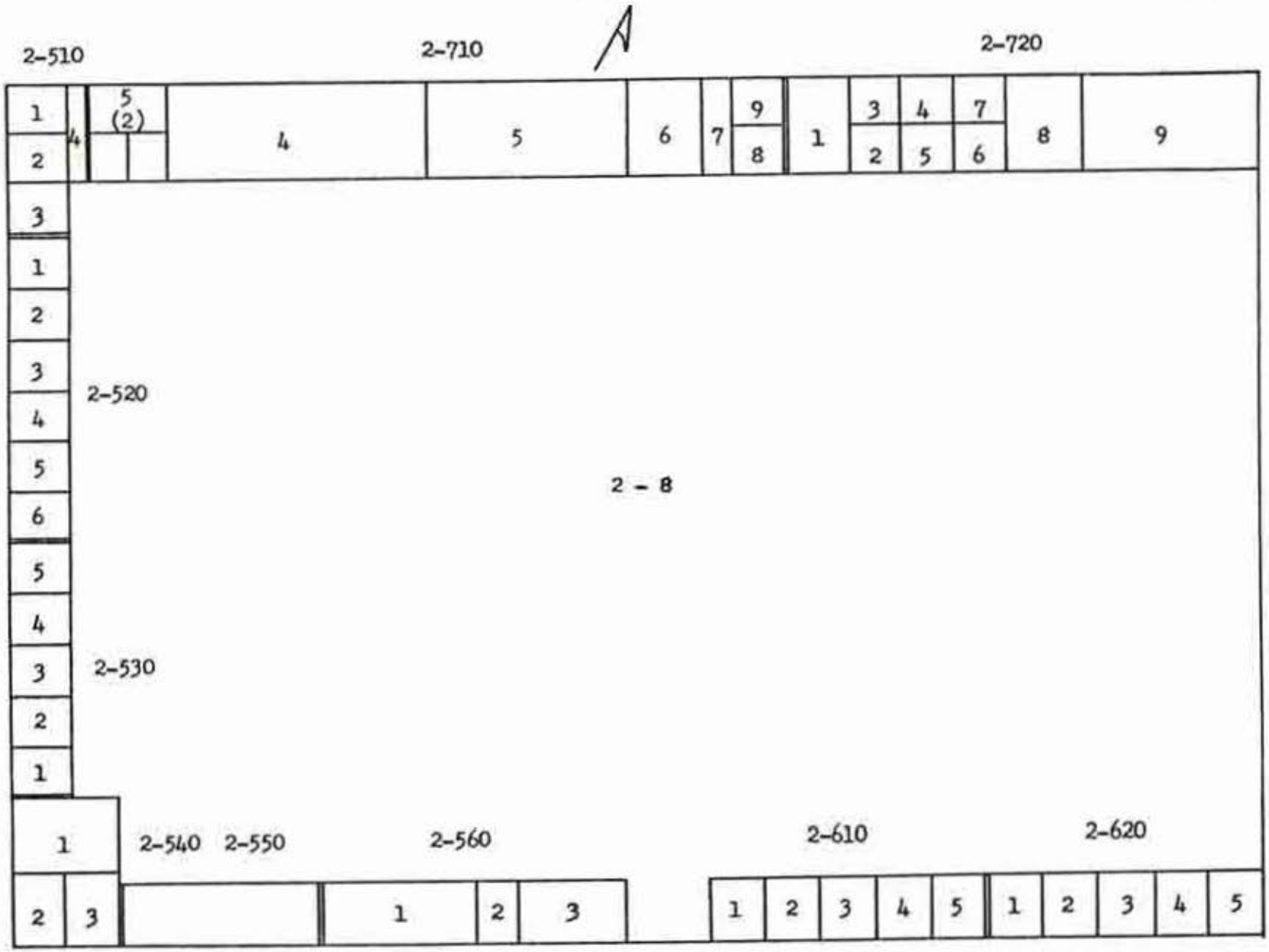
Testing showed the existence of a sidewalk west of the Bakery. This sidewalk, from the Bakery south to the Guardhouse (2-540), was cleared with the bulldozer. The sidewalk was 8 ft 2 in (2.5 m) in width and was covered with 4 to 24 in (10 to 60 cm) of fill. An area north of the Bakery was cleared of fill for a distance of about 26 ft (8 m). The sidewalk in this area is 8 ft 2 in (2.5 m) wide and was covered with 6 to 24 in (15-60 cm) of fill.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

In Room 2-513, the oven was completely excavated revealing a single-fire and baking surface, which was once domed. The brick floor of the oven was still intact. The Bakery took up rooms 2-511, 2-512, and 2-513. Room 2-512 yielded a large quantity of broken bottles and about 40 whole bottles, primarily beer bottles. Most of these were found in a one square-yard area in the southwest corner of the room. It appeared that the wall between 2-511 and 2-512 had been demolished to make one large room. In Room 2-514, which was the hallway east of the Bakery, the remains of a wooden floor were found (Fig. 22, 23). The joists for this floor were laid on cross braces 8 in high (20 cm). A door in the northern wall of this room had been sealed. The room to the south of the Bakery (2-521) was completely excavated. It appeared to have been a part of the Bakery at one time.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

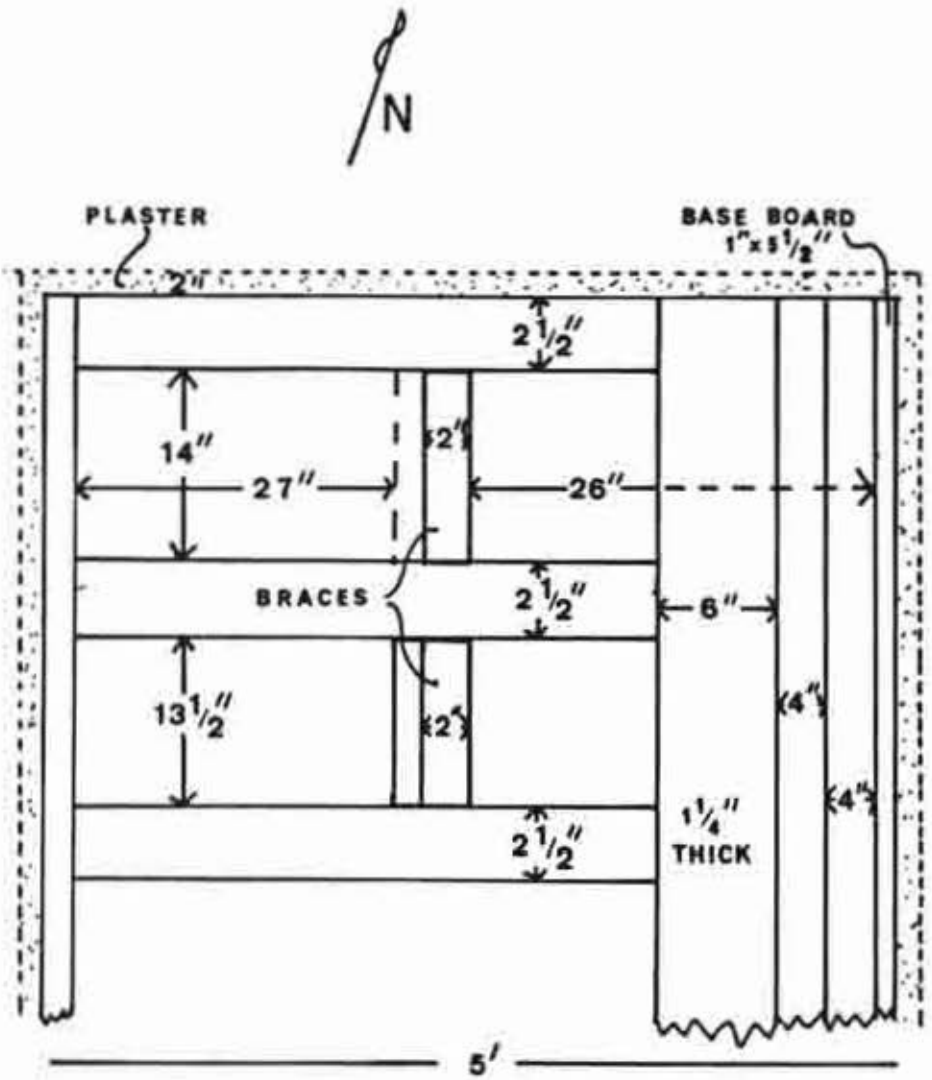
Although the field notes indicate that this structure has been excavated in its entirety, testing is recommended to determine if intact cultural deposits exist. In situ cultural deposits may be preserved in yard areas adjacent to the structure.

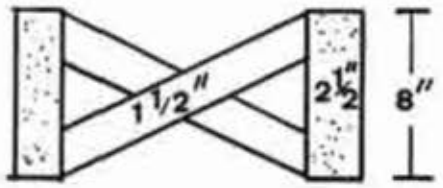


LAUNDRESSES' QUARTERS - COMPANY QUARTERS

Scale 1 inch equals 50 feet

Figure 21. Numbering Plan for Bakery, Laundresses' Quarters--Company Quarters.





DETAIL OF BRACES

NOT TO SCALE

Figure 22. Plan of floor joists in Room 2-514, located in the hallway east of the Bakery. [Field Notebook, Cattanach, vol.4, 8/27/57]

Figure 23. Photo. In progress excavation of Room 2-514 north end showing floor sills, joists and planking. [Wing 8/57 Neg FOUN-164(s)]

BUILDING OR FEATURE: 2-520 Laundresses' Quarters

LOCATION: Immediately south of Post Bakery (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, August 13-16, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, September 17-28, 1957
Monthly Stabilization Report, September 1957
Field Notebook, Cattanach, vol. 4, October 5-19, 1957
Monthly Stabilization Report, October 1957
Field Notebook, Cattanach, vol. 5, July 7-8, 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The excavation of 2-521 was completed. The fill of this room contained 105 military buttons. Between the north wall of 2-521 and the Bakery oven to the north is a hard-packed surface. The function of this feature is not discernable from the notes. Rooms 2-521, 2-522, 2-523, and 2-524 were completely excavated.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Rooms 2-525 and 2-526 were completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicated that the structure has been completely excavated, testing is recommended to determine if intact cultural deposits exist. The field notes are not detailed enough to determine the extent of excavations in yards adjacent to the structure. Interior features, mentioned in field notes, are not described sufficiently to determine original function.

BUILDING OR FEATURE: 2-530 Laundresses' Quarters

LOCATION: Southern block of buildings in northernmost block of Laundresses' Quarters; immediately north of the Guardhouse (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, June 27, 1958 through June 15, 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Rooms 2-531 through 2-535 were excavated and the exterior fill to the east of the structure was cleared. In Room 2-531 a Canadian Penny with the date of 1859 and a piece of "cheap" jewelry were found. In the exterior fill of Room 2-532 forks, knives, and spoons were recovered.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the structure has been completely excavated and that the exterior surfaces were bulldozed, testing is recommended to verify the extent of in situ deposits. The notes are not sufficiently detailed to supply information about the associated artifacts or cultural features. If in situ deposits remain, this information could be recovered.

BUILDING OR FEATURE: 2-540 Guardhouse

LOCATION: Located on south corner of northernmost Laundresses' Quarters; on east side of Company Street (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, June 20-26, 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Three rooms, which made up the Guardhouse, were excavated in their entirety. A large post was found 7 ft 3 in (2.21 m) north of the north wall of 2-541 and 3 ft 6 in (1.07 m) east of the east wall of 2-530.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the structure has been completely excavated, testing is recommended to determine if any intact cultural deposits exist on the interior or exterior of the building.

BUILDING OR FEATURE: 2-550 Chapel

LOCATION: Immediately east of the Guardhouse; on the south side of the northernmost block of the Laundresses' Quarters (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, June 24 through July 1, 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

The room was excavated and there was no evidence that the structure was used as a chapel. More than 600 lead bullets, part of a gun, and the nozzle of a fire hose were found in the excavations.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the structure was excavated completely, testing is recommended to determine if intact cultural deposits exist.

BUILDING OR FEATURE: 2-710 Company and Band Quarters

LOCATION: East-west oriented structure immediately east of Post Bakery on Company Street (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 4, August 29 through September 16, 1957
Monthly Stabilization Report, August 1957
Monthly Stabilization Report, September 1957
Field Notebook, Cattanach, vol. 5, June 28 through July 3, 1958
Monthly Stabilization Report, June 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The excavations started in Room 2-711. This room is an Enlisted Mens' sink with rock walls. A stratigraphic test trench was placed in the southeast corner of the room. It extended to a depth of 13 ft (3.9 m). Ten levels were clearly defined in the excavations. Some of the levels consisted almost entirely of wood.

Room 2-712 was the northern part of the sink and excavation extended to a depth of 13 ft (3.9 m). [In viewing Figure 21, please note the solid line separating Room 2-510 from Room 2-710].

Room 2-713 was the lime room. It was completely excavated.

Room 2-715, a kitchen, had plumbing. This room was completely excavated, and was built on top of the sink designated 2-712. In other words, to reach Room 2-712 the excavations destroyed the overlying Room 2-715. Remains of a wooden floor were excavated (Fig. 24) in Room 2-715.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Excavation was completed in Room 2-712 (the sink) in the Company Quarters. The fill on the south side of 2-711 was removed and a bulldozer was used to finish the clearing. Room 2-716 was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Room 2-714 should be tested to see if it was excavated. Wilson (n.d.:5) listed it as excavated, but there are no references in the notes to this. Rooms 2-712 and 2-715 have been completely excavated. Excavations in the adjacent yards might reveal in situ cultural deposits.

Figure 24. Photo. Floor joists in Room 2-715. [Cattanach, 9/6/57, Neg FOUN-166(s)] At the time that this room was excavated it was designated 2-712 as shown on the photo board. It was subsequently changed to 2-715.

BUILDING OR FEATURE: 2-720 Company Quarters

LOCATION: Farthest east structure in quadrangle of Company Quarters on Company Street (Fig. 21).

DATES OF FIELD WORK, NOTEBOOK AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, September 14, 1956
Field Notebook, Cattanach, vol. 5, April 8-12, 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
Trenching on the north side of structure 2-710 and 2-720 shows a sidewalk extending from the bakery (Structure 2-510) east to the east entry of 2-720.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The sidewalk north of structure 2-710 and 2-720 was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Structure 2-720 was excavated at the same time as Structure 2-710. The field notes, however, do not produce any details about the excavations of this structure.

BUILDING OR FEATURE: 3-110 Depot Officers' Quarters

LOCATION: Southernmost building in block of buildings at the northwest corner of the Parade Grounds (Fig. 25).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 4, May 20, 1958 through June 5, 1958
Monthly Stabilization Report, May 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The structure was completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The yards and rooms of this structure need to be tested to determine the potential for archeological information. The notes are very brief, indicating only that excavation started and was completed.

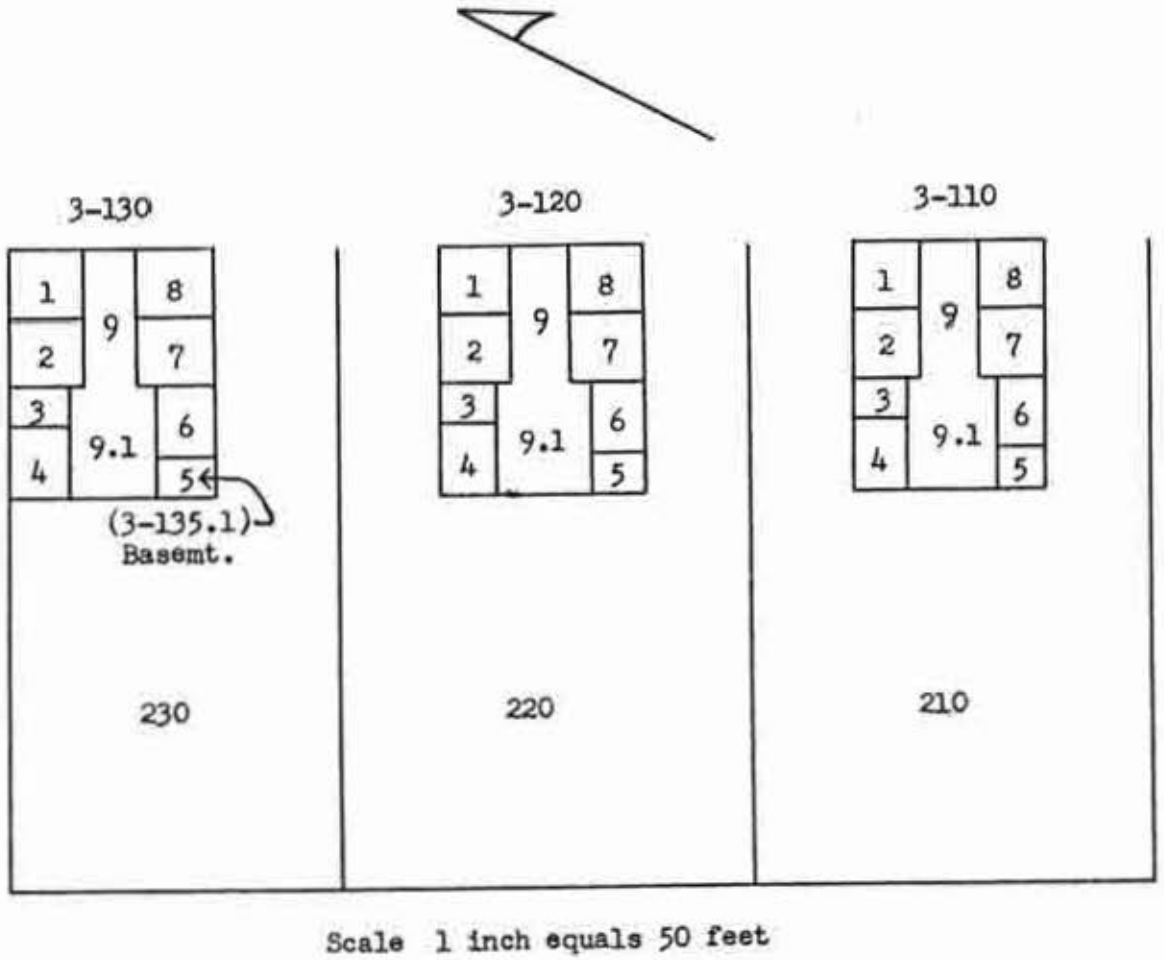


Figure 25. Numbering Plan. Depot Officers' Quarters. Buildings 3-110 to 3-130, 3-210 to 3-230.

BUILDING OR FEATURE: 3-120 Depot Officers' Quarters

LOCATION: Northwest corner of the Parade Grounds; fifth structure from the north end (Fig. 25).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Monthly Stabilization Report, May 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

The Monthly Stabilization Report lists this structure as excavated. No mention is made of it in the field notes.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The structure, its backyard, and associated structures need to be tested to determine the presence and extent of archeological deposits. If they are present, then specific activity studies and cultural material studies could provide details about the exact dating and occupation of this room.

BUILDING OR FEATURE: 3-130 Depot Officers' Quarters

LOCATION: Northwest corner of the Parade Grounds; fourth structure from the north end (Fig. 25).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 7, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 10-17, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vols. 3-4, August 8, 1957 through September 11, 1957
Monthly Stabilization Report, August 1957
Monthly Stabilization Report, September 1957
Field Notebook, Cattanach, vol. 4, April 8-19, 1958
Monthly Stabilization Report, April 1958
Monthly Stabilization Report, September 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The backyard wall was cleared of fill with the use of a bulldozer and shovels and then the walls were trenched. In the northeast corner of the yard, adjacent to the house, was a floored area of horizontally laid brick. A brick path to a privy was cleared. The sidewalk ran from the privy part way to the house. In front of the privy, the brick was laid flat and elsewhere on edge. A splash block or drain block was found near the northwest corner of the house. It had a hole drilled through it and a pipe under the stone extended to the east. The remains of a wooden barrel cistern were completely buried immediately north of the house near the splash block. The excavation of the top fill in all of the rooms was started.

A cellar or basement, designated 3-135.1 was excavated. The cellar was floored with brick and had walls of brick and rock rubble. A brick and rubble foundation for a fireplace was on the east side of the cellar. When the site was used by the Union Land and Grazing Company, the cellar was filled with rubble.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

The excavations were finished.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The privy and outbuildings could be excavated to provide artifactual material for dating the occupation and use of this complex. The structure should be tested to determine if intact archeological deposits are present.

BUILDING OR FEATURE: 3-140 Quartermaster's Offices

LOCATION: Third structure north from the south end of the Depot Officers' block; on northeast corner of Parade Grounds (Fig. 26).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, May 18-24, 1957
Monthly Stabilization Report, May 1957
Field Notebook, Cattanach, vol. 3, June 5-25, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, August 8, 1957
Field Notebook, Cattanach, vol. 5, June 21-25, 1958
Monthly Stabilization Report, June 1958
Field Notebook, Cattanach, vol. 3, August 8-19, 1958
Monthly Stabilization Report, October 1958
Field Notebook, Wilson, vol. 6, September 24, 1958
Field Notebook, Wilson, vol. 6, October 27, 1958
Monthly Stabilization Report, October 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

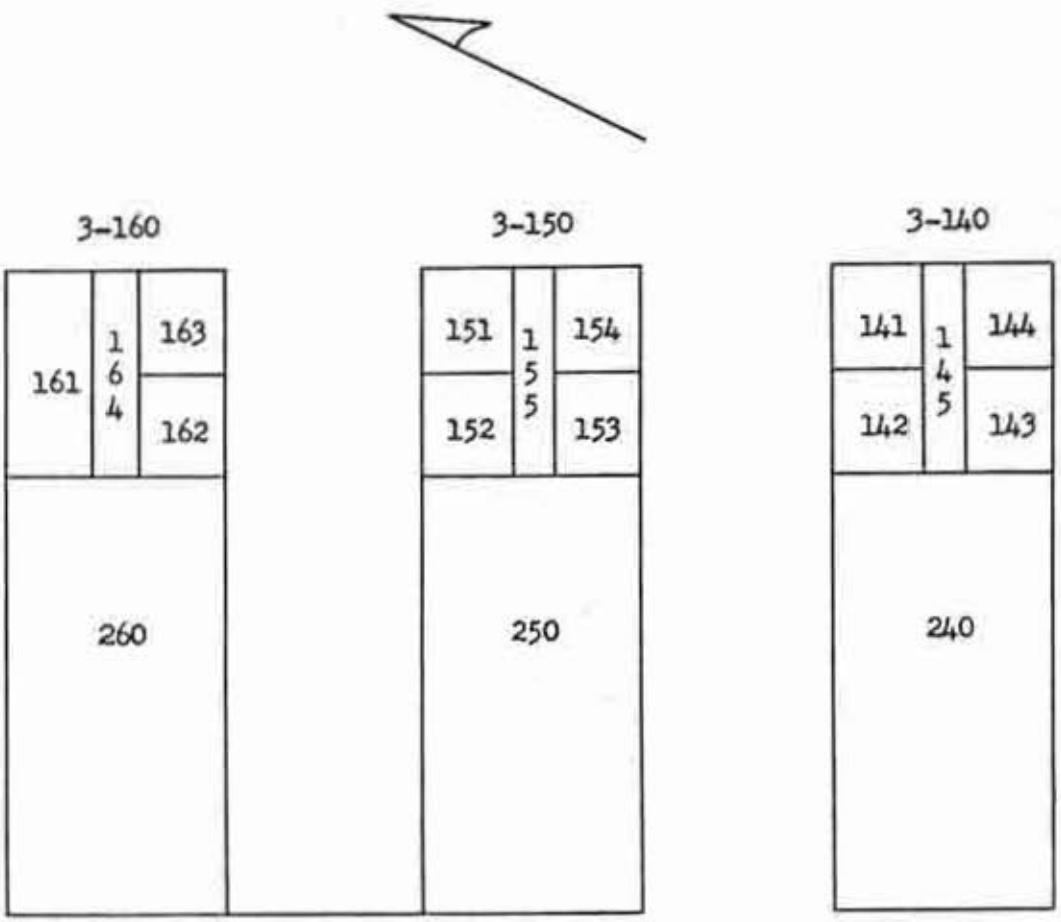
The west wall of the structure was cleared with a bulldozer. Walls in Rooms 3-140, 3-141, 3-143 were trenched to remove the fill from around them. The rooms were cleared of fill to a point just below the top of the wall footings. Floor joists and planks were found in the northwest corner of Room 3-141 (Figure 27). Wooden flooring was also found in the southeast corner of Room 3-142. The backyard was completely excavated with a bulldozer and shovels. All rooms except 3-141 were completely excavated.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Excavation was completed in 3-141. A large amount of newspaper and wood appeared in the excavations. Evidence obtained in the excavations suggested that the room burned, was rebuilt, and burned again.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The notes indicate that all rooms in the Quartermaster's Offices were completely excavated. Test excavation in the yards adjacent to the exterior walls of the structure are needed to determine if in situ materials remain. Excavation of the outbuildings and yard areas could recover artifacts for material culture studies, and in situ cultural deposits needed for specific activity area analysis.



QUARTERMASTER OFFICES

Scale 1 inch equals 50 feet

Figure 26. Numbering Plan. Quartermaster Offices, Buildings 3-140 to 3-160, 3-240 to 3-260.

Figure 27. Photo, Room 3-141 during excavation, showing in situ floor timbers. Dick Godfrey is the archeologist in the photo. [Wilson 10/4/58, Neg FOUN-212(s)]

BUILDING OR FEATURE: 3-150 Depot Offices

LOCATION: Second structure from the north end of the Parade Ground; on the northwest corner of the Parade Grounds (Fig. 26).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, May 31, 1957
Field Notebook, Cattanach, vol. 3, June 1-5, 1957
Field Notebook, Cattanach, vol. 3, June 22 through July 5, 1957
Monthly Stabilization Report, June 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vol. 3, August 13-16, 1957
Monthly Stabilization Report, August 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
Fill and debris were removed from around the outside of the structure to restore the original ground level. The structure was excavated in its entirety.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The backyard and outbuildings could be excavated to determine specific activity areas and to obtain artifacts for a material culture study. Within the structure, test excavations are needed to determine if intact cultural deposits remain.

BUILDING OR FEATURE: 3-160 Clerk's Quarters

LOCATION: Northernmost structure of a series of structures located on the northwest corner of the Parade Grounds (Fig. 26).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 7-8, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 2, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vols. 3-4, August 16-23, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, September 10-14, 1957
Monthly Stabilization Report, September 1957
Field Notebook, Cattanach, vols. 4-5, June 16-21, 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The fill in the backyard and along the foundation walls was cleared with the use of a bulldozer and shovels. The porch area and Rooms 3-161 and 3-164 were completely excavated. Excavations were started in Rooms 3-162 and 3-163.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
Excavations were continued in Rooms 3-162 and 2-163. Wallpaper and painted plaster were found. The last entry in the field notes indicates that excavations were temporarily halted.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
If outbuildings are present in the backyard of this structure, they can be excavated to provide artifacts for a material culture study. Within the structure, tests are needed to determine the extent of the stabilization excavations and to determine if cultural deposits remain intact.

BUILDING OR FEATURE: 3-310 Saddle and Wheelwright Shop

LOCATION: West side of Mechanics' Corral (Fig. 28).

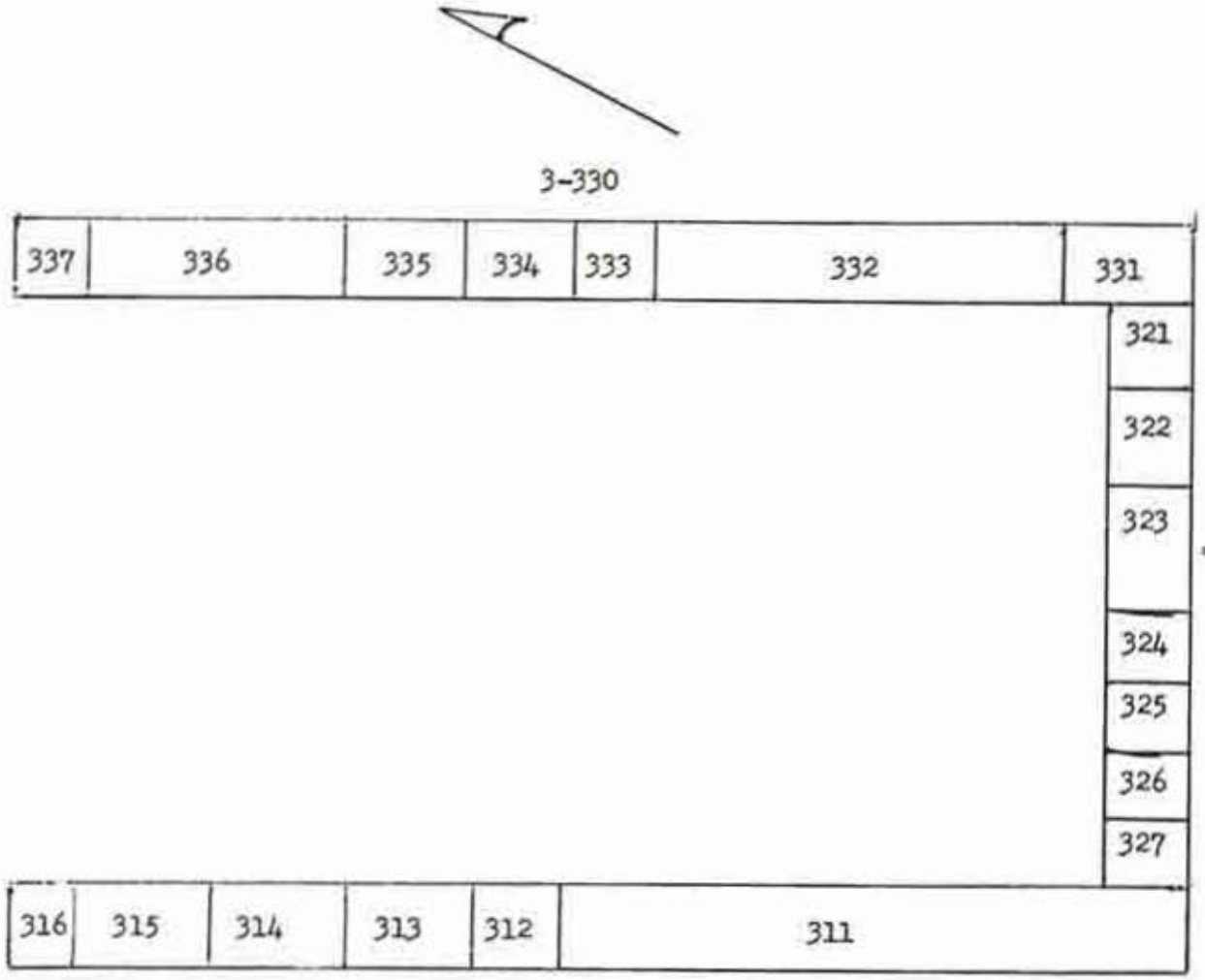
DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, October 18-27, 1956
Monthly Stabilization Report, October 1956
Field Notebook, Cattanach, vol. 2, November 24 through December 7, 1956
Monthly Stabilization Report, November 1956
Monthly Stabilization Report, December 1956
Field Notebook, Cattanach, vol. 3, August 6-15, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, November 7 through December 28, 1957
Monthly Stabilization Report, November 1957
Field Notebook, Cattanach, vol. 4, February 28, 1958
Monthly Stabilization Report, February 1958
Field Notebook, Cattanach, vol. 4, March 20-26, 1958
Monthly Stabilization Report, March 1958
Field Notebook, Cattanach, vol. 4, April 1-12, 1958
Monthly Stabilization Report, April 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
All walls were trenched on the inside to remove the adobe fill piled against them. Approximately 50 cu m of fill was removed from the area east of 3-310, the courtyard, with a bulldozer. Courtyard walls that were cleared totaled 289 ft (88 m) in length. The exterior side of the west wall was also cleared with a bulldozer. Approximately 325 ft (99 m) of wall was cleared.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The removal of fill outside the structure continued. Clearing in the courtyard or corral area showed stratigraphic layering with existing features built at different times. No profile drawings were found in the notes. Rooms 3-313, 3-314, 3-315, and 3-316 were completely excavated. Room 3-313 appears to have been a sheet-metal shop. Excavations were started in Rooms 3-311 and 3-312.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The excavations were completed in Rooms 3-311 and 3-312.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that all rooms have been excavated and the corral area has been cleared with a bulldozer, testing is recommended to determine if any intact cultural deposits exist. If stratigraphic profiles could be assembled from test excavations, they would add important details to the history of use of this area of the site.



MECHANIC'S CORRAL

Scale 1 inch equals 50 feet

Figure 28. Numbering Plan. Mechanics' Corral.

BUILDING OR FEATURE: 3-320 Mechanics' Corral Quarters

LOCATION: South side of Mechanics' Corral (Fig. 28).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, October 6-27, 1956
Field Notebook, Cattanach, vol. 2, November 1-27, 1956
Monthly Stabilization Report, October 1956
Monthly Stabilization Report, November 1956
Field Notebook, Cattanach, vol. 2, January 12, 1957
Monthly Stabilization Report, January 1957
Field Notebook, Cattanach, vol. 3, July 20 through August 13, 1957
Monthly Stabilization Report, July 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, October 3-5, October 26, 1957
Monthly Stabilization Report, October 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

Room 3-321 was cleared of fill to below the base of the adobe walls. The chimney between Rooms 3-322 and 3-323 was trenched prior to stabilization. The fill in Rooms 3-322, 3-323, and 3-324 was removed to below the bottom of the adobe walls. They were then backfilled to within a few centimeters of the top of the walls. A trench was cut around the walls inside Room 3-325, exposing a herringbone-pattern brick floor (Fig. 29). The room was then completely excavated. The interior walls of Rooms 3-326 and 3-327 were trenched to below the bottom of the adobe walls. A plank floor was found

Figure 29. Photo, herringbone-pattern brick floor in Room 3-325 and east wall. [Cattanach 2/26/57, Neg FOUN-112(s)]

in Room 3-326 covered with 6 to 20 in (15 to 50 cm) of fill. The fill was removed from the floor. A stone gutter was found in Room 3-327. The gutter originated in the corral to the north of the room and passed under the room's wooden floor. It terminated south of the south wall of the room. The fireplace in Room 3-327 was trenched and the base exposed. The base was composed of rock slabs on which adobe bricks were sitting. The fireplace bricks sat on the top of the adobe bricks. A line of stones were found in the center of the room oriented north-south and might have been used for joist supports. The courtyard area north of Structure 3-320 was cleared with a bulldozer and the exterior walls of Rooms 321-327 were cleared by hand. The deepest part of the fill was 32 in (80 cm). The exterior wall on the south side of Structure 3-320 was cleared with the bulldozer for the length of the building.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

Room 3-321 was completely excavated and then backfilled. A large number of Budweiser beer bottles were found in the fill of this room. A fireplace was located in the west end of the room. A trench, oriented north-south, passed in front of the fireplace and under the north and south walls of the room. The trench was 2 ft wide (61 cm) and approximately 18 in deep (46 cm) and probably was the trench for a water line, shown on historic maps.

Room 3-322 was excavated completely and then backfilled. Rock ledges were found on the east and west walls of the room extending into the room for a distance of 12 in (30 cm). The top of the ledge was 22 in (56 cm) below the top of the footings.

Room 3-323 was excavated and backfilled. This room had the same type of rock ledges as Room 3-322.

Room 3-324 was excavated and backfilled. This room also had similar rock ledges as Room 3-322, except the ledges were only 8 to 9 in wide (20-23 cm).

Excavations were completed in Room 3-326. This room had a rock ledge on the west and east walls. The ledge was covered with a two-by-eight sill. A fireplace with a brick hearth was in the southwest corner of the building. The hearth bricks were held in place by a one-by-nine board on the east side. This board was held in place by floor joists. The south wall of the room held the brick in place on that side and they were held in place on the north side by a floor joist. The minimum dimensions for the joists were 3 by 8 in (Figs. 30 and 31). The floor planking was one-by-twelve lumber. The floorboards, bricks, fireplace flooring, and face all showed evidence of a reddish paint.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that all of the rooms in this structure have been excavated, testing is recommended to determine if any intact cultural deposits exist within or on the exterior walls of the structure.

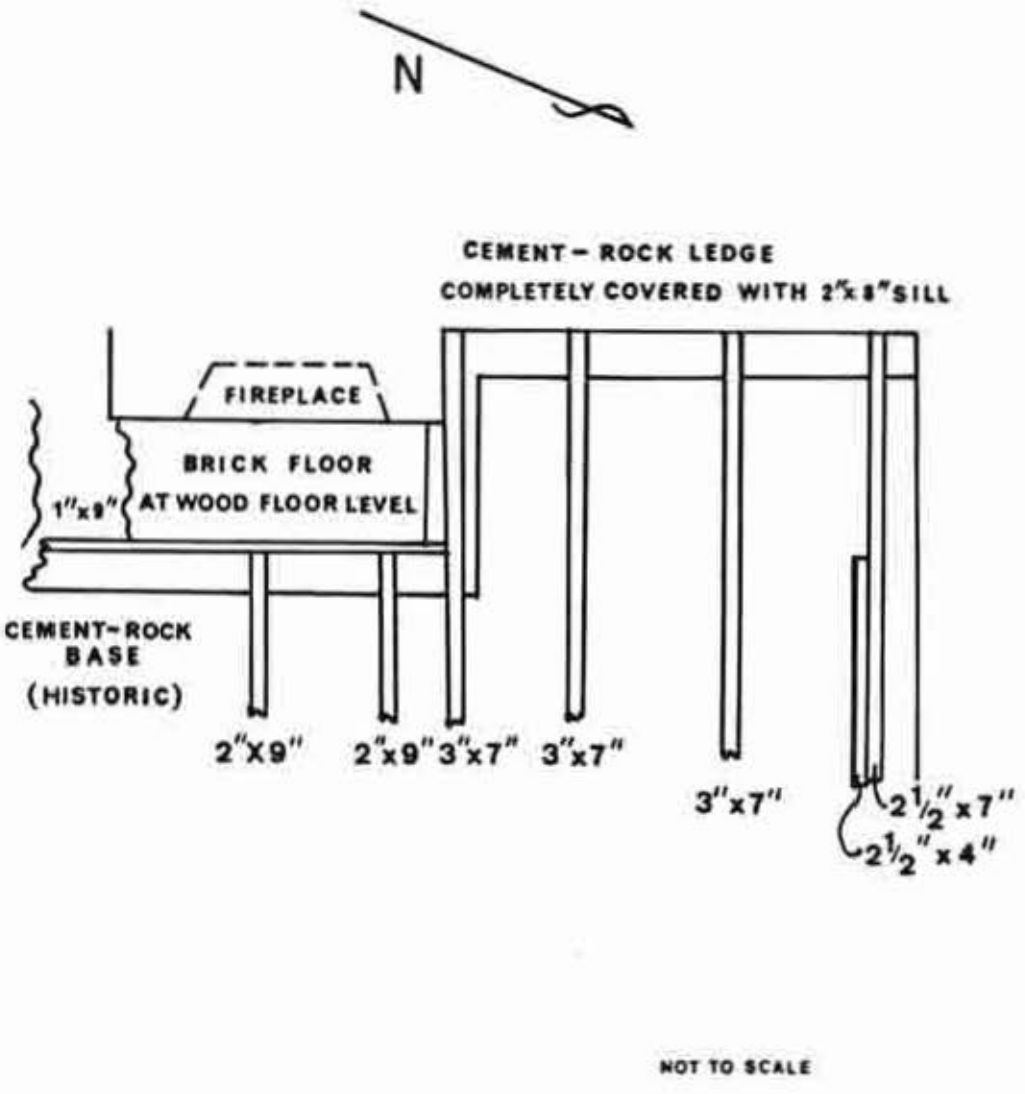


Figure 30. Plan. Floor joists in NW Quadrant Room 3-326. [Field Notebook, Cattanach, vol. 3, 8/9/57]

Figure 31. Photo. Room 3-326 floor joists and planking. [Cattanach 7/20/57 Neg FOUN-161(s)]

BUILDING OR FEATURE: 3-330 Blacksmith and Carpentry Shop

LOCATION: Seven rooms along the east side of Mechanics' Corral; on northeast corner of Parade Grounds, south of Quartermaster's Storehouse (Fig. 28).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, December 2, 3, 12, 29, 1956
Monthly Stabilization Report, December 1956
Field Notebook, Cattanach, vol. 2, January 1-31, 1957
Monthly Stabilization Report, January 1957
Field Notebook, Cattanach, vol. 2, February 1-20, 1957
Monthly Stabilization Report, January 1957
Field Notebook, Cattanach, vol. 2, March 7-22, 1957
Monthly Stabilization Report, March 1957
Field Notebook, Cattanach, vol. 3, May 4-10, 1957
Monthly Stabilization Report, May 1957
Field Notebook, Cattanach, vols. 3-4, August 9-22, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, October 3-4, 1957
Monthly Stabilization Report, October 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:

The base of the external west wall was cleared with a bulldozer and a shovel for a distance of 299 ft (91 m). Room 3-333 was excavated to a brick and rock slab floor. The interior walls of Room 3-337 were partially trenched.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The clearing of the eastern wall was completed on the outside and two drainstones were found. Large amounts of small coal fragments were found outside the wall of Room 3-337. The original ground level was restored on the north and east sides of the structure. The trenching around the base of walls and features in the corral area was done by hand. Features included the bases for the boiler, water tanks, and other types of machinery. The rest of the area was leveled and cleared with a bulldozer. The corral area was restored to the "original" ground level even though the stratigraphic evidence revealed several later surfaces on which structures had been built. A drive shaft in a wood-lined trench extended from the base of the foundation for the steam boiler to the west, towards the planing mill and other shops in Structure 3-310, a distance of approximately 35 ft (10.6 m).

Rooms 3-331 and 3-332 were excavated. The remains of a paintbrush and a can of what was possibly paint were found in Room 3-331. This may have been a "finishing" shop, indicated on one of the historic maps.

The excavations in Room 3-332 continued below the wooden floor to the hard-packed dirt floor. The sills for the wooden floor rested on three rows of rocks oriented north-south. One row was on the east side of the room, one in the middle of the room, and one on the west side of the room. The stones were roughly shaped, approximately one foot square, and were separated by distances of 2 to 10 ft (.61 to 3.05 m). A large number of liquor and beer bottles (Budweiser), some with the labels still on them, were found in one part of the room. Many of the bottles had been opened by simply breaking off the top of the neck. The slab for the fireplace in the south side of the room was trenched and the fireplace outlined.

Room 3-333 was excavated to reveal a brick and rock slab floor. The floor was two-thirds brick and one-third rock slab. The stone portion was in the center of the room running east-west from the door.

Room 3-334 was excavated to a hard-packed dirt floor. A rock and brick forge was found against the north wall of the room and the remains of a floor hearth, outlined with an arc of brick, were against the south wall. The forge appears to have been erected in an old fireplace. The middle of the south wall was faced with brick. The decayed bases of four posts of a wooden arched doorway supported by cement and rock columns was exposed. Excavations in the northern one-half of the room revealed a large mass of iron tools, horse shoes, cartridges, and miscellaneous scraps of iron on the floor.

Room 3-335 was excavated to a hard-packed dirt floor level. This room was a blacksmith shop and was connected to Room 3-334 by a door in the south wall. A forge was found in the southeast corner of the room.

Room 3-336 was also a blacksmith shop and the fill was removed from this room down to its dirt floor. Two forges against the east wall were built of well-dressed rock and brick construction with a rubble filled core. The working surfaces of the forges were floored with Evans and Howard brick. Material in the form of tools and iron scrap was found on the floor of the room.

The excavation of Room 3-337 was completed. The floor was hard-packed dirt. Access to this small room was from the Mechanics' Corral. The function of this room was not defined but a large amount of small coal fragments were found on the floor and in the fill.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that all ground surfaces have been disturbed, testing is recommended to determine if intact cultural deposits exist. If deposits remain, a profile of the stratigraphy of these rooms would be useful in detailing the history of use of this portion of the corral area.

BUILDING OR FEATURE: 3-340 Pumphouse

LOCATION: Center of Mechanics' Corral (Fig. 28).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, December 27, 1956
Monthly Stabilization Report, December 1956

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
The building was razed with a bulldozer sometime in the past and pushed into the well.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Testing is needed in the center of the Mechanics' Corral to locate the foundations of the various structures historically known to have been built here.

BUILDING OR FEATURE: 3-350 Well

LOCATION: Center of Mechanics' Corral (Fig. 28).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, December 27-28, 1956
Monthly Stabilization Report, December 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The top of the well and well shaft were outlined by hand excavation and the mouth of the well (4 ft 9 in [1.45 m] in diameter), which is slab lined, was excavated to a depth of about 3 ft (1 m).

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

The well could be excavated to provide stratified in situ artifacts for a material culture study. It might also provide hydrological information for the third quarter of the nineteenth century.

BUILDING OR FEATURE: 3-380 Steam Engine Building

LOCATION: Southwest corner of Mechanics' Corral (Fig. 28).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, July 7, 1957
Monthly Stabilization Report, July 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The building foundations were cleared by hand.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The interior of the structure needs to be tested to determine if archeological deposits are present. Excavations could provide information on construction techniques used at the post. A better description of the features and deposits associated with this structure is also needed.

BUILDING OR FEATURE: 3-410 Quartermaster's Storehouse

LOCATION: Immediately north of the Mechanics' Corral; on the northeast corner of the Parade Grounds (Fig. 32).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, December 6-20, 1956
Monthly Stabilization Report, December 1956
Field Notebook, Cattanach, vol. 2, January 5-11, 1957
Monthly Stabilization Report, January 1957
Field Notebook, Cattanach, vol. 2, February 9, 1957
Monthly Stabilization Report, February 1957
Field Notebook, Cattanach, vol. 3, August 2-6, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, May 26 through June 13, 1958
Monthly Stabilization Report, May 1958
Monthly Stabilization Report, June 1958

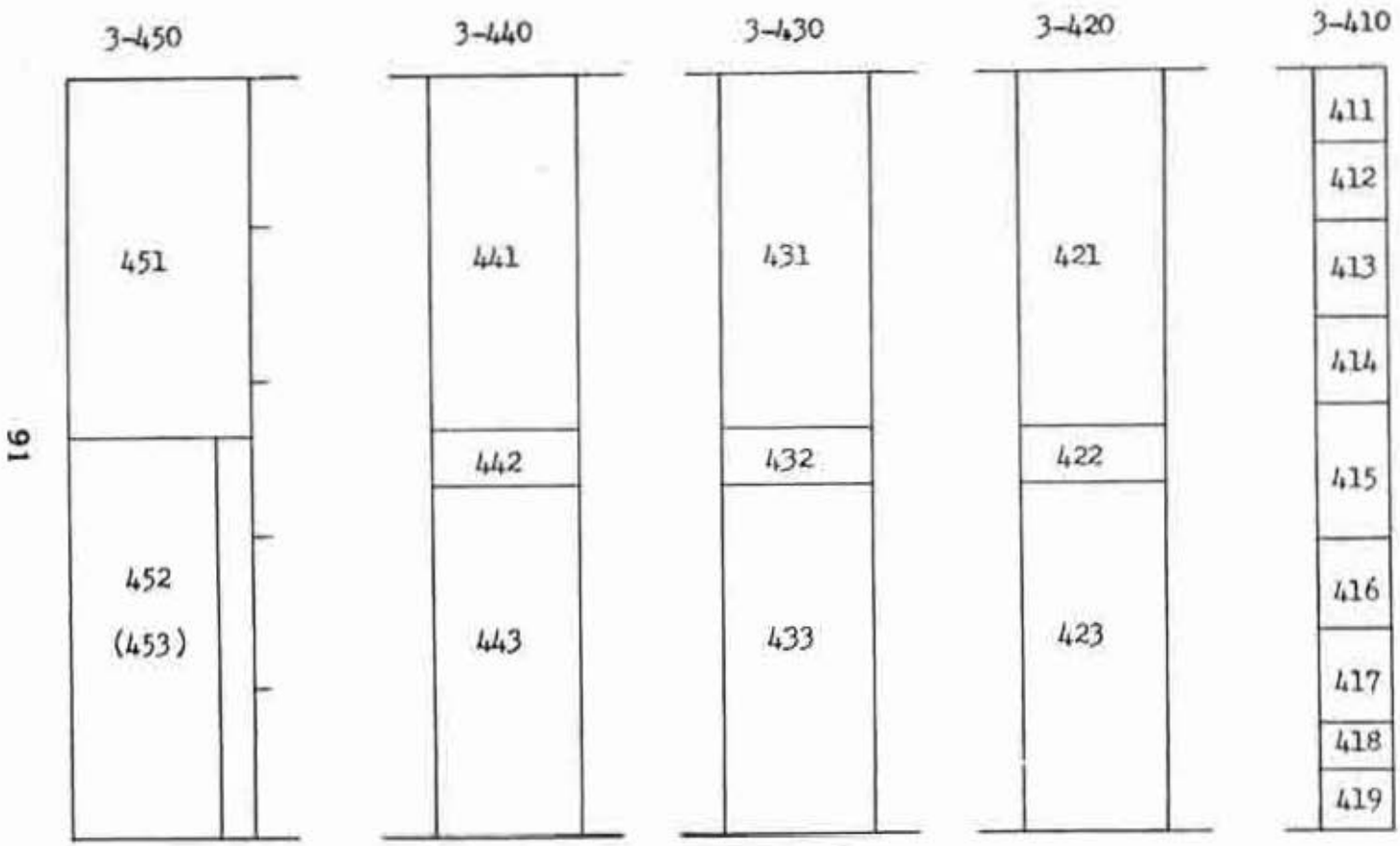
SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
The fill was removed from the exterior of the south side of the building using both shovels and the bulldozer. About 200 ft (61 m) of wall was cleared.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The remaining external walls of the building were cleared of rubble and fill. The badly rotted remains of a porch were found on the north side of the building (Fig. 33). This porch ran the whole length of the building.

Fill up to 37 in (95 cm) deep was removed from against the internal walls of the structure and the internal walls were then trenched. The remains of floor joists and floor planks were visible in the trenches.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
Nine rooms were outlined and excavated in the building. Room 3-419 had an elevated brick fireplace in the southeast corner. Floor joists running north-south and sitting on east-west running sills were found in this room. The joists were three-by-eights and were on 22 in centers.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that this structure was excavated in its entirety, testing to verify this is recommended.



WAREHOUSE BUILDINGS

Scale 1 inch equals 50 feet

Figure 32. Numbering Plan. Warehouses, Buildings 3-410 to 3-450.

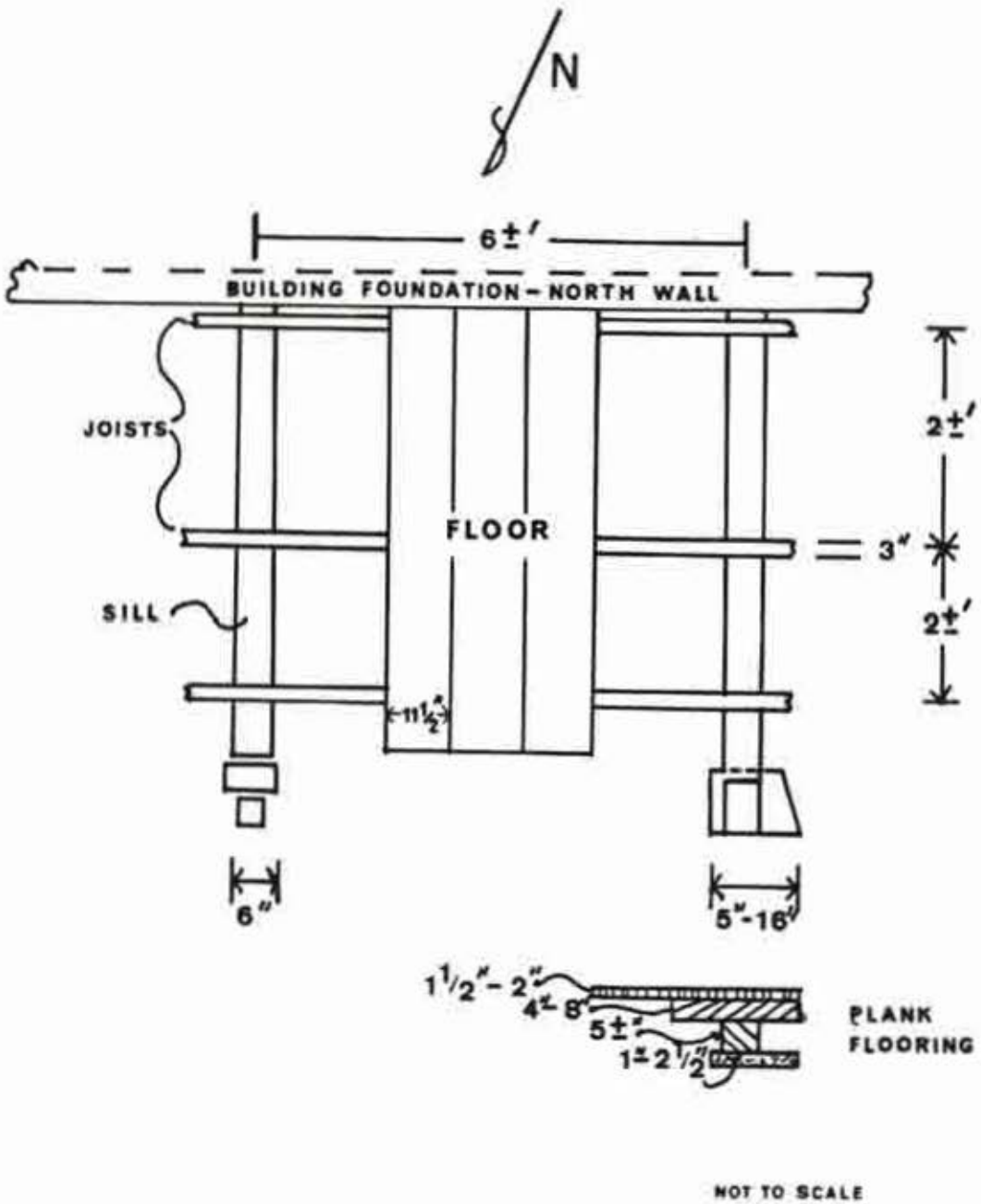


Figure 33. Plan Building 3-410, Porch of Loading Platform on north side of building. [Field Notebook, Cattanach, vol. 3, 8/2/57]

BUILDING OR FEATURE: 3-420 Quartermaster's Storehouse

LOCATION: Second storehouse from the south; on the northeast corner of the Parade Grounds (Fig. 32).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, August 1-3, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 5, July 15-25, 1958
Monthly Stabilization Report, July 1958
Field Notebook, Cattanach, vol. 5, August 2, 1958
Monthly Stabilization Report, August 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
All fill was cleared from around the building, restoring the historic ground level. A drain pipe on this building carried water to the southern cistern.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The structure was excavated completely. Apparently the large east room had been used as a shooting gallery because hundreds of slugs were found in the fill.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure has been completely excavated, testing is recommended to determine if intact cultural deposits exist. Testing might also yield dates for in situ artifacts that could help to determine the primary and secondary functions for this warehouse, and to compare with materials from other warehouse buildings.

BUILDING OR FEATURE: 3-430 Quartermaster's Storehouse

LOCATION: Third structure south from the north end; in the block of buildings located on the northeast corner of the Parade Grounds. The largest of the Quartermaster's Storehouses (Fig. 32).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 14-27, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 30-31, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vol. 3, August 1-3, 1957
Monthly Stabilization Report, August 1958
Field Notebook, Cattanach, vol. 4, April 22 through May 29, 1958
Monthly Stabilization Report, April 1958
Monthly Stabilization Report, May 1958
Field Notebook, Cattanach, vol. 4, June 7, 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
All internal walls of the structure were cleaned with a shovel and all external walls were cleared with the bulldozer. The fill between Buildings 3-430 and 3-440 was removed with the bulldozer.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The structure was excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure was completely excavated, testing is recommended to determine if intact cultural deposits exist.

BUILDING OR FEATURE: 3-440 Quartermaster's Storehouse

LOCATION: Second building from the north; in the block of buildings located at the northeastern corner of the Parade Grounds (Fig. 32).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 12-19, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 17 and 25, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vol. 3, August 3, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 4, April 22 through May 24, 1958
Monthly Stabilization Report, April 1958
Monthly Stabilization Report, May 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The outside of the foundations were cleared with the bulldozer and shovel. The walls inside the two western rooms and the walls of the eastern room were cleared. Trenches were cut along the bases of the walls to remove the fill piled against them externally and internally. The bulldozer was used to remove the upper levels of fill within the rooms.

Remnants of the drain pipes, which at one time carried water from the roofs of the warehouses to the cisterns, were uncovered. Remnants of the drain pipes from Structures 3-440 and 3-450 joined midway between and slightly west of the two structures, and from that point ran directly west to the cistern (Structure 3-520) nearest the north end of the Parade Ground. The pipes that ran to the cistern were placed between two rows of horizontally laid cemented brick, which was then covered with rock slabs that were also cemented into place.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The building was completely excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicated that the structure was completely excavated, testing is recommended to determine if intact deposits exist.

BUILDING OR FEATURE: 3-450 Commissary

LOCATION: Most northern building of the group; situated at the northeast corner of the Parade Grounds (Fig. 32).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, August 10 and 24, 1956
Monthly Stabilization Report, August 1956
Field Notebook, Cattanach, vol. 3, June 11, 12, 20, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 5-25, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vol. 4, April 22 through May 31, 1958
Monthly Stabilization Report, April 1958
Monthly Stabilization Report, May 1958
Field Notebook, Cattanach, vol. 4, June 6-7, 1958
Monthly Stabilization Report, June 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
A large original floor beam, extending 10 ft (3 m) from the west wall, was braced to prevent its movement.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The fill along the outside of the walls was removed with the bulldozer. Remnants of the drain pipes, which at one time carried water from the roofs of the warehouses to the cisterns, were uncovered. Remnants of the drain pipes from Structure 3-440 and 3-450 joined midway between and slightly west of the two structures and from that point ran directly west to the cistern (Structure 3-520), nearest the north end of the Parade Grounds. The pipes, which ran to the cistern, were placed between two rows of horizontally laid cemented brick, which was then covered with rock slabs that were also cemented into place.

Trenching in the basement against the walls exposed evidence of a wooden floor. The floor joists, which ran north-south, were spaced 16 to 18 in (40-50 cm) apart and were covered with planking that ran perpendicular to the joists.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The excavation of all of the rooms, including the basement, was completed.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the structure was completely excavated, testing is recommended to determine if intact cultural deposits exist.

BUILDING OR FEATURE: 3-520 Cistern

LOCATION: North end of Parade Grounds; midway between west and east sides (Fig. 6).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, May 8, 1957
Monthly Stabilization Report, May 1957
Field Notebook, Cattanach, vol. 3, June 8 and 11, 1957
Field Notebook, Cattanach, vol. 5, June 27, 1958
Monthly Stabilization Report, June 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The mouth of the cistern was cleared with the bulldozer to determine its shape and size. The cistern was 15 ft (4.5 m) in diameter and excavations were carried to a depth of about 20 in (50 cm) to reveal the intake and overflow pipe apertures.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
The cistern was excavated to a depth of 3 ft (1 m), where the remains of the collapsed dome were found. Excavation was stopped at this point.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Potential for future excavations is excellent. Cisterns have in the past been used as depositories for garbage after they outlived their usefulness. The excavation carried out during the stabilization program was limited to removing the rubble caused by collapse of the structure. In situ cultural deposits are likely preserved in this feature.

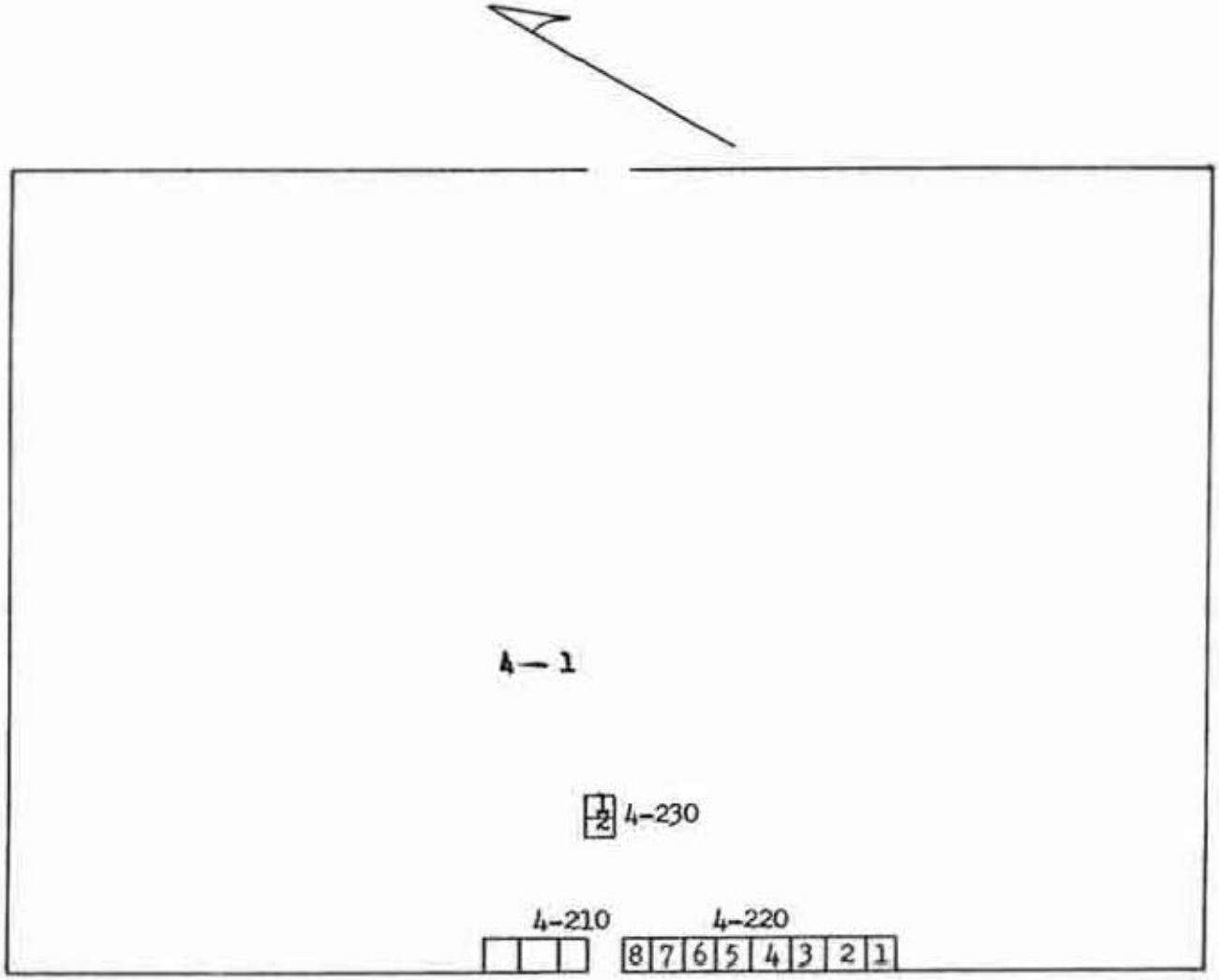
BUILDING OR FEATURE: 4-220 Teamsters' Quarters

LOCATION: East side of Company Street; opposite the Mechanics' Corral (Fig. 34).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, May 31, 1960
Monthly Stabilization Report, May 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
Rooms 4-225, 4-226, and 4-227 were completely excavated. They have no foundations and the floors were packed earth.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Five rooms remain to be excavated in this structure. The excavations could provide an inventory of the possessions of a group of teamsters. Testing in the previously excavated rooms is needed to determine if in situ cultural remains are present.



TRANSPORTATION CORRAL

Scale 1 inch equals 50 feet

Figure 34. Numbering Plan. Transportation Corral, Buildings 4-210 to 4-230.

BUILDING OR FEATURE: 4-230 Yardmaster Depot

LOCATION: East of Teamsters' Quarters and west of grain houses on the east side of Company Street (Fig. 34).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 3, June 20, 1957
Monthly Stabilization Report, June 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The structure was outlined by clearing the fill from the exterior face of the foundation walls.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

There has apparently been little excavation or disturbance of this structure. The interior of the structure can be excavated to provide information on the activities and tools of the Yardmaster. It is likely that in situ cultural remains are preserved in all rooms of this structure.

BUILDING OR FEATURE: 6-110, 120, 130, 140, 150, 160, 170 Hospital

LOCATION: Hospital building proper; southeast of Parade Grounds (Fig. 35).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 2, June 22-29, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 1-31, 1957
Monthly Stabilization Report, July 1957
Field Notebook, Cattanach, vols. 3-4, August 1-28, 1957
Monthly Stabilization Report, August 1957
Field Notebook, Cattanach, vol. 5, July 11-22, 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:

The bulldozer was used to clear the fill from all sides of the hospital. The top fill was removed from the rooms with the use of a bulldozer and shovels. Rooms 6-111, 6-112, 6-113, 6-121, 6-122, 6-131, 6-132, 6-133, 6-141, 6-142, 6-143, 6-151, 6-152, 6-161, 6-162, 6-163, 6-164, 6-165, 6-171, 6-172, 6-173, 6-174, 6-175, 6-176, and 6-177 were excavated completely. Rooms 6-171 through 6-177 were halls.

Room 6-164 (Fig. 36) was a cellar under Room 6-162. The cellar had a dirt floor and adobe walls. Room 6-165 was a cellar under room 6-161. Rooms 6-164 and 6-165 were connected by a door and were entered from the north side by means of either a ramp or stairs. Both rooms were walled with unbroken, untempered adobe brick. A base for a fireplace was in the center of Room 6-165.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

The rooms of the hospital were backfilled and excavations were started on the Steward's Quarters 6-210. The inner courtyard was cleared with the use of shovels and a bulldozer.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicated that the hospital has been completely excavated, testing is recommended to determine if intact cultural deposits exist.

HOSPITAL

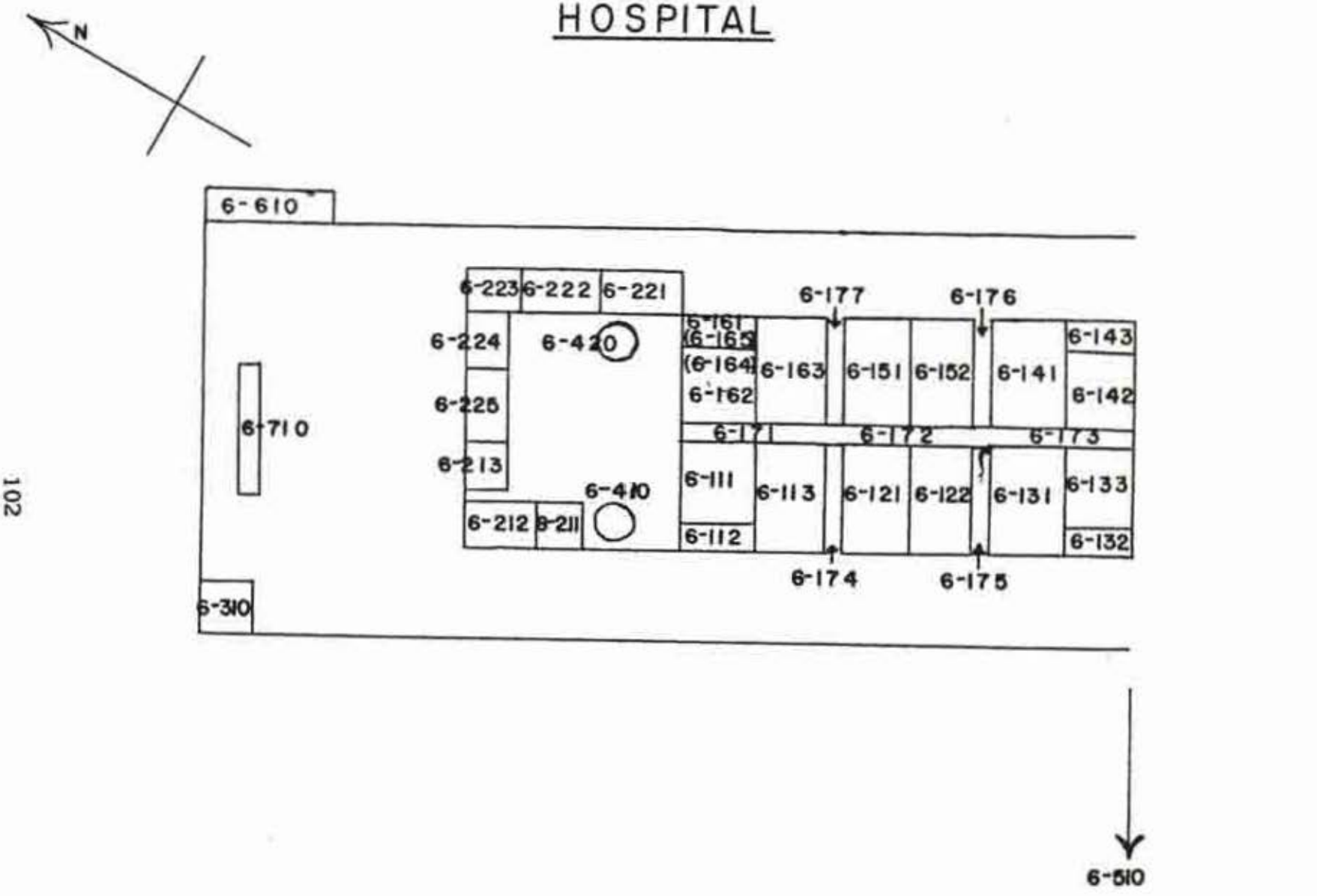


Figure 35. Numbering Plan, Hospital.

Figure 36. Cellar designated Room, 6-164, view to the north. Rock piled in the center of the room is not in situ, but were left in the room because of their weight. The room was backfilled. [Cattanach 6/13/58 Neg FOUN-178(s)]

BUILDING OR FEATURE: 6-210 Matron's Quarters, Laundry, and Bath
LOCATION: West of the Hospital Building (Fig. 35).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, July 17-22, 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:
Rooms 6-211, 6-212, and 6-213 were excavated.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The notes are very brief; these rooms need to be tested for intact archeological deposits.

BUILDING OR FEATURE: 6-220 Hospital Steward's Quarters

LOCATION: West of the Hospital Building (Fig. 35).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 5, July 17-22, 1958
Monthly Stabilization Report, July 1958

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1958 SEASON:

Rooms 6-222, 6-223, and 6-224 were excavated completely. Room 6-223 was a brick-lined privy 9 ft deep (2.7 m) with a dirt floor. The remains of two wooden posts were found midway along and against the two long sides of the privy. Possibly they functioned as supports for a floor. A great many bottles were found in the privy.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Room 6-221 remains to be excavated. It is a part of the Hospital Steward's Quarters. Previously excavated rooms need to be tested to determine if in situ cultural deposits remain.

BUILDING OR FEATURE: 6-510 Good Templar Lodge

LOCATION: Southwest of the southwest corner of the Visitor Center

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Cattanach, vol. 1, October 10-13, 1956
Monthly Stabilization Report, October 1956
Field Notebook, Cattanach, vol. 3, June 8-29, 1957
Monthly Stabilization Report, June 1957
Field Notebook, Cattanach, vol. 3, July 2-13, 1957
Monthly Stabilization Report, July 1957

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1956 SEASON:
Test excavations were initiated in an attempt to outline the structure. The building was constructed of vertically set posts. A brick area was found in the area of the antechamber.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1957 SEASON:
The octagonal structure (Fig. 37) was completely outlined to reveal the stubs of the vertically set posts, which formed the walls of the building (Fig. 38). The posts were seated on a board. A rectangular antechamber was located on the south side of the structure (Fig. 39).

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The interior of the structure has not been excavated. The location and outline of the building needs to be added to base maps of the fort. The interior features of the building are preserved in situ. Any anticipated subsurface disturbance should be preceded by testing and recording of these cultural deposits.

Figure 37. Photo. Outline of Building 6-510 after stabilization. [Cattanach 7/13/57 Neg FOUN-159(s)]

Figure 38. Photo. Building 6-510, east wall. [Cattanach 6/29/57 Neg FOUN-155(s)]

Figure 39. Photo. Building 6-510 Vestibule. [Cattanach 6/29/57 Neg FOUN-156(s)]

BUILDING OR FEATURE: 7-100 Sutler's Store

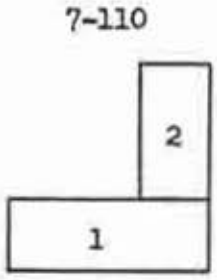
LOCATION: West of Fort Union (Figs. 6 and 40).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, December 2-3, 1959
Monthly Stabilization Report, December 1959
Field Notebook, Wilson, vol. 9, April 6-11, 1960
Monthly Stabilization Report, April 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:
Exploratory trenching to find the corners of the structure was conducted.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
Rooms 7-111 and 7-112 and a privy, immediately east of the structure, were completely excavated. The privy was 8 ft 6 in (2.6 m) long, 4 ft 6 in (1.37 m) wide, and 7 ft 2 in (2.18 m) deep.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
Although the field notes indicate that the Sutler's Complex was excavated completely, testing is recommended to determine if intact deposits exist. The associated yard has not been disturbed by previous stabilization projects. It contains in situ cultural deposits that should be preserved.



SUTLER'S STORE

Scale 1 inch equals 50 feet

Figure 40. Numbering Plan, Sutler's Store.

BUILDING OR FEATURE: Arsenal

LOCATION: First Fort Area (Fig. 41).

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 7, June 6-30, 1959
Monthly Stabilization Report, June 1959
Monthly Stabilization Report, March 1959.

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1959 SEASON:
Six inches of soil were removed from Buildings 9-110, 9-230, 9-240 and 9-310 to enable adobe walls to be stabilized.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
These structures have not been adequately recorded. The field notes are insufficient to determine the dimension, function and associated archeological material. The structures need to be described in detail, located on a more precise base map, and tested to determine their association with the Arsenal and First Fort occupations. It seems likely that the structures contain intact cultural deposits within the structures and in the associated yards.

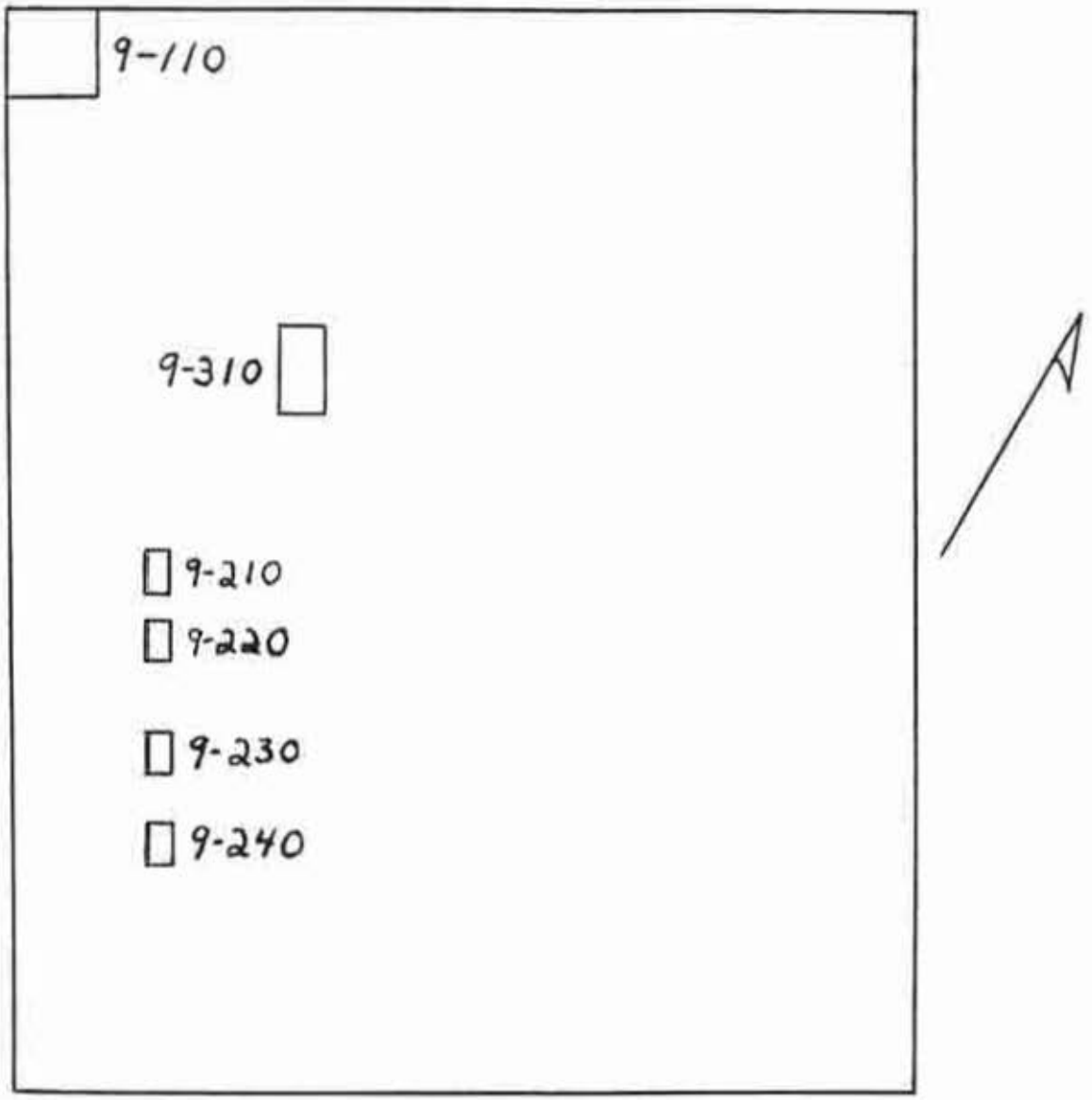


Figure 41. Numbering Plan. Arsenal-First Fort Area.

BUILDING OR FEATURE: Fort Union 1

LOCATION: Arsenal area.

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 30 through July 6, 1960
Field Notebook, Wilson, vol. 9, July 20-25, 1960
Field Notebook, Wilson, vol. 10, August 9-11, 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:
Trenching in the area of Fort Union 1 exposed the corners of five seven-room houses that were marked with wooden stakes.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
All of Fort Union 1 is in need of systematic archeological investigations. These structures need to be relocated, described in detail and shown on a base map that accurately records their placement in the site.

BUILDING OR FEATURE: Fort Union 1, Cellar

LOCATION: Between the boundary fence and the southwest corner of the stone wall that surrounds the arsenal buildings.

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Wilson, vol. 9, June 21, 1960
Monthly Stabilization Report, June 1960
Monthly Stabilization Report, July 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:

The cellar was completely excavated. It was 11 ft 1 in long (3.4 m), 6 ft 6 in wide (1.98 m), and 5 ft 8 in deep (1.72 m). An entrance on the east side was 5 ft 6 in long (1.67 m) and 2 ft 8 in wide (81 cm). The entrance was in the middle of the east wall and had wooden steps.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

Although the field notes indicate that the structure has been completely excavated, testing is recommended to verify this. The location of the structure is not shown in the field notes, and a surface reconnaissance may be needed to relocate this feature.

BUILDING OR FEATURE: Fort Union Wells

LOCATION: Courtyard of southernmost Company Quarters, east of Laundresses' Quarters, in Wagon Master's Corral, and wells in First Fort

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Hastings, vol. 10, September 20-27, 1960
Field Notebook, Hastings, vol. 10, October 4-5, 1960

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1960 SEASON:

The notes are extremely brief, noting that Well 27.3 was excavated to a depth of 6 ft (1.8 m) and that no trace of a wall had been found. A difference in soil color was found, indicating that a hole had been dug in this location. At this point the excavations were terminated.

In the areas of the Laundresses' Quarters (2-2, 2-8), the Wagon Master's Corral (4-1), and the First Fort Area, the wells were probably stabilized or as the notes state, "rehabilitated."

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:

It would appear that the potential for the excavations of all of the wells and cisterns in all of the forts and the Arsenal is unlimited. Wells are 'time capsules' and these should prove to be very productive. Information could also be obtained on hydrological conditions for the middle to late part of the nineteenth century.

BUILDING OR FEATURE: Privy

LOCATION: East of Jail

DATES OF FIELD WORK, NOTEBOOK, AND OTHER REFERENCES:
Field Notebook, Hastings, vol. 10, June 7-8, 1961

SUMMARY OF ARCHEOLOGICAL WORK ACCOMPLISHED 1961 SEASON:
The notes provide little information other than someone named Archibald excavated in the privy east of the jail.

POTENTIAL FOR FUTURE ARCHEOLOGICAL INVESTIGATION:
The privy needs to be located and mapped in on the base map of the fort. It should be tested for intact archeological deposits.

PART VII: PUBLISHED ARCHEOLOGICAL STUDIES

Studies of Material Culture: Bottles, Pipes and the Past

There is no comprehensive analysis of the artifacts recovered from the excavations at Fort Union. Catalogue cards on file at the monument describe many of the bottles, ceramic vessels, guns, buttons and other complete specimens. Arthur Woodward's report[21] on the material culture of the fort was intended to provide a generalized description of the range of artifacts recovered from western forts in general, and Fort Union in particular. Selected items and classes of artifacts recovered from excavations and stabilization activities at the fort have been studied and reported in the archeological literature.

Rex Wilson's studies of bottles on the Western frontier were stimulated by the large assemblage of bottles found in the Fort Union excavations (Figs. 42 and 43). His paper, "Evidence in Empty Bottles"[22] was a very general overview of the range of bottles found at the fort. The article does not provide quantitative data on the types, the function, or the contents of the bottles, nor their provenience in the site. This popular article was simply intended to show how artifacts could be used to interpret the historic past.

The most common bottles in the assemblage contained beer and its near relation--patent medicines. Perfume, toiletry, condiment, soft drink, baby food and ink bottles were also recovered. Wilson's expanded study, Bottles on the Western Frontier,[23] illustrates the bottle types found at Fort Union and Fort Laramie. Wilson lists the provenience of only one of the illustrated bottles that came from Fort Union. This was a bottle of New Mexico Lager Beer from a Las Vegas brewery. It was recovered from the privy [Feature 7-113] in the Sutler's Store.

Wilson[24] elaborated on the theme of artifacts in the interpretation of the past in his paper "Archeology and Everyday Life at Fort Union." This paper explains more specifically and justifies the importance of archeological excavations in "sinks" or privies at historic archeological sites. Wilson briefly describes the abundance and range of artifacts recovered from privies at Fort Union and other excavated forts managed by the National Park Service. The privies at Fort Union yielded tobacco pipes, bottles, ceramics, guns and other artifacts dating the use of the structures between 1865 and 1890. Unfortunately, there no compilation of artifacts for each of the five privies excavated at the fort. One of the privies was in the back yard of the Commanding Officer's residence [Feature 1-253]; two were located in the Company Quarters [Features 2-711, 2-712]; one was in the Hospital [Feature 6-610]; and one was in the Sutler's Store [Feature 7-113].

"Everyday Life" also contains a brief review of the then new field of historic sites archeology. Wilson explains the importance of archeology in the interpretation of history and historical sites. As a illustration of the methods and techniques of investigation, he recounts the search for the First Fort at Fort Union. Using historical photographs and military maps, the archeologists and NPS engineers surveyed the location of eighteen structures. Test excavations were then used to locate the corners of the buildings. The presence of bottles and historic ceramics, dating between 1851 and 1861, confirmed that the buildings corresponded to the period of occupation of First Fort. Again, Wilson gives no detailed accounting of the types, quantities and provenience of artifacts that he used to make this determination.[25]

Figure 42. Photo, Glassware from the 1956-1958 excavations in temporary storage area near park residences. [Cattanach 8/2/1958, Neg FOUN-175(s)].

Figure 43. Photo, Artifacts from Fort Union excavations laid out at the field lab in the Valmora Sanitorium, Valmora, New Mexico. [Cattanach 5/1958, Neg FOUN-176(s)]

Wilson also published an article on tobacco pipes found in the excavation of the fort.[26] It is not clear how many pipes were recovered from the fort; his analysis is a typological study of 44 different styles of clay pipes. He broadly classifies these specimens into categories labeled: "White Clays," "Simple Unglazed Clays," "Decorated Unglazed Clays," "Glazed Clays," "Figurehead Clays," and "Porcelain Pipes." Each pipe is described and illustrated, but there is little chronological discussion of the types, nor any interpretation of the significance of the pipe assemblage. He did not include in his analysis wooden or briar pipes also found at the site. More than half of the collection he describes consists of White Clay pipes.

He lists the provenience of very few specimens. A white clay specimen was found under seven feet of fill in the privy [Feature 7-113] of the Sutler's Store. Based upon datable bottles found in this level, Wilson suggests that the pipe was deposited in about 1878. Other White Clay specimens were also found in the excavations of the Company Quarters. Test excavations at First Fort yielded "several" Simple Unglazed Pipes. An ornate Figurehead, depicting a bearded soldier, was found during excavations in the Fort Union Telegraph Office. Two pieces of a single Porcelain pipe were found in the two northernmost rooms of the Enlisted Men's Quarters.

A further study of seven of the tobacco pipes from Fort Union was prepared by James Murphy.[27] Based on maker's marks found on the pipes, Murphy was able to identify the place of manufacture of these seven specimens, and to suggest that other pipes in the assemblage may also derive from potteries in Ohio. Two of the pipes illustrated by Wilson were manufactured in Mogadore, Ohio. The time of manufacture of these pipes is suggested to be between 1883 and 1895. Five of the pipes described by Wilson were manufactured at Point Pleasant, Ohio. Murphy suggests that these pipes date some 20 to 30 years earlier than the Mogadore pipe. Murphy too was frustrated by the lack of intra-site provenience on these specimens, making it impossible to offer more detailed interpretations of the importance of the pipes in the history of the fort.

An Historic Multiple Burial

In April 1958, while grading an area to the north of the Superintendent's new residence, a human skeleton was exposed. George Cattanach excavated the remains in June and July 1958, ultimately exposing a shallow mass grave with four burials (Fig. 44).[28] The burials were designated FU-1, FU-2, FU-3 and FU-4. FU-1 was the westernmost of the skeletons.

The remains were sent to the Museum of Northern Arizona where physical anthropologist Christy G. Turner analyzed them.[29] His detailed analysis of the osteology and pathology revealed that the skeletal remains were those of four males between the ages of 20 and 30. Turner suggested that the men were a "multiple racial admixture" consistent with the Southwestern Hispanic population. That is, they had racial characteristics of Hispanic, North American Indian and possibly Negro people. All of the men had met violent deaths. Three of the four had been shot, and one had also been stabbed in the sternum.

C. Randall Morrison undertook a more comprehensive forensic analysis of the burials.[30] He offered a likely explanation of the events surrounding the deaths and the deposition of the burials outside of Fort Union proper. Based on his reconstruction of events, the individual identified as burial FU-1 was wounded first, with a shot to the left shoulder from a .50 caliber gun fired from a distance. The men were then captured, and

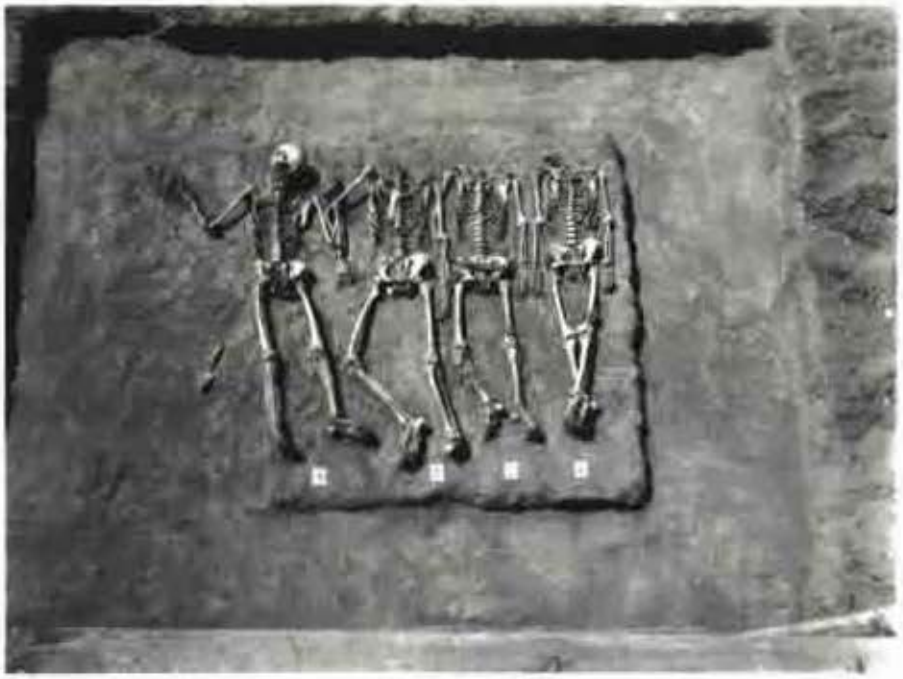


Figure 44. Photo, Burials FU-1, FU-2, FU-3, and FU-4, northeast corner of yard at Superintendent's Residence; skulls removed by bulldozer in leveling backyard. [Cattanach 6/19/1958, Neg FOUN-182(s) 38]

executed. Three of the men were shot in the forehead at close range, one was also stabbed in the sternum, probably with a bayonet. Two had their skulls crushed and one had his legs broken. They were then buried in a shallow grave without their shoes or coats, and with their clothing in disarray. Morrison believes that they were dragged to their graves with straps and sashes found in the grave. On the basis of the bullets, buttons and buckles found in the grave, Morrison believes that the murders took place between 1863 and 1872. The grave would have been clearly visible from the Star Fort and from public roads used during this period. He concludes that the murders of these civilians were condoned if not actually sanctioned by the military at Fort Union. Morrison's report is a fascinating reconstruction of an historical event. He vividly shows how proper archeological excavations and comprehensive analysis of that information can be used for a more detailed interpretation of the past. He writes with enthusiasm and a literary style refreshing in an archeological publication.

PART VIII: RECOMMENDATIONS

Although stabilization has destroyed extensive archeological remains at Fort Union, there are intact features and cultural deposits that need definition and protection. The ambiguity in the fieldnotes makes it imperative that an assessment be undertaken to define remaining deposits throughout the site. This could be done through a systematic program of test excavations or, at the very least, by monitoring any operations that have the likelihood of disturbing subsurface deposits.

An ongoing evaluation of subsurface deposits could be incorporated into the NPS Triple X Program which is intended to protect against the destruction of cultural resources. When maintenance is planned, prior testing or in-progress monitoring should accompany the work. The presence or absence of subsurface remains could then be recorded on a base map of the site. The map would be the base for recording and continually updating the location of the subsurface archeological deposits on the site. The base map would serve both as the plan of the buildings and as a status report on where subsurface deposits have been found and where they might likely be encountered. A file of fieldnotes, feature forms, soil profiles and photographs documenting the archeological evaluations should be compiled as part of this process.

To clarify the existing fieldnotes from the stabilization and cleanup project, an onsite oral history project should be conducted with Rex Wilson and George Cattanach. Both men served as informants for this report, and both had very sharp memories about the work that they did at Fort Union. Wilson, for example, might be able to clarify the extent of his testing at First Fort and the Arsenal, and help to relocate the structures he identified. Both men recalled the approximate location of areas used to dump backdirt. A field visit could serve to distinguish the stabilization-related dumps from dumps used when the fort was occupied.

In all the fieldnotes, monthly reports and daily logs, there was no mention of any work at Star Fort. It seems likely that some of the cleanup activities would have involved at least surface disturbance in the vicinity of the Second Fort. A comprehensive archeological reconnaissance, combined with documentary research, should be undertaken to determine what remains of the Star Fort and associated features.

The area of the First Fort and the Arsenal have been mapped on more than one occasion, although the maps have not been located at the fort or in the Regional Office files. There is no adequate description of each structure in this area of the monument. A new base map showing all of the structures identified, and showing where Wilson's test trenches were placed should be compiled as part of any proposed oral history of previous archeological investigations at the fort.

There is an enormous quantity of information still contained in the archeological deposits at Fort Union. The intact deposits are probably extensive enough to justify test excavations to establish some temporal control for the extensive artifact assemblage recovered during the stabilization program. That artifact assemblage, while no longer tied to specific proveniences, could still be used to illustrate the material life of a frontier post. The intact deposits are also the only source for controlled archeological collections of important temporal/spatial data that would be needed to determine the process of growth and abandonment for the occupations at the fort. These deposits could also be used to

perform comparative analyses of the material culture of the many classes of military and civilian people who occupied Fort Union.

The contribution of archeology to an understanding of the history of Fort Union is not well-integrated into the public interpretation of the site. Beyond the bottles and pipes exhibited in the Visitor's Center, there is little to inform the visitor about the discoveries made through excavation. For example, the location and outline of the Good Templar's building could be staked on the ground and presented for interpretation. The remodeling of the Company Quarters revealed in archeological excavations could be used to illustrate to the visitor the way in which archeology animates the past use of the fort.

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October 1, 1973 to December 31, 1973
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January 1, 1975 to December 31, 1975
January 1, 1976 to December 31, 1976
January 1, 1977 to December 31, 1977
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Wilson, Rex

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Vol. VIII, July 13, 1959 to November 24, 1959
Vol. IX, November 25, 1959 to August 2, 1960

Wilson, Rex (and others unnamed)
Vol. X, August 3, 1960 to October 23, 1964

Stabilization and Excavation Records, Fort Union National Monument.

File Name	Contents
H30-1.20	Stabilization Records for Buildings 1-130 and 1-180
H30-1.21	Historic Building Numbering System
H30-1.22	Stabilization Records for the following Historic Buildings: 1-110, 1-120, 1-140, 1-160, 1-170, 2-710, 3-120, 3-230, 4-220, 9-210, 9-220
H30-1.22	Excavation and Stabilization Records for the following Historic Buildings: 1-150, 1-90, 1-250, 1-310, 1-320, 1-410, 1-420, 1-510 (rooms 511 and 515), 1-520, 1-610, 1-620, 1-720, 2-110, 2-120, 2-130, 2-140, 2-150, 2-510, 2-520, 2-530, 2-540, 2-550, 3-110, 3-130, 3-140, 3-150, 3-160, 3-310, 3-320, 3-330, 3-410, 3-420, 3-430, 3-440, 3-450, 6-110, 6-120, 6-130, 6-140, 6-150, 6-160, 6-170, 6-210, 6-220, 6-510, 7-000, 9-110, 9-230, 9-240, 9-310
H30-1.22	Excavation Records for Historic Building 4-230
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APPENDIX A
FORT UNION CHRONOLOGY

Compiled by Frances Levine and Lisa Nordstrum

The following chronology was compiled from the Superintendent's Monthly Narrative Reports and Superintendent's Daily Diary entries. Monthly Narrative Reports indicate the month and date submitted, followed by the actual month in which the work was done. The date of entry is indicated by ( ). Listings without a date are general information or tasks performed within the indicated month. Daily Diary entries indicate date of entry by (//) and volume number by (V.).

1954 PL 83-429. Congressional authorization to preserve and protect in the public interest Fort Union National Monument.

1956

Jan. 7 **December 1955 Report**
(13) Archeologist Steen and Acting Superintendent Wing made reconnaissance walk over location of approach highway. One piece worked stone found; no signs of camps, hearths or habitations. Stabilization discussed; 1945 photographs show over two dozen chimneys to full height, only six stand and may not last. Continuing hazard to visitors in deteriorating walls and chimneys.

March 2 **February Report**
(24) High wind blew down a 30 ft. length of adobe wall in the shops quadrangle and one of six remaining brick chimneys; preservation of remaining chimneys much needed.

April 5 **March Report**
Fort Union National Monument formally established, April 5, 1956.
(16) Conference held at Fort Union; stabilization discussed. Restoration of a barracks for interpretive and administrative use discussed with Regional Office.

May 7 **April Report**
(18) R.E. Lee (WO), Russell, Reed and Archeologist Steen discussed stabilization methods and priorities.

June 11 **May Report**
(16) Regional Director Miller and Archeologist Steen considered proposed sites for visitor center; restoration of a barracks as a visitor center decided against.

July 8 **June Report**
(22) Archeologist position established (GS-7); candidates interviewed.
(28,29) Steen studied and discussed details of stabilization work at Fort Union.

August 7 **July Report**
(2) Roy Appleman Staff Historian WASO, Reed and Steen study ruins and development plans; Archeologist George Cattanach, Jr. reports for duty August 1.
Uniform insignia and buttons discovered by Ranger Clifford Mills.
Navy uniform button (origin?) found on the old Fort or Arsenal.

Conversations with old residents indicate several wells over a hundred feet deep with rock-masonry walls.
Funds for Rehabilitation of Historic Structures delayed until July 24; loss of time starting emergency stabilization work.

Sept. 10 **August Report**
(1) Cattanach reports for duty to supervise rehabilitation program; begins organizing relics and artifacts.
(7) Active stabilization work begins; 6-man crew; work accomplished:
Internal reinforcement (with concrete) of one chimney of Commanding Officer's residence completed; partial completion of a second chimney.
Clear rubble from various structures.
Clear foundation and sidewalk before Laundresses' Row.
Repairs to framed doorway remaining in Mechanic's Corral.
Repairs to Commissary Storehouse floor sill and end wall.
Test patching of plastered walls.
Test capping of adobe walls.
*Several years work required to complete Rehabilitation of Historic Structures project.
(8) Steen and Cattanach discussed problems of ruins stabilization.
(21) Regional Architect Saunders advises on stabilization techniques.

Oct. 7 **September Report**
(5-7) Steen assists with rehabilitation work.
(26) Regional Director Miller and Steen examine sites for visitor center and residences.
Rehabilitation has revealed "numerous foundations, sidewalls, etc.", especially in Commanding Officer's residence.
Cattanach and 5-man crew work on chimney reinforcement first, excavating and draining secondary.
Work accomplished:
Completion of internal reinforcement with concrete in chimneys of Commanding Officer's house completed.
Clearing of various structures.
(26) Work accomplished:
CO's residence walls defined.
Flagstone sidewalks cleared, totalling about 800 linear feet.
Experiments in soil-stabilization and color-blending continued.

Nov.7 **October Report**
(18) Visitor center location discussed.
(29) Four of five-man stabilization crew terminated; funds won't permit rehiring until April.
Brick floor of parquet design found in a room of the Mechanic's Quadrangle.
Work accomplished:
External reinforcement with angle-iron and internal with concrete of two chimneys in northernmost Post Officers' quarters.
Reinforcement of chimney in Mechanics' Quarters.
Five rooms in Mechanics' Quarters cleared of top fill.
Fill removed in Mechanics' Quarters.
Cleared fill from about 525 linear feet of flagstone walks.

Dec. 3 **November Report**
(14) Steen inspects stabilization work.
One room in Mechanics' Quarters, Quartermaster Depot, excavated by clearing dirt fill from adobe walls, left for exhibit purposes, shows rock foundations of walls and fireplaces. Slab-lined, open-top drain which formerly passed under floor of room drained excess rainfall from Southwestern corner of Mechanics' Corral.
Work accomplished:
Removal of adobe from northwest chimney, Post CO's house.
Removal of fill from against walls by trenching inside all rooms and shops west of mechanics' corral.
Replacement of large section of eroded or missing adobe bricks on west side of chimney in mechanics' quarters.
Stabilization of the chimney completed.
Backfilling of four rooms previously excavated in mechanics' quarters.
Straightline trimming of edges of fill bordering all sidewalks excavated.
Excavation completed in one structure of unknown use in the backyard of the Post CO's house, and in one room in the mechanics' quarters.

1957
Jan.3 **December 1956 Report**
"Handsome" brick floor discovered in a room of the shops quadrangle; stonework at mouth of well in mechanics' corral found.
(10) High winds blew down a small stub wall (12 ft. wide by 10 ft. high) on Officers' Row.
Rehabilitation of Historic Structures 65% complete for the year.

Feb 3 **January Report**
(9) Six-foot high section of chimney stub blew down in Mechanics' Corral
Job 68% complete for year.

March 3 **February Report**
Soil and moisture conservation started.
Earth and broken brick removed from ruins dumped in large gully which threatens the NE corner of the fort.
Plans to place at least two dams across the gully to slow erosion.
Slow work on rehabilitation due to weather and funding.
Job 70% done for year.

April 1 **March Report**
(28) Archeologist Cattanach gave talk to schoolchildren at fort.
Rehabilitation employing one man; mainly clearing foundations and floors.
Job 75% done for year.

May 2 **April Report**
Trail work has revealed sections of old flagstone walk.
No work on rehabilitation due to Cattanach's absence (annual leave).

June 6 **May Report**
Rehabilitation of Historic Structure 331.2.
Job 85% done for year.
Five men employed; funds will be expended by June 30.

July 4 **June Report**
(19) Archeologist Vivian's visit causes new thinking on ruins stabilization matters.
Rehabilitation of Historic Structures completed scheduled work.

Aug.4 **July Report**
(1-30) Regional Archeologist Steen visits.
Donation by Dr. Lynn Perrigo of articles collected at fort, includes cannon ball, bullet mold, ox shoe.
Rehabilitation of Historic Structures (331.3) employed eight men and Cattanach; large amounts of excavation and drainage finished, completion of Hospital excavation. About 3000 cubic yards of waste dirt accumulated.

Sept.3 **August Report**
Power-drive shaft discovered in place in Mechanics' Corral.
Ten men on crew; about 4000 cubic yards of waste dirt removed.
Job 35% complete for fiscal year.

Oct. 7 **September Report**
Crew cut to Cattanach and one worker due to lack of funds.
Job 35% complete for fiscal year.

Nov. 2 **October Report**
Same crew due to lack of funds.
Job 42% complete.

Dec. 12 **November Report**
Heavy snow and rain lead to collapse of small wall (20' by 6') in Depot area.
Two-man crew.
Job 49% complete.

1958
Jan. 8 **December 1957 Report**
Two man crew.
Job 55% complete.

Feb.7 **January Report**
Rehabilitation nearly inactive, job 60% complete.

March **February Report**
Rehabilitation inactive.

April 3 **March Report**
Rehabilitation inactive.

May 1 **April Report**
Rehabilitation resumed; excavation of Officer's Quarters and Commissary Buildings.
(4/26/58) Grading around residence No.1 exposed human bone about 20 feet north of back door. Mr. Archuleta bull-dozer operator. Those bones disturbed collected, others left until they could be properly examined and excavated.(V.I)

June 1 **May Report**
Material recovered during stabilization activities moved from Valmora and stored on shelves in garages.
Work in Quartermaster Storehouses and large cellar of Commissary Storehouse.
Soil against walls removed by hand shoveling and used to backfill water and sewer line trenches.
(5/3/58) Grounds development crew at FES #1.(V.I)
(5/16/58) Cattanach cut water diversion ditch around burials exposed near Res. #1 to prevent further flooding.(V.I)

July 2 **June Report**
Stabilization work uncovered enlisted men's sink, beer bottles and broken rifles, excavation completed at about 12 1/2 feet. Two pistols (18" and 4-6"), perfume bottles, and other items found in privy behind Commanding Officer's quarters by stabilization crew working in level 4.
Several hundred cubic yards dirt moved from around Hospital and Shops Quadrangle; work begun in Warehouse area.
(6/4/58) Four burials encountered at Residence No.1, excavated by Cattanach.(V.I)
(6/19/58) Cattanach and Dick Godfrey finished excavations of skeletons and took photographs.(V.I)
(6/27/58) Cattanach worked on burials near Residence No.1.(V.I)

Aug. 4 **July Report**
1000 cubic yards waste dirt removed.
Artifacts to be sorted.
750 soil-cement bricks made for stabilization work.
Wall capping, replacing weathered bricks, water proofing in following units: Officers' Quarters, Post Oven, Commissary Office, Depot, southeast corner of Shops Quadrangle, Building 3-45 Commissary, Depot.
Excavation continued or completed in 20 rooms and area 6-1 of Hospital unit.
Comprehensive report on details submitted by Cattanach.
(7/3/58) Cattanach and Dick Godfrey worked on material in jail cells.(V.I)
(7/22/58) Ike and Faustine leveling flagstone and cementing edges between flagpole and jail cell.(V.II)

Sept. 1 **August Report**
2500 cubic yards of dirt removed.
Brick making continued; 827 soil-cement, 1639 adobe.
Artifacts sorted for cataloging.
Four burials studied.
Concrete slab poured over jail cells, wall capping and excavation in several buildings and rooms.
(8/25/58) Art Woodward at fort to rephotograph artifacts for his report.(V.II)
(8/30/58) Cattanach and stabilization crew finished cap on top of jail cells.(V.II)

Oct.2 **September Report**
90 cubic yards dirt removed around Hospital.
Excavation completed in Laundresses' Quarters and Mechanic's corral, leveling and backfill to provide drainage.
Brick making continued; 815 soil-cement, 870 adobe.
Stabilization of SE wall of wing of Room S-331 completed.

(9/3/58) Cattanach transported burials to RO in Santa Fe.(V.II)
(9/8/58) Rex Wilson replaces Cattanach as GS-7 Archeologist. Cattanach transferred to Mesa Verde.(V.II)
(9/21/58) Capping on Storehouse next to Telegraph Office had fallen off.(V.II)

Nov. 2 **October Report**
3200 cubic yards dirt removed.
329 soil-cement bricks made.
All but two of crew released for winter.

Dec. 2 **November Report**
Classification system to fit bottles recovered devised by Wilson and laborer Godfrey.
Several small stabilization items completed.
Wilson experimenting with products used for stabilization of adobe.
(11/15/58) Specimens prepared to send to Western Museum Laboratory in San Francisco.(V.II)
(11/18/58) Specimens shipped.(V.II)

1959
Jan. 2 **December 1958 Report**
Artifacts cleaned, sorted, carded.
Archeologist Wilson on leave.

Feb 3 **January Report**
Inspection of walls, including Arsenal, to determine need for stabilization.
Bottles classified and boxed.
Test of silicone waterproofing material to be conducted on south wall of Room 3-321.
(1/21/59) Two bottles loaned to City of Philadelphia Commercial Museum for Exhibit "Glass Around the World."(V.II)

March 1 **February Report**
Historian Mawson recorded 382 specimens in Accessions book.
Wilson assisted by 2 men as of Feb. 25; sorting area near quarters - all glass and metal fragments removed.
All standing adobe walls measured and recorded at 60,951 sq. ft.
(2/26/59) First telephone call from Fort Union to Regional Director Miller. Hastings said "What God hath wrought."(V.II)

April 3 **March Report**
Six men hired at end of March.
555 type specimens of bottles and other historic objects shelved in Storeroom of Visitor Center.
Making stabilized adobes for wall capping resumed.
Emergency stabilization and clean-up done at Arsenal and south corner of the Hospital.

May 2 **April Report**
Catalog numbers assigned to 555 bottles. Records complete for 96 bottles. 541 museum specimens recorded.
Crew of eight worked all month; clean-up with 3,375 cubic yards of dirt hauled

from company street and around buildings; wall capping proceeding.
(4/10/59) Wilson crew on B-1 stabilization.(V.II)

June 3 **May Report**
Adobe making for wall capping continued; work done on Quartermaster's Office, Commissary Office, Warehouse No. 451, Company Quarters No. 320 and portions of Hospital.
(5/13/59) Two Peruvian Archeologists, Oscar L. de Quevara and Dr. Arturo Jimenez, visit stabilization with Steen and Reed.(V.II)

July 7 **June Report**
Dedication Program June 14, 1959.
Clean-up for Dedication and usual stabilization activities.

Aug. 3 **July Report**
3,026 soil cement adobes made.
Student Assistant Engineer Richard Godfrey reported July 6, mapped Arsenal Area, classification of historic bottles, categorized 400 stabilization photographs, test of silicone waterproofing.
Planned stabilization on Arsenal completed, work underway at Hospital.
(7/1/59) Wilson stabilizing B-1.(V.III)

Sept. 2 **August Report**
(9) Supervisory Archeologist Richard G. Vivian checked stabilization work.
"Evidence in Empty Bottles" by Wilson published.
4,285 soil-cement adobes made, straw eliminated for authenticity.
All bottles classified, ammunition collection and other objects sorted.
Waterproofing techniques tested.
Stabilization on Hospital.
Removal of dirt and debris in Company Quarters 1-510 started.
121 bottles and mass of cartridge cases found in Room 512.
(8/27/59) Godfrey identified bottles from recent excavations.(V.III)

Oct. 3 **August Report**
Catalog numbers assigned to historic bottles.
Nine man crew.
1779 soil-cement adobes made for capping and replacing bricks.
532 cubic yards dirt and debris in northernmost two company quarters sections removed.
Over 100 bottles recovered.
Silicone waterproofing testing continued.

Nov. 3 **October Report**
Stabilization crew cut from nine to five men.
Work in company quarters and hospital.
Excavation almost ceased.

Dec. 1 **November Report**
Stabilization crew of four.
Work completed in Laundresses' Quarters and northernmost Company Barracks.

1960

Jan 6 **December 1959 Report**
Wilson working on data on china and earthenware recovered.
Cleaning and classifying items.
Excavation of Room 10522 completed, work on Room 1-515 started.

Feb. 3 **January Report**
Compilation of stabilization records.

April 5 **March Report**
Exploratory trench dug in military dump produced mainly bottles.
Excavation of Company Quarters 1-515, 1-523 and 1-524 completed; stabilization of 9-110 in Arsenal completed.

May 3 **April Report**
Five man crew; soil-cement bricks made.
Privy in Sutler's Store excavated by Wilson; produced "finest bottle specimens to date."
(4/6/60) Bottles packed for shipping to the Smithsonian Institution. 65 duplicate bottles shipped.(V.III)
(4/18/60) Bottles packed for shipping to Fort Laramie.(V.III)
(5/21/60) Bottles packed for shipping to Fort Vancouver and Museum of New Mexico.(V.IV)
(5/24/60) Surplus bottles to Gun Collectors Show.(V.IV)
(5/31/60) Items appraised by Harry Wisehand and William Ritz.(V.IV)

July 5 **June Report**
Cellar located between boundary fence and southwest corner of stone wall surrounding Arsenal buildings, excavation begun.
Exploratory trenching begun to precisely locate original Fort Union buildings.
(6/29/60) Excavation at first fort.(V.IV)

Aug. 2 **July Report**
(17) Wind toppled wall between rooms 3-336 and 3-337 in Mechanics' Corral.
Exploratory trenching at five 7-room houses, corners marked.
Officer's area of new fort buildings 1-120, 1-130, 1-140, 1-160 excavated.

Sept. 1 **August Report**
Wilson accepted transfer to Fort Laramie, August 18.
Excavation of Chaplin's Quarters, Building No. 1-110 completed.
Regional Engineer Wohlbrandt and Landscape Architect Marsh mapping building locations.
Missing flagstone replaced.

Oct. 4 **September Report**
Continue mapping and flagstone work outside Officers' Quarters.
Location and stabilization of well outlines in Troop areas and in Transportation Corral started.
(9/14/60) Walls to be stabilized in Company Quarters.(V.IV)
(9/19/60) Mr. and Mrs. William G. Hassler, Fort Worth Children's Museum, took surplus bottles to be exchanged for other artifacts. Specimen numbers: 1518, 6103, 2609, 6147, 1717, 1733, 1533, 6141, 6140, 6143, 6145.

(9/20/60) Ramon, Archie, and Benito worked on excavation of building corners at First Fort. Work at Star Fort checked.(V.IV)
(9/26/60) Archuleta and Lucero stabilizing walls in Company Quarters 1-310 and 410.(V.IV)
(9/27/60) Archuleta and Lucero excavating well 273 in Company Quarters 1-310.(V.IV) Stabilization of well in area 4-continued by Benito.(V.IV)

Oct. 31 **October Report**
Location of building corners and features at Arsenal.
Locate and replace stone facing of wells in Main Fort area.
Repair four fireplaces in Company Quarters area.
(10/4/60) Archuleta and Lucero working on stabilization on walk to Santa Fe Trail routes. Work on chimneys in Warehouse 3-410.(V.IV)
(10/5/60) Archuleta and Lucero spent day locating well and cistern outlines at First Fort.(V.IV)
(10/6/60) Archuleta and Lucero continued excavation of building outlines at First Fort.(V.IV)
(10/14/60) Archuleta and Lucero working on fireplaces in Unit 2-530.(V.IV)
(10/24/60) Lucero working on fireplace in Room 5, Unit 1-610.(V.IV)
(10/28/60) All walls except those in Hospital sprayed with Silaneal.(V.IV)

Dec. 1 **November Report**
(2) Two sq. yards wall blown down between Rooms 3 and 4 in Unit 1-170 of Officer's Quarters.
(11/3/60) Archuleta and Lucero working on fireplaces in Units 1-120 and 1-130.(V.IV)
(11/4/60) Continue spraying walls, beginning at west end of parade ground and continuing to Unit 1-140.(V.IV)

1961
Jan. 4 **December Report**
Project suspended until Spring.

May 5 **April Report**
Plans made to complete rehabilitation job.

June 1 **May Report**
(8) Project resumed; two men made and laid 723 adobes.

July 6 **June Report**
Completion of stabilization.
Preparation of Project Completion Report.

Aug. 3 **July Report**
Surveys completed for map of Arsenal and First Fort areas by Wohlbrandt and Colten (engineers).
(7/18/61) Archuleta and crew made 99 adobes.(V.V)
(7/19/61) Minor stabilization of walls in Hospital. Wire added in NW wall of Unit 1-140.(V.V)
(7/24/61) Lucero and Archibeque worked on stabilization in Hospital.(V.V)
(7/26/61) Lucero and Archibeque applied silicone to Hospital walls.(V.V)
(8/18/61) Cartridges and nails sorted for loan to Pioneer Museum.(V.V)

(8/21/61) Hastings and Giese deliver exhibit to Rough Riders Pioneer Museum in Las Vegas.(V.V)
(9/11-12/61) Archuleta and crew of two made adobes.(V.V)
(9/13/61) Archuleta and crew made adobes and worked on Unit 2-155 Company Quarters.(V.V)
(9/14/61) Archuleta and crew finished stabilization of Unit 2-155 and began Units 2-132 and 1-320.(V.V)
(9/19/61) Archuleta and crew finished stabilization of walls in Unit 1-315 and 1-324.(V.V)
(9/21-22/61) Archuleta and crew capping walls around bakery.(V.V)
(9/27/61) Archuleta and crew work on walls in Warehouse Area.(V.V)
(10/3/61) Lucero and Archibeque spraying walls in Mechanic's Corral Area with silicone.(V.V)
(10/4/61) Lucero and Archibeque spraying walls in Company Quarters.(V.V)
(10/6/61) Archibeque and Lucero working on repairs in Warehouse Area.(V.V)
(10/23/61) Archibeque and Lucero respraying Warehouse 3-440 and 3-450.-(V.V)
(10/26/61) Archuleta and Garduno filling at Arsenal and excavating behind jail.(V.V)
(11/28/61) Project completed.(V.V)

1962

(2/9/62) Hasting completed mounting photographs for Stabilization Report Project B-4.(V.VI)

May 1 **April Report**
Clean-up of Area and Stabilization of Buildings Project Completion Report accepted Nov. 1, 1961.
Comprehensive Stabilization Report in preparation.
(4/3/62) Archuleta and crew of two stabilized north wall of Warehouse 3-441.(V.VI)
(4/4/62) Lucero and Archibeque made stabilized adobes.(V.VI)
(4/9/62) Lucero and Archibeque made stabilized adobes.(V.VI)
(4/10/62) Hastings took "before stabilization" photographs of Unit 1-324 which Archuleta and crew then repaired.(V.VI)
(4/24/62) Archuleta and crew of two continued work on west corner of Warehouse 3-433 and made adobes.(V.VI)
(4/30/62) Archuleta and crew finished repair of west corner of Warehouse 3-433 and laid 547 adobe bricks (V.VI)
(5/14/62) Archuleta and crew capping stubs of walls in Officer's Row. Windy day; couldn't get enough pigment to add to mortar.(V.VI)
(5/15/62) Archuleta and crew continue stabilization of Officer's Row.(V.VI)
(5/25/62) Archuleta and crew completed wall maintenance in Officer's Row.-(V.VI)
(5/28/62) Archuleta uses 90 adobes in wall of Unit 3-316 Telegraph Office.(V.VI)
(5/29/62) Archuleta and crew of two repair outside wall of Unit 1-515.(V.VI)
(6/1/62) Archibeque, Archuleta and Lucero work on stabilization.(V.VI)
(6/7/62) Archuleta and crew of two installed brace on north corner of Unit 3-141; repair in Unit 3-140.(V.VI)
(6/12/62) Archuleta and crew applying silicone to all units in Post, Depot Officer's Quarters, and Arsenal.(V.VI)

(6/13/62) Archuleta and crew capping and filling areas in west end of Warehouse Unit 3-443.(V.VI)
(6/26/62) Hasting sorted 77 bottles to be taken to Gun Collector's Show.(V.VI)
(8/24/62) Archuleta and crew respraying walls with silicone.(V.VI)
(8/27/62) Archuleta and crew respraying walls with silicone.(V.VI)
(8/28/62) Archuleta and crew respraying walls with silicone. Completed work on Warehouse and started Mechanics Corral.(V.VI)
(8/30/62) Archuleta and crew respraying walls with silicone.(V.VI)
(8/31/62) Repaint walls on north side of Mechanic's Corral.(V.VI)
(9/4/62) Lucero and Archibeque work on wall repairs in Unit 3-335.(V.VI)

1963

March 2 **February Report**
Superintendent Hastings and Historian Giese made reconnaissance of Adobe Fields outside monument boundary, paying close attention to evidence of ditches which conveyed water from reservoir near Turkey Mountains to the area where bricks were made. Traces of these ditches were found.
Temporary braces placed against wall in the Hospital.

April **March Report**
Report submitted for binding.

Oct. 1 **September Report**
Repair of capping on historic warehouse walls completed; buildings re-sprayed with silicone.
Work started on Hospital.

Nov. 2 **October Report**
All repairs to capping of adobe walls completed.
All walls re-sprayed with silicone.

Dec. 2 **November Report**
"Bottles on the Late 19th Century Frontier" by Rex Wilson will be published eventually by the Smithsonian.

1964

Jan. 4 **December 1963 Report**
Maintenance work inside foundations of Room 2-143 in Company Quarters for Married Men uncovered a sunken area indicating an unknown cellar or privy. Area backfilled to prevent run-off.

Feb.1 **January Report**
(27) Archeologist Charles Voll discussed with Holmes (Sales Representative) and Urmacher (Chemist) the experimental work in Hospital with preservation of adobes.

May 1 **April Report**
(5) Steen checks epoxy resin on adobe walls in Hospital; further tests planned.

July 1 **June Report**
(4) Test application of Sandstone and Adobe Coating, an epoxy resin, made on walls in west end of Hospital, Unit 6-120. Trc-150 solvent used as thinner

on west facing section, kerosene on north-facing wall.
Wall capping at Hospital completed.

Aug. 4 **July Report**
Shattered Wedgewood teapot recovered from Laundresses' privy.
Bottle specimen No. 2024, almost full of original contents, taken to Dr. Richard Parteh, Chemistry Dept. New Mexico Highlands University, for analysis.
Hospital walls given second coat of silicone treatment.

Oct.4 **September Report**
All walls sprayed with silicone except test section.

1965
July 2 **June**
Capping of all walls completed.

Oct. 4 **September Report**
Hospital walls stabilized (east wall Rm. 6-113), all walls sprayed with epoxy resin.

1966
June 1 **May Report**
Minor repairs to Hospital and Warehouse walls.

Aug. 1 **July Report**
Repair and stabilize historic adobe walls most of month.

Sept. 1 **August Report**
Repair and stabilization in Mechanics' Corral area.

1967
Oct. 4 **September Report**
(11) About two Square yards of wall in Unit 1-514 fell.

Nov. 1 **October Report**
(5) Finished repainting adobe walls in main fort area.

Dec. 1 **November Report**
(5) Wilson requested photographs of bottles from collection identified to type specimen.

1968
June 4 **May Report**
(7) Archeologist Paul J.F. Schumacher made first visit to Fort Union.

1969
Sept. 3 **August Report**
(15) 276 bottles shipped by air-freight to Walter L. Griffith Jr. of Photographers Assoc. in Omaha for publication.

1971
Oct. 1 **September Report**
(2) Sonic boom caused existing crack in ruins wall to widen.

1973
Oct. 3 **September Report**
(10) George Chambers and Navajo crew arrive for approximately eight weeks of ruins stabilization work on foundations of Officer's Row.

Nov. 1 **October Report**
(1-31) Chambers and Navajo crew continued ruins stabilization work on foundations of Officer's Row.

1974
May 4 **April Report**
(22) Archeologist Bruce Anderson and Don Fiero, SWRO, inspect trenching for archeological evidence.

1975
April 13 **March Report**
(29) 10' by 5' section adobe wall at Arsenal building collapsed.

July 7 **June Report**
(23-27) Archeologist James Ayres, Arizona State Museum, inventoried and examined Fort Union bottle collection for research project.

Sept. 16 **August Report**
(1-31) Stabilization crew members work on wood preservation, foundation drain installation, adobe brick experimentation.
(17) Dave Battle inspects rehabilitation work.

Nov.5 **October Report**
(9) Tom Baker, SWR stabilization crew, completed season's project.
(29) Martha M. Mayben assigned as work leader and archeological salvage monitor, JOP projects.

1976
Feb. 8 **January Report**
(6) Dave Battle visits to inspect rehabilitation work.

June 4 **May Report**
(3-7, 10-12, 17,18) Bobby Flickinger (Exhibit Specialist) conducts on-site OJT course for Fort Union maintenance crew in historic building foundation masonry stabilization repairs and drain system installation.
(8) Robert Utley visits to inspect ruins stabilization work.

July 4 **June Report**
(3) Dave Battle, SWRO, discusses stabilization work.

Sept. 3 **August Report**
(12,13) Flickinger inspects stabilization work.

Sept. 30 **September Report**
(1) Crusher waste spreading begun over historic walkways to fill cracks.
(15) Flickinger to monitor ruins stabilization project.
(29)Dave Battle, Joe Bilello, Keith Everett, Van Ramsey, Div. Cultural Resources, SWRO, inspect ruins stabilization.

Nov. 2 **October Report**
(7) Work begun on Third Fort Hospital flagstone walkway.

Dec. 4 **November Report**
(5) Last day masonry stabilization repair work on Third Fort foundations. Rehabilitation work on historic Third Fort Hospital flagstone walkway. Construction for historic foundation drain pipe and fittings storage begun.

1977
March 1 **February Report**
(28) Flickinger and Doug Hicks (Cultural Resource Center) inspect winter weather effects on ruins stabilization work.

June 1 **May Report**
Twelve-man stabilization of ruins crew will report Sept. 4, 1977 (12 week delay due to lack of funding.)

APPENDIX B

CROSS LIST OF STRUCTURE NUMBERS

BUILDING	STABILIZATION NUMBER	HISTORIC STRUCTURES REPORT NUMBER
THIRD FORT		
Post Officers Quarters	1-110	HS-1
Post Officers Quarters	1-120	HS-2
Post Officers Quarters	1-130	HS-3
Post Officers Quarters	1-140	HS-4
Commanding Officers Quarters	1-150	HS-5
Basement Room	1-154.1	No Number
Outbuilding	1-251	No Number
Outbuilding	1-252	No Number
Privy	1-253	No Number
Outbuilding	1-255	No Number
Post Officers Quarters	1-160	HS-6
Post Officers Quarters	1-170	HS-7
Outbuilding	1-270	No Number
Post Officers Quarters	1-180	HS-8
Outbuilding	1-280	No Number
Post Officers Quarters	1-190	HS-9
Outbuilding	1-290	No Number
Company Quarters	1-310	HS-11
Company Quarters	1-410	HS-12
Company Quarters	1-420	HS-12
Company Quarters	1-510	HS-13
Company Quarters	1-520	HS-13
Company Quarters	1-610	HS-14
Company Quarters	1-620	HS-14
Southernmost Flagpole	1-710	No Number
Middle Flagpole	1-720	HS-10
Prison	1-210	HS-17
Laundresses' Quarters	2-120	HS-16
Laundresses' Quarters	2-130	HS-16
Company Quarters	2-140	HS-15
Room	2-141	No Number
Room	2-144	No Number
Room	2-145	No Number
Company Quarters	2-150	HS-15
Post Bakery	2-510	HS-24
Laundresses' Quarters	2-520	HS-23
Laundresses' Quarters	2-530	HS-23
Guardhouse	2-540	HS-22
Chapel	2-550	HS-21
Company & Band Quarter	2-710	HS-25
Privy	2-711	No Number
Privy	2-712	No Number
Room	2-713	No Number

Room	2-714	No Number
Room	2-715	No Number
Depot Officers Quarters	3-110	HS-27
Depot Officers Quarters	3-120	HS-28
Depot Officers Quarters	3-130	HS-30
Basement Room	3-135.1	No Number
Depot/Quartermasters Office	3-140	HS-29
Commissary's Office	3-150	HS-31
Clerk's Office	3-160	HS-32
Saddle and Wheelwright Shop	3-310	HS-36
Mechanics' Corral Quarters	3-320	HS-36
Blacksmith and Carpentry Shop	3-330	HS-36
Pumphouse	3-340	HS-38
Well	3-350	HS-38
Quartermaster's Storehouse	3-410	HS-39
Quartermaster's Storehouse	3-420	HS-40
Quartermaster's Storehouse	3-430	HS-41
Quartermaster's Storehouse	3-440	HS-42
Commissary;s Storehouse	3-450	HS-43
Cistern	3-520	HS-33
Teamster's Quarters	4-220	HS-46
Room	4-225	No Number
Room	4-226	No Number
Room	4-227	No Number
Yardmaster Depot	4-230	HS-47
Hospital	6-110	HS-57
Hospital	6-120	HS-57
Hospital	6-130	HS-57
Hospital	6-140	HS-57
Hospital	6-150	HS-57
Hospital	6-160	HS-57
Hospital Hallways	6-170	HS-57
Hospital Matron's Quarters	6-210	HS-63 & 64
Hospital Steward's Quarters	6-220	HS-63 & 64
Privy	6-610	No Number
Good Templars Lodge	6-510	No Number
Sutler's Complex	7-100	No Number
Privy	7-112	No Number
FIRST FORT AND ARSENAL		
Stables	9-110	HS-111
Ammunition Magazine	9-230	HS-110
Powder Magazine	9-240	HS-109
Cellar	No Number	No Number

END NOTES

1. An administrative history of Fort Union National Monument was prepared by Donald Mawson in 1961. The report, entitled Fort Union National Monument: Its Origin, Development and Administration, traces the history of the Fort from the time it was abandoned as a military post in 1891 to the establishment of the Monument in 1956. A 1984 Master's Thesis in History [New Mexico Highlands University] prepared by Douglas Croy examines twenty-five years of National Park Service administration of the Fort. His thesis, entitled Fort Union National Monument, New Mexico:The First Twenty-Five Years, is on file at the Monument library.

2. In telephone interviews with Rex Wilson and George Cattanach, Levine was told repeatedly that the emphasis on the work at Fort Union was stabilization. Wilson was emphatically told by Park and Regional Office administrators that he was not to excavate, that he was simply to "clean up" and make the structures safe for visitors.

3. Although we found no detailed discussion of archeological techniques used by the stabilization crews, a general idea of the procedures followed has been gleaned from the field notebooks and photographs. Rex Wilson, "Archeology and Everyday Life at Fort Union," El Palacio, 40(1) (Spring 1965):59 describes the excavation procedures as follows:

> Most of the massive and sterile overburden was removed with a small bulldozer whenever it was practical to do so. Workmen with shovels then continued excavations to the original soil level.

4. Dwight T. Pitcaithley and Jerome A. Greene, Historic Structure Report; Historical Data Section; The Third Fort Union, 1863-1891, Fort Union National Monument, New Mexico, (Denver: National Park Service 1982), p. 69, report that a fire in February 1876 destroyed the Machine Shop.

5. Rex Wilson "Archeology and Everyday Life at Fort Union," New Mexico Historical Review 40(1) (Spring 1965):57-60.

6. Wilson's three-volume Rehabilitation of Historic Structures 1956-1960, and an "Index of Stabilization Photographs," both on file at the Monument, are the most complete records of the photographs of the excavations and stabilization. Contact prints of the photographs and the negatives for most of the photos are filed at the Monument. The Southwest Regional Office Library also had some record photography of the Fort, but these are largely photos taken after the stabilization took place.

7. George Cattanach related the sad story of the artifact provenience debate to Levine in a telephone interview during the preparation of this report. See also Woodward's manuscript report on the artifacts, "Appendices to Report on Ft. Union 1851-1891," (1958, Santa Fe: National Park Service, Regional Office Library), vol. 1, pp. 1-3.

8. Superintendent's Daily Diary, Volume II, entry for March 19, 1959 reports the redeposition of Arsenal dirt around the Visitor's Center and the housing area. Cattanach and Wilson's recollections were related to Levine during telephone calls in the process of assembling this report. See Appendix A for journal entries and "Monthly Narrative Reports" calculating the amount of debris hauled from the structures.

9. Development Plan for an Interpretive Program at Fort Union, October 1955, cited by Mawson 1961:38-39. Mawson listed the document as being on file at Fort Union, but it was not relocated in our 1989 search for records relating to the archeology and stabilization.

10. The deterioration of the chimneys is documented in Superintendent's Monthly Reports for December 1955, dated January 7, 1956 and the February Monthly Report dated March 2, 1956. See also Memo from Wing to the Regional Director of March 5, 1957 reporting on the first working season of rehabilitation at the Fort, on file FOUN.

11. George Cattanach, "Progress Report: Rehabilitation of Historic Structures, 1957 Fiscal Year," (March 15, 1957). See also Cattanach's "Annual Completion Report" for the period August 1, 1956 to June 30, 1957 (February 13, 1959). Both reports are on file FOUN.

12. George S. Cattanach, "Stabilization and Restoration of Historic Structures; 1958 Fiscal Year Foreword," (June 8, 1957), on file FOUN.

13. George S. Cattanach, "Annual Completion Report," for the period July 1, 1957 to June 30, 1958 (September 16, 1959). See also Stabilization Monthly Reports for Fiscal Year 1958, on file FOUN.

14. Arthur Woodward, "Appendices to Report on Fort Union 1851-1891," Vols. 1-3. (September 1958) Ms. on file NPS, Southwest Regional Office and FOUN.

15. George Chambers, "Completion Report, Officers Quarters" (June 28, 1974). Ms. on file, FOUN.

16. Dwight T. Pitcaithley and Jerome A. Green, Historic Structure Report; Historical Data Section; The Third Fort Union, 1863-1891, Fort Union National Monument, New Mexico, (Denver: National Park Service 1982), p. 121-122.

17. Robert M. Utley, Fort Union National Monument, New Mexico. National Park Service Historical Handbook Series, No. 35. (Washington: Government Printing Office 1962), p. 10-11.

18. Rex Wilson, "Stabilization Monthly Report for March 1959," (March 31, 1959) and "Stabilization Monthly Report for June 1959," (June 30, 1959) On file, FOUN.

19. Rex Wilson, "Stabilization Monthly Report for June 1960," (July 5, 1960). On file, FOUN.

20. Memoranda to Superintendent, FOUN from Nicholas J. Bleser, (September 30, 1965 and May 29, 1966), On file, FOUN.

21. Arthur Woodward "Appendices to Report on Ft. Union 1851-1891," (1958, Santa Fe: National Park Service, Regional Office Library) Vol. 1.

22. Rex Wilson, "Evidence in Empty Bottles," El Palacio 66(4) (August 1959):120-123.

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24. Rex Wilson "Archeology and Everyday Life at Fort Union," New Mexico Historical Review 40(1) (Spring 1965):55-64.

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27. James L. Murphy, "Provenience of Seven Reed Stem Pipes from Fort Union, New Mexico," The Kiva 39(3-4) (1974):247-251. The Mogadore pipes are those labeled Figures 6c and 5g in Wilson, "Tobacco Pipes". The Point Pleasant pipes are Figures 1g-i;1l; 5c,h and 5e-f.

28. Cattanach's field records for the burials are on file at the Western Archeological and Conservation Center of the National Park Service in Tucson, Arizona. They consist of forms describing the condition of the skeletal material and associated grave goods. The bullets found with the burials were transferred from the Monument to WACC in 1967. They are catalogued at WACC under accession 588. The burials themselves are on permanent loan to Arizona State Museum, where they were transferred in 1968. The personal effects found with the burials were loaned to WACC, and then apparently returned to the Monument in 1972 according to an computerized accession record sent to Levine by George Cattanach during the preparation of this report.

29. Turner's osteological and dental analysis record forms are on file at the Western Archeological Conservation Center in Tucson.

30. Charles Randall Morrison, "A Historical Multiple Burial at Fort Union, New Mexico: An Exercise in Forensic Archaeology," in Collected Papers in Honor of Florence Hawley Ellis, Papers of the Archaeological Society of New Mexico, No.2, ed. Theodore R. Frisbie (Norman: Hooper Publishing Co. 1975), pp. 381-406.

FOUNDATIONS OF OLD BUILDINGS NOT COVERED BY SURVEY

FORTIFICATIONS (EARTH REDOUBT)

5 OFFICERS QUARTERS 1

5 OFFICERS QUARTERS 2

1-2

3-6

3-26

1-730

1-740

1-720

1-710

3-520

3-510

4-710

4-720

4-730

4-740

1-610

1-410

1-316

1-320

2-730

2-650

2-560

2-740

2-2

2-140

2-150

3-370

3-330

3-410

3-420

3-430

3-440

4-220

4-230

4-1

4-2

4-3

4-4

4-5

4-6

CORRAL

STABLES

GRAIN HOUSE

HORSE AND MULE YARD

HAY AND WOOD YARD

COMMISSARY UNIT

COM STABLES

10,000 ft.

INTERPRETIVE POINTS

1. COMPANY BARRACKS
2. COMPANY BARRACKS
3. LAUNDRESSES QUARTERS
4. MILITARY PRISON
5. POST GUARD HOUSE
6. COMPANY MESSHALL
7. COMPANY KITCHEN
8. POST BAKERY
9. DIVISION BETWEEN TROOP AREA & SUPPLY DEPOT
10. SHOPS QUADRANGLE
11. WATER TANK & PUMP SITE
12. TELEGRAPH OFFICE (Not Identified)
13. QUARTERMASTER STOREHOUSES
14. OFFICE OF THE QUARTERMASTER
15. OFFICERS QUARTERS
16. FORTIFICATION
17. HOSPITAL

VISITOR CENTER EXISTING PARKING AREA

PROPOSED PARKING AREA

PARKING - 40 CARS

TO US HWY NO 85 7 Miles

L E G E N D

	EXISTING	PROPOSED	OBLITERATE
FORT RUINS			
BUILDINGS			
ROADS			
WALKS OR TRAILS			
FENCE			

HALF-SIZE REPRODUCTION

0 100 200

SCALE IN FEET

RECOMMENDED:

APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LANDSCAPE ARCHITECTURAL BRANCH
WESTERN OFFICE, DIVISION OF DESIGN & CONSTRUCTION

INTERPRETATION

PART OF THE MASTER PLAN

CREATION

REVISED OPERATIONS REGION

MISSION 66

INTERPRET REGION

COOP ACTV REG 3N

REGION

BASIC DATA Survey of 1 Mar-1959 & miscellaneous

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