

Honouliuli POW and Internment Camp

Archaeological Investigations at *Jigoku-Dani*
2006-2017

Mary M. Farrell

December 2017

Japanese Cultural Center of Hawai'i





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Abstract

During World War II, the U.S. incarcerated at Honouliuli not only prisoners of war but also diverse U.S. citizens and resident aliens under the authority of martial law. This history was long forgotten until 2002, when the Japanese Cultural Center of Hawai'i (JCCH) rediscovered the site, which had been known as *Jigoku-Dani* (地獄谷), or Hell Valley, to some of its civilian prisoners. Archaeological investigations undertaken by the JCCH and the University of Hawai'i West O'ahu (UHWO) led to the Honouliuli Internment and Prisoner of War Camp Site (State Site No. 50-80-08-9068) being listed on the National Register of Historic Places on February 21, 2012 at the national level of significance. As an internment site, Honouliuli represents the fragility of constitutional rights and the effects of martial law; as a POW camp, Honouliuli exemplifies the management of enemy troops, as the military balanced the need for national security and the need to comply with the Geneva convention. Thanks to the efforts of the JCCH, the National Park Service, UHWO scholars, the public, Hawai'i legislators, and Monsanto Hawai'i, which owned the land, the site was designated the Honouliuli National Monument by President Barack Obama on February 24, 2015. To facilitate the Park Service's management, this report summarizes the archaeological work conducted before the site became a National Monument. It compiles information from several previous reports and the National Register nomination, and incorporates the results of the 2014 UHWO field session, the last before the site became a unit of the National Park Service.

Abbreviations Used

FBI	Federal Bureau of Investigation
HABS	Historic American Buildings Survey
INS	Immigration and Naturalization Service
JCCH	Japanese Cultural Center of Hawai'i
JANM	Japanese American National Museum
MP	Military Police
n.d.	no date listed
NPS	National Park Service
NRHP	National Register of Historic Places
POW	Prisoner of War
UHWO	University of Hawai'i West O'ahu
WCCA	War-time Civil Control Administration
WRA	War Relocation Authority

front cover: Honouliuli ca. 1945 (R.H. Lodge photograph).

back cover: Honouliuli 1948 (Hashimoto collection, JCCH).



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Chapter 1

Introduction

On December 7, 1941, the United States entered World War II when Japan attacked the U.S. naval base at Pearl Harbor, Hawai‘i. On February 19, 1942, President Franklin D. Roosevelt signed Executive Order No. 9066, which authorized rounding up and confining about 120,000 Americans of Japanese ancestry, most of them United States citizens. The Executive Order allowed the military to designate areas “from which any or all persons may be excluded” Although the Executive Order did not specify who would be excluded, or from what areas they would be excluded, in practice, it was applied almost exclusively to Japanese Americans on the mainland’s West Coast and parts of Arizona. Most were imprisoned for the duration of the war.

By the time this so-called “Relocation” took place, the United States government had already determined that the Japanese-American population did not pose a military threat. In fact, in 1982 the U.S. Commission on Wartime Relocation and Internment of Civilians (U.S. Commission), a bipartisan group, concluded that the incarceration was caused not by military necessity, but by racism, wartime hysteria, and a failure of political leadership (U.S. Commission 1982). Besides the enormous material losses to the internees, the commission report also cited long-lasting intangible results, including lost education and job training, loss of family structure, and prolonged racial stigma (Yamato 2013).

It was long thought that Hawai‘i avoided the unconstitutional catastrophe that occurred on the mainland (U.S. Commission 1982:261). Nearly 158,000 persons of Japanese ancestry lived in Hawai‘i, and although estimates vary, fewer than 2,400 Nikkei in Hawai‘i were taken into custody during the war (Hayashi 2015; U.S. Commission 1982). Looking back, one might assume that because the military selected less than 2 percent of the Japanese Americans in Hawai‘i for incarceration, they carefully and scrupulously interned only those who presented legitimate threats. Given that Hawai‘i was within the war arena and had been directly attacked by Japan, one might suppose that whatever measures were taken there in the name of military necessity had been clearly, amply justified.

Those more familiar with the Hawaiian situation (e.g., Allen 1950; Anthony 1955; Saiki 1982) came to a different conclusion: martial law exerted strict military control over most aspects of life in Hawai‘i, and those

who were incarcerated as potentially dangerous were more often than not simply leaders in the Japanese American and other immigrant communities. Internment in Hawai‘i, though more selective and limited than on the mainland, was equally unconstitutional, and was used to intimidate the population. As Scheiber and Scheiber (2003) state:

The record of military rule in wartime Hawai‘i is without precedent in American history. It far exceeded in duration a similar exercise of authority over civilians during the Civil War, when President Lincoln declared martial law in sections of the North for brief periods. It also differed from the internment of Japanese-Americans because it involved a complete suspension of constitutional liberties for an entire civilian population. There is abundant evidence that civilians from all ethnic groups were subjected to arbitrary and humiliating treatment. “While fighting for democracy on a dozen fronts,” the Interior Department solicitor wrote in December 1942, “we have dictatorship, quite needlessly—almost by accident, in one vital part of the United States of America.” That sentiment was echoed in a confidential 1946 investigation of Hawai‘i’s wartime military courts, in which a Justice Department counsel concluded without qualification: “It’s a very, very nasty unpleasant picture, and you just cannot justify it in any way.”

As with the Japanese Americans’ World War II mass incarceration on the mainland, U.S. school history books did not discuss this abrogation of civil rights; like the treatment of Native Americans and African Americans, it did not fit with the United States’ Constitutional ideals of justice and equality (e.g. Adams 1945; Cahan and Williams 2016; Roosevelt 1943). For the



Figure 1.1. Verifying site location in 2006 using historic photograph.



Figure 1.2. Aqueduct visible in historic photographs.

most part, it was assumed that the locations where civilian internment occurred were lost to time, or to development. But in 1998, a Hawaiian television station called the Japanese Cultural Center of Hawai'i (JCCH) to ask where one of the internment camps, Honouliuli, was located. After doing much research, in 2002 JCCH identified the location where the site had been (Kurahara 2004). R.H. Lodge's photographs in *Waipahu at War* (1949) helped confirm the location.

Fieldwork at Honouliuli

Soon after the initial push to locate the Honouliuli site, the JCCH began adding important internment-related papers and artifacts to their Resource Center collections in an effort to collect, preserve, and interpret the Hawai'i internment story to a broad audience, particularly Hawai'i's school children (Kurahara et al. 2014:16, 22-23). JCCH recognized that the places where people had been confined or jailed would be an important part of the story, and in 2006 invited Jeff Burton and me to help them document the known confinement sites in Hawai'i (Burton and Farrell 2007). Access to Honouliuli was restricted, but JCCH staff arranged for Jeff and Mike Gordon, a reporter who had conducted research on the Hawaiian internment, to walk the site for a few hours with them (Figures 1.1-1.4). During that short time, foundations, remains of the sewer system, rock walls, and numerous artifacts were found. By

the end of the visit, it was apparent that Honouliuli was the site where the Hawaiian internment story could be told: protected by its location on private property and nearly hidden by dense vegetation, the site appeared to offer the greatest archaeological potential. Still undeveloped, Honouliuli also evoked the isolation and remoteness of the internment camp once there.

Mike Gordon wrote an article about the site and included a description of a small slab of concrete with names inscribed (Gordon 2006). Mr. Rodney Santiago contacted JCCH to report that those names were his relatives; he had grazed cattle and horses in Honouliuli Gulch for 40-some years, beginning in 1958. Mr. Santiago noted that when he grazed cattle in the gulch, sidewalks, rock alignments, and other features could be easily seen; the vegetation that made travel off the road treacherous had grown up only recently. This oral history confirmed that Honouliuli held promise as an archaeological site.

With assistance of funding from the Conservation Fund, National Trust for Historic Preservation, National Park Service, and others, JCCH contracted with Burton and Farrell in 2008 to nominate Honouliuli to the National Register of Historic Places. To do so, we needed to document what was left at the site and assess whether Honouliuli had sufficient integrity of location, association, setting, feeling, materials, design, and workmanship, as we had for the mainland sites. Ron



Figure 1.3. Foundation recorded in 2006.



Figure 1.4. Cesspool recorded in 2006.

Beckwith of the National Park Service and Jim Bayman of the University of Hawai‘i provided their archaeological expertise, and 25 volunteers from JCCH provided tools, labor, curiosity, and enthusiasm (Figures 1.5 and 1.6). By this time, Monsanto Hawai‘i had purchased the part of the Campbell Estate that included the Honouliuli site, and facilitated the research. We recorded over 100 features, most of them related to the World War II camp.

JCCH had arranged some publicity for the archaeological work, and Burton was invited to give a talk about the results at ‘Iolani Palace. After that talk, the late David Cox, the Cultural Resource Specialist at Schofield Barracks, provided two historic plan maps, or blueprints, of Honouliuli that he had found. Labeled “Honouliuli Gulch, Oahu, T.H./Prisoner of War Camp/ Sanitary Sewer System,” the blueprints consist of two sheets that depict the location of the stream, buildings, and roads. Only features of interest to the sewer system are labeled, and the blueprints are not complete: no fences or guard towers are depicted, and some buildings visible in historic photographs are not shown.

Nevertheless, the blueprints changed everything. We could match some of the features we had found in the field to their locations on the blueprints. We could compare the blueprints and historical photographs with known features, such as the aqueduct or stream, to determine likely locations for additional features.

Then, the presence of archaeological features like foundations or walls could be used to reconstruct exactly where, and to what direction, historic photographs had been taken. Pinning down photo points could result in the discovery of additional features visible in the photographs but not on the blueprints. Using the salary we received for the 2008 work, we decided to fly to Hawai‘i to do a second session of field work in 2009 to provide more data for the National Register nomination. Again, JCCH recruited volunteers, and obtained additional R.H. Lodge photographs from the files of Hawai‘i’s Plantation Village (Figure 1.7). Again, JCCH arranged media coverage of the archaeological project, which generated publicity that in turn led to the donation of more historic photographs and documents.

The 2009 field session also set the stage for another important collaboration: that year, Dr. Suzanne Falgout of the University of Hawai‘i West O‘ahu and some of her anthropology students volunteered at JCCH’s Honouliuli project. The UHWO campus is located close to the Honouliuli site, and toward the end of the 2009 field session, several of Dr. Falgout’s colleagues in the UHWO faculty visited Honouliuli (Figure 1.8). UHWO faculty agreed that Honouliuli would be a good site for archaeological field classes, and several of its professors began related research. Sponsored in part by grants from the National Park Service’s Japanese American Confinement Sites grant program, Valor in the Pacific National Monument, Pa-



Figure 1.5. Volunteer survey in 2008.



Figure 1.6. Using historic photographs during 2008 survey.

cific Hawai‘i Parks, University of Hawai‘i Foundation, and the Robert and Betty Wo Foundation, UHWO professors of English, psychology, sociology, anthropology, history, and religion studied different aspects of Honouliuli’s history. The resulting multi-disciplinary volume explored the context and implications of the Hawaiian internment, confirmed the significance of the site, and expanded its relevance (Falgout and Nishigaya 2014).

As planned, the University of Hawai‘i West O‘ahu (UHWO) led the third field season of archaeological investigations at Honouliuli in 2010 (Figure 1.9; Burton and Farrell 2011a). In addition to the interdisciplinary focus, the UHWO connection also brought students with their own interests and expertise to the project. For example, Kelly Altenhofen, a National Park Service wildlife biologist, took the field class because of his interest in history and in Hawai‘i. Altenhofen is also a veteran familiar with military archives and records. One of the Lodge photographs archived at Plantation Village shows a soldier striding out of a wood-frame building; a four-part sign identifies the building as “Headquarters Prisoner of War Processing Station/Compounds 6, 8, and 9, Civilian Internee Stockade/162 Prisoner of War Processing Company/Anti-Tank Company, 372nd Infantry.” By contacting military historians, museum technicians, and archivists in Hawai‘i, Maryland, the District of Columbia, and Ohio, Altenhofen was able to track down the record of the 372nd Infantry, an African-American unit in the segregated U.S. military. They were assigned to Hawai‘i in May of 1945, thus providing a terminus post quem (“no earlier than”) date for at least that one

Lodge photograph, and perhaps others. During World War II, African-American units in the military were often relegated to support roles, such as truck-driving, convoy operations, and food preparation. Although the majority of civilian internees had been released from Honouliuli by May 1945, U.S. soldiers segregated because of their race guarded civilian internees who were incarcerated because of their race.

During the 2010 field school, we were visited in the field by 100-year-old Hanako Hashimoto, the wife of Koji Hashimoto, and her daughter and son, Elsie Hyde and Francis Hashimoto (Figure 1.10). The family had visited Koji Hashimoto when he was interned at Honouliuli, and Mr. Hashimoto and his family returned to Honouliuli in 1948 (Figure 1.11). Their five photographs from the 1948 visit show that by then all of the buildings had been removed but many concrete slab foundations remained. Elsie Hyde provided copies of the photographs to the UHWO and the JCCH. All of the Hashimoto photographs provide enough visual information to determine where they were taken.

New archival resources were also discovered after the 2010 fieldwork, when JCCH obtained 38 photographs from Kendall Olsen, whose grandfather Glenn Heern was an MP at Honouliuli. Twenty-one of the photographs could be identified as taken at Honouliuli; together these provide a candid view of some of the ways the military police passed their leisure time at the camp. The Heern photographs helped guide the next season’s field work in the summer of 2011, which was funded by the second year of the JACS grant and by UHWO. Students in the UHWO archaeological



Figure 1.7. Volunteer survey in 2009.

field methods class, with assistance from volunteers recruited through the UHWO Anthropology Club and by JCCH, uncovered and mapped many of the features visible in the Heern photographs, including a sidewalk, retaining walls, and the foundation of a latrine and shower building that forms the backdrop for some of the photographs. Scraps of wire mesh were identified as likely from the trellis visible in the photographs. Students recreated some of the shots, standing and sitting in the same places that the MPs had stood and sat 70 years before (Farrell and Burton 2012a). Using the work of volunteers and students, Honouliuli was nominated to the National Register of Historic Places (Burton and Farrell 2011b), and the site was listed in February 2012.

For two days in April 2012, Jeff Burton conducted archaeological reconnaissance to determine the site's southern boundary, on behalf of the National Park Service. During the week he was in Hawai'i, Burton also met with National Park Service planners and realty specialists and Monsanto Hawai'i, to discuss the boundary of the area Monsanto was willing to donate to the Park Service so that Honouliuli could become an interpreted historic site. The boundary was drawn to include most of the archaeological remains, but excluded some features in the northeast part of the site.

In the July 2012 field class, students again expanded the investigations at Honouliuli to bring their own expertise and passion to the research. Linda Maldonato traced a name inscribed in the concrete of one guard tower foundation through the National Archives and an online Army database to find out more about



Figure 1.8. UHWO faculty visit Honouliuli in 2009.

one of the soldiers assigned to Honouliuli. Lisa Kaneko conducted an oral history with the daughter of former internees to confirm her hypothesis that prisoners were not allowed to use the large laundry facility in the guards' compound; instead they used tubs and washboards, sometimes in an open-sided hut. Her work will inform future surveys at Honouliuli, and will lead to more accurate identification of potential laundry facilities in the prison compounds.

In 2014, UHWO sponsored another field class focused on identifying and recording features within the camp, to aid in future management and interpretation. This was the final field class before the site was transferred to the National Park Service, and the final field class that Burton and Farrell participated in. Students spent ten days at the site, and JCCH volunteers were invited for four field days, two of the days overlapping with the class schedule. Again Monsanto facilitated access, assisted with logistics, and provided a classroom for lectures.

Also in 2014, the National Park Service released a draft special resource study (NPS 2014). The study had been authorized by Congress in 2009 to determine if Honouliuli or any of the other sites associated with the World War II internment of Japanese Americans in Hawai'i were nationally significant, and if they would be suitable and feasible additions to the National Park system. The special resource study entailed compiling information about the known internment sites in Hawai'i. Scoping meetings were held in 2011 both to acquire more information about the sites and to gauge public opinions about naming Honouliuli a unit of



Figure 1.9. Ron Beckwith leading field school students in total station mapping.



Figure 1.10. 100-year-old Hanako Hashimoto (left) and her daughter psychology professor Elsie Hyde (right) visiting Honouliuli field class in 2010.



Figure 1.11. In 1948 Koji Hashimoto brought his family back to where he had been interned at Honouliuli; his wife Hanako took the photograph (Hashimoto collection, JCCH).

the National Park Service. The draft recommended that the Honouliuli Internment Camp be added to the National Park System as a National Historic Site or National Monument, finding that the site represented a “distinct and important aspect of American history associated with civil rights in times of conflict that is not adequately represented or protected elsewhere.” That same year, Monsanto Hawai‘i completed a multi-year process to subdivide and prepare the land for transfer to the federal government (Monsanto 2015).

Even before the special resource study was finalized, President Barack Obama proclaimed the site of the Honouliuli internment and POW camp a National Monument, on February 24, 2015 (Figure 1.12). The proclamation cites the archaeological work conducted at the site, and states:

Honouliuli serves to remind every American about the critical importance of safeguarding civil liberties and maintaining our values during times of crisis. It is important to recognize Honouliuli as a part of our shared national heritage and national consciousness. It is a place to reflect on wartime experiences and recommit ourselves to the pursuit of freedom and justice.

Future Archaeology and Interpretation

Plans for management and interpretation of Honouliuli National Monument are now being developed by the National Park Service in collaboration with the public. Volunteers and staff of the JCCH continue to research the history of Honouliuli and other internment sites in Hawai‘i. Under the direction of Dr. William Belcher, the University of Hawai‘i West O‘ahu students continue archaeological investigations at Honouliuli, and other scholars continue their research (e.g., Akiyama 2016; Dakujaku 2016). JCCH continues to sponsor pilgrimages, tours, and special events at the site, which commemorate and honor the former internees and prisoners of war (e.g., see Tonthat 2017).

The current and future plans, activities, and research projects will be the mechanisms by which Honouliuli National Monument meets the goal President Obama set for it, to be “a place to reflect on wartime experiences and recommit ourselves to the pursuit of free-

dom and justice.” Although that goal sounds a bit lofty to apply to work that involves wading through Guinea grass and uncovering latrine foundations, it fits the archaeological investigations conducted at the site, too. Archaeology helps unleash Honouliuli’s power of place by allowing people to see, and touch, the remains of the structures the military built to confine and manage the prisoners, as well as modifications made by the prisoners themselves and the artifacts they left behind.

Report Organization

To facilitate future archaeological research and site management, this report summarizes all archaeological work led by Farrell and Burton at the site, compiling information from the previous reports and the National Register nomination, and incorporating the results of the UHWO field seasons. Chapter 2 outlines the research design and methods. Chapter 3, adapted from the recent JCCH overview of Hawaiian internment (Farrell 2017), provides some historic context for Honouliuli as an internment and POW camp. Chapter 4 describes the historic appearance, as depicted in maps, blueprints, historic photographs, military and consular reports, memory maps, art work, oral histories, and other sources. Chapter 5 is a compilation of the results, and includes a description of each of the features recorded. Chapter 6 includes recommendations for future work.

Appendix A includes the blueprints of Honouliuli’s sanitary sewer system and the plan of the “Disciplinary Compound,” which is labeled Compound VII on the sewer system map. Appendix B comprises all the maps and aerial photographs used in our research, from a 1936 military terrain map to the latest archaeological base map depicting our findings. Appendix C consists of historic photographs from the Lodge, Heern, Hashimoto, and National Archives collections; maps at the beginning of Appendix C depict where each photograph was taken and the direction of view. Memory maps created by former prisoners and their children are included as Appendix D. Appendix E includes photographs and an analysis of the artifacts that Rodney Santiago collected from the site during the years he grazed livestock there and a brief interview of Mr. Santiago. All field notes, field photographs, and GPS data are curated at JCCH.

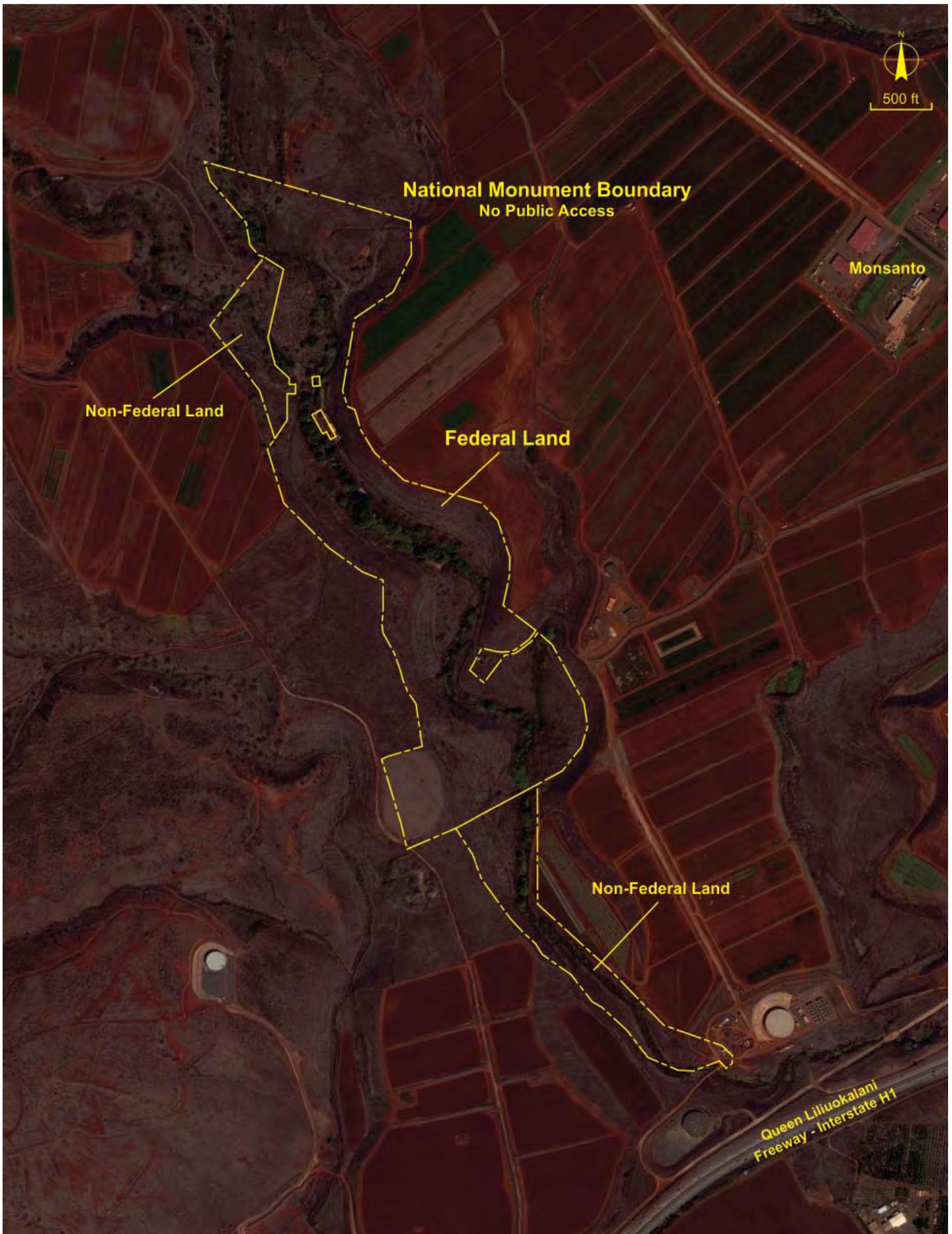


Figure 1.12. Honouliuli National Monument (Google Earth imagery 1/19/2013).

Table 1.1. Archaeological Projects at Honouliuli, 2006-2017.

Year	Month	Days in Field†	Project Director	Institution	Project Type	Number of Participants	Number of Features Investigated
2006	Feb	1	Burton	JCCH	Reconnaissance	5	22
2008	Feb-Mar	5	Burton	JCCH	Volunteer	26	124
2009	Feb-Mar	6	Burton	JCCH	Volunteer	25	41
2010	July	6	Burton	UHWO	Field School	22	21
2010	July	3***	Burton	JCCH	Volunteer	23	
2011	July	6	Farrell	UHWO	Field School	21	25
2011	July	2**	Farrell	JCCH	Volunteer	59	
2012	April	2	Burton	NPS	Reconnaissance	1	19
2012	July	6	Farrell	UHWO	Field School	24	24
2012	July	3*	Farrell	JCCH	Volunteer	26	
2014	July	10	Farrell	UHWO	Field School	17	25
2014	July	4**	Farrell	JCCH	Volunteer	47	
2017	Jan-Feb	2	Farrell	JCCH	Field Review	5	107

† each * denotes a volunteer day concurrent with a field school day

Acknowledgements

The preparation of this report by the author, who is director of Trans-Sierran Archaeological Research, was funded by the Japanese Cultural Center of Hawai‘i (JCCH) and a Japanese American Confinement Sites (JACS) grant from the National Park Service. JCCH has been the inspiration for this project from start to finish: it was their curiosity and research expertise that re-discovered the site of the Honouliuli internment and POW camp in 2002. Brian Niiya, then with JCCH, raised funds for archaeological work at Honouliuli after Jeff Burton’s visit to the site in 2006. In his current role at Densho, Brian continues to make research about Honouliuli and other aspects of internment easily accessible, and several online *Densho Encyclopedia* entries have been cited in this report.

JCCH’s staff and volunteers first uncovered the archaeological potential of the site, and their energy and enthusiasm inspired the University of Hawai‘i West O‘ahu (UHWO) field classes. The JCCH Resource Center has an invaluable collection of primary documents, historic photographs, and oral histories about the internment that helps make sense of the archaeological remains and bring them to life. Their educational exhibits and art collection helped us, instructors and students alike, see the relevance of the archaeological efforts to an important and complicated history.

I especially thank Carole Hayashino, Jane Kurahara, and Betsy Young, who continue to inspire us with their dedication and friendship.

Combining power and persuasion with charm and diplomacy, JCCH garnered support from a diverse set of stakeholders for Honouliuli’s designation as a unit of the National Park Service. President Obama made that designation in February 2015.

In addition to JCCH, funding for the archaeological work came from a variety of sources. An Albright-Wirth Employee Development Grant from the National Park Foundation helped cover the cost of my husband Jeff Burton’s first visit to Hawai‘i, to discover what we had left out of our overview of internment sites on the mainland, *Confinement and Ethnicity*. Subsequent field sessions were partly funded by The Conservation Fund, National Trust for Historic Preservation, National Park Service, Hawai‘i Pacific Parks, University of Hawaii Foundation, Robert and Betty Wo Foundation, Jane Kurahara, Ellen Godbey Carson and Robert Carson Godbey, and an anonymous donor.

A Japanese American Confinement Sites grant awarded in 2009 jump-started the University of Hawai‘i West O‘ahu’s participation, and UHWO has taken the lead in the archaeological work, with administrative, logistical, technical, professional, academic, and financial sup-

port. We were also inspired by the visions for Honouliuli eloquently expressed by former UHWO Chancellor Gene Awakuni and the late Frank Hays, then Pacific Area Director for the National Park Service.

In the beginning access to the site was permitted by the Estate of James Campbell, and then by Monsanto Hawai'i, which facilitated the field work by allowing access and arranging escorts. I thank Frederick Perlak, Stacie Sasagawa, and Paul Koehler for their hospitality and innovative problem-solving, and am indebted to Alan Takemoto for his infinite patience as he accommodated our changing schedules and numerous requests for not just access to the site but also classroom space, drinking water, portable toilets, and other amenities that greatly enhanced the fieldwork. The National Park Service's Rebecca Rinas and Jadelyn Nakamura and Johanna Fuller of Pacific Historic Parks accompanied Jeff Burton and me in 2017 as we double-checked some GPS points and took photographs of a few features that had eluded UHWO's many cameras in previous seasons.

NPS archaeologist Jeff Burton led the archaeological work at Honouliuli from his first visit in 2006 until he got a full-time job at Manzanar National Historic Site in 2011. At that time, he not only transferred the consulting firm he had started in 1982 to me, he also graciously allowed me to take the lead on the Hawai'i research. Jeff continued to provide technical direction, field supervision, cartography expertise, and inspiration, all on his own time.

During an early field session, Professor Jim Bayman of UH Manoa connected us with UHWO Professor Suzanne Falgout, which began a productive research and educational partnership. For the field classes, Dr. Falgout provided key research, teaching, administrative, and logistical direction, coordinated the complex field and guest lecturer schedules, and made sure the field class met official requirements. Dr. Falgout is one of the kindest and most generous people I have ever met, caring for her students' well-being and happiness as well as their academic achievement. She also re-



Figure 1.13. Ellen Godbey Carson (center, in blue) inspiring and thanking students and volunteers for their efforts at Honouliuli.

cruited Dr. Jim Turner to ferry multiple truckloads of equipment in and out of the gulch.

Other University of Hawai'i faculty shared their research with the archaeology field class, including Susan Matoba Adler, Joyce Chinen, Linda Nishigaya, Ernest Oshiro, Alan Rosenfeld, and Amy Nishimura. Dr. Yong-ho Ch'oe (Professor Emeritus, History, UH Manoa) provided lectures about the Korean POWs who were held at Honouliuli. Attorney Ellen Godbey Carson shared her experience representing the National Council for Japanese American Redress: she spent seven years litigating their suit up to the U.S. Supreme Court (Figure 1.13).

Saguaro National Park Service archaeologist Ron Beckwith spent many of his vacation days in Honouliuli gulch, teaching students how to use a total station and other map-making techniques. Ron created all of the feature drawings in this report. Ross Brown of Keller Williams Real Estate volunteered his time and equipment to provide instruction in the use of metal detectors in archaeological field work (Figure 1.14). Lorraine Minatoishi of Minatoishi Architects provided lessons in recording historic structures.

Valerie McDougale, Mary Grace Busto, Clint Krall, Kristen Blom, and Felicia Wun served as teaching assistants and crew chiefs for the class, and made sure fieldwork and lab work proceeded smoothly and safely.

We were honored to have some special guests visit us in the field. Besides the Hashimoto family, mentioned above, special guests included Mr. Alan Nishikawa, who had last visited Honouliuli when his father was interned there over 65 years ago (Figure 1.15).

All told, between 2006 and 2017 researchers spent a total of 48 field days at Honouliuli. We were accompanied, at various times, by over 200 individuals who spent at least a day at the site. These folks included JCCH volunteers, UHWO students, UHWO and UH Manoa professors, Monsanto employees, and even a few National Park Service staff.

JCCH recruited volunteers from the start, many of whom returned session after session, and most of whom brought their own tools and safety gear. In many sessions, the JCCH recruits worked alongside the UHWO students, and inspired them by explaining

why they had voluntarily chosen to subject themselves to the heat, bugs, and brush that can make Honouliuli gulch miserable. On behalf of all the archaeologists who have worked on this project, I express deep appreciation to volunteers:

Liane Aipa	Linda Hee
Mari Aipa	Hitomi Hirata
Charlene Akina	Cherise Honda
Kaori Akiyama	Jeff Huff
Lenny Andrew	Mel Inamasu
Dave Andrew	Derrick Iwata
Elodi Arellano	Bonita Jackson
Jim Bayman	Richard Jones
Jennifer Bellville-Marrion	Clarence Kanja
Chris Blom	Fay Kaku
Wendy Boyd	Roger Kaku
Tony Cabalar	Deron Kamisato
Heather Calabro	Teresa Kaneakua
Kainui Carroll	Clarence Kanja
Anthony Casciano	Janet Kanja
Sandi Chang	Robin Kapoi-Keli'i
Suk-han Chang	Noreen Kawachika
Sheila Chun	Ryan Kawamoto
Hingsun Chun	Brandon Kim
Garnet Clark	Heidi Kimura
Miwako Coker	Eric Kobayashi
Shayna Coleon	Bertrand Kobayashi
Tracey Conover	Gale Kobayashi
Cait Contello	Mel Kwiatkowski
Jolene Contello	Lari Koga
Christina Cotton	Jane Kurahara
Matteo D'Alessio	Chad Kurahara
Elizabeth Dakujaku	Stephanie Kuroda
Tiffany Davis	Andrew Le
Vicky De	Alex Lee
Steve Dyer	Miguel Llorca
Elizabeth Ebisu	Lance Marugame
Susan Eichor	Cheryl Matayoshi
Mark Enomoto	Jeff Matsura
Dave Erdman	Amber McClure
Cheryl Ernst	Mrs. McClure
Nora Furuno	Valerie McDougale
Nicki Garces	Cara Moriwaki
Laura Gilda	John Moriyama
Grace Gilson	Troy Muraoka
Dave Gilson	Dietra Myers-Tremblay
Joei Gomez	Blayne Nagata
Les Goto	Yumi Nakama
Tatsumi Hayashi	Lloyd Nakamura
Allyson Hayashida	Sean Newsome

Brian Niiya
 Jean Nishimura
 Larry Oaks
 Jonna Ocampo
 Traci Ohashi
 John Okutani
 Naomi Omizo
 Stanley Omizo
 Fred Ota
 Jaime Raduenzel
 Lauren Roberson
 Colleen Rost-Banik
 Scott Rowland
 Arlene Sato
 Nealson Sato
 Susan Scott
 Jenny Seki
 Frank Seki
 Lisa Sekiya
 Alex Seto
 Amy Shimamura
 Karen Shishido
 Lauren Shissler
 Gordon Siu
 Jill Sommer
 Scott Sonoda
 Lenora Springer

Mike Staffaroni
 Karl Suenishi
 Eddie Sumida
 Liane Sumida
 Sarah Sumida
 Todd Takahashi
 Kathy Teruya
 Dean Tomita
 Gordon Tomita
 May Tomita
 Mike Tsuchida
 Jon Tsujimura
 Tyson Tsutsumi
 Claire Tsutsumi
 John Tuthill
 Tino Valdez
 Shane Webb
 Mike Weidenbach
 Austin Weyman
 Ryan Wilkerson
 Felicia Wun
 Nicholas Yim
 Ann Yoklavich
 Betsy Young
 Kimberlee Young
 Calvin Young
 Lois Yamaguchi

Amara Kunishi
 Ashlee Lanier
 Christina Lawes
 Alex Lee
 Tiffany Lee
 Linda Maldonado
 Janet Mariano
 Tori McCann
 Valerie McDougale
 Nicole Mello
 Cory Miyasato
 Dorianne Moreno
 Veronica Nash-Givens
 Damon Oda-Kauhola
 Traci Ohashi
 Cherina Oyama-Jackson
 Melissa Parkinson
 Tiffany Provo

Charli Quinonez
 Earl Ramsey
 Brianne Sifre
 Jehan Sinclair
 Georgia Spence
 Luke Sugita
 Heather Sumner
 Lezlee Tam
 Rayvn Tate
 Alofa Togia
 Samantha Torres
 Kaulia Vang
 Keali'i Vasques
 Jessica Villanueva
 Jane Wiegand
 McKinsey Williams
 Felicia Wun
 Joseph Zdyrski

Sixty-six students from the University of Hawai'i West O'ahu archaeology field class worked at Honouliuli in the summers of 2010, 2011, 2012, and 2014. As part of the class, they not only lent labor and analysis in the field, they conducted their own original research. Their work has been incorporated into this report, and their enthusiasm and energy were an inspiration to me:

Katherine Albers	Jesse Davis
Kelly Altenhofen	Karin Diricx
Jacob Barfield	Katrina Ghazanfar
Julie Baxter	Michele Pua Guanzon
Christopher Beavers	Hananiah Henry
Kimberly Benton	Crystal Jackson
Sara Blahut	Casey Jones
Kristen Blom	MaryAnn Jones
Amy Bossler	Sheena Joseph
Sandra Call	Claudia Kamiyama
Natalie Carper	Lisa Kaneko
Garnet Clark	Elizabeth Kay
Tracey Conover	Robin Keli'i
Jayson Correa	Marissa Kobayashi
Elizabeth Dakujaku	Clint Krall

Research conducted by staff and volunteers of the JCCH Resource Center, including Jane Kurahara, Betsy Young, Brian Niiya, and Elizabeth Dakujaku, made the fieldwork findings much more comprehensible. Rancher Rodney Santiago, former lessee of the Honouliuli site area, shared stories and his artifact collection with us. The late David Cox, Cultural Resource Specialist at Schofield Barracks, found two historic plan maps of Honouliuli's wastewater system that allowed us to match archaeological features to historic locations, and which were invaluable in designing survey strategies and interpreting results. Jill Sommer, of the Cultural Resources Section of the Conservation and Restoration Branch of Schofield Barracks, shared several blueprints for buildings and site plans that allowed a much better understanding of operations at Honouliuli and other POW camps. Hawaii's Plantation Village, Waipahu, allowed us to make copies of the R.H. Lodge photographs. JCCH's Glenn Heern collection of photographs, donated by his granddaughter Kendall Olsen, provides a glimpse into the life of a young soldier who served in the military police at the camp.

Kaori Akiyama shared oral histories she had collected during her dissertation research: accounts of prisoners making wine and *geta* hint at the resilience and resistance of the Honouliuli prisoners. Drs. Suzanne Falgout and Linda Nishigawa coordinated years' worth of research focused on Honouliuli, published in a *Social Process in Hawai'i* volume, that provides multiple analyses from a variety of academic disciplines. Public-

ity arranged by Shayna Coleon, Audrey Kaneko, and others at JCCH as well as videos by filmmaker Ryan Kawamoto led to more awareness among the public, and elicited more stories about the camp (Figure 1.16).

Finally, my own work on sites related to the incarceration of Japanese Americans during World War II has been made not only possible but fun through the

encouragement and example provided by my husband, Jeff Burton, who continues to demonstrate how archaeology can be a force for truth and justice. Recognizing and remembering the injustices of the past is not for the purposes of self-admonishment, but so we are better equipped to strive for the ideals embedded in our Constitution in the future (Figure 1.17).



Figure 1.14. Ross Brown instructing field school students in use of metal detector.



Figure 1.15. Descendants of former internees at Honouliuli in 2011. Liane Sumida (left), Mari Aipa (second from left), and Sarah Sumida (right) are the granddaughters and great-granddaughter of Sam Nishimura. Alan Nishikawa is the son of Dan Nishikawa; when he was 11 years old he visited his father several times at Honouliuli.



Figure 1.16. Filmmaker Ryan Kawamoto.



Figure 1.17. Jeff Burton, Betsy Young, and Jane Kurahara discussing preservation options at Honouliuli.



Chapter 2

Research Design and Methods

The former Honouliuli Internment and POW Camp is located on the island of O‘ahu about 15 miles northwest of Honolulu, north of Highway H1 and west of Kunia Road (Figure 2.1). Comprising about 122.5 acres, the site is located within Honouliuli Gulch, roughly 6 miles mauka (inland) from the coast. When most of the fieldwork described in this report was conducted, the archaeological site and the surrounding land to the east, north, and south were owned by Monsanto Hawai‘i, who allowed access to the site from their offices located a mile to the east. A parcel of land on the ridge to the west of the site belongs to the University of Hawai‘i West O‘ahu. The gulch varies from about 500 to 700 feet wide at the camp location, with steep slopes bounding the relatively flat floodplain. Elevation ranges from 280 feet above mean sea level (AMSL) along the stream at the southern end of the site, up to 520 feet AMSL on the slopes at the north end of the site.

The site is within the Honouliuli *ahupua‘a*, one of 13 traditional land divisions of the district of ‘Ewa; the Honouliuli *ahupua‘a* includes the entire watershed from Honouliuli stream into Kaihuopala‘ai, the West Loch of Pearl Harbor (Basham 2014). Human habitation and farming in the Honouliuli *ahupua‘a* date to at least as early as 400 A.D. Honouliuli likely took its name, meaning “blue harbor” or “dark bay,” from its association with Kaihuopala‘ai.

Beginning in the eighteenth century, the Native Hawaiian farming and fishing culture was supplanted by foreign whaling, ranching, and agriculture (Daws 1968). In 1877 James Campbell purchased over 40,000 acres of land in the *ahupua‘a* of Honouliuli for cattle grazing and agriculture, and sugar cane production was made possible by the drilling of artesian wells. About 1916 the Waiāhole Water Company completed a system of tunnels, ditches, and pipes to bring water from the windward side of O‘ahu to the drier leeward side for sugar cane irrigation. Water from the Waiāhole ditch was used by the Oahu Sugar Company until the company closed, in 1994 (Wilcox 1998). The aqueduct and the siphon visible in historic photographs of the Honouliuli Internment Camp were part of the Waiāhole water system.

The site is still surrounded by agricultural fields, as it was during World War II. Modern developments take up only a small portion of the gulch. The Board of

Water Supply, City and County of Honolulu, has three areas developed and fenced for wells and a treatment plant. The treatment plant is located where a large building is shown in historic photographs. The south end of the original entrance road has been replaced with a paved access road entering the gulch from the ridge to the east. Large satellite dishes for KITV-TV were located on the slope, adjacent to the new access road, since at least 2000, and removed by the time of the January 2017 field visit.

From the paved road, much of the site area appears to be a dense jungle. In contrast to the plowed farm fields above, the gulch is overgrown with vegetation, most notably invasive species such as Guinea grass (*Megathyrus maximus*) and haole koa (*Leucaena leucocephala*), with Chinese banyan trees (*Ficus microcarpa*) near the stream drainage that runs north to south through roughly the center of the floodplain. Other species observed at the site include acacia (*Acacia koa*), aloe vera (*Aloe vera*), autograph tree (*Clusea rosea*), bougainvillea (*Bougainvillea glabra*), Pua or be-still tree (*Cascabela thevetia*), castor oil plant (*Ricinus communis*), sandalwood (*Santalum ellipticum*), monkeypod (*Albizia saman*), sisal (*Agave sisalana*), mock orange (*Murraya paniculata*), goden trumpet or yellow allamanda (*Allamanda cathartica*), wild bitter melon (*Momordica charantia*), kukui (*Aleurites moluccana*), and tomatoes (Kay 2011). Mr. Rodney Santiago, who leased the site for ranching from 1958 up until ca. 2000, noted



Figure 2.1 Honouliuli location.

that the dense over-growth of vegetation at the site is a relatively recent phenomenon. When he used the area to graze cattle, the valley was much more open, and he said that many foundations, rock walls, walkways, and other features remaining from the internment camp could be seen.

Research Objectives

The very first, and most basic, archaeological research goal was simply to determine what was left from the World War II internment camp. This goal led to several objectives for the field work:

1. Accurately define the areal boundaries of the site;
2. Determine if it was eligible for listing on the National Register of Historic Places;
3. Provide baseline condition data;

4. Identify critical issues of public safety and long-term preservation;
5. Evaluate archaeological potential;
6. Assess interpretive potential; and
7. Develop recommendations for future management.

When the University of Hawai'i West O'ahu became involved in 2010, more objectives were developed to boost the field projects' educational potential:

8. Demonstrate to students how archival information, oral history, and archaeology can be integrated;
9. Introduce students to a variety of sampling methods, ranging from traditional hand excavation to metal detecting and excavating with heavy equipment; and
10. Provide hands-on experience in instrument and GPS mapping, on-site artifact analysis, and feature drawing.



Figure 2.2. Searching through Guinea grass.



Figure 2.3. Inspecting a clearing.

Methods

Our methods of choice to accomplish these objectives were survey, feature recording, mapping, and photography, adapted to the specific conditions of Honouliuli. The first two field sessions, in 2008 and 2009, were undertaken with JCCH volunteers (Burton and Farrell 2008, 2009). With partial funding from federal sources, the field classes in 2010, 2011, 2012, and 2014 were federal undertakings, requiring National Historic Preservation Act Section 106 review. Fieldwork followed research designs and recommendations for a determination of “No Adverse Effect” (Burton and Farrell 2011a; Farrell and Burton 2011, 2012a, 2012b, 2014), and the work was conducted under the authority of an annual permit issued by the Historic Preservation Division of the State of Hawai‘i Department of Land and Natural Resources. Honouliuli Internment and POW camp was assigned State Site No. 50-80-08-9068.

Because of the landowner’s concerns for security and safety, access to the site was limited: we spent 5 days on site in 2008 and 2009; six days each in 2010 and 2011; and eight days each in 2012 and 2014. From 2010 to 2014, field direction and classroom lectures were provided by Jeff Burton, Dr. Falgout, and myself, with assistance from Ron Beckwith and Ross Brown. Jeff Burton spent an additional two days at the field in April of 2012 to conduct reconnaissance in the southernmost part of the site, at the request of the National Park Service.

Generally, archaeologists conduct survey by systematically walking transects back and forth across a given study area, at regular intervals. Because of the dense vegetation at Honouliuli, complete traverses across the entire site would have been neither feasible nor productive. In parts of the site, Guinea grass is so thick it not only thoroughly obscures the ground surface, it impedes travel. At first, we focused on surveying wherever walking was possible. In some cases, irregularities in the ground surface, such as depressions or mounds, or a change in the density or type of vegetation, provided clues about feature locations. Occasional clearings in the vegetation allowed more thorough inspection, and some areas with relatively sparse vegetation indicated where slabs lay hidden by vegetation or shallowly buried under recent sediments. Areas where plant cultivars were found, such as tomatoes, were examined closely for evidence of garden plots or terrace walls (Figures 2.2 and 2.3).

In the beginning, we had little archival information to guide the search. *Waipahu at War* (Lodge 1947) contains a map that shows an area along Honouliuli gulch as an “Army Installation” (Figures 2.4 and 2.5); the first years of survey, this was the only boundary we had. A few of the photographs in *Waipahu at War* could be inferred to be of Honouliuli camp, but they were taken from such a distance that they did not provide precise locational information for potential archaeological features. Our ability to predict where features might

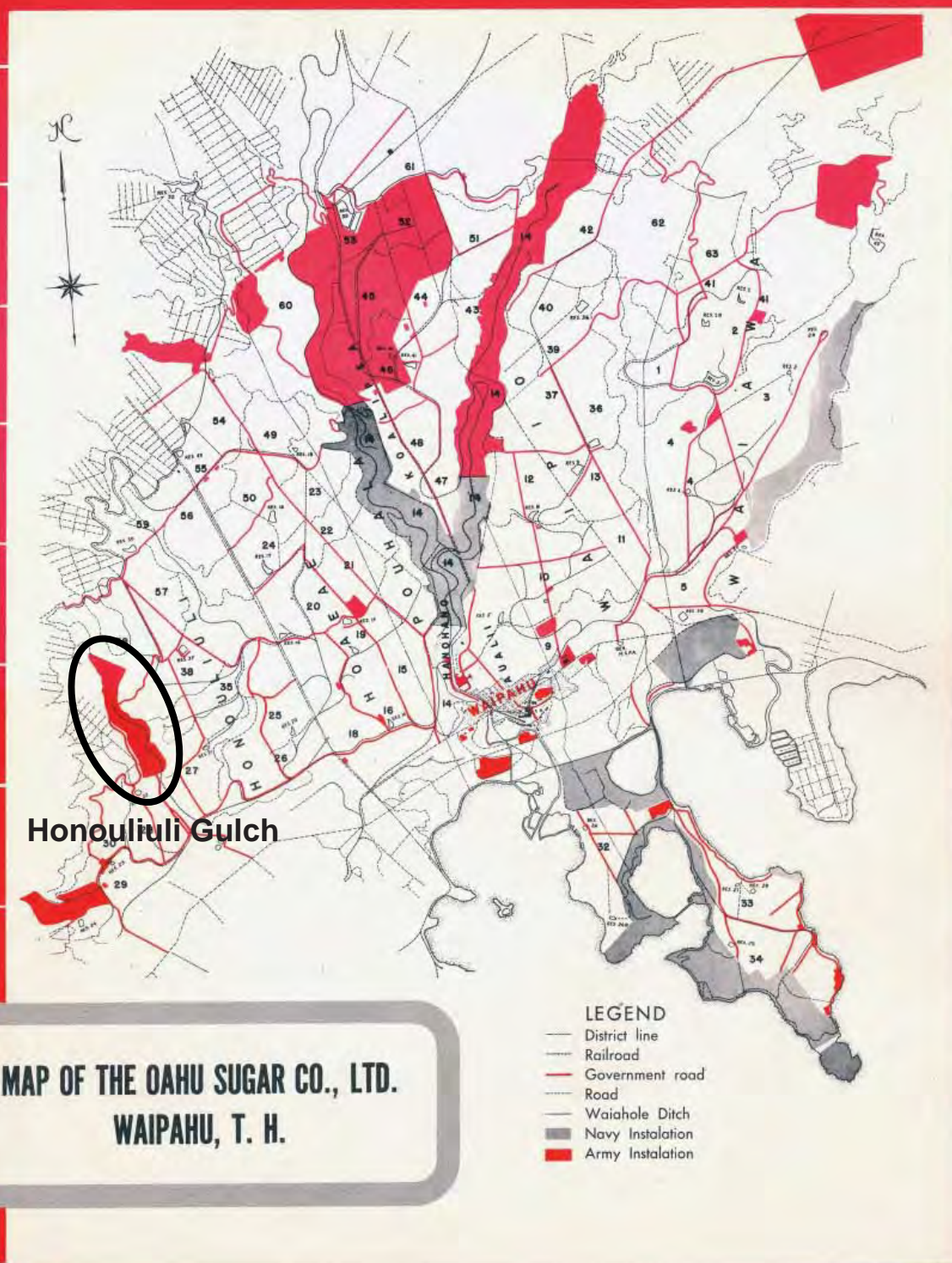


Figure 2.4. Map in *Waipahu at War*, label and circle of Honouliuli Gulch added.

be found improved each session, as historical maps, photographs, and blueprints were located and made available to us.

Examining the archival information was an iterative process. For example, we realized that another photograph of a POW camp in *Waipahu at War* was of Honouliuli only after David Cox of Schofield Barracks provided us with Army blueprints of the site, and we could compare the blueprint road configurations with that in the photograph. Likewise, with the blueprints in hand, we could tell that Dan T. Nishikawa's drawings of the camp were not abstracted or idealized, but accurate depictions of what he could see. Knowing that, we could understand that the differences between Nishikawa's art and Lodge's photographs were due to modifications made to the camp, which in turn helped us decipher the changes in the archaeological record.

As more information became available, we followed the clues the archival data provided, and focused on areas that seemed most likely to have World-War-II-era features. Where the historic photographs or blueprints suggested substantial features might be present, we walked closely spaced pedestrian transects, using metal probes and excavating small shovel tests where changes in vegetation suggested a buried feature might be present.

When part of a feature was encountered, we determined its extent with the metal probes and cleared it of vegetation and sediments, in some cases pulling up grasses by hand, in some cases using shovels, trowels, picks, and long-handled scrapers. Trees growing through concrete slabs were cut with small hand saws. Brooms and whisk brooms were used to clean off the remaining dirt to reveal details of construction, such as anchors for walls or roof supports, traces of walls, floor drains, or sawn-off pipes. Each feature was photographed and many were drawn to scale. The feature number assigned was in two parts, with the first part a Roman numeral indicating which compound it was in, according to the Army blueprints, and the second part based on the order in which the feature was found. Thus, V-1 indicates the first feature recorded in Compound V, which was the internee mess hall.

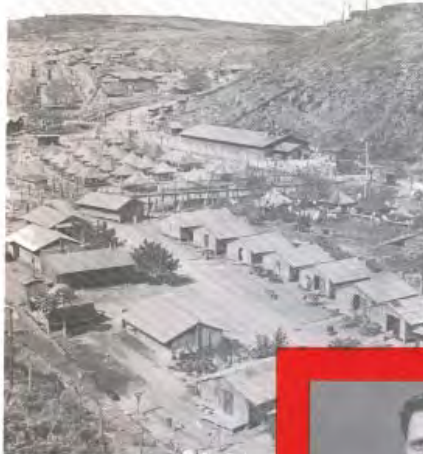
Few artifacts were encountered: all the sediments atop the features had been deposited from stream flooding or hillslope erosion after World War II. Those artifacts

that were found were set aside and recorded, then returned to where they had been found. No artifacts were collected as part of the archaeological project, but JCCH collected five artifacts with the permission of Monsanto, Hawai'i, the landowner. Feature locations were plotted using Garmin and Trimble handheld GPS units. A total station was used to map large features; smaller features were mapped with compass and tapes.

Although a metal detecting expert participated in almost every field session, metal detectors are of limited use in heavy vegetation. The instrument must be able to move freely in arcs just a few inches above the ground surface. Metal detecting efforts, therefore, were focused in Compound VI west of the stream, where vegetation was less dense. When the detector indicated the presence of metal, trowels or shovels were used to uncover the artifact; diagnostic historic artifacts were recorded, mapped, photographed, and reburied. Non-diagnostic artifacts (e.g., unmeasurable nail fragments) were counted, recorded, and replaced.

In 2010, Monsanto Hawai'i provided a backhoe to help us search for the foundations of a large building visible in the historic photographs in Compound VI. The trench was placed so that it would bisect the north end of the staff mess hall; the excavated trench measured 90 ft long by 2 to 3 ft wide, and 3 ft deep at the west end and 2 ft deep at the east end. The excavation was continually monitored by two students and one professional archaeologist. Side walls of the trench were examined for evidence of features, artifacts, or soil variations; back dirt piles were examined for artifacts. Side walls were periodically cleaned by trowel or shovel. Each artifact encountered was recorded, photographed, and redeposited in the trench at approximately the same location it was found. Soils were very rocky, with some large boulders from the west end to about 30 ft east, at which point the sediments became less rocky, but more compact. No evidence of a foundation was found. The few artifacts encountered included some water pipe, nails, and other structural materials.

Information collected in the 2008 through 2011 projects was used to nominate Honouliuli to the National Register of Historic Places under criteria A and D (Burton and Farrell 2011b). As an internment site, Honouliuli represents the fragility of constitutional rights and the effects of martial law; as a POW camp,



"Tourist" camp was populated by prisoners of war



P-51 night fighters train for the Okinawa fight.



Thousands of prisoners of war were temporarily confined in this plantation camp.



Crew of 120MM gun ready to send the big projectiles screaming over the cone field.



Some of the bombs which fell on Tokyo were also hidden in Waipahu's gulches.



Another view of the hidden away plantation camp which harbored prisoners of war.



Oahu Sugar Co. passes the ammunition. Two plantation railroad engines chuff through Oahu Sugar Co. field with a deadly load of bombs.

Figure 2.5. Pages from *Waipahu at War* that include photographs of Honouliuli.

Honouliuli exemplifies the management of enemy troops, as the military balanced the need for national security and the need to comply with the Geneva convention. The site was listed February 21, 2012.

The 2012 field work was the final session partially funded by UHWO's JACS grant. Like the previous archaeological investigations at Honouliuli, the 2012 field work focused on discovering and documenting the cultural resources present at the site to assist in planning future management (Figures 2.6 and 2.7).

The last joint field class and volunteer project described in this report occurred in 2014, before Monsanto arranged for the site to be donated to the federal government. The project included 12 days on-site (10 days with the UHWO field class, 4 days with volunteers, with 2 days for both). By this time, the NPS had completed a draft Special Resource Study to determine if Honouliuli should become part of the NPS system. Field work, then, focused on recording information that might be useful to the Park Service in its future management. Additional features were mapped.

In 2014 we also excavated three 1m-by-1m archaeological test units in Compound V to investigate the history of sediment deposition and the depth of cultural

deposits there. The units were excavated using hand tools (trowels, shovels, and small hand-picks) and all sediments were screened through 1/4-inch mesh and examined for artifacts and floral and faunal remains. Artifacts encountered were tabulated and recorded, and diagnostic artifacts were photographed. The units were excavated until natural, non-cultural strata were reached, as defined by soil stratigraphy (e.g., a layer of stream-deposited cobbles) or the absence of artifacts or evidence of disturbance. The location of each unit and significant artifacts found within them were mapped with the total station. Artifacts were replaced in the unit in which they were found, accompanied by a 2014 coin or other current time marker, and the units backfilled. In addition, three excavation units were completed adjacent to the laundry slab foundation in Compound VI.

Finally, I spent two partial days at the site in 2017 in the company of Jeff Burton, Rebecca Rinas and Jadelyn Nakamura of the NPS and Johanna Fuller of Pacific Historic Parks, to take a few photographs, re-take some of the GPS points, and collect more detailed data on a few previously noted features. During this work a few additional features were discovered and recorded, a testament to the fact that much remains to be found at Honouliuli.



Figure 2.6. Removing grass mat from a foundation slab.



Figure 2.7. Mapping an excavated sidewalk.



Chapter 3

History Background

By the start of World War II, Japanese immigrants and their Hawaiian-born children numbered almost 160,000, comprising the largest single ethnic group and almost 40 percent of the total Hawaiian population (Odo 2004:1-2). Large-scale Japanese emigration to Hawai‘i began in 1868, when some 150 workers were recruited for sugar plantation work. Between 1885 and 1894, almost 30,000 contract laborers came, most staying on after their original contracts expired. Japanese immigrant businessmen and professionals followed. To circumvent an anticipated ban, planters brought in over 26,000 more Japanese after Hawai‘i was annexed by the United States in 1899 and before it was designated a territory in 1900 (U.S. Commission 1997:262-263).

Partly because of their large numbers, Hawai‘i’s Japanese Americans had opportunities beyond the plantation fields as professionals, entrepreneurs, and skilled workers (Odo 2004:24). By 1940, race relations on Hawai‘i were far better than on the mainland, with Japanese immigrants integrated into the economy and represented in government, education, medicine, and legal professions (U.S. Commission 1997:263). However, they were not immune from racism or discrimination. As on the mainland, those born in Japan were prohibited from becoming naturalized citizens on the basis of race (Niiya 2001:331). There were also attempts to suppress Japanese language schools (U.S. Commission 1997:261). Beginning in the 1920s, plantation owners who wanted to quell Nikkei workers’ ability to unite and strike portrayed the Japanese as an enemy race scheming to take over the islands (Odo 2004).

Japanese in Hawai‘i were also seen as potentially dangerous if the United States and Japan went to war. Both the Army and the FBI gathered data on Nikkei residents in the late 1930s. The Army’s plan recommended the arrest of 128 Nikkei, the closing of 60 amateur radio stations, and the confiscation of 23 businesses under a martial law regime. The FBI designated 338 Issei and nine Nisei in Hawai‘i as candidates for custodial detention (Kashima 2003:68). Finger-printing and registering of aliens was begun in August of 1940 under provisions of the federal Alien Registration Act (Allen 1950:430); some 6,000 aliens in Hilo alone were registered and fingerprinted beginning in September of 1940 (Tomonari-Tuggle and Bouthillier 1998:III-49).

An FBI memo dated December 4, 1941, listed the

people who should be arrested at the outbreak of war on a “custodial detention list” (Kashima 2003:71). At first, the largest category of internees consisted of “consular agents.” Most of these were volunteers on islands where the Japanese consul had no paid staff. They assisted other Japanese in filling out reports of birth, marriage, and death sent back to the emigrants’ original villages in Japan. Although the FBI considered them potential agents or spies for the Japanese government, most were long-time residents of Hawai‘i, and none was ever charged with espionage or sabotage (Kashima 2003:72).

War Comes to Hawai‘i

The day Pearl Harbor was attacked, December 7, 1941, the War Department ordered the internment of everyone on the FBI’s custodial detention list. On O‘ahu, the FBI and the Army carried out the arrests together, then the FBI handed the prisoners over to the military police at the U.S. Immigration Station at Honolulu, which was used as the temporary detention station. Some prisoners were held at the Honolulu Police Station.

On the other islands except for Kaua‘i, FBI agents made the arrests with local police (Kashima 2003:69-71). On Hawai‘i, most internees were held at Kilauea Military Camp, but the Hilo Dokuritsu Nippon Go Gakko (Hilo Independent Japanese Language School) and Waiākea Prison Camp were also used to imprison detainees. On Kaua‘i, prisoners were held at the Waimea and Wailua jails, the Kalāheo Stockade, and

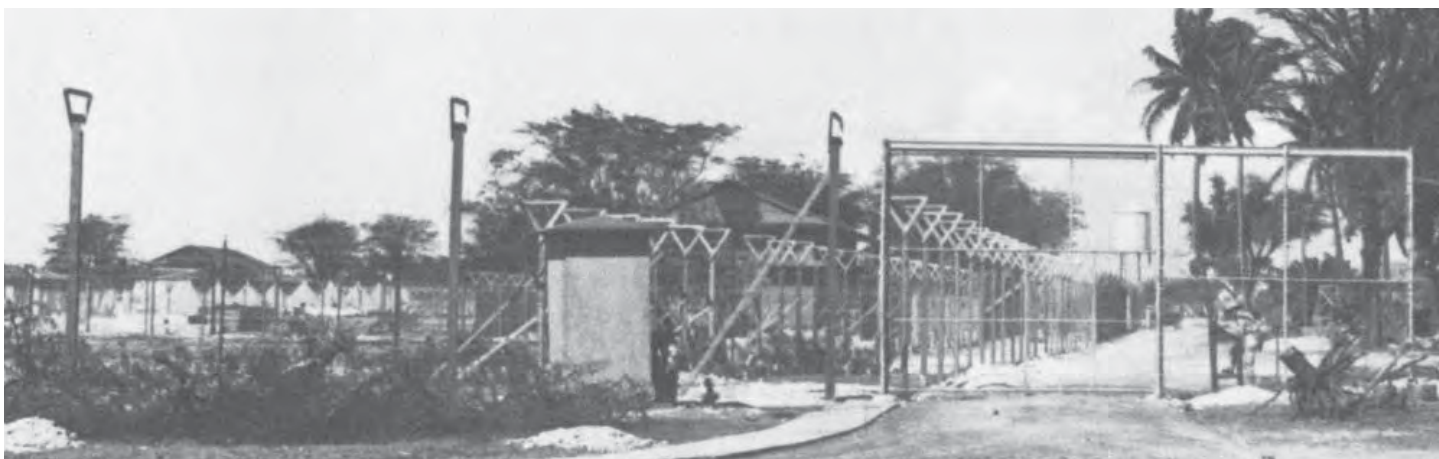


Figure 3.1. Sand Island Internment Camp (U.S. Army).

even the Līhu‘e Plantation gymnasium’s shower room. On Moloka‘i and Lāna‘i, detainees were temporarily kept at local jails until they could be transferred to Maui, where they joined Maui internees at county jails and a detention center at Haiku. Two internees from Ni‘ihau were taken to Kaua‘i county jails.

A week after the outbreak of war, approximately three hundred Japanese had been transferred from the U.S. Immigration Station in Honolulu to the Sand Island Detention Camp (Figure 3.1; U.S. Army 1945). The detention camp on Sand Island operated for 15 months, from December 8, 1941, until March 1, 1943. There were eventually four separately fenced enclosures for internees within the original Quarantine Station, two for male Japanese with 250 persons each, one for 40 females “of mixed races,” and one for German and Italian internees.

Across Hawai‘i, the Japanese American internees included almost all Buddhist and Shinto priests, language-school officials, and many commercial fishermen. Most were arrested simply because they were leaders in the Japanese American community; one-third of them were American citizens (Allen 1950:143). In all, over 1,300 persons of Japanese ancestry were interned in Hawai‘i (Ogawa and Fox 1991:135). The European American internees included at least 67 German aliens and 40 U.S. citizens of German origin or ancestry, 15 Italian aliens and two U.S. citizens of Italian origin or ancestry, and one Norwegian alien (Shivers 1942). Rosenfeld (2014:100-101) tallies at least 135 civilians of European heritage arrested in Hawai‘i: those publicly portrayed as “enemy aliens” included people of Irish, Finnish, Danish, Lithuanian, Norwegian, and Swedish descent, many of them U.S. citizens.

Those arrested were to have two hearings, one with a military intelligence board, the other with a review board composed of three civilians and one or two army officers. Internees would be released or held for permanent internment, theoretically on the mainland. After initial questioning, internees were ferried from the U.S. Immigration Station across the harbor to the Sand Island Detention Station (Kashima 2003:73-74). As Nye recounts, the hearings were very cursory and appeared to rely on second-hand accusations (Nye 2006). Rosenfeld describes the structure and implementation of the hearing process: the civilians on the boards were mostly white, socially and economically elite males; the civilians’ recommendations for release or parole were frequently overruled by the one military board member; and intelligence officers could ignore even unanimous board recommendations (Rosenfeld 2014:89-90).

Even more telling, there are reports that some internees were interrogated while being threatened by military personnel with brandished weapons, and forced to sign false declarations (Rosenfeld 2014:91). One U.S. citizen’s internment was justified and continued because she exhibited what the hearing board considered an excessive amount of patriotic loyalty (Rosenfeld 2014:98). Internees were held even when the military believed they posed no threat: the U.S. Commission on Wartime Relocation and Internment of Civilians (1997:280) reported that the parole policy made clear that large numbers of internees should not be released at one time, and leaders in the Japanese community should not be released, simply “so as not to create an inference that the military authorities are relaxing their vigilance.”

Vignettes of daily life for the Hawaiian internees are depicted in several first- and second-person accounts, poetry, and drawings (see, for example, Furuya 2017; Honda 2012; Hoshida n.d.a, n.d.b; Saiki 1982; Soga 2006). Most narratives indicate that the first weeks of internment were the worst, because neither the internees nor their families were told what was going to happen. Fear and uncertainty were exacerbated by inadequate facilities and uncomfortable conditions: several accounts mention crowding, and that internees were held for weeks without a change of clothes.

As the weeks wore on and internees were able to communicate with family members, anxiety was partially replaced by boredom, given the very restricted nature of internee life. Internees tried to pass the time with activities – some wrote poetry, composed songs, tended gardens, collected shells, and created art and jewelry from the limited items that were available to them. George Hoshida filled notebooks with drawings and watercolors. Many of these items have been collected by the Japanese Cultural Center of Hawai‘i and the Japanese American National Museum (Los Angeles), and together with the written accounts, they humanize the internee story more fully than the details of statistics and government reports.

On February 21, 1942, a group of 199 prisoners, including 156 Issei, 16 Nisei, and German and Italian nationals and U.S. citizens of Italian and German ancestry, left O‘ahu bound for Angel Island, in San Francisco Bay. The Army transported additional prisoners on five occasions in 1942 and three times in 1943 (Kashima 2003:78). Some of these were sent back to Hawai‘i’s Sand Island Detention Station when the Justice Department raised concerns about transferring U.S. citizens to the mainland concentration camps (Kashima 2003:79).

Statistics regarding how many Hawaiian residents of Japanese ancestry were interned overall are confusing, partly because historic sources tallied different categories, including temporary detainment, long-term internment, and “voluntary” and involuntary removal to the mainland. Kashima and Weglyn provide consistent numbers: 875 Issei were removed from Hawai‘i to mainland Department of Justice Camps, including the camps at Bismarck, North Dakota; Lordsburg, New Mexico; Crystal City, Texas; and Santa Fe, New Mexico. U.S. citizens of Japanese ancestry were sent

to WRA relocation centers on the mainland, including those at Jerome, Arkansas; Topaz, Utah; Minidoka, Idaho; and Tule Lake, California. Of these, 1,037 were “voluntary evacuees,” family members who wished to join their fathers and husbands who had been sent to the mainland. Some 300 of those interned were kept in Hawai‘i, bringing the total of those incarcerated for a substantial amount of time to 2,392 (Kashima 2003:86; Weglyn 1976).

The Camp in Honouliuli Gulch

In early March of 1943, internees and POWs were moved from Sand Island to the Honouliuli Internment camp (Figure 3.2). According to Commander Lt. Louis Springer, who oversaw the move from Sand Island to Honouliuli, Sand Island was unsuitable for a prisoner of war or alien internment camp because, in violation of international law, it was subject to a direct attack by enemy landings (Springer 1943). Another report says that Sand Island facilities were needed for the expansion of the Honolulu Port of Embarkation (U.S. Army 1945a).

Perhaps both reasons applied. The Honouliuli Internment and POW Camp was located further inland, in Honouliuli Gulch west of the city of Waipahu. In addition, it was apparently constructed with a large potential population in mind: while Sand Island’s compounds totaled about 90 acres, Honouliuli was designed to encompass up to 160 acres, with facilities for approximately 3,000 prisoners of war and civilian internees (Springer 1943). Two captions in Lodge’s account of a Hawaiian sugar plantation during the war suggest that Honouliuli was established at an existing plantation camp (1949:37), but in a 1981 interview, Lodge stated that the military had built the prison camp “from scratch,” as the location was mostly a barren, rocky gulch (Gordon 1981). A 1936 U.S. War Department terrain map (Appendix B) show a single building and a railroad spur in the gulch, both probably related to the harvest and hauling of sugar cane.

Honouliuli was divided into several compounds, so that prisoners of war and civilian internees were separated, and civilian Japanese Americans were separated from German Americans (Nye 2006). Suggesting that civilian internees still outnumbered prisoners of war when the camp opened March 2, 1943, it was first



Figure 3.2. Honouliuli Internment and POW Camp (R.H. Lodge photograph).

called Honouliuli Internment Camp. Its name was later changed to Alien Internment Camp and still later it became POW Compound Number 6 (U.S. Army 1945). At first, POWs and enemy aliens were held only temporarily until they could be transported to mainland internment and POW camps. The interned citizens, on the other hand, were expected to remain at Honouliuli for the duration of the war, if not released. However, some interned citizens voluntarily transferred to mainland internment centers when told such a move could reunite them with family members previously sent there (Springer 1943).

It is difficult to accurately determine the population at Honouliuli throughout its occupation. The Swedish vice-consul reported 84 Japanese Nationals and 154 American-born Japanese (i.e., U.S. citizens) at Honouliuli in May 1943, and 69 Japanese Nationals and 160 Japanese American citizens there four months later (Olson 1943). There were at least nine and as many as 25 German American citizens, including at least two women and two children. However, as Rosenfeld (2014) documents, the official accounts classified U.S. citizens and immigrants of various nationalities as “en-

emy aliens.” For example, none of the official accounts available lists Italian Americans at Honouliuli, but Yoshitami Tasaka’s “memory map” (Tasaka 2004) labels the section of the civilian internment camp across from where he lived as the “German and Italian” section. Yasutaro Soga, who was the editor of a Japanese language newspaper, compiled a list of 328 Japanese Americans who were interned at Honouliuli, based on his interviews with former internees (Soga 2008). The varying counts reflect the fluid demographics at the internment camps, as additional residents were arrested, some were transferred to mainland camps, and some were released.

The prisoner of war population at Honouliuli may have been even more fluid, given the policy to transfer POWs to mainland POW camps to remove them from potential combat zones (Figure 3.3). Most Japanese military captured were held at POW camps in Australia, New Zealand, west India (now Pakistan), and Pacific islands to the west of Hawai‘i (Straus 2003). According to Straus, “most prisoners captured in Admiral Nimitz’s Pacific area of command were funneled through Hawai‘i to permanent camps in the continen-



Figure 3.3. Prisoners of War at Honouliuli (Glenn Heern photograph, JCCH).

tal U.S. However, several hundred remained in Hawaii throughout the war” (Straus 2003:172). Gwenfreed Allen (1950:221) provides a figure of 16,943 total prisoners of war and internees in Hawai‘i. Like Strauss, she also notes that of the captured combat troops who were held in Hawai‘i, most were sent on to mainland POW camps. She lists 4,841 Italian prisoners, 2,643 Koreans, 320 Japanese, 23 Formosans (from present-day Taiwan), seven Indochinese, and three Chinese in Hawaiian POW camps at the end of the war. Allen lists no Okinawans in the counts, but points out that they were routinely counted as Japanese, even though neither they nor the Japanese considered them so. Straus (2003: 214) notes that the last Japanese POWs to arrive in Hawai‘i were from the battle of Iwo Jima.

More recently, Suzanne Falgout (2014) has studied the status and ethnic composition of the POW population in Hawai‘i and at Honouliuli, using a variety of primary sources. In March 1943, there were reportedly about 1,500 POWs held at Honouliuli in POW Compound 6. This likely corresponds to the areas identified as Compounds I, II, III, and IV on the Army blueprint, which are the area designations used in the archaeological

reports. By January 1, 1945, a second POW compound had opened; identified by the Army as Compound 8, this area likely corresponds to what was referred to as Compound VII on the Army blueprints (and in the archaeological reports). Falgout notes that by 1945, the prisoner population at Honouliuli may have reached 4,000 or more, exceeding the planned capacity of 3,000. POWs included Okinawans, Koreans, Italians, Japanese, and Formosans (Taiwanese). Okinawans comprised the largest group, followed by Koreans. Most were noncombatants (92 percent), but 7 percent were enlisted men and 1 percent were officers (Falgout 2014:117-120).

Yong-ho Ch’oe (2009), who has documented the presence of 2,700 Korean POWs at Honouliuli in December 1945, describes how three young Korean students – Pak Sundong, Yi Chongsil, and Pak Hyöngmu – ended up as POWs at Honouliuli. The three students had been conscripted into the Japanese Imperial Army, but because of their strong Korean nationalism, defected to the Allies and worked for the U.S. Office of Strategic Services (OSS). With the U.S. anticipating an invasion of Korea, the three trained as secret agents. When the war ended, the status of these Koreans shifted abruptly from OSS special agents to POWs. To their great dismay and indignation, they were unceremoniously put into POW uniforms once again and confined to a barbed-wire enclosure. Their bitter protests against U.S. officials for betraying their trust and cooperation – they were prepared to risk their own life for the American cause – were of no avail.

At Honouliuli, the three students became leaders of the Korean POWs, publishing a newsletter urging self-reliance and fostering democratic ideals. One of the men, Pak Sundong, became the inspiration for a famous character in one of Korea’s greatest novels, “Thus, one of the Korean POWs in the Honouliuli camp emerged as a major figure in modern Korean literature” (Ch’oe 2009). Ch’oe also says one of the last things the three students did as POWs was to list all the Korean POWs before they were repatriated, in the last issue of their newsletter. Ch’oe (2009) concludes:

The Korean POWs included three former college students who were drafted into the Japanese military and deserted to the Allied Powers and worked as special agents of OSS of the United States only to be reduced to POWs at the end of the war. They also included

three fishermen who were kidnapped from Korean waters and were incarcerated in the Hawaii POW camp. They too were innocent victims of immoral and illegal acts perpetrated in the name of war.

By the end of August 1943, all of the German Americans had been released from Honouliuli (Morrison and Kneer 1996; Nye 2006). It seems likely that by that time, the military could not maintain the tenuous legal basis for the internment. Doris Berg Nye reports that her mother requested permission for an attorney to visit her in Honouliuli in June 1943. Her request was denied, but she was soon released on parole (Nye 2006). As was true for any internee who was eligible for parole, she was required to sign a statement promising not to contest the imprisonment in court. Failure to sign would result in continued imprisonment. Three other interned naturalized German American citizens pursued writs of habeas corpus in court. The military went to great lengths to avoid acknowledging this basic constitutional right first by refusing the court's order to allow two of them to appear before the judge, and then by releasing the three from custody not in Hawai'i, where they had lived before internment, but out of the court's jurisdiction on the U.S. mainland (Anthony 1955).

In June 1944, the Japanese American women's compound at Honouliuli was needed for Japanese POWs, and the few women left were paroled (Okiihiro 1991:248). After martial law was lifted in Hawai'i on October 24, 1944, there was no longer any legal authority to hold citizens. However, citizens could be excluded from the territory and detained pending exclusion under the authority of Presidential Order 9489. Ogawa and Fox (1991:136) report that on November 11, 1944, the 67 remaining Japanese American citizens held at Honouliuli were transferred to the Tule Lake Segregation Center in California. During 1945, an additional 12 American citizens of Japanese ancestry were arrested and detained pending exclusion (Ogawa and Fox 1991:138).

On September 14, 1945, eighteen alien internees from the Honouliuli Internment camp were released, leaving only three local internees (all Kibei) in custody (Roehner 2008). Honouliuli closed as a civilian internment camp by the end of 1945. The repatriation of prisoners of war began in December 1945, with priority given to the sick and wounded, and to the Koreans

and Taiwanese (Strauss 2003:235-236). According to Allen (1950:222), the Italian and most of the Korean POWs were repatriated early in 1946, Japanese and Okinawans by December 1946.

Roehner (2008) reports that on January 27, 1947, the repatriation of prisoners of war had come to an end, with 3,411 Japanese, 2,600 Koreans, and 2,322 Okinawans passing through at least one of the Hawai'i POW camps. It is not known how many of these were held temporarily at Honouliuli, or when the final prisoner of war left the gulch. The last group of Okinawan POWs reportedly left Kilauea Military Camp on the Big Island on December 5, 1946 (Tomonari-Tuggle and Bouthillier 1998: III-50). Honouliuli may have been used through 1946 as well or even later, due to its more central location, for POW transfers or other military activities.

Guards and Military Police

Little is known about the guards and military police who were stationed at Honouliuli, in part because of the disastrous 1973 fire at the National Personnel Records Center in St. Louis, Missouri. The National Archives estimates that 80 percent of records for Army personnel discharged between November 1, 1912, to January 1, 1960, were destroyed (Stender and Walker 1974). Until more research is conducted, some information can be pieced together from historical photographs and an inscription in concrete at the site.

One of the photographs taken by R.H. Lodge of Honouliuli shows a soldier striding out of a wood frame building (Figure 3.4). In a 1981 interview, Lodge identified this man as the camp commander Maicco, an Italian-American who could converse with the Italian POWs (Gordon 1981). A four-part sign in front of the building reads:

Headquarters Prisoner of War Processing Station
Compounds 6, 8, and 9, Civilian Internee Stockade
162 Prisoner of War Processing Company
Anti-Tank Company, 372nd Infantry

The 372nd Infantry was assigned to Hawai'i in May 1945, and Honouliuli may have been their first assignment. It was an African-American unit in the segregated U.S. military (Figure 3.5; Altenhofen 2010a). It



Figure 3.4. Headquarters building at Honouliuli (R.H. Lodge photograph).

seems an odd coincidence that a unit segregated on the basis of race was stationed at the same place as civilian internees who were incarcerated because of their race or ethnicity, but it indicates that Honouliuli's history is tied to African American history as well as to other racial and ethnic discrimination.

We know of two soldiers assigned to the camp, Glenn Heern (1925-2012) and Rollin N. Hotchkiss (1911-1955). Heern was a young Caucasian soldier whose photographs in the JCCH collection suggest his unit was present at the same time as the 372nd Infantry. He may have belonged to the other unit identified in the photograph, the 162nd Prisoner of War Processing Company. The 162nd POW Processing Company was activated December 15, 1943, at Fort Custer, Michigan, and inactivated May 30, 1946 at Fort Armstrong, Hawai'i (U.S. Army Center of Military History n.d.). Its function was to furnish interpreters and assist in running POW camps. In another of Honouliuli's ironies, at

least two known members of the 162nd POW Processing Company were Japanese American: Pfc. Larry Katayama, whose family was interned on the mainland at Poston (American Nisei Veterans 2014), and Shig Imai, who "used his Japanese language in service with the 162nd Prisoner of War Processing Center in Honolulu in 1944-45" (*Hood River News* 2011). However, neither may have been stationed at Honouliuli; one platoon of the 162nd was in Okinawa from April 1, 1945 until June 22, 1945, and none of the military personnel who appear in Heern's photographs appears to be Japanese American.

Rollin Neale Hotchkiss's identity was discovered because he left his name and a date (8/13/43) in the concrete foundation of a guard tower at Honouliuli. Hotchkiss had enlisted at Camp Blanding, Florida, on April 29, 1942, but his records were among the millions of service records catastrophically destroyed by fire in 1973 (Maldonato 2012). Hotchkiss was at Hon-

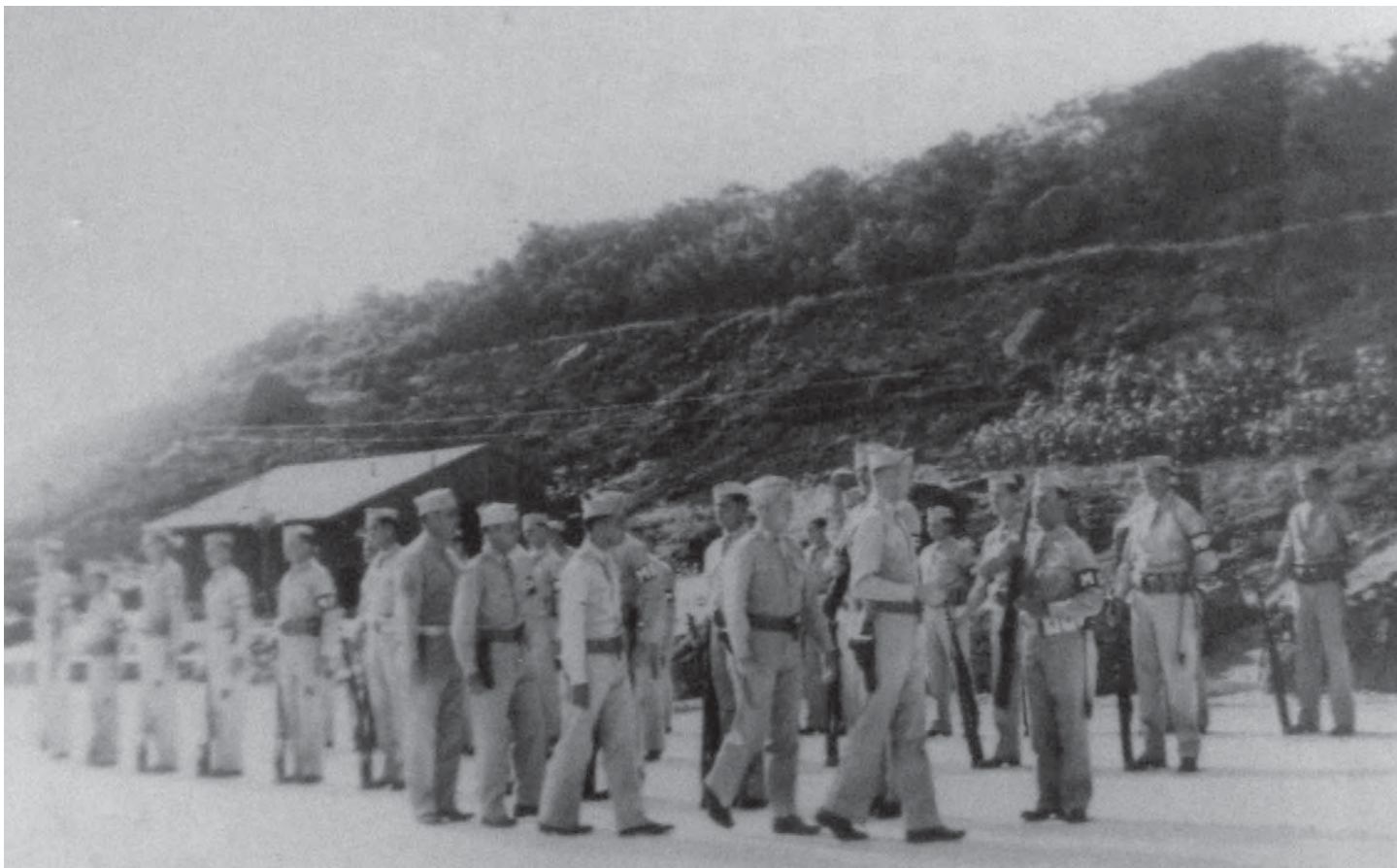


Figure 3.5. Members of the 372nd Infantry (Glenn Heern photograph, JCCH).



Figure 3.6. One member of the military police at Honouliuli (Glenn Heern photograph, JCCH).

ouliuli before the 162nd POW Processing Company or the 372nd Infantry arrived in Hawai'i, so may have been part of the 111th Military Police Company, who were stationed at Sand Island, assuming the guards transferred with the prisoners. Hotchkiss died in 1955, at Volusia, Florida, was buried at Arlington National Cemetery. The fact that he was buried at Arlington indicates he either retired from the military, or was medically disabled; the latter seems more likely, because he died before he could have served the minimal 20 years required for retirement (Maldonato 2012).

The historic context study for POW camps on the mainland reports that a ratio of one guard for every three prisoners was standard (Listman et al. 2007:4-1). "With guards required on a 24-hour, 7-day a week basis, this really worked out to about one guard on duty per each 15 prisoners at any one time" (Listman et al. 2007:4-6). If this ratio held at Honouliuli, one would expect 1,000 guards and administrators for a camp of 3,000 POWs. However, Listman et al. (2007:5-6) note that toward the end of the war, many camps were down to a ratio of around 10 to 15 prisoners per guard, and some camps had as few as one guard for every 20 POWs (Figure 3.6).

Abandonment and Reuse

The camp was dismantled and bulldozed soon after it was abandoned. Mrs. Gabriel Silva (personnel communication with JCCH, 2006) reported that her husband, who worked for the U.S. Army Corps of Engineers as a bulldozer operator during World War II, had the job of leveling the Honouliuli internment camp as well as other internment camps. Records about the demolition of the camp have not yet been found, but photographs taken by the Hashimoto family when they returned to visit Honouliuli in 1948 (Hashimoto collection, Japanese Cultural Center of Hawai'i) show that by then all of the buildings had been removed and only concrete slab foundations and fence posts remained (Figure 3.7).

Rancher Rodney Santiago started ranching in the gulch in 1958 and leased the area into the 1990s.

Mr. Santiago made some improvements and modifications to facilitate ranching, including a corral and horse stalls. He recalls that when the area was grazed, one could see rock-lined paths and other features at the site. Mr. Santiago identified the standing wooden buildings at the site as a chicken ranch, where fighting roosters were bred. The house that was part of the chicken farm was in good shape when he first visited but deteriorated over the decades. Based on some of its World-War-II-era materials, we thought that the house was an original administration building, converted into use as a chicken farm, and the chicken coops were built of recycled materials on a military slab foundation. However, no structures are visible at the chicken farm in the Hashimoto photographs, so more likely both structures were built with recycled materials on the camp building foundations. Mr. Santiago gave up ranching in Honouliuli gulch about 2000, not long before the JCCH rediscovered the site.



Figure 3.7. Abandoned Honouliuli camp in 1948 (Hashimoto collection, JCCH).



Chapter 4

World-War-II Appearance

Historical maps, photographs, and blueprints acquired over the course of the several archaeological field sessions informed our search for archaeological features. By comparing information from these historical resources, we can get a good idea of what the Honouliuli Internment and POW Camp looked like during World War II.

Topographic Maps and Aerial Photographs

A broad-brush look at the development of the Honouliuli camp is provided by historical topographic maps and aerial photographs (Appendix B).

1936 War Department Terrain Map

The 1936 War Department Corps of Engineers Waianae Quadrangle Terrain Map shows several human-created features in what later became the Honouliuli Internment and POW camp (Figure 4.1). Most prominent is a railroad track, labeled “Oahu Sugar Co,” which extended from a main track that ran east-west near the current alignment of Highway H1. The Honouliuli gulch branch tracks ran about 1.3 miles north into the gulch, ending at a building located just east of the stream confluence at what would become the south end of Compound III.

In *Waipahu at War*, two captions for photographs of Honouliuli camp seem to imply that Honouliuli was established in an existing plantation camp. One reads “Thousands of prisoners of war were temporarily confined in this plantation camp” and the other “Another view of the hidden away plantation camp which harbored prisoners of war” (Lodge 1947:37). However, in a later interview, R. H. Lodge stated that there was nothing in the gulch before the prison camp, and that it was barren and rocky except for some sugar cane fields in the upper sections of the gulch (Gordon 1981). The building and railroad branch on the map were probably related to the cultivation and transport of sugar cane. The 1936 terrain map shows the ditch and aqueduct of the Waiāhole water system, but not the siphon which crosses the gulch, even though the water system was in operation by about 1916 (Wilcox 1998: 98-108).

On the 1936 terrain map, a dirt road crosses the gulch just north of the aqueduct, with switchbacks on both the east and west gulch slopes. The 1936 map also depicts numerous fences (indicated by “o—o—o”). In the camp vicinity, most of these are located on the more gently sloping land to the west above the gulch, but one dips into the west side of the gulch and crosses the stream, then heads up the east fork of Honouliuli stream, crossing what would become Compounds I through IV.

1943 War Department Terrain Map

The 1943 War Department map shows three large buildings, roughly where the mess halls for Compounds I, II, and IV are located (Figure 4.2). It also depicts six sets of five small buildings in a row: two sets are located in Compound I, and one set each in Compounds II, III, IV, and V. Also in Compound V, one small building is shown along the ditch west of the stream: this may represent a guard tower. Nine other rectangular shapes in Compound V (as the compound boundaries have been extrapolated), most of them parallel to the road, likely represent generalized building locations. Three of the medium-sized buildings shown at the south end of Compound V were probably actually in Compound VI, as they better match the layout of buildings in that compound on the U.S. Army blueprints. Compound VI also includes six other medium-sized buildings next to the entry road and nine buildings of various sizes on the southwest side of the stream. These locations are generalized, rather than exact.

The railroad tracks end in Compound VI, indicating the north end of the tracks was removed, but a new road parallels the tracks from the south, and extends north through Compound V, then forks in Compound

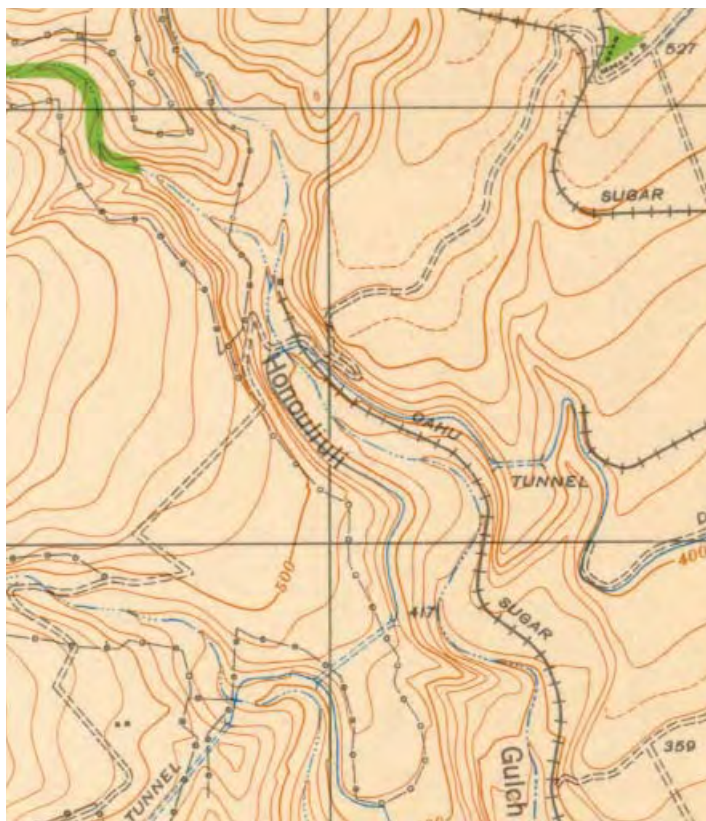


Figure 4.1. Portion of 1936 War Department map.

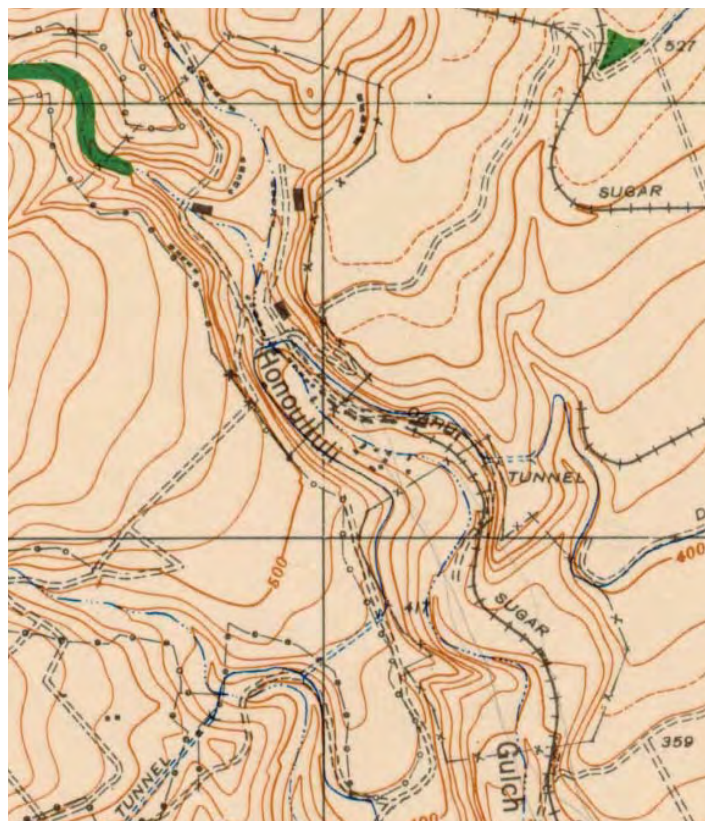


Figure 4.2. Portion of 1943 War Department map.

IV, with branches into both Compound I, on the east side of the stream, and Compound II, on the west side.

The prison camp is not labeled on the 1943 map, but new fencing is depicted, mostly with the standard “x—x—x” symbol for fence. Going by the map symbols, it appears that some of the 1936 fence was incorporated into the new fence that surrounds the prison camp, and sections of the 1936 fence within the gulch were removed. One fence alignment surrounds Compounds I, II, III, IV, and V, and another surrounds Compound VII. The southernmost fence boundary is depicted approximately where the map in *Waipahu at War* puts the boundary, just south of Compound VII. A small building is depicted where the old road crosses the fenceline near the top of the east slope of the gulch; the alignment of that road up the west slope of the gulch is slightly different than shown on the 1936 map.

1951 Aerial Photograph

In a 1951 aerial photograph, taken after the buildings were removed, mess hall slabs are visible in Compounds II, IV, and V, and the laundry slab and smaller foundations are apparent in Compound VI. Light-colored rectangles at what became the chicken farm in Compound VI also appear to be concrete foundations, rather than buildings. Knowing where the shower

buildings were in Compounds I, II, and II allows those foundations to be discerned, too. On the other hand, mess hall slabs are not visible in Compounds I and VI, suggesting either a different type of foundation for those buildings, or that sediments or vegetation was already obscuring them from view.

Portions of Compound I and VII may be under cultivation. Several roads, including the main entrance road up the gulch from the south and the road that climbs the west slope of the gulch, are clearly visible because of the white coral gravel the military used (Gordon 1981). A road in the same alignment as the current access road from the Monsanto Hawai‘i land to the east shows up much darker.

1953 USGS Map

The 1953 USGS map depicts the siphon and its ditch as well as the aqueduct and its ditch (Figure 4.3). No buildings are depicted in the gulch. The main entrance road comes in from the south, but the current road alignment from Monsanto Hawai‘i’s property on the east slope of the gulch is shown as a dirt road.

1960 USGS Map

On the 1960 USGS map, the main road still enters the gulch from the south. One building is depicted at the

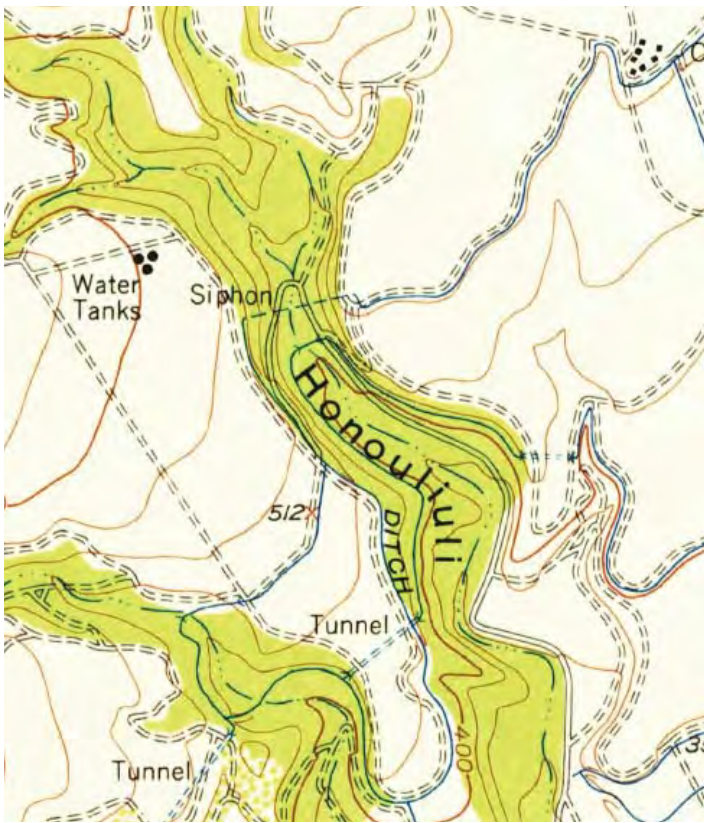


Figure 4.3. Portion of 1953 USGS map.

chicken farm, suggesting the chicken farm was constructed between 1953 and 1960.

1962 Aerial Photograph

In the 1962 aerial photograph, the roads appear in the same alignments as the earlier 1951 aerial photo, but the mess hall foundation slabs are less distinct. The two light-colored rectangles at the chicken farm have shadows, indicating that at least by this time, both buildings had been constructed. Areas of uniform vegetation with discrete boundaries in Compounds I and VII indicate cultivated fields.

1967 USGS Map

In the Honouliuli gulch area, the 1967 USGS map appears to be identical to the 1960 USGS map.

1977 Aerial Photograph

This aerial photograph is of lower resolution than preceding ones, so the fact that mess hall foundations and roads in the gulch are less distinct may be due to photo quality rather than sediments or vegetation obscuring the features. Cultivated fields are still apparent in Compound I, but the Compound VII fields may be abandoned.

1983 USGS Map

The 1983 USGS map shows the chicken farm building as in previous versions, but the main road in the gulch is depicted with a dotted double line, rather than the solid double line in the 1960 and 1967 editions, indicating the road was considered only a secondary route by this time. Further, fewer roads are shown in the gulch, compared to the 1943, 1960, and 1967 editions.

Contemporary Official Accounts

World War II-era records indicate official perspectives about Honouliuli; the records include army memoranda and blueprints, and reports by the Swedish vice-consul, who inspected the camp as the authorized representative of a neutral power.

Commanding Officer

Lt. Springer's Memo, 1943

A document titled "Control of Civilian Internees and Prisoners of War in the Central Pacific Area" provides details about the facilities at Honouliuli:

The kitchen and mess hall for Japanese internees is equipped to feed up to one thousand internees. The internees live in prefabricated "sixteen-man" demountable barracks. All latrines have modern plumbing with hot and cold showers. A post exchange is available for the purchase of cigarettes, tobacco, and miscellaneous items for sale. There is also a tailor shop, an equipped dental office, and a dispensary for necessary medical treatment. A recreation field has been cleared and fenced in for the use of the internees.

The prisoner of war section of the Camp has been divided into separate enclosures to take care of Japanese officers, enlisted men, and noncombatant Japanese prisoners of war. As a result of the Gilbert Island operation and the capture of Korean noncombatant prisoners of war, it has been found necessary to construct an additional enclosure to separate the Japanese from the Koreans. There are two large prisoner of war kitchens and mess halls, each with facilities to feed one thousand or more prisoners. In the prisoner of war section there are cold water showers and pit latrines. Prisoners of war live in pyramidal tents, usually six to eight men in a tent.

All internees and prisoners of war are issued mat-

tresses, pillows, blankets, mattress covers, and mosquito bars. [Internees] cultivated vegetable gardens, and grew string beans, corn, tomatoes, lettuce, carrots, beets, cabbage, radishes, eggplant, and watermelon (Springer 1943).

Springer's description suggests that the POW compounds at Honouliuli differed from the standard plans for POW compounds described in the Department of Defense's historic context for mainland prisoner-of-war camps (Listman et al. 2007). To conform to Geneva Convention standards, POW barracks were very similar to enlisted men's quarters. Barracks were typically 2000 square feet, and constructed of wood; mess halls were generally 64 feet by 20 feet, constructed to serve 250 prisoners (Listman et al. 2007:10-3 through 10-6). There may have been logistical, climatic, or political reasons for Honouliuli's deviance from these standards.

The civilian internee compounds at Honouliuli are also very different from the ten mainland Japanese American "relocation centers" that housed civilian internees (Burton et al. 2002). The entire Japanese American population of the mainland's West Coast was interned, so each relocation center was built to house thousands of U.S. citizens and resident aliens. Men, women, and children were housed together. In the mainland camps, residential blocks were composed of 14 standard Army-style barracks, each divided into several single rooms, each room occupied by a family. At Honouliuli, German American couples were interned together, while Japanese American men and women were separated from each other.

Gustaf Olson Reports, 1943

The Swedish vice-consul's reports about the civilian internee compounds at Honouliuli in May and September 1943, sound almost idyllic:

The 84 Issei and 154 Nisei busied themselves with planting of trees and shrubs, arranging flower beds with rock borders and otherwise embellishing their surroundings with the materials at hand (Olson, May 1943, cited in Okihiro 1991:247).

The lanes between the rows of cottages have been graded, and through the voluntary efforts of their occupants and nature's generous response the cottages now are surrounded by green lawns, shrubs and flowers also young trees. That portion of the compound

occupied by the Japanese internees presents a particularly neat and tidy appearance both in- and out-of-doors (Olson, September 1943).

U.S. Army Blueprints

Three Army blueprints archived at Schofield Barracks provide invaluable spatial information about the layout of the camp (Appendix A). The first two, found by the late David Cox, illustrate the sanitary sewer system. The blueprints (U.S. Army n.d.) depict buildings, roads, boundaries between compounds, ditches, and a plantation railroad. Only features of interest to the sewer system are labeled, and the blueprints are not complete: no fences or guard towers are depicted, and some buildings visible in historic photographs are not shown. However, the sanitary sewer system blueprints provided key spatial information for conducting the archaeological inventory and interpreting the results.

The blueprints subdivide the camp into areas or compounds, designated by Roman numerals I-VIII, beginning at the north end of the site. Compounds I through V are labeled "Existing Prisoner of War Compounds" and Compound VII as "Proposed Prisoner of War Compound." Compound V was where civilian internees were held, so Compounds I through IV and VII would have housed prisoners of war, each nationality separated from each other. On the blueprints, Compound VI is identified as "Existing Guard Camp Area," and VIII as "Proposed Sewage Treatment Plant." Also delineated (but not labeled with a Roman numeral) is "Proposed Sewer Outfall Alternative A," to the south of the proposed sewage treatment plant. Archaeological features have been found in Compounds I through VIII, and we have used those compound designations to organize the feature descriptions.

The blueprints differentiate between the existing, an authorized, and a proposed sewer system. Logically, then, the blueprints would date to sometime in the middle of the camp occupation, after the original waste water disposal system was determined no longer adequate but well before the end of the war, when new facilities would have been unnecessary. This is supported by a manhole cover discovered during archaeological survey. Depicted as part of the "authorized" system on the blueprints, the manhole cover has "Nov. 4, 1944" inscribed in it. The blueprints, therefore, date to sometime after March 1943, when the camp opened, and before November 1944, when the "authorized" be-

came the actual. Given that the original sanitary sewer system had time to become inadequate by the time the blueprints were created, it seems likely they date to early or mid-1944.

The “existing” system consists of cesspools and septic tanks that outflow into the stream. The blueprint shows eleven cesspools: one for each of the five mess halls, one for each of the four shower buildings, one for the POW dispensary, and one for a latrine in Compound VI. A latrine in Compound V shares the nearby mess hall cesspool. In both Compounds V and VI (internee and staff housing areas) showers and latrines have a separate system of two septic tanks in series.

The “authorized” sewer system replaces or supplements the Compound V and Compound VI systems. The authorized system includes two or three large septic tanks at the south end of the camp, which empty into the stream. The “proposed” system extends the “authorized” system to Compounds I-IV, and connects everything to a proposed sewage treatment plant. Interpreting the distinctions in the legend, one can guess that at the time the blueprints were drawn, the existing system (which included “water-borne latrines”) was deemed inadequate, some improvements were authorized to maintain or restore hygienic safety, and additional improvements were proposed, either to further improve sanitary or environmental conditions or in anticipation of additional inmates. It is not known if the structures listed as “buildings not in use” on the blueprint had been built but not yet occupied, or if they had been recently abandoned.

The blueprints also depict what appears to be a baseball field, on the west side of Honouliuli stream in Compound VII. The Oahu Sugar Company railroad terminates in Compound VIII, rather than Compound VI as depicted in the 1943 military terrain map.

The third blueprint of Honouliuli, labeled “Honouliuli Gulch Disciplinary Compound,” was provided by Jill Sommer of Schofield Barracks. Depicting just the area identified as Compound VII in the Sanitary Sewer System blueprints, this blueprint, dated April 12, 1945, is far more detailed. It shows not only roads, the stream, power lines, and sewer lines, but also other features. An 8-foot-high fence of barbed wire and chicken wire surrounds the entire compound, and each row of tents is also fenced. Guard towers are depicted at each cor-

ner, to be equipped with search lights. A small “sentry box” and a 16-foot-by-20-foot guard house is located near the gate, which is in the center of the south side. There is a 2-seat pit toilet at the end of each row of 11 tent platforms. A shower building is opposite the gate; a 4-inch sewer pipe leads to a 100-man settling tank. The tank in turn has an outlet made of a 4-inch galvanized iron pipe anchored with concrete, which appears to discharge into the stream. The blueprint includes detailed plans and elevations of the latrines and shower. A “dam” was noted to be constructed to divert a tributary of Honouliuli stream along the north side of the compound. The blueprint label indicates that this compound’s capacity would be 110 tents, to house 880 men. The laundry and three other buildings in Compound VI, the Guard Camp area, are drawn on the other side of a fence on the northwest edge of the blueprint.

Internee Oral Histories and Art

Oral histories archived at JCCH’s Resource Center describe Honouliuli from the internees’ perspectives; accounts from former prisoners of war are also available (see, for example, Kaori Akiyama’s research). For internees, the pain of being separated from families and the humiliation of being interned were exacerbated by the physical discomfort of mosquitoes and excessive heat. According to reminiscences collected in the book *Gambare!* (Saiki 1982:160), the valley slopes trapped heat in the camp, and the internees called the camp *Jigoku-Dani* (地獄谷), or Hell Valley. Boredom was oppressive, and many worked on gardening, landscaping, or crafts to pass the time (Okiihiro 1991).

Art work by Dan Toru Nishikawa documents the physical setup of the camp (see Figures C.24-28). A professional musician, radio broadcaster, and newspaper salesman who was interned at Sand Island and Honouliuli, Nishikawa sketched scenes of everyday camp life in pencil and crayon (Niiya and Wakida 2015). Three of Nishikawa’s drawings show views from the Japanese American men’s area. One, showing several internee buildings and a guard tower, depicts the view to the north. Another, labeled “Women’s Internment Camp,” shows the view to the northeast, with barracks of the Japanese American women’s area in the mid-ground and the Compound IV mess hall in the background. The third shows the view from the southern part of

the Japanese American men's area, across the stream toward the east, framing the Compound V mess hall. Given these perspectives, Mr. Nishikawa clearly had access to the entire area of Compound V west of the stream, and views of the compounds to the north and east.

Nishikawa's detailed sketches date to April, May, and June 1943, providing details about the early months of camp operation. In one, a road through the internee compound and pathways to each barracks are paved with white coral and bordered with cobbles. Grass and palm trees have been planted in front of the barracks, but red dirt shows through. A large barrel or drum is next to a barracks, and a guard tower and security fences are visible in the distance. Another, labeled "Honouliuli camp mess hall, 6/15/43" shows the Compound V mess hall on the other side of Honouliuli stream. The mess hall dining area has open sides, and an American flag flies high on a flagpole in front of it. Laundry hangs on a makeshift clothesline in the foreground. A sketch labeled "Women's internment camp 4/10(?) /43" shows two barracks enclosed in security fencing, an open-sided tent, and the mess hall behind. Security fencing climbs the hill in the background. In another sketch, two men sit on the ground at a low table outside a barracks; each man is focused on his work. One sketch dated "4/10/43" shows the interior of the mess hall, with several people in the kitchen/serving area and several at tables or in line.

Historical Photographs

There are three collections of contemporary photographs of Honouliuli in the JCCH collection (Appendix C). The most widely used were taken by R. H. Lodge, a division overseer of the Oahu Sugar Company. His book, *Waipahu at War*, documents wartime activities that occurred on the Oahu Sugar Company land, and includes four photographs of the camp in operation. Ten additional Honouliuli photographs by Lodge were found at Hawai'i's Plantation Village in Waipahu. One of Lodge's photographs depicts a sign listing the 372nd Infantry, which means it must have been taken after May 1945, when that unit was assigned to Honouliuli. All of Lodge's photographs may have been taken late in the war, when security restrictions were relaxed. Most of the 14 photographs provide overviews of Honouliuli, showing a sea of tents, closely

spaced barracks, fences, guard towers, and other structures.

Lodge's camera must have been of very high quality: the resolution is so fine that one can zoom in and see details. The fences surrounding the prisoner areas were composed of round posts and 15 to 20 strands of barbed wire. The posts appear to be 8 feet high, and are topped with inverted-triangle extensions formed of lumber. These extensions supported additional sets of barbed wire, one set angled inward toward the camp and the other set outward, to inhibit climbing. Security lights with rectangular shades are located on the end of metal poles that extend an additional 4 feet or so above the fence at intervals. Guard towers have cabs that look to have been about 6 feet square situated on towers constructed of braced lumber. There were no catwalks, and shallow pyramidal roofs extend at least a foot beyond the cab walls. Photographs show most of the towers located just outside the perimeter security fence, but one in Compound III is located further from the fence, on the slope above the main road east of the stream, and others may have been similarly placed.

The Japanese Cultural Center of Hawai'i (JCCH) also obtained photographs from two private collections that provide additional clues about the historic appearance of the camp. Kendall Olsen provided over 80 photographs taken by her grandfather, Glenn Heern, who was an MP at the camp. Most of the photographs can be identified as having been taken at Honouliuli, and they provide a candid view of some of the ways the military police passed their leisure time at the camp. Several show details of Compound VI, including views of the laundry, barracks, shower building, and landscaping. Two show mess halls with open sides, rather than the walled sides the mess halls have in Lodge's photographs. Some show guards sitting with prisoners, and two show the cages used for disciplinary confinement.

There is an interesting distinction in the Heern collection. Many of the photographs are informal but posed portraits of individuals and groups; almost all the settings are casual, and all the subjects are Caucasian. But there are also photographs of African American soldiers, taken from afar, as the soldiers are standing in formation. The photographs suggest little interaction between Heern's unit and members of the African American segregated 372nd Infantry.

Elsie Hyde, whose father Koji Hashimoto had been interned at Honouliuli, provided JCCH and University of Hawai'i of West O'ahu (UHWO) with five photographs taken when her family had returned to visit Honouliuli in 1948. The five photographs show that by then all of the buildings had been removed but many concrete slab foundations and fence posts remained. Many of the Olsen photographs and all of the Hashimoto photographs provide enough visual information to determine where they were taken.

Finally, Falgout (2014) identified one photograph in the National Archives as being of Honouliuli. The photograph shows POWs lined up to the south of the Compound IV mess hall, disrobing.

Memory Maps

Three memory maps provide surprising detail about Honouliuli camp (Appendix D). Doris Nye's memory map depicts the main gate, the main road, a guard tower, and a steep embankment sloping down to the creek terrace, where her parents' tent was. She shows the Compound V mess hall with an open front, and an outhouse to the northwest of the mess hall (On the Army blueprints, this is shown as a water-borne latrine). A dentist office and PX (post exchange) store is on the west side of the stream, and POW tents to the north.

Yoshitami Tasaka's memory map identifies a POW compound north of the aqueduct, and the female Japanese section and the German and Italian section on the east side of the stream in Compound V. Tasaka labels each building on the west side of Compound V; they include an office, barber, carpenter's building, latrine, guard house, dispensary, PX, and 14 barracks. Tasaka was in barracks #14, at the south end of the compound, next to the military compound.

A third memory map, by Shuzo Takahashi, shows an overview of the entire camp, set in the gulch below the Waianae range. The entrance road takes off from a main east-west road at the south end of the gulch, where there are two towers and a guard house. A fence circles the entire camp high above the gulch, and there are two more fences and two more sets of gates, each with a guard house, along the entrance road before the road reaches a mess hall and barracks.

Honouliuli During World War II

Combined, the blueprint information and historic photographs indicate there were about 175 buildings (58 of them in the guard camp area), 14 guard towers, and over 400 tents (including single and double pyramidal tents) at the camp. Discrepancies in the historic resources suggest that the number and locations of buildings and tents changed through time, likely to meet changing needs as the camp population grew.

Compound I Prisoner of War Camp

This compound is located on the east side of the stream at the far north end of the camp (Figure 4.4). Here, the U.S. Army blueprints depict a mess hall near the southern boundary of the compound, east of the main road. Just north of the mess hall, the road forks, with one branch heading northeast, the other northwest. To the northwest, near the end of the west fork of the road, is a shower building flanked on the north and south by eight pit latrines (four are noted as "to be removed" in the key). There are two cesspools, one serving the mess hall and the other the shower.

The historic photographs indicate that Compound I was divided into two separate areas (Figure 4.5). The northernmost area extends north and east from the showers and latrines; the southernmost area of Compound I extends north and west from the mess hall. The northern area of the compound, clearly visible in one of Lodge's photographs, has two parallel fences enclosing an area estimated to be about 350 by 500 feet. Two guard towers are visible at the far corners, and two more towers are likely, out of the photograph frame. The photograph shows two shower buildings flanked by four pit latrines, two on each side. Other buildings visible within this area include a large structure (estimated to be about 20 by 100 feet). The 120 single-peak tents and two double-peak tents visible in the photograph are distributed in two groups: there are nine rows of 11 single-peak tents each located west of the large structure, and four or five rows of tents southeast of the large structure, each row with three to five tents (some single, some double). The compound is not flat: the tents and one barracks building at the right foreground of the photograph (which would be the east side of the compound) are located on a high

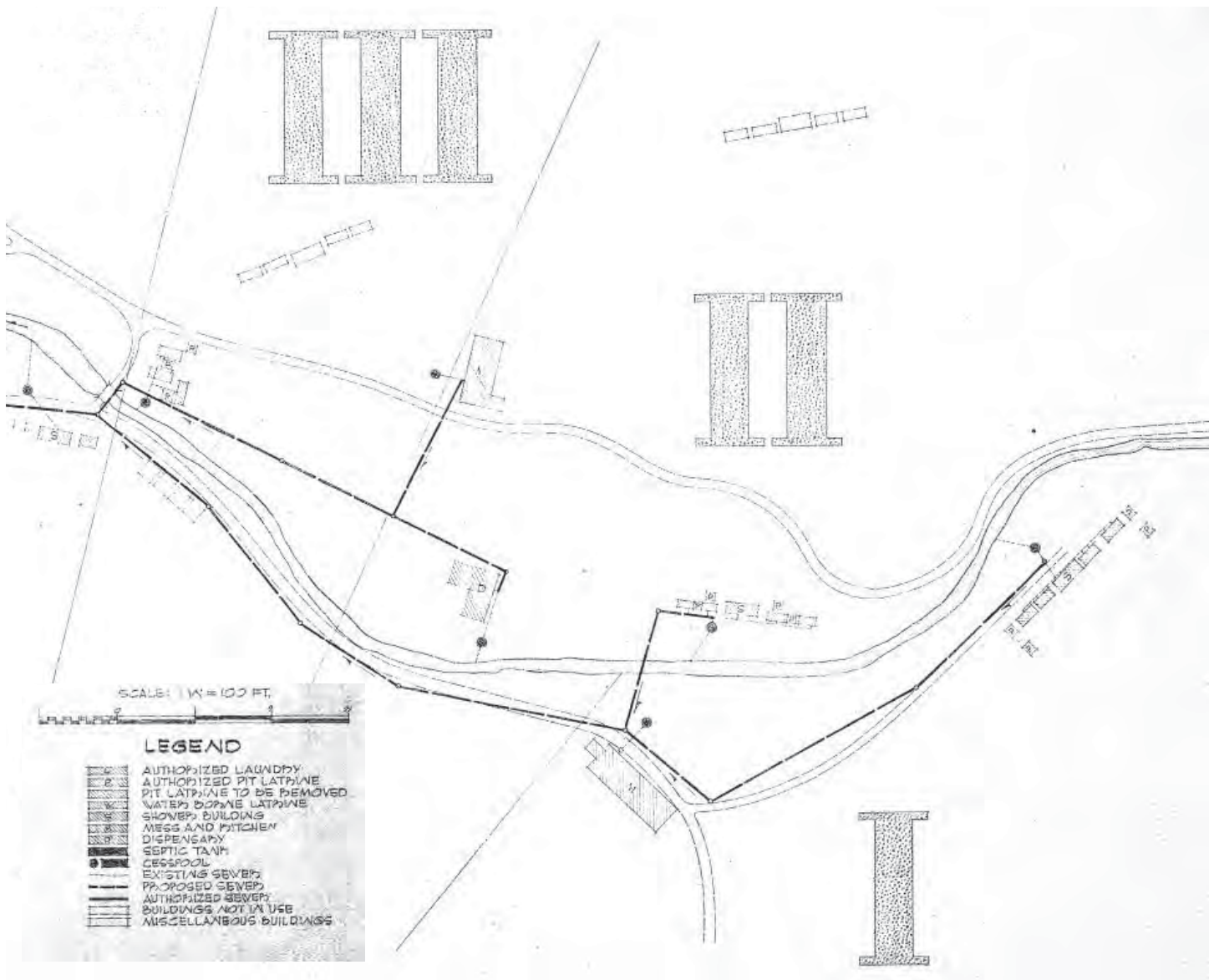


Figure 4.4. Portion of U.S. Army blueprint, showing Compounds I, II, and III (Schofield Barracks).

terrace supported by a rock retaining wall. A shack visible in the photograph to the northwest, along the stream, may have been part of the POW camp or perhaps unrelated. Given the number of tents, this part of Compound I could have housed up to 1,000 prisoners.

The southern section of Compound I, on the west side of the mess hall between the stream and the road, is shown only in the distant background of other photographs, but it appears to have had approximately 26 double tents and four single tents, potentially enough for almost 450 prisoners. In the photographs there are two buildings visible north of the road.

Much farther to the east the 1943 map shows a group of five buildings in a row, in the same configuration as shower buildings and four pit latrines elsewhere in the camp. There are no photographs of this area, and

the buildings are not depicted on the Sanitary Sewer System blueprints. It is not known if the buildings were built, built and not used, or simply represent a cartographic mistake. On the 1951 aerial photograph, there appears to be a light-colored shape in the area, which could be a shower building foundation.

Compound II Prisoner of War Camp

The U.S. Army blueprints show a mess hall, a dispensary, and a group of five buildings including a shower building, two water-borne latrines, and two pit latrines in Compound II (see Figure 4.4). Another shower building and four latrines are depicted on the map and keyed in the legend as “buildings not in use.” There are two cesspools, one for the shower and latrines and one for the dispensary. The mess hall cesspool is located to



Figure 4.5. Compound I view toward west (R.H. Lodge photograph).

the south of the mess hall, within Compound III. The historic photographs show two guard towers, an additional building, over 50 single-peak pyramidal tents, and four double tents.

In historic photographs, Compound II is in the background, but it is clearly surrounded by a double fence (Figure 4.6). The Compound II mess hall is separately fenced. One of the buildings noted as “not in use” is only partially visible in any of the photographs, but the rest of the buildings depicted on the blueprints are shown. There is also an additional building south of the dispensary and a small building adjacent to the southeast corner of the mess hall. The mess hall appears to be longer in the photographs than on the blueprints (Figure 4.7). Three guard towers are visible in the photos, one west of the latrines, one just east of the Compound II mess hall (Figure 4.8), and one

south of the Compound I mess hall. At least 69 single-peak tents and 12 double-peak tents are visible. The double tents flank the dispensary and continue into Compound III, suggesting these tents were for medical cases and served more than one compound.

Compound III Prisoner of War Camp

The U.S. Army blueprints show a group of five small buildings at the south end of this compound (see Figure 4.4). Two are labeled as pit latrines and the other three buildings are likely toilets or showers, since they seem to be connected to the adjacent cesspool. As at Compound II, there is another group of five buildings (a shower building and four pit latrines), keyed as “buildings not in use.” The blueprint also depicts four barracks-size buildings on the east side of the stream,



Figure 4.6. Compound II in the background, Compound III in the foreground (R.H. Lodge photograph).



Figure 4.7. Compound II mess hall (Glenn Heern photograph, JCCH).



Figure 4.8. Compound II, view toward northwest (R.H. Lodge photograph).

east of the road. Historic photographs place these four buildings outside of the compound fence, indicating they were used for military housing, administration, or supplies.

Historic photographs indicate this compound was surrounded by a double fence. The “not in use” buildings appear to be less regularly placed than shown on the blueprints; they are not fenced and there is an additional building at the same location. About 22 double tents and one single tent are visible, in two north-south rows. A third row of tents to the east would be located in Compound III as defined by the blueprints, but fences visible in one of the photographs indicate this row of tents was actually related to the Compound II dispensary. No mess hall is indicated in this compound, either on the blueprints or in historic photographs.

Another interesting feature in the historic photographs is the construction ditch for the pipe that takes wastewater from the dispensary in Compound II south to the septic system in Compound III. Clearly, construction continued while the camp was occupied, corroborating the inference that the blueprints date to sometime during the camp occupation and reflect the need for better waste disposal than originally planned.

Compound IV Prisoner of War Camp

The blueprints depict a mess hall, a shower building, two pit toilets, two other buildings, and two cesspools in Compound IV (Figure 4.9). All but one pit toilet and the cesspools are east of the road, and there are no structures depicted west of the stream. However, the historic photographs indicate several additional buildings and tents: there are four barracks west of the stream, and an additional building and 30 tents,

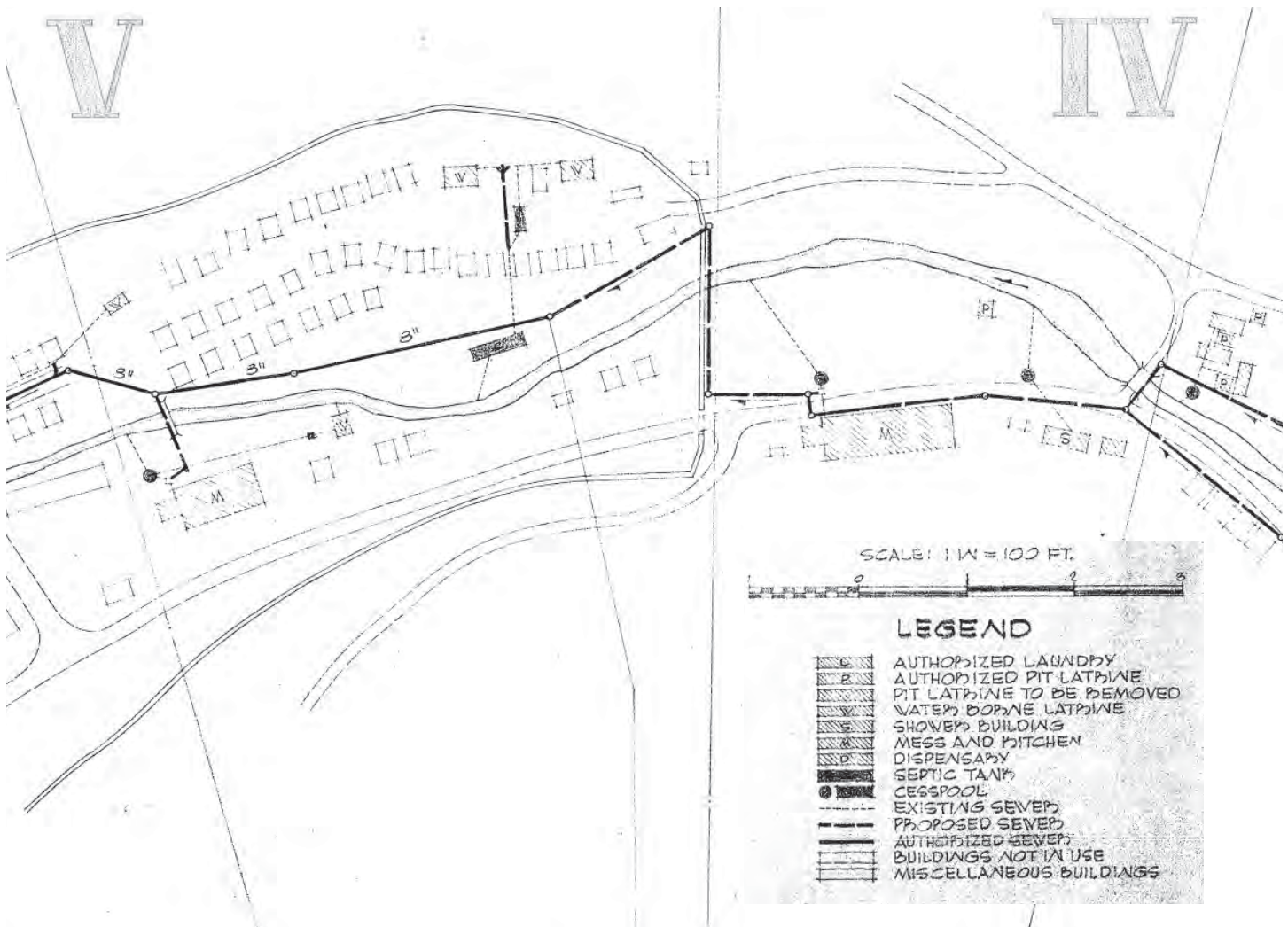


Figure 4.9. U.S. Army blueprint showing Compounds IV and V (Schofield Barracks).



Figure 4.10. Compound IV, view toward southwest. Mess hall in foreground (Glenn Heern photograph, JCCH).

arrayed in four rows, east of the stream (Figure 4.11). The barracks, perhaps to house POW officers, may have been moved here from the internee compound. Other features within Compound IV visible in the historic photographs include the mess hall (Figure 4.10), two possible pit latrines, one on either side of the stream; two footbridges; and two incinerators south

of the mess hall (Figure 4.11). There are two guard towers, one on the west side and one at the north-east corner, and a sentry post along the road near the southern boundary of the compound. The compound is surrounded by a single fence, and divided into sub-compounds by fences between the tent area and the barracks and around the mess hall. Two other Compound IV features are shown in Glenn Heern's photographs: a gate and sentry post along the main entry road, at the sound end of the compound (Figure 4.12), and detention cells (Figures 4.13-4.14).

Compound V Internee Area

Although the U.S. Army blueprint labels Compound V as another "prisoner of war" compound, internee art and oral history clearly identify this as the area where residents of Hawai'i, including U.S. citizens, were imprisoned (see Figure 4.9). Located on both sides of the stream between the aqueduct and the Guard Camp Area (Compound VI), the internee compound is



Figure 4.11. Compound IV, view toward southeast. Mess hall building on left, POW tents in foreground (detail of R.H. Lodge photograph).



Figure 4.12. Gate at south end of Compound IV (Glenn Heern photograph, JCCH).

bounded on the west by the Waiāhole ditch and on the east by the main camp road. The blueprints depict the most structures west of the stream, with three rows of buildings between the stream and the ditch. Thirty-two of these are barracks-size, three are water-borne latrines (two at the north end of the compound and one at the south end), and another, connected to the sewer system, may be a laundry building. There are three other buildings depicted, one near the north boundary of the compound as shown on the blueprint, above the ditch. The blueprints also depict two septic tanks and sewer pipelines that extend the length of the compound, west of the stream, to connect the shower and latrines to the septic system. To the east of the stream the blueprints depict the mess hall near the southern boundary of the compound, two barracks-size buildings and a smaller building near the aqueduct, and three barracks-size buildings near the mess hall. Two septic tanks and a cesspool are also depicted. The blueprints also show a footbridge across the stream near the mess hall.



Figure 4.13. Compound IV with detention cells in foreground (Glenn Heern photograph, JCCH).

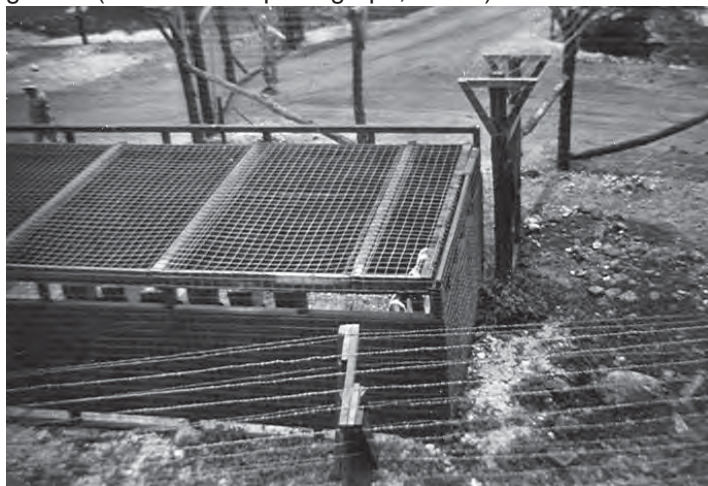


Figure 4.14. Close view of detention cell taken from guard tower (Glenn Heern photograph, JCCH).

Four distinct areas are described in historic accounts. The area west of the stream contained the barracks for the Japanese American men (Figures 4.15-4.18). According to former internee Yoshitami Tasaka (2004), this area also included a post exchange, dispensary, guard building, barber, and carpenter shop. The area east of the stream was divided into three fence-enclosed areas, one for the Japanese American women (at the north end) one for German Americans (central), and one for the mess hall (at the south end). Doris Nye, who as a young teenager visited her German American parents in the camp, remembers that they had a tent on the east side of the stream; a post exchange and a dentist were located on the west side.

Several changes are apparent in the historic photographs, supporting the idea that they were taken late in the camp's occupation. Six of the buildings depicted on the blueprints west of the stream were apparently removed in order to build a fence to create a separate compound in the southern portion of Compound V. This newly defined compound, with five barracks and one latrine, may have held the last 50 civilian internees.

The larger compound north of the fence has ten tents in one photograph, but only eight tents in other photographs. The smaller internee compound included its own latrine and shower building, likely a later addition.

Buildings may have been added to the women's section of Compound V as well. Dan T. Nishikawa's drawing of the women's compound, dated April 1943, shows one single-peak tent and two barracks buildings (Figure 4.18). Nishikawa's view was to the northeast. One of Lodge's historic photographs, taken from the east toward the west, shows two buildings and some tents on the near side, where the European-American's compound would have been, and small structures on the other side of the stream (Figure 4.20). But Lodge's photograph that provides a more complete view of the east side of Compound V (see Figure 4.17) shows four buildings. By the time of Lodge's photographs, the east side of Compound V had been converted to house POWs instead of civilian internees.

All together, discrepancies between the blueprints and the photographs indicate there were six barracks removed from the Japanese American men's part of the compound and two barracks removed from the Japanese American women's compound. Four of these barracks may have ended up in Compound IV, as mentioned above, to house POW officers, and one may have been moved a short distance south: the blueprint shows three barracks-sized buildings within the European-Americans' part of the compound, but the photographs show four.

The mess hall, which has enclosed sides in historic photographs, was also modified. Nishikawa's drawing and Nye's memory map depict it as having an open-air dining room. In fact, it appears that by the time of the photographs, artists documenting real-life scenes would not have had the same subjects for their work: opaque screening, apparently made of tarps or fabric, was hung on the internal division fences to block the view between the compounds. However, access between the areas of Compound V does not appear to have been greatly restricted when the photographs were taken: prisoners are using the aqueduct to cross the stream, and a second footbridge is visible about 100 feet south of the aqueduct.

In the photographs, the Japanese American men's area



Figure 4.15. Compound V north end (Nishikawa collection, JCCH).

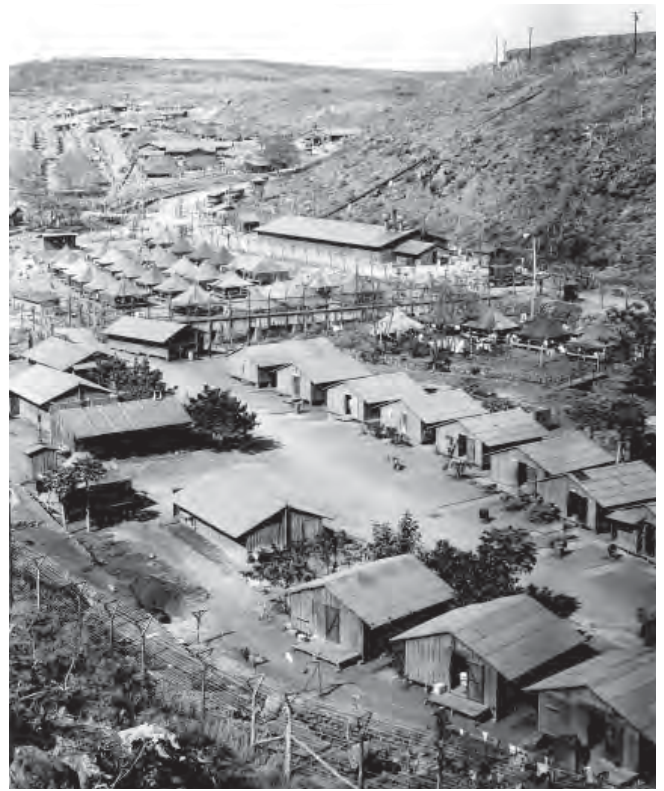


Figure 4.16. Compound V north end and center (R.H. Lodge photograph).



Figure 4.17. Center of Compound V, internee mess hall visible on right. The European American section would have been across the creek to the left of the mess hall. By the time of this photograph, ca. 1945, almost all of the internee compounds were being used to house POWs. Only the area to the right of the fence, mostly out of view, still held Japanese Americans (R.H. Lodge photograph).



Figure 4.18. South end of Compound V in foreground (detail of R.H. Lodge photograph).

and the European-Americans' area contain the same type of barracks, and both areas have neatly planted shrubs and trees. Internee barracks are wooden buildings on post-and-pier foundations; some of the piers appear to be of formed concrete, others simply rocks. The low-pitched end-gabled roofs are sheathed with tar paper; the roofs extend over the sides of the buildings, sheltering openings or windows that extend along the entire side under the eaves. In one of Dan T. Nishikawa's drawings, this opening appears screened. Most of the siding at the gable ends appears to be vertical boards estimated to be about a foot wide; some of the sides appear sheathed with the same wood, while other sides look like they are sheathed with plywood or some other composite. One barracks appears to be sided with tarpaper. One of the barracks west of the stream has a dark cross on a light background painted on the end by the door, marking the dispensary that Mr. Tasaka remembered. One building at the south end of the compound is longer than shown on the blueprint.

The photographs indicate that the larger of the two septic tanks depicted in the blueprint is an above-ground structure. A building has exposed sewer pipes on the end, a connection not shown on the blueprint. Another possible change or addition to the waste disposal system is suggested in one of the historic photographs in which a man is standing inside a small tarpaper-sided enclosure with no roof. The structure may have been a pit toilet or shower, although neither is depicted on the US Army blueprints in this area. One of the Army reports indicates that the civilian internees had hot showers, unlike the POWs, and the photographs show a building in Compound V that looks like the water heater building in Compound VI. A double fence, or a fence and a hedge, separate the south boundary of the compound from the Guard Camp area.

The maximum Japanese American male internee population at one time is estimated to have been 340.



Figure 4.19. Compound V Japanese American women's compound, view to northeast (Nishikawa collection, JCCH).



Figure 4.20. Compound V east side, view to northwest from main road (R.H. Lodge photograph).

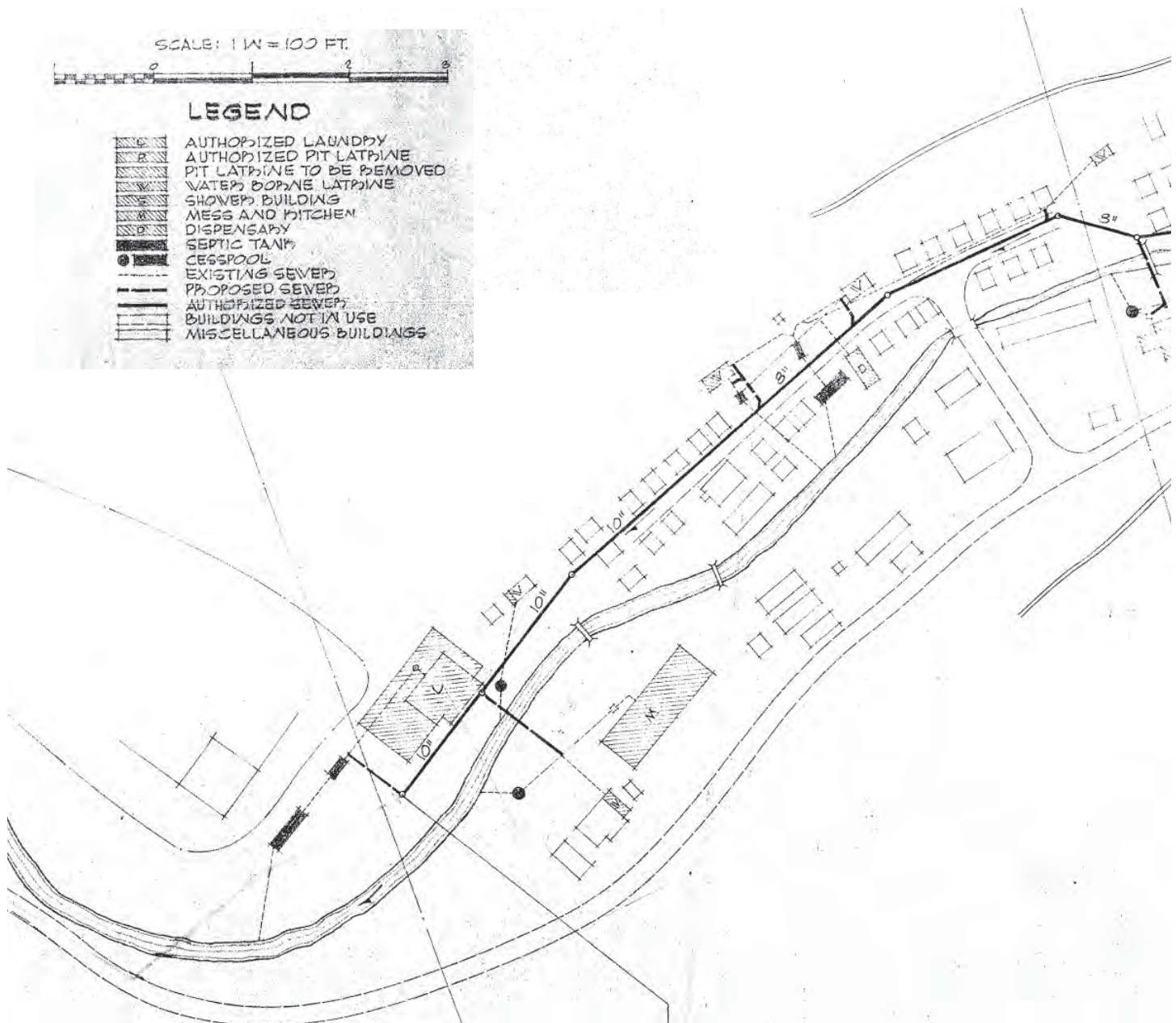


Figure 4.21. U.S. Army blueprint showing Compound VI (Schofield Barracks).

Given 30 barracks (assuming the dispensary and at least one other barracks-sized building housed no residents), each structure would have held eleven or twelve internees. Some of the features visible in the historic photographs were added by the internees or POWs: variously sized stoops are visible at some of the cabins at the west gable doors, and clotheslines are prominent in the “back yards” of several of the barracks. In at least two cases, a tarp or other large and flexible material has been fixed to the roofs of two adjacent barracks to create shaded areas between. The dirt road between the two rows of buildings and paths to each barracks are discernible in the photographs as lighter than the surroundings probably because of the coral gravel, and

one of the drawings by Dan T. Nishikawa shows that paths to each building were lined with rocks. In the photographs several 55-gallon drums occur at intervals between the barracks and the road.

The differences between Dan Nishikawa’s drawings, the blueprints, and the historic photographs of Compound V suggest that by the time the R.H. Lodge photographs were taken, the entire area east of the stream had been converted for prisoners of war, as well as the northern portion of the compound west of the stream. The photographs were most likely taken after most of the Japanese Americans and European-Americans had been released.



Figure 4.22. Compound VI, view to southeast (R.H. Lodge photograph).

Compound VI

Guard Camp Area

The Guard Camp area had 58 buildings, and three to five pyramidal tents (two of the tents may be double-sized). Building sizes, layout, and historic photographs indicate that the east side of the stream was the administration area and the west side was primarily housing.

The U.S. Army blueprints show a mess hall and 15 other buildings in the administration area on the east side of Honouliuli stream within Compound VI (Figure 4.21). Other than the mess hall, none of the buildings are labeled. In the “authorized” sewer system, the mess hall and one other building are connected to an existing cesspool, which would be tied into the proposed sewer system. Two of the buildings are the same size as the barracks across the stream in the staff housing area and in the internee areas, but most are much larger, suggesting use as offices, automotive repair and carpenter shops, and warehouses. No buildings are shown on the blueprints east of the entrance road, but five are visible in historic photographs (Figure 4.22). The historic photographs also show additional buildings as well as tents (Figure 4.23). For example, at the south end of the administration area there are three tents

and three additional barracks-sized buildings (perhaps some of the eight removed from Compound V). In the central area there are four additional buildings. The headquarters building depicted close-up in one of the Lodge photographs and a flagpole can be identified at the north end of the administration area (Figure 4.24). Large motor pool sheds are also apparent.

In the staff housing area on the west side of the stream, the U.S. Army blueprints show 36 buildings, most lining both sides of a road that parallels the stream (Figures 4.25-4.28). A road bridge and two foot bridges connect the staff housing area to the administration area on the east side of the stream. Buildings identified on the blueprints include a laundry, a dispensary, and three water-borne latrines. Based on their size, 26 of the building are apparently barracks or officers’ living quarters. Four other buildings are unidentified; typically one could expect a post exchange or canteen, barber shop, classroom/library, gymnasium, theater, and chapel at a military camp of this size and type. Two of the latrines share a septic tank system and the other is connected to a cesspool.

Historic photographs show three additional barracks



Figure 4.23. Compound VI mess hall (Glenn Heern photograph, JCCH).



Figure 4.24. Headquarters building in foreground with flagpole. Vehicle sheds visible in mid-ground (Glenn Heern photograph, JCCH).



Figure 4.25. Guard barracks (Glenn Heern photograph, JCCH).



Figure 4.26. Guard barracks (Glenn Heern photograph, JCCH).

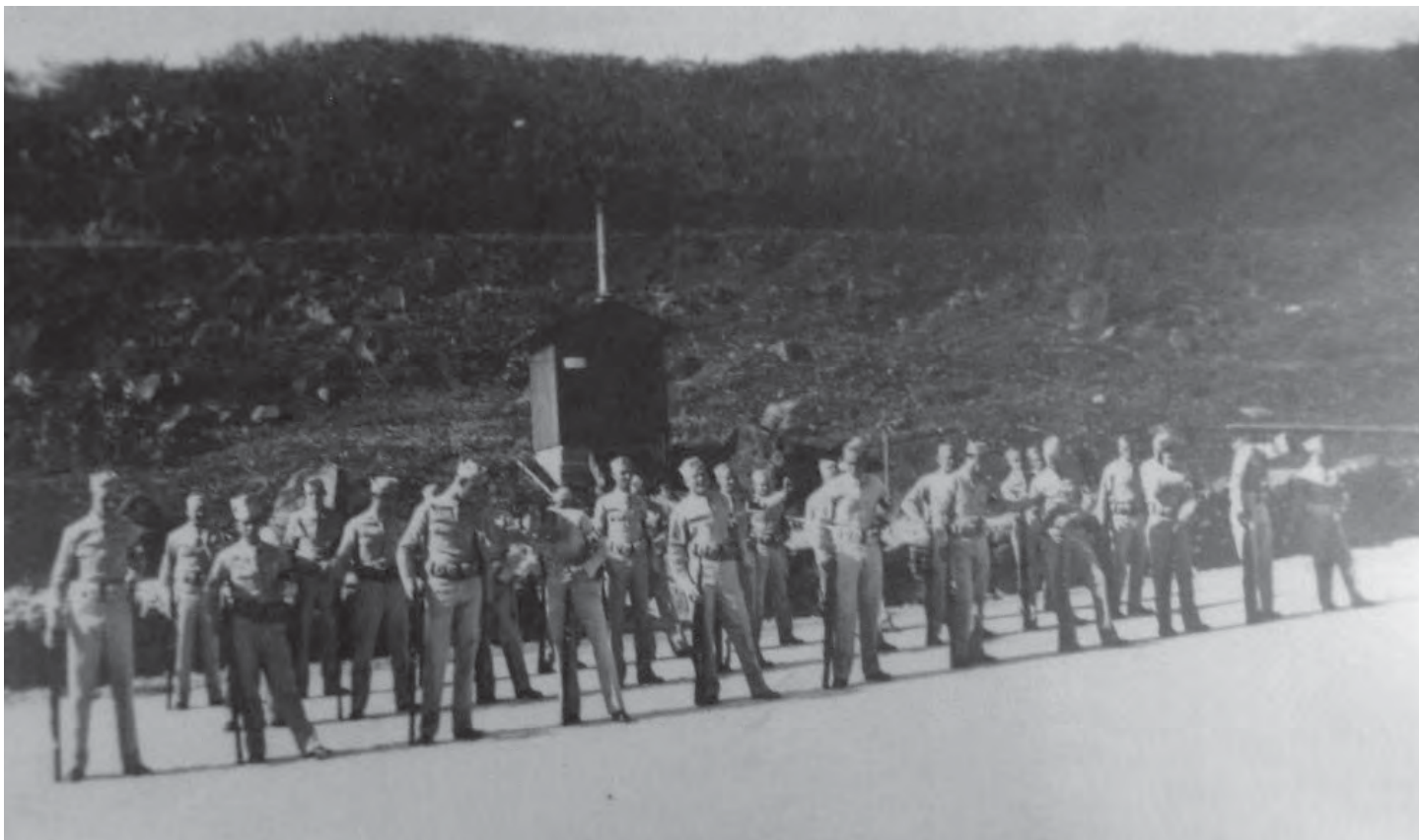


Figure 4.27. Members of the 372nd Infantry in formation on the parade ground in front of the water heater building (Glenn Heern photograph, JCCH).



Figure 4.28. Guard Tower at the north end Compound VI (detail of R.H. Lodge photograph).

and a tent. Small trees and shrubs grow around the barracks, and most have well-defined paths from the front door to the dirt road. There is a guard tower visible at the northwest corner of the Guard Camp.

Compound VII **“Proposed” Prisoner of War Camp**

Stretching across both sides of the stream, this compound is labeled as “Proposed Prisoner of War Compound VII” on the U.S. Army Sanitary Sewer System blueprints. The blueprints show no buildings or tents, but do depict two or three septic tanks and a baseball field on the west side of the stream south of the Guard Camp housing area laundry building (Appendix A). A line similar to that defining the baseball field outlines a large area on the east side of the stream, possibly indicating this area was cleared for future use. Penciled in on the blueprints (and hard to see or photocopy) is a sewerline that bypasses the septic tanks, crosses the stream, and follows the entrance road south. The blueprints depict the main road as splitting within this compound, with one branch following the curve of the stream and the other cutting across the terrace to the east before rejoining the stream-side alignment.

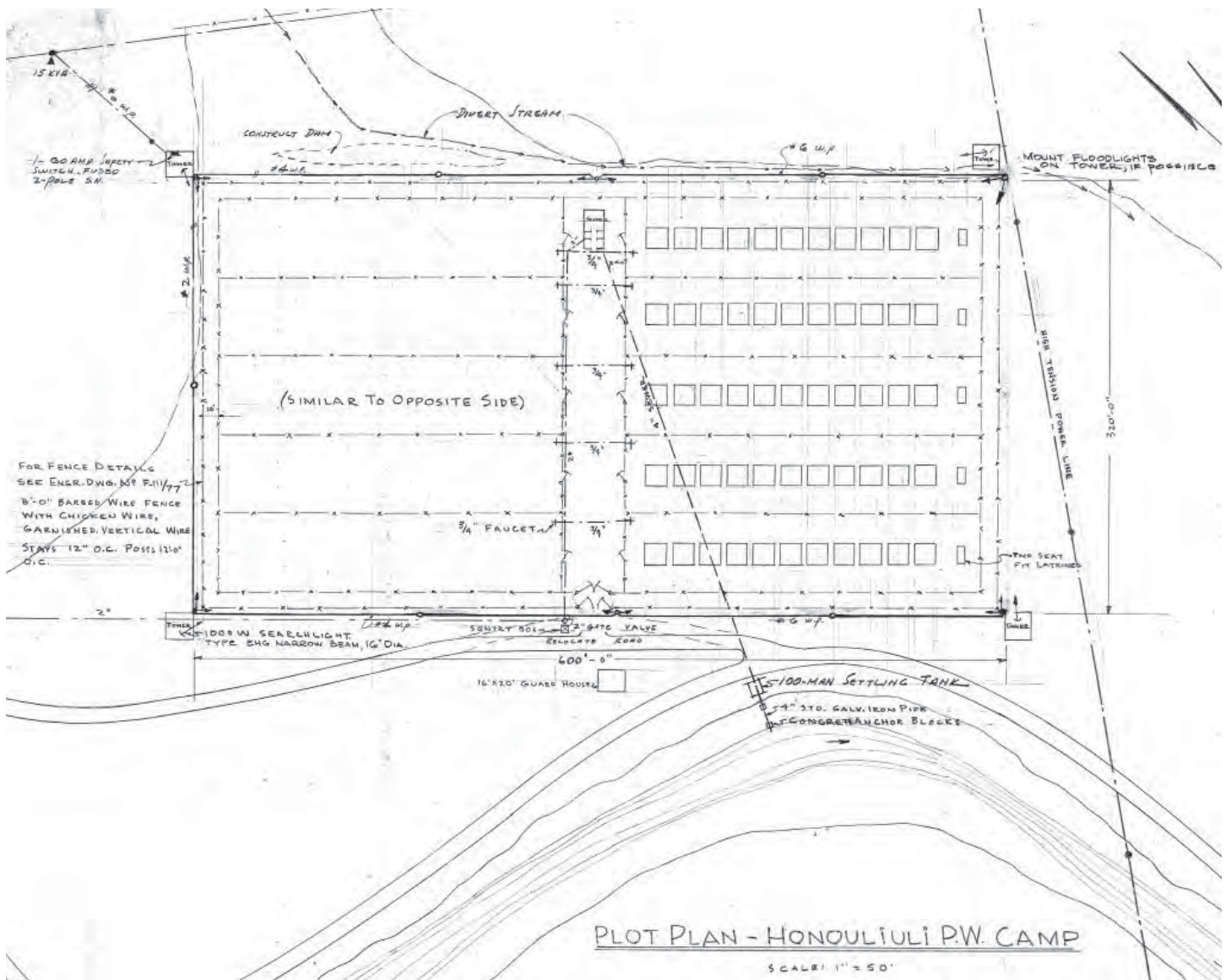


Figure 4.29. U.S. Army 1945 blueprint of disciplinary compound recorded as Compound VII (Schofield Barracks).

The 1945 Disciplinary Compound blueprint indicates this compound was enclosed by a security fence 600 feet by 320 feet in size (Figure 4.29). Running down the center of the compound from the entrance gate on the southwest side to the shower building was an open area estimated to be about 50 feet wide and 320 feet long; on either side of this open area were the tents, in two sections, each section with five rows of eleven tents. Each row of tents had a water spigot near the center and a pit toilet near the perimeter fence, and each row of tents was completely fenced.

One of Lodge's historic photographs shows that the proposed POW compound was indeed built, and near as can be judged from the photograph, very much in accordance with the blueprint specifications (Figure 4.30). However, the fences between the tent rows on the blueprint are not visible in the photograph, and in

fact the way the people in the photograph are milling about both inside and outside the compound, security may have been relatively lax by the time the photo was taken. At least 150 people can be counted in this photograph, more than in any of the other historic photographs that have been found of the camp, but far short of the 880 prisoners it was designed to hold. Based on roads that match the blueprint and on the terrain in the background, the photograph was taken from the top of the west slope of Honouliuli Gulch, with the view toward the east. Outside the security fence is a gable-roofed building with a shed roof over the door on the north end, located where the guard house is depicted in the blueprint. The guard hut shown on the blueprint is not visible, but there is a rectangular structure (possibly a recycled railroad car) across from the guard house, and two large tents to the northeast of the rectangular structure.



Figure 4.30. Compound VII, view to east (R.H. Lodge photograph).

Compound VIII

Proposed Sewer Treatment Plant

This area is noted on the U.S. Army blueprint as “proposed sewer treatment plant” (Appendix A). No buildings are clearly depicted, however there are faint penciled-in structures and notations (possibly erased on the original). One structure next to the plantation railroad spur may be a warehouse, and another at the end of the penciled-in sewer line and railroad spur may be part of the proposed sewer treatment plant. Further south, between Compound VIII and the main highway, is an area labeled as “Proposed Sewer Outfall Alternative A.” It is not known if any of these facilities were built; none is included in the area mapped as the military installation at Honouliuli in *Waipahu at War*. No evidence of a sewage treatment plant was encountered during archaeological reconnaissance in this area. No archaeological reconnaissance has been conducted of the areas where gates and guardhouses are shown along the entrance road in former internee Shuzo Takahashi’s memory map (Figure 4.31).

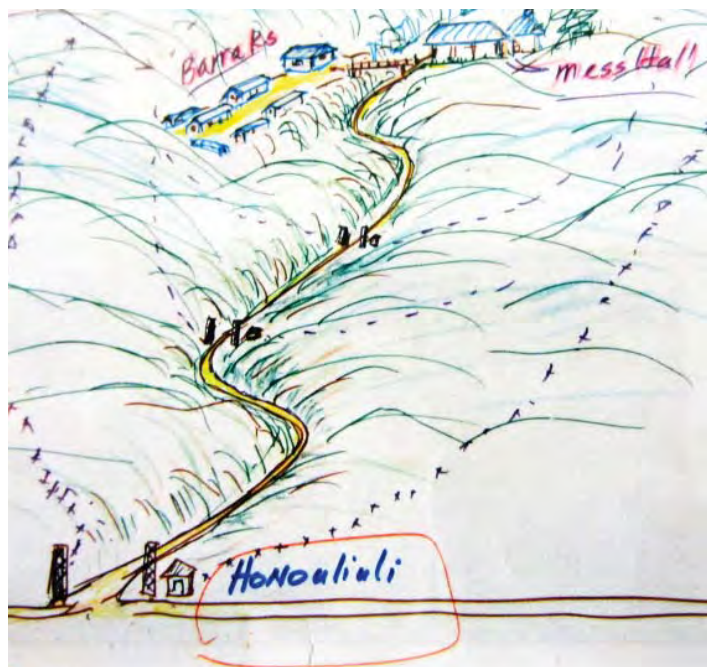


Figure 4.31. Takahashi’s memory map of the Honouliuli entrance road (Takahashi collection, JCCH).



Chapter 5

Results

Between 2006 and 2017, 215 features were recorded during archaeological work at Honouliuli. Of these, 175 are considered directly associated with the World War II internment and POW camp, either because they are related to construction specifically tied to the camp, or because they were already present and adapted to the World-War-II use. The 40 features that are not associated with the camp include two ditch systems that pre-date the camp as well as post-war agricultural features, vehicles, and metal power poles, and 17 features considered “modern.”

Below, features more than 50 years old are described by compound, as designated on the undated U.S. Army blueprints. Compounds I-IV extend from the northern boundary of the site south on both sides of the stream 2,700 feet to the Waiāhole Water Company aqueduct. Forty-seven features were recorded in this area, which encompasses about 45 acres: five in Compound I, thirty in Compound II, nine in Compound III, and three in Compound IV. The internee area (Compound V) lies on both sides of the stream, extending south about 450 feet from the aqueduct to the northern boundary of Compound VI, the guard camp area. Twenty-nine features were recorded in the 10-acre internee area. The guard camp area (Compound VI), just southeast of the internee compound, includes the administration and the staff housing areas. Sixteen features were recorded in the administration area, which encompasses 8 acres on the northeast side of Honouliuli stream from an abandoned chicken farm to the northwest approximately 1,000 feet. Sixty features were recorded in the 10-acre staff housing area, located across the stream from the administration area. Twenty-four features were recorded in Compound VII, the last-built prisoner-of-war compound, depicted as “proposed” on the U.S. Army blueprints. Two features were recorded in Compound VIII, the compound where a sewage treatment plant was proposed.

Descriptions of 11 features that cross more than one compound follow, under the Linear Features section. The “Modern Features” section includes 17 features that were used or modified within the last 50 years. The “Post Features” section describes the results of a fence

post survey conducted in 2014, in which 25 features were recorded. Maps depicting the location and extent of all recorded features are included as Appendix B.

Compound I Prisoner of War Camp

This compound is located on the east side of the stream at the upper end of the camp (Figures 5.1 and 5.2). According to Lodge (Gordon 1981), the far north end of this compound consisted of cane fields before the war, and the 1951 aerial photograph (as well as irrigation troughs found in the area) indicates it was cultivated after the war, too. During the 2006-2014 fieldwork, five features were recorded, as well as three sections of displaced 2-inch-diameter water pipe, one in the stream bank (5 feet long) and two in the stream 180 feet downstream (12 feet and 6 feet long) (Figure 5.3). Additional features are undoubtedly obscured by the dense Guinea grass and kiawe trees.

Feature I-1: Pipe (Figures 5.4 and 5.5)

This feature is a possible sewage outlet pipe, which may have carried overflow from a cesspool shown on the U.S. Army blueprints as 750 feet to the east. The concrete pipe is 7 inches in diameter, extending slightly from the east bank of the stream, about 2 feet 6 inches below the ground surface. It is located just across the stream from Feature II-5, another concrete pipe of the same diameter. It was recorded in 2008.

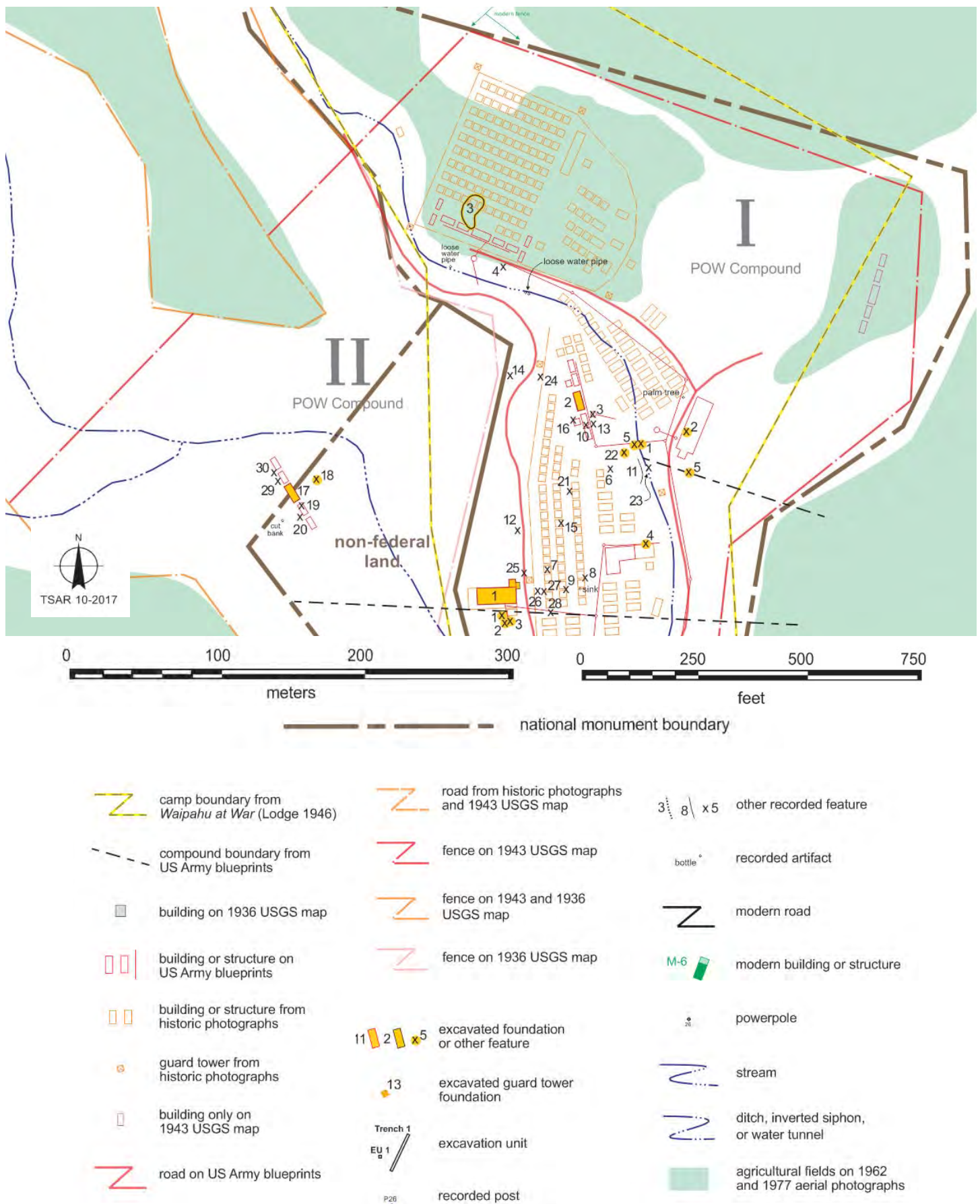


Figure 5.1. Compounds I and II archaeological features.



Figure 5.2. Overview of Compound I, view to south (2009).

Feature I-2: Mess Hall Location (Figures 5.6 and 5.7)

The location is marked by a tall landmark palm tree, possibly dating to the World War II era. Historic photographs show obviously planted palm trees outside of barracks in Compound V, and the palm tree in Compound I may have been planted, as well. According to the U.S. Army blueprints, it is located near what would have been the northwest corner of the Compound I mess hall. The palm tree was noted as likely near the mess hall in 2008, and the area was probed with a steel soil probe in 2009 and 2014. Due to the dry and compact sediments, probing in 2009 did not extend below 2 feet. Probing in 2014, when the soils were saturated and more pliable, struck a solid surface at a depth of 3 feet in one area, but it could not be determined if this was a rock, concrete, or compacted soils.

Feature I-3: Concrete Trough (Figures 5.8-5.10)

This feature consists of at least nine segments of open-ended concrete troughs and trough fragments, in four

concentrations. Each complete trough is 36 inches long and 1 foot 1¼ inches deep. The troughs flare outward slightly, so that the bottom of each measures 1 foot 4 inches and across the open top they measure 1 foot 6 inches. The floor of each trough slopes outward toward both sides from a raised center. At some of the ends, there is evidence of a petroleum-based seam sealant or adhesive on the interior, suggesting that the troughs were once connected end-to-end and used to convey liquid. One of the trough segments has two square outlet holes, one in each side wall at one end; one of the square holes is closed by a metal strip. A piece of shaped and folded sheet metal (see Figure 5.9) and other metal fragments at the feature may also be related to the troughs. The troughs and fragments are spread out in an area about 30 feet east-west by 60 feet north-south in size, extending north from the location of a shower building as depicted on the U.S. Army blueprints. A feature drawing of a sample trough segment was completed in 2009. This feature and Feature I-4, below, would be related to post-war cultivation.



Figure 5.3. Water pipe (isolate) in stream bed within Compound I (2009).



Figure 5.4. Feature I-1, concrete pipe (2008).

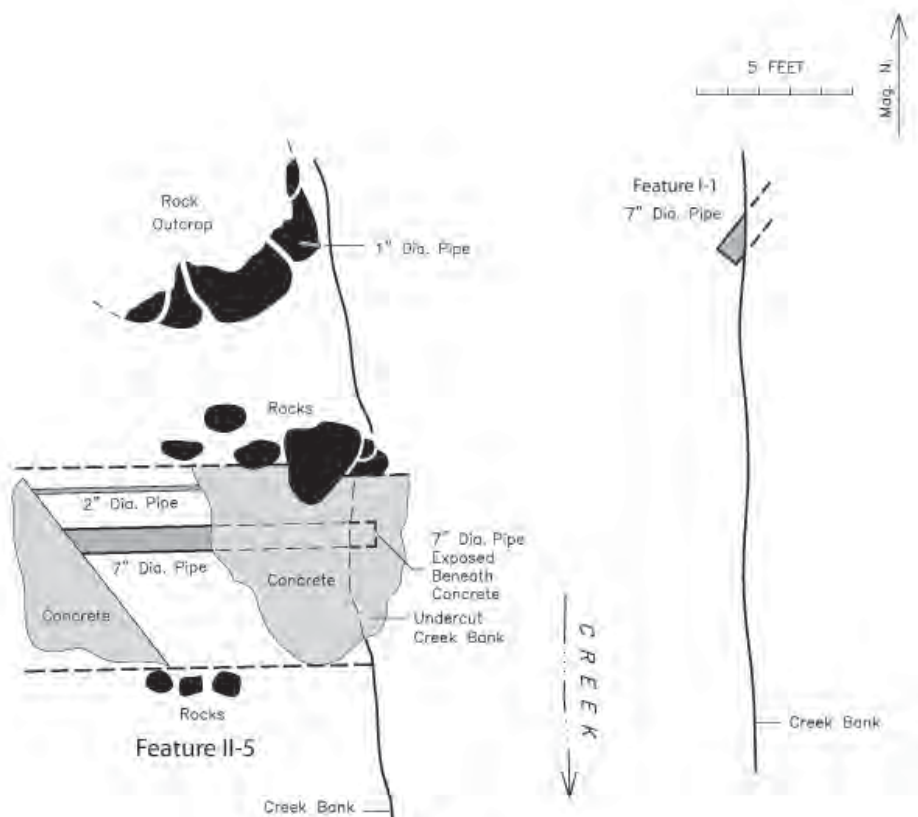


Figure 5.5. Features I-1 and II-5, concrete and metal pipes.

Feature I-4: Concrete Trough Fragments (Figures 5.11 and 5.12)

Also encountered in 2009, this feature consists of several additional concrete trough fragments, located about 150 feet southeast of Feature I-3 and partially buried.

Feature I-5: Garbage Incinerator (Figures 5.13-5.21)

Discovered in 2010, this feature had been cleared of vegetation, photographed, and plotted on the site map, but feature drawings had not been finished. The incinerator was completely obscured by new vegetation growth at the start of the 2011 field work. Vegetation was again removed so that scale drawings of the



Figure 5.6. Feature I-2, palm tree at Compound I mess hall location (2008).



Figure 5.7. Feature I-2, searching for mess hall foundation (2009).

incinerator could be completed. The incinerator is about 12 feet in length, over 4 feet wide, and 3 feet tall, with walls of poured concrete about 4 inches thick. Although the Compound I incinerator is similar to the incinerator previously recorded in Compound III (Feature III-1), its concrete is broken in several

places so that the brick-lined combustion chamber lies in pieces on the ground, probably from purposeful demolition at the end of the camp occupation. In other respects, Feature I-5 is more intact than Feature III-1. A heavy-gauge sheet metal frame lies alongside the concrete; it appears to have functioned as a liner for the combustion chamber, dividing the chamber into three sections. The chimney end is still lined with fire bricks, and a broken and cracked concrete collar holds a remnant of the stove pipe. Several fire bricks are stamped “DIABLO,” a brand made by the Stockton Fire Brick Company of Stockton, California, from 1935 to 1942 (Gurcke 1987:224-225). At least one is stamped with “STOC[KTON],” made by the same company from 1927 to 1942 (Gurcke 1987:302-303). The chimney of this incinerator is visible in the distance in one of R.H. Lodge’s historic photographs, and it appears to be similar to the two south of the Compound III mess hall photographed by Lodge.

Compound II Prisoner of War Camp

Compound II is located west and south of Compound I, near the north end of the camp (Figures 5.22 and 5.23; see Figure 5.1). In U.S. Army blueprints as well as in historic photographs, almost the entire compound is west of the stream, but one of the three guard towers within the compound and an access road were located to the east. The blueprints show a mess hall, a dispensary, and a group of five buildings including a shower building, two water-borne latrines, and two pit latrines. Another shower building and four latrines are depicted on the map and keyed in the legend as “buildings not in use.” The historic photographs show over 50 single-peak pyramidal tents and four double tents, all surrounded by a double fence. The Compound II mess hall is separately fenced, and there is a guard tower just to the east. Although much of this compound is overgrown with Guinea grass, 30 features and several artifacts were found here, including foundations for a mess hall and two shower buildings, other structural remains and debris, an inscription, and water and sewage system remains. The mess hall was recorded and mapped in 2010; in 2014, we searched for the guard tower footings, but were not able to find them in the thick Guinea grass.

The western portion of this compound remains private



Figure 5.8. Feature I-3, concrete irrigation trough (2009).



Figure 5.9. Feature I-3, Folded metal object (2009).

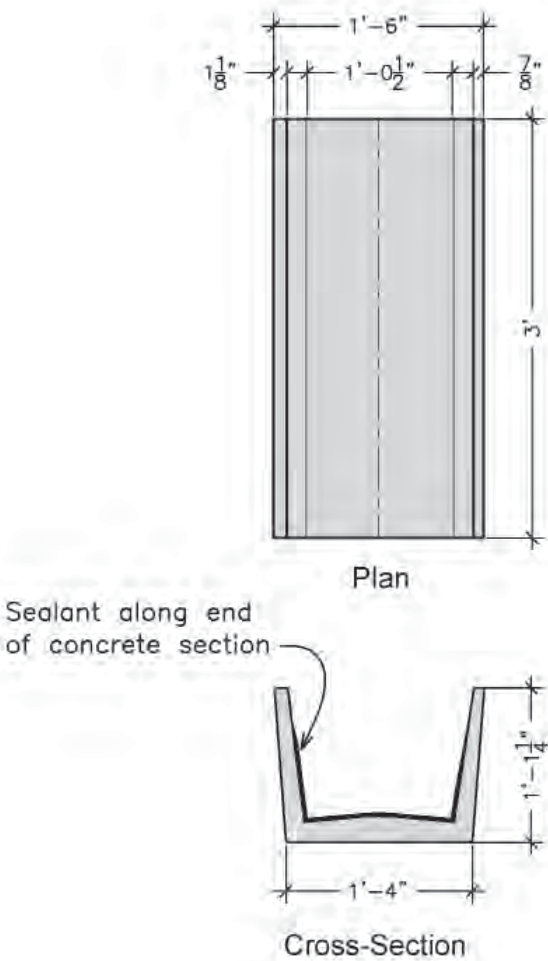


Figure 5.10. Feature I-3, concrete irrigation trough.



Figure 5.11. Feature I-4 (2009).



Figure 5.12. Feature I-4, concrete irrigation trough fragments (2009).



Figure 5.13. Feature I-5, clearing incinerator (2011).



Figure 5.14. Feature I-5, incinerator (2010).



Figure 5.15. Feature I-5, incinerator (2011).



Figure 5.16. Feature I-5, incinerator (2010).



Figure 5.17. Feature I-5, embossed brick from incinerator (2011).



Figure 5.18. Feature I-5, embossed bricks from incinerator (2011).

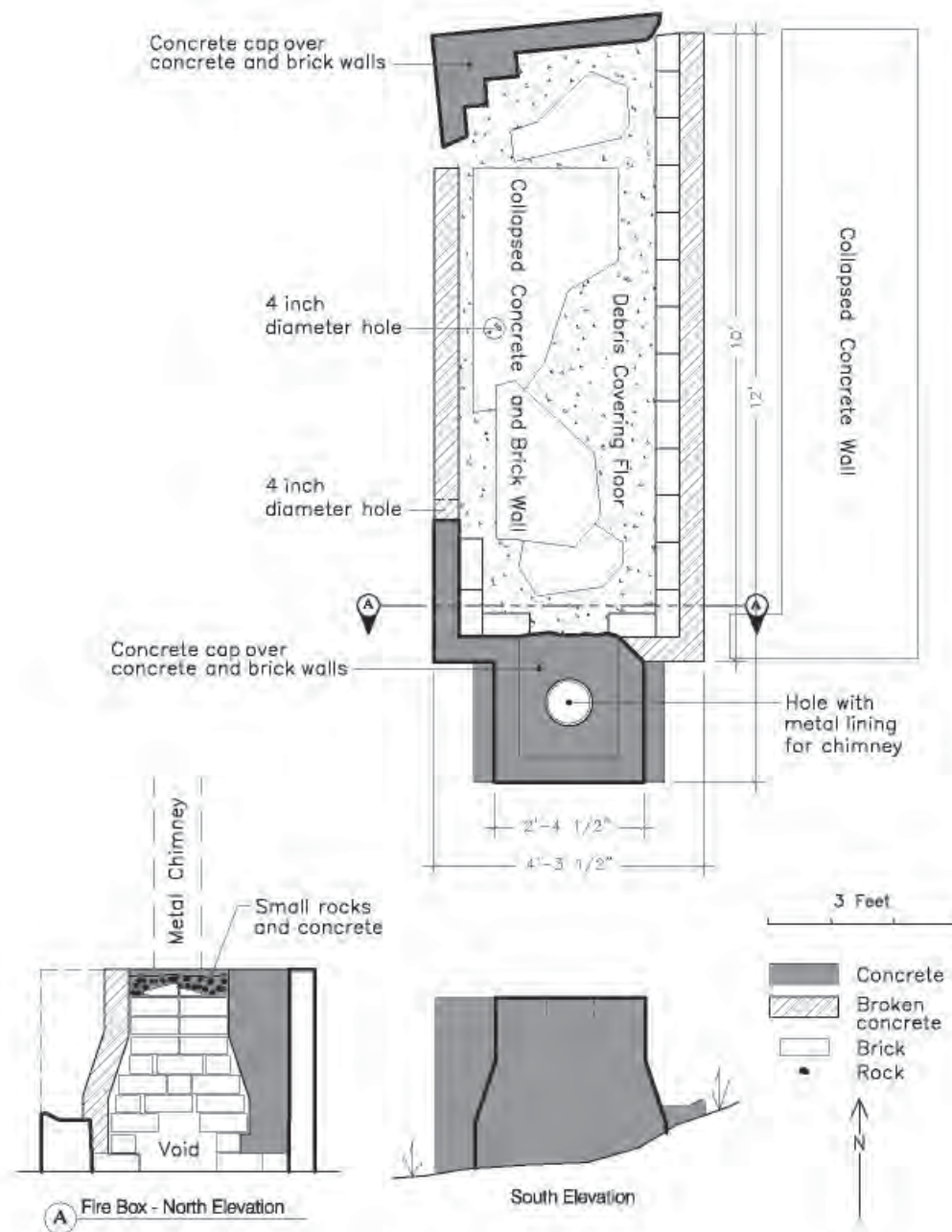


Figure 5.19. Feature I-5, incinerator.

land, even within the boundary of the National Monument. Although the boundary is not marked on the ground, it appears that Feature II-17 is bisected by the boundary, and that Features II-18, II-19, II-20, II-29, and II-30 are completely on Monsanto Hawai'i land.

Feature II-1: Mess Hall Foundation (Figures 5.24-5.32)

This feature, at the location of a mess hall on the U.S. Army blueprints, was recorded, partially cleared, and mapped over the course of three field sessions, in 2006, 2008, and 2009. Oriented roughly east-west, the main slab measures 103 feet long by 45 feet wide. There are

two extensions at the northeast corner. One, measuring almost 20 feet long and 16 feet wide (320 square feet), extends north from the east end of the north side. The other, measuring 18½ feet by 11 feet (203 square feet), extends to the east. The main slab has a sloping apron surrounding the slab on the long north and south sides, and a raised concrete stem wall along the west end. Both extensions have raised perimeter walls, except for a doorway between the two. Small rectangular slots along the perimeter wall of the north extension probably held anchors for the superstructure. A concrete apron and retaining wall on the west side of the north extension slab appears to have been a later modification to improve drainage. In the south-



Figure 5.20. Incinerator at Compound II mess hall ca. 1945 (detail of R.H. Lodge photograph).

east corner of the main concrete slab, a small room measuring approximately 16 feet by 14 feet is defined by traces of partition walls. Two vertical pipe inlets and a drain in this room suggest the location of a sink. On the large slab, “50+” has been inscribed in the concrete.

Historical photographs may correlate with some of the modifications of the mess hall foundation. One photograph shows a group of men, some wearing cooks’ aprons, standing in front of the mess hall, which at that time had wire screens in place of walls (see Figure 5.31). By the time of Lodge’s photograph, the mess hall appears to have been enclosed (see Figure 5.32). Lodge’s photograph also shows an additional extension off the south side of the mess hall, with a raised post-and-pier foundation; we did not search for evidence of this addition.

At the time of its recording in 2006, modern supplies and equipment like lumber, ladders, metal fence posts, barbed wire, fence gates, hoses, buckets, plastic pipe, plastic and metal barrels, three water trailers, a utility trailer were stored on the slab. In 2008 there was an



Figure 5.21. Incinerators at Compound IV mess hall ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.22. Searching for guard tower foundation in Compound II (2014).



Figure 5.23. Searching for guard tower foundation in Compound II (2014).

agricultural tractor parked on the slab. Subsequently many of these items were removed, however much remains. One notable artifact found while clearing a portion of the slab in 2008 is a clear glass bottle base embossed “PROP. OF C.C. BOTT. CO. / MADE IN JAPAN / 59.” It has a painted label with “DIAMOND HEAD BEVERAGES” and “DIAMOND HEAD BEVERAGES / CONTENTS 7 FLUID OUNCES / BOTTLED BY COCA-COLA BOTTLING CO., OF HONOLULU, LTD” (see Figure 5.28). The bottle was manufactured in 1959, in Japan. Two cartridge casings were also found at that time (see Figure 5.29).

Feature II-2: Shower Building Foundation (Figures 5.33-5.39)

This feature is the foundation for the shower shown as “in use” on the U.S. Army blueprints. Partially uncov-

ered in 2008 and 2009, this concrete slab foundation was completely exposed in 2011 so that it could be mapped and recorded. It measures 40 feet long by 16 feet 8 inches wide, overall, and is about 2 feet higher than the current ground surface at the southern end. Stem walls about 3 inches above the slab define a changing room and two shower rooms. The changing room, across the entire north end of the building, measures about 16 feet by 14 feet 7½ inches. The entrance to the structure would have been along the north wall, if the building follows the plan of the shower building in Compound III, discovered in previous field work. However, there is no break in the stem wall along the north edge of the building, nor anywhere along its perimeter. The changing room has one 4-foot-wide single doorway on its southern wall that leads to two shower rooms, each slightly less than 8 feet wide by 24½ feet long. The floor of the shower rooms is lower than the changing room, likely to confine water, and is coved where the wall meets the floor, probably to facilitate cleaning and drainage. Rectangular slots measuring 1 inch by 3¾ inches by 3 inches deep occur along the perimeter walls roughly every 3 or 4 feet, to anchor the superstructure.

Each shower room has a drain, 3¾ inches in diameter, about 4 feet from the southern wall. These drains were apparently not adequate, however, as an improvised drain about 3½ feet long and 6 to 10 inches wide was chiseled out of the floor of the eastern shower room. A section of the perimeter stem wall was removed where this drain exits the building. There is a concrete patch just north of where the stem wall was removed, perhaps part of the makeshift drain project. Artifacts observed at the foundation include nails (4¼” long, 2¾” long, and 2” long), and fragments of tar paper (one with a nail hole).

Feature II-3: Cesspool (Figures 5.40-5.42)

Recorded in 2008, this cesspool is shown on the U.S. Army blueprints as connected to shower and toilet structures. Although partially buried by sediments and obscured by vegetation, the block-lined pit appears to be similar to others recorded, with an access opening estimated to be about 2 feet square. Inside is the skeleton of a young horse. When revisited in 2017, the cesspool was overgrown with grass, and the opening was covered with an extruded metal screen and a wooden board.



Figure 5.24. Feature II-1, mess hall foundation (2006).



Figure 5.25. Feature II-1, mess hall foundation (2009).



Figure 5.26. Feature II-1, mess hall foundation (2014).



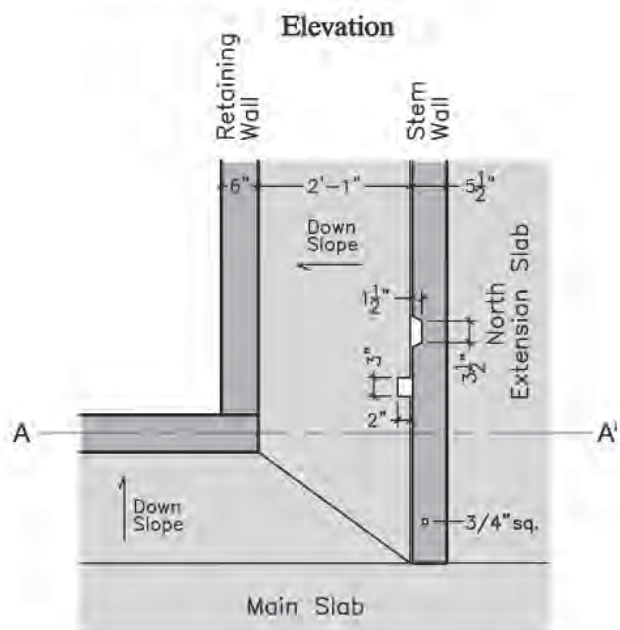
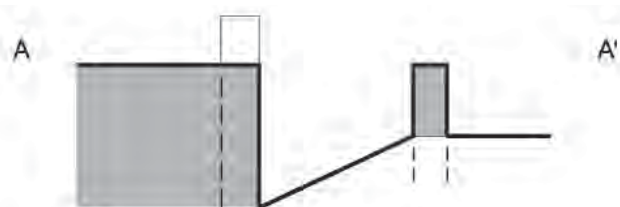
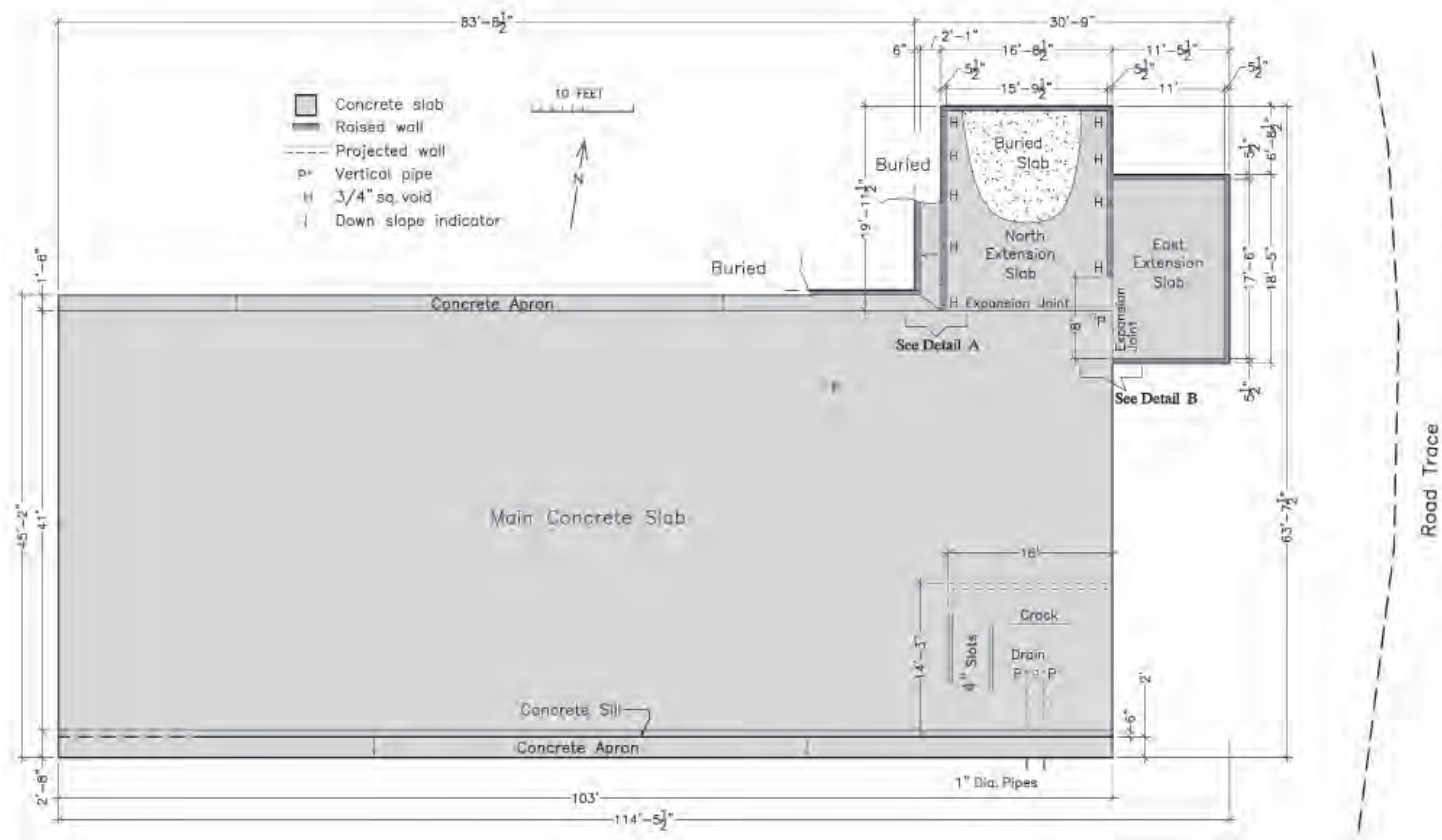
Figure 5.27. Feature II-1, inscription in mess hall concrete slab (2006).



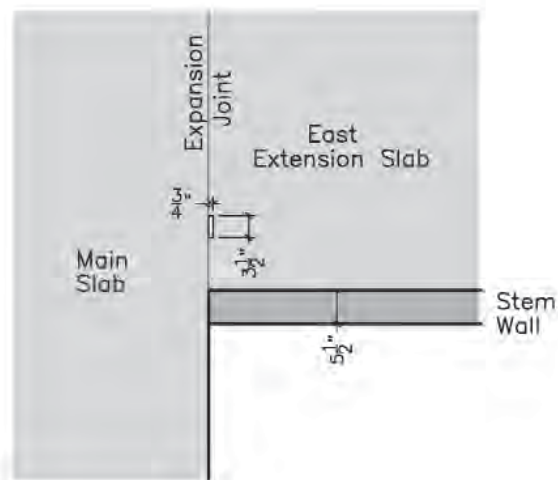
Figure 5.28. Feature II-1, bottle found at mess hall foundation (2008).



Figure 5.29. Feature II-1, cartridge casings found at mess hall foundation (2011).



Detail A



Detail B

Figure 5.30. Feature II-1, mess hall foundation.



Figure 5.31. Feature II-1, mess hall ca. 1944 (Glenn Heern photograph, JCCH).



Figure 5.32. Feature II-1, mess hall ca. 1945 (detail of R.H. Lodge photograph).

Feature II-4: Cesspool (Figures 5.43-5.46)

First observed during the quick reconnaissance in 2006, this cesspool was partially cleared and mapped in 2008. Its top is an octagonal slab, almost even with the ground surface and measuring 13 feet across. A concrete-rimmed opening, covered with a 2-foot-square concrete-slab lid, provided access to the block-lined pit, which is over 15 feet deep. A cast iron outlet tee pipe (6-inch interior diameter, 10-inch exterior diameter) extends from the southwest wall of the pit. This feature is depicted on the U.S. Army blueprints.

Feature II-5: Pipe

(Figure 5.47; see Figure 5.5)

This feature is a sewerline stream crossing, composed of a 7-inch-diameter pipe anchored in concrete protruding from the east bank of the stream. A 2-inch-diameter pipe runs parallel to the larger pipe, and a 1-inch-diameter pipe protrudes from the west bank, on the other side of the stream. It was recorded in 2008.

Feature II-6: Structural Debris (Figure 5.48)

Recorded in 2008, this feature consists of a concentration of six cobbles and a fragment of concrete, located



Figure 5.33. Feature II-2, shower foundation after clearing, view south (2011).



Figure 5.34. Feature II-2, shower foundation after clearing, view north (2011).



Figure 5.35. Feature II-2, shower foundation after clearing (2011).



Figure 5.36. Feature II-2, shower foundation after clearing showing depth of overburden in northeast corner (2011).



Figure 5.37. Feature II-2, shower drain (2011).



Figure 5.38. Feature II-2, track marks on shower foundation (2011).

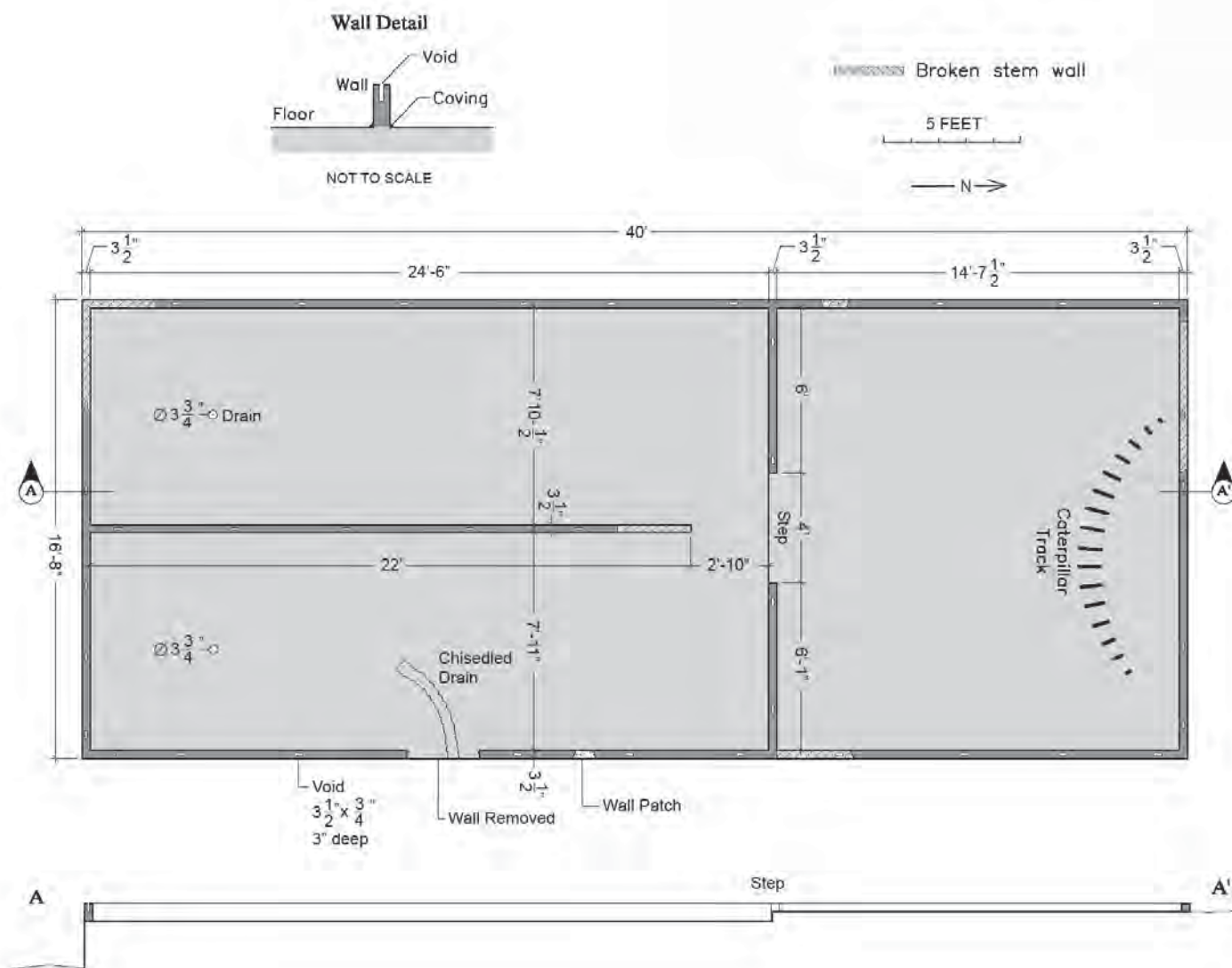


Figure 5.39. Feature II-2, shower foundation.

in dense grasses.

Feature II-7: Concrete Remnant (Figure 5.49)

Encountered in 2008 and 2009, this feature is a piece of concrete, possibly a pulled fence post foundation. Lying on its side and partially buried, it measures about 2 feet in diameter and 1½ foot deep, around a roughly cylindrical hole that measures about 8½ by 9½ inches. The surface of the interior hole is rough with longitudinal grain, suggesting the concrete anchored a rough-cut wooden post. Historic photographs indicate that large round poles were used for the security fence, and this concrete may have been a post foundation.

Feature II-8: Structural Debris and Artifacts (Figures 5.50 and 5.51)

Encountered in 2008, this feature includes a metal

stake, about 3/4-inch square in cross section, a little over a foot high, and with holes along the side. The stake is pounded into the ground under a large banyan tree. Nearby are two pieces of a rusted-out enameled metal sink basin. The sink was 20 inches in one dimension, at least 19 inches in the other; one of the fragments is partially buried. Nearby are feral tomato plants, a concentration of cobbles and boulders, and wire (barbed and smooth) hung in the banyan tree.

Feature II-9: Concrete Remnant (Figure 5.52)

Recorded in 2008, this feature consists of a large fragment of concrete; one corner has a quarter-circle notch as though it was formed around a pipe or large fence post. The concrete may have been an anchor or foundation for the security fence, like Feature II-7 described above.



Figure 5.40. Feature II-3, cesspool location (2008).



Figure 5.41. Feature II-3, cesspool access (2017).



Figure 5.42. Feature II-3, horse skeleton in cesspool (2008).



Figure 5.43. Feature II-4, cesspool access (2006).



Figure 5.44. Feature II-4, cesspool (2006).



Figure 5.45. Feature II-4, cesspool interior (2006).

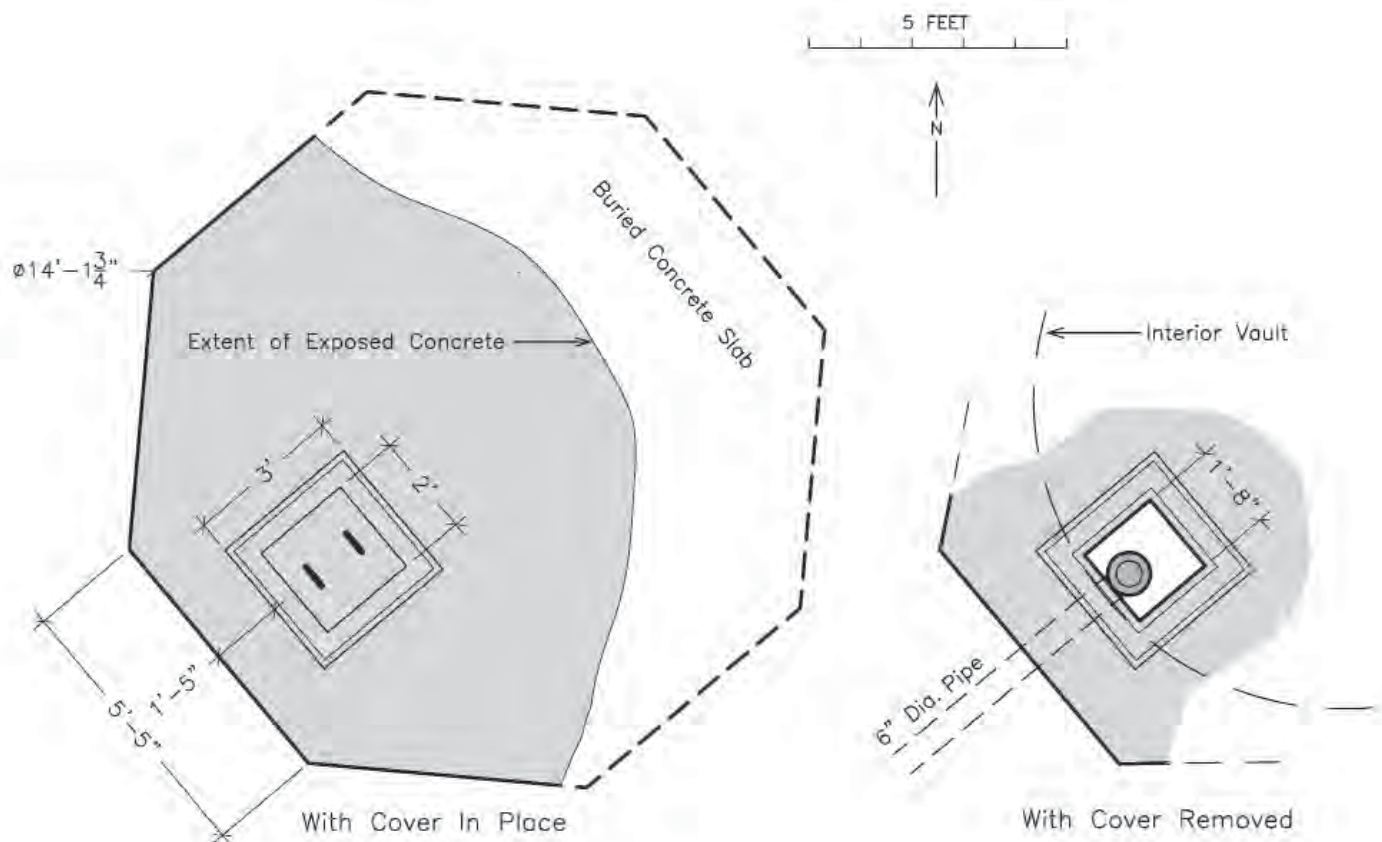


Figure 5.46. Feature II-4, cesspool.



Figure 5.47. Feature II-5, concrete and metal pipes under concrete (2008).



Figure 5.48. Feature II-6, structural debris (2008).

Feature II-10: Pipe and Artifacts (Figures 5.53 and 5.54)

Found in 2008, this 2-inch (outside diameter) water pipe is partially buried; the section above ground is 14 feet long, and ends with a T-connection. Two right isosceles triangles, of unknown function, are also present. They are formed of heavy-gauge sheet metal,

with all three edges folded over about an inch. The two short sides each measure 16 inches; one side has regularly spaced holes, the other side has rivets.

Feature II-11: Rock Wall (Figure 5.55)

Located just west of the stream, this dry-laid wall, composed of uncoursed basalt cobbles and boulders,



Figure 5.49. Feature II-7, concrete debris (2009).



Figure 5.50. Feature II-8, iron bar (2009).



Figure 5.51. Feature II-8, metal sink (2008).



Figure 5.52. Feature II-9, concrete debris (2008).



Figure 5.53. Feature II-10, embedded pipe (2008).



Figure 5.54. Feature II-10, metal object (2008).



Figure 5.55. Feature II-11, rock wall (2008).

was encountered in 2008. Measuring about 2 feet high and about 40 feet long, the wall functions as a retaining wall for a terrace.

Feature II-12: Drilled Holes in Rocks (Figure 5.56)

Possible quarry debris, this is an area (estimated 30 by 60 feet in size) of large basalt boulders, some with drill holes. Most of the drill holes are cylindrical, but one is star-shaped; most are shallow, but one extends completely through one of the boulders. The feature was noted and photographed in 2008. Attempts to relocate it in 2017 were unsuccessful.

Feature II-13: Pit Latrine Depression (Figure 5.57)

Recorded in 2009, this feature is a large depression south of Feature II-2, at the location of a pit latrine depicted on the U.S. Army blueprints.

Feature II-14: Inscription (Figures 5.58 and 5.59)

Half way up the ridge on the west side of the gulch is a large red volcanic boulder with 7-inch-tall letters “W K” scratched into the top surface. It was found in 2008.

Feature II-15: Wood Poles (Figure 5.60)

This feature includes at least three logs or round poles, lying on the ground and overgrown with grass. Because of the dense vegetation, the extent of the log concentration is unknown. The logs may have been posts in the security fence, stockpiled here when the fence was dismantled. Observed in 2006, the logs could not be relocated in 2017.



Figure 5.56. Feature II-12, drill holes in rock (2008).

Feature II-16: Pit Latrine Depression (Figure 5.61)

This large and deep depression is immediately south of a shower building foundation (Feature II-2); like the adjacent Feature II-13, above, it likely marks the location of pit latrine. It was found in 2009 and photographed in 2017.

Feature II-17: Shower Building Foundation (Figures 5.62-5.71)

This concrete slab feature, located on a terrace above the flood plain, was partially cleared (and mapped) in 2009, then completely cleared and mapped in 2014. Based on its mapped location, it straddles the monument boundary, at a private inholding, so all of the feature is located on private land owned by Monsanto Hawai'i. The slab measures 40 feet long and 16 feet 9 inches wide (670 square feet). The slab has 8½-inch-high stem walls dividing it into three rooms, the two long narrow rooms on the northwestern end with floor drains, and one room on the southeast end (measur-



Figure 5.57. Feature II-13, pit latrine depression (2017).



Figure 5.58. Feature II-14, inscribed rock (2008).



Figure 5.59. Feature II-14, inscription (2008).



Figure 5.60. Feature II-15, wood poles (2006).



Figure 5.61. Feature II-16, pit latrine depression (2017).

ing 14 feet 6 inches by 16 feet 9 inches) that would have been the dressing room. One of the drains in the shower rooms has a slotted metal cover with the label “S&J” within an oval inscribed in the rim.

Four artifacts were found on the slab, all in the northwest corner of the building. They include two rimless cartridge shells, a trowel blade, and a paste tube

with cap. The trowel, with perforations on the back or underside, may have been a specialized tool for cutting cane. One of the 2014 field class students who was a military veteran familiar with military ammunition provided more details about the cartridges (Correa 2014a). The cartridge shells are both military grade, 7.62 mm caliber, and both had been fired by a M1A1 Carbine Fully Automatic Rifle. The headstamp of one



Figure 5.62. Feature II-17, clearing shower foundation (2013).



Figure 5.63. Feature II-17, clearing shower foundation (2014).



Figure 5.64. Feature II-17, shower foundation after clearing (2014).



Figure 5.65. Feature II-17, shower drain (2014).

was “DEN 41,” indicating manufacture in 1941 at the Denver Ordnance Plant, which operated from 1940 through 1950. The other, stamped “LC 12,” was probably manufactured in the Lake City Ammunition Plant, Lake City, MO. The “12” on the second cartridge, Correa discovered, was likely a load identification code used by Pretoria Metal Pressing Ltd, Pretoria, RSA. Pretoria had been making brass casings since 1931, and “the Lake City Ammunition Plant may have manufactured some of its first 7.62 mm rounds using brass casings purchased from Pretoria” and used part of Pretoria’s stamping system (Correa 2014a).

Feature II-18: Cesspool (Figures 5.72 and 5.73)

This cesspool, cleared and mapped in 2009, is topped by a nine-sided concrete slab, measuring 11 feet 4 inches across. An off-center access opening 2 feet 4 inches square has a raised concrete rim. This feature is not depicted on the U.S. Army blueprints. It is located on private land within the monument boundary.

Feature II-19: Pit Latrine Depression (Figure 5.74)

First discovered in 2009, this shallow depression is located where an unlabeled building, likely a latrine, is depicted on the U.S. Army blueprints. It is located on private land within the monument boundary.

Feature II-20: Pit Latrine Depression (Figure 5.75)

Like Feature II-19, this feature is a shallow depression, located where an unlabeled building, likely a latrine, is depicted on the U.S. Army blueprints. It was found and photographed in 2009s. It is located on private land within the monument boundary.

Feature II-21: Concrete Post Support (Figure 5.76)

Located about 75 yards south of Feature II-2 and 7 yards from the fence, this feature consists of a circular piece of concrete 15 inches in diameter and 4 inches

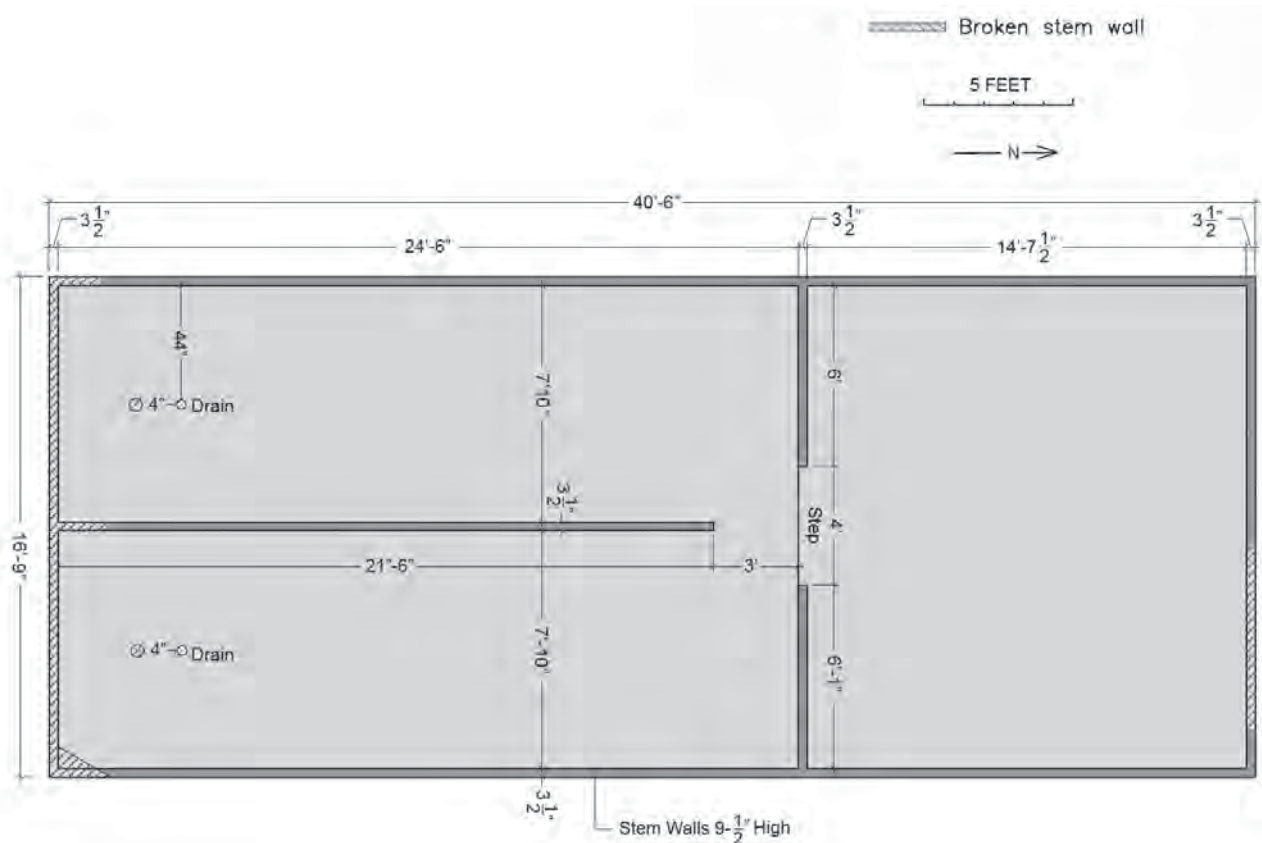


Figure 5.70. Feature II-17, shower foundation.



Figure 5.71. Detail of ca. 1945 photograph showing Compound II mess hall (Feature II-1) and shower building (Feature II-17, Compound III shower building (Feature III-4), and a guard tower at Compound IV (Feature IV-2) (detail of R.H. Lodge photograph).

thick, with a 2-inch-diameter hole in the center. Found and photographed in 2011, the concrete may have functioned as a temporary or movable post support.

Feature II-22: Culverts (Figures 5.77 and 5.78)

Two concrete pipe culverts, each about 30 inches in diameter, are adjacent to each other, and about 10 feet long; one of the culverts extends about a half foot farther than the other. Indicating the location of a Compound II road, they would have conveyed the water of a secondary drainage that runs north-to-south 10 feet west of, and roughly parallel to, the main stream channel. A sketch map of the feature was completed in 2011.

Feature II-23: Drilled Hole in Rock (Figure 5.79)

A solitary drill hole, about 2 inches in diameter and 4 inches deep, occurs in a large basalt boulder near the stream, at the main drainage near the culverts (Feature II-22). Its function is unknown. It was found and photographed in 2011.

Feature II-24: Water Trailer (Figure 5.80)

Found northwest of the Feature II-2 shower foundation, this metal water trailer was photographed and plotted with a GPS in 2014, but not measured or fully recorded. The tank, with a large filler opening and a galvanized fitting for the drain, sits on a trailer with a triangular tongue. The lid for the filler opening is missing, but a hinged strap clamp to secure the lid is still present. One tire, on a wheel off the axle, is labeled “3 ...M540517 Ply 10 Rating” and “SEIBERLING mud and snow / ND MS.” The Seiberling Tire Company was founded in 1921 by the Seiberling brothers, who had founded Goodyear Tire Company in 1898. During World War II, Seiberling supplied tires for heavy artillery pieces. The Seiberling company was acquired by the Firestone Tire and Rubber Company, which in turn was bought out by Bridgestone when the latter took over Firestone. The brand name is still used outside of the mainland U.S.

Feature II-25: Gate (Figure 5.81)

Noted in 2014, this gate is located northeast of the Compound II mess hall (Feature II-1) along the road



Figure 5.72. Feature II-18, cesspool (2009).

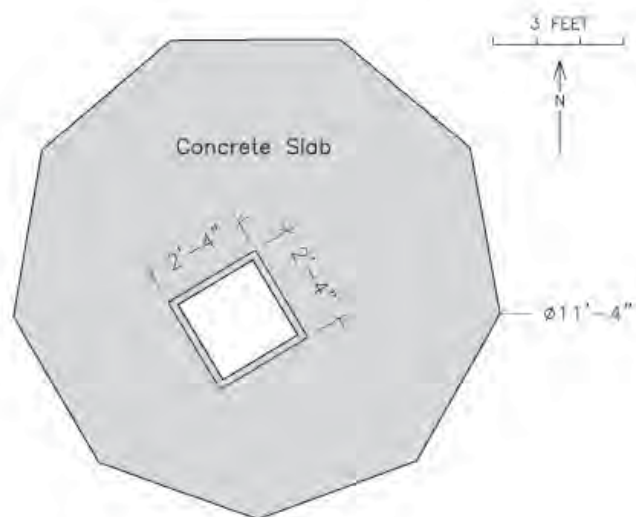


Figure 5.73. Feature II-18, cesspool.



Figure 5.74. Feature II-19, pit latrine depression (2017).



Figure 5.75. Feature II-20, pit latrine depression (2009).



Figure 5.76. Feature II-21, concrete post support (2011).



Figure 5.77. Feature II-22, culverts (2011).

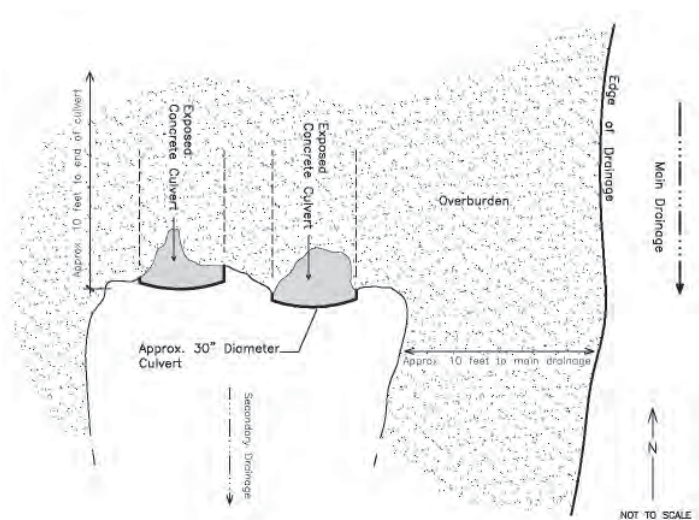


Figure 5.78. Feature II-22, culverts.



Figure 5.79. Feature II-23, drill hole in rock (2011).



Figure 5.80. Feature II-24, water trailer (2014).

that passed just east of the mess hall building. Although the road itself is overgrown, the gate appears to be still functional. Each gate post, on either side of the road, is a large round wooden post, estimated to extend about 4 feet above ground level. Four strands of galvanized barbed wire continue from the posts along the fence, and a Texas-style gate is still present, suggesting the gate was used for ranching in the gulch in the second half of the twentieth century.

Feature II-26: Rock Alignment (Figure 5.82)

Fragments of concrete and a rock alignment were encountered east of the Feature II-1 mess hall in 2014.

Feature II-27: Metal Pipes (Figure 5.83)

Two parallel segments of water pipe were encountered east of the Feature II-1 mess hall in 2014. The segments are at least partially above ground but hidden by grass;

only about 10 feet of the pipes were uncovered.

Feature II-28: Wood Poles (Figure 5.84)

Similar to the log or pole concentration noted as Feature II-15, both features may be stockpiles of power poles, awaiting use or recycling. Feature II-28, found east of the mess hall foundation (Feature II-1) during the search for the guard tower foundations, consists of two poles estimated to be about 8 feet long and a foot in diameter.

Feature II-29: Pit Latrine Depression (Figure 5.85)

This depression was noted in 2014 as northwest of the II-17 shower building foundation. Judging by its mapped location, it is outside the monument boundary.



Figure 5.81. Feature II-25, gate (2014).



Figure 5.82. Feature II-26, rock alignment (2014).



Figure 5.83. Feature II-27, water pipe (2014).



Figure 5.84. Feature II-28, wood poles (2014).



Figure 5.85. People standing at pit latrine depressions; Feature II-29 in foreground, Feature II-17 and II-30 in background (2017).



Figure 5.86. People standing at latrine depressions; Feature II-29 on right, Feature II-30 on left (2017).

Feature II-30: Pit Latrine Depression (Figure 5.86)

Located northwest of Feature II-29, this pit latrine location is also outside the monument boundary.

Compound III Prisoner of War Camp

In spite of some modern developments (see Features M-2 through M-5 and M-11 and M-12, below), nine features dating to World War II were recorded in Compound III (Figure 5.87). Features III-1, -2, and -3, found near the northern edge of the compound, were probably associated with the Compound II mess hall. Features III-4, -5, -6, -7, -8, and -9 are located near the center of the compound, on a terrace above the westernmost modern water well. Although the U.S. Army blueprints identify the buildings at this location as unused, they can be seen in one of the historic photographs. Features III-4 to III-9 are within the monument boundary on Monsanto Hawai'i land.

In 2012, a small crew of the field class searched for the foundations for the guard tower that was located east of the fence dividing Compounds III and IV. This guard tower is visible in a historic photograph as north of the Compound IV mess hall and east of the road crossing, where the main road crosses Honouliuli stream. In the photograph the tower is upslope an estimated 30 to 50 feet from the road, outside the outer security fence. Three box-like flat-roofed structures and a gable-roofed building are below, west of the tower. The tower would have had a clear view to the gate between Compounds III and IV.

The presumed location of the guard tower was deduced by comparing the historic maps and photographs with the current layout of the gulch. Although now wider and more substantially constructed, the current road crossing is in the same location as the World War II crossing. On the hill to the east grow dense Guinea grass and haole koa trees. Abundant boulders on the ground surface appear to be the result of a small landslide or purposeful bulldozing. No traces of the small buildings at the foot of the hill were observed, and they have been located under the current road.

To search for the guard tower foundations, small haole

koa trees were trimmed and Guinea grass was cut, using hand gardening tools, to increase visibility of the ground surface. Piles of boulders were investigated, to determine if their original location or alignment could be determined. In some small areas, recent colluvial deposits were removed by shovel, to expose the pre-landslide ground surface. Metal probes were used to test for subsurface rock or concrete features. However, no evidence of the guard tower foundation was found. Post-occupation demolition and subsequent rock fall and colluvial deposition has erased any surface trace of the guard towers. If footings are still present, they are buried.

Feature III-1: Garbage Incinerator (Figures 5.88-5.90)

Noted in 2006, this incinerator was cleared and mapped in 2008. Although in Compound III as delineated by the military blueprints, the feature is located just south of the Compound II Mess Hall foundation, and was undoubtedly associated with that structure. The incinerator is shaped like a trough, but open on one end and with a chimney at the closed end. The intact portion of the feature measures almost 12 feet long overall, 4 feet 3 inches wide, and 3 feet 4 inches tall. The exterior of the chimney, at the east end of the structure, measures 1 foot 10½ inches by 2 feet 3 inches. The interior of the chimney and the east end of the trough are lined with fire bricks, and there are three evenly spaced round holes through the south side wall. Part of the north wall of the structure has been broken off, and the western end is displaced slightly. Feature III-1 is now partially filled with trash, both modern (such as a 55-gallon-drum lid, glass beer bottles, and aluminum beverage cans) and older (such as lumber, wire, metal pipe, two 55-gallon drums, a jerrycan, fencing, and fragments of metal and wood). Although this incinerator is not depicted in the available historic photographs or U.S. Army blueprints, it appears to be similar to two located south of the Compound III mess hall photographed by R.H. Lodge (see Figure 5.21).

Feature III-2: Concrete Structure (Figure 5.91)

This concrete box, located to the south of Feature III-1, was noted in 2006 and cleared and mapped in 2008. The box is mostly set into the ground, with about 6 inches extending above the ground surface. It has a rim that measures 4 feet square (outside), and an opening

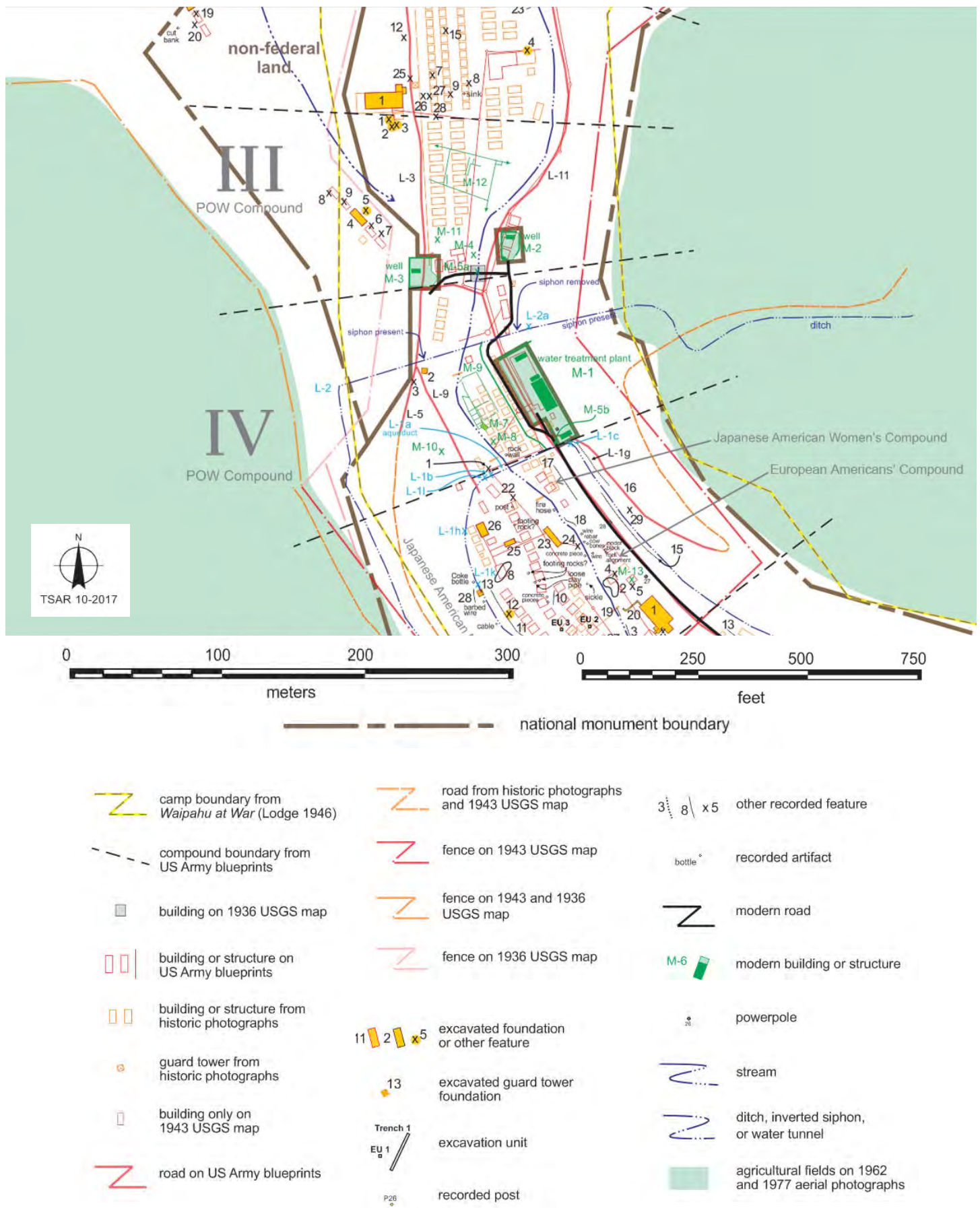


Figure 5.87. Camps III and IV archaeological features.

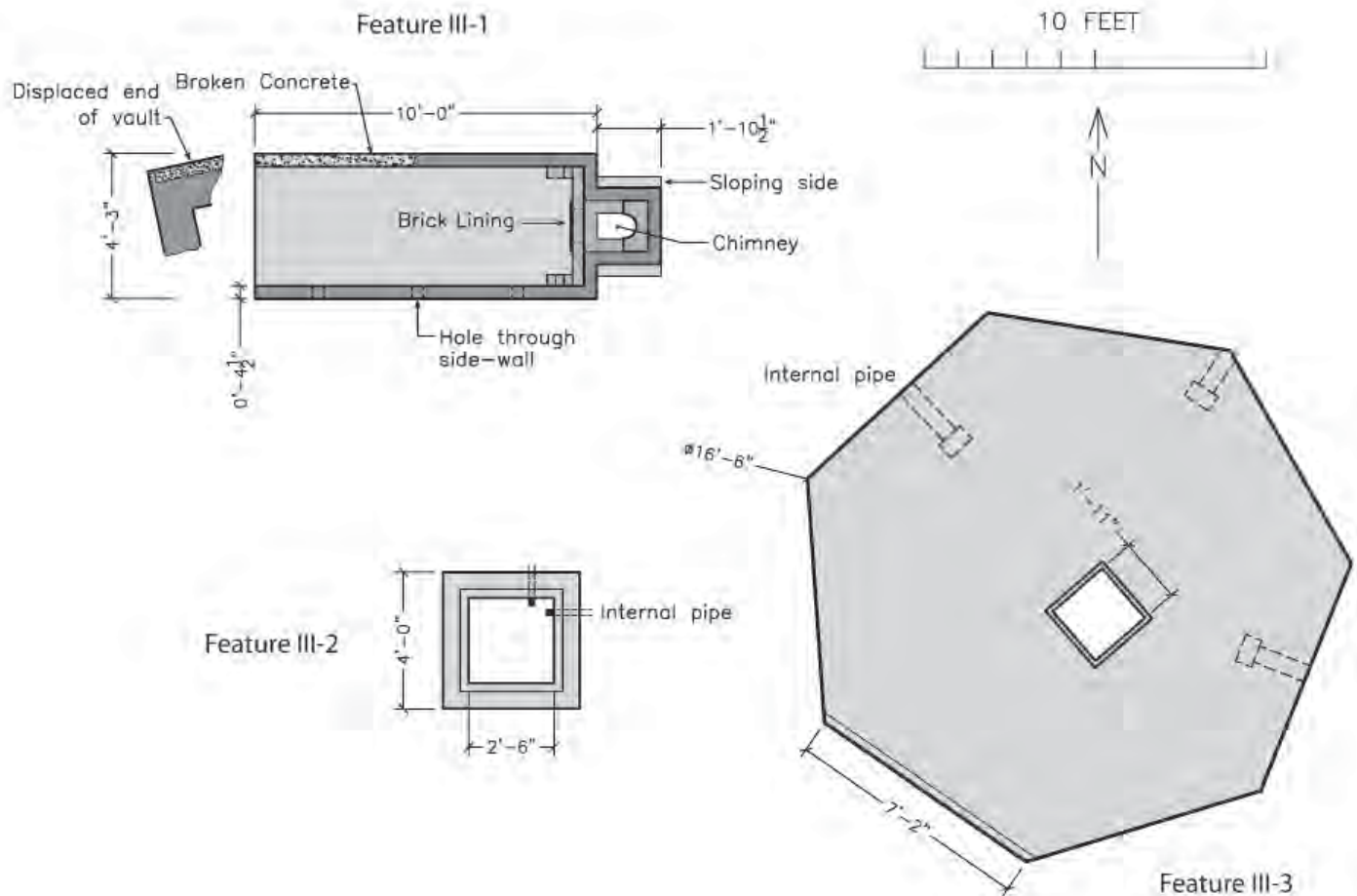


Figure 5.88. Feature III-1, III-2, and III-3, incinerator, concrete structure, and cesspool.



Figure 5.89. Feature III-1, incinerator (2008).



Figure 5.90. Feature III-1, incinerator (2008).

2 feet 6 inches square. The box is at least 3 feet deep. An unthreaded pipe (2-inch outer diameter) enters the north wall of the box interior; a threaded pipe of the same dimensions enters the east wall. Both pipes are located near the northeast corner. Apparently part of the water system, the box may once have housed a pump. Window screening, a metal scoop, and a “Ken-

more” three-burner propane metal stove were dumped into the pit.

Feature III-3: Cesspool (Figures 5.92-5.95)

This feature is similar in form, materials, and construction to that described above under Feature II-4. This cesspool cover slab, however, is seven-sided, rather



Figure 5.91. Feature III-2, concrete structure (2008).



Figure 5.92. Feature III-3, cesspool (2008).



Figure 5.93. Feature III-3, cesspool access (2014).



Figure 5.94. Feature III-3, cesspool interior (2014).



Figure 5.95. Feature III-3, cesspool interior (2014).

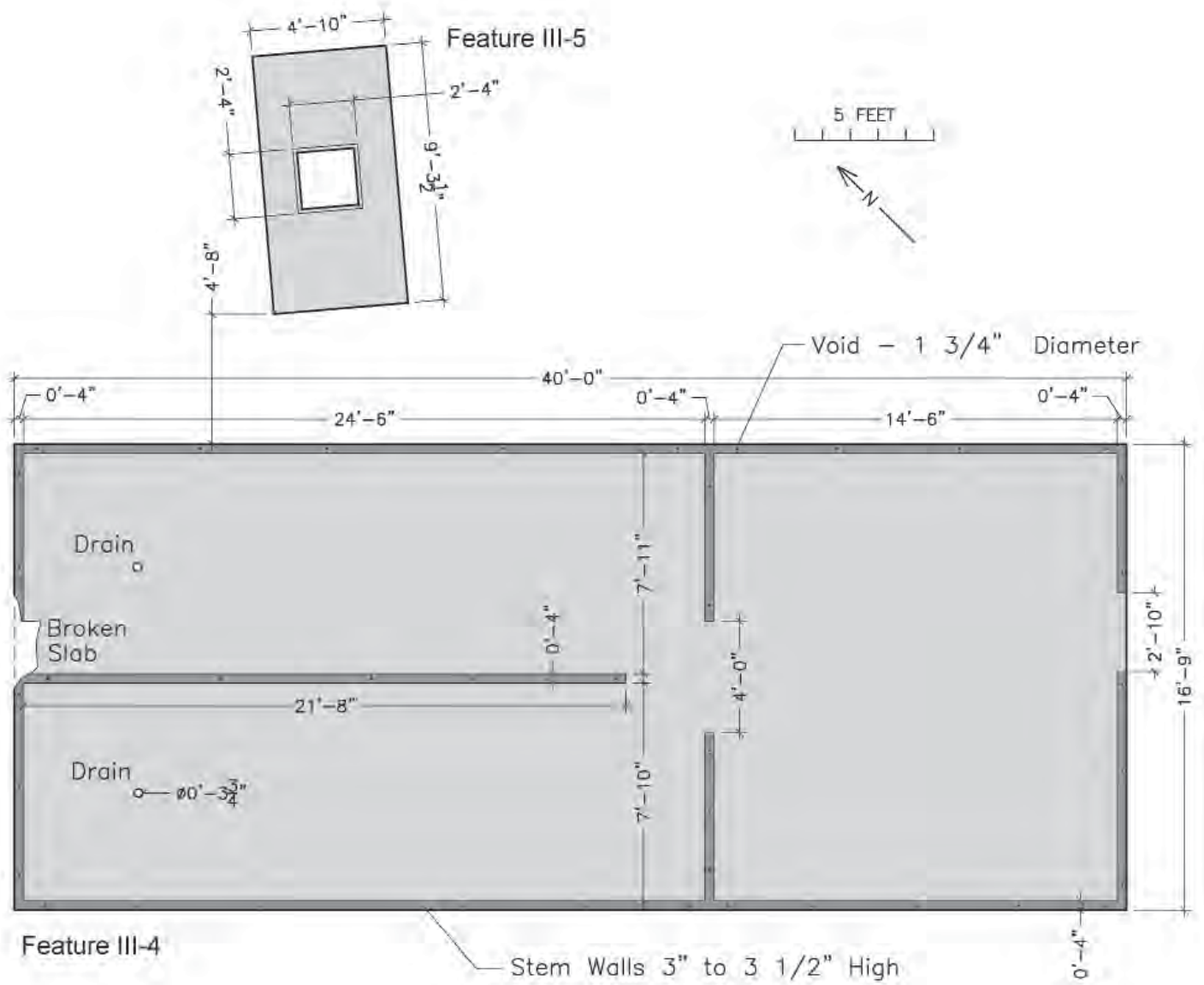


Figure 5.96. Feature III-4 and III-5, shower foundation and septic tank.



Figure 5.97. Feature III-4, shower foundation before clearing (2009).



Figure 5.98. Feature III-4, shower foundation after clearing (2009).



Figure 5.99. Feature III-4, shower foundation after clearing (2009).



Figure 5.100. Feature III-4, shower drain (2009).



Figure 5.101. Feature III-4, shower drain.



Figure 5.102. Feature III-4, dry-powder fire extinguisher found at shower foundation (2009).



Figure 5.103. Feature III-4, chain found at shower foundation (2009).



Figure 5.104. Feature III-4, vehicle parts found at shower foundation (2009).



Figure 5.105. Feature III-4, vehicle parts found on shower foundation, Feature III-5 in background (2009).



Figure 5.106. Feature III-5, septic tank (2009).



Figure 5.107. Feature III-5, septic tank interior (2009).



Figure 5.108. Feature III-5, septic tank interior (2009).

than octagonal, the access hatch is slightly smaller and located closer to the center of the slab, and there are three sewer pipes, instead of one, entering the side walls of the pit. The slab was partially covered with scrap lumber, and a trash can had been thrown inside. The pit is at least 11 feet deep. This feature is depicted on the U.S. Army blueprints. It was noted in 2006, and

cleared and mapped in 2008.

Feature III-4: Shower Building Foundation (Figures 5.96-5.105)

This feature is a shower building foundation, a concrete slab 40 feet long by 16 feet 9 inches wide (670 square feet). Like the other shower foundations record-



Figure 5.109. Feature III-6, pit latrine depression (2009).



Figure 5.110. Feature III-7, pit latrine depression (2009).



Figure 5.111. Feature III-8, pit latrine depression (2009).



Figure 5.112. Feature III-9, pit latrine depression (2009).

ed, the building was divided into three rooms by stem walls 3 inches to 3½ inches high above the slab floor. An exterior doorway on the southeastern end provides entry into a dressing room measuring approximately 14 by 16 feet. A 4-foot-wide doorway in the center of the interior wall of the dressing room provides access to two long narrow shower rooms, each with a drain near the far end. Vehicle parts, including truck and car rear axles, wheels, a steering wheel, gears, and tire chains, are located on and adjacent to the slab. Also found on the slab and probably related to the vehicle parts is a brass hand-pump carbon tetrachloride (CTC) fire extinguisher. The shower building foundation was cleared in 2009 and partially mapped, and cleared again and mapped in 2014. Although within the monument boundary, Feature III-4 is located on

private land owned by Monsanto Hawai'i.

Feature III-5: Septic Tank (Figures 5.106-108, see also Figures 5.96 and 5.105)

Less than 5 feet from Feature III-4, this small septic tank measures about 5 feet by 9 feet 3½ inches. The 2-foot-4-inch-square access opening is collared with raised concrete, and located at the center of the slab. The access cover was removed so the interior could be measured; it is at least 6 feet deep, with water at the bottom. Two cast iron pipes enter the tank from the uphill side, and there is a cast iron outlet tee on the opposite wall. It was noted in 2009, and cleared and mapped in 2014. It is within the monument boundary on private land owned by Monsanto Hawai'i.

Feature III-6: Pit Latrine Depression (Figure 5.109)

This depression, located just southeast of the shower building foundation (Feature III-4), is 15 feet in diameter and up to 3 feet deep; there is a loose cinder block in the depression. Like Features III-7, -8, and -9, described below, this feature is at the location of one of the unlabeled buildings on the U.S. Army blueprints, and is likely the remains of a pit latrine. It was noted in 2009, and is located on private land owned by Monsanto Hawai'i within the monument boundary.

Feature III-7: Pit Latrine Depression (Figure 5.110)

Just southeast of Feature III-6 and probably representing another latrine, this depression is 25 feet in diameter by 2½ feet deep. Recorded in 2009, it is located on private land owned by Monsanto Hawai'i within the monument boundary.

Feature III-8: Pit Latrine Depression (Figure 5.111)

Recorded in 2009, this depression is at the location of one of two small buildings (likely pit latrines) depicted on the U.S. Army blueprints northwest of the shower building. It measures 25 feet in diameter by 1½ feet deep. The feature is located on private land owned by Monsanto Hawai'i within the monument boundary.

Feature III-9: Pit Latrine Depression (Figure 5.112)

Located between Feature III-8 and the shower foundation, this depression is 15 feet in diameter by 1½ feet deep, and likely represents another latrine. Recorded in 2009, it is located on private land owned by Monsanto Hawai'i within the monument boundary.

Compound IV Prisoner of War Camp

Modern developments located in Compound IV may have affected some of the World War II features (see Features M-1 and M-7 through M-10, below). Both of the early-twentieth-century water systems (the Waiāhole Water Company siphon and the same company's ditch and aqueduct; Features L-1 and L-2, described below) crossed this compound. Three camp-

era features were recorded in Compound IV, as well as a section of concrete pipe in the stream bed (Figure 5.113). Outside the modern developed areas, this compound is very heavily vegetated, so it is likely that more features and artifacts could be discovered with additional archaeological survey.

Feature IV-1: Sewer Manhole (Figures 5.114 and 5.115)

Noted in 2006 and recorded in 2008, this feature is a concrete sewer manhole, protruding above the ground surface in a truncated cone shape. Overall the manhole is about 2 feet 8 inches in diameter at the top (adjacent to the metal rim) and 3 feet 8 inches in diameter at the base. The 2-foot-diameter opening is rimmed with metal. Inside, the manhole is about 30 inches deep from rim to concrete floor. The inside is lined with bricks, and the concrete floor has a trough connecting two pipes that open into the side wall at a 90-degree angle. One pipe is large diameter, the other smaller diameter. It is located west of the stream, adjacent to the aqueduct (Feature L-1). The lid is missing and was not encountered, but there is dense vegetation in the area. This feature is depicted on the U.S. Army blueprints.

Feature IV-2: Guard Tower Footings (Figures 5.116-5.123)

Although there was no evidence of the footings visible on the surface, a leveled area is still present just east of the fork in the perimeter road, where one of George Hoshida's drawings depicts a guard tower. The guard tower is also visible in a Lodge photograph. In 2010 the four guard tower footings were found a few inches below the ground surface. Each footing is composed of concrete poured into a roughly circular-shaped hole, each with a rectangular posthole. Posthole sizes vary slightly, suggesting the lumber used was rough or irregular, but the posts were approximately 5 by 8 inches in cross-section. Together the four footings form a square about 6 feet on a side. A deteriorated wooden post, which measures only 4½ by 5 inches in cross section, is within the area defined by the footings, but this post is not set in concrete, and its current placement likely postdates the internment camp. A metal artifact, about 5 inches long and possibly part of a guy wire clamp or anchor (see Figure 5.123a), was found near the northeast footing. Also found during clearing of the feature was a beer bottle manufactured by the Anchor Hocking Glass Company sometime between

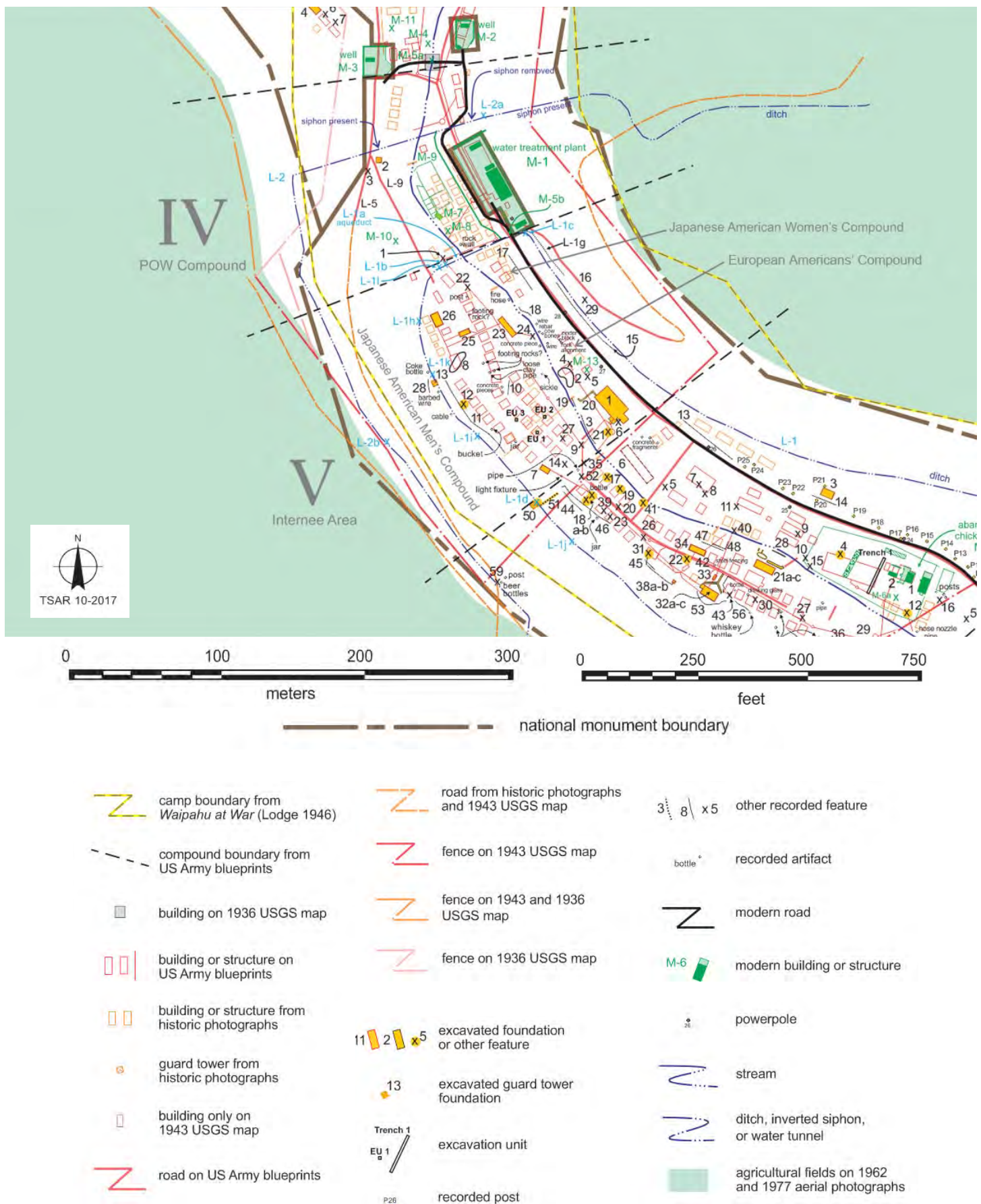




Figure 5.114. Feature IV-1, sewer manhole (2008).



Figure 5.115. Feature IV-1, sewer manhole interior (2008).



Figure 5.116. Feature IV-2, excavation of guard tower footings (2010).



Figure 5.117. Feature IV-2, excavation of guard tower footing (2010).



Figure 5.118. Feature IV-2, exposed guard tower footing (2010).



Figure 5.119. Feature IV-2, guard tower footings (2010).



Figure 5.120. Feature IV-2, mapping guard tower footings (2010).

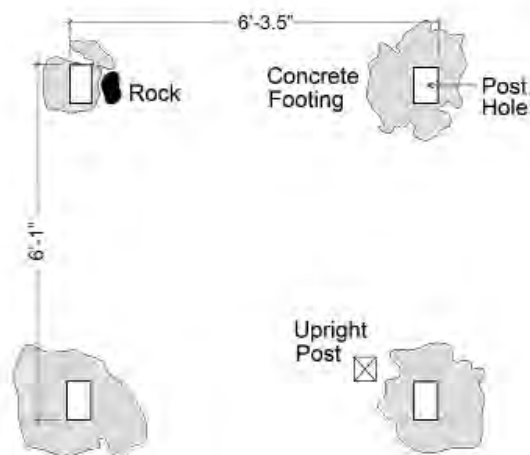


Figure 5.121. Feature IV-2, guard tower footings.



Figure 5.122. Guard tower (Feature IV-2) ca. 1945, view toward northwest (detail of R.H. Lodge photograph).



Figure 5.123. Feature IV-2, artifacts found during excavation of guard tower footings; a. wire clamp (?), b. beer bottle.



Figure 5.124. Feature IV-3, embedded iron rod (2010).

1937 and 1977; the basemark is “10 5109 2” (see Figure 5.123b).

Feature IV-3: Concrete Footing (Figure 5.124)

Located in Compound IV about 50 feet south of the siphon and just east of the upper road, this feature is an irregular slab of concrete roughly 1 foot by 3 feet in size, with a smooth metal rod about a half inch in diameter and 7 inches long protruding from it. The rod is bent at a 90-degree angle. The function of the feature, and whether it is in situ or displaced from elsewhere, is unknown at this time. It was recorded in 2010 but could not be relocated in 2017.



Figure 5.125. Compound V, women internee's area, view to southwest from aqueduct (2017).



Figure 5.126. Compound V, women internee's area being used to house POWs ca. 1945, view to northeast towards aqueduct (detail of R.H. Lodge photograph).

Compound V Internee Area

Although the U.S. Army blueprints label Compound V as another “prisoner of war” compound, internee art and oral histories clearly identify this as the area where residents of Hawai‘i, including U.S. citizens, were imprisoned. Located on both sides of the stream between the aqueduct and the guard camp area (Compound VI), the internee compound is bounded on the west by the Waiāhole ditch and on the east by the main camp road. West of Honouliuli stream, which runs north to south through the middle of the compound, was the Japanese American men’s compound. East of the stream were the Japanese American women (at the north end; Figures 5.125-5.126) and the European Americans (in the middle of the east side). The mess hall, serving all three groups, was at the south end of the east side. In addition to the 29 features described below, several isolates were recorded in the Japanese American Men’s compound west of the stream. These include large flat-topped rocks (possible barracks footing piers; Figure 5.127), a bucket (Figure 5.128), a light fixture (Figures 5.129 and 5.130), a sickle blade (Figure 5.131), a fire hose (Figure 5.132), and a loose-capped piece of salt-glazed pipe.

In 2014, three excavation units (EUs), each 1 by 1 meter in size, were excavated in Compound V west of the stream (Figures 5.133-5.143). Unit profiles and strata descriptions can be found in Figure 5.141 and a plan view in Figure 5.142. Locations are depicted in Figure 5.113 and in the archaeological feature map in Appendix B. Where those locations are estimated to fall in one of the Lodge photographs of Compound V is depicted in Figure 5.143.

EU 1 was placed near one of the fences that divided Compound V into sub-compounds. A complete clear glass fluted oval bottle with a Hazel Atlas basemark was found on the ground surface nearby. In the 0-10 cm level ten clear glass fragments, possibly all from the same bottle, were found. The second level yielded a small glass marble 9/16 inch in diameter, likely a Chinese checker. Between 10 and 28 cm depth, in the western third of the unit, a rock alignment of basalt cobbles was encountered.

EU 2 was placed slightly north, and closer to the stream. No artifacts were found in the 0-10 cm level,

but eight nails were encountered from the 10-20 cm level. A layer of coral gravel, 3 to 6 cm thick, was found between about 12 and 18 cm below the current ground surface. EU 3 was placed near what would have been the front yard of one of the barracks. A layer of coral gravel was also found in the west part of EU 3, at a depth of about 10 cm.

Although a very small test of a large site, the three excavation units indicate excellent potential for future investigations. Most promising is that in EU 2 and EU 3, layers of coral gravel were encountered. Coral was used to pave the roads at Honouliuli, and photographs show that pathways in Compound V were also paved with coral gravel. This stratum, then, represents the World-War-II ground surface. Despite the purposeful demolition of the camp and decades of post-war use, the original ground surface is apparently intact, in at least some portions of the camp. The edge of the coral gravel in EU 3 may even be the edge of an original path, but further investigations would be needed to determine how much of the coral paths remain, and if they could be restored.

To oversimplify a bit, when strata are intact, archaeologists have better chronological control: artifacts found at a former ground surface can be more confidently assigned to that time period, and artifacts at lower levels are more likely to be older. A layer of coral gravel bodes well not only for investigations of the World War II camp, but also for the potential discovery of evidence for earlier use of the gulch. The rocks found in EU 1 are consistent with its location at or near the fence that divided Compound V into sub-compounds. The rocks could have been placed there purposefully, either as reinforcement for the fence or to define a pathway, or to clear adjacent areas for habitation.

Feature V-1: Mess Hall Foundation (Figures 5.144-5.166)

Noted in 2006, partially mapped in 2008, and cleared and mapped in 2009, this large concrete slab is southwest of the current road at the location of the Compound V mess hall on the U.S. Army blueprints. It is cleaned by JCCH-sponsored service groups about once a year. Oriented northwest-southeast, the main part of the slab measures 71 feet 2 inches by 38 feet 8 inches (2,752 square feet). Surrounding it is a 6-inch-wide perimeter foundation/sill to support posts or superstruc-



Figure 5.127. Possible barracks footing rock in Compound V (2008).



Figure 5.128. Bucket (isolate) in Compound V (2008).



Figure 5.129. Light fixture (isolate) in Compound V (2008).



Figure 5.130. Light fixture in Compound V ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.131. Sickle (isolate) found in Compound V (2011).



Figure 5.132. Fire hose (isolate) found in Compound V (2011).

ture. The sill is flush with the slab, and surrounding the sill is a 2-foot-wide concrete apron that slopes down to the original ground surface, about 5½ inches lower than the top of the sill. The sloping apron suggests the walls were open to increase breezes or facilitate cleaning. In fact, a drawing done by Dan T. Nishikawa dated 6/14/1943 shows the mess hall with a gable roof supported on posts with triangular braces at the roof line (Appendix C, Figure C.25). In the drawing, the north end is completely open; the west side looks to be about 80 percent open, with a wall and window at the south end. In a photograph, taken later in time (see Figure 5.166), the west facade of the mess hall had been enclosed with wooden board siding in the lower half and screening in the top half. In both the drawing and the photograph, the roof appears to be rolled tarpaper sheathing.

A partition wall across the southern end of the main slab is indicated by an expansion joint, the shadow of the wall base, and vertical rebar set as anchor bolts for the wall. The large room north of the partition, measuring approximately 59 feet by 38 feet 8 inches, would have served as the dining room; the smaller room south of the partition was the kitchen, at 11 feet

6 inches wide by 38 feet 8 inches. There is a doorway, estimated to be 5 feet wide, just east of center in the partition wall. There are floor drains near both the east and west walls of the kitchen, probably indicating food preparation and dishwashing areas. The proportions of the slab correspond well to Nishikawa's drawing, which shows the southern room (the kitchen) as enclosed and the larger northern room (the dining room) as open-sided.

There is evidence of at least three separate construction or remodeling episodes. The apron surrounding the stem wall was chipped away when two additions were added. The "south extension slab" is 20 feet by 16 feet 2 inches (323 square feet); historic photographs indicate this addition was a gable-roofed structure, narrower than the main building. Similar adjacent structures are apparent at other mess halls in the historic photographs and U.S. Army blueprints. The "west extension slab" at the southwest corner is L-shaped, with maximum dimensions 17 feet 4½ inches by 14 feet 8 inches (167 square feet). The west extension slab is visible in historic photos without any building superstructure; it may have been a garbage-can-washing area. The two extensions do not connect, so the survey evidence



Figure 5.133. Excavation Unit 1 (2014).



Figure 5.134. Excavation Unit 2 (2014).



Figure 5.135. Excavation Unit 3 (2014).



Figure 5.136. Excavation Unit 3 (2014).

does not clarify if they were built at the same time. The surface of the west extension slab is 6½ inches below the surface of the main slab; the surface of the south extension is 3½ inches below the main slab. The third remodeling episode is suggested by the floor of the west extension slab, which was chipped out and then patched so that two drains could be installed. These drains lead to a small concrete septic tank covered

with a concrete slab with an entry hatch. The tank measures 6 feet 3 inches by 5 feet 6 inches; it is partially filled with sediments so its depth is not known.

Changes in the building configuration are also evident in the perimeter stem wall. Metal brackets spaced approximately every 12 feet around the perimeter of the slab probably tied 4-by-4-inch roof-support posts to the footing when the mess hall had open sides. Small irregular holes around the perimeter probably indicate where walls were attached to the floor when the building was enclosed. The metal brackets are now flush with the slab, either cut or broken off when the walls and posts were removed. Sometime after the building superstructure was removed, heavy machinery was used in an attempt to remove the foundation: the southern extension is broken up, and there are apparent bucket scrape marks on the part of the slab adjacent to the broken section.



Figure 5.137. Lotion bottle found near Excavation Unit 1.



Figure 5.138. Chinese checker from Excavation Unit 1 (2014).



Figure 5.140. White coral layer visible in sidewall of Excavation Unit 3 (2014).



Figure 5.139. White coral layer visible in sidewall of Excavation Unit 2 (2014).

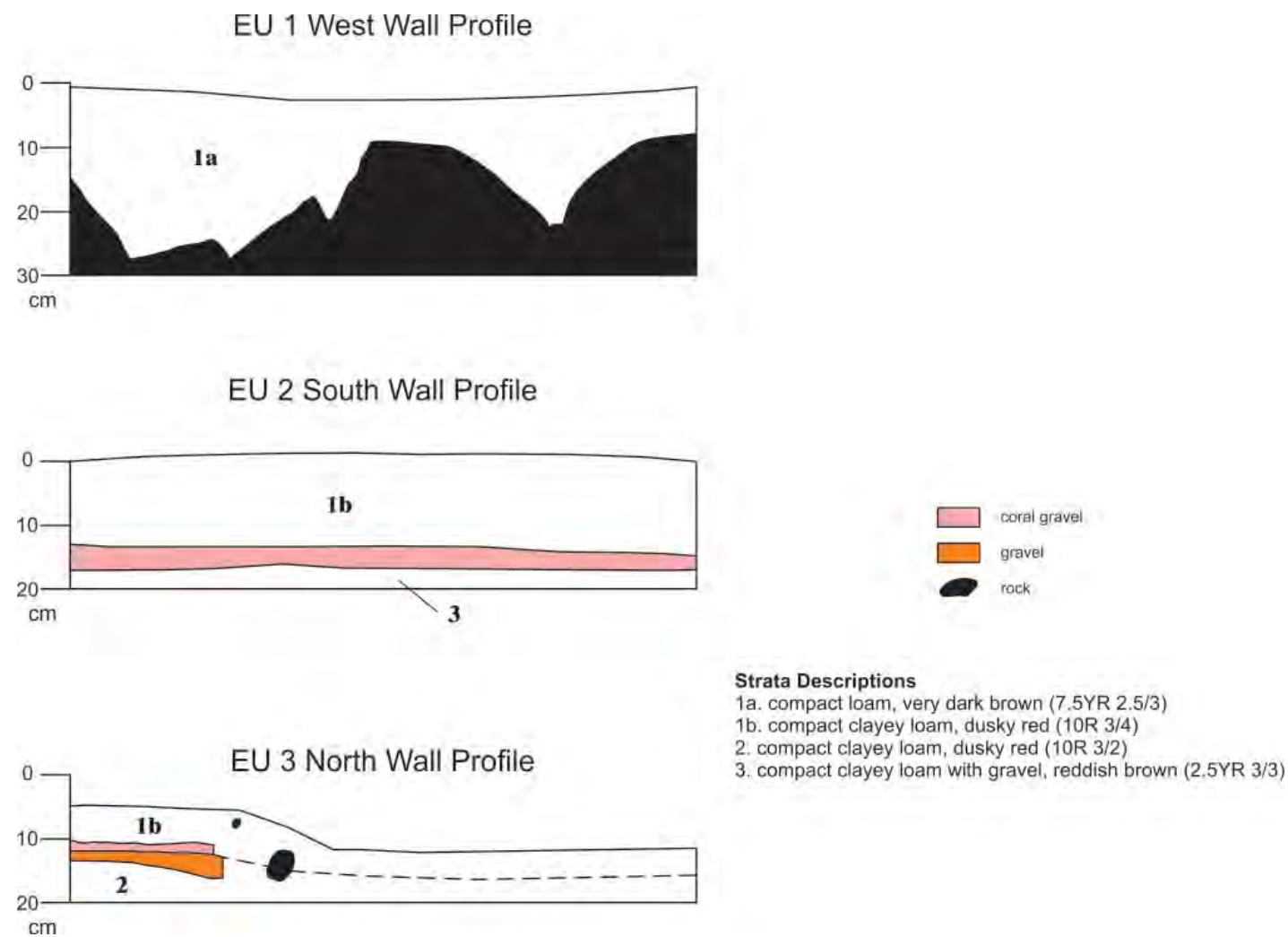


Figure 5.141. Excavation unit sidewall profiles.

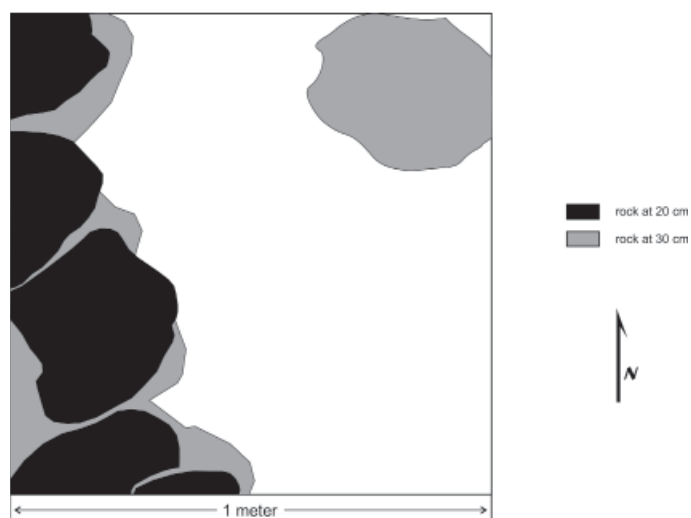


Figure 5.142. Excavation Unit 1 plan view.



Figure 5.143. Approximate location of excavation units in Compound V (R.H. Lodge photograph).

Partially on the mess hall foundation are the remains of a vehicle (Feature V-6, below), a “Seventeen Brillianteen” hair cream jar (see Figure 5.161), and a bottle with a basemark of “...8907 ... 14 ...”. The bottle was manufactured by the Maywood Glass Company of California, which operated from 1930 to 1950. Tarpaper and lumber fragments, one fragment of electrical porcelain (for knob-and-tube wiring), window glass, a fire brick fragment, and an unidentified piece of heavy-gauge metal are probably mess hall remains. Two long sections of water pipe found on Feature V-1 are twisted and bent, suggesting they were pulled up out of the ground. Some of the artifacts, such as a woven rope, cow bones, and a horseshoe, are probably associated with the post-war ranching at the site (see Figures 5.162-5.164). Others, such as a church-key-opened can, a light green bottle neck with a crown cap finish, and a metal nozzle from a hose, could be either World War II-era or later.

Feature V-2: Structural Debris (Figure 5.167)

Two concrete slabs, apparently upside down, are at the location of a water-borne latrine on the U.S. Army blueprints. One measures 10 feet 1 inch by 9 feet 4 inches, the other 10 feet by 8 feet 5 inches. Both are about 16 inches thick. Noted during the 2006 reconnaissance, they were recorded in 2008.

Feature V-3: Rock Wall (Figure 5.168)

This feature is a rock retaining wall along the stream bank, composed of dense basalt and vesicular basalt cobbles and boulders up to over 2 feet in length. The retaining wall is up to 31 inches high, mostly just one to two courses, and at least 40 feet long (it extends upstream into dense brush). The wall may have been constructed to stabilize the Honouliuli Gulch stream channel; historic photographs and the U.S. Army blueprints show a footbridge at this location. The wall is visible in historic photographs. Noted during the 2006 reconnaissance, it was recorded in 2008.



Figure 5.144. Feature V-1, internee mess hall foundation prior to cleaning (2008).



Figure 5.145. Feature V-1, clearing mess hall slab (2009).



Figure 5.146. Feature V-1, clearing mess hall slab (2009).



Figure 5.147. Feature V-1, clearing internee mess hall foundation (2009).



Figure 5.148. Feature V-1, clearing internee mess hall foundation (2009).



Figure 5.149. Feature V-1, internee mess hall foundation (2009).

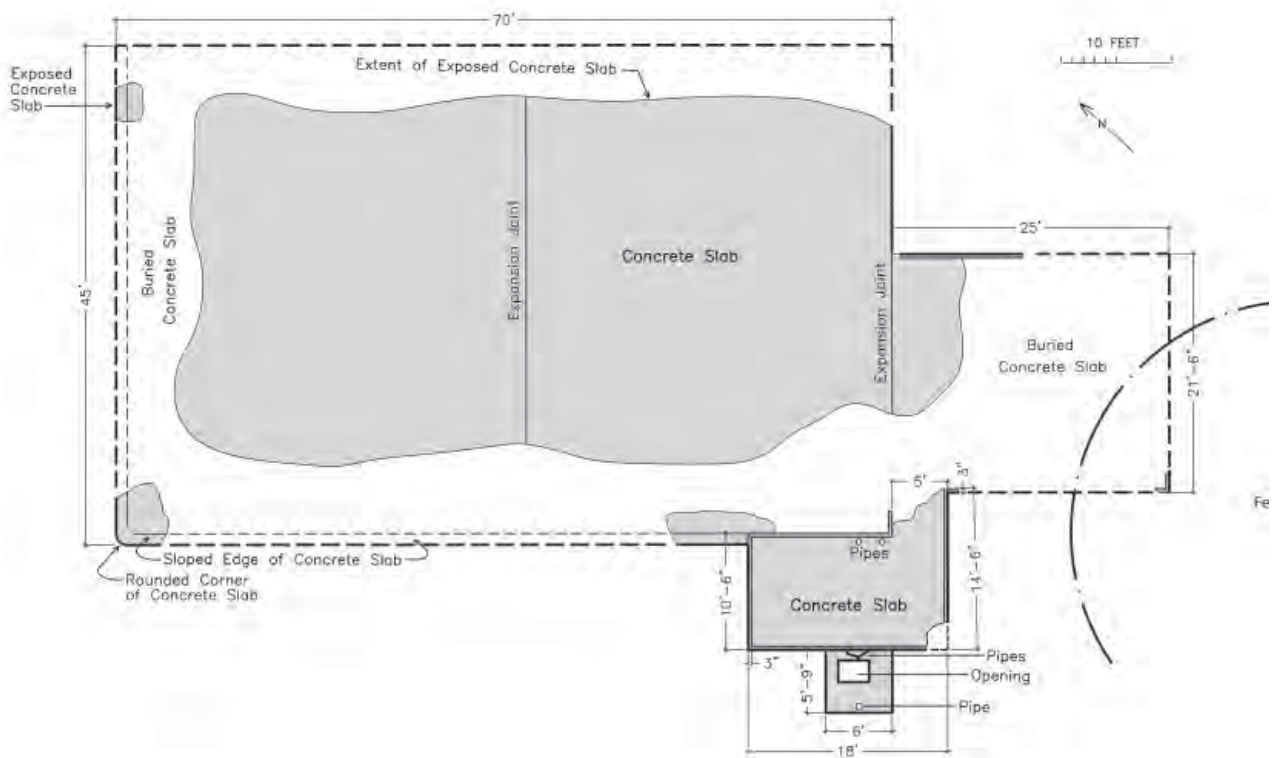


Figure 5.150. Feature V-1, internee mess hall foundation prior to clearing.

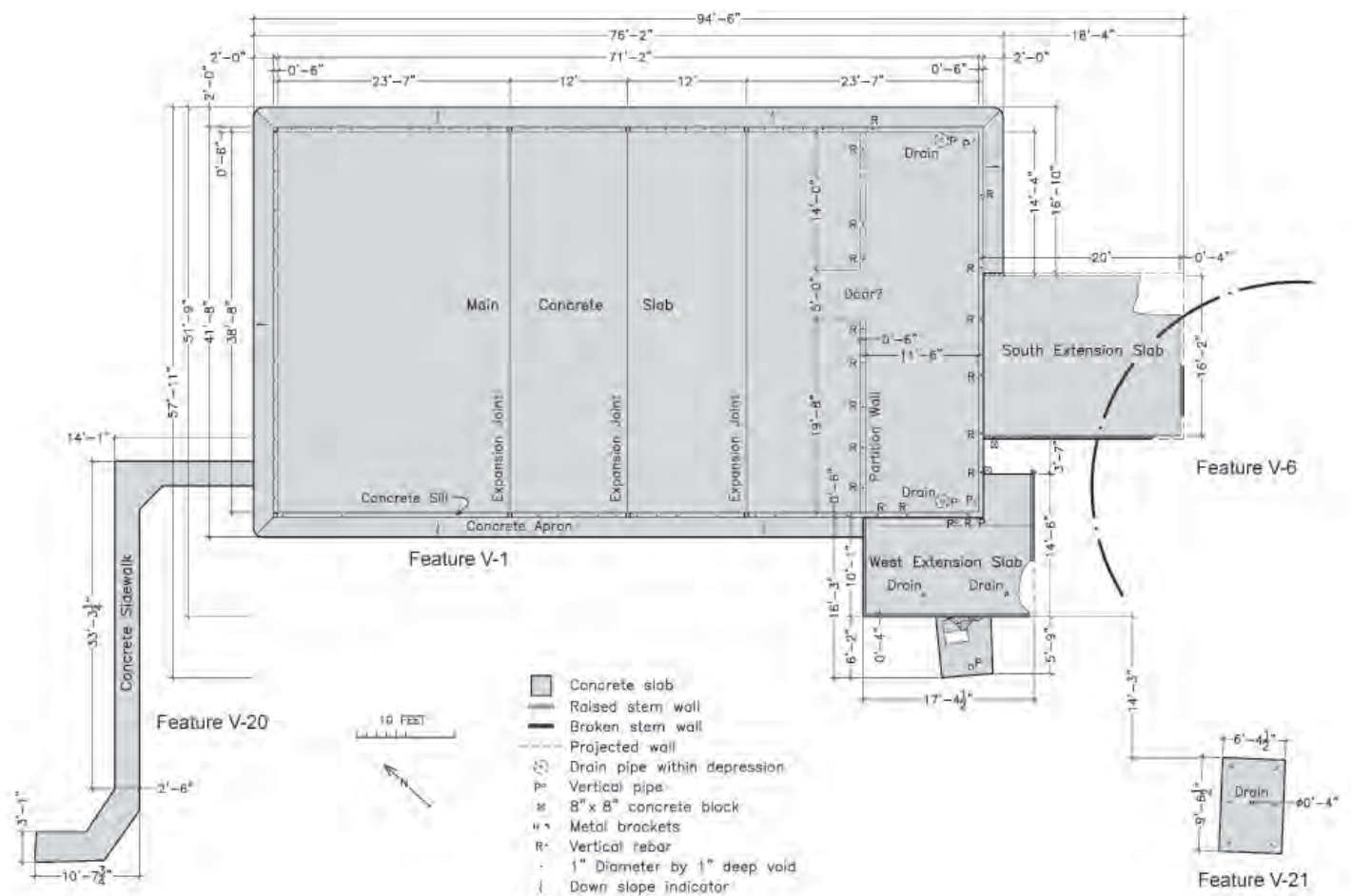


Figure 5.151. Feature V-1, internee mess hall foundation after clearing.

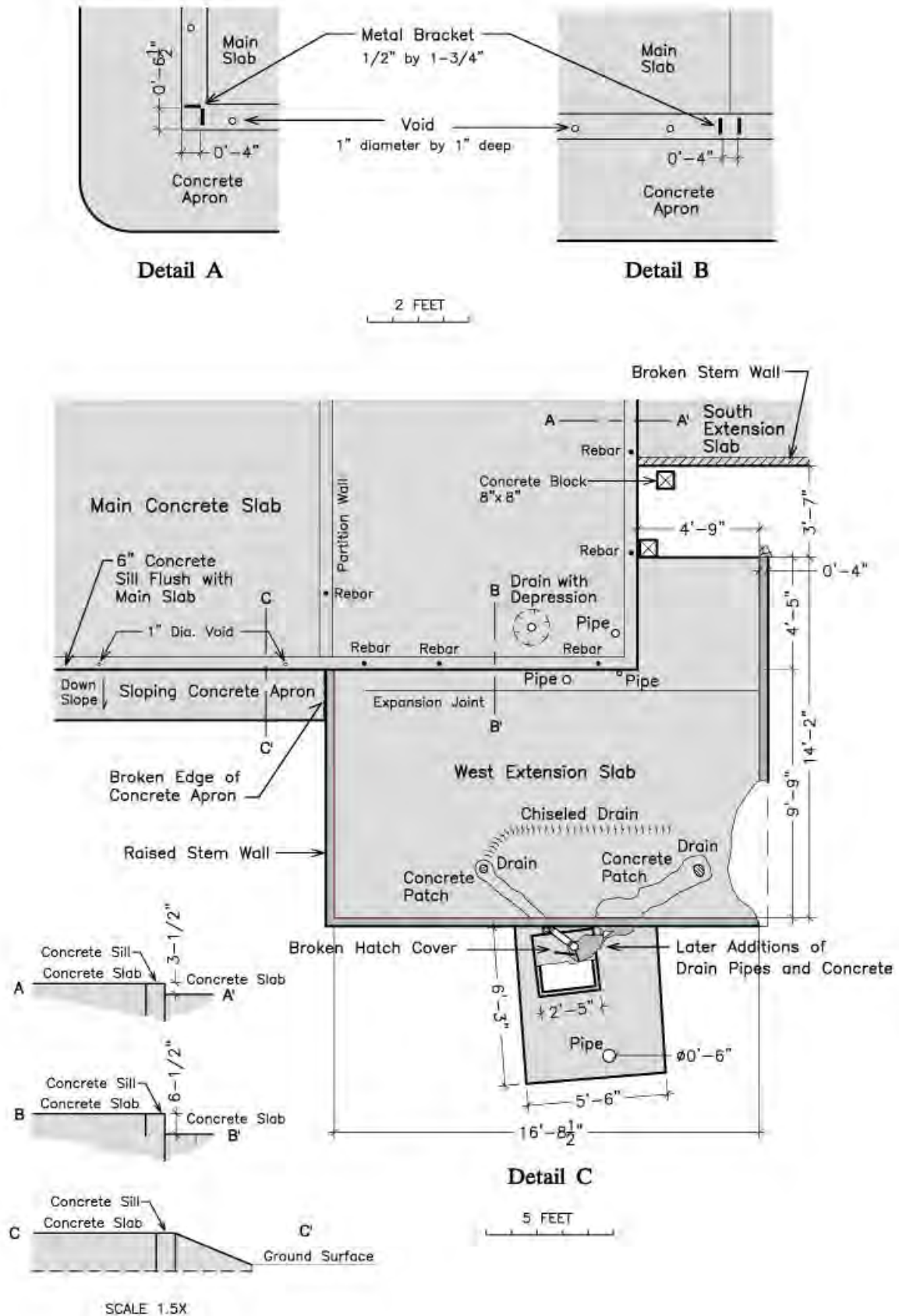


Figure 5.152. Feature V-1, internee mess hall foundation details.



Figure 5.153. Feature V-1, mess hall septic tank prior to clearing (2007).



Figure 5.154. Feature V-1, mess hall septic tank after clearing (2009).



Figure 5.155. Feature V-1, concrete patch in west extension slab (2009).



Figure 5.156. Feature V-1, concrete patch in west extension slab (2009).



Figure 5.157. Feature V-1, concrete slab and footing blocks (2009).



Figure 5.158. Feature V-1, northwest corner of main slab, showing sidewalk (Feature V-20) (2009).



Figure 5.159. Feature V-1, southwest corner of internee mess hall after clearing (2009).



Figure 5.160. Feature V-1, south end of internee mess hall foundation after clearing (2009).



Figure 5.163. Feature V-1, cow bones found during clearing of mess hall slab (2009).



Figure 5.161. Feature V-1, "Seventeen Brillianteen" hair cream glass jar found during clearing of mess hall slab (2009).



Figure 5.164. Feature V-1, horseshoe found during clearing of mess hall slab (2009).



Figure 5.162. Feature V-1, licence plate found during clearing of mess hall slab (2009).

Feature V-4: Rock Alignment (Figure 5.169)

This rock alignment is at least 13 feet long, composed of about 18 rocks that form a straight line for about 9 feet roughly perpendicular to the road, then curve to the north for another 5 feet. The rocks may have lined a pathway, since other rocks and concrete fragments in the vicinity may indicate a building platform. Further complicating interpretation of this feature is an overturned latrine slab (Feature V-2), which indicates the area has been subject to heavy ground disturbance. The alignment was noted in 2006, and further examined in 2008 and 2009.



Figure 5.165. Feature V-1, internee mess hall foundation today (2017).

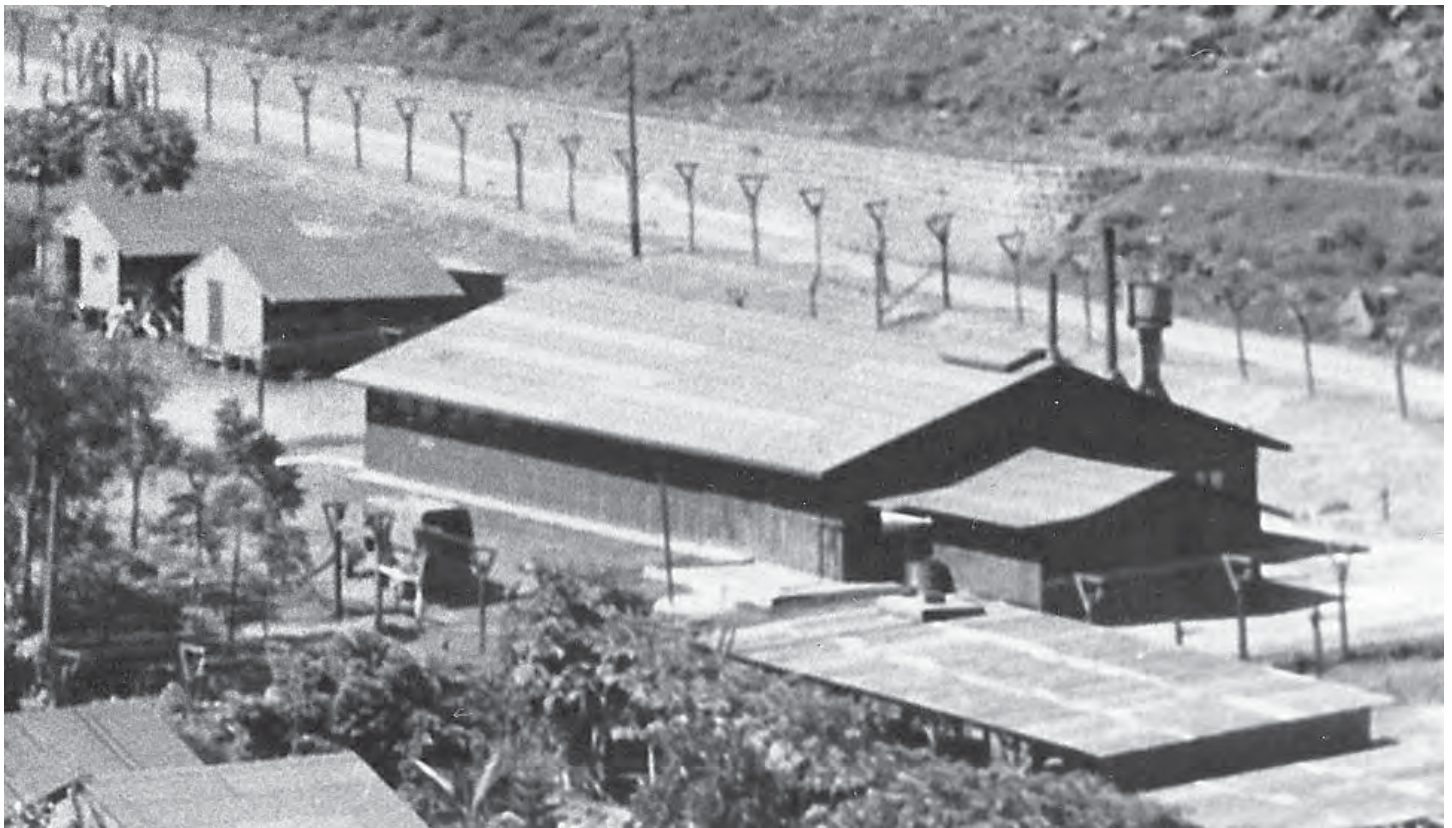


Figure 5.166. Feature V-1, internee mess hall ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.167. Feature V-2, displaced concrete slabs (2006).



Figure 5.168. Feature V-3, rock wall (2008).



Figure 5.169. Feature V-4, rock alignment (2009).



Figure 5.170. Feature V-5, post with concrete support (2017).

Feature V-5: Post (Figure 5.170)

Recorded in 2008, this feature is a hollow metal post set in a round concrete base. The post is 4 feet 3 inches long; the concrete is 6 inches high and about a foot in diameter. It appears as though a bucket (with nails

inside) was used as the form. The feature may be from the post-World-War-II ranching era. There is a concrete fragment 1 foot by 8 inches in size located 100 feet west.



Figure 5.171. Feature V-6, vehicle (2008).



Figure 5.172. Feature V-6, vehicle parts (2008).

Feature V-6: Vehicle and Parts (Figures 5.171 and 5.172)

Vehicle parts, representing at least two vehicles, were abandoned adjacent to the Compound V mess hall, including the front end of a truck; a differential with a tire and a separate gas tank; another differential; and a front axle with leaf spring and tire and steering linkages. Plate glass fragments, pieces of chrome and other metal, a license plate (“ALOHA / 63-380 / HAWAII”), and wire cable were also found. The vehicle parts were noted during the 2006 reconnaissance, and in his 2010 class project, Joseph Zdyrski examined the front end of the truck more closely and compared it to World-War-II vehicles. Zdyrski (2010) concluded that it was similar to a Dodge 1/2-ton 4-wheel-drive truck dating to the early 1940s, but its abandonment here may postdate the camp. Feature VI-6, pier foundations for a garage, is located just to the south.

Feature V-7: Latrine and Shower Building Foundation (Figures 5.173-5.181)

Found in 2008 and partially cleared and mapped in 2010, this feature is a concrete foundation, located on the artificial terrace above the barracks of Compound V. A “water borne latrine” is shown here on the U.S. Army blueprint; historic photographs show a rectangular building at the location (see Figure 5.181). The concrete foundation measures 26 feet by at least 12 feet; overburden over a foot deep and boulders cover the western portion, estimated to be about a third of the overall slab. A stem wall, 4 inches wide and 4 inch-

es tall, defines the perimeter of the slab. Portions of the stem wall are broken off along the northeast edge of the slab, but the wall remnants indicate doorways on each end of the building and a closet or storage room in the north corner. A channel had been chiseled into the concrete slab to drain water away. The larger, open portion of the slab has four toilet drains, each with four small holes where bolts held the toilet base. Bolt holes between the toilets indicate there were partitions between them. Fragments of a white porcelain toilet include the lid, which is stamped inside: “K 4541 / 81 / 9 8 42.” The last set of numbers indicates the date the toilet was manufactured, that is, September 8, 1942. A deteriorated metal urinal was found in the northeast corner. Three pieces of electrical porcelain (a complete split-knob marked “KNOX[?] No. 2½”, a split-knob base, and a solid spool insulator) indicate the building had electrical lights.

Feature V-8: Structural Debris (Figures 5.182-5.184)

Recorded in 2008, this feature consists of concrete debris pushed into a pile about 40 by 20 feet in size, now overgrown with grasses and small trees. Near the location of a water-borne latrine on the U.S. Army blueprints, the debris includes slabs, some with small regularly spaced peck marks (possibly shower floors made slightly irregular to improve traction). Also in the pile are two fragments of concrete sink, one marked “... WESELY & CO / PAT. / [S]EPT 29, 1885 / [J]UNE 19, 1886.”



Figure 5.173. Feature V-7, internee latrine foundation prior to clearing (2008).



Figure 5.174. Feature V-7, internee latrine foundation after partial clearing (2008).



Figure 5.175. Feature V-7, latrine excavation (2008).



Figure 5.176. Feature V-7, metal urinal uncovered at latrine (2008).



Figure 5.177. Feature V-7, broken toilet tank top uncovered at latrine (2008).



Figure 5.178. Feature V-7, 1942 date on underside of toilet tank top uncovered at latrine (2008).

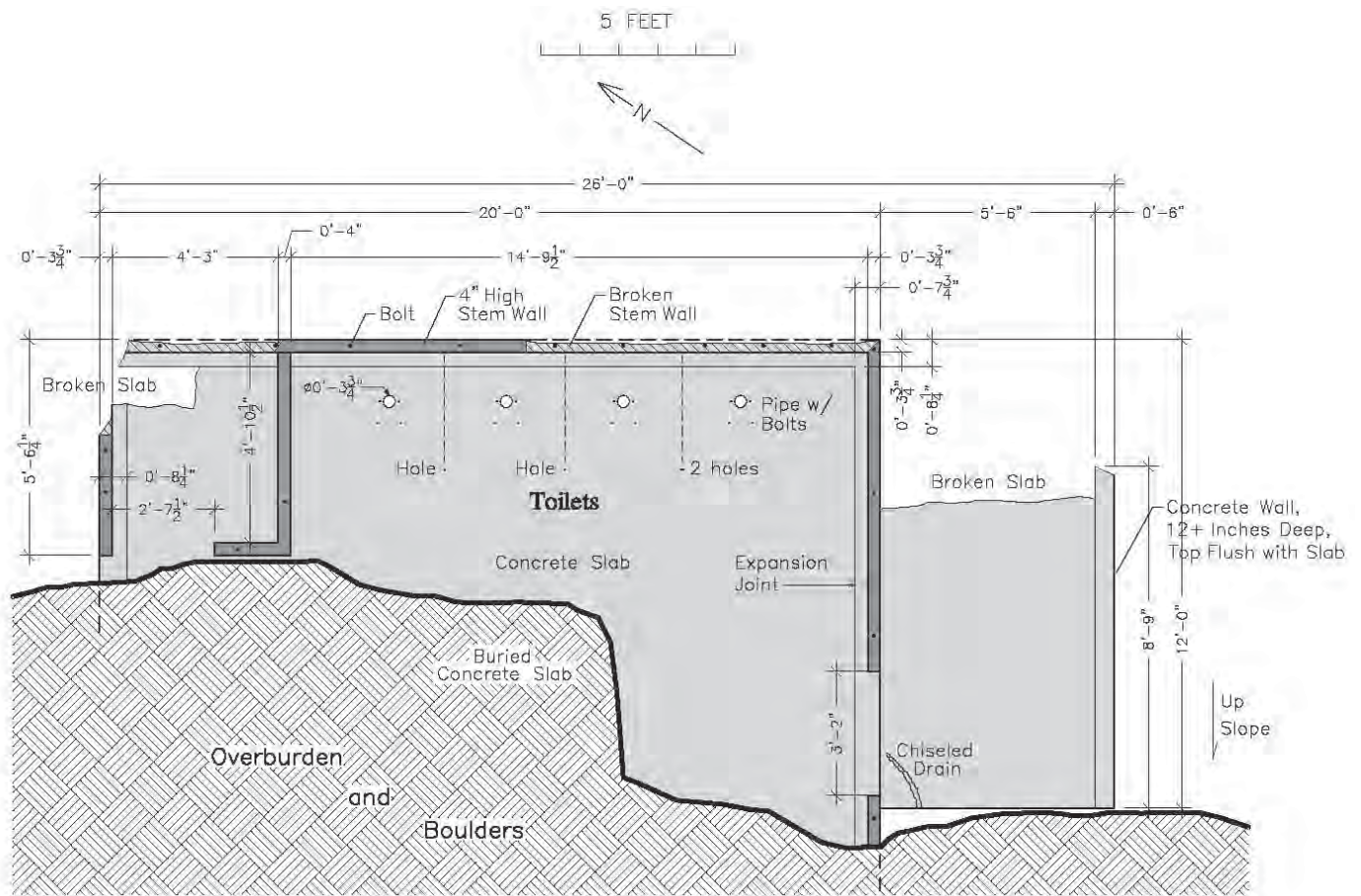


Figure 5.179. Feature V-7, internee latrine and shower building foundation.



Figure 5.180. Feature V-7, internee latrine and shower building foundation after partial clearing (2008).



Figure 5.181. Feature V-7, internee latrine ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.182. Feature V-8, concrete debris from latrine (2008).



Figure 5.183. Feature V-8, sink fragment (2008).

Feature V-9: Sewer Manhole (Figure 5.185)

Recorded in 2008, this feature is an in-place manhole, with a concrete lid 2 feet 1 inch in diameter set in a concrete rim that is 3 feet 3 inches in diameter at its base, and 7 inches high. The lid has two handles made of rebar, between which is inscribed into the concrete “Nov 4, 1944.” The inscription is formed from a series

of small angular depressions, and may have been made with a square nail head or similar tool. This feature is depicted as part of the “authorized system” (rather than part of the “existing system”) on the U.S. Army blueprints, indicating that the blueprints were drawn before that date.



Figure 5.184. Feature V-8 (building at upper right), latrine ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.185. Feature V-9, sewer manhole (2008).



Figure 5.186. Feature V-10, rock wall (2008).

Feature V-10: Rock Alignment (Figure 5.186)

Noted in 2008, this curved rock alignment is very overgrown with vegetation, but is estimated to be approximately 30 feet long and composed of at least 12 large, widely spaced basalt boulders. This feature is similar to a row of large widely spaced boulders between buildings and the stream visible in one of the historic photographs.

Feature V-11: Rock Wall (Figure 5.187)

Visible in historic photographs, this retaining wall is made of dry-laid basalt boulders and cobbles. It is over 200 feet long, about 1 foot 6 inches to 2 feet high, and up to 2 feet wide. The northern 185 feet is well constructed and intact; the southern part has partially collapsed. Several large boulders are incorporated into the rock wall, and there is some rubble fill behind. Tomato plants, mock orange trees, and togan (winter) squash grow in the flat to the east. A second, higher, retaining wall parallels Feature V-11 in places, and a galvanized

steel bucket was noted tucked under a boulder in the upper wall. Vegetation is very dense and other artifacts and features are likely. Feature V-11 was recorded in 2008.

Feature V-12: Pond (?) (Figures 5.188 and 5.189)

This feature appears to be a small water catchment or ornamental pond. It was built on the terrace created by the Feature V-11 retaining wall and incorporates a large boulder that is also part of the wall. Excavated during the 2008 survey, this concrete and cobble feature measures 4 feet 1 inch by 3 feet 3 inches in plan overall, and is 1 foot 4 inches deep. It is egg-shaped, with a concrete rim, and concrete-mortared cobbles and boulders lining the concave interior and bottom. Wire mesh hardware cloth is embedded all around the rim, extending roughly 6 inches toward the basin interior. The mesh may have been embedded to exclude foliage, debris, or predators from the pond.

The only artifact in the feature fill was a large 8-sided compression nut. Nearby are a concrete block, a large animal bone, wire, a drilled boulder, and an electrical box on conduit 1 foot 11 inches long. A boot heel was found about 30 feet to the northwest. Also found nearby was a light fixture that matches lights along the security fence visible in historic photographs. It has a shade of galvanized tin, measuring 2 feet 10 inches by 1 foot 4 inches, and two sockets for bulbs at the end of a J-shaped conduit pole about 4 feet long.

Feature V-13: Guard Tower Footings (Figures 5.191-5.193)

In 2008, Feature V-13 was recorded as a concrete post footing, with a single posthole 4 inches by 6 inches in size, located along the Waiāhole Water Company ditch. At the time, the feature was thought to be part of a fence, perhaps one of the fences that divided the prison camp into compounds. In 2010, it was discovered that the guard tower at the boundary between Compounds V and VI straddled the ditch. The foundation for that guard tower, recorded as VI-50, was indicated by four postholes, each roughly 4 inches by 6 inches in size, about 6 feet apart, with two on each side of the ditch. Given the discovery of VI-50, the V-13 posthole was reevaluated as possibly part of the foundation for another guard tower visible in historic photographs. However, the V-13 posthole had been buried under a



Figure 5.187. Feature V-11, rock wall (2008).



Figure 5.188. Feature V-12, possible ornamental pond (2008).



Figure 5.189. Feature V-12, possible ornamental pond (2008).

small landslide sometime between the 2008 and 2010 fieldwork, and the original GPS reading on the feature was imprecise, due to limited satellite availability at the time. Therefore, in 2011 recent sediments along

approximately 100 feet of the ditch were removed, to expose the ditch's concrete edge and adjacent ground surface where the V-13 posthole had been recorded. During that excavation, a 1939 Coke bottle (with



Figure 5.190. Feature V-13, excavation to locate guard tower footings (2011).



Figure 5.191. Feature V-13, guard tower footings (2011).



Figure 5.192. Feature V-13, guard tower footing and inscription (2011).

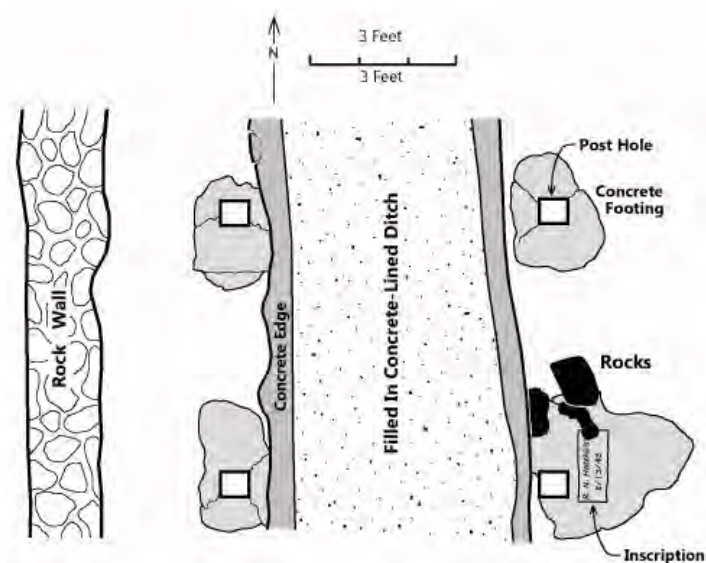


Figure 5.193. Feature V-13, guard tower footings.



Figure 5.194. Feature V-14, embedded water pipe (2017).



Figure 5.195. Feature V-14, loose pipe found nearby (2017).

“Kansas City, MO” on its base), barbed wire, and a section of cable were recorded.

The guard tower foundation was found, approximately 350 feet north of the guard tower recorded as VI-50. It consists of four poured-in-place irregular concrete post footings, two on either side of the ditch. No posts remain, but a posthole impression in each footing indicate that 4-by-6-inch lumber was used for the tower’s legs, which were set about 7 feet apart. Inscribed in the southeast footing is a name and date: “R.N. Hotchkiss(s) / 8/13/43,” and possible hand prints.

Linda Maldonado, a student in the 2012 class, found out more about R. N. Hotchkiss (Maldonado 2012). He had enlisted at Camp Blanding, Florida, on April 29, 1942; his civilian occupation category was listed as “semiskilled chauffeurs and drivers, bus, taxi, truck, and tractor,” and he was single with no dependents. Hotchkiss’s records were among the millions of service records catastrophically destroyed by fire in 1973, so Maldonado searched for other sources of information. The March 23, 1951, edition of the *Daytona Beach Morning Journal* noted that Hotchkiss had entered Halifax Hospital. In the Florida death index, Rollin Neale Hotchkiss is listed as having died in 1955, at Volusia, Florida. His tombstone at Arlington National Cemetery is, of course, much more formal and poignant than the inscription in the concrete at Honouliuli:

Rollin Neale Hotchkiss
OHIO
CPL CMP
WORLD WAR II
FEBRUARY 15 1911
AUGUST 9 1955

Maldonado was not able to locate descendants or other relatives of Hotchkiss, but notes that the fact that he is buried at Arlington means he either retired from the military, or was medically disabled. The latter seems more likely, because he died before he could have served the minimal 20 years required for retirement.

Feature V-14: Pipe (Figures 5.194 and 5.195)

This feature is a 1/2-inch-diameter water pipe curving up from the ground about a foot and a half, and a second loose section of pipe, approximately 2 inches in diameter and 2 feet long. The pipes were found in 2008, and photographed in 2017.

Feature V-15: Rock Wall (Figures 5.196-5.199)

This feature is a large retaining wall of mortared basalt, adjacent to the entry road and visible in historic photographs. Like Feature V-16, below, this feature is within the area marked as “Compound V” on the U.S. Army blueprints, but east of the road and therefore outside of the fenced internee compounds. The wall served as a retaining wall for the ditch that feeds into the aqueduct. Measuring 225 feet long, the wall is almost 9 feet high at its south end, with eight courses of rocks about 12 by 10 inches to 11 by 15 inches in size, by 8 inches deep, and a top course of half-size rocks. At the south end of the wall there are boulders and cobbles as fill behind it. The wall decreases in height from south to north, and bends with the irrigation ditch where the ditch crosses the road. Drainage pipes have been set flush with or slightly extending from the wall at the south end. In the historic photograph, ten or eleven courses of rock are visible, indicating that the current road surface and shoulder are higher than they were 60 years ago. In 2008, when the wall was recorded, there were several cracks in the southern part of the wall (Figures 5.197 and 5.198). However, by the 2017 field visit, the cracks appeared more extensive and one of the rocks was missing (Figure 5.199). The National Park Service and UHWO under the direction of Dr. Bill Belcher have documented the wall and its condition in more detail, in anticipation of a stabilization plan (Rebecca Rinas, personal communication 2017).

Feature V-16: Road (Figure 5.200)

Recorded in 2008, this feature is an old road bed about 18 feet wide, located above Feature V-15. The road is depicted on the U.S. Army blueprints; now it is overgrown with vegetation.

Feature V-17: Rock Wall (Figure 5.201)

Guinea grass in the Japanese American women’s compound, immediately south of the aqueduct and east of the stream, is extremely dense, not only obscuring the ground surface but also impeding traverses through the area. However, a retaining wall was noted parallel to and approximately 15 feet west of (below) the current road. The portion of the wall recorded in 2009 was composed of basalt boulders, and was about 1½ feet high. The length of the wall was not determined.



Figure 5.196. Feature V-15, rock retaining wall (2008).

Feature V-18: Rock Wall (Figures 5.202 and 5.203)

This retaining wall, located along the east bank of the stream, was composed of uncoursed basalt boulders and cobbles stacked two to four rocks high. Estimated to be 30 feet long when it was recorded in 2009, the wall has partially collapsed.

Feature V-19: Rock Wall (Figures 5.204 and 5.205)

Located about 150 feet downstream from Feature V-18, this rock wall is similarly constructed and may be a continuation of that stream bank retaining wall. Feature V-19 is also composed of uncoursed basalt boulders and cobbles, stacked up to five rocks high. Estimated to be 40 feet long when it was recorded in 2009, the wall has partially collapsed. The wall is visible in historic photographs, and would have supported a pedestrian bridge at the end of the sidewalk recorded as Feature V-20. Feature V-3, a rock wall 40 feet downstream, may also be a continuation of this retaining wall.

Feature V-20: Sidewalk (Figures 5.206-5.209)

Visible in one of the historic photographs (see Figure 5.209), this concrete sidewalk extends northwest 14 feet from the corner of the Internee Mess Hall (Feature V-1), turns southwest toward the stream for 33 feet, then makes two 45-degree angles to the right (that is, to the west and northwest) before ending not far from the stream for a total length of nearly 58 feet. Each alignment is of a different width; this non-standard construction may indicate the feature was constructed by internees or POWs after the camp was established, perhaps to alleviate muddy conditions. It was cleared and mapped in 2009.

Feature V-21: Concrete Slab (Figures 5.210 and 5.211)

This small concrete slab, measuring 9 feet 6½ inches by 6 feet 4½ inches (61 square feet), is located about 25 feet to the south of the Internee Mess Hall (Feature V-1). The slab slopes slightly toward a central drain; there is a depression adjacent to the slab to the northwest, possibly indicating the location of a cesspool depicted on the U.S. Army blueprints. It was cleared and mapped in 2009.



Figure 5.197. Feature V-15, cracks in rock wall (2008).



Figure 5.198. Feature V-15, missing veneer rock and cracks in rock wall (2014).



Figure 5.199. Feature V-15, missing veneer rock and cracks in rock wall (2017).



Figure 5.200. Feature V-16, road (2012).

Feature V-22: Vertical Pipe and Wood Post (Figure 5.212-5.214)

This feature, recorded in 2009, is a glazed clay sewer pipe, set vertically into the ground as a clean-out for the sewerline depicted on the U.S. Army blueprints. The pipe's outer diameter is 9½ inches, and it extends

just a couple inches above the current ground surface. Two large flat rocks nearby may have been piers for one of the internee barracks, or part of a walkway border. The vertically set four-by-four-inch wood post, located approximately 10 feet to the south, extends about 3 feet above ground.

Feature V-23: Septic Tank (Figures 5.215-5.221)

This feature, cleared and mapped in 2009, is a raised septic tank, measuring 51 feet 6 inches long by 11 feet 4 inches wide, by up to 3½ feet above the cur-



Figure 5.201. Feature V-17, rock wall (2017).



Figure 5.202. Feature V-18 (2017).



Figure 5.203. Feature V-18, rock wall (2017).



Figure 5.204. Feature V-19, rock wall (2017).



Figure 5.205. Feature V-19, rock wall (2017).



Figure 5.206. Feature V-20, sidewalk to internee mess hall (2009).



Figure 5.207. Feature V-20, sidewalk at internee mess hall (2009).



Figure 5.208. Feature V-20, sidewalk to internee mess hall (2009).



Figure 5.209. Feature V-20, sidewalk to internee mess hall ca. 1945 (detail of R.H. Lodge photograph).

rent ground surface. The side walls are solid block for the top six courses; below that, the blocks are spaced widely so that there are small openings between the end joints. Presumably, the tank was designed so that these openings would have been below ground, but the feature can be seen as a raised flat surface in the historic photographs (see Figure 5.221). An access hatch, 2 feet 3½ inches square, is located midway along the southwest edge of the top surface; the hatch has a concrete cover with two bent rebar handles. A 6-inch-diameter clean-out pipe is located near the east corner. The northern end is cracked and broken. One artifact was noted at this feature, a clear glass vinegar bottle, about 9½ inches tall and 3 inches in diameter. “*Duraglas*” is in raised lettering at the heel and on the bottom is the basemark “... 5. / 9 / E1596,” signifying the Owens Illinois Glass Company and a 1945 manufacturing date.



Figure 5.210. Feature V-21, concrete slab prior to clearing (2009).



Figure 5.211. Feature V-21, concrete slab after clearing (2009).



Figure 5.214. Feature V-22, ceramic pipe (2009).



Figure 5.212. Feature V-22, wood post and ceramic pipe (2009).



Figure 5.213. Feature V-22, wood post (2009).



Figure 5.215. Feature V-23, septic tank after clearing (2009).



Figure 5.216. Feature V-23, septic tank detail (2009).



Figure 5.217. Feature V-23, septic tank detail (2009).

Feature V-24: Pipeline

(Figures 5.222 and 5.223; see Figure 5.220)

Recorded in 2009, this 10-inch-diameter glazed clay pipe is mostly buried, but two sections are visible above ground, one at the stream and one a third of the way from the septic tank to the stream. The sewer line

is depicted on the U.S. Army blueprints.

Feature V-25: Septic Tank (Figures 5.224-5.228)

Feature V-25 is a septic tank measuring 27 feet 5½ inches long by 11 feet 4 inches wide; depth is un-



Figure 5.218. Feature V-23, septic tank access (2009).



Figure 5.219. Feature V-23, septic tank clean-out pipe (2009).

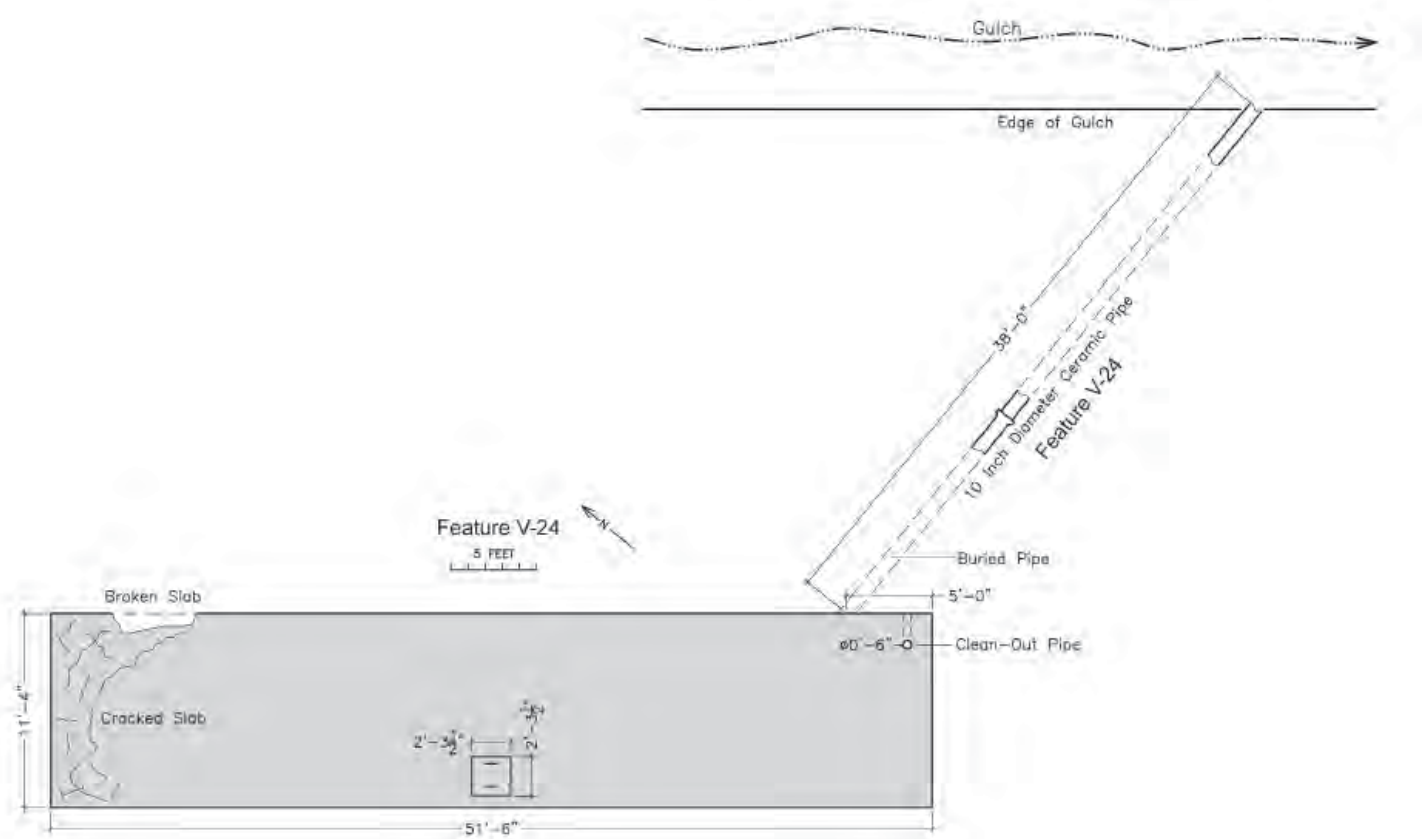


Figure 5.220. Feature V-23 and V-24, septic tank and outflow pipe.

known. Partially visible in historic photographs, the concrete top was found at the current ground surface, but covered with vegetation. It was partially cleared and mapped in 2009. There are three access openings, all with concrete covers; two of them are 2 feet 3 inches square and the third 3 feet 3½ inches square. On the slab was found a “no deposit no return / not to be refilled” amber beer bottle with the basemark “Dura-

glas / 45. / 3,” indicating the Owens Illinois Glass Company and a 1945 manufacturing date.

Feature V-26: Latrine and Shower Building Foundation (Figures 5.229-5.241)

This feature was partially cleared and mapped in 2009, and re-photographed in 2014 and 2017. Measuring 30 feet by 16 feet 10 inches (505 square feet), the con-



Figure 5.221. Feature V-23, septic tank behind row of internee barracks ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.222. Feature V-24, septic tank outflow pipe (2009).



Figure 5.223. Feature V-24, septic tank outflow pipe (2011).



Figure 5.224. Feature V-25, septic tank after clearing (2009).

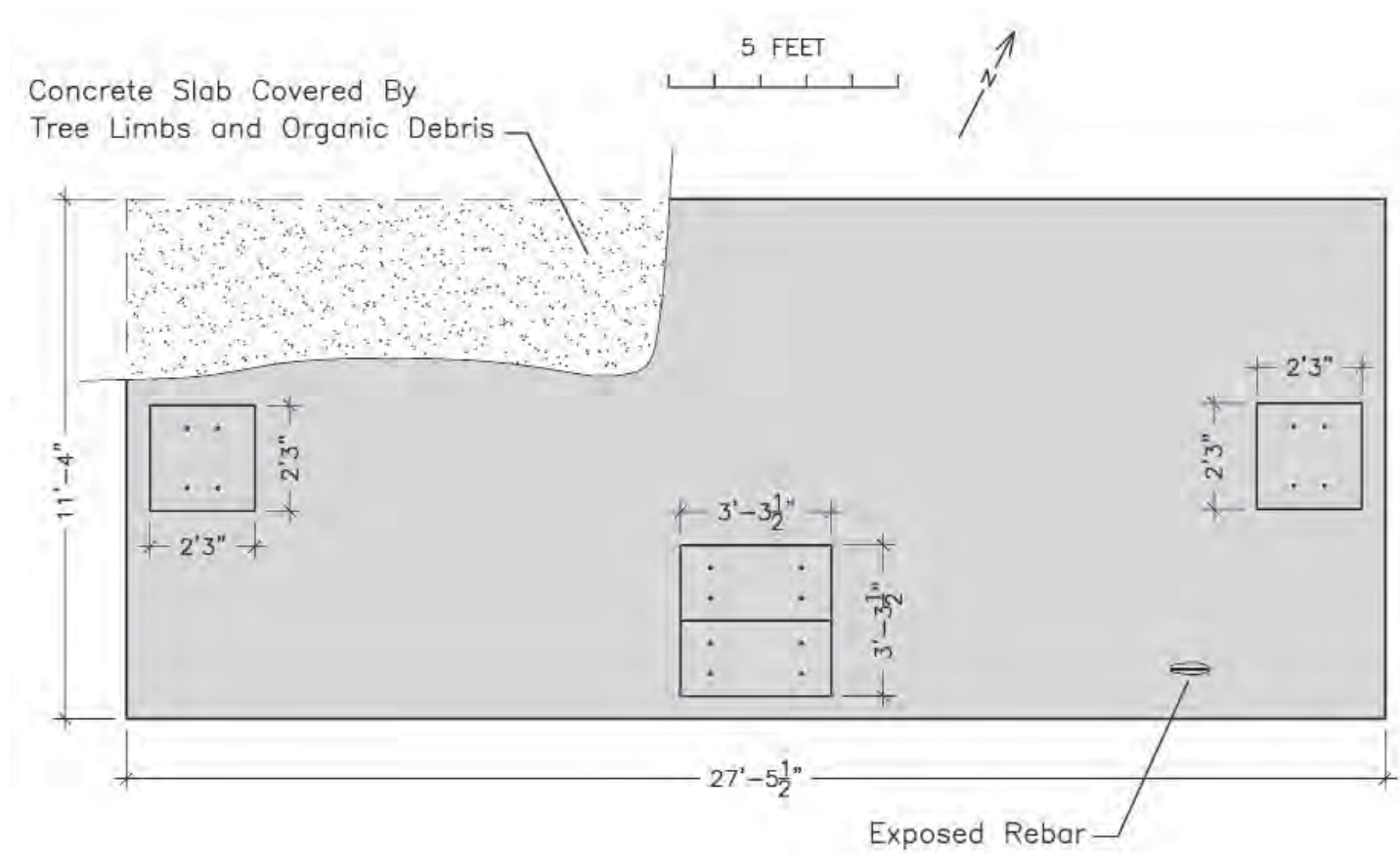


Figure 5.225. Feature V-25, septic tank.



Figure 5.226. Feature V-25, clearing top of septic tank (2009).



Figure 5.227. Feature V-25, septic tank access.

crete slab foundation is divided into several sections or rooms by raised stem walls. The two largest rooms, on the southern end of the building, each have five toilet drains and a 3-foot-wide exterior doorway on the south end. Portions of the stem walls are broken off in the northern part of the building, but the wall remnants indicate a closet or storage room, a hallway, and a shower room 9 feet 2 inches by 11 feet 9 inches in size, with two floor drains. There appears to have been a drainage problem in the southern, latrine part of the building: five small drainage channels were chiseled into the concrete floor to carry water out two of the doors, and two drain holes were punched through the floor and the foundation wall. The latrine and shower building can be seen in one of Lodge's historic photographs (see Figure 5.239); it appears to have an unroofed partial privacy wall at the south end, where the doorways to the toilet rooms were. Numerous cow bones (all likely from the same animal) found on the slab are related to the post-war ranching use of the site.



Figure 5.228. Feature V-25, bottle encountered during clearing of septic tank top (2009).

In 2017, the foundation was almost completely obscured by vegetation.

Feature V-27: Drilled Posthole (?) in Rock (Figure 5.242)

This mostly buried rock, recorded in 2010, is irregularly shaped, 18 by 24 inches in size at the ground surface. A vertical hole drilled in about the center of the rock measures 1 7/8 inches in diameter. This feature would have been located among the internee barracks west of the creek and near the south boundary of Compound V. Function is unknown, but the hole is vertically aligned, and may have served to anchor a metal post.

Feature V-28: Rock Wall (Figure 5.243)

This feature is a rock retaining wall west of the ditch and guard tower recorded as Feature V-13. Constructed of basalt boulders and cobbles, it is about 3 feet high. Its length is unknown but it extends at least 25



Figure 5.229. Feature V-26, latrine and shower foundation being cleared (2009).



Figure 5.230. Feature V-26, latrine and shower foundation being cleared (2009).



Figure 5.231. Feature V-26, latrine and shower foundation being cleared (2009).



Figure 5.232. Feature V-26, latrine and shower building after clearing (2009).



Figure 5.233. Feature V-26, wall impression.



Figure 5.234. Feature V-26, toilet fixture.



Figure 5.235. Feature V-26, latrine and shower foundation detail (2009).

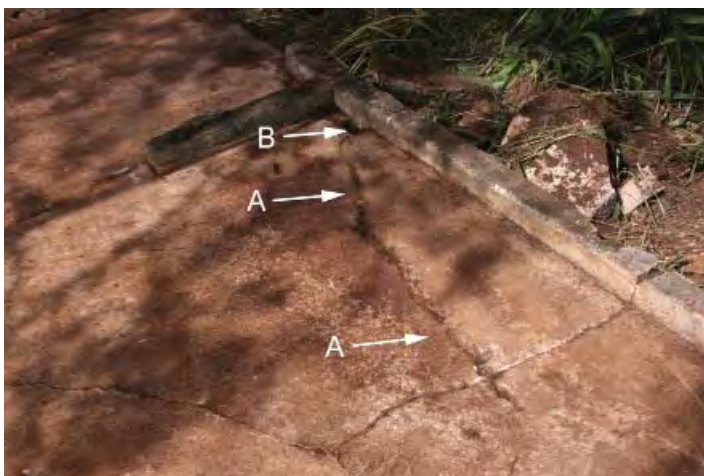


Figure 5.236. Feature V-26, latrine and shower foundation detail showing chiseled drain (A) and hole through wall (B) (2009).

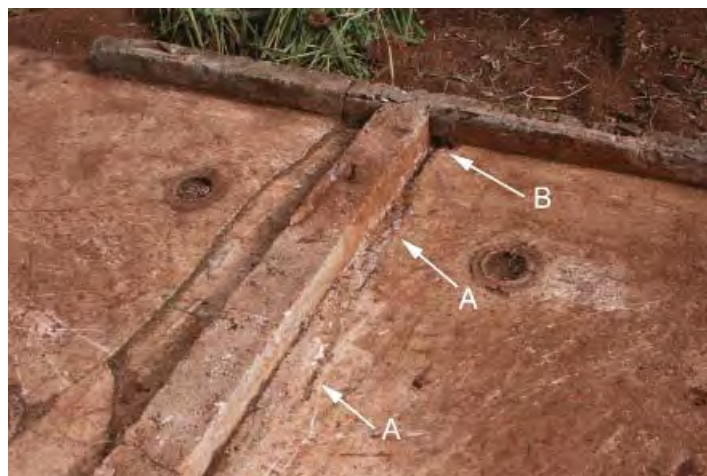


Figure 5.237. Feature V-26, latrine and shower foundation detail showing chiseled drain (A) and hole through wall (B) (2009).

feet to the north and 10 feet to the south of the guard tower. It was only partially cleared during the 2011 field season.

Feature V-29: Rock Wall (Figure 5.244)

Recorded in 2014, this feature is a rock retaining wall 12 feet long and 7 feet high, located above the road and above the big wall recorded as Feature V-15. It would have served as a retaining wall for the road recorded as Feature V-16, which is directly above it.

Compound VI Guard Camp Area

The area labeled “Existing Guard Camp Area VI” on the U.S. Army blueprints included an administration area east of the stream and a housing area to the west (Figures 5.245-5.246). Historic photographs indicate that the guard camp area had over 50 buildings, and three to five pyramidal tents. Numerous large and conspicuous features are still present. Fifty-eight features were recorded including two buildings, foundations,

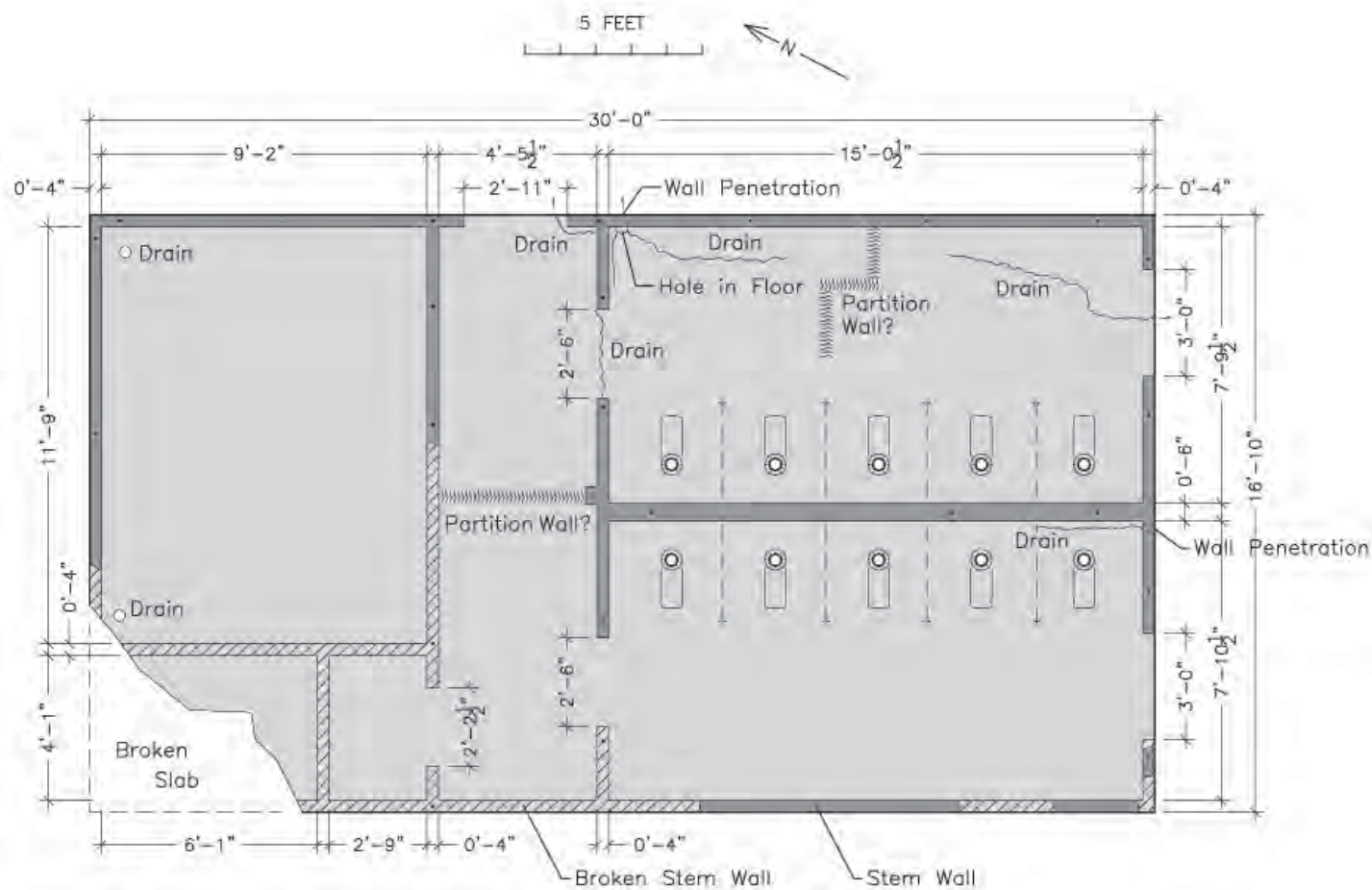


Figure 5.238. Feature V-26, latrine and shower foundation.



Figure 5.239. Feature V-26, latrine and shower building ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.240. Feature V-26, latrine foundation (2014).



Figure 5.241. Feature V-26, latrine foundation today (2017).



Figure 5.242. Feature V-27, drilled post hole in rock (2009).



Figure 5.243. Feature V-28, rock wall at guard tower (2011).



Figure 5.244. Feature V-29, rock and concrete wall (2012).

cesspools, and structural debris. According to Rodney Santiago, the two buildings were used as a chicken farm. The buildings had been in good condition when he first started ranching in the area in the 1950s. Abundant debris and trash attest to this former use (see Feature M-6, below).

As mentioned in Chapter 2, in 2010, Monsanto Hawai'i provided a backhoe to help us search for the foundations of a large building visible in the historic photographs in Compound VI (see Figure 5.247). The trench was placed so that it would bisect the north end of the staff mess hall; the excavated trench measured 90 feet long by 2 to 3 feet wide, and 3 feet deep at the west end and 2 feet deep at the east end (Figures 5.248-5.249). The excavation was continuously monitored by two students and one professional archaeologist, and periodically examined with a metal detector (Figure 5.250). Side walls of the trench were examined for evidence of features, artifacts, or soil variations; back dirt piles were examined for artifacts both visually and with a metal detector. Side walls were periodically cleaned by trowel or shovel. Soils were very rocky, with some large boulders from the west end to about 30 feet east, at which point the sediments became less rocky, but more compact. No evidence of a foundation was found, and the rockiness of the deposits suggests the trench was excavated below the World-War-II ground surface.

Artifacts encountered in the trench include metal water pipe, a door hinge (Figure 5.251), some small concrete fragments (less than 2 inches maximum size), seven common wire nails (one 4 inches long, one 3 inches long, three 2½ inches long, one 2 inches long, and one 1½ inches long), a broken horseshoe nail, metal strapping, other small metal fragments, and a chicken bone. After recording was completed, the trench was refilled, to approximate the original ground contour.

In addition to the artifacts associated with features and described below, there were several isolates found in Compound VI (Figures 5.251-F.255). Most common are beer bottles, all with crown caps and many with “no deposit no return” (dating to 1939 and later). Also found were an embossed oval bottle (perhaps for lotion), and a Coca-Cola bottle. A metal bar with tines may be part of a harrow blade, from later agricultural activities at the site.

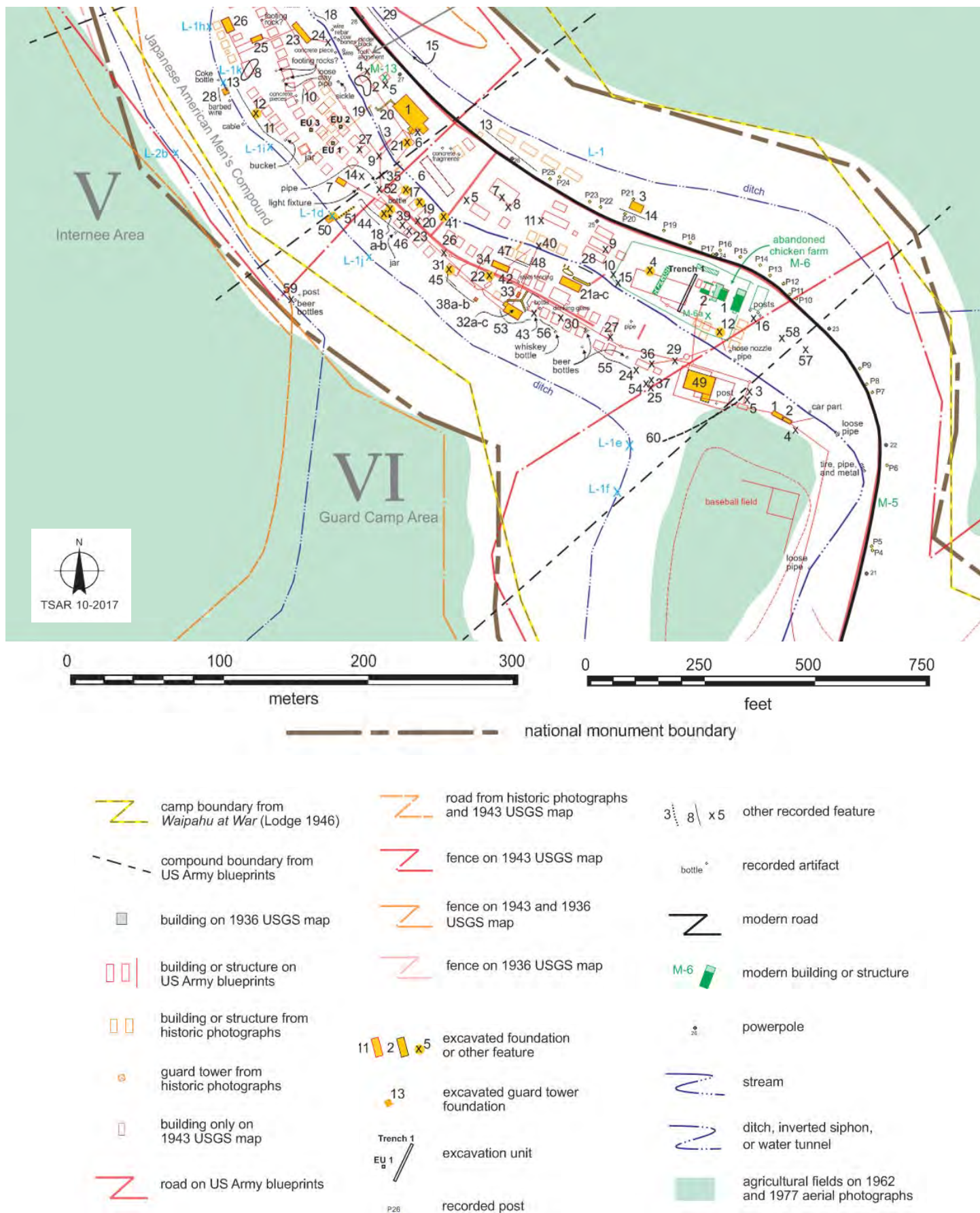


Figure 5.245. Compound VI archaeological features.



Figure 5.246. Northwestern portion of Compound VI (2008).



Figure 5.247. Compound VI mess hall ca. 1944 (Glenn Heern photograph, JCCH).



Figure 5.248. Excavating backhoe trench in Compound VI (2009).



Figure 5.250. Examining trench in Compound VI with metal detector (2009).



Figure 5.249. Completed backhoe trench in Compound VI.



Figure 5.251. Door hinge found in backhoe trench in Compound VI.

Feature VI-1: Building Foundation (Figures 5.256-5.262)

When first recorded in 2008, the main building of the abandoned chicken farm was thought to be an original administration area structure. A building at the location is shown on the U.S. Army blueprints, and a building is partially visible in the background of the historic Lodge photographs. However, the Hashimoto photographs donated to JCCH during the 2010 field school show that all of the buildings had been removed by 1948 (see Figures 5.256 and 5.257). Close examination of the 1951 aerial photograph indicates that the light-colored rectangles at the chicken farm location are foundations, rather than buildings. No buildings



Figure 5.252. Beer bottle found in Compound VI (2017).



Figure 5.253. Lotion bottle found in Compound VI (2017).



Figure 5.254. Beer bottles found in Compound VI (2007).



Figure 5.255. Possible harrow blade part found in Compound VI (2012).

are depicted in the gulch on the 1953 USGS topographic map, but one building is depicted at the chicken farm on the 1960 USGS map, suggesting that the chicken farm was built between 1953 and 1960, using World War II foundations. The chicken farm may have incorporated recycled building materials from World War II, but the two buildings are considered post-war constructions, and are described under Feature M-6, below.

Overall, the foundation designated Feature VI-1 measures 49 feet by 20 feet 6 inches (337 square feet). The north half is a raised concrete slab foundation, the south half consists of wooden posts and concrete piers. Several wooden posts, both round and rectangular in cross-section, are set vertically into the ground near the structure to form a corral. These posts are likely related to the chicken farm or ranching rather than to the World War II use of the site.

Feature VI-2: Building Foundation (Figures 5.63-5.266; see Figure 5.262)

This raised concrete foundation, mapped in 2008, has been converted for use as chicken coops, possibly using materials recycled from the dismantled camp.

The U.S. Army blueprints show a large building in this area oriented parallel to the camp entrance road, with a water-borne latrine at its western end. The building is visible in the historic photographs as a large low-pitched gable-roofed building with vertical board siding; it appears to have a shed-roofed extension on the west end, although the blueprints depict a separate small building there.

The original building's concrete foundation is 28 inches high above the current ground surface on the southwest corner, 25 feet wide, and extends to the west perhaps as much as 60 feet, although the western half is buried and was not measured. A 2-inch-by-6-inch sill is probably original. Currently on the eastern end of the foundation there is a two-room gable-roofed building, described below as part of Feature M-6.

Two ramps provided vehicle access across and through the middle of the building: one ramp is on the north side and measures 12 feet 8 inches wide and is constructed of concrete, and the other is on the south side and measures 16 feet 8 inches wide, constructed of asphalt. Although a vehicle ramp entrance might indicate a warehouse with a sheltered area for unload-



Figure 5.256. South end of Compound VI ca. 1945 showing building locations (detail of R.H. Lodge photograph).

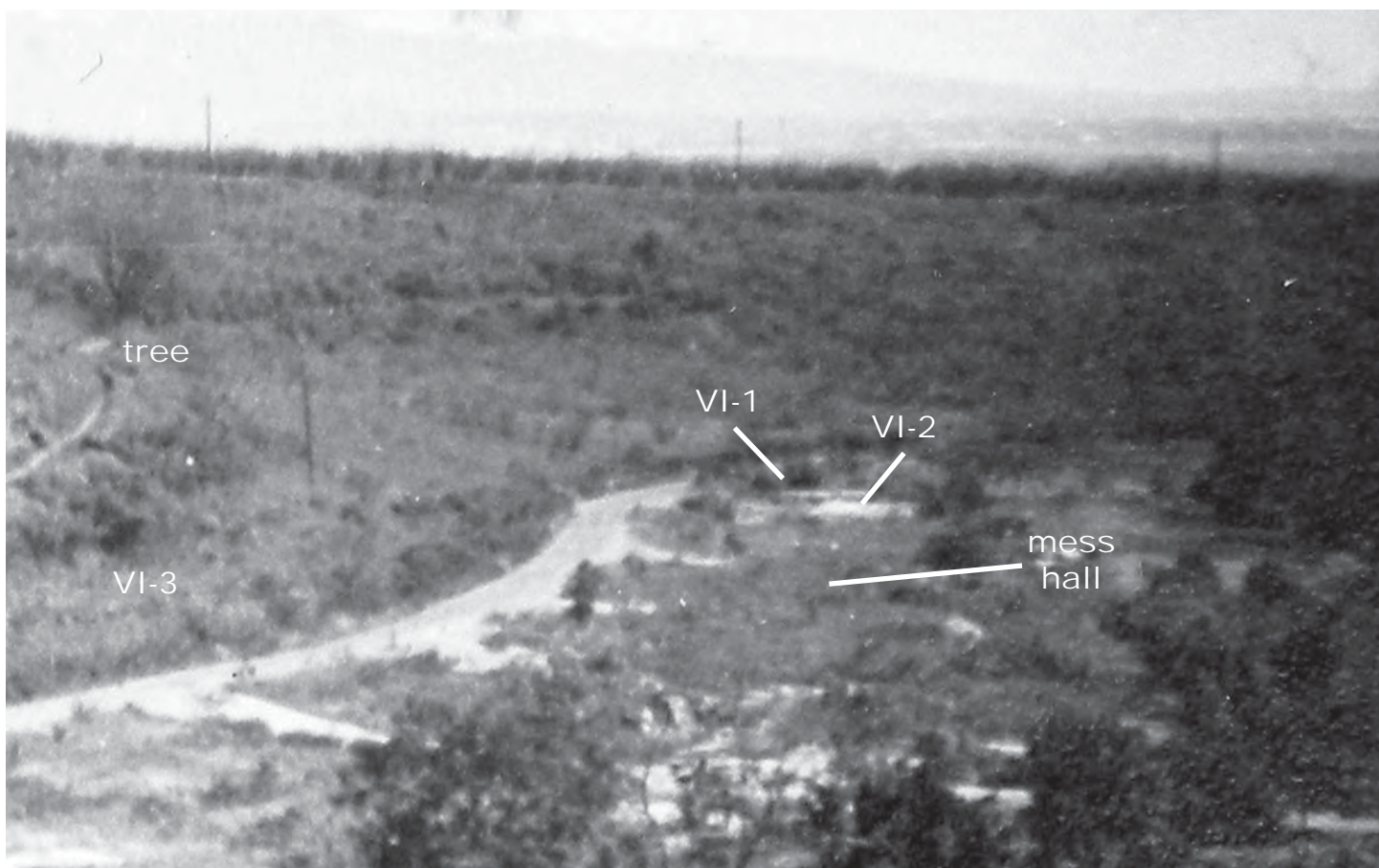


Figure 5.257. South end of Compound VI in 1946 showing former building locations (Hashimoto collection, JCCH).



Figure 5.258. Feature VI-1, building on concrete slab and concrete footers (2010).



Figure 5.259. Feature VI-1, building on concrete slab (2008).



Figure 5.260. Feature VI-1, concrete slab (2010).



Figure 5.261. Feature VI-1, concrete footers and wood posts(2008).



Figure 5.262. Feature VI-1 and VI-2, concrete foundations.



Figure 5.263. Feature VI-2, concrete foundation (2010).



Figure 5.264. Feature VI-2, concrete foundation (2010).



Figure 5.265. Feature VI-2, concrete foundation (2008).



Figure 5.266. Feature VI-2, concrete foundation (2010).

ing material in the rain, the water-borne latrine shown on the blueprints suggest the building sheltered people, rather than supplies. The building may have been the military camp's fire house. At mainland internment camps, the fire houses typically were oriented parallel to a main road, with the truck entrance on the long side. Ramps providing vehicle access through the building were also common features of municipal fire houses, to facilitate rapid parking and egress. The two different ramp materials at this Honouliuli foundation suggest they were constructed at different times, with the concrete ramp facing the main road likely built at the same time as the original building, and the rear asphalt ramp added as a later improvement.

Feature VI-3: Generator Building Foundation (Figures 5.267-5.272)

Partially cleared and mapped in 2008, this feature is a concrete foundation, probably for a building that housed a generator. The partially buried slab mea-

sures 29 feet by at least 16 feet overall (460+ square feet), with a raised perimeter 6 inches tall and 6 inches wide. There are three raised machine foundations on the slab, one near the center of the structure measuring 5 feet 4 inches by 16 feet 6 inches by 6 inches high, and two along the south wall, one measuring 3 feet by 8 feet by 2 feet high, and the other 30 inches square by about 2 feet tall. Pipes and electrical conduit extend from the slab surface and bolts extend from the machine mounts. Openings in the perimeter rim are visible on the east and west ends, and two trough-like drains are located in the floor from the center machine mount to the southern side. A building is visible at this location in historic photographs (see Figure 5.272); it is not on the U.S. Army blueprints.

Feature VI-4: Building Foundation (Figures 5.73-5.275)

Partially cleared and mapped in 2008, this concrete foundation, for an unknown structure, measures 8 feet

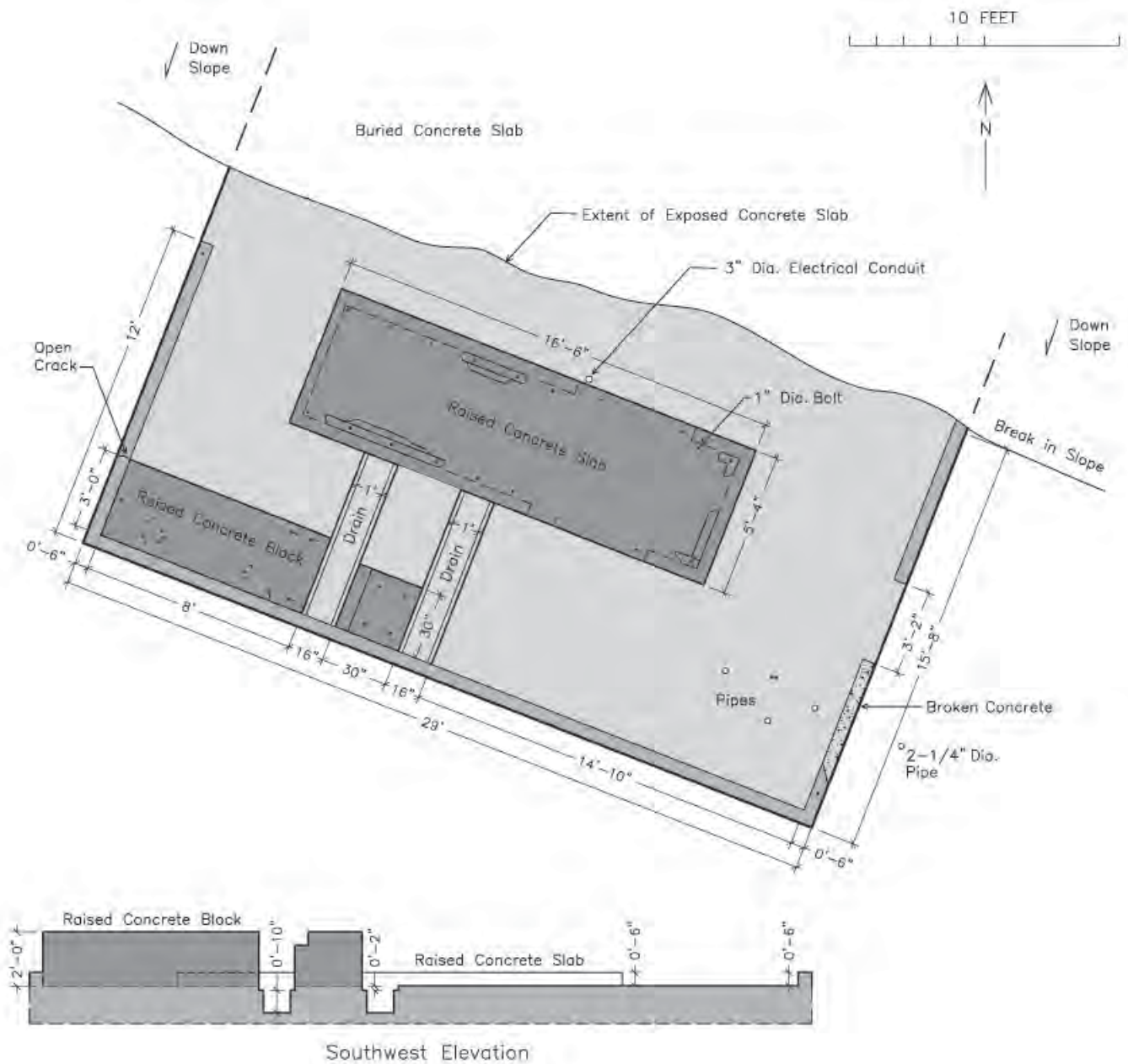


Figure 5.267. Feature VI-3, generator building foundation.



Figure 5.268. Feature VI-3, clearing generator building foundation (2008).



Figure 5.269. Feature VI-3, clearing generator building foundation (2008).



Figure 5.270. Feature VI-3, generator building foundation after clearing (2008).



Figure 5.271. Feature VI-3, equipment mounts at generator building (2008).



Figure 5.272. Feature VI-3, generator building ca. 1945 (detail of R.H. Lodge photograph).

11 inches wide by at least 23 feet long (200+ square feet). A southeastern room just over 18 feet long is defined by the concrete stem wall. The raised perimeter stem wall is 4 inches wide, and there are at least four tie bolts along the north and east sides (one bolt has a nut 2½ inches above the concrete). Along the south side, where the perimeter is rougher (either eroded or not as well built), there are three pilaster-like piers of rock and concrete extending from the perimeter foundation. A stain on the floor suggests that chemicals or paint were stored in this building. Artifacts found while clearing the slab include a section of water pipe with a gate valve and a rectangular piece of sheet metal. An alignment of rocks crosses the slab near the northwestern end; the buried slab extends an unknown distance under the rock alignment to the northwest. This feature is near the Compound VI mess hall on the U.S. Army blueprints and may be related to that building.

Feature VI-5: Cesspool (Figures 5.276 and 5.277)

Recorded in 2008, this feature is a concrete slab and broken pieces of concrete slab over a concrete-lined

pit. A cesspool is depicted on the U.S. Army blueprints at this location.

Feature VI-6: Building Footers (Figures 5.278 and 5.279)

This building location, recorded in 2008, is indicated by five concrete piers and a small rectangular slab. Each pier is a pre-fabricated foundation block in a truncated pyramid shape, measuring about 10 by 10 inches at the base and 8 by 8 inches at the top, where a threaded bolt protrudes. Three of the piers line up, northwest to southeast, in an alignment approximately 40 feet long. These three piers appear to be in their original locations, although one of the piers has fallen over. A fourth pier located 10 feet to the northeast of the alignment is also likely in place. The fifth pier, about 21 feet further to the southeast, is heavily eroded and possibly moved out of its original position. Other footers appear to be missing or buried, but the five piers match the outline of an unlabeled building depicted on the U.S. Army blueprints. A historic photograph indicates this building was a long, narrow, open-sided garage. The small concrete slab is an irreg-

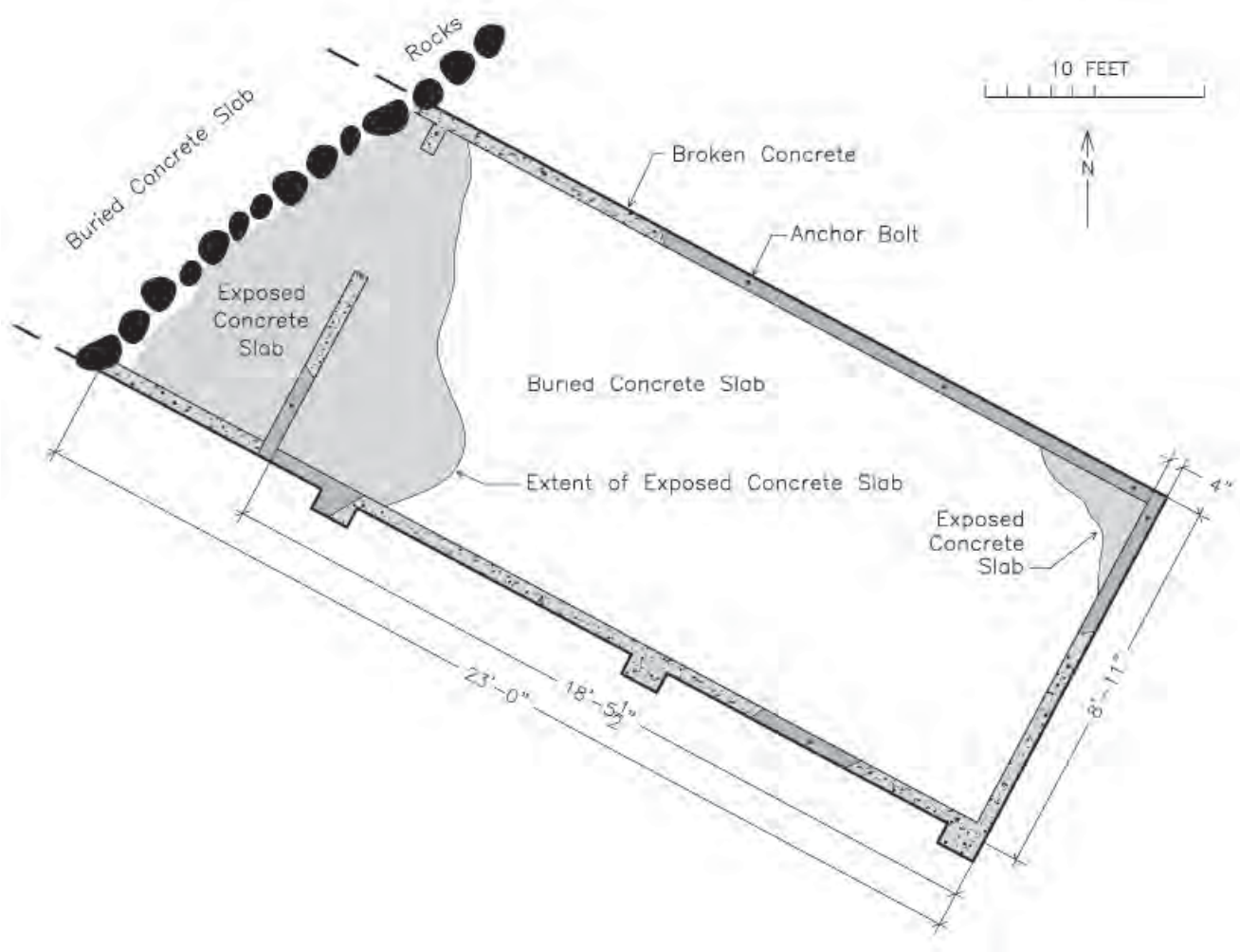


Figure 5.273. Feature VI-4, concrete foundation.



Figure 5.274. Feature VI-4, concrete foundation after partial clearing (2008).



Figure 5.275. Feature VI-4, artifacts found during clearing of foundation (2008).



Figure 5.276. Feature VI-5, cesspool (2017).



Figure 5.277. Feature VI-5, cesspool interior (2009).



Figure 5.278. Feature VI-6, footer (2008).



Figure 5.279. Feature VI-6, footer (2011).



Figure 5.280. Feature VI-7, concrete debris (2008).



Figure 5.281. Feature VI-8, concrete debris (2008).



Figure 5.282. Feature VI-9, concrete debris (2008).



Figure 5.283. Feature VI-10, concrete debris (2008).



Figure 5.284. Feature VI-10, concrete debris (2008).



Figure 5.285. Feature VI-11, concrete debris (2008).



Figure 5.286. Feature VI-12, cesspool (2010).

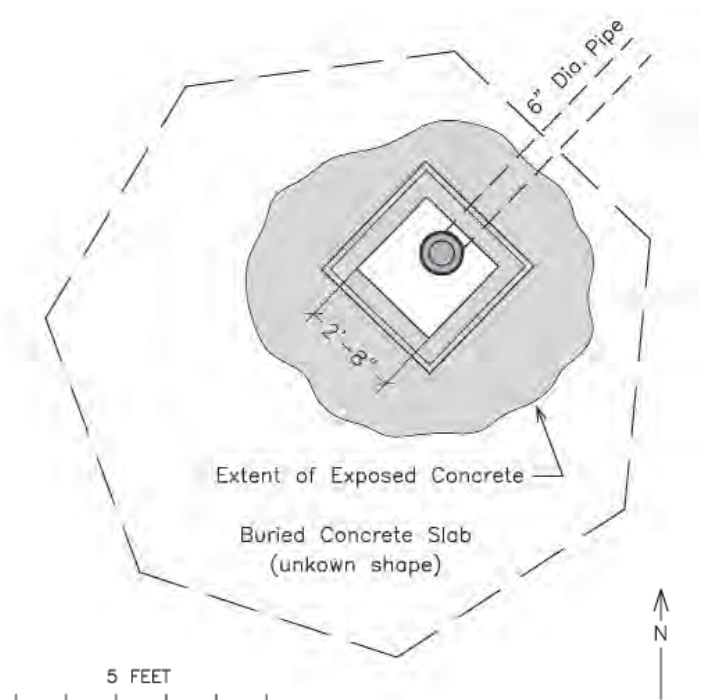


Figure 5.287. Feature VI-12, cesspool.



Figure 5.288. Feature VI-13, rock wall (2008).



Figure 5.289. Feature VI-14, rock wall (2009).



Figure 5.290. Feature VI-14, rock wall (2010).



Figure 5.291. Feature VI-14, rock with drilled post holes at rock wall (2008).



Figure 5.292. Feature VI-14, water pipe at rock wall (2008).



Figure 5.293. Feature VI-15, guy wire (2008).



Figure 5.294. Feature VI-16, concrete sinks (2008).



Figure 5.295. Feature VI-16, concrete sinks (2012).



Figure 5.296. Feature VI-16, inscription on the bottom of a concrete sink (2012).



Figure 5.297. Feature VI-16, manufacture's mark on concrete sink (2012).



Figure 5.298. Feature VI-16, manufacture's mark on concrete sink (2012).

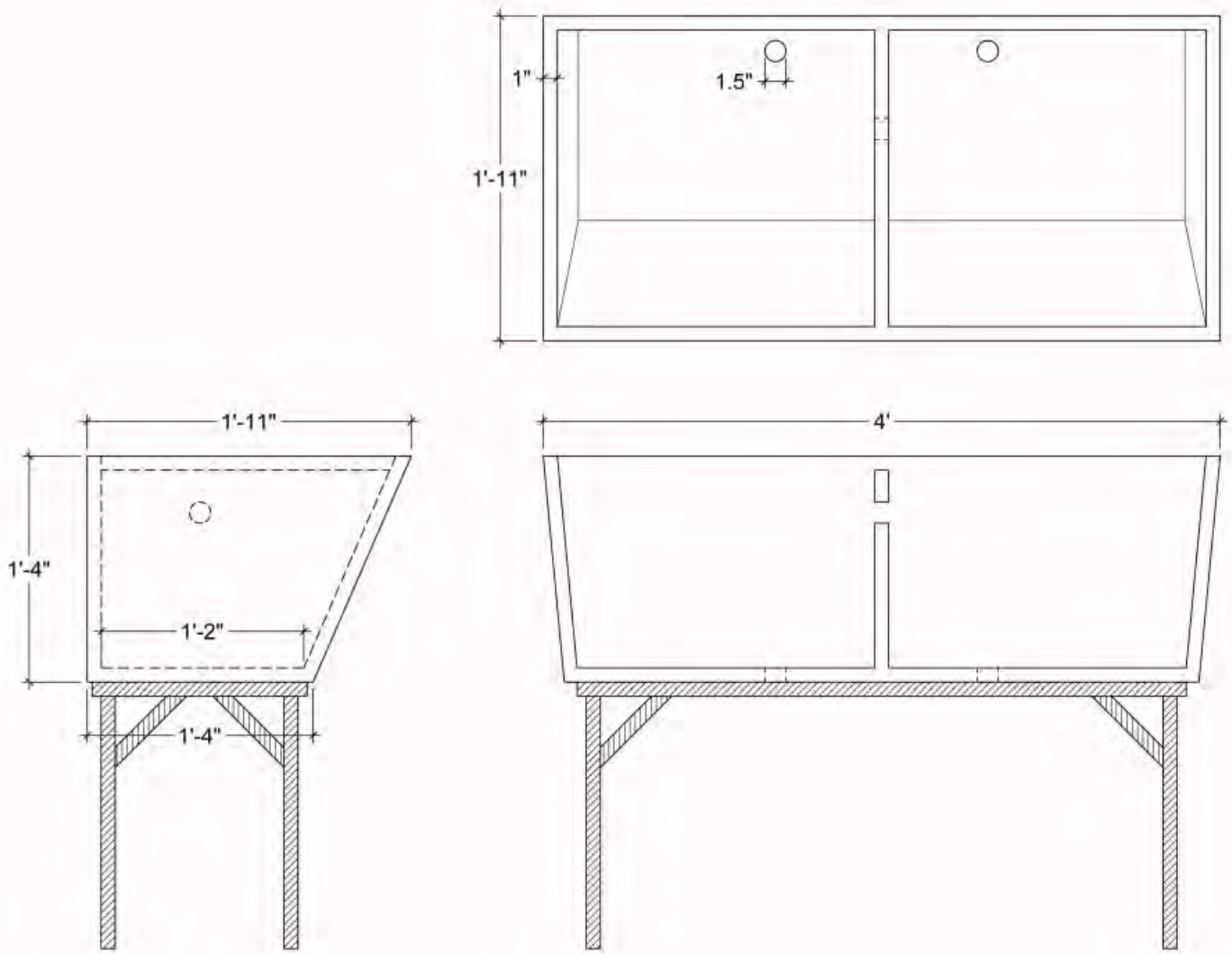


Figure 5.299. Feature VI-15, concrete sink (metal legs extrapolated).



Figure 5.300. Feature VI-15, toilet (2012).



Figure 5.301. Feature VI-15, toilet maker's mark (2012).



Figure 5.302. North end of Compound VI ca. 1945 showing the locations of recorded features (detail of R.H. Lodge photograph).

ular rectangle measuring 31 by 39 inches. Based on the blueprints, the slab would have been just outside the building's footprint, and may have served as a stoop or step support. Several rocks in the area appear out of place, and these may have been used as piers, also.

Feature VI-7: Structural Debris (Figure 5.280)

This feature was recorded in 2008 as a large pile of concrete rubble with some barbed wire.

Feature VI-8: Structural Debris (Figure 5.281)

Also recorded in 2008, this feature is a large rubble pile, about 50 feet in diameter.

Feature VI-9: Structural Debris (Figure 5.282)

This feature was recorded in 2008 as a concentration of concrete rubble and corrugated metal.

Feature VI-10: Structural Debris (Figures 5.283 and 5.284)

Recorded in 2008, this feature consists of over 20 dumped concrete piers.

Feature VI-11: Structural Debris (Figure 5.285)

This feature is three large pieces of concrete, noted in 2008.

Feature VI-12: Cesspool (Figures 5.286 and 5.287)

Recorded in 2008, this cesspool is indicated by a partially buried slab with a 32-inch-square opening. There is a 6-inch-diameter iron pipe leading into the cesspool from the north. The cesspool is depicted on the U.S. Army blueprints, but no sewer connection is indicated to the north, where the Feature VI-1 foundation and Feature M-6, the main chicken farm building, are located.

Feature VI-13: Rock Wall (Figure 5.288)

Located along the east edge of the entrance road, this partially collapsed wall is approximately 150 feet long and up to 3 feet tall, and constructed of uncoursed unmortared basalt rocks. Concrete fragments at the north end may be the remains of steps visible in historic photographs. The wall was recorded in 2008.

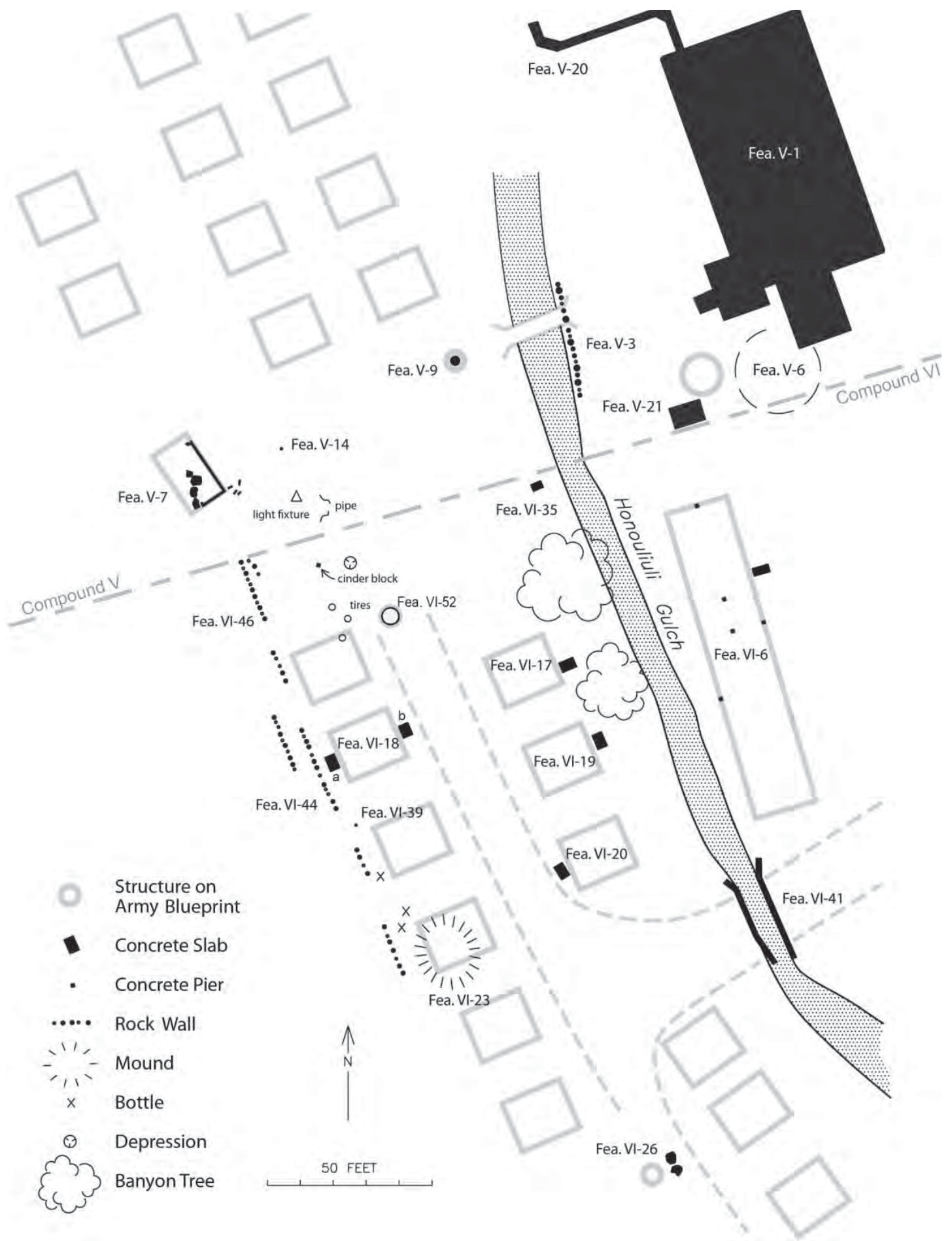


Figure 5.303. North end of Compound VI.



Figure 5.304. Feature VI-17, concrete slab (2008).

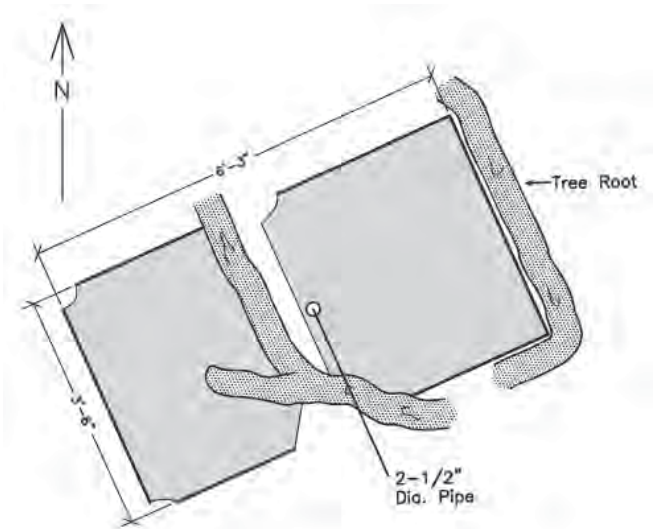


Figure 5.305. Feature VI-17, concrete slab.



Figure 5.306. Feature VI-18a, concrete slab (2008).

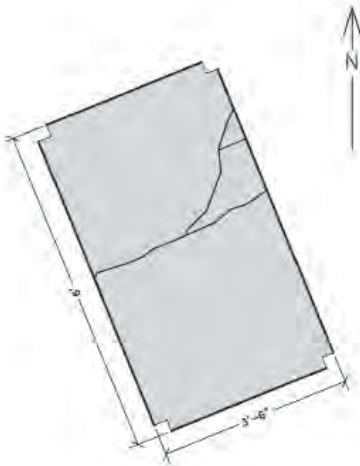


Figure 5.307. Feature VI-18, concrete slab.



Figure 5.308. Feature VI-18b, concrete slab (2010).

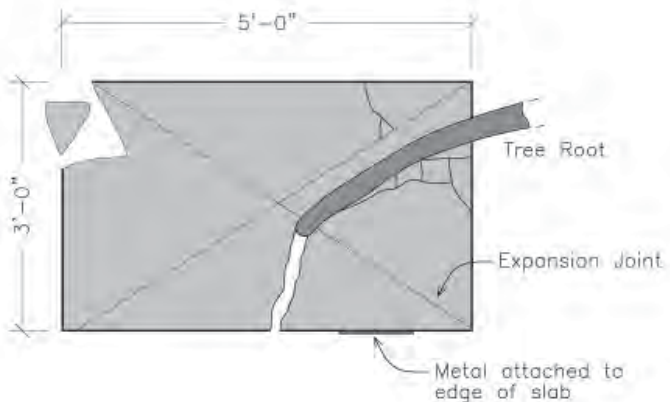


Figure 5.309. Feature VI-18b, concrete slab.



Figure 5.310. Feature VI-18, beer bottle with 1945 date code (2010).



Figure 5.311. Feature VI-18, one of three tires found nearby (2011).

Feature VI-14: Rock Wall (Figures 5.289-5.292)

Located below the generator slab, this wall is of unmortared basalt rock and is about 5 feet tall and 50 feet long. A water pipe extends from the north drain of the generator building slab (Feature VI-3) through this wall. One rock at the north corner of the wall has five drill holes, with a pipe stuck in one. The wall was recorded in 2008.

Feature VI-15: Guy-Wire Anchor (Figure 5.293)

Recorded in 2008, this feature appears to be a guy wire anchor, with a heavy-gauge multiple-strand wire buried in the earth, ending with a loop created by bending a piece of solid metal and wrapping it with single-strand wire.

Feature VI-16: Laundry Tubs and Toilet (Figures 5.294-5.301)

First recorded in 2008, this feature consists of six concrete deep-basin rectangular sinks and the base of a porcelain toilet on the ground south of Feature VI-1 (the administration area foundation reused for the chicken farm building). Five of the sinks are double-basin, one is single-basin. On the bottom of the tubs, in a shield, are the words:

WESELY
TRADE MARK
SINCE 1882
GUARANTEED

On the bottom of the toilet base is a blue stamped “83” and several identification numbers and letters, only partially readable: “.K 4349(?)P(?)I(?),” “8 8 I (?) / X.” On the back of the toilet base, in blue, is “K



Figure 5.312. Feature VI-18 light fixture found near nearby (2011).



Figure 5.313. Feature VI-19, concrete slab (2017).

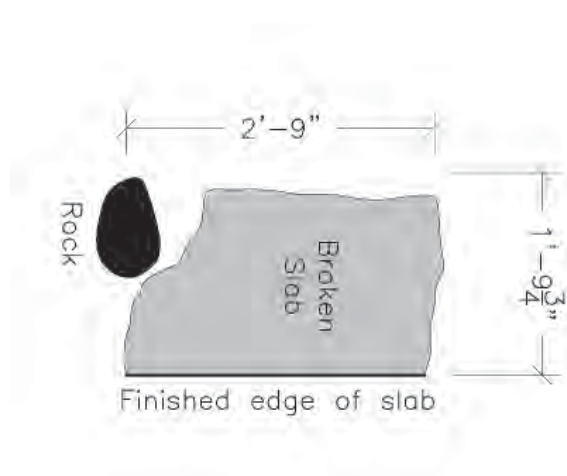


Figure 5.314. Feature VI-19, concrete slab.



Figure 5.315. Feature VI-19, metal lid found during metal detecting (2011).



Figure 5.316. Feature VI-20, broken and overturned concrete slab (2008).



Figure 5.317. Feature VI-21a, concrete slab (2008).



Figure 5.318. Feature VI-21b, sidewalk (2008).

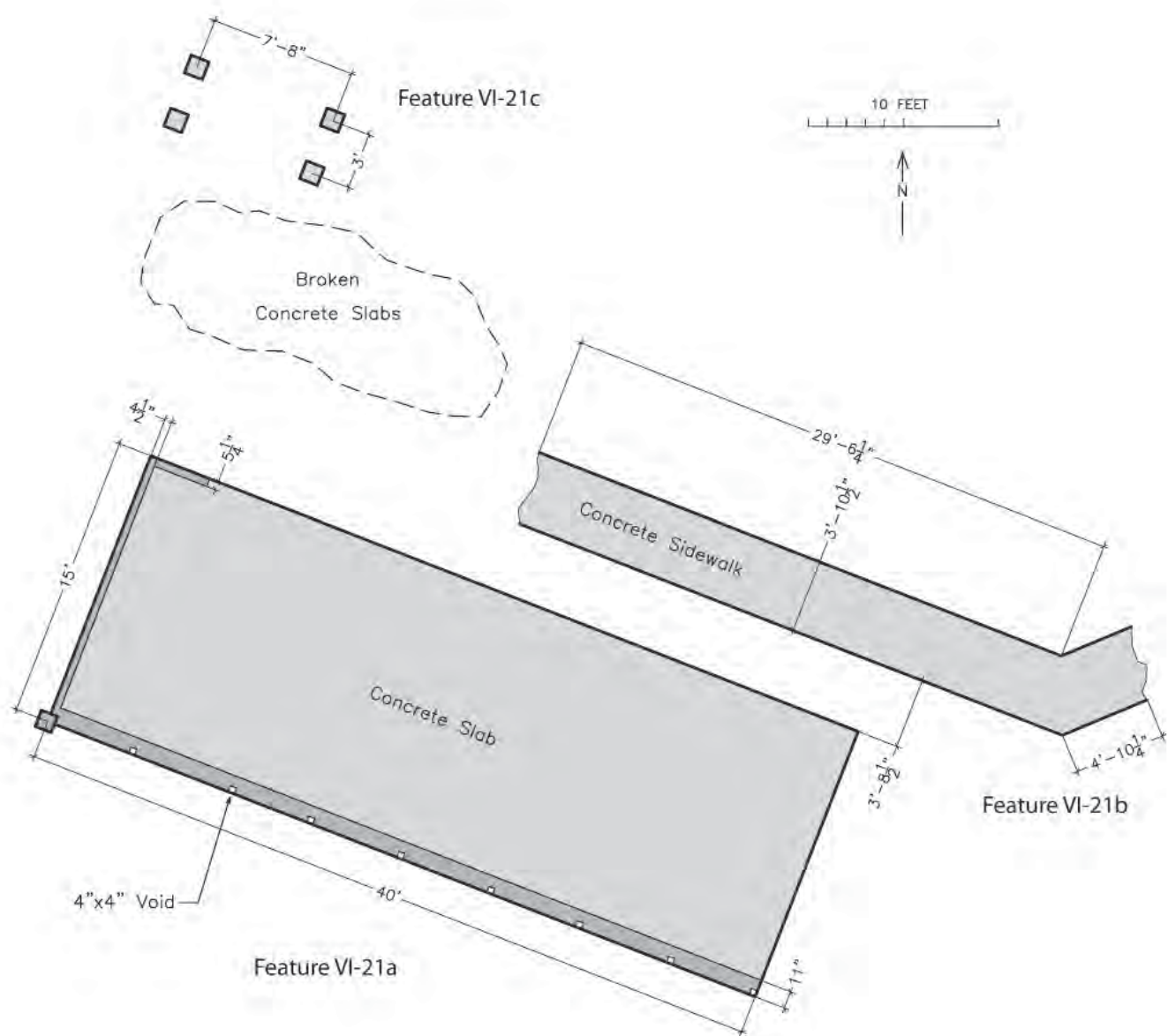


Figure 5.319. Feature VI-21, concrete foundation, sidewalk, and footers.



Figure 5.320. Feature VI-21c, concrete footers (2008).



Figure 5.321. Feature VI-22, cesspool (2012).



Figure 5.322. Feature VI-22, military plate fragments (2007).

OF K / U.S.A.," which signifies Kohler (the company) of Kohler, Wisconsin (the company town). The K of K logo was used from at least the 1920s into the 1980s (Kohler website, <http://timelinekohler.tumblr.com/>).

Feature VI-17: Concrete Slab (barracks location) (Figures 5.302-5.305)

This small concrete slab is near the stream, adjacent to a large Chinese banyan tree. The slab, cracked approximately in half by a root, measures overall about 6 feet 4 inches by 3 feet 6 inches (20 square feet), with a concave depression and drain pipe in the stream-side half. The slab is about 2 inches thick. The drain pipe, 2 feet 6 inches from the edge of the slab, measures 2 inches in diameter. The slab appears to have been located at the rear of a barracks shown on the U.S. Army blueprints, and may have been a shower floor or wash area, with runoff draining directly into the stream channel. It was cleared and mapped in 2008.

Feature VI-18: Concrete Slabs (barracks location) (Figures 5.306-5.312; see also Figures 5.302 and 5.303)

According to the U.S. Army blueprints, both of these small concrete slabs were located at a barracks building, one at the front, and one at the rear. The larger slab, Feature VI-18a, measures 6 feet long by 3 feet 6 inches wide (20 square feet) and would have been at the back (west) end of the barracks. Now in a small thicket of immature mock orange trees, the slab has rectangular cut-outs at each corner, as though for wooden 2-inch-by-4-inch vertical supports. The slab was apparently the floor or foundation of a small addition to the barracks building, visible in historic photographs as a shed-roofed structure with a solid lower wall and screened upper wall. Behind the slab (uphill) is a dry-laid stone retaining wall (Feature VI-44), about 3 feet tall. Feature VI-18b, located where the front of the barracks would have been, likely functioned as an entry or step support. This slab measures 3 feet by 5 feet and with diagonally scored expansion joints, and a strip of metal, less than a foot long, is attached to one of the long edges of the slab. A tree root is growing through the slab and there are other cracks as well. The two slabs were identified in 2008, and cleared and mapped in 2010. Nearby artifacts include an amber beer bottle with a 1945 date code, three tires, and a light fixture pole.



Figure 5.323. Feature VI-22, beverage bottle found nearby (2008).



Figure 5.324. Feature VI-22, bottle base with 1945 date code (2008).

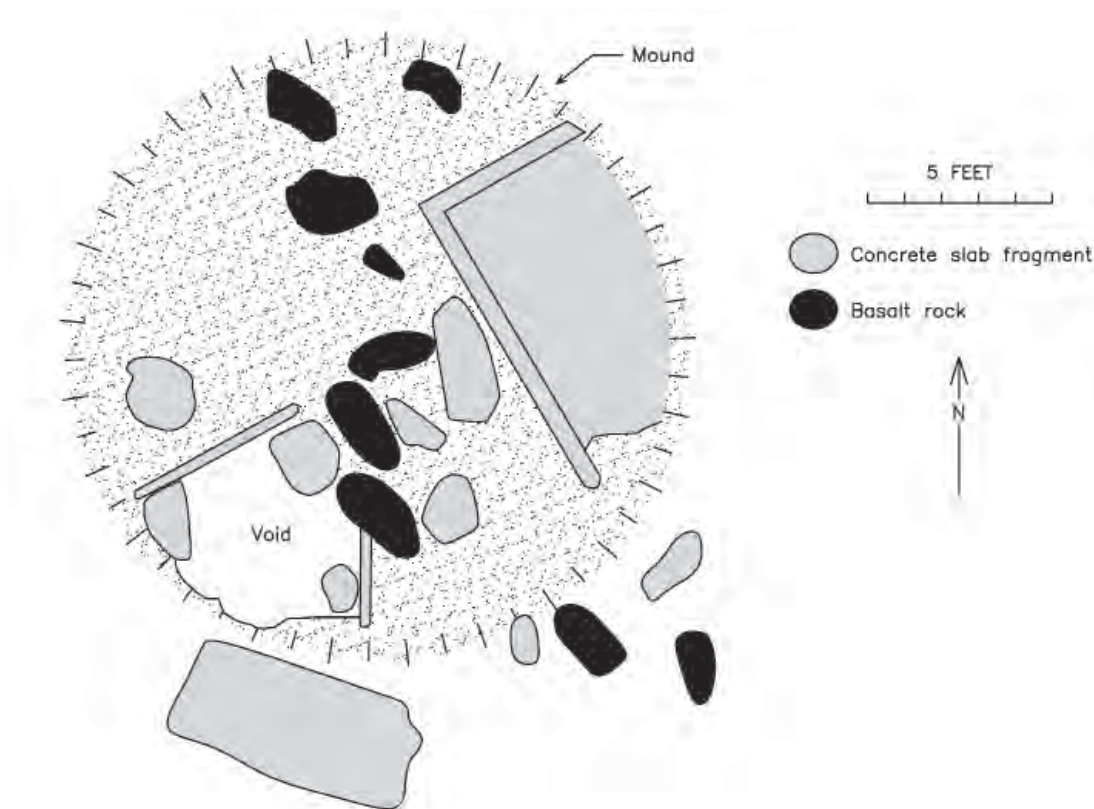


Figure 5.325. Feature VI-22, cesspool.

Feature VI-19: Concrete Slab (barracks location) (Figures 5.313-5.315; see also Figures 5.302 and 5.303)

This small, roughly rectangular concrete slab fragment measures 1 foot 9¾ inches by 2 feet 9 inches. It is set in the ground securely and appears to be in its original location, but rough broken edges on three sides indicate it was part of a larger slab. Located at the rear of a barracks depicted on the Army blueprints, it is of unknown function. Artifacts in the surrounding area include a large metal pot cover (see Figure 5.315), a metal dish, sheet metal, barbed wire, copper electrical

wire, common nails, and an amber beer bottle with an Anchor Hocking Glass Company basemark and a 1945 manufacturing code: "8565-A / 5 / 45 / 10". The slab was cleared and recorded in 2008.

Feature VI-20: Concrete Slab (barracks location) (Figure 5.316; see also Figures 5.302 and 5.303)

Recorded in 2008, this feature may have been an entry stoop. According to the U.S. Army blueprints, its location would have been the front of a barracks, but the slab has probably been displaced: it is upside down



Figure 5.326. Feature VI-23, concrete debris (2008).



Figure 5.327. Feature VI-23, displaced concrete slab (2008).

and broken into several pieces. Stream cobbles are set in the concrete, likely to stretch the concrete mix. If whole, the roughly rectangular concrete slab would have measured about 3 feet 3 inches by 3 feet, by 3 to 5 inches thick. The eastern half, which would have been closest to the barracks entrance, is about 4 inches higher than the western half.

Feature VI-21: Building Foundation (Figures 5.317-5.320)

Partially cleared and mapped in 2008, this feature includes a slab (Feature VI-21a), a sidewalk (VI-21b), and four piers (VI-21c), for an unknown structure. The concrete slab measures 15 feet by 40 feet (600 square feet); the mostly buried concrete sidewalk is slightly less than 4 feet wide and runs over 29 feet parallel to the slab, then continues to the east at least 5 more feet. The four concrete piers, located north of the slab, form a rectangle 3 feet by 7 feet 8 inches. Between these three areas of apparently intact concrete is a concentration of broken concrete slabs. An unlabeled structure is depicted at this location on the U.S. Army blueprints.

Feature VI-22: Cesspool (Figures 5.321-5.325)

Depicted as a cesspool on the U.S. Army blueprints, this feature now consists of a mound, about 16 feet in diameter and 4 feet high, where building material was apparently bulldozed into the deep concrete-lined pit. The mound includes basalt rocks and concrete slab



Figure 5.328. Feature VI-24, concrete debris (2008).



Figure 5.329. Feature VI-25, concrete debris (2017).



Figure 5.330. Feature VI-26, concrete debris (2017).



Figure 5.331. Feature VI-27, overturned footer (2017).

fragments, one with a raised perimeter foundation. Two plate fragments were found near the mound in 2007, one with a “United States Army Medical Department” hallmark. The other plate fragment’s basemark is “TAYLOR SMITH TAYLOR / U-S-A” within a wreath and “1 43 3” beneath, indicating manufacture by Taylor, Smith, and Taylor of East Liverpool, Ohio, in 1943. Both of these ceramic marks are common at mainland Japanese American internment sites. Other artifacts noted in the cesspool vicinity include a section of insulated pipe, fragments of white ware ceramics, a brown bottle base with “Duraglas / 6 3 / 29”, and a clear beverage bottle with “20 5” on the base. Both were made by the Owens Illinois Bottle Company; the number after

the company symbol signifies the year of manufacture, so the former dates to 1943 (or 1953) and the latter to 1945. The feature was mapped in 2008.

Feature VI-23: Structural Debris (barracks location) (Figures 5.326 and 5.327)

Recorded in 2008, this feature is located at the approximate location of a barracks on the U.S. Army blueprints. It consists of a small mounded area of concrete rubble, dirt, metal water pipe, cinder block fragments, and metal sheeting. One slab noted on the surface of the mound measures 1 foot 5 inches by 1 foot 10 inches, by 5 inches thick; although displaced, a beveled



Figure 5.332. Feature VI-28, rock wall (2008).



Figure 5.333. Feature VI-29, displaced concrete footer (2017).



Figure 5.334. Feature VI-29, displaced concrete footer (2017).



Figure 5.335. Feature VI-30, soda and beer bottles (2017).



Figure 5.336. Feature VI-30, liquor bottle and drinking glass (2017).



Figure 5.337. Feature VI-31, latrine and shower building foundation (2008).



Figure 5.338. Feature VI-31, latrine and shower building foundation (2012).



Figure 5.339. Feature VI-31, latrine and shower building foundation.

edge around the perimeter indicates the slab is complete. Three bottles were found nearby, one a broken Coke bottle.

Feature VI-24: Structural Debris (Figure 5.328)

Recorded in 2008, rubble at this location includes a large fragment of a concrete slab and other concrete fragments and rocks.



Figure 5.340. Feature VI-31, military button found nearby (2012).

Feature VI-25: Structural Debris (Figure 5.329)

This location consists of a concentration of concrete rubble and rocks. It was recorded in 2008.

Feature VI-26: Structural Debris (Figure 5.330)

This feature consists of two large displaced concrete slab fragments, recorded in 2008.

Feature VI-27: Structural Debris (Figure 5.331)

This feature consists of a few fragments of displaced concrete, recorded in 2008.

Feature VI-28: Rock Wall (Figure 5.332)

When it was originally recorded in 2008, this feature was considered to be structural debris. Reexamination



Figure 5.341. Feature VI-32a, latrine and shower building foundation prior to clearing (2008).



Figure 5.342. Feature VI-32a, clearing latrine and shower building foundation (2011).



Figure 5.343. Feature VI-32a, clearing latrine and shower building foundation (2011).

in 2017 indicates it is a rock wall that extends at least 30 feet along the stream.

Feature VI-29: Structural Debris (Figures 5.333 and 5.334)

This feature is an overturned and displaced concrete footing, noted in 2008 and photographed in 2017.

Feature VI-30: Pipe and Artifacts (Figures 5.335 and 5.336)

The pipe at this feature, recorded in 2008, is vertically set into the ground and located on the north side of a road trace. Artifacts in the vicinity include a drinking glass (22 feet to the northwest), a 1945 Coke bottle (40 feet to the northwest), and a whiskey bottle with the basemark of the Hazel Atlas Glass Company and a 1944 date code (20 feet south). To the southeast about 70 feet are four “no deposit no return” beer bottles, two with the Hazel Atlas Glass Company basemark and two with the Owens Illinois Bottle Company basemark. All four have 1945 date codes.

Feature VI-31: Latrine and Shower Building Foundation (Figures 5.337-5.340)

This feature, partially cleared and mapped in 2008, is located where a water-borne latrine is depicted on the U.S. Army blueprints. It consists of a slab foundation measuring at least 16 feet by 26 feet; much of the slab is buried. Within the interior a small room, measuring roughly 12 feet by 10 feet, is defined by a raised concrete stem wall in the western corner of the foundation. There is a rock retaining wall southwest of (upslope from) the slab, and a 2½-inch-diameter pipe goes from near the slab uphill approximately 10 feet, where it connects with a 6-inch-diameter insulated pipe that extends to the southeast, parallel to and above the retaining wall. A metal military button stamped “U.S. Army” was found at the feature.

Feature VI-32: Latrine and Shower Building Foundation (Figures 5.341-5.360)

This feature, first recorded in 2008 and cleared and mapped in 2011, encompasses a latrine/shower slab (Feature VI-32a), a Y-shaped sidewalk (VI-32b), and a pipe (VI-32c). A water-borne latrine is depicted at this location on the U.S. Army blueprints, and the building and the Y-shaped sidewalk that leads to it are visible in several of Glenn Heern’s photographs. The slab measures 30 feet 3 inches by almost 17 feet; it has a raised

perimeter foundation, and interior rooms defined by raised stem walls. Two exterior doors are indicated by 3-foot-wide openings in the perimeter stem wall, one on the northwest end opening to a larger (enlisted men’s) area and one on the southeast end opening to a smaller (officers’) area. The enlisted men’s side has five toilet drains, a small dressing room, and an L-shaped shower room with two drains. The officers’ side has two toilet drains, a larger dressing room, and a rectangular shower room with one drain. The pipe, located about 15 feet to the east of the building slab, extends from the sloping ground surface and extends about 12 feet northwest toward a septic tank (Feature VI-33).

Several fragments of porcelain toilets were found at the latrine, and fragments of sheet metal may be from a trough-shaped urinal. Other artifacts include a threaded nut, electrical porcelain (marked “Bull Dog”), and a one-gallon clear bottle that likely held bleach or other disinfectant. Its basemark (with a 20 2 / 5694W) indicates manufacture by the Owens Illinois company in 1942. A clear bottle is embossed “Kreml Shampoo” and “R.B. Semler Inc. New Canaan Conn. U.S.A. 6 Oz. Fl.” A small bottle, likely for after-shave lotion or hair tonic, is embossed “Fitch’s” on the base. Fitch’s was a Des Moines, Iowa, grooming-products company who had contracts with the military during World War II. Two brown beer bottles both are embossed with “No deposit no return” and “Not to be refilled” on the main body; one beer bottle has “7-12 / Ball 3A” on the base; the other has “Duraglas / 6 8 / 21”. Other artifacts include a two-hole shell button and a golf ball.

The initials “W.J.R.” are inscribed in the sidewalk, and during metal detecting in the area, nails and the top of an old metal tube (possibly for shaving cream) were found.

Feature VI-33: Septic Tank (Figures 5.361-5.363)

This concrete feature is a septic tank shown on the U.S. Army blueprints and visible in the background of some of Glenn Heern’s photographs (see Figure 5.361). Located on the slope below the latrine and shower building, it is a partially buried rectangular concrete box. When first recorded in 2008, measurements were imprecise because it had been partially covered with dirt and basalt boulders from the slope above; this debris was removed for the 2011 recording. On the surface it measures about 9 feet by 4½ feet, with a central hatch



Figure 5.344. Feature VI-32, latrine and shower building foundation after clearing IMG_8819.JPG (2011).



Figure 5.345. Feature VI-32, latrine and shower building foundation showing damage from tree roots (2011).



Figure 5.346. Feature VI-32, drain detail (2011).



Figure 5.347. Feature VI-32b, sidewalk at latrine and shower building (2011).



Figure 5.348. Feature VI-32b, sidewalk fragment with inscription (2011).



Figure 5.349. Feature VI-32b, sidewalk (2011).



Figure 5.350. Feature VI-32c, pipeline (2011).



Figure 5.351. Feature 32b, sidewalk at latrine and shower building after clearing (2011).

opening about 3 feet 4 inches square. The top is up to 4 inches above the ground surface, and the interior is at least 7 feet deep. One of the two hatch covers is missing. On the top of the tank there is a 6¾-inch-diameter clean-out pipe at the downhill end, and a 2¼-inch-diameter vent pipe at the uphill end.

Feature VI-34: Septic Tank (Figures 5.364-5.368)

This large septic tank, mapped in 2008, is shown on the U.S. Army blueprints. The tank is topped by a concrete slab 20 feet 6 inches by 11 feet in plan and about 20 inches higher than the surrounding ground surface. The 8-inch-thick slab lies over a concrete-block-lined pit. There is an access opening 2 feet 3 inches square near the center of the south side, and in the eastern corner is a 7¼-inch-diameter pipe set flush with the concrete, which is slightly mounded around the pipe. Sediments in the interior are of unknown depth; there is approximately 4 feet (and six courses) of concrete block between the top of the sediments and the slab roof of the structure. Most of the concrete block in the three lowest courses visible was set sideways, so that the tank was purposefully porous.

Feature VI-35: Wood Pole (Figures 5.369 and 5.370)

A short pole, about 1 foot in diameter and 1 foot 4 inches long, was found attached to the ground near the Honouliuli stream in 2008. The pole has a sunken hexagonal-headed bolt (and possibly a metal washer) in the side. On the bolt head are the initials "PFC." At the approximate southern boundary of the Japanese men's compound, the pole may have been associated with the security fence or a stream crossing. The pole was moved by a flood in 2009.

Feature VI-36: Sewer Manhole Depression (Figure 5.371)

Depicted on the U.S. Army blueprints, this manhole is similar to the others in the camp system. This feature, recorded in 2008, is missing its lid.

Feature VI-37: Manhole Lid (Figure 5.372)

This manhole lid, recorded in 2008, may have been from the manhole recorded as Feature VI-36, above, but was found about 75 feet away. It has a handle made of rebar, similar to that of Feature V-9, but without an inscription.

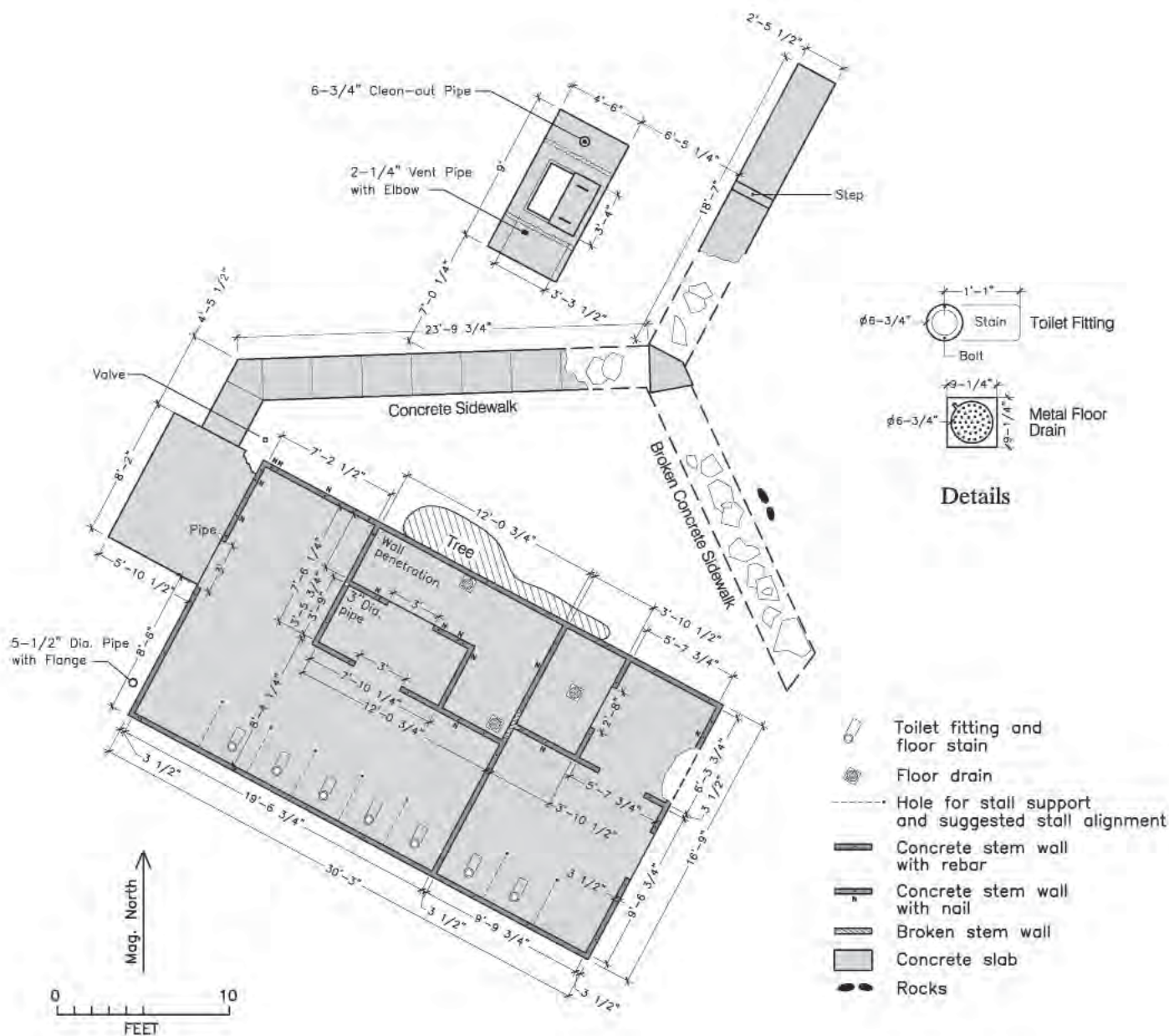


Figure 5.352. Feature VI-32 and VI-33, latrine and shower building, sidewalk, and septic tank.

Feature VI-38: Water Tank Foundation and Pipe (Figures 5.373-5.377)

This feature, depicted on the U.S. Army blueprints, consists of a large concrete foundation, measuring 6 feet 1 inch square in plan. Set on a slope, the flat top is 2 feet 8 inches above the ground surface on the downhill side, and less than a foot above the ground surface on the uphill side. About 50 feet of a once-connected water pipe measuring 2 3/8 inches in diameter is exposed on the ground surface. Water appears to have come from the northwest to the feature (with an outlet coupling on the upslope side) and then continued down the southeast side of the foundation sheathed

in metal, rubber, and green and white insulation remnants. There is no rust stain visible, but its solid construction and the adjacent water pipe indicates the foundation was probably a foundation for a water heater.

The water tank foundation is about halfway between showers that were located at Features VI-31 and VI-32a, and the insulated pipe could have provided hot water to both. The water tank foundation appears in a photograph in the Glenn Heern collection, behind a group of at least 25 soldiers in a casual formation, at rest (see Figure 5.377).



Figure 5.353. Feature VI-32, one-gallon jug with 1942 Owens Illinois Glass Co. date code (2011).



Figure 5.354. Feature VI-32, "Bulldog" brand electrical porcelain, button, and bottle neck found during excavation (2011).



Figure 5.355. Feature VI-32, paste tube top found during excavation (2011).



Figure 5.356. Feature VI-32, bottles encountered during excavation of latrine and shower building, a-b. beer, c. "Fitch's" brand hair tonic, d. "Kreml" shampoo (2011).



Figure 5.357. Feature VI-32, faucet handle encountered during excavation of latrine and shower building (2011).



Figure 5.358. Feature VI-32, golf ball encountered during excavation of latrine and shower building (2011).



Figure 5.359. Feature VI-32a, latrine and shower building ca. 1944 (Glenn Heern photograph, JCCH).



Figure 5.361. Feature VI-33, septic tank ca. 1944 (Glenn Heern photograph, JCCH).



Figure 5.360. Feature 32b, sidewalk at latrine and shower building ca. 1944 (Glenn Heern photograph, JCCH).

Feature VI-39: Pipe (barracks location) (Figure 5.378)

This feature, recorded in 2008, is an embedded 1/2-inch-diameter water pipe in a leveled clearing at a former barracks location.

Feature VI-40: Pipe (Figure 5.379)

This feature, recorded in 2008, is a partially exposed 1/2-inch-diameter water pipe perpendicular to the stream bank.

Feature VI-41: Bridge Abutments (Figures 5.380-5.382)

This feature, mapped in 2008, consists of concrete bridge abutments along the banks of Honouliuli stream. The bridge, for a road, is depicted on the U.S. Army blueprints. The abutment on the northeast bank is 26 feet long total, almost a foot wide, and at least 2 feet tall. The abutment on the southwest bank



Figure 5.362. Feature VI-33c, septic tank after clearing (2011).



Figure 5.363. Feature VI-33, septic tank interior (2011).



Figure 5.364. Feature VI-34, septic tank (2008).



Figure 5.365. Feature VI-34, septic tank access (2008).

is slightly shorter and broken, with the southernmost section slightly displaced. The northwest (upstream) ends of both abutments angle slightly back toward their respective banks, to keep the water flow within the channel.

Feature VI-42: Road (Figure 5.383)

Traces of asphalt are still visible in some areas along this road trace, which ran parallel to the stream between two rows of barracks. The largest exposed area of asphalt noted when the feature was recorded in 2008 was approximately 1 by 10 feet. More of the road is likely present, and buried. The road is shown on the U.S. Army blueprints.

Feature VI-43: Rock-Lined Pathway (near barracks location) (Figures 5.384-5.386)

This feature, recorded in 2008, is a 10-foot-long pathway bordered with mortared rocks, about 25 feet east

of Feature VI-32 (latrine/ shower foundation). According to the U.S. Army blueprints, the pathway would have been located near the rear of a barracks-size building.

Feature VI-44: Rock Wall (Figures 5.387 and 5.388)

Recorded in 2008, this single-wythe retaining wall, about 130 feet long and 1 foot 6 inches to 3 feet high, is constructed of unmortared basalt boulders. The wall width, up to 1 foot 6 inches, varies depending on the size of the rocks. Stuck in the wall are a cow bone and a brown bottle with “Duraglas 2 5 / 17” on the base; the 5 after the symbol is a 1945 date code. A large brown bottle was found nearby, with the basemark “1 4 / 2000”; the 4 after the symbol is a 1944 or 1954 date code. Both bottles were manufactured by the Owens Illinois Bottle Company.



Figure 5.366. Feature VI-34, septic tank access (2008).



Figure 5.367. Feature VI-34, septic tank interior (2008).

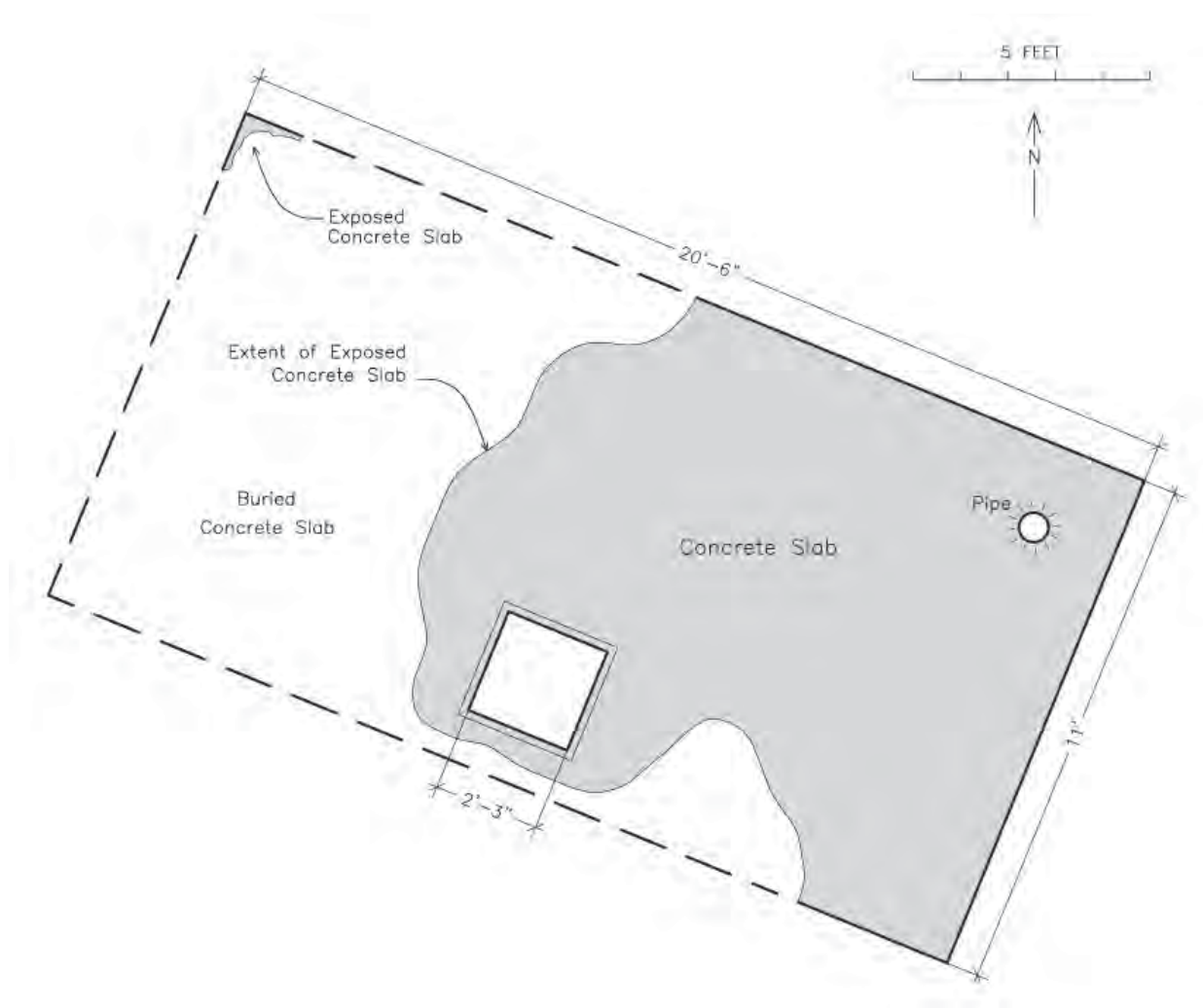


Figure 5.368. Feature VI-34, septic tank.



Figure 5.369. Feature VI-35, wood pole section (2008).



Figure 5.370. Feature VI-35, displaced wood pole section (2009).



Figure 5.371. Feature VI-36, sewer manhole depression (2017).



Figure 5.372. Feature VI-37, displaced sewer manhole cover (2017).

Feature VI-45: Rock Wall (Figures 5.389 and 5.390)

Recorded in 2008, this linear alignment of basalt boulders is about 35 feet long; it may be a collapsed continuation of the same basalt rock retaining wall described above under Feature VI-44.

Feature VI-46: Rock Wall (Figures 5.391 and 5.392)

Recorded in 2008, this 20-foot-long retaining wall, of basalt rock, lies north of and on roughly the same alignment as Feature VI-44, and is likely a continuation of that rock wall. Some of the rocks appear to have

been cut into trapezoidal shapes and some of the rocks may have been arranged as steps to the terrace above. Nearby are scattered fragments of concrete block, tires, pipe, a brown glass jar, and part of a security light fixture. The light fixture is the same type as that found at Feature V-12, and both match those visible in historic photographs.

Feature VI-47: Ditch (Figure 5.393)

This short segment of shallow ditch, recorded in 2008, may have been constructed to improve drainage; its location would have been between two barracks and the stream.

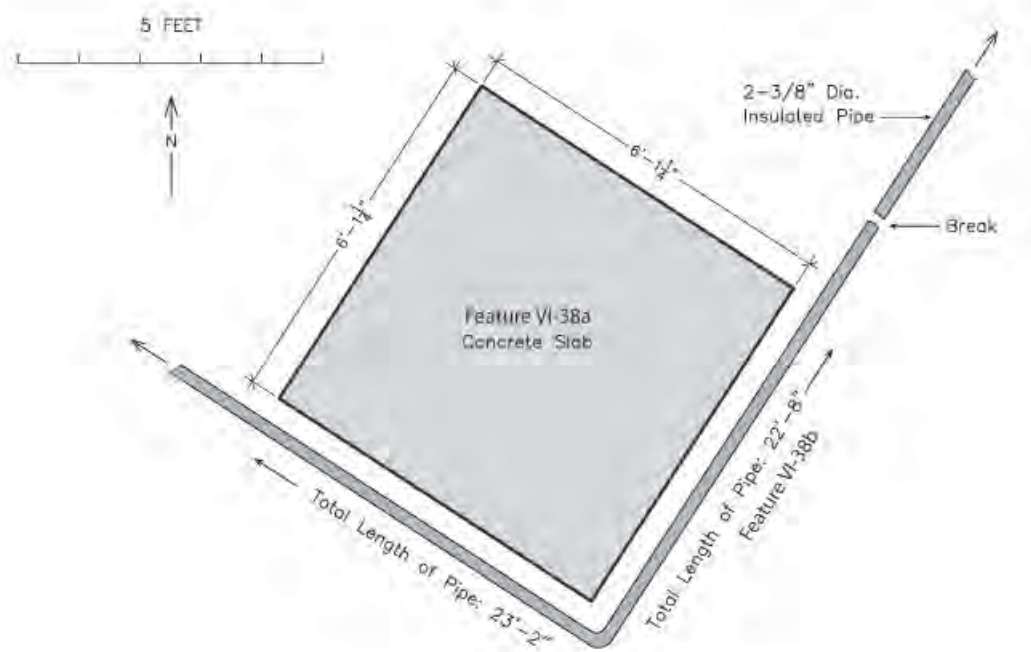


Figure 5.373. Feature VI-38, concrete water heater building foundation.



Figure 5.374. Feature VI-38, water heater building foundation (2017).



Figure 5.375. Feature VI-38, water heater building foundation and insulated water pipe (2017).



Figure 5.376. Feature VI-38b, insulated water pipe (2012).

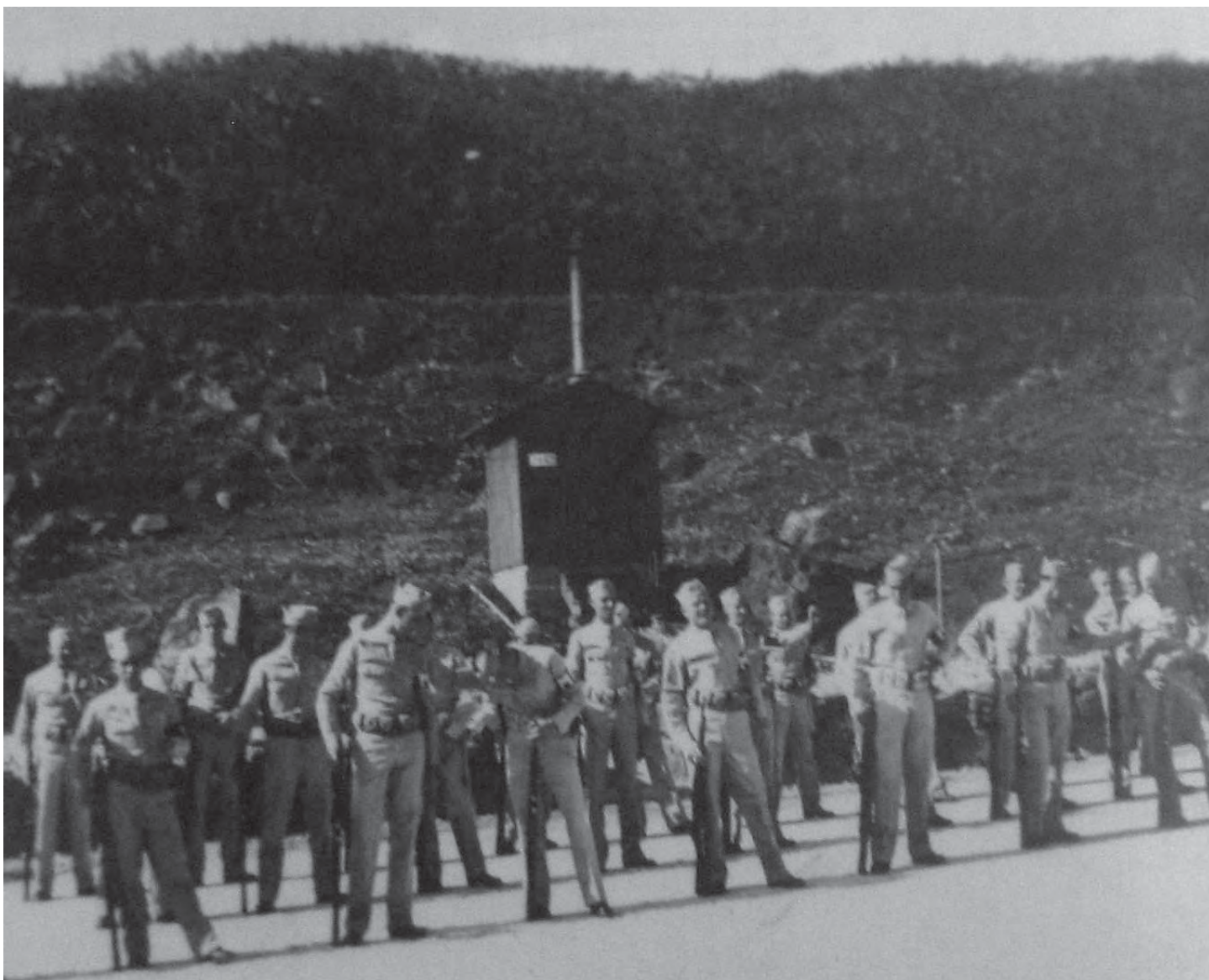


Figure 5.377. Feature VI-38, water heater building ca. 1944 (Glenn Heern photograph, JCCH).

Feature VI-48: Possible Rock Foundation (Figure 5.394)

Recorded in 2008, this mound of water-worn basalt rocks lies between a ditch (Feature VI-47, above) and the stream. Now overgrown and possibly collapsed, it may have served as a building foundation; historic photographs show a building at this location.

Feature VI-49: Laundry Building Foundation (Figures 5.395-5.440)

Located near the southern end of Compound VI, the laundry was one of the largest buildings at Honouliuli, measuring 60 feet by 54 feet, for a floor area of 3,240 square feet. In places the slab is buried by over a foot of sediments. The laundry foundation was first mapped

in 2008 and partially uncovered during field sessions in 2010, 2012, and 2014; after each session it was mapped again to document the newly exposed areas.

The foundation has a 6-in-wide concrete stem wall around the perimeter; erosion in one area along the south side indicates the perimeter foundation wall is over 4 feet deep. Smaller stem walls in the interior demarcate a separate room in the southeast corner, and there was a boiler-room extension off the east corner of the south wall. In the main room there is a large drain trough, with its widest section 4 feet 4¼ inches wide by 23 feet 10¾ inches long, with gently-sloping sides that drop into a deeper, steep-sided central trough which empties into a lateral rectangular drain outlet near its center. A smaller trough drain extends to the east, and measures about 12 feet by 6 inches.



Figure 5.378. Feature VI-39, pipe and leveled barracks location (2011).



Figure 5.379. Feature VI-40, embedded water pipe (2008).

An extension on the east end of the south side of the foundation slab was the boiler room foundation. Measuring approximately 17 feet 6 inches by 14 feet, the boiler room has a rectangular stain indicating the location of the boiler. A gap in the perimeter stem wall on the west wall indicates a doorway, 5 feet 6 inches wide, to the exterior of the building. A broken section of brick wall measuring about 15 inches high by 40 inches long by 8 inches wide was found on its side just east of the boiler room; it probably was part of the boiler support. Loose fire bricks on the slab are impressed “Lincoln” and “Placer.” Both brands were made by Gladding, McBean, and Company of California, with Lincoln bricks made between 1921 and 1942, and Placer bricks made from 1921 to 1935 (Gurcke 1987).

Floor details provide evidence for the layout and use of the building. Two sets of four protruding bolts surrounded by a circular stain indicate the location of washing machines centered over the large drain trough. Four bolts with two conduits adjacent indicate where another electricity-powered machine was mounted, perhaps a dryer. Bolts and faint traces of



Figure 5.380. Feature VI-41, concrete bridge abutments (2008).



Figure 5.381. Feature VI-41, concrete bridge abutments (2008).

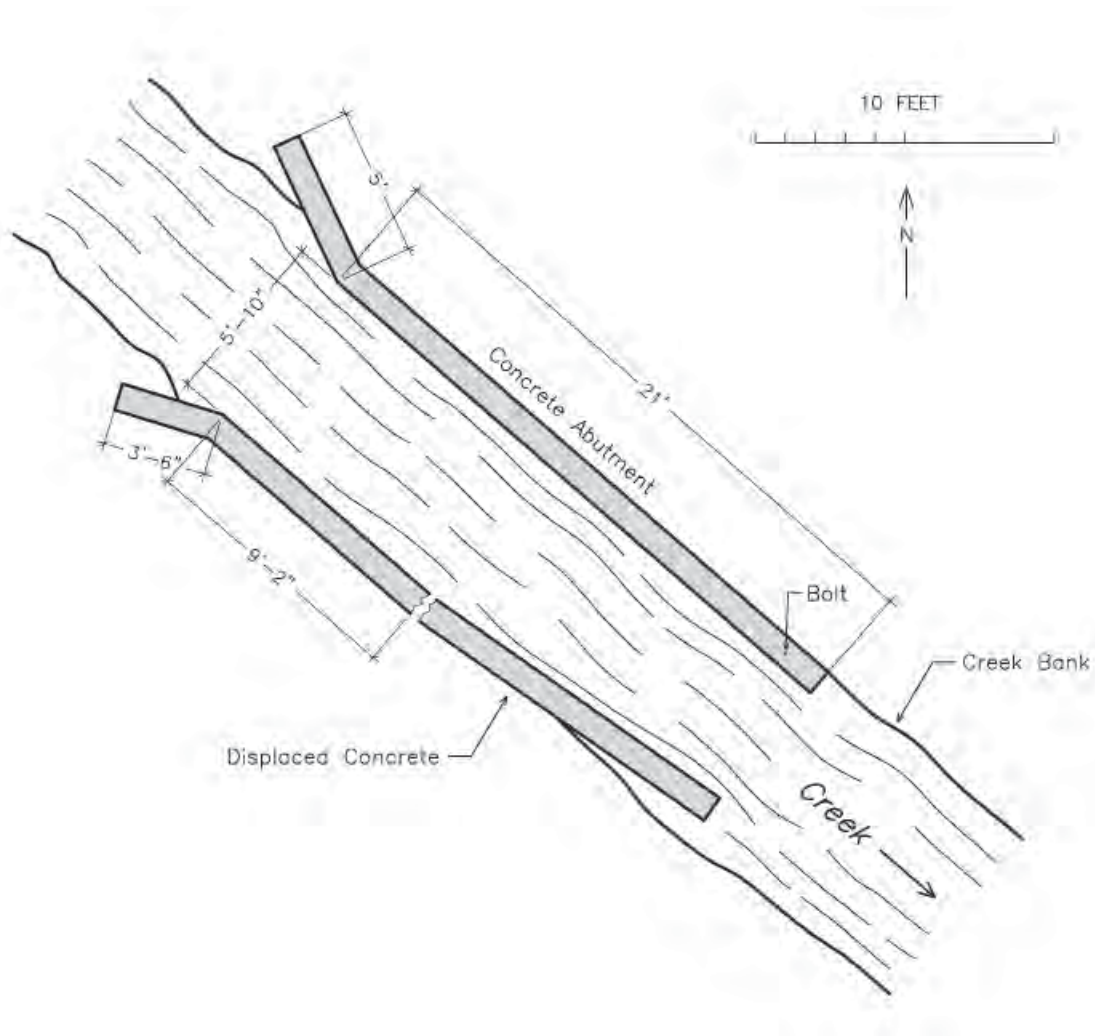


Figure 5.382. Feature VI-41, bridge abutments.



Figure 5.383. Feature VI-42, road (2017).



Figure 5.384. Feature VI-43, rock-lined pathway (2017).



Figure 5.385. Feature VI-43, rock-lined pathway (2008).

walls suggest the area defined by the interior stem walls in the southeast corner of the building was divided into smaller rooms, one of which housed a toilet, as indicated by a toilet drain and mounting bolts.

A similar drain trough was found at the hospital laundry building slab at Manzanar National Historic Site (Burton 1996). At Manzanar, the trough top was lined with metal, and machine bolts indicated where washing machines had been located.

Artifacts found were photographed, measured, and left at the site. They included more than half of a white ceramic bowl, found in the large drain in the laundry building's concrete floor. The bowl has a printed backstamp that reads: U.S.Q.M.C. / O. I. 6064 / 4-23-41 / SHENANGO CHINA / NEW CASTLE PA. Also in the drain were found a shampoo bottle fragment, a 2-hole shell button 9/16 inches in diameter, and a .22 rim-fire bullet with an "H" headstamp, indicating manufacture by the Winchester Company (Ball 1997:124). Like a metal 4-hole button stamped "U.S. ARMY" found elsewhere on the slab, the shell button was probably inadvertently lost during laundering.

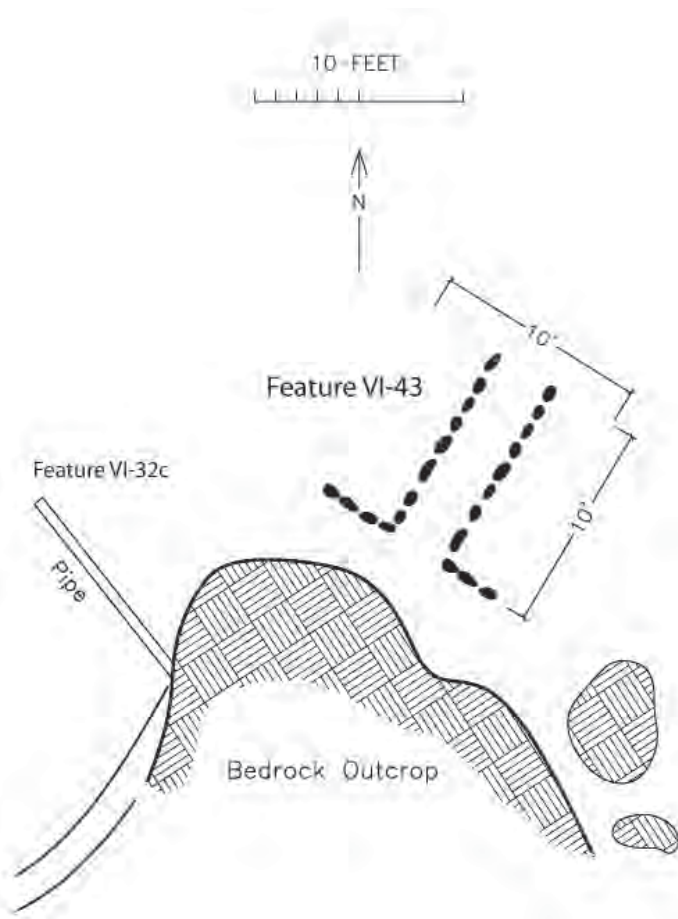


Figure 5.386. Feature VI-43, rock-lined pathway.

Structural or machine-related artifacts found on or near the Honouliuli laundry slab include eight heavy metal machine part fragments; twenty pieces or fragments of hardware; two 2½-inch-long common nails; seven nail fragments; a round metal gasket; five very rusty pipe fragments, all with an inner diameter of 3/4 inch; some sheet metal fragments; and a broken piece of angle iron, 3 inches long by 1½ inches. A 25-inch-long tapered metal "leg," strapping, bolts, washers, fibrous light-gray insulation, and a brass or copper faucet were likely related to laundry machinery. Black tarpaper fragments were also documented, most near the perimeter foundation, with a concentration in the boiler room extension. Electrical artifacts include the metal end of a cartridge fuse and copper and aluminum electrical wire, some wrapped with insulation.

Three neck fragments with handles and about 68 other fragments of clear bottle glass, likely from bleach or disinfectant, were also noted. One of the neck fragments had a cork closure, the other two were threaded for screw-on caps. One base fragment was embossed with what appears to be a lone "4" on the outside, and an "8" and "...O C" on the inner circle. Another clear



Figure 5.387. Feature VI-44, rock wall (2008).



Figure 5.388. Feature VI-44, bottle in rock wall (2008).



Figure 5.389. Feature VI-45, rock wall (2017).



Figure 5.390. Feature VI-45, rock wall (2012).



Figure 5.391. Feature VI-46, rock wall with waterpipe in foreground (2008).



Figure 5.392. Feature VI-46, jar found nearby (2008).



Figure 5.393. Feature VI-47, ditch (2008).

glass base fragment was embossed with “OWENS / 8 3,” indicating it was manufactured by the Owens-Illinois Glass Company in 1943. Other glass included two fragments of flat window glass.


Other artifacts reflect unrelated activities. For example, five beer bottles found at the foundation probably relate to after-hours leisure; soldiers and sailors in Glenn Heern’s historic Honouliuli photographs hold similar bottles. The bottles found at the slab include three complete amber beer bottles; all are embossed “NOT TO BE REFILLED” around the base of the neck and have a stipple pattern on the body and base. The three bottles look identical except for different basemarks: one basemark is “8565-A / 5/ 44 / 12” and another’s is “3565-A / 5/ 44 / 9” both with the Anchor Hocking Glass Company maker’s mark. The 8565-A and 3565A are the bottles’ catalog or model numbers; the “5” before the symbol indicates the plant, Connessville, Pennsylvania, and “44” indicates a manufacturing date of 1944. The number below the symbol is the mold number (Lockhart et al. 2013). The third complete amber beer bottle is embossed “Duraglas / 9 / 5. / 0.”, which indicates it was made by the Owens Illinois Glass Company in 1945. An amber beer bottle base fragment has a partial *Duraglas* symbol on its base with numbers indicating manufacture in 1946. The fifth beer bottle is complete, of clear glass, stamped “NOT TO BE REFILLED” and with the basemark “K-4040 /  / 2-6” indicating manufacture by the Hazel Atlas glass company. Lockhart et al. (2015:86) suggest that a “K” on a Hazel Atlas base indicated the former Kearns-Gorsuch factory at Zanesville, Ohio, but the



Figure 5.394. Features VI-48, possible rock foundation (2008).

Hazel Atlas Glass Company did not use date codes consistently enough to provide reliable indicators of the year of manufacture. Artifacts dating to the post-World-War-II use of the area include a horseshoe with nails and three .22 caliber shell casings.

In 2014, three test units were excavated adjacent to the foundation. One, located just outside the doorway of the boiler room, was 8 feet by 4 feet in plan, and up to 1.5 feet deep. excavated to locate the original ground level. The lowest stratum, about 1.5 feet below the current ground surface, consisted of compact loam with gravel; this stratum is likely the ground surface when construction of the laundry building was completed. Above that stratum was a layer of coral gravel, likely brought in to define a pathway and reduce mud. Above the coral gravel was a layer of tarpaper, discarded when the building was demolished. Found with the tarpaper were a dozen 8d common nails and numerous nail fragments too rusty to identify, a large bolt, a window glass fragment, a pipe clamp, and a white porcelain cap, which might have been a cover for a toilet anchor bolt. Above the tarpaper were three strata deposited after demolition: directly above the tarpaper was a thin layer of organic material, and above that, a very compact clayey loam. The top stratum consisted of compact silty loam, red to light red in color. No artifacts were found in the top stratum, save for a fire brick found at the transition from the top to second stratum.

The second test unit, 2.5 by 1.5 feet in plan by 2 feet deep, was excavated outside the wall where the laundry drain trough was projected to exit the building.



Figure 5.395. Feature VI-49, laundry foundation prior to clearing (2008).



Figure 5.396. Feature VI-49, mapping laundry foundation prior to clearing (2008).



Figure 5.397. Feature VI-49, clearing laundry foundation (2010).



Figure 5.398. Feature VI-49, clearing laundry foundation (2010).



Figure 5.399. Feature VI-49, clearing laundry foundation (2010).



Figure 5.400. Feature VI-49, clearing laundry foundation (2010).



Figure 5.401. Feature VI-49, excavation of laundry foundation (2012).



Figure 5.402. Feature VI-49, excavation of laundry foundation (2012).



Figure 5.403. Feature VI-49, excavation of laundry foundation (2012).



Figure 5.404. Feature VI-49, excavation of laundry foundation (2014).



Figure 5.405. Feature VI-49, excavation of laundry foundation (2014).



Figure 5.406. Feature VI-49, exposing the northeast edge of the laundry foundation (2014).



Figure 5.407. Feature VI-49, laundry foundation interior walls detail (2014).



Figure 5.408. Feature VI-49, laundry foundation wall detail (2014).



Figure 5.409. Feature VI-49, laundry foundation toilet drain (2010).



Figure 5.410. Feature VI-49, laundry slab after excavation (2014).



Figure 5.411. Feature VI-49, conduit and mounting holes in laundry slab (2010).

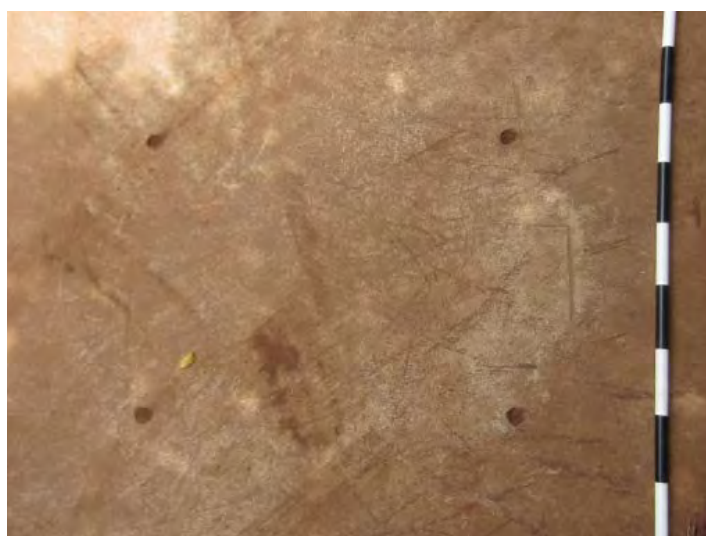


Figure 5.412. Feature VI-49, mounting holes in laundry slab (2014).



Figure 5.413. Feature VI-49, mapping laundry foundation, view to east (2012).



Figure 5.414. Feature VI-49, laundry foundation drain (2012).

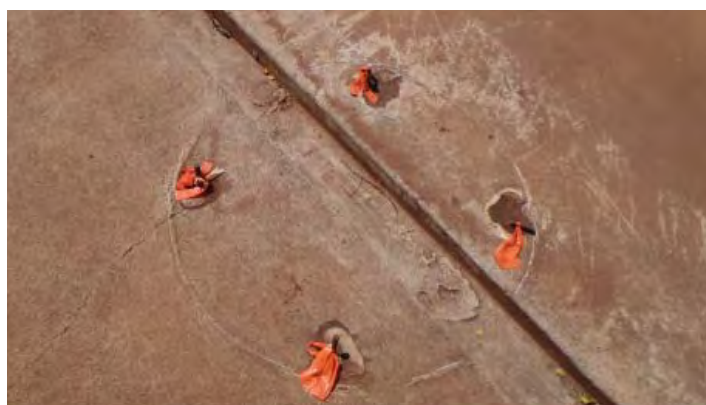


Figure 5.415. Feature VI-49, laundry foundation mounting bolts (2012).



Figure 5.416. Feature VI-49, laundry foundation mounting bolts outlined with chalk (2012).



Figure 5.417. Feature VI-49, laundry foundation pipe and conduit (2012).



Figure 5.418. Feature VI-49, laundry slab after excavation, view to southwest (2012).



Figure 5.419. Feature VI-49, laundry slab after excavation, view to north (2012).



Figure 5.420. Feature VI-49, laundry building ca. 1944 (detail of Glenn Heern photograph, JCCH).



Figure 5.421. Feature VI-49, laundry building ca. 1945 (detail of R.H. Lodge photograph).

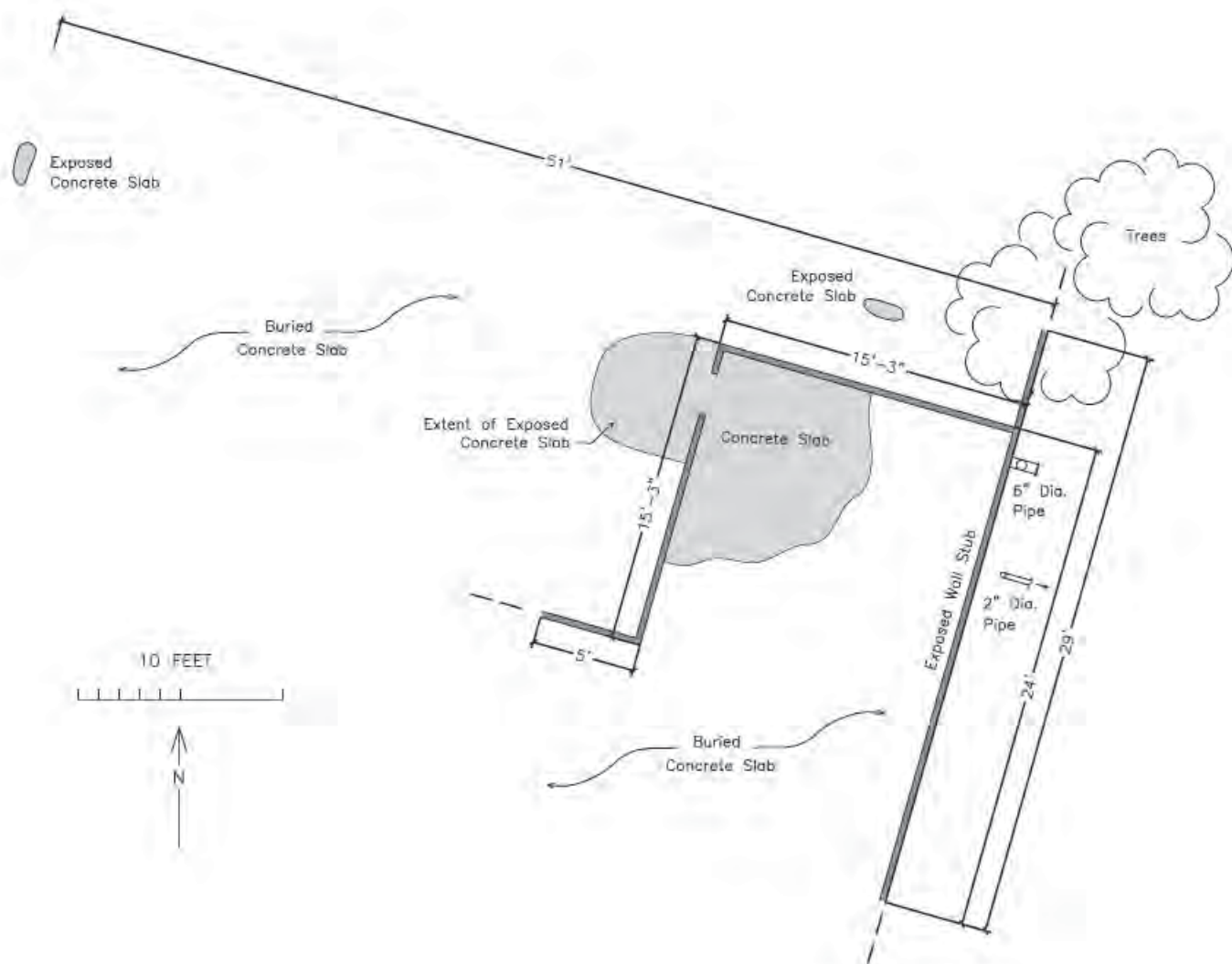


Figure 5.422. Feature VI-49, laundry foundation prior to clearing.



Figure 5.423. Feature VI-49, brick wall fragment uncovered during clearing of laundry slab (2010).



Figure 5.424. Feature VI-49, laundry doorway (2014).

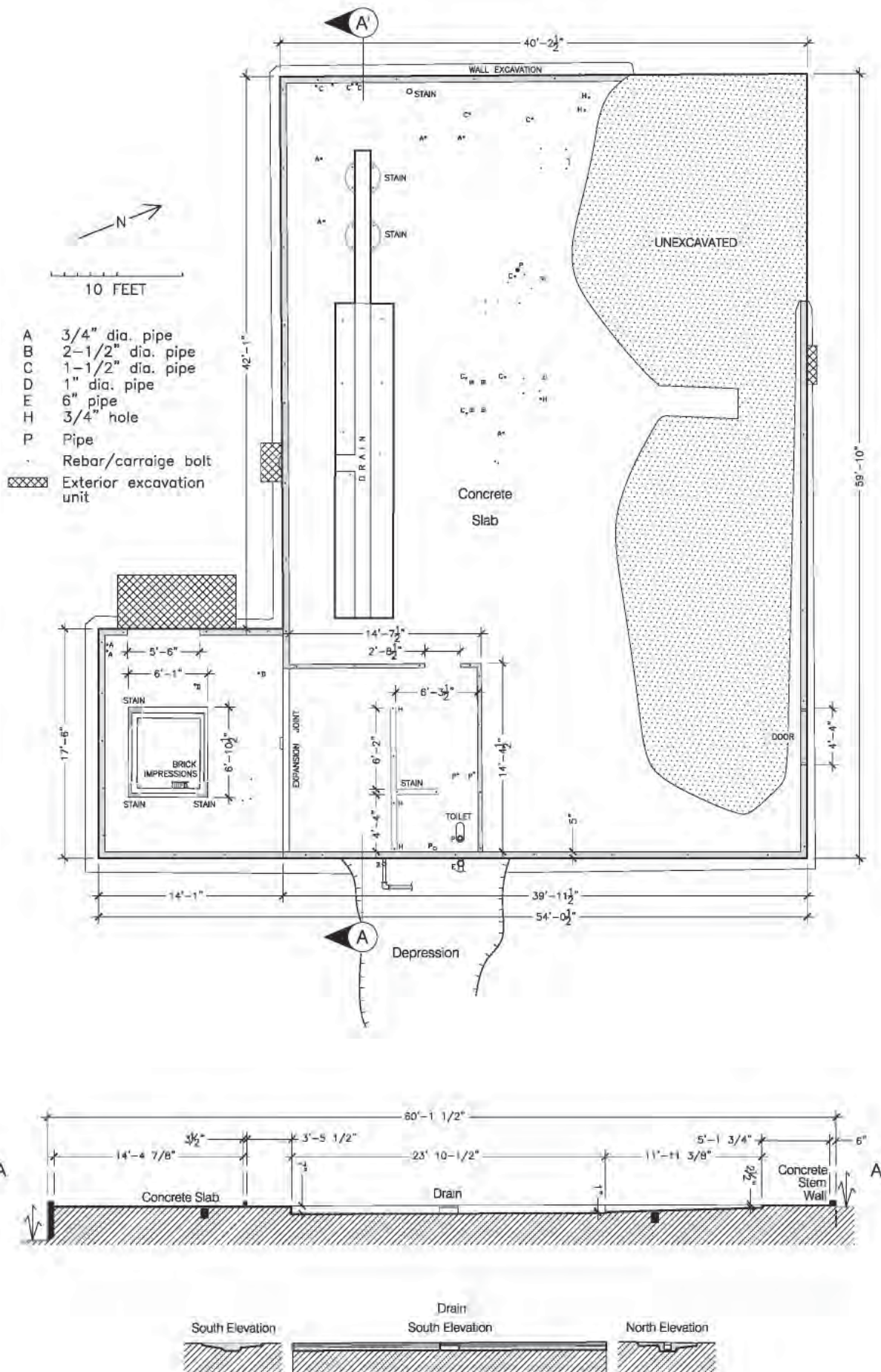


Figure 5.425. Feature VI-49, laundry foundation.



Figure 5.426. Feature VI-49, excavation unit adjacent to laundry foundation boiler room (2014).



Figure 5.427. Feature VI-49, excavation unit adjacent to laundry foundation drain (2014).

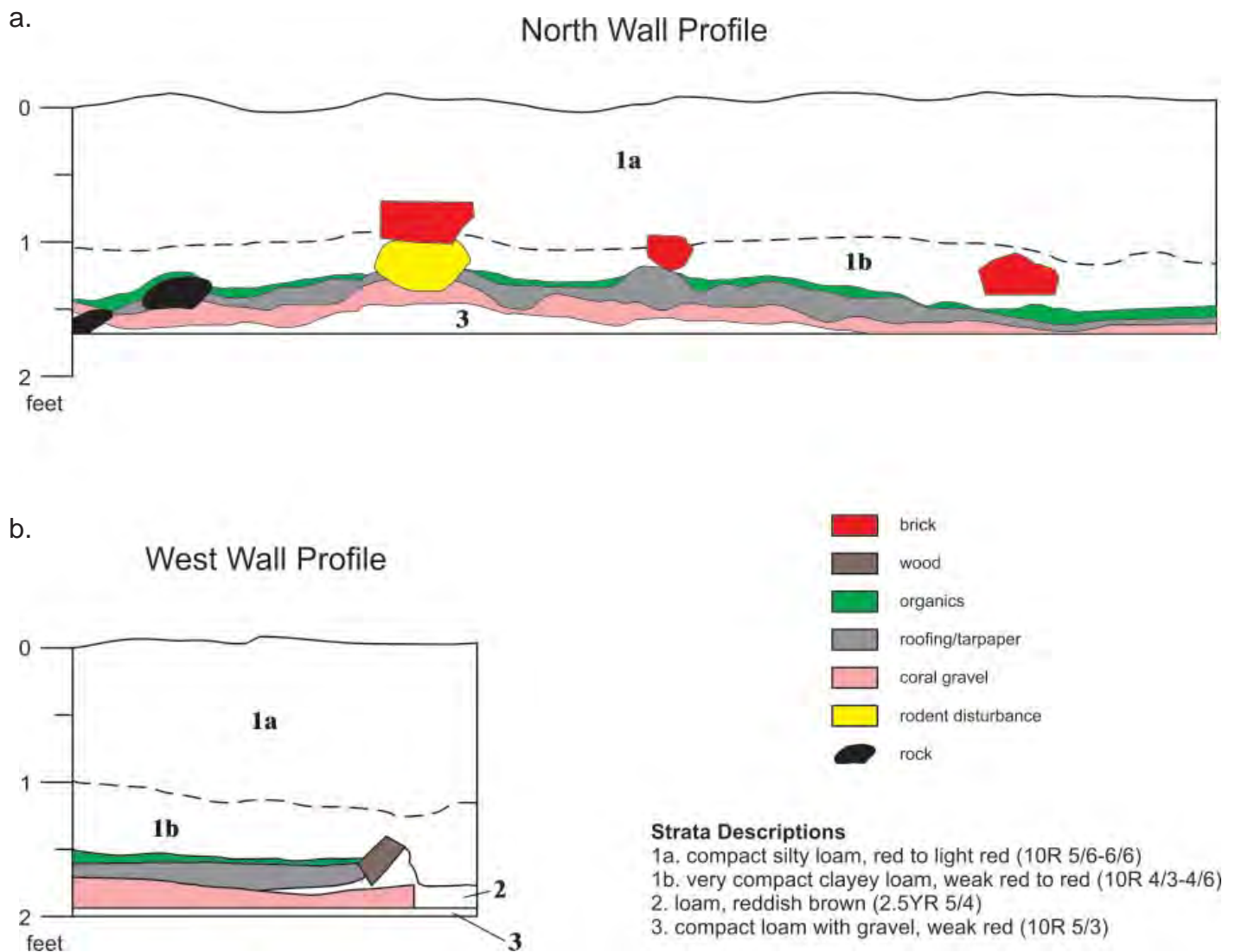


Figure 5.428. Feature VI-49, laundry excavation units sidewall profiles, a. boiler room, b. drain.



Figure 5.429. Feature VI-49, ceramic bowl found during excavation of laundry (2012).



Figure 5.431. Feature VI-49, ceramic object found during excavation of laundry (2014).



Figure 5.430. Feature VI-49, typical nails found during excavation of laundry (2014).



Figure 5.432. Feature VI-49, embossed brick found during excavation of laundry (2014).



Figure 5.433. Feature VI-49, embossed brick found during excavation of laundry (2014).



Figure 5.434. Feature VI-49, military button found during clearing of laundry foundation (2014).



Figure 5.435. Feature VI-49, glass bottle fragment found during clearing of laundry foundation (2010).



Figure 5.436. Feature VI-49, glass bottle fragments found during clearing of laundry foundation (2012).



Figure 5.435. Feature VI-49, horseshoe found during clearing of laundry foundation (2010).

The stratigraphy of this unit was similar to that of the first, with two layers of red loam over a thin organic layer, which in turn overlay a layer of tarpaper from building demolition. Under the tarpaper was a partial layer of coral, at roughly the same depth and thickness as a layer of reddish brown loam not seen in the first unit. Compact red loam with gravel underlay both the coral and the reddish-brown loam. Two pieces of wire encountered in this unit were found to be loose fragments.

The third area excavated outside the laundry slab perimeter was placed adjacent to the long northeast side of the building to test whether there was a slab foundation on the “outside” of the main laundry building, where a small shed-roofed extension is visible in a historic photograph (see Figure 5.421). This test was 3 feet long and 1 foot wide, and extended only a few inches below the level of the laundry building’s slab.

No concrete was encountered, so if the addition had a concrete floor, it is buried more deeply than the main slab.

Feature VI-50: Guard Tower Footings (Figures 5.441-5.444)

The four concrete footings for this tower, excavated and mapped in 2010, indicate the tower straddled the aqueduct at an outlet gate (Feature L-1d, described below). No posts remain, but the posthole impressions in the footings indicate that 4-by-6-inch lumber was used for the tower’s legs, which were set to form a rectangle about 6½ by 7 feet in plan. The water gate was closed with concrete to prevent access to the aqueduct from the compound through the turnout. A date inscribed in the concrete of the gate closure, “JAN 21-1943,” may also indicate when the guard tower was constructed.



Figure 5.438. Feature VI-49, World War II-era beer bottles found during excavation of laundry slab (2010 and 2012).

Feature VI-51: Rock Steps (Figures 5.445-5.450)

The fourteen steps of this feature, cleared of vegetation in 2010, lead from an artificial terrace behind and above the guard barracks up to a flat area adjacent to the aqueduct. The guard tower foundations (Feature VI-50, above) are just over 16 feet to the north of, and 1 foot 4 inches higher than, the top of the stairs. Each step is formed of five to ten large rocks, most of them shaped, aligned to form a riser. Fill dirt forms the treads, and large unshaped boulders anchor the ends of several steps. Overall the staircase is 31 feet long by 8 feet 6 inches wide, and 12 feet 4 inches high from the terrace to the top of the steps.

Artifacts found nearby include a small corroded pocket knife (a little over 3 inches long) (see Figure 5.449), a beer bottle (with basemark “12 44 / .31” and “NOT TO BE REFILLED” twice around the shoulder) (see Figure 5.450), and a fallen-over and rotted utility pole. The steps were likely built to provide easier access up the slope from the guard camp area to the guard tower. Another, smaller set of steps (Feature VI-46) is

located in the same alignment, on the other side of the 30-foot-wide terrace at the base of Feature VI-51; this feature continues down to the level of the barracks.

Feature VI-52: Sewer Manhole (Figures 5.451 and 5.452)

Found during metal detecting in 2010, this in-place manhole opening is a metal ring about 2 feet in diameter. It is located west of the creek just south of the boundary between Compounds V and VI, approximately 7½ feet north of Feature VI-18b, a concrete slab. It appears on the Army blueprints as part of the “authorized” sewer system.

Feature VI-53: Rock Wall (Figures 5.453 and 5.454)

Just west of the Feature VI-32 latrine foundation is a curved rock retaining wall, estimated to have been about 3 feet high and at least 100 feet long. The wall is composed of natural basalt boulder outcrops and smaller stacked basalt boulders and cobbles, and was mapped with Features VI-32 and 33 in 2011.



Figure 5.439. Feature VI-49, laundry foundation showing extent of excavation (2014).



Figure 5.440. Feature VI-49, laundry foundation today (2017).

Feature VI-54: Drilled Hole in Rock (Figure 5.455)

Recorded in 2012, this feature is big basalt boulder with one drilled hole a few inches above the ground surface. It is possible that the hole was once on top of the rock and served to anchor a post. A boulder with natural cupules is located nearby.

Feature VI-55: Rock Wall (Figures 5.456 and 5.457)

Noted in 2012, this feature is a rock retaining wall composed of basalt boulders and cobbles. It varies from 2 to 3 feet high and is over 50 feet long.



Figure 5.441. Feature VI-50, guard tower footings (2010).



Figure 5.442. Feature VI-50, inscription at guard tower (2010).

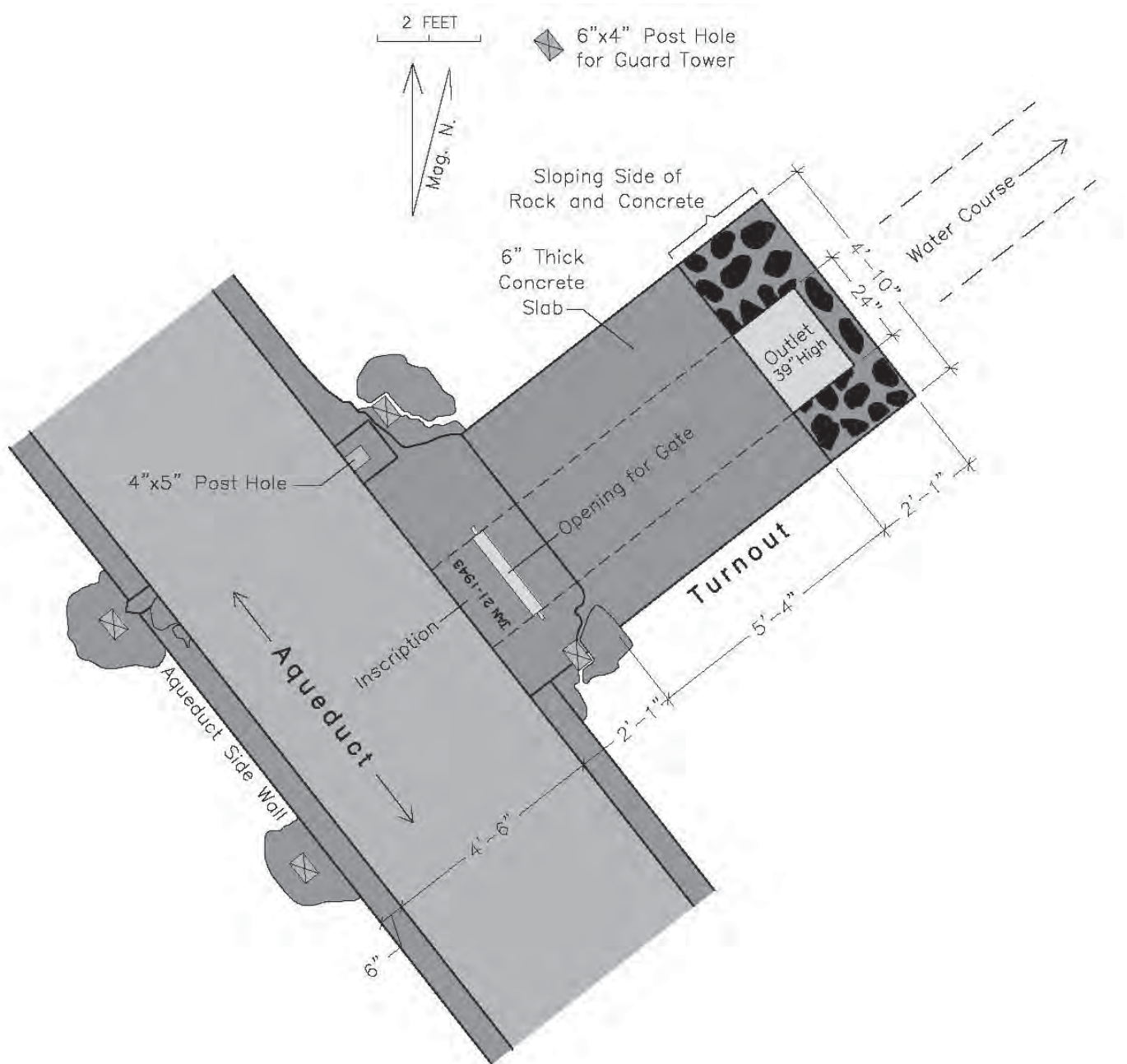


Figure 5.443. Feature VI-50, guard tower footings.



Figure 5.444. Feature VI-50, guard tower ca. 1945 (detail of R.H. Lodge photograph).



Figure 5.445. Feature VI-51, rock steps to guard tower (2010).



Figure 5.446. Feature VI-51, rock steps to guard tower (2010).



Figure 5.447. Feature VI-51, rock steps to guard tower (2010).

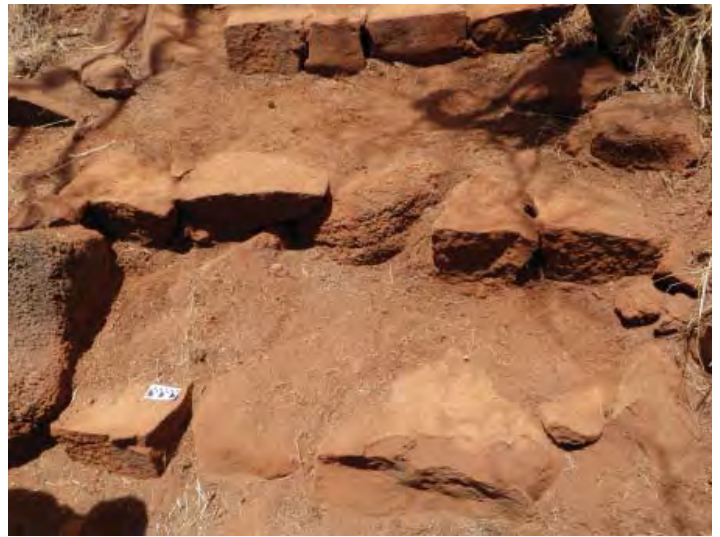


Figure 5.448. Feature VI-51, rock steps (2010).



Figure 5.449. Feature VI-51, pocket knife found during clearing of rock steps to guard tower (2010).



Figure 5.450. Feature VI-51, beer bottle with 1944 date code found during clearing of rock steps (2010).



Figure 5.451. Feature VI-52, sewer manhole before clearing (2010).



Figure 5.452. Feature VI-52, sewer manhole after clearing (2011).



Figure 5.453. Feature VI-53, clearing rock wall at latrine and shower building (2012).



Figure 5.454. Feature VI-53, rock wall at latrine and shower building after clearing (2012).



Figure 5.455. Feature VI-54, drill hole in rock (2012).



Figure 5.456. Feature VI-55, rock wall (2012).



Figure 5.457. Feature VI-55, rock wall (2012).



Figure 5.458. Feature VI-56, rock wall (2012).



Figure 5.459. Feature VI-57, dump truck and trash (2012).



Figure 5.460. Feature VI-57, dump truck and trash (2012).



Figure 5.461. Feature VI-57, water cooler and other trash (2012).



Figure 5.462. Feature VI-58, pile of boulders (2012).



Figure 5.463. Feature VI-59, metal fence post (2014).

Feature VI-56: Rock Wall (Figure 5.458)

This rock retaining wall was noted in 2012; it is obscured by vegetation, but is estimated to be 1 to 2 feet high and at least 10 feet long.

Feature VI-57: Dump Truck and Trash (Figures 5.459-5.461)

Noted in 2012, this abandoned vehicle appears to be an International Harvester dump truck dating to the 1940s. It was not recorded in detail. A gas can, metal bed springs and frames, a metal water cooler, and other discarded items are piled on the truck, and two beer bottles were found nearby. One, of brown glass, has the basemark “17 / 10 / 6019”; the other, of clear glass, has “23 / 1714” surrounding the stylized “double F” in a circle, the symbol used by the Foster-Forbes Glass Company between 1942 and 1983. The dump truck and trash may postdate the prison camp.



Figure 5.464. Feature VI-59, Anchor Hocking Glass Co. beer bottle with 1944 date code (2014).



Figure 5.465. Feature VI-59, Northwestern Glass Co. beer bottle (2014).

Feature VI-58: Pile of Boulders (Figure 5.462)

Photographed in 2012, this feature consists of about two dozen large basalt boulders in a pile that measures at least 15 feet in diameter. It is located near Feature VI-57, the dump truck.

Feature VI-59: Metal Gate Post (Figures 5.463-5.465)

This metal gate post, recorded in 2014, is located adjacent to the road on the west side of the camp that leads from the farms above down into the gulch. Its location, where a fence shown on the 1943 War Department Terrain Map would have crossed the road, and its substantial construction suggest it may have been part of the outer security fence. It is hollow, approximately 4 feet high and 4 inches in diameter. Four U-shaped pieces of metal are welded on to its northeast side,



Figure 5.466. Feature VI-60, fence post (2012).

and are used to attach four strands of barbed wire. A larger flat ring is welded near the top of the post on the southwest side, facing the road. Stenciled lettering on the post has been tentatively identified as "... [unreadable] ASTM A120 LA / 2 1-0." Two beer bottles and an aluminum beer can were found nearby; one of the bottles dates to World War II. Manufactured by Anchor Hocking, it has a 1944 date code. The other beer bottle has the "NW" used by the Northwestern Glass Company from 1931 to the 1960s.

Feature VI-60: Fenceline (Figures 5.466-5.468)

This feature, recorded in 2012, is a fenceline that runs northeast-southwest south of the laundry slab feature (VI-49). At least 200 feet long and extending upslope, it is located close to the boundary between Compounds VI and VII as shown in the Army blueprints, and is in the same location, or very close to the same



Figure 5.467. Feature VI-60, fence post (2012).



Figure 5.468. Feature VI-60, trees along fence line (2012).

location, as a fence shown on the 1943 military terrain map. A long, low swale runs parallel to the fence; the swale is overgrown with grass but may have been part of the original fence construction. Some of the posts are substantial wood lumber, and the fence may originally have been part of Compound VII's security fence. However, it now has a single strand of barbed wire, and in some places uses trees as fence posts, indicating it was most recently used as range fencing.

Compound VII "Proposed" Prisoner of War Camp

In the undated Sanitary Sewer System blueprints, the area at the far southern end of the camp is labeled "proposed prisoner of war compound VII." The April

12, 1945, blueprint, labeled “Honouliuli Gulch Disciplinary Compound,” shows not only roads, the stream, power lines, and sewer lines, but also other features that are to be constructed. An 8-foot-high fence of barbed wire and chicken wire was to surround the entire compound, and each row of tents was to be fenced. Guard towers are depicted at each corner, to be equipped with search lights. A small “sentry box” and a 16-foot-by-20-foot guard house is located near the gate, which is in the center of the south side. There is a 2-seat pit toilet at the end of each row of 11 tent platforms. A shower building is opposite the gate; from there, a 4-inch sewer pipe leads to a 100-man settling tank. The tank in turn has an outlet made of a 4-inch galvanized iron pipe anchored with concrete, which appears to discharge into the stream. The blueprint includes detailed plans and elevations of the latrines and shower. A “dam” was noted to be constructed to divert a tributary of Honouliuli stream along the north side of the compound. The blueprint label indicates that this compound’s capacity would be 110 tent floors, to house 880 men. The laundry and three other buildings in Compound VI, the Guard Camp area, are shown on the other side of a fence on the northwest edge of the blueprint.

By the time R.H. Lodge took photographs of the camp, there were over 80 tents in a rectangular fence enclosure in this area, guard towers at each of the three corners visible in the photograph, nine small latrines along the fence, the shower building at the back of the compound opposite the entrance gate, and another building outside the fence near the entrance. Constructed after most of the initial construction at Honouliuli was done, Compound VII is located away from the other POW compounds, on the other side of the guard area. Yong-ho Ch’oe (2009, 2010) notes that Korean POWs were at Honouliuli beginning in late 1943 or early 1944, in Compound 7, among other compounds; however, the compound designations may have changed between the time of the blueprint and the records.

Twenty-four features were found within Compound VII (Figure 5.469). However, not all 24 features relate to the Compound VII POW camp: Features VII-1, -2, and -3 appear to be part of the wastewater disposal system servicing Compound VI rather than integral components of Compound VII, and nine of the features (metal power poles and concrete irrigation troughs)

postdate the camp.

Although very few modern developments are apparent in Compound VII, the area has seen some changes since World War II. In the 1951 aerial photograph, there is a new road in the current alignment of the paved access road on the east side of the gulch. In the 1960 and 1967 USGS topo maps, this road is depicted with dashed lines, indicating it was secondary to the original entrance road which enters the gulch from the south. In aerial photographs dated 1962, the Compound VII area appears to be cultivated: the vegetation is all the same height, and a couple of linear features (possibly fences or irrigation features) cross the floodplain. If so, the compound may have been at least partially cleared and plowed by this time. There was a communication site in this compound at least as early as 2000, according to Google Earth images; it had been removed by the time of the 2017 visit.

Isolates recorded within Compound VII include a tire and rim (Figure 5.470) and another vehicle part (Figure 5.471), both in the stream bed, and both probably post-dating World War II. Three other isolates are more likely associated with the camp. One is a cut and shaped basalt rock partially covered with mortar, indicating it was once part of a structure, perhaps a wall similar to Feature V-15 east of the road near Compound V. A large boulder with bulldozer teeth marks is nearby, suggesting that there has been extensive ground disturbance in the area. The second is a fence corner post that includes a diagonal brace of four-by-six-inch lumber for the upright post. The upright post appears to be a quarter-round of a power pole, and was likely recycled from some recent use, but the four-by-six-inch lumber appears to be older, and has drill holes that serve no function in the fence post. It may be a reused post from the prison camp. The third isolate in Compound VII that is probably related to the camp is a metal lamppost shade with a green exterior and white interior. It was found near the original entrance road, and appears to have been part of a security or exterior building light.

Feature VII-1: Septic Tank (Figures 5.472-5.474)

This septic tank and VII-2, described below, are located adjacent to each other, south of the stream and east of the guard camp area. Both are shown on the U.S. Army blueprints. Although located in the “Proposed



Figure 5.469. Compound VII archaeological features.



Figure 5.470. Tire and rim (isolate) in stream bed within Compound VII (2012).



Figure 5.471. Vehicle part (isolate) in stream bed within Compound VII (2012).

POW Compound,” both septic tanks are part of the guard camp area utilities. Both are constructed of formed concrete, and the top surfaces of both are about 15 to 20 inches above the ground surface. Feature VII-1, cleared and mapped in 2008, measures 13 feet 6 inches by 34 feet 6 inches, and has a 3-foot-square access hatch along the north side. A ladder into the pit is formed of bent rebar set into the concrete wall. A cover 2 feet 4 inches square with rebar handles indicates another access port on the eastern end.

Feature VII-2: Septic Tank

(Figures 5.475 and 5.476; see Figure 5.472)

This septic tank, cleared and mapped in 2008, measures 24 feet by 10 feet with an extension 7 feet 8 inches wide by 4 feet 8 inches long at the eastern end. There are three 2-foot-square access hatches (two with concrete covers) and one 1-foot-square opening.

Feature VII-3: Septic Tank

(Figures 5.477 and 5.478)

Recorded in 2008, this feature is a circular concrete slab, part of the guard camp sewer system and located upstream of Features VII-1 and VII-2. The slab is mostly buried so its extent was not measured,

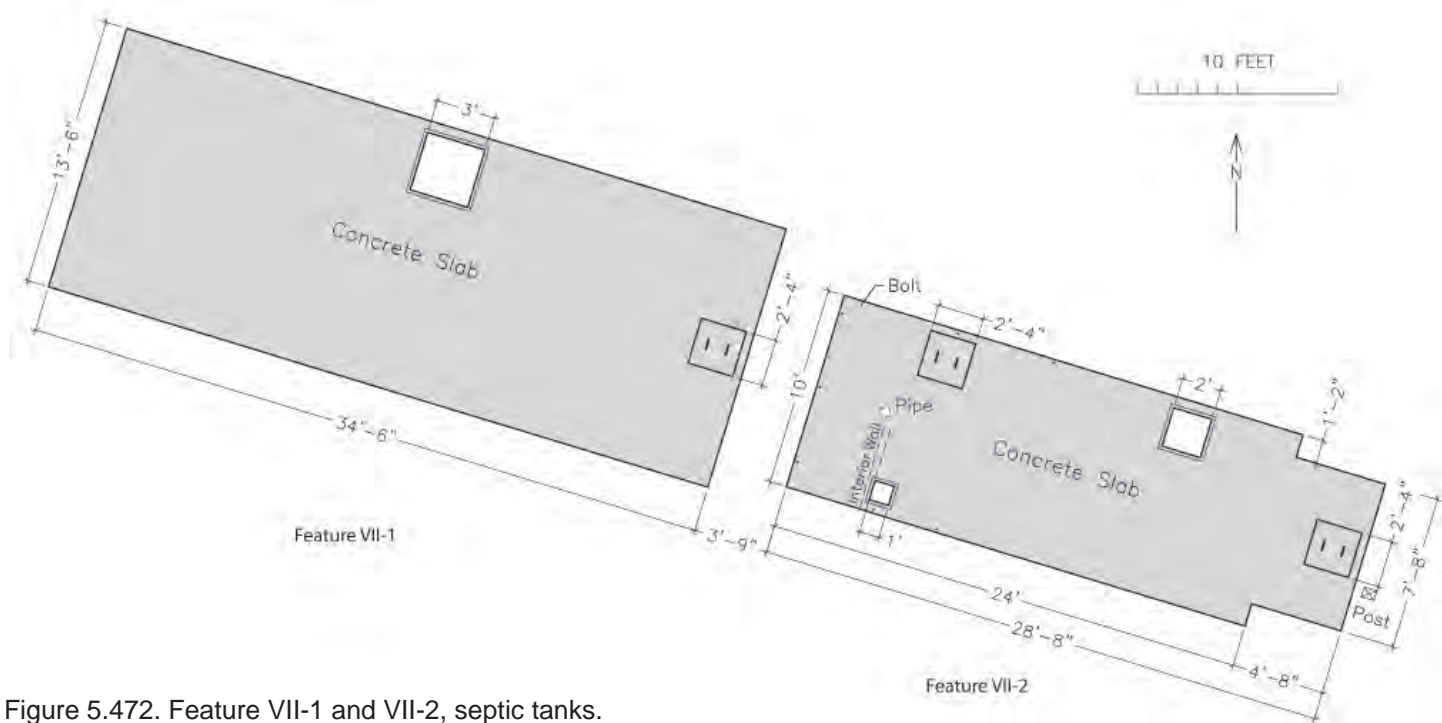


Figure 5.472. Feature VII-1 and VII-2, septic tanks.



Figure 5.473. Features VII-1 and VII-2, septic tanks (2008).

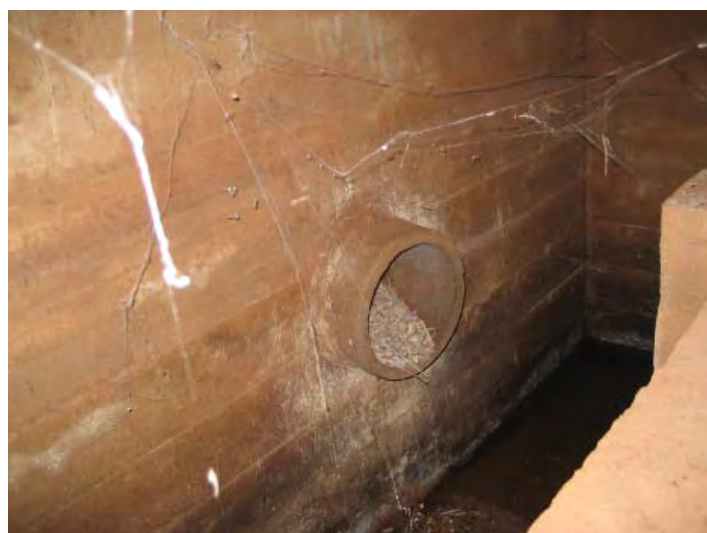


Figure 5.474. Feature VII-1 septic tank interior (2008).



Figure 5.475. Feature VII-2, septic tank (2008).



Figure 5.476. Feature VII-2 septic tank interior (2008).



Figure 5.477. Feature VII-3, septic tank (2008).



Figure 5.478. Feature VII-3, detail of septic tank opening (2008).



Figure 5.479. Feature VII-4, metal fence post and wire (2008).

but it has a 2-foot-square access opening rimmed with a 9-inch-high collar. The feature is depicted on the U.S. Army Sanitary Sewer System blueprints as a septic tank.

Feature VII-4: Fence Remnants (Figure 5.479)

Noted in 2008, this feature consists of three metal



Figure 5.480. Feature VII-5, wood post (2008).



Figure 5.481. Feature VII-5, wood post (2017).

posts, wire mesh, and pulled-up concrete post anchors. These may be associated with the Compound VII security fence or a baseball field shown nearby on the U.S. Army blueprints.

Feature VII-5: Posts (Figures 5.480 and 5.481)

Recorded in 2008, these two wooden posts, each ap-



Figure 5.482. Feature VII-6, concrete fragments and metal posts (2017).



Figure 5.483. Feature VII-7, concrete irrigation trough (2011).



Figure 5.484. Feature VII-7, bottle found at concrete irrigation trough (2011).

proximately 12 inches in diameter and 10 feet high, are about 10 feet apart. The top of the east pole is cut flat, the top of the west pole is cut on two angled planes to form a pointed top. It is not known if they are associated with the POW camp. No historic photographs have been found of the vicinity of the posts, and the prisoner area that is depicted in a historic photograph is at least 1,000 feet to the south. There, the posts for the security fence look to have been 8 to 10 feet tall, and

there are nine larger-diameter, taller posts visible in the historic photograph along the perimeter. The guard towers appear to sit on structures of braced posts, but the photograph is too indistinct to assert that the tower supports are not of milled lumber. Unless additional evidence surfaces to indicate prisoner housing at this location, it seems likely the posts were associated with other facilities, during or after the camp's occupation.



Figure 5.485. Feature VII-8, trash dump (2012).



Figure 5.486. Feature VII-8, trash dump (2012).

Feature VII-6: Structural Debris (Figure 5.482)

In 2008, this feature was recorded as a small pile of concrete slabs and rubble and metal posts along the edge of the original entrance road. It is located downslope of a former communications site (Feature M-14, below), and may have been pushed into its current location when that facility was construction.

Feature VII-7: Concrete Trough (Figures 5.483 and 5.484)

Recorded in 2011, this trough is composed of concrete segments joined end to end, with each segment roughly U-shaped in cross-section and 30 inches long. The walls of the trough are a little over an inch thick and a foot high. The trough walls flare outward slightly, so that the floor of each measures 1 foot 4 inches wide and across the open top they measure 1 foot 6 inches. The bottom of each trough slopes outward toward both sides from a slightly raised center, and each trough segment has two square outlet holes, one in each side, with shaped and folded sheet metal attached to the concrete at the holes. At some of the joints, there is evidence of a black petroleum-based seam sealant or adhesive. The trough is at least 50 feet long overall, with both ends continuing beyond the area cleared during



Figure 5.487. Feature VII-8, metal urinal at trash dump (2012).



Figure 5.488. Feature VII-8, artifacts at trash dump (2014).



Figure 5.489. Feature VII-8, artifacts at trash dump (2017).



Figure 5.490. Feature VII-9, metal power pole (2011).

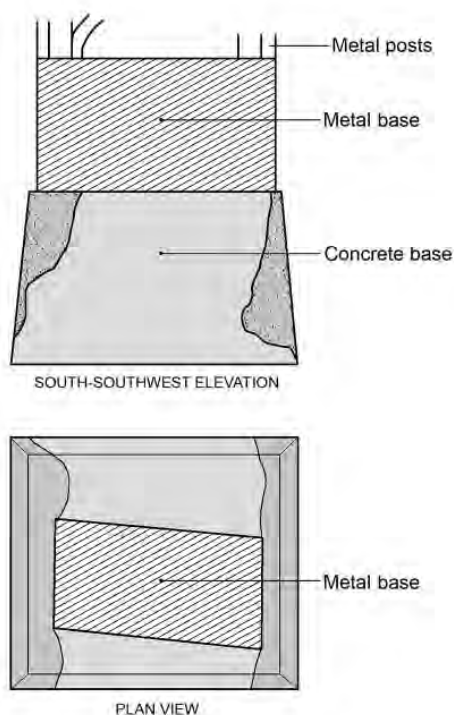


Figure 5.491. Feature VII-9, power pole foundation.



Figure 5.492. Feature VII-9, detail of metal power pole (2011).

the 2011 field work. Segments and fragments of a similar trough were recorded previously in Compound I (Feature I-3); both likely relate to post-World-War-II farming activities. A Diamond Head Beverages bottle was found at the feature. Its basemark reads “PROP. OF C.C. BOTT. CO. HON. LTD.” and “Made in Japan.”

Feature VII-8: Trash Dump and Building Debris (Figures 5.485-5.489)

This trash dump is located on the steep side of Honouliuli Gulch, to the west of where the Lodge photograph places the fenced area of Compound VII. The remains of a wooden structure (likely from the prisoner of war compound) appear to have been bulldozed over the edge of the ravine and the remains now perch on the slope; the structure has been only cursorily noted because of the steep slope and very active wasps. Most of the trash observed postdates World War II; it includes wood, chicken wire, 55-gallon drums, a variety of domestic items, including a refrigerator, chairs, many bottles (especially liquor bottles but also a 1969 Coca Cola bottle and “Diamond Head” beverages), a toy truck, a toy gun, a baseball, a bed spring, and a child’s bed spring. One bottle had the *Duraglas* basemark: “20 45 / *Duraglas*”; another *Duraglas* bottle has the date code for 1949. Also included are concrete trough remnants. Although the building is considered likely to have been a POW camp building, the domestic artifacts represent a secondary trash deposit brought in from somewhere else, possibly the chicken farm. Closer examination of the structure, and of its relationship to the artifacts, could provide better data about the formation processes here.

Feature VII-9: Metal Power Pole (Figures 5.490-5.492)

Located east of the old entrance road and about 200 feet south of the presumed location of Compound VII fence, this feature is a metal power pole estimated to be 25 to 30 feet high. Recorded in 2011, the power pole is formed of two rail-like posts with a metal zig-zag welded between them; the lower sections of the zig-zag are topped with spikes, probably to prevent climbing. A horizontal bar at the top has three insulators; no wire was observed. The pole’s metal base is seated in an eroded trapezoidal- shaped concrete foundation about 13 inches high and 16 inches square. Similar metal power poles were recorded elsewhere in Compound VII; although not still in use, the metal power poles do



Figure 5.493. Feature VII-10, area with concrete fragments (2012).



Figure 5.494. Feature VII-11, drilled post hole in rock (2012).



Figure 5.495. Feature VII-12, mounds and depressions overgrown with vegetation (2017).



Figure 5.496. Feature VII-13, metal power pole (2012).



Figure 5.497. Feature VII-13, detail of metal power pole (2012).

not appear in the historic Lodge photographs and are considered to postdate the camp.

Feature VII-10: Concrete Fragments (Figure 5.493)

This feature, recorded in 2011, consists of two pieces of concrete surrounding 2-inch-diameter hollow metal post sections. One piece of concrete is about 18 inches long by 8 inches diameter; the other is about 14 inches by 6 inches in diameter. Both may be security fence remnants.

Feature VII-11: Drilled Posthole in Rock (Figure 5.494)

This feature, noted during the quick reconnaissance of Compound VII (Burton 2012a), is a basalt boulder with a drilled hole, possibly for a post, in its center.



Figure 5.498. Feature VII-13, ceramic power pole insulator (2012).



Figure 5.499. Feature VII-13, 1978 date on power pole insulator (2012).

Feature VII-12: Mounds and Depressions (Figure 5.495)

Also noted during the 2012 reconnaissance, Feature VII-12 consists of mounds and depressions, located southeast of where the fenced POW compound would have been. Like Feature VII-14, below, it was likely part of earthworks created to divert runoff away from the POW compound.

Feature VII-13: Metal Power Pole (Figures 5.496-5.500)

Thanks to having fallen over, this metal power pole was recorded in detail in 2012. It would have stood 30 feet tall above its concrete anchor, with a 6-inch-high insulator extending the total height to 30½ feet. Two additional insulators sit on a cross piece 2½ feet below the top. A 1978 date on an insulator indicates the powerline was still in use at that time. These distinctive poles do not appear in the historic Lodge photographs, indicating they postdate 1945.

Feature VII-14: Concrete Slab Fragments (Figures 5.501 and 5.502)

Recorded in 2014, Feature VII-14 consists of two concentrations of concrete slab fragments atop a linear berm, located northeast of where the fenced POW compound would have been. The berm itself, recorded as Feature L-10, is shown on the April 12, 1945, Disciplinary Compound blueprint with the notation to “construct dam” and “divert stream” to keep runoff from the slope above away from the POW compound. Feature VII-14 consists of the remains of concrete slab

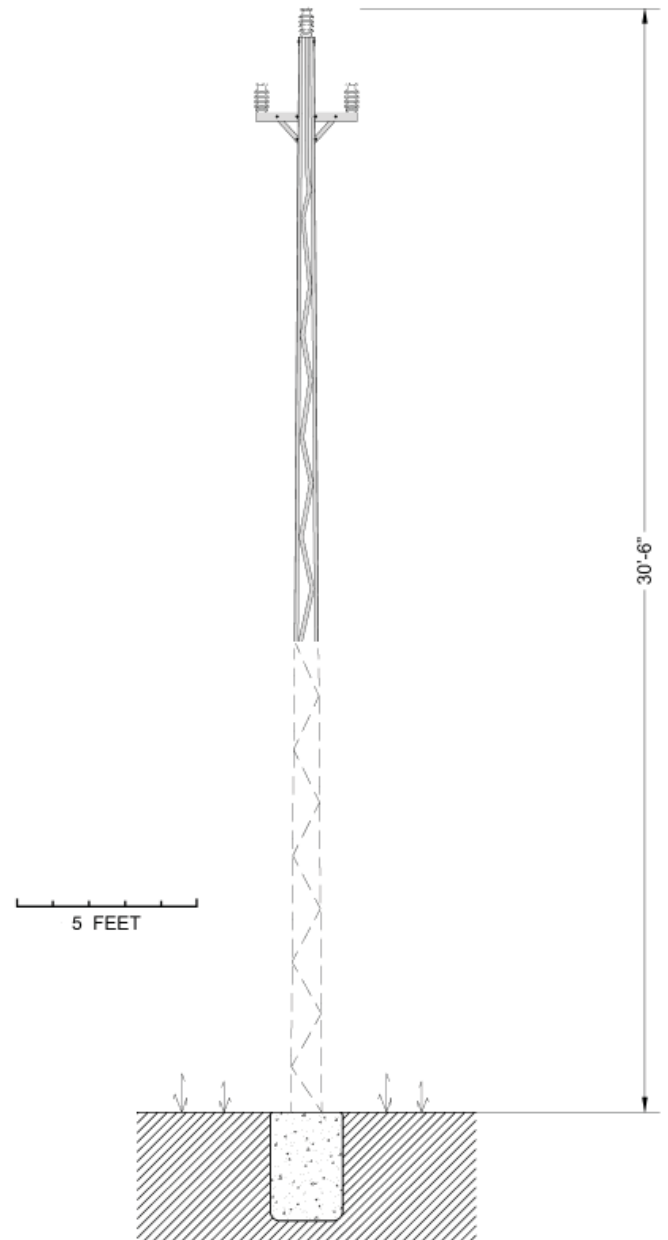


Figure 5.500. Feature VII-13, metal power pole.



Figure 5.501. Feature VII-14, concrete slab fragments on berm (2017).



Figure 5.502. Feature VII-14, concrete slab fragments (2017).



Figure 5.503. Feature VII-15, concrete slab fragment (2017).



Figure 5.504. Feature VII-16, cut power pole (2014).



Figure 5.505. Feature VII-16, top of cut wood power pole (2017).



Figure 5.506. Feature VII-16, detail of ceramic power pole insulator (2017).

foundations, undoubtedly from POW structures, piled on top of the berm to reinforce it at a cut. There are about six concrete slab fragments at the northwest end of the cut (mapped as Feature VII-14a) and five fragments on the southeast end (Feature VII-14b). Some of the slabs show that the concrete was poured into a perimeter trench. On one, the slab floor is about 4½ inches thick, with a raised stem wall on the edge about 3 inches tall and 3½ inches wide. The slabs are broken and some are upended, and were apparently pushed to the berm to clear the area below and reinforce the berm so the area could be replanted in sugar cane.

Feature VII-15: Concrete Fragments (Figure 5.503)

Noted in 2014, these two concrete fragments are also located atop and near the berm on the uphill side of the fenced POW compound.

Feature VII-16: Cut Wood Power Pole (Figures 5.504-5.507)

When first noted in 2014, Feature VII-16 was recorded as a cut-off power pole, standing about 3½ feet tall, and 1 foot in diameter. When revisited in 2017, vegeta-



Figure 5.507. Feature VII-16, wood power pole ca. 1945 (detail of R.H. Lodge photograph).

tion was less dense, and the rest of the pole was visible, lying on the ground with the crosspiece and insulators still attached. The length on the ground is 36.6 feet; insulators are printed “LAPP 15” and “C NECK 1” (?) / 2500 # ULT STR / 1000 # MAX ...(?).”

This power pole is visible just outside the security fence in one of the historic Lodge photographs (see Figure 5.507). It is also depicted on the 1945 Disciplinary Compound blueprint as one of three poles along a “high-tension power line” that stretches southwest to northeast just southeast of the security fence.

Feature VII-17: Portable Fuel Tank (Figures 5.508 and 5.509)

Thanks to relatively sparse vegetation, this large yellow steel tank was seen for the first time during the 2017

field visit. Although it looks similar to a water trailer, it was more likely an above-ground petroleum storage tank. One of the cast-iron hatches is embossed “Clay & Bailey,” a company founded in 1913 to produce steel tanks for the petroleum industry. The company had moved to Kansas City, Missouri, by 1923 (www.claybailey.com), but still focuses on petroleum-related products. “Marine Corps” is neatly painted in white letters on one end; casually scrawled over that is “91-(?)029/#005.” Inside one of the lids is embossed: “FX (or FY?) 937-2 109(?)7-2.” There are two hatches on top, one at each end of the tank, and both lids appear to be vented. The tank sits on skids, rather than a trailer. It is not known if this tank was associated with Honouliuli camp, or if it was reused military surplus acquired for the later sugar cane fields.



Figure 5.508. Feature VII-17, fuel tank (2017).



Figure 5.510. Feature VII-18, concrete irrigation trough fragments (2017).



Figure 5.509. Feature VII-17, detail of fuel tank (2017).



Figure 5.511. Feature VII-18, concrete irrigation trough (2017).



Figure 5.512. Feature VII-19, concrete irrigation trough fragments (2017).

Feature VII-18: Concrete Trough (Figures 5.510 and 5.511)

These fragments of a post-World-War-II concrete trough were noted in 2017.

Feature VII-19: Concrete Trough (Figure 5.512)

This concrete trough, also noted in 2017, is located on Monsanto Hawai'i land, just beyond the monument boundary.



Figure 5.513. Feature V-20, wood poles (2017).



Figure 5.514. Feature VII-21, cut concrete (2017).

Feature VII-20: Cut Wood Power Poles (Figure 5.513)

This stockpile of cut wood power poles, recorded in 2017, is located near the former communications site, where the modern entrance road intersects the historic entrance road. It consists of six large-diameter (estimated 16 to 24 inches) segments, each about 8 feet long.

Feature VII-21: Cut Concrete Slab (Figure 5.514)

Noted in 2017 and located south of the former communications site, this concrete fragment appears to be a foundation remnant.

Feature VII-22: Concrete Trough (Figures 5.515-5.517)

This concrete trough, composed of numerous connected segments, was observed in 2017. It is at least 90 feet long.

Feature VII-23: Concrete Trough (Figure 5.518)

This trough, observed in the sparse vegetation conditions of the 2017 visit, is about 165 feet long, overall, but about 20 feet of it is missing, buried, or overgrown.

Feature VII-24: Concrete Trough (Figures 5.519 and 5.520)

Observed in 2017, this trough is 190 feet long. At one end the trough branches in two, with one branch extending at least 15 feet.

Compound VIII Proposed Sewage Treatment Plant

In the U.S. Army blueprints, Compound VIII is labeled “Proposed Sewage Treatment Plant.” On mainland Japanese American internment camp sites, wastewater treatment infrastructure is often the most substantial part of the archaeological record. In addition, the original entrance road to the Honouliuli POW and internment camp would have traversed this area. A reconnaissance survey was conducted from Compound VI to Highway H1 through Compound VII and VIII to determine if traces of camp infrastructure (such as a sewage treatment plant, trash dump, or railroad siding) could be located. As is the usual case at the Honouliuli site, vegetation impeded access and visibility in the gulch, but one possible World-War-II-era feature was identified in addition to an isolate and a post-war power pole (Figure 5.521). Also passing through Compound VIII are the alignments of the road and railroad, described under Linear Features, below. The isolate is a pile of rocks (Figure 5.522), noted in 2012, that may be the result of clearing fields.

Feature VIII-1: Concrete Fragments (Figure 5.523)

These small fragments of concrete were recorded during the 2012 reconnaissance. Although they were found near where the sewage treatment plant is depicted on the Army blueprints, the fragments are too small to have been part of sewage treatment facilities. Septic tanks and cesspools at Honouliuli are among the most massive features at the site, and sewage treatment



Figure 5.515. Feature V-22, concrete irrigation trough (2017).



Figure 5.516. Feature V-22, concrete irrigation trough (2017).



Figure 5.517. Feature V-22, concrete irrigation trough (2017).

facilities at mainland internment camps are even more substantial. Nevertheless, the fragments are not far from unidentified structures on the Army blueprints, and may be related to the World War II occupation of the gulch. The feature is located on Monsanto Hawai'i land, outside the monument boundary.

Feature VIII-2: Metal Power Pole (Figure 5.524)

This standing intact power pole, located near the interpolated boundary between Compounds VII and VIII, was recorded in 2012. Like the identical metal power poles recorded within the monument, it postdates the camp occupation.

Linear Features

Linear features include two water conveyance systems that traverse the site, five roads that cross several compounds, the old highway, a railroad grade, and

two berms. Both of the water systems are part of the Waiāhole Ditch Irrigation System constructed for the Oahu Sugar Company. Begun in 1914, the system officially opened in 1916, and with some modifications and expansions, it served the Oahu Sugar Company until that company's close in 1994. With tunnels, ditches, and siphons, it brought water from the windward side of the island over 20 miles to irrigate sugar cane fields on the Ewa Plains. According to Wilcox, the workforce for the system, at least in the construction of the nearly 3-mile-long tunnel that traversed the Koolau Range, was composed predominantly of Japanese immigrants.

Feature L-1: Ditch and Aqueduct (Figures 5.525-5.554)

Noted during the 2006 inspection, this feature comprises the ditch and aqueduct system that carried water through the internment camp. The ditch slopes so gently that it is difficult to tell the direction of flow, on



Figure 5.518. Feature V-23, concrete irrigation trough (2017).



Figure 5.519. Feature V-24, concrete irrigation trough (2017).



Figure 5.520. Feature V-24, concrete irrigation trough (2017).





Figure 5.521. Compound VIII and far south area archaeological features.



Figure 5.522. Rock pile (isolate) in Compound VIII (2012).



Figure 5.523. Feature VIII-1, concrete fragments (2012).

the ground, but analysis of the 1936 topographic maps indicates it flowed from west to east through Honouliuli Gulch, and was fed by a pipe from Pump Camp 5, located a little over a mile to the south-southwest.

Portions of the lower ditch and aqueduct system within the Honouliuli World War II prisoner of war and internment site were recorded in 2008, 2010, 2011, and 2012. Seven features of the water conveyance system were recorded individually and are described below, following the description of the ditch itself.

The concrete-lined ditch measures about 5 feet 6 inches wide overall, with the channel 4 feet 6 inches wide by at least 2 feet 6 inches deep (sediments preclude accurate depth measurement). The ditch is trapezoidal in cross-section, with the side walls sloping slightly inward so that the channel's width is slightly less at the bottom. Feature V-15, described above, serves as a retaining wall for the ditch. The concrete-walled ditch passes under the road east of the aqueduct (Figure 5.526); a large concrete slab visible under the east edge of the road shoulder may be part of the original road-crossing support (Figure 5.527). Cracks in the ditch expose cobbles used as



Figure 5.524. Feature VIII-2, metal power pole (2012).

fill or reinforcement under the concrete.

In 2010 a short section of the concrete on the rim of the ditch was uncovered as part of the search for evidence of the guard tower at the boundary between Compounds V and VI. When the post-hole foundations for that guard tower were found on each side of the ditch, a single posthole that had been recorded in 2008 at the rim of the ditch was reevaluated as possibly part of the foundation for another guard tower visible in historic photographs. However, the posthole had been buried under a small landslide sometime between the 2008 and 2010 fieldwork, and the original GPS reading on the feature was imprecise, due to limited satellite availability at the time. Therefore, in 2011 recent sediments along approximately 100 feet of the ditch were removed, to expose the ditch's concrete edge and adjacent ground surface where the Feature V-13 posthole had been recorded. During that excavation, a 1939 Coke bottle made in Kansas City, MO (Figures 5.532-5.533), barbed wire, and a section of wire cable were recorded.

Feature L-1a is the aqueduct that carries the ditch water across the Honouliuli stream (see Figure 5.525 and 5.534) and is visible in historic photographs. Of concrete, it is approximately 170 feet long and is supported by massive piers set at 16-foot intervals. Square-trimmed basalt and mortar give the piers an ashlar facing, although the interior construction is unknown. In cross-section, the concrete aqueduct measures 5 feet 4 inches wide and 4 feet deep overall, with the side walls 8 inches thick and the channel 4 feet wide. The side walls are reinforced by 12-inch-wide concrete pilasters above each pier. The aqueduct channel was cleared of trees and other vegetation in 2012.

Feature L-1b is a concrete and rock abutment or pier with an inscribed date of "Aug 30, 1920" (see Figure 5.535). The pier measures 25 by 42 inches by 50 inches high. Out of plumb and tilted to the north, the abutment appears to have been originally constructed adjacent to the aqueduct as an auxiliary support near its western end. If so, its slight shift since its construction has had no obvious adverse effect on the aqueduct itself.

Recorded in 2008, Feature L-1c is a concrete pipe, opening into the ditch just east of the aqueduct (see Figure 5.536).

Recorded in 2008, Feature L-1d is a former concrete and rock gate along the aqueduct to divert water from the aqueduct to presumed fields on the stream terrace below (see Figure 5.537). Along the west edge of the site near the boundary between Compounds V and VI, the gate was permanently closed with concrete inscribed "Jan 21 - 1943" on top. A guard tower (Feature VI-50, above) was constructed above the aqueduct at the gate.

Also recorded in 2008, Feature L-1e is another sealed gate along the ditch, within Compound VI, the guard camp area (see Figures 5.538-5.541). Below the gate is an "L"-shaped single-wythe mortared rock wall that would have deflected water coming out of the gate, probably to reduce the potential for erosion. The wall's construction, with the flat faces of rock facing the ditch and the back of the wall irregular, suggests a retaining wall, rather than a stand-alone wall. Lumber scattered below the gate includes four-by-four-inch posts and one-by-twelve-inch boards, which would have been



Figure 5.525. Feature L-1, aqueduct (2017).



Figure 5.526. Feature L-1, concrete ditch (2008).

appropriate sizes for a gate closure. Above the ditch at the gate is an uncoursed, dry-laid rock wall under a boulder; it may have been constructed to keep the boulder from falling on, and damaging, the ditch.

Feature L-1f is a wooden flume over the ditch, within Compound VI, the guard camp area. It was recorded in 2008 (see Figures 5.542 and 5.543). On either side of the ditch the flume is supported by a wooden brace composed of four-by-four-inch posts and smaller dimension lumber. The origin or destination of the flume



Figure 5.527. Feature L-1, concrete ditch under current road (2008).

was not determined.

First noted in 2006, Feature L-1g is an uncoursed dry-laid basalt retaining wall for a road (Feature V-16). Above the ditch to the east of the aqueduct, the retaining wall is 157 feet long, up to 21 feet high at its southern end, tapering down to ground level where it curves around toward the entrance road (see Figures 5.544-5.546). The wall slopes back into the hillside, at about a 60-degree angle.

Recorded in 2010, Features L-1h and L-1i are sealed outlets located at the western border of Compound



Figure 5.528. Feature L-1, ditch (2006).



Figure 5.529. Feature L-1, walking along overgrown ditch (2010).



Figure 5.530. Feature L-1, exposing overgrown ditch (2011).



Figure 5.531. Feature L-1, exposing overgrown ditch (2011).



Figure 5.532. Feature L-1, bottle found during ditch clearing (2011).



Figure 5.533. Feature L-1, bottle found during ditch clearing (2011).



Figure 5.534. Feature L-1a, aqueduct (2006).



Figure 5.535. Feature L-1b, aqueduct (2006).



Figure 5.536. Feature 1c, concrete pipe into ditch (2008).



Figure 5.537. Feature L-1d, ditch outlet gate (2008).

V along the ditch (see Figures 5.547 and 5.548). Both of these features consist of a water discharge gate that has been permanently sealed with concrete, to prevent access from the prison area below. Feature L-1h is near the north edge of Compound V, about 500 feet north of the sealed gate at the guard tower recorded as Feature VI-50. L-1i is about 300 feet further south, or 200 feet north of the guard tower. No dates were observed inscribed in the concrete at either feature, but the seals were probably made at about the same time as the similar seal inscribed January 21, 1943, at the guard

tower foundation (Features VI-50 and L-1d, above). Recorded in 2010, Feature L-1j consists of two boards found on the east side of the aqueduct, near the western boundary of Compound VI, the guard camp area, and about 115 feet south of the guard tower foundation recorded as Feature VI-50 (see Figure 5.549). One board measured 1 inch by 11¾ inches by 52½ inches long, and had a strip of galvanized metal wrapped around and nailed over each end. There are three irregular, elongated holes across the board about 10 inches from each end, which may indicate former



Figure 5.538. Feature L-1e, ditch outlet gate (2017).



Figure 5.540. Feature L1-e, rock support wall (2017).



Figure 5.541. Feature L-1e, lumber (2017).



Figure 5.542. Feature L-1f, wood flume crossing ditch (2017).



Figure 5.539. Feature L-1e, ditch outlet gate (2017).



Figure 5.543. Feature L-1f, wood flume crossing ditch (2017).



Figure 5.544. Feature L-1g, rock retaining wall (2012).



Figure 5.545. Feature L-1g, rock retaining wall (2008).



Figure 5.546. Feature L-1g, rock retaining wall above concrete ditch (2017).

nail holes where cross pieces were attached, but no “shadow” from a cross piece was observed. The other board was thickly entwined with vegetation, and left in place because it appeared too fragile to move without damaging it. About the same dimensions as the other board, it had more holes, and nails still present. The galvanized metal strips suggest the boards functioned as a removable gate for the aqueduct. They may have been recycled for use as a footbridge: what appears to be a small simple footbridge is visible in this general location in historic photographs taken by R.H. Lodge (see Figure 4.16).

Feature L-1k was discovered during the 2011 removal of a recent landslide; it is a sealed gate along the ditch (see Figure 5.550). Similar to features L-1e, -h, and -i, the seal was likely constructed when the internment camp was constructed, to close off a potential prisoner escape route.

Recorded in 2011 and 2012, Feature 1l is located about 20 feet west of the westernmost pillar of the aqueduct (see Figures 5.551-5.554). The feature is a sluice gate



Figure 5.547. Feature L-1h, sealed ditch outlet gate (2010).



Figure 5.548. Feature L-1i, sealed ditch outlet gate (2014).



Figure 5.549. Feature L-1j, wood board (2010).



Figure 5.550. Feature L-1k, buried ditch outflow gate (2011).

opening on the north side of the ditch. It is 42 inches wide and 36 inches high, and has slots for two parallel gates that would have controlled the water flow into a concrete-lined channel to the north which measures about 8 feet long. A modern (but not functional) gate in one of the slots consists of four horizontal boards and plastic sheeting, and two other boards nearby were probably used as part of a gate. There is a concrete footing for a four-by-six-inch post near its west end. The footing (and now-missing post) likely relate to the prison camp. Two 1971 dates are inscribed in repairs at the top and side of the ditch.

Feature L-2: Ditch and Siphon (Figures 5.555-5.562)

The large-diameter metal pipe visible in historic photographs, now partially removed, functioned as an inverted siphon (noted as “siphon” on 1953, 1967, and 1983 USGS maps) in the Waiāhole Water Com-

pany system. The company used a total of 1.38 miles of siphons in the system completed in 1916 (Wilcox 1998). The siphons were enclosed pipes that carried water from a ditch on one side of a valley to a ditch on the other. Siphons are laid close to the ground, so they dip down to the bottom of the valley before climbing back up. As long as the pipe’s inlet is at a higher elevation than its outlet, the pressure of the incoming water keeps the pipe’s contents in motion. The ditch that the siphon served is on the hillside above the ditch that connects to the aqueduct. This ditch carries water from east to west, and the 1953 topographic map indicates that at that time, the upper ditch could supply water to the lower ditch.

The upper ditch and siphon are not depicted on the 1936 or 1943 War Department Terrain maps, yet the siphon is clearly visible in some of R.H. Lodge’s historic photographs of Honouliuli camp. Given the 1943 map



Figure 5.551. Feature L-1l, ditch outlet gate (2017).



Figure 5.552. Feature L-1l, post hole at ditch outlet gate (2011).



Figure 5.553. Feature L-1l, dated repair at ditch outlet gate (2012).



Figure 5.554. Feature L-1l, 1971 date inscribed in concrete at ditch outlet gate (2012).

was prepared during the war, it is not surprising that the siphon was left off: the 1943 map was most likely just an update of the 1936 map with the additions considered critical to the war effort added. The absence of the feature is more curious on the 1936 map, and may indicate the siphon and upper ditch were constructed after that date. Although the ditch system was in operation by 1916, the upper ditch and siphon may have been one of the many continuing improvements made to the Waiāhole ditch system over the years. A 1916 recounting of the water system construction mentions three inverted siphons, none of which were in Honouliuli (Kluegel 1916). That 1916 account does mention a Honouliuli ditch, which may be the lower ditch, with an older, pre-aqueduct wooden trestle. Although not definitive, these archival sources suggest that the siphon may not have been built until after 1936. The Waiāhole Ditch Irrigation System has been designated as State Inventory of Historic Places (SIHP)

#50-80-09-2268, and has been determined eligible for the National Register of Historic Places under criteria A, C, and D (U.S. Army Corps of Engineers 2016:73-74). Portions of the upper ditch and siphon within the Honouliuli World War II prisoner of war and internment site were recorded in 2008, 2009, 2010, and 2012. The ditch reaches Honouliuli Gulch from the east, possibly from Reservoir 155 (U.S. Army Corps of Engineers 2016). Near the top of the gulch, a metal water gate controlled flow into the siphon (Figure 5.556).

The siphon (Feature L-2a) is 2 feet in diameter, composed of sections of riveted steel pipe (see Figures 5.557-5.558). It was supported at intervals by formed concrete piers measuring roughly 48 inches high. The pipe would have fit into a half-cylindrical hollow in the pier's top, and was held down with a semi-circular heavy-gauge metal clamp with flanges that fit over bolts sunk into the concrete (see Figure 5.559). Near



Figure 5.555. Feature L-2, ditch (2012).



Figure 5.556. Feature L-2, ditch gate (2012).



Figure 5.557. Feature L-2, metal siphon (2009).

one of the piers is a large iron rod with a turnbuckle in the middle and a hook at the end, which connects to an iron eye loop sunk into a basalt boulder (see Figure 5.560 and 5.561).

Feature L-2b is a portion of the ditch wall exposed by erosion above the road recorded as L-5 (see below). Because a portion of the cut bank has eroded away, a section of what appears to be a rock wall composed of basalt boulders and mortar is visible (see Figure 5.562). Located where the ditch that debouches from the siphon is shown on historic maps, this “wall” is actually the exterior of the ditch lining. The exposed section is about 10 feet long and 2 feet high; the rocks appear to have been shaped to be roughly 10 or 12 inches square. The concrete rim at the top of the ditch is level and straight; the mortar on the newly exposed face is irregular, suggesting that the rocks were set in the ditch wall to conserve concrete, and plastered over. The ditch itself has been filled with sediment, and is partially

obscured by vegetation.

Feature L-3: Road (Figures 5.563-5.565)

Recorded in 2008 and 2009, this road traverses the west side of the gulch within Compounds II and III, north of the end of the modern road that ends at the westernmost well. Although somewhat overgrown when first noted in 2006, the road was still visible as a two-track dirt road as far as the Compound II mess hall foundation (Feature II-1), with asphalt pavement and white coral gravel visible in some areas (see Figure 5.563). By 2009, the road was difficult to see or follow (Figure 5.564), and by 2011, it was completely overgrown with Guinea grass, although trees have not yet established themselves in the roadway (see Figure 5.565). The discernible portion of the road is approximately 400 feet long, but in the Army sanitary sewer system blueprints it extends at least another 500 feet north up the gulch.



Figure 5.558. Feature L-2, siphon (2010).



Figure 5.559. Feature L-2a, siphon support (2010).



Figure 5.560. Feature L-2a, siphon anchor (2010).



Figure 5.561. Feature L-2a, siphon anchor (2010).

Feature L-4: Road (Figures 5.566 and 5.571)

This feature is a segment of the original access road, which continues south, parallel to the stream, while the modern access road climbs up the slope just north of the former electronics site (Feature M-14, below). Asphalt pavement is still present along much of the road alignment, although in some areas chunks of asphalt have been torn up from the ground and pushed aside, perhaps by flood waters. Most of the alignment is very overgrown with dense vegetation as it continues south into Compounds VII and VIII. The road crosses

Honouliuli stream just south of Compound VIII, then continues to the old highway. Total length, from its turnoff from the modern road to the old highway, is about 4,600 feet.

Feature L4a is a creek crossing cleared in 2012 and 2014 (see Figures 5.570 and 5.571). Although there is little sign of the road itself here, a mortared stone wall on the west bank indicates where the bridge once was. A pipe with a valve at the crossing appears to be in place; pieces of concrete and a culvert have been dis-



Figure 5.562. Feature L-2b, exposed exterior of ditch (2009).



Figure 5.563. Feature L-3, road, view to north (2006).

placed. The crossing is within the monument boundary, but on Monsanto Hawai'i land.

Feature L-5: Road (Figures 5.572 and 5.573)

The U.S. Army blueprints depict Feature L-5 as a continuation of Feature L-3, described above. From the current end of the paved road at the westernmost modern water well, this historic route travels south, to ascend the western slope of the gulch. Today the road is best defined near the top, where it intersects a modern agricultural road. Several of Lodge's overview photographs were taken from this point. Lower on the slope, the road is overgrown with vegetation and severely eroded in spots, but the road bed is still discernible as a cut, and still has areas of paving and coral. Recorded in 2009, the section from the westernmost water well to the agricultural road above the gulch is approximately 1,340 feet long.



Figure 5.564. Feature L-3, road (same view as Figure 5.563) (2009).

Feature L-6: Rock Berm (Figures 5.574 and 5.575)

Noted in 2012, this wide, low rock berm straddles the extrapolated boundary between Compounds VII and VIII. It is composed of uncoursed fieldstone, and measures approximately 260 feet long, 1 to 3 feet high, and 4 to 5 feet wide. Possibly constructed for flood control, it is overgrown with haole koa trees.

Feature L-7: Railroad Grade (Figure 5.576)

According to the Army blueprints, a spur of the old Oahu Sugar Company Railroad extended from the



Figure 5.565. Feature L-3, road (same view as Figure 5.563 and 5.564) (2011).



Figure 5.566. Feature L-4, road in Compound VII (2008).



Figure 5.567. Feature L-4, road in Compound VII (2008).



Figure 5.568. Feature L-4, road in Compound VIII (2012).



Figure 5.569. Feature L-4, road at far south end (2012).



Figure 5.570. Feature L-4a, stream crossing (2012).



Figure 5.571. Feature L-4a, stream crossing (2012).



Figure 5.572. Feature L-5, road (2009).



Figure 5.573. Feature L-5, road (2009).



Figure 5.574. Feature L-6, rock berm (2012).



Figure 5.575. Feature L-6, rock berm (2012).



Figure 5.576. Feature L-7, railroad grade (2012).



Figure 5.577. Feature L-8, old highway alignment (2012).

old highway to Compound VII; sections further to the north shown on the 1936 terrain map had been removed. Recorded in 2012, part of the alignment is discernible as a vegetated, elevated grade surrounded on both sides by agricultural fields. It is approximately 1,200 feet long.

Feature L-8: Old Highway (Figures 5.577-5.579)

The 1943 terrain map shows two possible routes to reach the main entrance road (recorded as Feature L-4) into the Honouliuli prison camp. One road paralleled the main branch of the Oahu Sugar Company Railroad from Kunia Road, about 1¼ mile east, on its way to Pump Camp 5. Another road ran a little over half a mile north from “Highway 2 / Waianae Road” (close to the current Farrington Highway alignment) to connect directly with the entrance road. Shuzo Takahashi’s memory map (Appendix D, Figure D.3) appears to depict the first route, and north of the current Highway 1, segments of that road are still intact (Figure 5.577). On private land within the monument boundary is the road’s impressive stone ashlar culvert crossing of Honouliuli stream (recorded as Feature L-8a in 2012; see Figures 5.578 and 5.579). Both the road and the parallel railroad alignment are depicted on the 1936 and 1943 terrain maps (see Figures 4.1 and 4.2).

Feature L-9: Road (Figure 5.580)

First noted in 2009, this road is located on the west side of Honouliuli stream. It forks off from the L-5 road in Compound IV just south of the siphon (Feature L-2a) and guard tower foundation (Feature IV-2), and travels south-southeast approximately 300 feet to Compound V. The Army sanitary sewer system blueprints show the road crossing the lower ditch (Feature L-1) but not extending much farther. However, the road is depicted in one of Dan Nishikawa’s drawings (see Figure C.24 in Appendix C) as a sort of “main street” of Compound V, with barracks on either side of it. The road is still discernible as a leveled grade in Compound IV, but it is overgrown with grass and small trees. No evidence of a bridge was noted at the ditch crossing, but footings may be obscured by vegetation.

Feature L-10: Berm (Figure 5.581)

Recorded in 2012, this berm was built by the military to divert runoff away from the POW tents in Com-

pound VII. Depicted as a “dam” on the 1945 disciplinary compound blueprint, the berm is 6 to 8 feet wide at the top, 12 to 15 feet at the base, up to 8 feet tall, and 310 feet long. It has been breached (or possibly cut?) in the center, with either end of the breach or cut reinforced with broken foundation slabs (Features VII-14 and VII-15, above). Small trees and Guinea grass grow on the berm.

Feature L-11: Road (Figure 5.582)

First noted in 2010, Feature L-11 is depicted on the Army sanitary sewer system blueprints. It took off from the main entrance road just east of the current road’s stream crossing, near the boundary between Compounds III and IV and just south of the modern well recorded as Feature M-2. The road continued north into Compounds III, II, and I. The blueprints show the road as about 900 feet long from the entrance road to a fork, from which one fork headed northwest another 600 feet and one fork headed to the northeast about 250 feet. Today the road is very overgrown with vegetation, and the southernmost portion was destroyed by the Feature M-2 well construction. In Compound III the road trace is east of, and parallel to, the stream, but in Compound II it is harder to discern, and was not observed in Compound I.

Modern Features

Post-camp historic features at Honouliuli are associated with later use of the site, including a chicken farm and ranching. Both of those operations are now defunct. The site is currently used by the Board of Water Supply City and County of Honolulu for water wells and treatment, and until recently, by KITV for communications. In addition, the Feature II-1 slab (see above) is used for provisional storage of modern and post-camp materials and equipment.

Feature M-1: Water Treatment Plant (Figures 5.583-5.587)

Noted in 2006 and mapped in 2008, this feature is the current Water Treatment Plant, constructed on a raised platform where the Compound IV mess hall was located during World War II. It is a non-federal inholding within the monument boundary. The plant includes a large treatment building, two pump houses, a tank, and an asphalt driveway and turn-around area,



Figure 5.578. Feature L-8a, bridge culvert (2012).



Figure 5.579. Feature L-8a, bridge culvert (2012).



Figure 5.580. Feature L-9, road (2017).



Figure 5.581. Feature L-10, berm (2014).



Figure 5.582. Feature L-11, road (2017).



Figure 5.583. Feature M-1, water treatment building (2012).



Figure 5.584. Feature M-1, water treatment building (2012).



Figure 5.585. Feature M-1, plaque at water treatment building (2008).



Figure 5.586. Feature M-1, well at water treatment building (2012).

all enclosed with a tall chain-link fence. The current retaining wall for the platform appears to be fairly recently constructed or recently reinforced with rock and concrete, but portions of the retaining wall at the rear (northeast edges) of the platform are uncoursed dry-laid basalt rocks, possibly part of an older retaining wall constructed for the Compound IV mess hall. A brass plaque on the building reads: “Honouliuli Wells II / Board of Water Supply /1990” (see Figure 5.585).

Feature M-2: Well (Figures 5.588 and 5.589)

Located on the east side of the stream within Compound III, this well site includes a pump and an asphalt-and-concrete driveway surrounded by a chain-link fence and a rock-and-concrete retaining wall. It was recorded in 2008, and is now an inholding of private land within the monument boundary.

Feature M-3: Well (Figures 5.590-5.592)

On the west side of the stream within Compound III,

this well site includes a pump, light post, and a driveway of concrete and asphalt, surrounded by rock and concrete walls and a chain-link fence. Recorded in 2008, it is a private inholding within the monument boundary.

Feature M-4: Shutoff Valve and Rock Wall (Figures 5.593 and 5.594)

West of the stream and on the north side of the road at the stream crossing, within Compound III, this feature consists of a shutoff valve bolted onto the end of a pipe that is set into a mortared-rock-lined spillway that empties into the stream. The valve reads: “TROY VALVE / TROY PA 1989” around the edge with the numbers “8 / 177423 / -1420” and the letters “BF” in the center (see Figure 5.594). It was recorded in 2008.

Feature M-5: Paved Road (Figures 5.595-5.598)

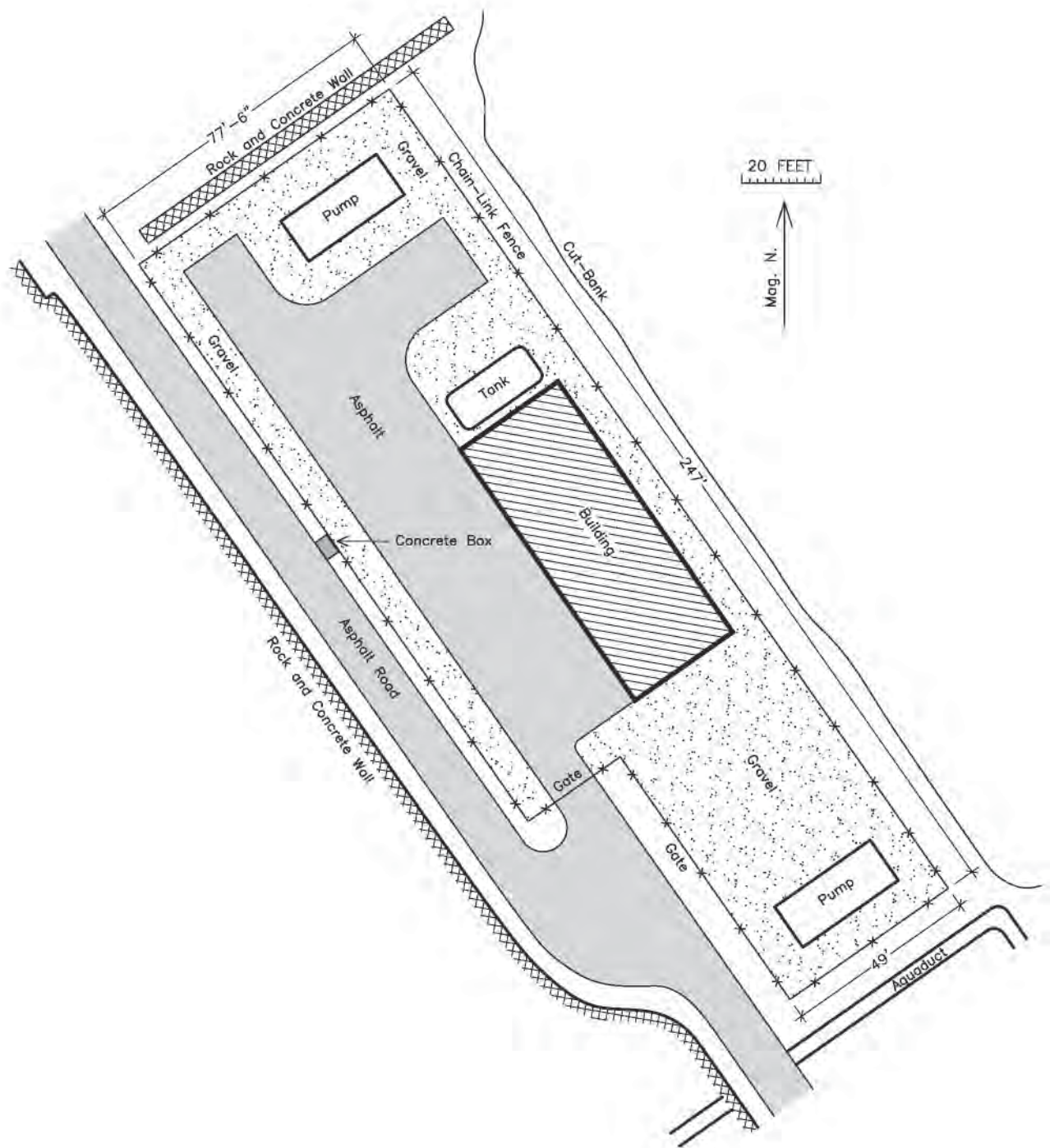


Figure 5.587. Feature M-1, water treatment plant.

The current access road to the water treatment plant and wells is paved mostly with asphalt, but with several concrete sections, including where the road crosses the Honouliuli stream. The road enters the gulch from the east in Compound VII, rather than from the south, as did the original camp road (Feature L-4), but within Compounds IV, V, and VI, the modern road follows the alignment of the camp road. Feature M-5a is a concrete ford at Honouliuli stream, with three culverts,

at or near the original boundary between Compounds III and IV (see Figure 5.597). Feature M-5b is a concrete box bridge over the aqueduct ditch (Feature L-1, above), at the original boundary between Compounds IV and V (see Figure 5.598). These features and the road were recorded in 2008.

Feature M-6: Chicken Farm



Figure 5.588. Feature M-2, well (2006).

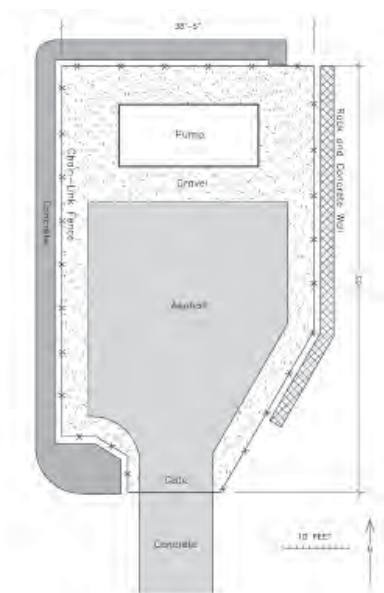


Figure 5.589. Feature M-2, well.

(Figures 5.599-5.624, see also Figure 5.262)

When our archaeological investigations began in 2006, there were two standing buildings in Compound VI at what Mr. Rodney Santiago called the chicken farm. One building, atop the foundation described as Feature VI-1 above, was considered likely to be a World War II building. A 1948 date on the lid of a toilet tank in the building was assumed to be evidence that the building was modified with the addition of a bathroom when it was converted to chicken-farm use. Because it would have been the first building encountered upon entering the guard camp area (Compound VI), it was considered possibly related to the processing of prisoners. The second building, atop the foundation described above as Feature VI-2, was considered likely to have been completely rebuilt, perhaps using recycled WWII-era materials. Ramps added after the

original construction would have allowed a vehicle to drive through the building. Based on comparison with mainland Relocation Centers, the ramps and the location near the entrance of the administration area suggested the building originally might have been a fire station.

The two buildings were analyzed and documented in detail by Minatoishi Architects (Minatoishi 2010): the building located at our archaeological Feature VI-1 was recorded as Building A, and our Feature VI-2 as Building B. Based on architectural evidence, Minatoishi concluded that both buildings were original to the internment and POW camp, although the second building had been modified substantially after the war. Her analysis suggested that Building A was likely a guard house, and Building B was likely a guard barracks. The bathroom, she concluded, was original to the structure; the 1948 toilet tank lid could be explained as a replacement part (Minatoishi 2010:44-46).

However, one of the 1948 Hashimoto photographs, which were made available after the Minatoishi study, shows only foundations at the building locations (see Figure 5.257). Our original inferences that at least one, and possibly both, of the standing buildings was constructed for the Honouliuli internment and POW camp were incorrect: both buildings were built later, atop war-era foundations. Corroborating the evidence in the Hashimoto photograph, the 1951 aerial photograph appears to show concrete foundations at the location, rather than standing structures. In the 1962 aerial photograph, two buildings (with shadows) are clearly visible. No buildings appear on the 1953 USGS map, but a building is shown on the 1960 USGS map, which is at the same scale. Finally, if the bathroom in the Feature VI-1 building was part of the original structure, and if the original structure had been built for the camp, as Minatoishi suggested, the U.S. Army blueprints of the sanitary sewer system should have shown a sewer connection to that building. Instead, the blueprints show a sewer connection to Building B, which now has no fixture requiring a sewer drain. It is most likely, then, that the buildings were constructed sometime between 1951 and 1960. Therefore, in this report both buildings are described as part of Feature M-6, the chicken farm.

The building constructed atop camp-era foundation Feature VI-1 measured 49 feet by 20 feet 6 inches (337



Figure 5.590. Feature M-3, well (2008).



Figure 5.591. Feature M-3, well (2008).

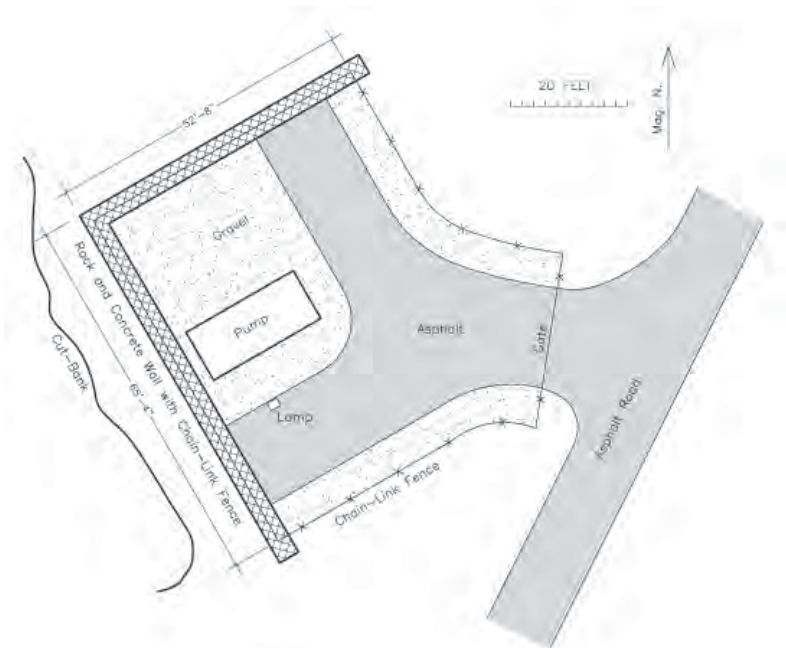


Figure 5.592. Feature M-3, well.



Figure 5.593. Feature M-4, rock wall and outlet valve (2008).



Figure 5.594. Feature M-4, detail of outlet valve (2008).



Figure 5.595. Feature M-5, paved road (2008).



Figure 5.596. Feature M-5, paved road (2011).



Figure 5.597. Feature M-5a, stream crossing (2008).



Figure 5.598. Feature M-5b, aqueduct crossing (2017).

square feet). In precarious condition when we recorded it in 2008, the building has collapsed further since then. The building has a low-pitched gable roof. The south, east, and west facades are sided with vertical tongue-in-groove boards, 5¼ inches wide; the northern facade is sided with wider composite boards. There is a large light fixture on the south end, and knob-and-tube wiring visible above a door and a window. Both openings are screened. The southern half, in the best condition, has a wood floor, and the siding extends from the floor to about 6 feet high. Above the siding is 30 inches of screened area. In 2008, the screen was intact in the east windows. The roof structure is composed of 2-by-6-inch rafters, and the roof is sheathed in corrugated metal.

A small bathroom and shower room is in the southeast

corner; the toilet tank lid has a 1948 date stamp and manufacturer information: “CRANE / PAT. 2334855 / J 2 / TRADE MARK REC. / NOV 5 1948” (see Figures 5.605 and 5.606). Plumbing pipes for the bathroom are on the exterior of the south wall. Because of the 1948 date on the toilet tank lid, we assumed the bathroom was a later addition to the structure. Minatoishi’s conclusion (2010:46) that the bathroom was an original part of the structure jibes with the evidence that the building was constructed between 1951 and 1960.

Most of the interior and exterior doors are wood with five horizontal panels; one is half wood and half screened, with the screening replacing the top three panels. The northern room, on the raised concrete foundation, was more dilapidated when initially observed in 2006, and the roof was partially collapsed.



Figure 5.599. Feature M-6, standing building at chicken farm on concrete foundation of Feature VI-1 (2008).



Figure 5.600. Feature M-6, same building at chicken farm, now collapsed (2017).



Figure 5.601. Feature M-6, interior of formerly standing building on concrete foundation of Feature VI-1 at chicken farm (2008).



Figure 5.602. Feature M-6, interior of formerly standing building on concrete foundation of Feature VI-1 at chicken farm (2008).



Figure 5.603. Feature M-6, collapsed ceiling of standing building on concrete foundation of Feature VI-1 at chicken farm (2012).



Figure 5.604. Feature M-6, bathroom in standing building on concrete foundation of Feature VI-1 at chicken farm (2008).



Figure 5.605. Feature M-6, manufacturer's mark on toilet tank lid interior (2008).

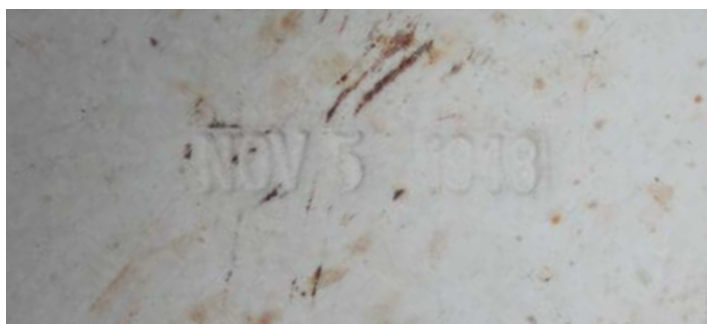


Figure 5.606. Feature M-6, 1946 date on toilet tank lid interior (2012).

It was apparently last used for storage, and contained rolled asphalt roofing, corrugated roofing, lumber, and mattresses. The far north part of the structure may have been left open, as for a lanai or porch. A large bougainvillea engulfed the front (north) end of the building (see Figure 5.607), and the building is on the verge of complete collapse (see Figure 5.600).

There are five double concrete sinks and one single concrete sink lying on the ground to the south of the building (Feature VI-16, above). Several wooden posts, both round and rectangular in cross-section, are set vertically into the ground near the structure to form a corral. These posts are likely related more to the chicken farm or ranching than to the World War II use of the site.

The raised concrete foundation recorded as Feature VI-2 was used for chicken coops, possibly using recycled materials from a World-War-II-era building. Currently on the eastern end of the foundation there is a two-room gable-roofed building, measuring 23 feet by 16 feet 9½ inches (380 square feet) and about 10 feet tall at the gable peak. Its south room is open and divided into chicken coops, and the north room used for storage. Both rooms have doors to the west, opening to a roofed porch area. West of the porch are two rows of more chicken coops. One row is 3 feet by 24 feet 4 inches with eight enclosures, and the other row is 10 feet 1 inch by 22 feet 2 inches with four enclosures. There are two small slabs with recent inscriptions, one in the “porch” area, and one to the southwest (see Figures 5.615-5.5617). The inscription in the porch area is in a slab that measures 3 feet 1 inch by 3 feet 6 inches; the inscription reads “BOBBY / WILLY / LEI / BLA / ‘75’”. The other, in a slab measuring 2 feet by 1 foot 9 inches, says “MADE By S.W.A.T. TEAM / Sept 30 ‘75.” The latter slab has metal and PVC pipes at its eastern edge. There are also numerous small sheds of corrugated metal, probably chicken coops, many of them now collapsed.

The building and the coops are all within a fenced area measuring approximately 110 feet by 300 feet, enclosing an area of about ¾ acre between the road and the stream. The fence is now mostly collapsed. Outside the fenced area, to the south of Feature VI-1, there is a 25-foot-by-50-foot corral and the cache of World-War-II-era laundry sinks (Feature VI-16).

There is abundant debris and trash attributable to the

chicken farm use within and around the buildings. Trash includes typical household items such as cans, bottles, jars, all-aluminum beer cans, “Elmer’s” glue, “Comet” cleanser, white plastic “Clorox” jugs, and newspapers. Among other items in the bathroom there is a jar with a paper label that reads “3½ oz / TRES FLORES / Three Flowers Brilliantine;” a similar jar (without the paper label) was found at the internee mess hall foundation (Feature V-1). Other items include a small refrigerator, a trailer, a power jointer, a wheelbarrow, garden hoses, five-gallon paint buckets, a one-gallon gas can, two jerrycans, a “Havahart” animal trap, wood/lumber, sheet and corrugated metal, a child’s bicycle, and a pile of about 50 small clay flower pots. Dozens of blue plastic five-gallon “Ansulite” (fire-fighting foam) containers and clear plastic one-gallon jugs are present, probably recycled for use as water or feed containers.

Feature M-7: Concrete Slab (Figures 5.625-5.628)

Noted in 2006 and mapped in 2008, this slab is located between the road and the stream within Compound IV. The slab measures 16 feet long by almost 10 feet wide. The names Florence, Mary, Andrea, and Danny are inscribed in the concrete perimeter wall stub (see Figure 5.628), and there is a pipe in the southern corner of the slab. A small circular concrete pad with two vertical pipes lies outside the eastern end, and a black plastic pipe runs from there to the southwest, along the outside of the slab. A roll of fencing lies on the ground nearby. Mr. Rodney Santiago noted that he constructed the slab as part of his cattle grazing operation.

Feature M-8: Loading Pen (Figure 5.629, see also Figure 5.625)

Noted in 2006 and mapped in 2008, this feature is just south of Feature M-7, within Compound IV. It consists of boards nailed horizontally to three posts and a tree, to partially enclose an area about 9 feet square.

Feature M-9: Corrals and Stalls (Figures 5.630-5.632)

Just north of Feature M-7, within Compound IV, two corrals and horse stalls are constructed of posts, boards, and barbed wire. Overall, the two corrals measure over 100 by 40 feet, and the stalls, with metal roofing, measure 16 feet by almost 47 feet. Noted in 2006, the feature was mapped in 2008.



Figure 5.607. Feature M-6, standing building at chicken farm on concrete slab VI-1 (2012).

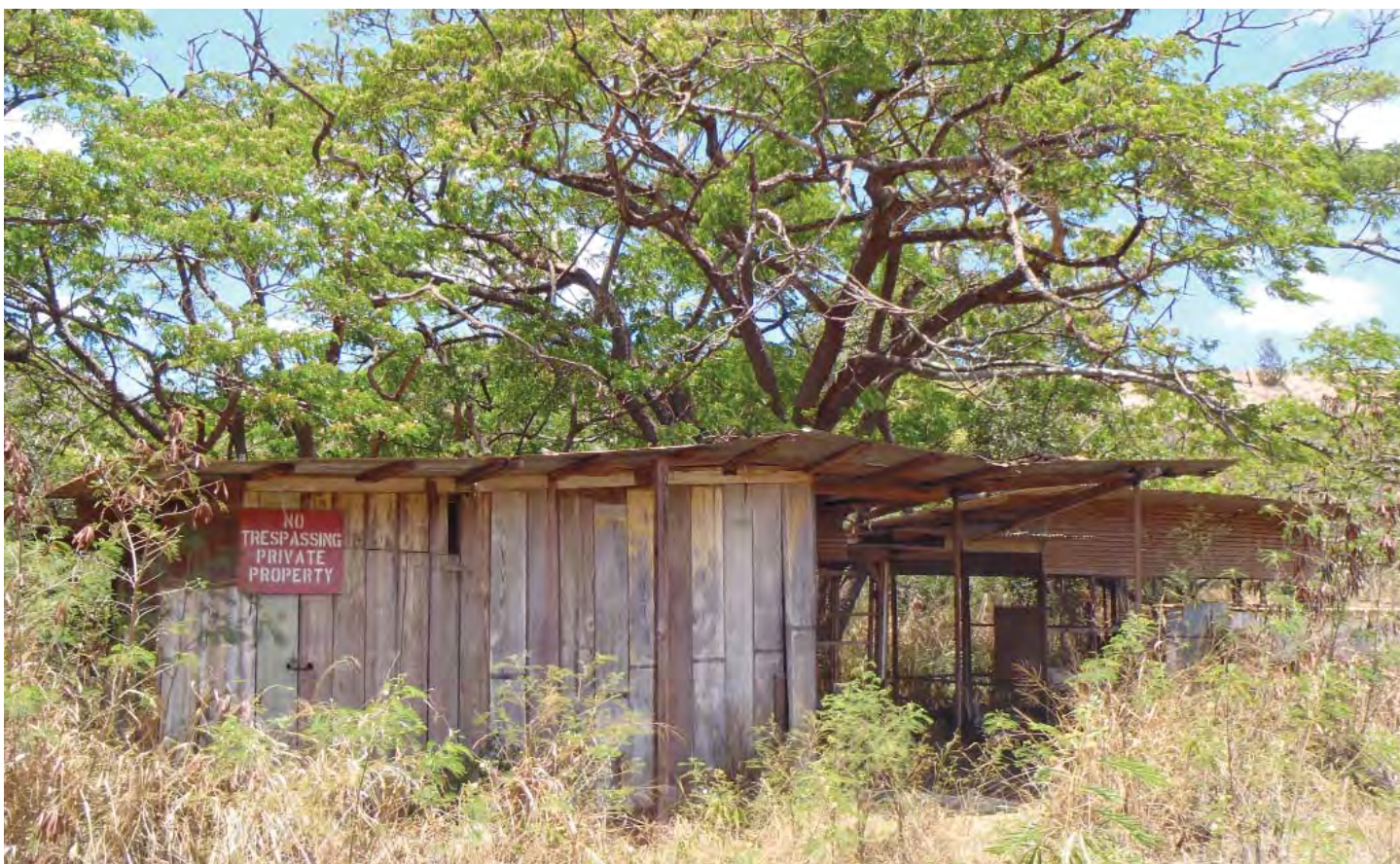


Figure 5.608. Feature M-6, standing building at chicken farm on concrete slab VI-2 (2012).



Figure 5.609. Feature M-6, standing building on concrete foundation of Feature VI-2 at chicken farm (2010).



Figure 5.610. Feature M-6, standing building on concrete foundation of Feature VI-2 at chicken farm (2010).



Figure 5.611. Feature M-6, standing building on concrete foundation of Feature VI-2 at chicken farm (2017).



Figure 5.612. Feature M-6, interior of standing building on concrete foundation of Feature VI-2 at chicken farm (2008).

Feature M-10: Wood Structure (Figures 5.633)

Remnants of what may have been a shade or rain shelter constructed of apparently recycled lumber is west of the stream within Compound IV. It was noted in 2006 and recorded in 2008.

Feature M-11: Wood Structure (Figures 5.634)

Recorded in 2008, this small open-sided wooden shelter within Compound III measures about 10 feet square, with a shed roof sheathed in corrugated metal. Only 5 feet tall in front and 4 feet 6 inches tall in the rear, the structure was constructed of a variety of recycled lumber and posts. The roof has served as provisional storage for rebar, bolts, barbed and smooth wire, and lumber.

Feature M-12: Corral (Figures 5.635 and 5.636)

Within Compound III, this corral is constructed of barbed wire, wooden posts and boards, metal portable fencing, corrugated roofing, and chain link fencing. Within the corral is a big feeding tank and interior division fence. The corral has a metal gate, and there is a vehicle tire on the south side of the corral. It was mapped in 2008.

Feature M-13: Water Tank (Figure 5.637)

Recorded within Compound V in 2008, this feature is a water tank made of heavy corrugated metal sheets riveted together. Measuring almost 8 feet in diameter and 4 feet high, the tank is likely a remnant of the post-camp ranching era.

Feature M-14: Communications Site (Figures 5.638-5.641)

When it was recorded in 2008, this communications



Figure 5.613. Feature M-6, interior of standing building on concrete foundation of Feature VI-2 at chicken farm (2008).



Figure 5.614. Feature M-6, interior of standing building on concrete foundation of Feature VI-2 at chicken farm (2008).



Figure 5.615. Feature M-6, inscribed slab at standing building on concrete foundation of Feature VI-2 at chicken farm (2008).



Figure 5.616. Feature M-6, inscribed slab at standing building on concrete foundation of Feature VI-2 at chicken farm (2017).

site within Compound VII had one tall antenna, a small building, and satellite dishes, all surrounded by a chain link fence and signed “KITV - TV / No Trespassing / Area under constant video surveillance / Trespassers will be prosecuted.” The facilities were removed in 2016, but the site remains (see Figure 5.642). It is on Monsanto Hawai’i land, which along with the access road, is excluded from the monument.

Feature M-15: Vent Pipe (Figure 5.642)

Noted and recorded in 2012 as a distinctive landmark among the haole koa trees and Guinea grass of Compound VII, this feature is a modern white plastic or fiberglass pipe, about a foot in diameter and 8 feet tall. It is unknown if it is a recent replacement for some part of the 1940s sewer system.

Feature M-16: Well and Metal Framework (Figure 5.643)

Noted in 2012, this feature consists of a capped well at

ground level, with a metal frame above it. The frame, an upside-down “U” made of welded galvanized pipe or posts, is estimated to be about 4 or 5 feet tall, slightly narrower in width. Smaller-diameter non-galvanized pipe welded at 45-degree angles support the corners, and in the center of the top of the U is a ring, to which a pulley could be attached. It is located in Compound VIII.

M-17: Pipeline Segment and Valve (Figure 5.644)

Noted in 2012, this modern feature is a segment of large-diameter plastic (PVC?) pipeline in a “U” shape above ground, surrounded by wire mesh fencing held in place by four metal fence posts. In the center of the top pipe segment is a valve, covered with fabric. It is located just west of the original entrance road (Feature L-4) in what would have been Compound VIII.

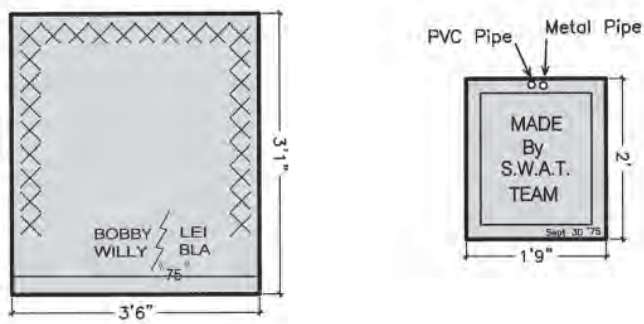


Figure 5.617. Feature M-6, inscriptions at chicken farm.



Figure 5.618. Feature M-6, structure at chicken farm (2017).



Figure 5.619. Feature M-6, structure at chicken farm (2017).



Figure 5.620. Feature M-6, structure at chicken farm (2017).



Figure 5.621. Feature M-6, structure at chicken farm (2017).



Figure 5.622. Feature M-6, jointer at chicken farm (2008).



Figure 5.623. Feature M-6, trailer at chicken farm (2017).



Figure 5.624. Feature M-6, flower pots at chicken farm (2008).

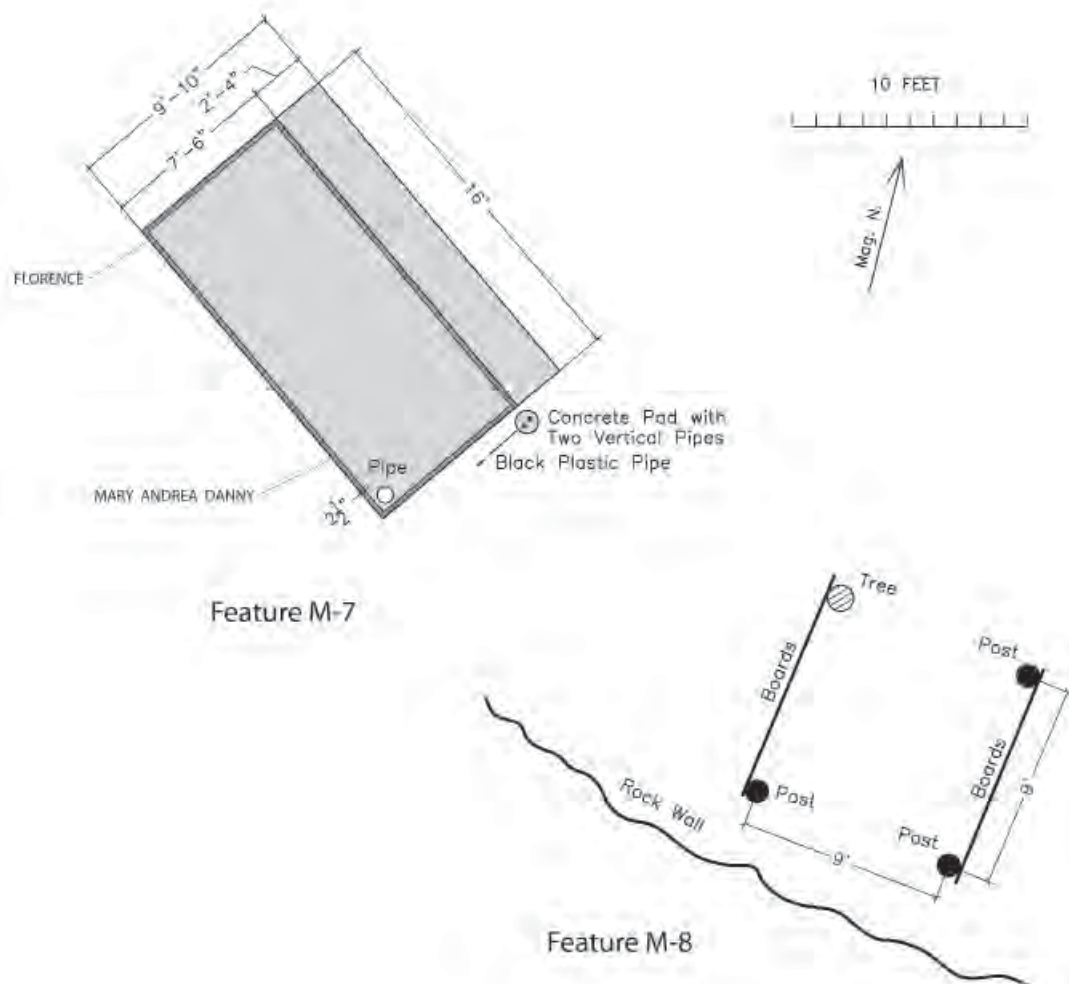


Figure 5.625. Feature M-7 and M-8, concrete slab and loading pen.

Fence Post Inventory

During the 2012 field class, an attempt was made to begin an inventory of the existing fence posts at Honouliuli. In a site with better visibility, mapping the abundant fencing at the site would be a simple process, but in Honouliuli gulch, the vegetation is so dense that in many cases one cannot see from one fence post to the next. Oral histories have indicated that most of the fencing within the site was added by the rancher, when he leased the land for grazing in the 1950s through 1990s (see Altenhofen 2010b in Appendix F). A few corrals made by the rancher have been identified and mapped, but we do not yet have a comprehensive map of all the fence remnants. Fences within the site are made of a variety of materials, which may reflect the rancher's ingenuity in reusing and recycling materials. However, if any of the security fencing was left in place when the camp was demolished, it is also possible that the rancher incorporated it and used it to help define

corrals and pastures. An inventory of existing fencing was begun to see if we could correlate post or mesh types with compound divisions, in an effort to identify whether parts of the fencing could be determined to be from the POW and internment camp, whether in place or relocated.

In historic photographs, most of the security fence appears to be composed of unshaped log poles, each topped with a triangle constructed of milled lumber (possibly two-by-four-inch pieces). The lower part of the fence, the height of the log poles, appears to be woven wire mesh, with at least 12 horizontal wires and regular vertical stays. Multiple strands of (barbed?) wire top the mesh, strung from triangle to triangle along all three sides. Some photos show two parallel fences around the perimeter of the camp, both of similar construction. Fencing around gates, however, appears to be constructed entirely of milled lumber and wire mesh.



Figure 5.626. Feature M-7, concrete slab (2006).



Figure 5.628. Feature M-7, inscribed names (2006).



Figure 5.627. Feature M-7, detail of concrete slab (2006).



Figure 5.629. Feature M-8, loading pen (2017).

The 2012 fence inventory focused on Compounds VI and VII, along the modern paved road. Twenty-five posts or post features were recorded (Table 5.1; Figures 5.646-672). Most of the fence posts recorded during the preliminary inventory were likely World-War-II-era or earlier wooden elements reused or recycled by

the rancher. For example, some are former railroad ties with holes for the rail spikes, and some rail spikes are still imbedded. The military blueprints depict the “Oahu Sugar Company Railroad” entering Compound VII from the south, so the ties and tracks were present before World War II. Other wooden posts may have



Figure 5.630. Feature M-9, corral (2008).



Figure 5.631. Feature M-9, corral stalls (2008).

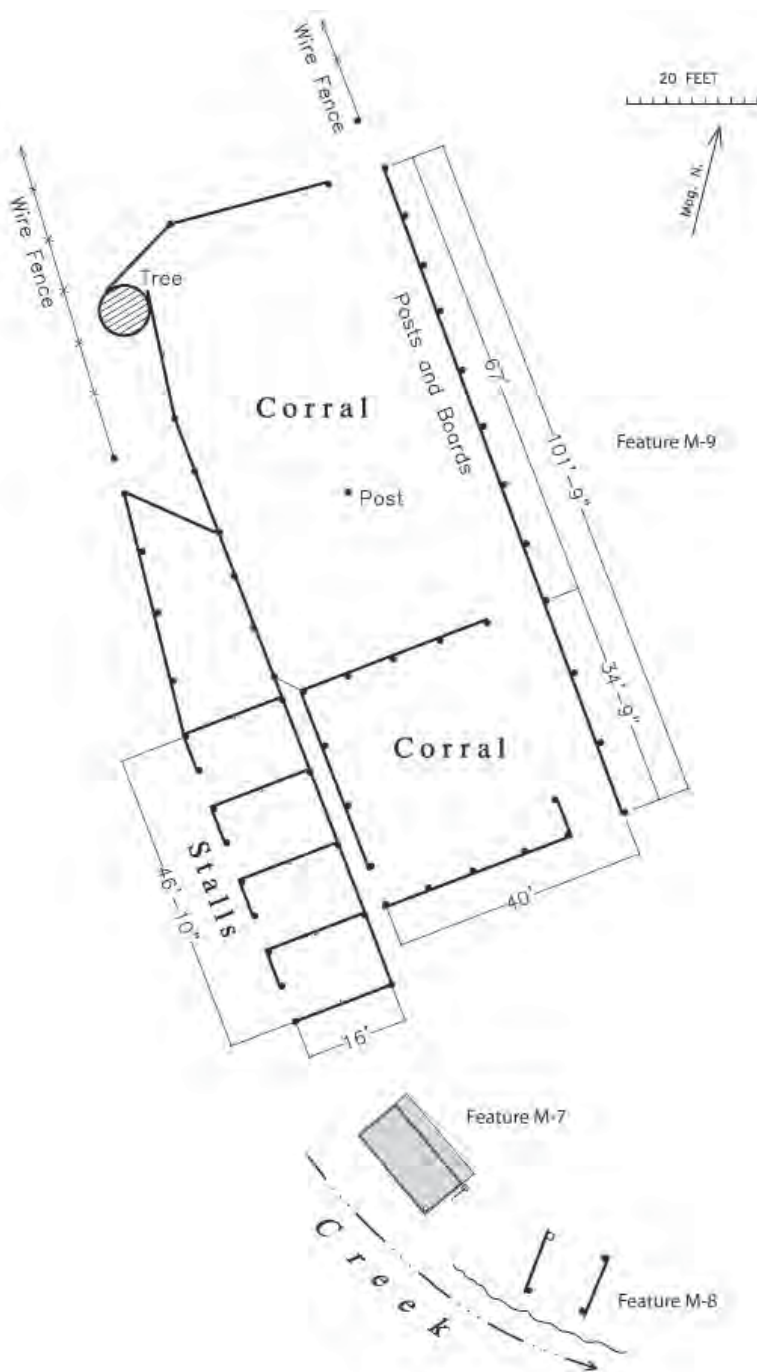


Figure 5.632. Feature M-9, corral and stalls.



Figure 5.633. Feature M-10, wood structure (2017).



Figure 5.634. Feature M-11, wood structure (2008).

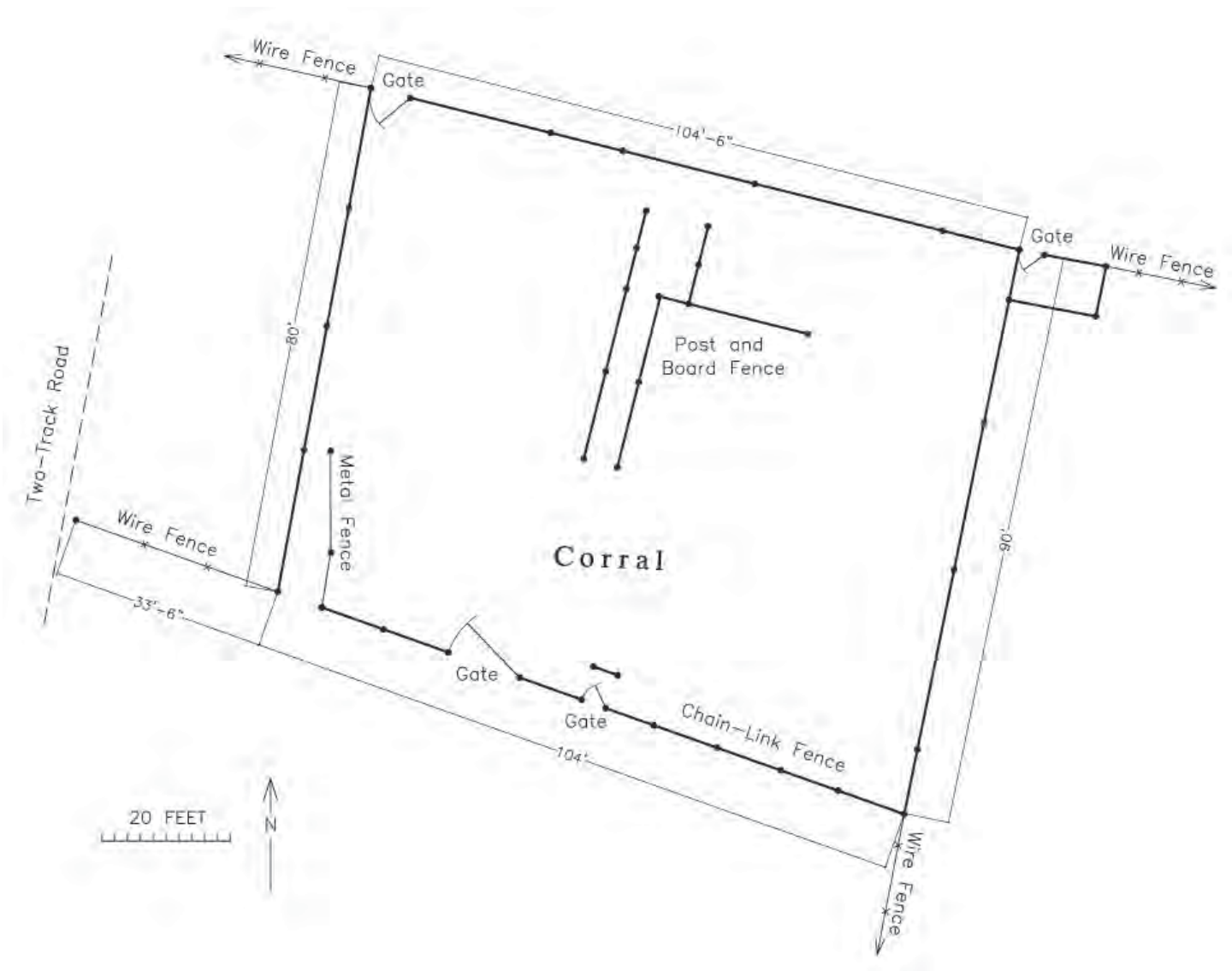


Figure 5.635. Feature M-12, corral.



Figure 5.636. Feature M-12, corral (2006).



Figure 5.637. Feature M-13, metal water tank (2008).



Figure 5.638. Feature M-14, communications site (2008).



Figure 5.639. Feature M-14, communications site (2008).



Figure 5.640. Feature M-14, communications site (2011).

been cut from military security fencing, but one (P21) that is long enough to have been part of the security fence was found near the generator slab (Feature VI-3) and is more likely part of a power line. The five round

metal posts, or post remnants (P1, P2, P7, P8, and P17) are probably related to the postwar use of the site by the Honolulu City and County Board of Water Supply.

Table 5.1. Fence Post Inventory (post numbers are keyed to the archaeological feature map).

Post No.	Description	Figure No.	Post No.	Description	Figure No.
1	Metal post cut flush with concrete foundation	5.645	14	Two four-by-four-inch wood posts with one-by-twelve-inch bracing, on the opposite side of the gate above (P-13). T-joint for water pipe (or metal post) at base	5.658 5.660 5.661
2	Metal post within road cut flush with road	5.646	15	Wood fence post, fallen over	5.662
3	Wood post on east side of road	5.647	16	Wood railroad-tie post with two railroad spikes	5.663
4	Lumber, 42½ inches long by 1 inch thick, with nail hole	5.648	17	Braced metal fence post, for gate	5.664
5	Wood post, triangular in cross-section, 51 inches long	5.649	18	Wood post in grass on hill above road	5.665
6	Wood board with 6-inch-long railroad spike, found lying across drain	5.650	19	Wood post with small nails, on hillside against basalt boulders	5.666
7	Metal post next to railroad-tie wooden post	5.651	20	Leaning wood post with barbed wire (next to rock wall, Feature VI-14)	5.667
8	Metal gate post with metal brace	5.652	21	Large round power pole, ~12 feet long, fallen over, with nails, behind generator slab (Feature VI-3)	5.668
9	Wooden post on ground, approx. 61 inches long	5.653	22	Wood post	5.669
10	Wood railroad-tie post with railroad spike near bottom	5.654	23	Wood post with large nail	5.669
11	Wood railroad-tie post w/rusty chain (likely for Texas-style gate)	5.655	24	Wood post lying in grass, with barbed wire attached	5.670
12	Wood railroad-tie post w/ railroad spike approx. midway on back of post	5.656	25	Metal post, with remnants of wire	5.670 5.671
13	Gate: hinge side has two wood posts, one with 2 strap hinges (two different sizes) still attached and a curved metal pipe segment and other water pipes (or hollow post sections) on the ground between the posts. The lumber gate has fallen but is still adjacent	5.657 5.658 5.659			



Figure 5.641. Former location Feature M-14, communications site (2017).



Figure 5.642. Feature M-15, vent pipe (2017).



Figure 5.643. Feature M-16, well and metal frame work (2012).



Figure 5.644. Feature M-17, pipeline and valve (2017).

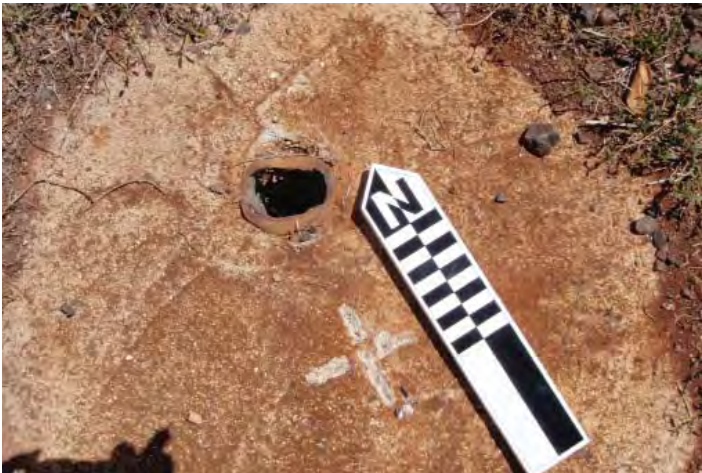


Figure 5.645. Feature P1, cut metal post (2012).



Figure 5.646. Feature P2, cut metal post in road (2012).



Figure 5.647. Feature P3, wood post (2012).



Figure 5.648. Feature P4, lumber (2012).



Figure 5.650. Feature P6, wood board with railroad spike (2012).



Figure 5.649. Feature P5, wood post (2012).



Figure 5.651. Feature P7, metal post and wood post (2012).



Figure 5.652. Feature P8, metal post (2012).



Figure 5.653. Feature P9, wood post (2012).



Figure 5.654. Feature P10, wood post (2012).



Figure 5.655. Feature P11, wood post with chain (2012).



Figure 5.656. Feature P12, wood post (2012).



Figure 5.657. Feature P13, wooden gate (2012).



Figure 5.658. Feature P13 (right) and P-14 (left), wood gate (2012).



Figure 5.659. Feature P13, pipes near wooden gate (2012).



Figure 5.660. Feature P14, wooden gate (2012).



Figure 5.661. Feature P14, pipe T-joint at base of wood post (2012).



Figure 5.662. Feature P15, fallen wood post (2012).



Figure 5.663. Feature P16, wood post (2012).



Figure 5.664. Feature P17, metal post (2012).



Figure 5.665. Feature P18, wood post (2012).



Figure 5.666. Feature P19, wood post (2012).



Figure 5.667. Feature P20, wood post (2010).



Figure 5.668. Feature P21, wood power pole (2012).



Figure 5.669. Feature P22 and P23, wood posts (2012).



Figure 5.670. Feature P24, wood post, and Feature P25, metal post (2012).



Figure 5.671. Feature P25, detail of metal post (2012).



Chapter 6

Conclusions and Recommendations

Between 2006 and 2017, archaeologists, students, and volunteers spent 48 field days exploring Honouliuli under the direction of Mary Farrell and Jeff Burton. As outlined in Chapter 2, the first, and most basic, archaeological research goal was simply to determine what was left from the World War II internment and prisoner of war camp. Of the 215 features recorded, 175 are considered to date to World War II. The more-specific objectives of the archaeological work are considered one by one below.

Areal Boundaries of the Site

The archaeological survey was able to define, and refine, the boundaries of the site, especially as compared with the generalized map initially available in *Waipahu at War*. The most accurate site boundary is that contained in the National Register nomination (Burton and Farrell 2011b; Figure 6.1). The boundary is based on the 116 acres depicted as a military installation in Lodge (1949) plus an additional 6.5 acres identified on U.S. Army blueprints where prison-camp facilities have been confirmed by archaeological survey. The archaeological work was also used to justify the boundary used in the land exchange and the National Monument designation (Figure 6.2). However, it is important to stress that the National Monument boundary is not the site boundary. Some site features are still located on Monsanto Hawai'i land, even though they had been recorded at the time the exchange boundaries were drawn. Conversely, some areas within the National Monument boundary have not yet been subject to even cursory archaeological survey.

National Register of Historic Places Eligibility

A National Register nomination was prepared in 2009 and revised in 2011 (Burton and Farrell 2011b). The site was listed on the National Register in 2012 at the national level of significance, and the archaeological work was acknowledged in the Presidential Proclamation that established the National Monument.

An important part of a National Register nomination is the discussion of a property's integrity, that is, its ability to convey its period of significance. In addition to discussing the history and significance of the site and describing each of the features that had been recorded up to that point, the National Register nomination included a discussion of site integrity. At the time of the nomination, it was believed that two structures of the chicken farm (Feature M-6) had been modified from structures original to the camp, and that they contributed to the site's integrity. One of the historic photographs acquired after the nomination was completed indicates that there were no buildings at the location of the chicken farm in 1948. The best evidence available to date indicates the chicken farm structures were built between 1951 and 1960. For the sake of completeness, the nomination's summary of the site's integrity is updated here.

As an archaeological site, Honouliuli retains a high degree of integrity of location, design, setting, workmanship, materials, feeling, and association. World-War-II-era features include numerous structure foundations, artifact scatters, and other features that convey the historic significance of the site. Modern developments are minimal, and do not detract from the overall site integrity.

Location: The site is in its original location, as depicted in World War II era maps of military installations.

Setting: Honouliuli's setting, in an isolated hidden gulch surrounded by agricultural fields, remains virtu-

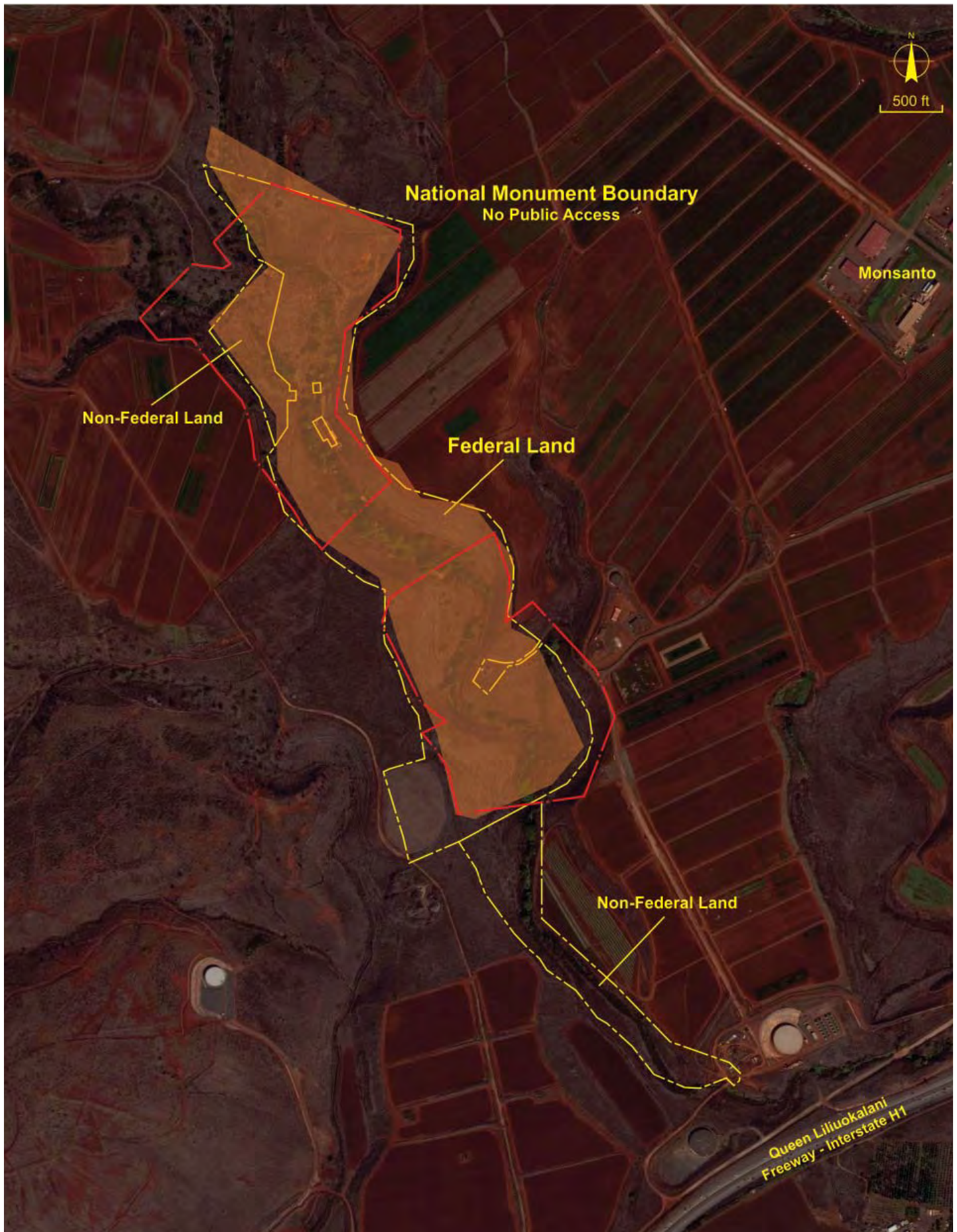


Figure 6.1. Honouliuli National Monument boundary (yellow dashed line), National Register of Historic Places boundary (shaded yellow), and camp perimeter fences depicted on 1943 military terrain map (red lines).

ally unchanged since World War II. The harshness and isolation of the original setting of Honouliuli no doubt contributed to the fact that the site and its history were forgotten and ignored for decades, until researchers at the Japanese Cultural Center of Hawai'i rediscovered it in recent years.

Materials: Honouliuli retains integrity of materials in numerous features and in archaeological deposits. For example, concrete foundations retain evidence of walls, partitions, plumbing, and modifications. Roads retain the layer of coral brought in as surfacing, and pathways are outlined with rock. Concrete tanks and concrete, metal, and clay pipes of the sewage disposal infrastructure are still present. These materials preserve the footprints of buildings and structures, and indicate the placement of gardens, sidewalks, roads, and other landscape features.

Design: Design is the combination of elements that creates the historic form, plan, space, structure, and style of a property. Although properties may lack surviving buildings, design may be evident in the layout or the remains of fences or watchtowers. Although the Honouliuli site is currently overgrown with vegetation, the military design and layout are evident in the still-traceable roads, water and sewer infrastructure, large mess hall foundations, and other features within the site.

Workmanship: As discussed in The Japanese Americans in World War II National Historic Landmark Theme Study, "low-quality or expedient construction may be the sense of workmanship that is important" and that workmanship can be illustrated in military standardization of plans, differences in housing between staff and internee housing, or internee-built features (National Park Service 2005). At Honouliuli, this expedient military-style workmanship is evident in the standardized mess hall, laundry, and other foundations; the guard tower footings; and the overall layout. There are also apparent differences between staff and internee housing, with a small pond and rock-lined pathways in the internee area and more substantial barracks additions in the staff housing area. To date, no landscaping elements have been found in the solely POW compounds. Although such features may be obscured by sediments and vegetation, it is quite possible that the lack of landscaping features represents significant differences in the ways the POWs experienced

their confinement.

Feeling: To the former internees who revisited the site during days of remembrance and pilgrimages, Honouliuli has integrity of feeling: the isolated setting, military design, prison-related artifacts, mosquitoes, and steep valley walls that retain heat convey the discomfort experienced when they named Honouliuli *Jigoku-Dani*, or Hell Valley. Visitor comments recorded by the Japanese Cultural Center of Hawai'i after the 2011 pilgrimage to the site suggest that Honouliuli conveys much of that historic feeling even today. For example, one visitor wrote: "I was moved by the isolation and ruggedness of the site. The internees endured a lot." Another wrote: "I am amazed at how secluded yet proximate the site is."

Association: As the largest and longest-lived of the Hawaiian internment sites and as a prisoner of war camp, Honouliuli provides a direct and tangible link to the history of civilian internment, martial law, and the control of enemy prisoners of war during World War II.

Combined, these seven elements of integrity give a strong sense of the historic character of Honouliuli, and the events that occurred there. Although the chicken farm structures do not contribute to the site's integrity, as originally thought, they have not permanently detracted from it, either. That is, the chicken farm structures made use of existing World-War-II-era foundations but did not, evidently, alter them substantially. The superstructure of the buildings could be removed and the foundations would remain intact.

Baseline Condition Data

This report is intended to provide the National Park Service with baseline data about the condition of the site. Twenty-five of the features are in-situ foundations and structures (Table 6.1), including three sets of guard tower footings, two mess hall slabs, one deeply buried mess hall foundation (in Compound I), four latrine/shower foundations, three POW shower foundations, one laundry building foundation, two trash incinerators, foundations for a generator building and for a water heater building, a rock foundation, two sets of concrete piers, and four concrete slab foundations of unidentified buildings.

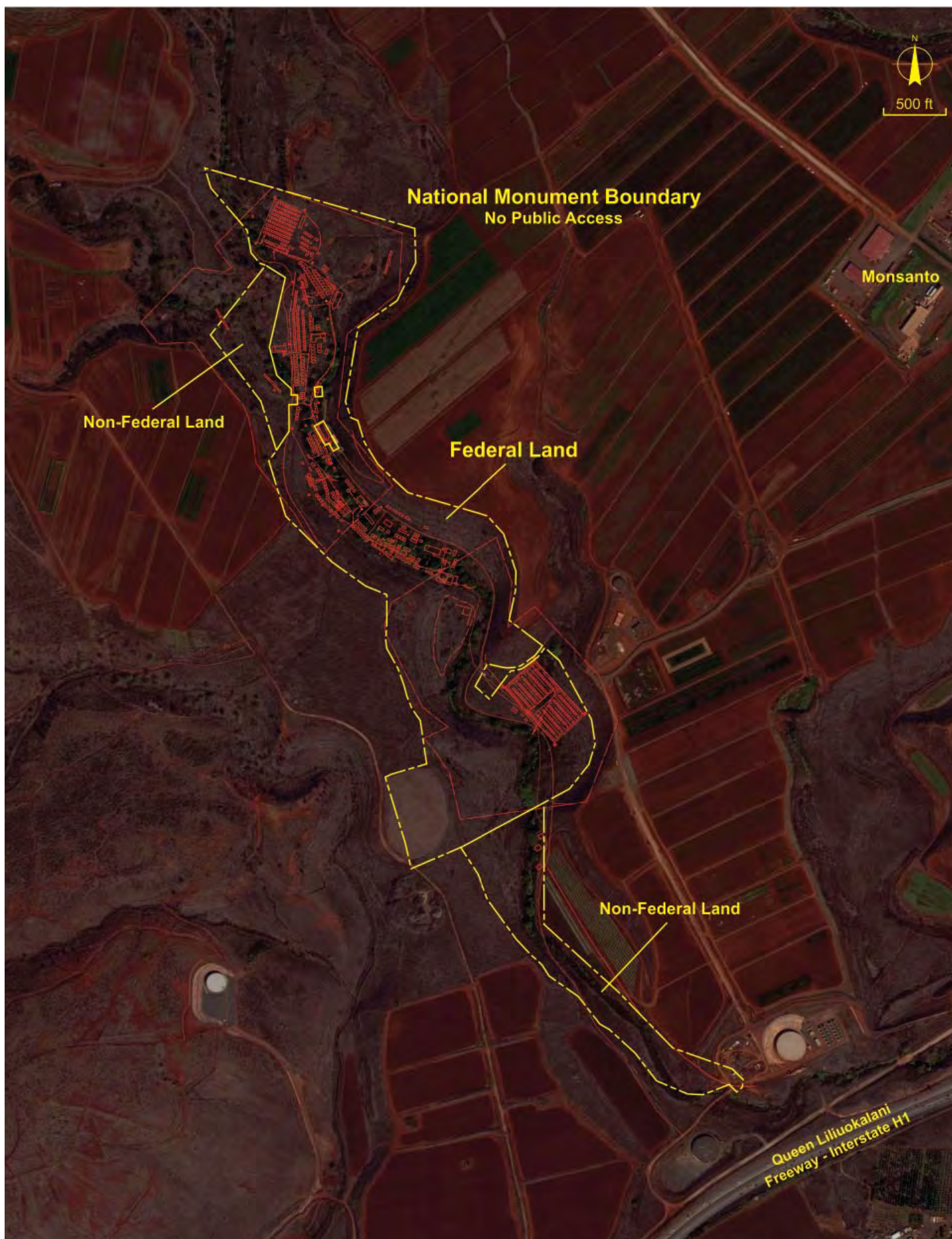


Figure 6.2. Honouliuli National Monument boundary (yellow dashed line) and the location of World War II camp features derived from historic blueprints and photographs and archaeological data (in red).

Table 6.1. Summary of Features Recorded at Honouliuli, 2006-2017.

Count	Description
25	Building Foundations and Structures
10	Small Concrete Slabs and Sidewalks
24	Structural Debris and Concrete Fragments
10	Latrine Depressions
21	Sewage Structures
11	Sewer and Water Pipes
6	Power Poles and Electrical System
24	Rock Features
13	Roads and Transportation Features
36	Fence Features
2	Artifact Concentrations
1	Rock Inscription
4	Earthen Features
14	Waiāhole Ditch System Features
34	Modern Features

Ten of the features defined outdoors spaces adjacent to buildings. They include three sidewalks, five small concrete slabs that would have been located just outside barracks doorways, and two other small slabs. Ten depressions are pit latrine locations. Twenty-one features are related to the sewage system, including seven cesspools, seven septic tanks, four sewer manholes, one sewer manhole cover, and two structures of unknown use. There are five concentrations or individual occurrences of wooden power poles or cut sections of poles, eleven pipelines or pipe fragments, and one power pole guy-wire anchor.

Twenty-four rock features include nineteen rock walls, two rock borders, one rock-lined pathway at a barracks location, a small rock-and-concrete basin (possible ornamental pond), and rock steps that led to a guard tower.

Twelve road features include seven road alignments within the camp, the old highway south of the camp, and four road features, including bridge abutments, a creek crossing, and culverts. The old railroad grade is a thirteenth transportation feature.

In addition to the 25 posts recorded in the fence post inventory, 11 additional fence features were recorded, including a section of fenceline, a concrete post support, a post set in concrete, a metal gate post, and fence and post remnants.

Twenty-four features consist of structural debris, some consisting of mounds of demolished concrete, some just isolated concrete slab fragments. The structural debris, two loci of laundry tubs, a lumber scatter, and concrete slab fragments piled atop an earthen berm reflect camp demolition. A rock berm, a pile of boulders, and an inscription on a rock above Compound II are undated.

Fourteen features are related to the pre-World-War-II Waiāhole water irrigation system, including the upper ditch and siphon and the lower ditch and aqueduct. Post-war features include eight concrete irrigation trough alignments or fragments there of, three vehicles, a large portable fuel tank, three metal power poles, corrals, wells, a water treatment plant, a paved road, chicken farm buildings, and a trash dump that includes some debris that may date to the camp.

Critical Issues of Public Safety and Long-Term Preservation

The archaeological survey work contributed to the resolution of one critical public safety issue, and has identified three others that need to be addressed. In 2014, the National Park Service had identified the presence of the incinerators at Compounds I and III as potential impediments to the land exchange, since they could be sources of hazardous materials. An analysis of the available archaeological and historical evidence at Honouliuli, along with comparisons with the archaeology at incinerators at three mainland camps, indicated that the incinerators at Honouliuli were used to burn and reduce garbage from the mess halls, with the resulting residue then transported to an off-site landfill (Burton and Farrell 2014).

Three issues of public safety remain. First, the collapsed and collapsing buildings and outbuildings at the chicken farm (Feature M-6): since the first archaeologist visit to the site in 2006, the main building has deteriorated from dilapidated to partially collapsed, and is undoubtedly unsafe. Second, there are open pits across the site, and the horse skeleton in the Feature II-3 cesspool attests to the danger they pose. Third, although it looks benign, dense Guinea grass poses a tripping hazard. It not only makes walking through parts of the site difficult itself, it obscures deep open pits and the irregular ground surface.



Figure 6.3. Overview of Honouliuli gulch, view to north (2009).

The archaeological inventory results provide enough data to begin to address the two issues. By analyzing what is left at the chicken farm (the archaeological survey results) with the World War II sanitary sewer system blueprint, USGS maps, and a 1948 Hashimoto photograph of the area, this report concludes that the chicken farm buildings were constructed between 1951 and 1960. If so, they do not contribute to the significance of the site, nor to its interpretive or information potential, under the context developed in the National Register nomination, the Special Resource Study, or the Presidential Proclamation designating the site a National Monument. The National Park Service can assess the significance of the chicken farm for its own, separate, potential historic significance; if not significant, the buildings should be removed. The analysis completed by Minatoishi Associates in 2010 is likely sufficient documentation for their removal.

The survey has also identified the locations of the most dangerous features, so that they can be managed. In addition to Feature II-3, there are open pits at Features III-2, III-3, III-5, V-1, VI-5, VI-12, VI-33, VI-34, VII-1, VII-2, and VII-3. Features II-4, II-18, III-5, V-23, and V-25, also cesspools or septic tanks, retain their original covers, but the covers could be easily removed by a curious visitor. Feature VI-22 has been partially filled in, and its stability is unknown. The

temporary measures currently employed, such as deteriorated boards or plywood over cesspool openings, are not adequate for long-term public safety.

As for the third safety hazard, the Guinea grass, the archaeological inventory can only provide some observations. For one thing, it is tenaciously invasive: features cleared one year were often completely overgrown and invisible again the next. Compare, for example, Feature V-26, a latrine and shower foundation, during and after it was cleared in 2009 (see Figures 5.229-237), with its condition in 2014 (see Figure 5.240) and 2017 (see Figure 5.241). For another thing, the luxuriance of the grass, and hence its effect on archaeological survey, varies. For example, during the February 2017 field visit, we saw a large fuel tank that had been previously hidden by Guinea grass even though we had walked within a few feet of it before. Finally, oral history indicates it is getting worse because cattle stopped grazing in the gulch.

With the current vegetation cover, smaller features pose tripping hazards. The dense vegetation in the gulch also presents challenges for long-term preservation (Figures 6.3 and 6.4). Tree roots have damaged some concrete features (for example, small slabs at Features VI-17 and VI-18 and the latrine and shower foundation and sidewalk at VI-32). Trees are growing



Figure 6.4. Overview of Honouliuli gulch, view to southeast (2009).

in cracks in others (for example, Feature V-1, the internee mess hall). A bougainvillea appears to have contributed to the collapse of the chicken farm building at Feature M-6. And yet the vegetation is not sufficient to hold flooding and erosion in check. For example, there was a small landslide between 2008 and 2011 that covered up over 100 feet of the lower ditch, near Feature IV-2. Erosion continues to create channels in Feature L-5, the road up the west side of the gulch, and has exposed the underside of a section of the upper ditch (Feature L-2b). Other long-term preservation issues include moisture build-up behind the retaining walls: Feature V-15, the distinctive wall that appears in historic photographs, has cracked, and a stone from the rock veneer has spalled off.

Archaeological Potential

Figure 6.5 illustrates the areas within and adjacent to the Honouliuli National Monument that were subjected to archaeological reconnaissance between 2006 and 2014. Some areas within the monument have yet to be examined, and even in those areas we did examine, the survey needs to be considered cursory and preliminary, because vegetation impeded visibility of the ground surface. Nevertheless, the documentation of features and artifacts, in a relatively intact setting,

confirms the initial impression that the Honouliuli camp has excellent archaeological potential. In spite of the military's apparent efforts to demolish the site, substantial features still convey the site's original layout and design. The site's location on private land, first owned by the Campbell Estate and then by Monsanto Hawai'i, kept souvenir-collectors away; the chicken farmers and rancher constructed developments for their own use, but had very little effect on the site overall. Even the Guinea grass that makes archaeological survey so difficult also provides some measure of protection: no doubt the grass has effectively hidden many more features and artifacts that await future discovery.

The three excavation units completed in Compound V in 2014 suggest the layer of white coral gravels that formed the World-War-II-era ground surface is intact, at least in some areas. Because the coral was put down by the military, it provides an easily identifiable "occupation surface" for the camp (Figure 6.6). Although most commonly used on roads, at Honouliuli white coral may have been more widespread, as suggested by its presence in Excavation Unit 3, near a barracks, and on the northwest side of the laundry, adjacent to the exterior wall. Dan Nishikawa's drawing of Compound V's barracks shows no break between the road and the paths that led to each barracks, indicating white coral was likely placed on paths, as well. In addition,



Figure 6.5. Honouliuli National Monument boundary (yellow dashed line) and areas that were cursorily surveyed between 2006 and 2014 (shaded yellow).



Figure 6.6. Paths to barracks surfaced with white coral gravel, ca. 1945 (detail of R.H. Lodge photograph).

in Excavation Unit 1 a rock alignment not visible on the surface was discovered. Close examination of the R.H. Lodge photographs will suggest additional areas to look for archaeological features, such as the posthole for a clothesline pole (?) and stone and concrete barracks foundation piers visible in Figure 6.7.

The layer of tarpaper and roofing found in the units adjacent to the laundry also bodes well for archaeological potential. In the two units large enough for side walls to be examined, the roofing and tarpaper layer was found directly on top of the coral layer. This indicates that at least some of the building materials were not hauled off-site, and are present for analysis in themselves, and as a cap-layer for the historic ground surface. Despite the purposeful demolition of the camp and decades of post-war use, the original ground surface is apparently intact in many portions of the camp, in some areas protected by both demolition debris and post-war flood deposits.

Some areas in Compounds I and VII were cultivated after the war, and at least in some cases, foundation slabs appear to have been pushed out of the way of fields (for example, Features VII-14 and VII-15). Upper soil levels would have been disturbed by planting, irrigating, and harvesting. However, even in those areas, there is still potential for archaeological materials related to the World War II camp. For example, post-war flood deposits may be deep enough to have protected World-War-II-era features: evidence of the Compound I mess hall slab was found deeply buried,



Figure 6.7. Barracks in compound V ca. 1945, suggesting archaeological features that might be found (detail of R.H. Lodge photograph).

and portions of the laundry slab are covered with sediments up to 4 feet deep. In addition, latrine pits are often used for trash disposal, especially of contraband items. The pits in Compounds I and VII were probably just filled in with convenient nearby material, which could have incorporated surface trash and demolition debris, or left to fill in naturally.

Interpretive Potential

The National Park Service will develop interpretive plans to fulfill the goals identified in President Obama's proclamation establishing the Honouliuli National Monument "to remind every American about the critical importance of safeguarding civil liberties and maintaining our values during times of crisis" and to allow us "to reflect on wartime experiences and recommit ourselves to the pursuit of freedom and justice."

Although access is currently limited, pilgrimages, ceremonies, and other special events at Honouliuli create thought-provoking, meaningful experiences. For example, the ceremony held in August 2017 with a taiko drum that had been used at the site in 1943 was attended by only 20-some people, but its coverage in the media (Bernardo 2017; Figure 6.8) allowed many more people to vicariously experience the ceremony. Field classes, volunteer work days, and student trips to the gulch provide their own interpretive opportunities. Spending time in the gulch gives students and volunteers a greater appreciation for the hardships endured:



Figure 6.8. Nine Buddhist ministers at the special *obon* service held on the internee mess hall foundation at Honouliuli in August 2017 (JCCH).

one high school student who visited the site in 2013 said, “I couldn’t even imagine ‘living’ there daily, the heat for the short time we were there was already too much.” But another expressed her appreciation for getting to see the site before it is officially opened: “I loved having the opportunity to learn more about World War II that is generally not known by the public. The experience was unique, allowing us to look at the site like archeologists and make our own conclusions” (Yee 2013).

Educational Objectives

In the three-week-long UHWO field classes in 2010, 2011, 2012, and 2014, students were introduced to a variety of sampling methods, and got experience with a total station, compass and tape mapping, GPS receivers, metal-detecting, and on-site artifact analysis (Figures 6.9-6.12). For many of the students, the field class was their first field experience, giving them a chance to find out if the joys of working outside in a remote location outweighed the inconveniences of working in the heat and rain far from indoor plumbing and air-conditioning.

Even more important is the creativity students employed in their work. Students brought their own interests and expertise to their research projects, and greatly exceeded what the instructors could have done on their own. Some of their findings have been included in this report (for example, Altenhofen 2010a, 2010b; Correo 2014a, 2014b; Kaneko 2012; Maldonato 2012; Zdyrski 2010). Several students did research on mainland Japanese American incarceration camps, to compare with Honouliuli; one examined terminology and euphemisms. Students inventoried the plants and the fauna in Honouliuli gulch; one examined artifacts and art in the JCCH internment collection. Several students chose artifacts to study in depth; two students replicated the home-made *shamisens* that internees created in camp; two students experimented with creating alcohol from fruit juices, as internees had done. Some interviewed family members and acquaintances about their World-War-II experiences. One wrote and illustrated a children’s book about the internment, others developed a brochure for visitors, some focused on sharing insights about field safety. One field class student went on to write her Master’s thesis about Honouliuli (Dakujaku 2016). In short, the students explored a variety of the many facets of archaeological investigation, and their work has contributed greatly to



Figure 6.11. Excavating a feature, 2010 UHWO field class.



Figure 6.10. Correlating historic photographs, 2011 UHWO field class.



Figure 6.9. Total station mapping, 2012 UHWO field class.



Figure 6.12. Homemade *shamisen* project, 2014 UHWO field class.

the investigation of Honouliuli.

It is important to note that the educational benefits of the class extended beyond teaching the students about archaeology: the class was an interactive venue for spreading the word about the internment of civilians in Hawai'i. Students were recruited not just from the UHWO campus, but also from other UH campuses and from the mainland. Graduate students, high school students, and non-students registered for the class. One student came from Australia. Even local students, even students with Japanese heritage, were unaware of Honouliuli's story before taking the class. Students told their friends, families, and colleagues about Hawai'i's internment; most provided comments on the National Park Service's Draft Special Resource Study. All became articulate supporters of the importance of the site and its power to tell its story, some even taking the lead hosting visiting news reporters.

The volunteer projects conducted by JCCH also enhanced the educational goals by connecting students with members of the public who generously gave their time and energy to the site without expectation of college credit. Students were able to see the importance of the Hawaiian internment to the descendant communities, and experience archaeology in action as a tool of civic engagement (for more examples, see Little and Shackel 2007). Kaori Akiyama, a PhD student from Japan when she volunteered at Honouliuli, built contacts and connections from her experience that continue to benefit Honouliuli National Monument (*Ryuku Shimpō* 2017).

Recommendations for Future Management

Plans for management and interpretation are being developed by the National Park Service in collaboration with the public: the current status of planning efforts is available at www.nps.gov/hono/. The collaboration with the JCCH and the University of Hawai'i West O'ahu has been so productive and beneficial for the public and students alike that it seems almost unnecessary to recommend that it continue. The work published by the University of Hawai'i (Falgout and Nishigaya 2014) illustrates the potential of the Honouliuli site to inspire multi-disciplinary research, and Kaori Akiyama's continuing work (for example, Akiyama 2016, 2017) is an excellent example.

Archaeological Recommendations

Historic photographs and blueprints suggest there is more infrastructure at Honouliuli to be investigated. For example:

- Were the shower foundation and pit latrines in the northeast part of Compound I shown on the 1943 War Department terrain map actually constructed? If so, what remains?
- The fact that the 1945 blueprint supplied by Jill Summer of Schofield Barracks labels Compound VII a "Disciplinary Compound" may contradict the notion that this compound had lighter security because it housed Koreans, who were considered less of a security risk than Japanese POWs. The blueprint provides more precise information about where guard towers in Compound VII were located, and a power pole (Feature VII-16) provides a key datum point to guide a search. If the Compound VII guard tower foundations are found, are they different from the guard towers constructed earlier?
- One guard tower visible in a historic Lodge photograph is east of the Compound II mess hall. We searched the area directly east of the mess hall's slab foundation, Feature II-1, with no success. A search to the southeast of the Feature II-1 slab may be more productive. The Lodge photograph suggests the guard tower was east of an addition that extended to the south, which had post and pier foundations instead of a slab.
- Modern improvements to the main entry road obscure how it originally crossed the ditch (Feature

L-1). The 1948 Hashimoto photographs and Army blueprints indicate where another road (Feature L-9) crossed the ditch, and evidence of a World-War-II-era crossing structure may still be present. If so, it could be documented to help determine what parts (if any) of the current road's ditch crossing are likely to be original to the site.

- The coral layer found in the excavation units in Compound V gives some hope that the alignments of roads and pathways might still be discernible, capped by flood deposits.
- The nails found in the Compound V excavation units and the layer of tarpaper noted in the excavation units at the laundry building, Feature VI-49, suggests that debris from demolition may be plentiful, which could provide clues about construction, use, and abandonment of the site.

Most of the artifacts that we found, including beer bottles in the guard camp area and a few items on the floor of features, appear to be items that were lost or casually discarded close to where they were used. A camp the size of Honouliuli would have generated a large amount of "official" trash, but in standard military procedure, trash would have been hauled to dumps (Young 2005). Still, there might be deposits of trash generated by the purchase and use of canteen items, or even of contraband.

- Is there archaeological or archival evidence that trash was disposed of on-site or nearby?
- Did POWs have access to contraband goods? If so, "incriminating evidence" may have been hastily tossed into the pit latrines.
- At a POW camp at Camp Hearne, Texas, buried caches of artifacts were found (Waters 2004:190-192). Some of the caches may represent trash, but other caches appear to be carefully selected, wrapped, and stored items. The Camp Hearne caches included metal items like mess kits, buckles, insignia, and canteens, as well as canvas items. If similar caches exist at Honouliuli, they may be discoverable through metal detector surveys in the POW areas, where vegetation permits.
- More detailed recording of the trash and structure remains at Feature VII-8 would help uncover the formation processes of that feature. Comparisons of structure characteristics with the 1945 blueprint, which has some detail drawings of structures, could

determine if the structure was part of the POW compound. Analysis of the trash may provide clues as to its origin, too: its proximity to the structural remains suggests it was associated with use of the structure. However, it is possible that the military pushed a war-era structure over the edge of the gulch during camp demolition, creating a convenient dumping area for later trash.

Some of our findings invite comparison with other POW and internment camps. For example,

- How common is it to find so many beer bottles at a POW camp? Was guard duty so burdensome that guards drank a lot of beer to relax, or was it so boring they had little else to amuse themselves with?
- How does Honouliuli compare to mainland internment camps, and other POW camps? Are the differences related to topography, climate, or function? For example, although Honouliuli's layout was constrained by topography, rectangular compounds were used wherever there was enough room (Compounds I and VII). Tents used to house POWs, and showers without hot water, may have been common in tropical Theater of Operations.
- Mytum and Carr (2014) argue that even minimal possessions played a role in prisoner coping strategies, and that artifacts at POW and civilian internment camps can provide insights into human adaptability and ingenuity. The JCCH collections have several examples of exquisite art made by Japanese American internees (Figures 6.13 and 6.14). Correa (2014a) surmised that the expended rounds at Feature II-17 were most likely brought to the shower by a POW for the purpose of creating functional or ceremonial art, and other small, seemingly insignificant artifacts may have meaning beyond their everyday function.
- Kaneko (2012) suggests that the large laundry building in Compound VI was for the guards and staff, only, and that internees washed their own laundry, boiling large items in a little open-sided hut with a tin roof. Are there any archaeological traces of these little huts? Can any huts be identified in historic photographs? Is there other, opposing evidence that POW laundry was done at the Compound VI laundry building?

Future archaeological work could explore aspects of the Waiāhole Ditch Irrigation System within the monument. The system has been designated as State Inventory of Historic Places (SIHP) #50-80-09-2268, and has

been determined eligible for the National Register of Historic Places, but the dating of these features is not completely resolved. The Waiāhole Ditch System as a whole was in operation by 1916, but new wells, ditches, and tunnels were added even into the 1960s. The Lodge photographs show that both the upper ditch and siphon and the lower ditch and aqueduct were present in 1945. A 1916 engineer's report mentions Honouliuli ditch, but the rock and concrete aqueduct across the gulch has a 1920 inscription, indicating the aqueduct, if not the ditch as a whole, was completed then. It does not seem likely that the 1916 engineer's report is referring to the upper ditch and siphon: it describes three metal siphons constructed as part of the project, but none are located in Honouliuli gulch.

- Is there archaeological evidence that could date the siphon and the upper ditch, Feature L-2?
- Historic accounts suggest the lower ditch may have been present by 1916, but the concrete aqueduct has a 1920 date. Can the ditch be dated with archaeological evidence? Is there any evidence of a flume dating to before the 1920 concrete aqueduct?

In addition, both survey and testing could better define the cultural resources within the monument:

- Conduct survey in the northeast and southwest parts of the monument, where no reconnaissance was conducted between 2006 and 2014. Buildings are shown on the 1943 terrain map in the northeast unsurveyed area.
- Continue the search for the Compound I mess hall; once its location and depth have been determined and the overlying strata characterized, it may be appropriate to use heavy equipment such as a backhoe to remove some of the overburden.
- There is a good chance that foundations for the guard tower in the far northwest corner of Compound I are still present, since its location is outside of the area cultivated after the war.
- Uncover the rest of the laundry building to allow an analysis of the laundry operations, facilitate maintenance, and serve as a destination point for visitor tours. Its large size gives an impression of the scale of the war development at the camp, and its location at the end of Compound VI would provide a good overview of the camp as a whole (Figure 6.15).



Figure 6.13. Wood carving by Honouliuli internee Taichi Sato of his daughter Harriet (JCCH collection).



Figure 6.14. Painted shell from Honouliuli in the JCCH collection.

- Most of Compound V, the internee compound, was used for POWs toward the end of the war. Archaeological excavation units in the last internee compound, at the southwest corner of Compound V, may provide the best intra-site comparison between POW and civilian internee circumstances.
- Search for landscape features in the internee compound, using historic photographs as guide.
- Locate the headquarters building in Lodge's photograph; the flagpole base or sidewalk may still be present.
- Search for the bridge or culvert where the Feature L-9 road crossed the lower ditch, west of the aqueduct.
- Try conducting survey in different seasons: the visibility of even large features can vary tremendously, depending on the growth of the Guinea grass.
- Although the fence survey has yielded no evidence yet of in-place security posts or fencing, additional inventory would be necessary before the presence of this once-important element of the Honouliuli Internment and POW Camp can be ruled out completely. With the 1943 War Department terrain map and historic photographs (Figure 6.16), the alignment of the exterior perimeter fence can now be better estimated, increasing the chances of finding at least post holes, with careful testing. Shuzo Takahashi's memory map shows the perimeter fence and two interior fences, each with gates and a sentry post along the entrance road.



Figure 6.15. Tour group listening to Jane Kurahara at the laundry building foundation in 2012.

Beyond answering the basic question of “what’s left” at Honouliuli, archaeological investigations have the potential to provide additional information about the administration and operation of a POW and internment camp and how, in their everyday lives, people dealt with their confinement (Figure 6.17). At mainland internment camps, archaeological studies have documented the resurgence of Japanese American culture (Burton 1996; Burton et al. 2003; Carrillo and Killam 2004; Ellis 2002; Larson et al. 1995; Sawyer-Lang 1989), and Honouliuli could provide useful comparative data about material expressions of ethnicity, confinement, and identity.

Similarly, archaeological investigations at a few former POW camps on the mainland have found fairly abundant intact structural features, including concrete slab foundations, artifact caches, and POW-constructed features (Bucher and Albertson 2005; Gaither et al. 2005; Northrup and Bennett 1990; Waters 2004). As the historic context prepared for mainland POW camps on military installations points out, “documentation of the positions of foundations and features can provide significant information on the size of the camp, how the camp was laid out in comparison to the

standard plans, and the range of recreational activities (e.g., garden plots, special use buildings, sculptures) available to the POWs” (Listman et al. 2007). Myers (2013) collected information from oral histories, interviews, archival research, and three seasons of field archaeology to determine that material culture played a key role in a concerted reeducation campaign designed to introduce German POWs to a democratic, capitalistic way of life.

As one of the few POW camps in the U.S. where Japanese prisoners were held, Honouliuli has the potential to provide information about a distinctive characteristic of the Japanese POWs: their political and military leaders had taught them that to surrender under any circumstances was a criminal disgrace, so for them, POW status was shameful and humiliating (Straus 2003). Archaeological remains have the potential to provide clues about the ways these prisoners coped with and adapted to their unexpected status.

Historic Research Recommendations

One of the appeals of doing historical archaeology is the opportunity for written records and oral histories



Figure 6.16. Perimeter fence at top of gulch, ca. 1945 (detail of R.H. Lodge photograph).

to inform the interpretations of the features and artifacts found at a site. Historic research can add context, meaning, and relevance to the archaeological record, even as archaeological remains can enhance a historic site's sense of place. Several historic research themes, questions, and potential opportunities could complement the archaeological work:

- First priority should be to determine if there are any surviving POWs, military guards, or administrative personnel who could be interviewed. Oral histories are invaluable, not only to provide more historic data and context for the archaeology, but also to understand the role Honouliuli plays in memory and heritage.
- Descendants of former internees, POWs, and military personnel could also be interviewed. For example, the late Glenn Heern's collection of photographs, donated by his granddaughter Kendall Olsen, provides invaluable insight into the life of a young MP at Honouliuli. Mr. Heern's family may have other memories or mementos of his war experiences that they would be willing to share. Alan Nishikawa, son of Dan Nishikawa, remembers the long bus ride to visit his father at Honouliuli, and undoubtedly has other stories to tell.
- Akiyama (for example, her PhD dissertation, completed in 2017) has written extensively about Honouliuli and Sand Island camps in Japanese; translations of her work into English, by Akiyama herself or someone else, would be beneficial for both public interpretation and future research.

- In an interview in 1981, R.H. Lodge identified the man striding out of the building as the camp commander, of Italian ancestry, who could speak Italian to the Italian POWs (Gordon 1981). His name, as Lodge recalled, was Maicco. Could more information be found about this officer? Although it is likely too late to interview him, his relatives may have seen photographs or heard stories about his time at Honouliuli.

- Original military Honouliuli blueprints provided by Schofield Barracks archivists and cultural resource specialists have greatly facilitated the archaeological research to date; closer scrutiny of WWII blueprints of non-Honouliuli facilities could help in the interpretation of Honouliuli's features, and further searching may uncover additional Honouliuli blueprints in the Schofield Barracks archives.

- NPS Civil Rights Initiative funding might be tapped to find out more about the history of the 372nd Infantry, the African-American unit assigned to Honouliuli, and how its members interacted with other guards, internees, and POWs (Figure 6.18).

- Integrating archaeology and history research may be able to provide further insight on some previous conclusions about Honouliuli. For example, Kashima (2003:84) cites a 1972 article in the *Hokubei Mainichi Newspaper* that said the internees built part of their own camp, including the guard towers. Feature VI-50, on the south border of Compound V, the internee compound, contains guard tower footings and a closed aqueduct outlet with the date "Jan 21-1943." The con-



Figure 6.17. POWs passing time at Honouliuli, ca. 1945 (detail of R.H. Lodge photograph).

crete is not one piece; that is, the aqueduct might have been closed before (or even after) the guard tower was put in place. But if both were constructed at the same time, the Feature VI-50 guard tower would have been built over 5 weeks before the first internees arrived. The other dated guard tower foundation is Feature V-13, also on the west edge of Compound V, about halfway between Compound VI and Compound IV. The date “8/13/43” is impressed in one of the guard tower footings, directly dating its construction to the period when internees were present. This is the footing with Rollin Hotchkiss’s name inscribed; did Corporal Hotchkiss lead internees in the construction of the guard tower? Are the hand prints in the concrete his, or his prisoners’?

- Kashima’s sources also indicated that the gulch was rented out after the war to hold wrecked vehicles (2003:86), which may account for the various vehicles and vehicle parts found on site. However, that seems an odd use of a fairly remote area. If the vehicles were intended for salvage, it does not seem likely they would have been spread out in different locations around the gulch.
- Before the structures and artifacts associated with the chicken farm are removed, the history of the chicken farm should be researched and documented.

Preservation Recommendations

The National Park Service is developing preservation plans for the aqueduct (Feature L-1a) and the distinctive basalt wall (Feature V-15) that serves as a retaining

wall for the lower ditch (Figures 6.19 and 6.20). Other actions recommended to help preserve the site include:

- Record and remove the late-twentieth-century materials stored on the Feature II-1 mess hall foundation.
- Record the chicken farm artifacts and outbuildings in detail, then remove.
- Employ cattle or other grazing animals such as goats to control the Guinea grass.
- Trim trees and roots to prevent damage to features.
- Stabilize eroding slopes and ground surfaces, such as on the west side of the gulch, that are affecting Features L-2b (upper ditch) and L-5 (road).

Retrospective

Ten years ago, standing on a concrete slab overgrown with Guinea grass, we started kicking around the idea of Honouliuli becoming part of the National Park Service. We knew that what had happened at Honouliuli was important and we knew the site could help tell the story. To tell the truth, the ideas circulating that day seemed to me intriguing, but fantastical. Yet ten years later, this report provides an example of the power of archaeology as social action, and summarizes our work for the new site stewards, the National Park Service.

Archaeological investigations at the Honouliuli internment and POW site, initiated by JCCH, focused on simple research goals which led to its designation as a historic park: identifying and describing historic features; providing baseline condition data for future management; addressing (or at least identifying) critical issues of public safety and long-term preservation; and determining archaeological and interpretive potential.

Over 200 students and volunteers contributed countless hours of both physical labor and archival research. Working in the harsh physical conditions at Honouliuli, students and volunteers experienced the heat, lack of breezes, and insects that plagued the World War II prisoners. For visitors, volunteers, and students, the physical remains at the Honouliuli Internment and Prisoner of War Camp provided tangible connections to the lives of the civilian internees, POWs, and guards



Figure 6.18. African-American military police and Honouliuli POWs (R.H. Lodge photograph).



Figure 6.19. Tilted pier of the aqueduct (Feature L-1b) in 2017.



Figure 6.20. Spalling rock wall (Feature V-15) in 2017.

who once lived there. The archaeological investigations also brought the history to the community's attention: media coverage brought each field season's results to a wider audience, which in turn generated donations of historic photographs, oral histories, and more volunteers. Exposing and analyzing building foundations and other features anchor the historic photographs to real, discernible places on the ground, which became integral parts of JCCH tours of the site.

JCCH's pilgrimages to the site increased local awareness of Hawaiian internment, which in turn increased support for its designation as a unit of the National Park Service (Figure 6.21). President Obama's proclamation declaring Honouliuli a National Monument begins a new era in the site's role in remembering, discovering, and commemorating an important aspect of World War II history (Figure 6.22). As a tangible link to an event in which fears and prejudices led to the suppression of civil rights, Honouliuli can inform today's discussions about the treatment of immigrants and minorities, the history of racial relationships, and the interplay of national security and the U.S. Constitution.



Figure 6.21. First Honouliuli Pilgrimage, 2008. Guests of honor/former internees Chojiro Kageura, on left, Harry Urata on right.



Figure 6.22. President Obama with guests attending the Honouliuli National Monument proclamation signing ceremony, including members of Hawai'i's congressional delegation and JCCH (White House Archives).



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Appendix A

Blueprints

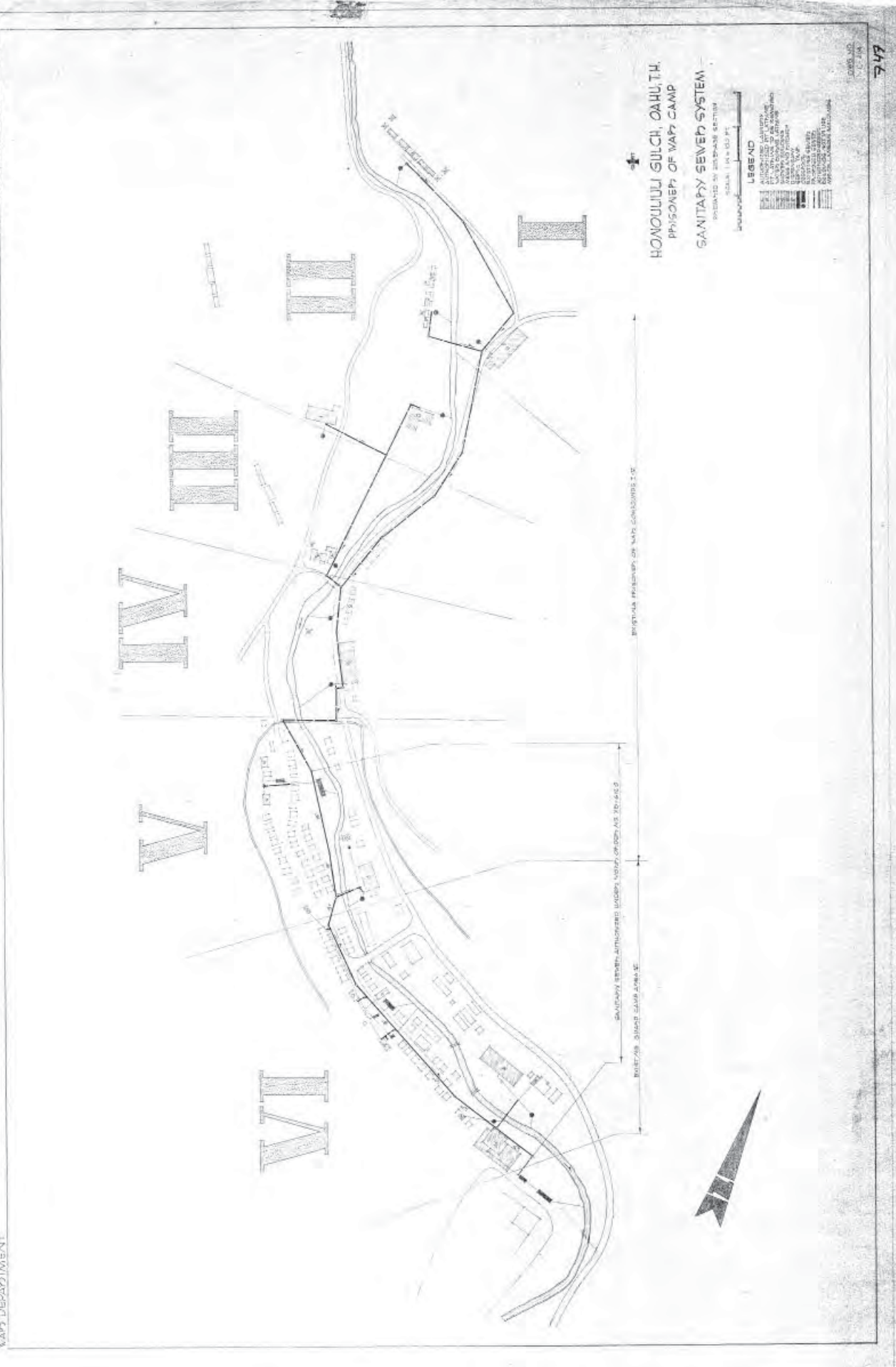


Figure A.1. Honouliuli Gulch, O'ahu, T.H. Prisoner of War Camp Sanitary Sewer System, sheet 1 (Schofield Barracks).

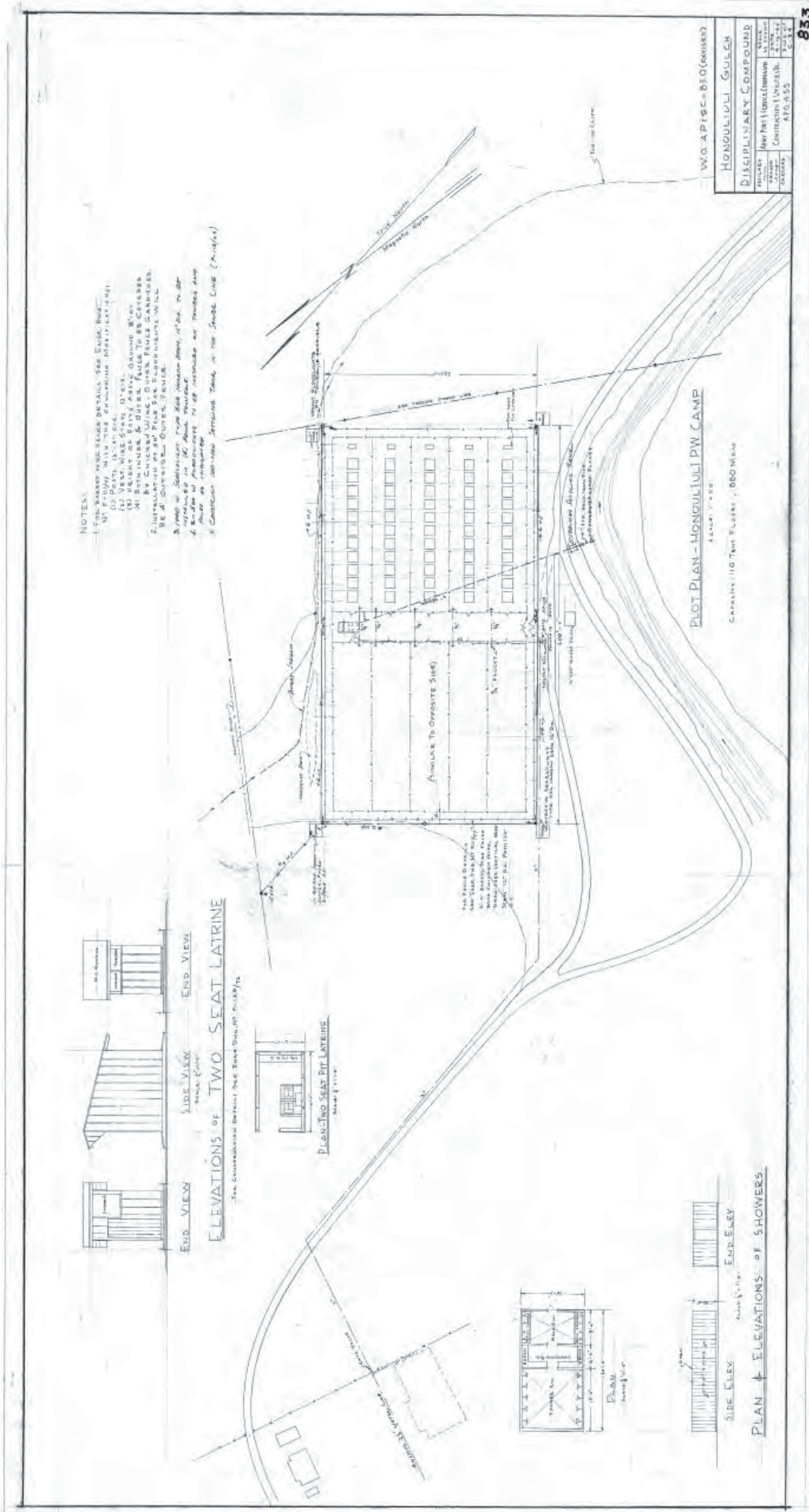


Figure A.3. Honouliuli Gulch, Disciplinary Compound. Army Post and Service Command, April 12, 1945 (Schofield Barracks).

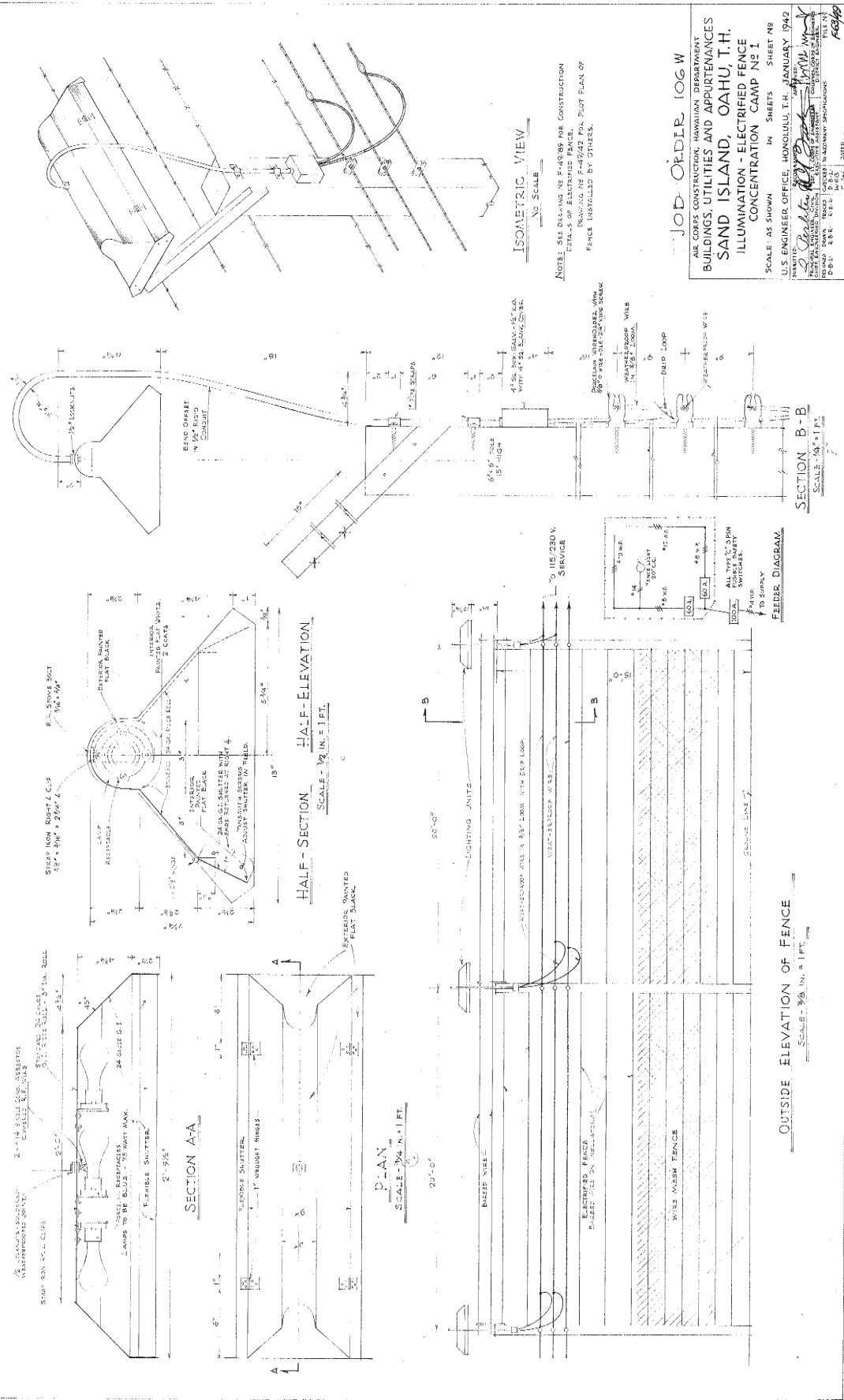
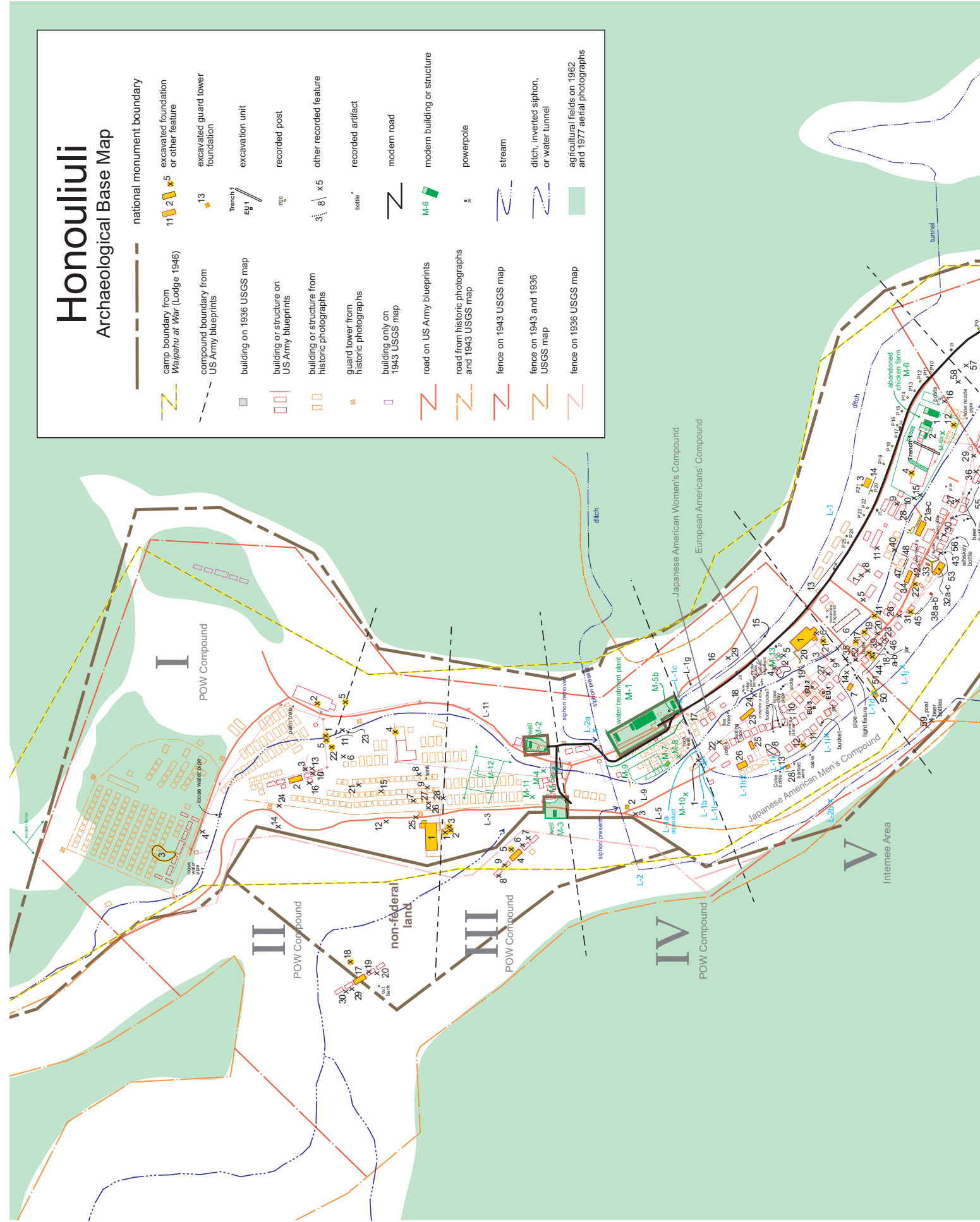


Figure A.4. Illumination - Electrified Fence, Concentration Camp No. 1, Sand Island, Oahu, T.H., January 1942 (Schofield Barracks).



Appendix B

Maps



Honouliuli

Archaeological Base Map

- national monument boundary
- camp boundary from *Waipahu at War* (Lodge 1946)
- compound boundary from US Army blueprints
- building on 1936 USGS map
- building or structure on US Army blueprints
- building or structure from historic photographs
- guard tower from historic photographs
- building only on 1943 USGS map
- road on US Army blueprints
- road from historic photographs and 1943 USGS map
- fence on 1943 USGS map
- fence on 1943 and 1936 USGS map
- fence on 1936 USGS map
- excavated foundation or other feature
- excavated guard tower foundation
- excavation unit
- recorded post
- other recorded feature
- recorded artifact
- modern road
- modern building or structure
- powerpole
- stream
- ditch, inverted siphon, or water tunnel
- agricultural fields on 1962 and 1977 aerial photographs

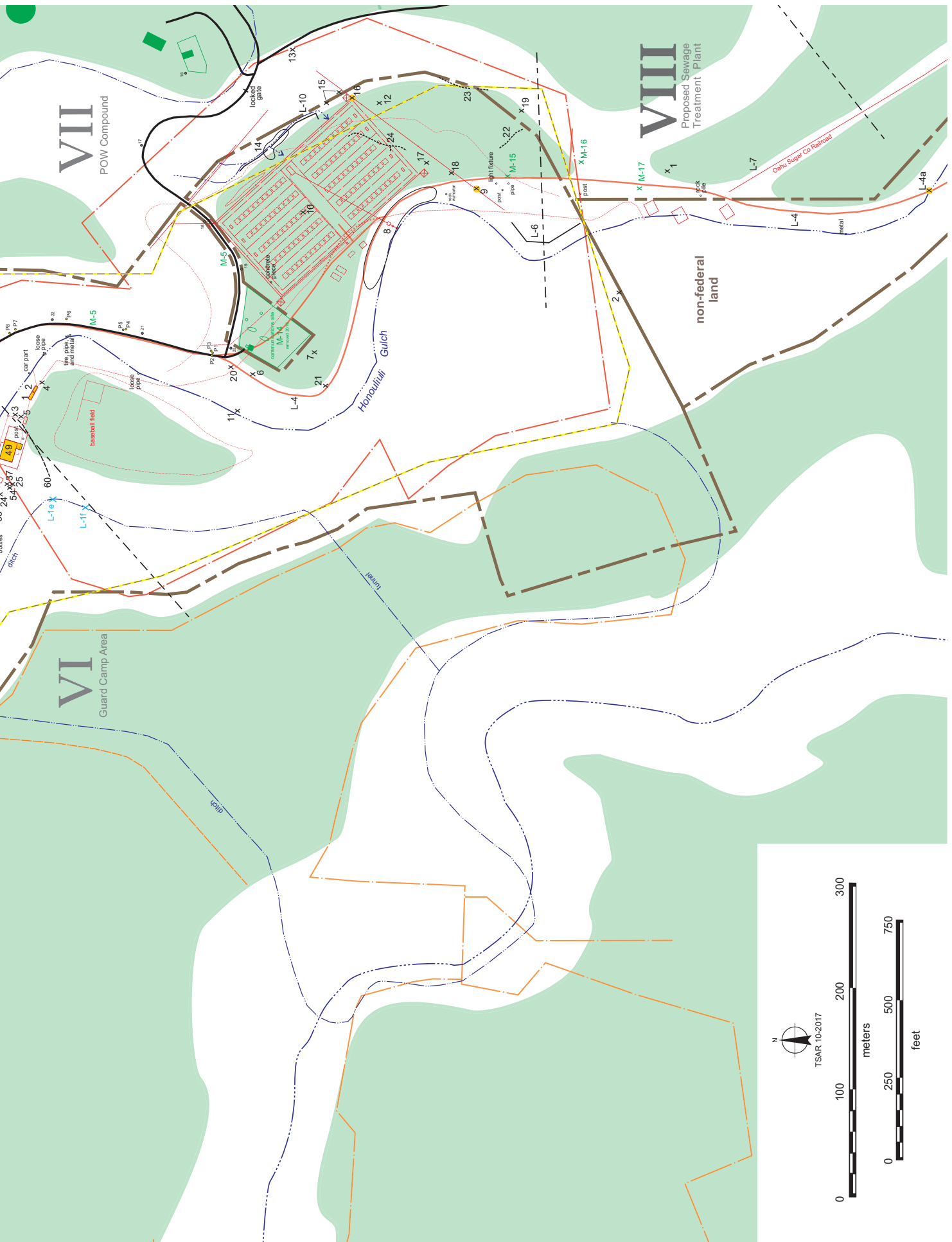














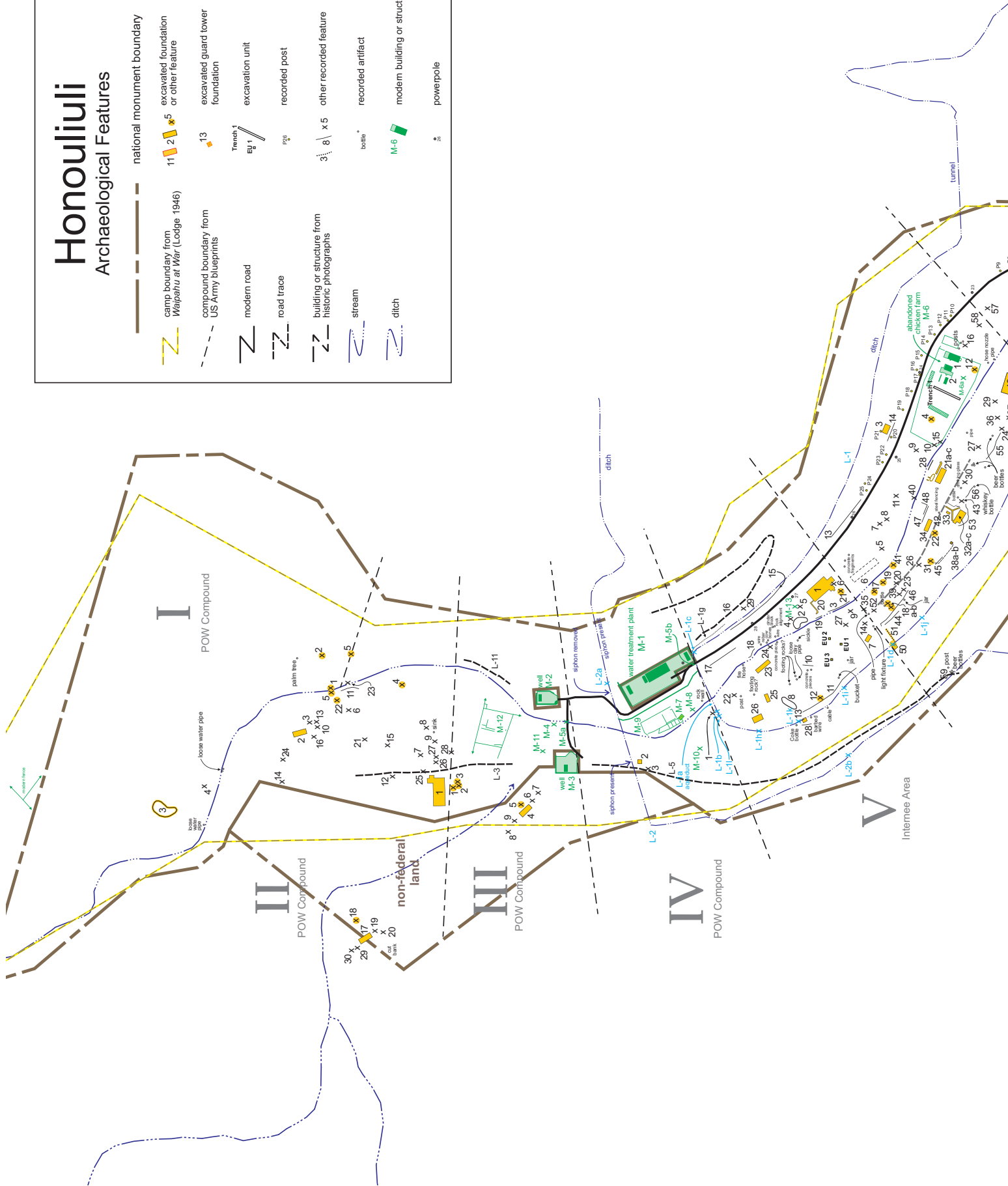


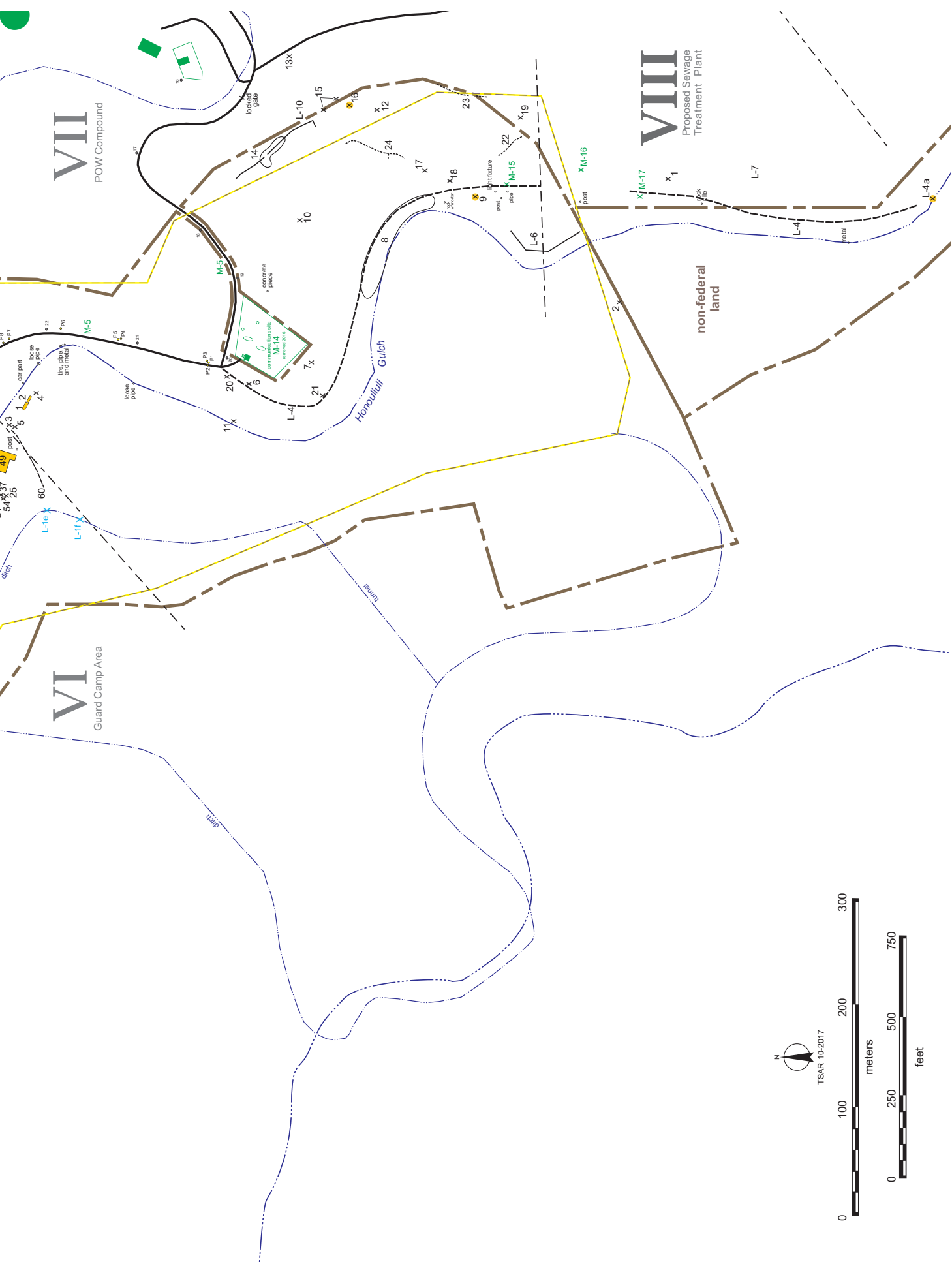
Figure B.1. Honouliuli archaeological base map.

Honouliuli

Archaeological Features

	national monument boundary
	camp boundary, from <i>Waipahu at War</i> (Lodge 1946)
	excavated foundation or other feature
	excavated guard tower foundation
	modern road
	road trace
	building or structure from historic photographs
	stream
	ditch
	other recorded feature
	recorded post
	recorded artifact
	modern building or structure
	powerpole

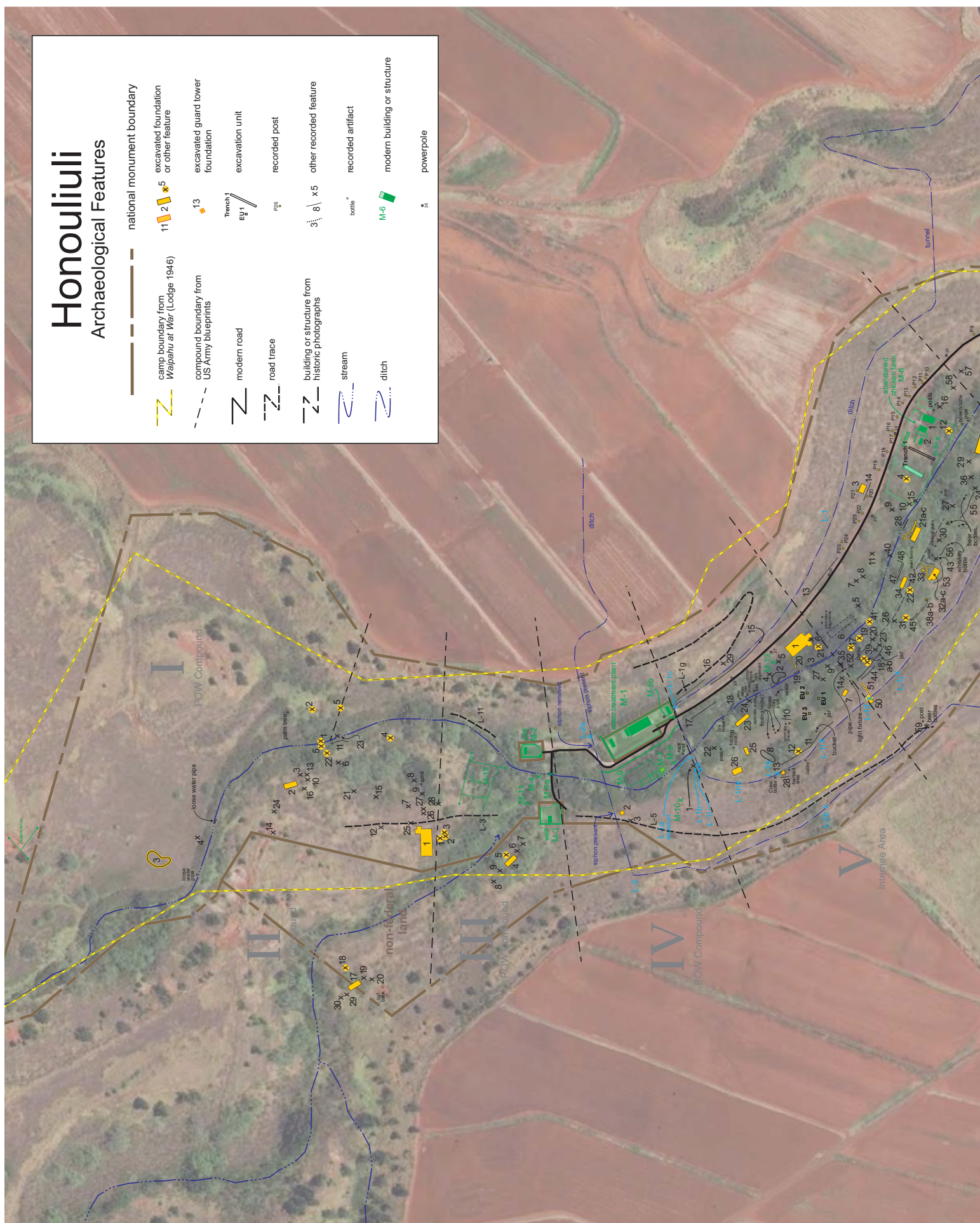




Honouliuli

Archaeological Features

	national monument boundary
	camp boundary from Waipahu at War (Lodge 1946)
	excavated foundation or other feature
	excavated guard lower foundation
	excavation unit
	recorded post
	building or structure from historic photographs
	stream
	ditch
	recorded artifact
	modern building or structure
	powerpole



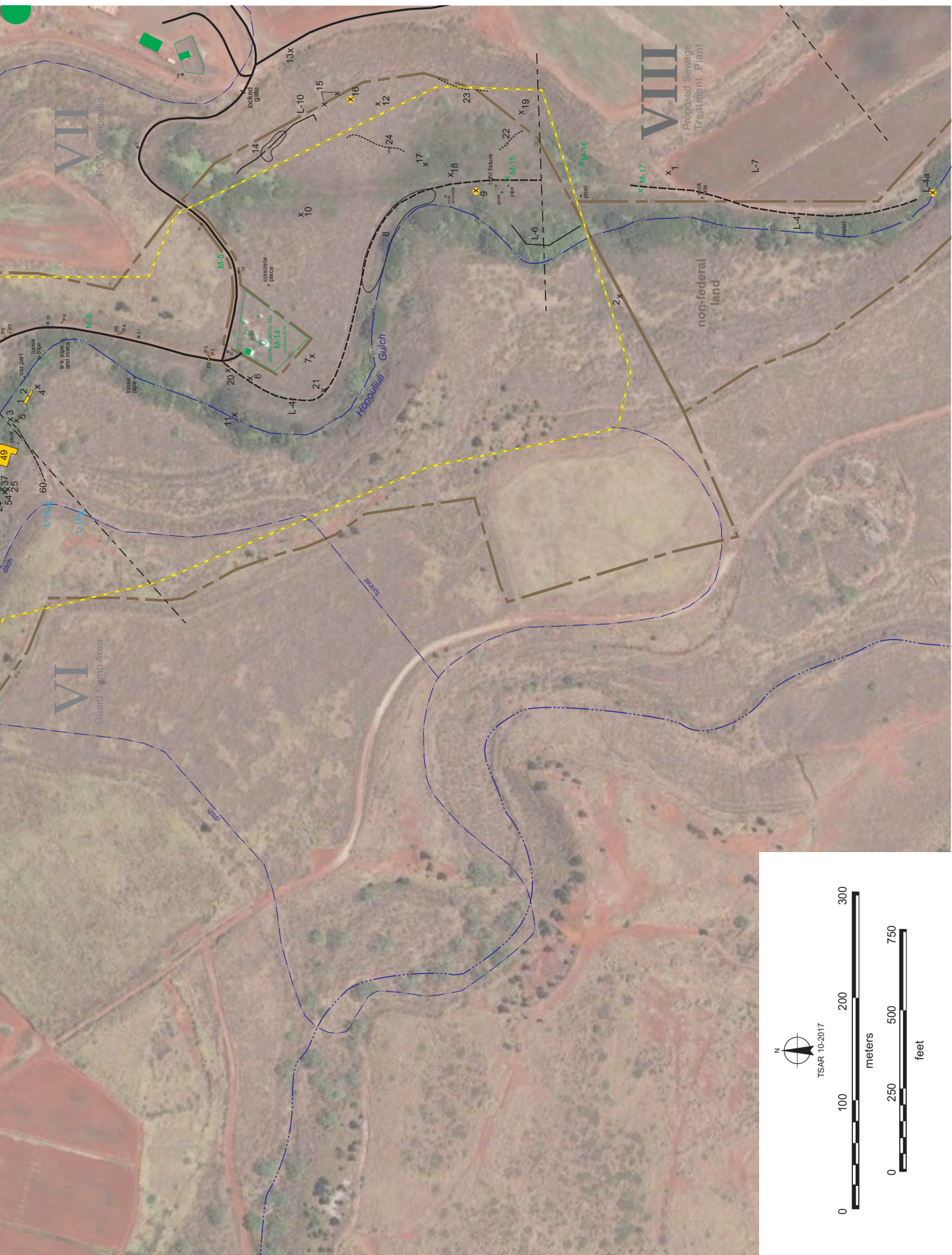


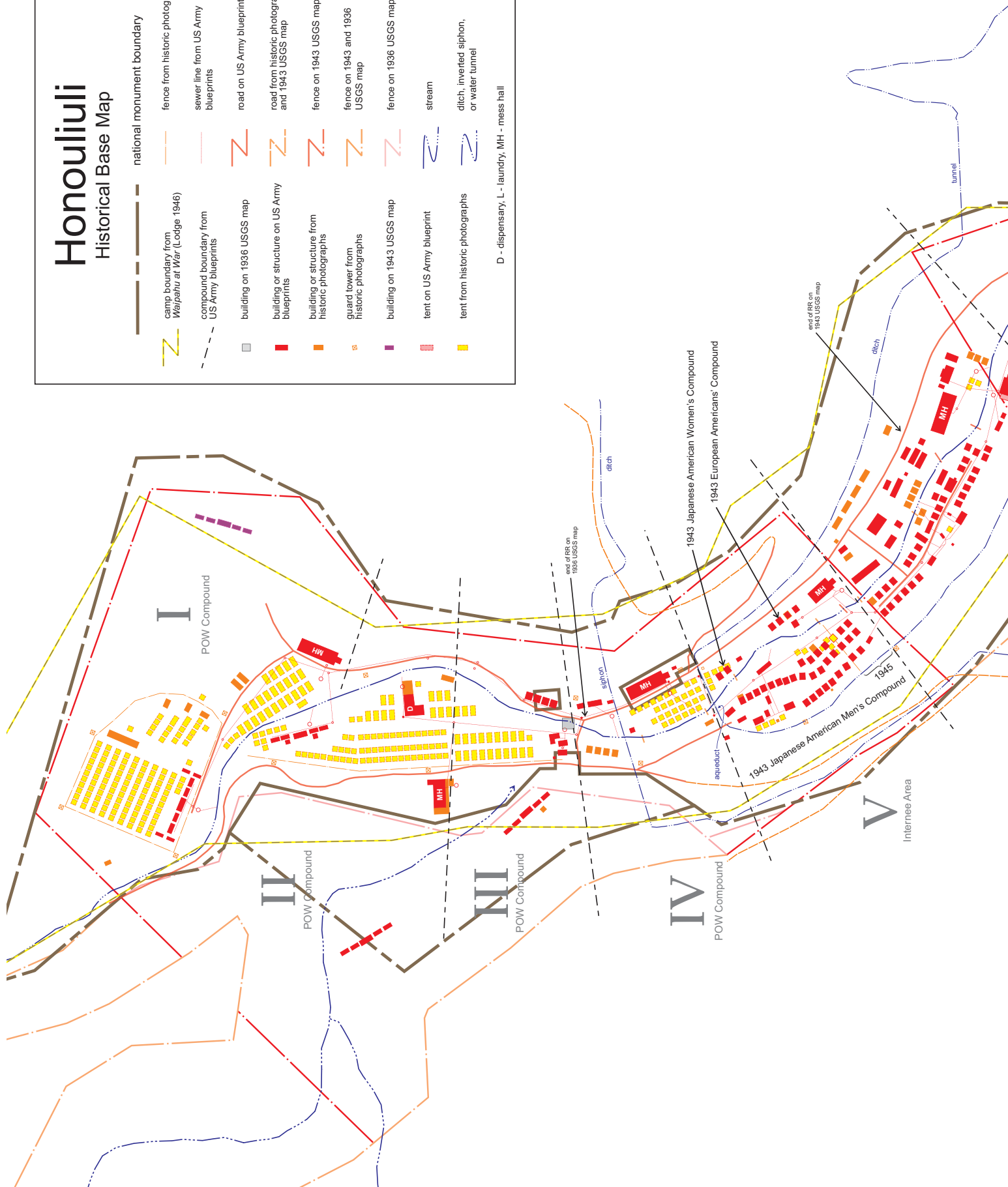
Figure B.3. Honouliuli archaeological features superimposed on 2016 DigitalGlobe aerial photograph.

Honouliuli

Historical Base Map

	national monument boundary
	camp boundary from Waipahu at War (Lodge 1946)
	compound boundary from US Army blueprints
	building on 1936 USGS map
	building or structure on US Army blueprints
	building or structure from historic photographs
	guard tower from historic photographs
	building on 1943 USGS map
	tent on US Army blueprint
	tent from historic photographs
	fence from historic photographs
	sewer line from US Army blueprints
	road on US Army blueprints
	road from historic photographs and 1943 USGS map
	fence on 1943 USGS map
	fence on 1943 and 1936 USGS map
	fence on 1936 USGS map
	stream
	ditch, inverted siphon, or water tunnel

D - dispensary, L - laundry, MH - mess hall



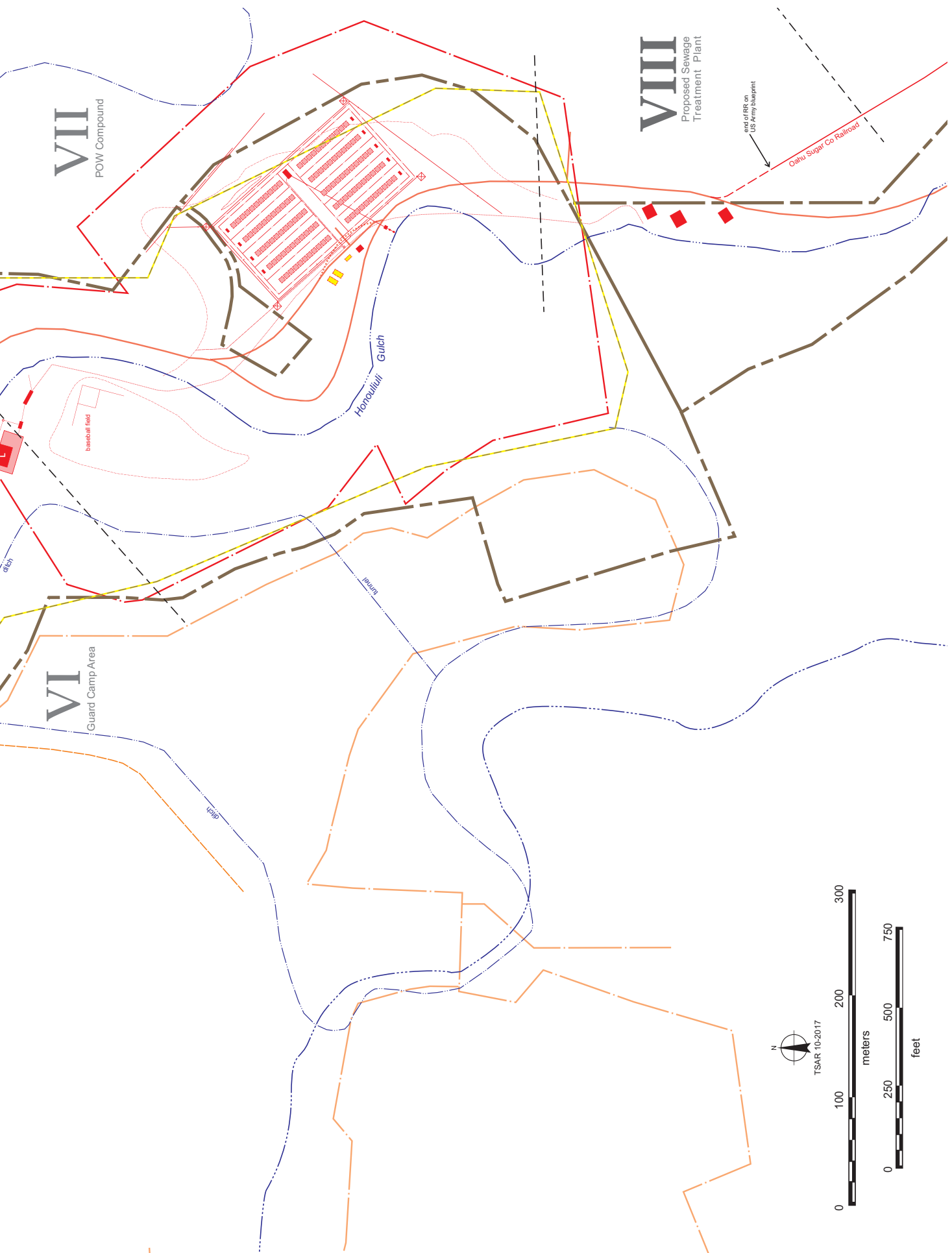


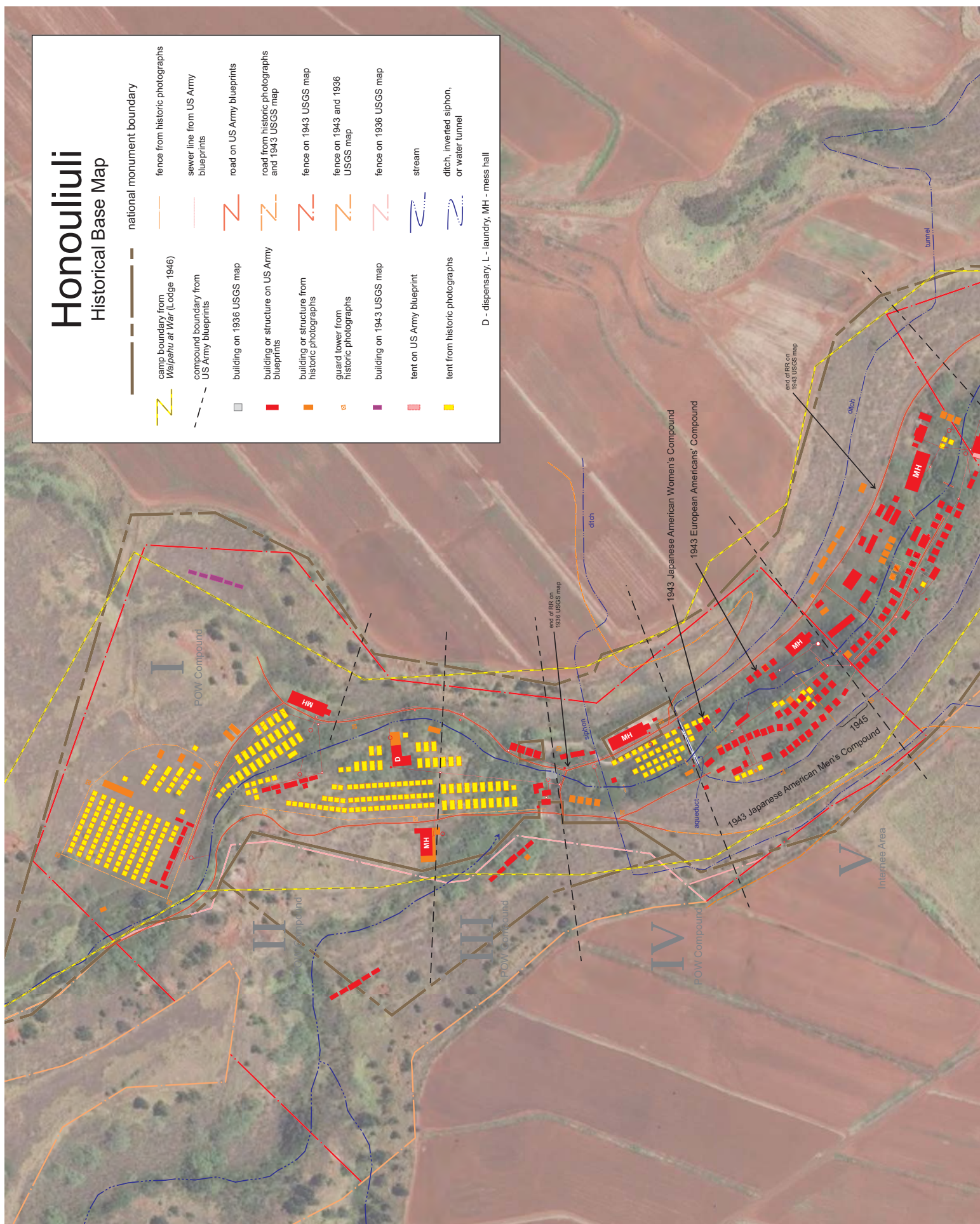
Figure B.4. Honouliuli historical base map.

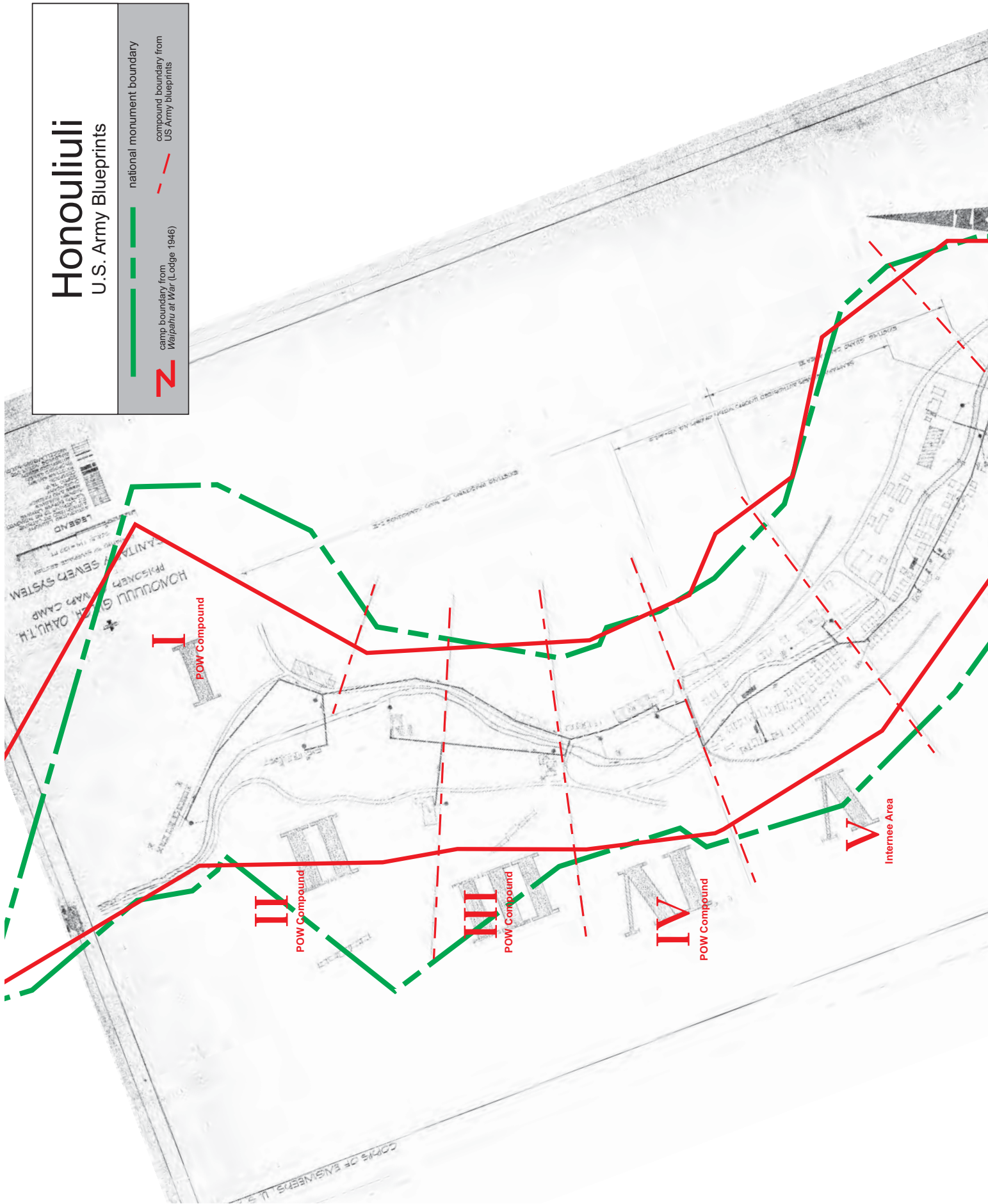
Honouliuli

Historical Base Map

	national monument boundary
	camp boundary from <i>Waipahu at War</i> (Lodge 1946)
	compound boundary from US Army blueprints
	building on 1936 USGS map
	building or structure on US Army blueprints
	building or structure from historic photographs
	guard tower from historic photographs
	building on 1943 USGS map
	tent on US Army blueprint
	tent from historic photographs
	fence from historic photographs
	sewer line from US Army blueprints
	road on US Army blueprints
	road from historic photographs and 1943 USGS map
	fence on 1943 USGS map
	fence on 1943 and 1936 USGS map
	fence on 1936 USGS map
	stream
	ditch, inverted siphon, or water tunnel

D - dispensary, L - laundry, MH - mess hall





Honouliuli

U.S. Army Blueprints

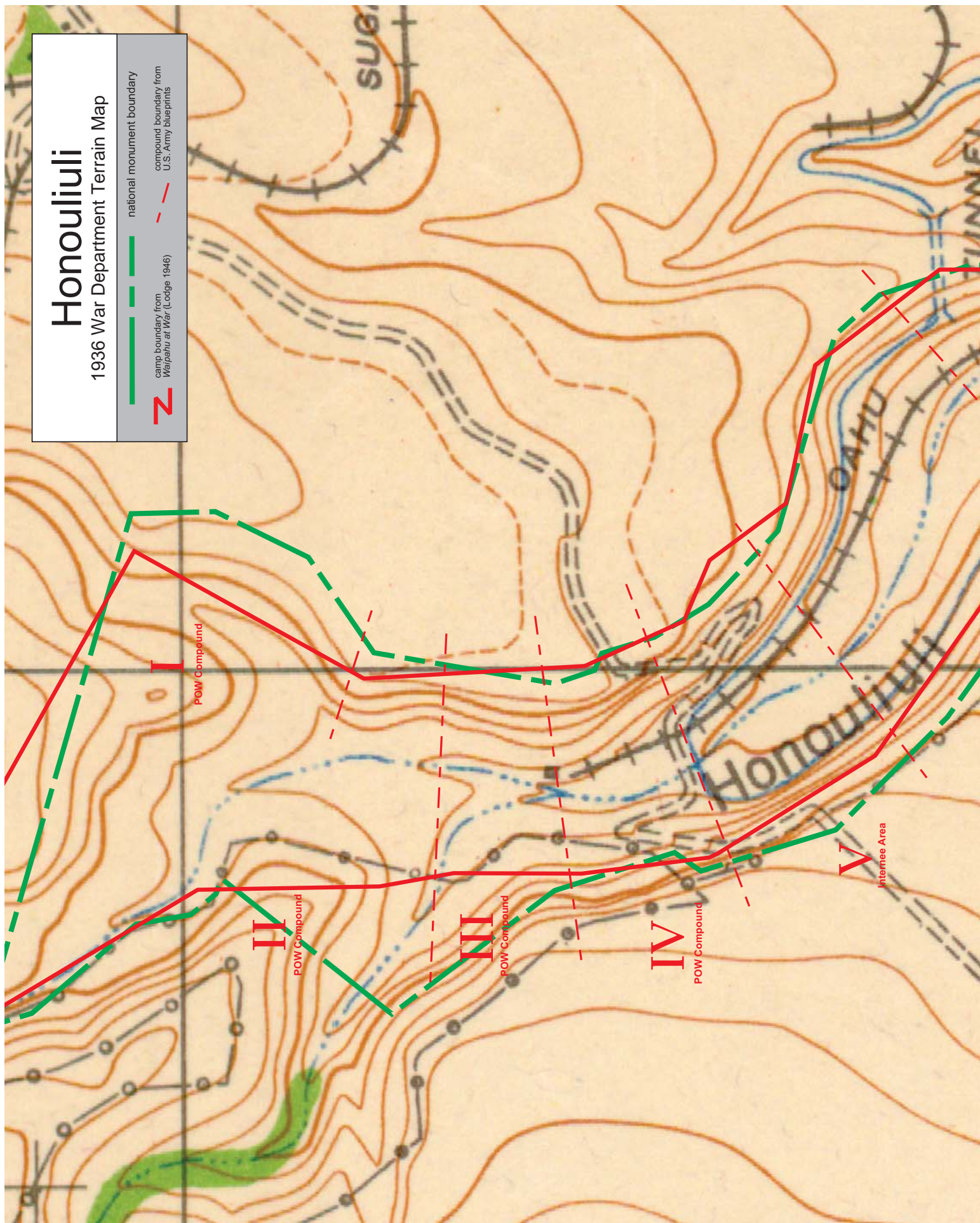
camp boundary from
Waipahu at War (Lodge 1946)

national monument boundary

compound boundary from
US Army blueprints



Figure B.6. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on U.S. Army blueprints.



Honouliuli

1936 War Department Terrain Map

national monument boundary

camp boundary from
Waipahu at War (Lodge 1946)

compound boundary from
U.S. Army blueprints

I
POW Compound

II

POW Compound

III

POW Compound

IV

POW Compound

V

Internment Area

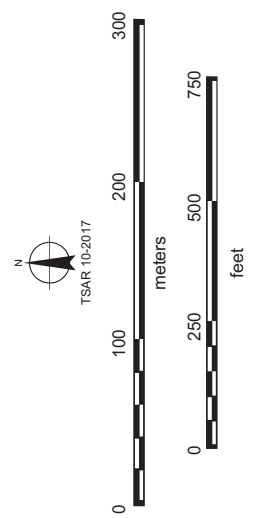
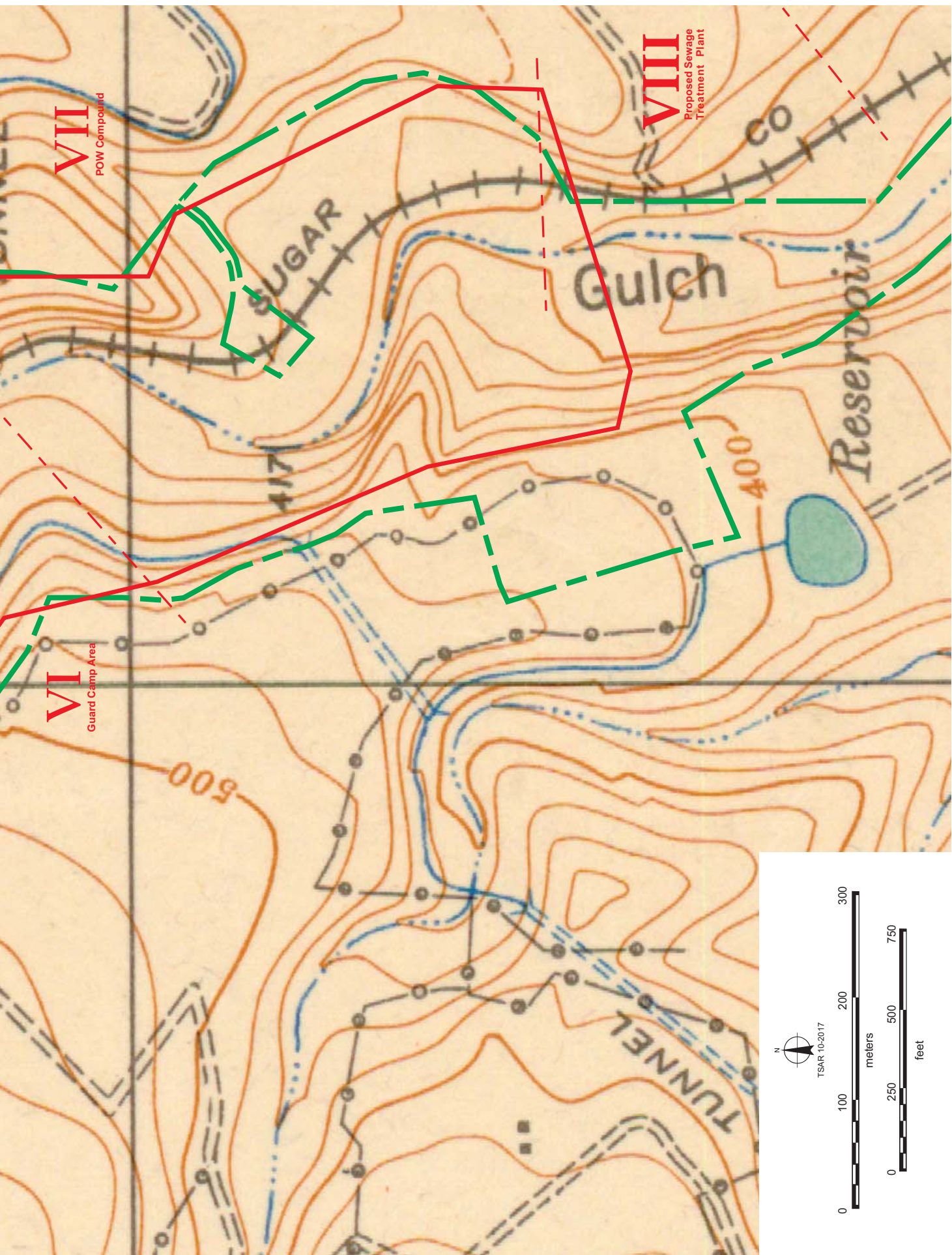
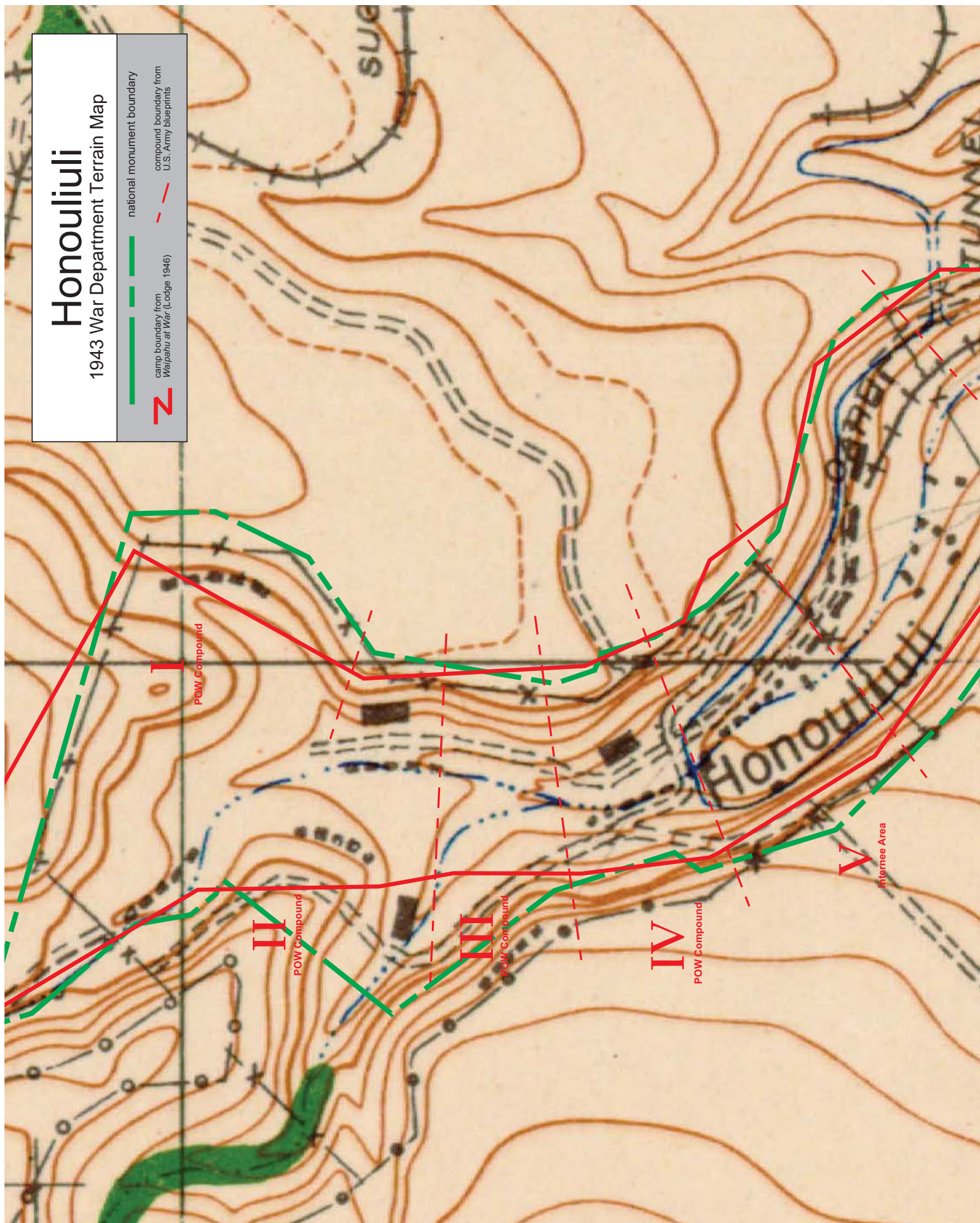


Figure B.7. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blue-prints superimposed on 1936 War Department terrain map.



Honouliuli

1943 War Department Terrain Map

national monument boundary

camp boundary from
Waipahu at War (Lodge 1946)

compound boundary from
U.S. Army blueprints

POW Compound

II

POW Compound

III

POW Compound

IV

POW Compound

Internment Area

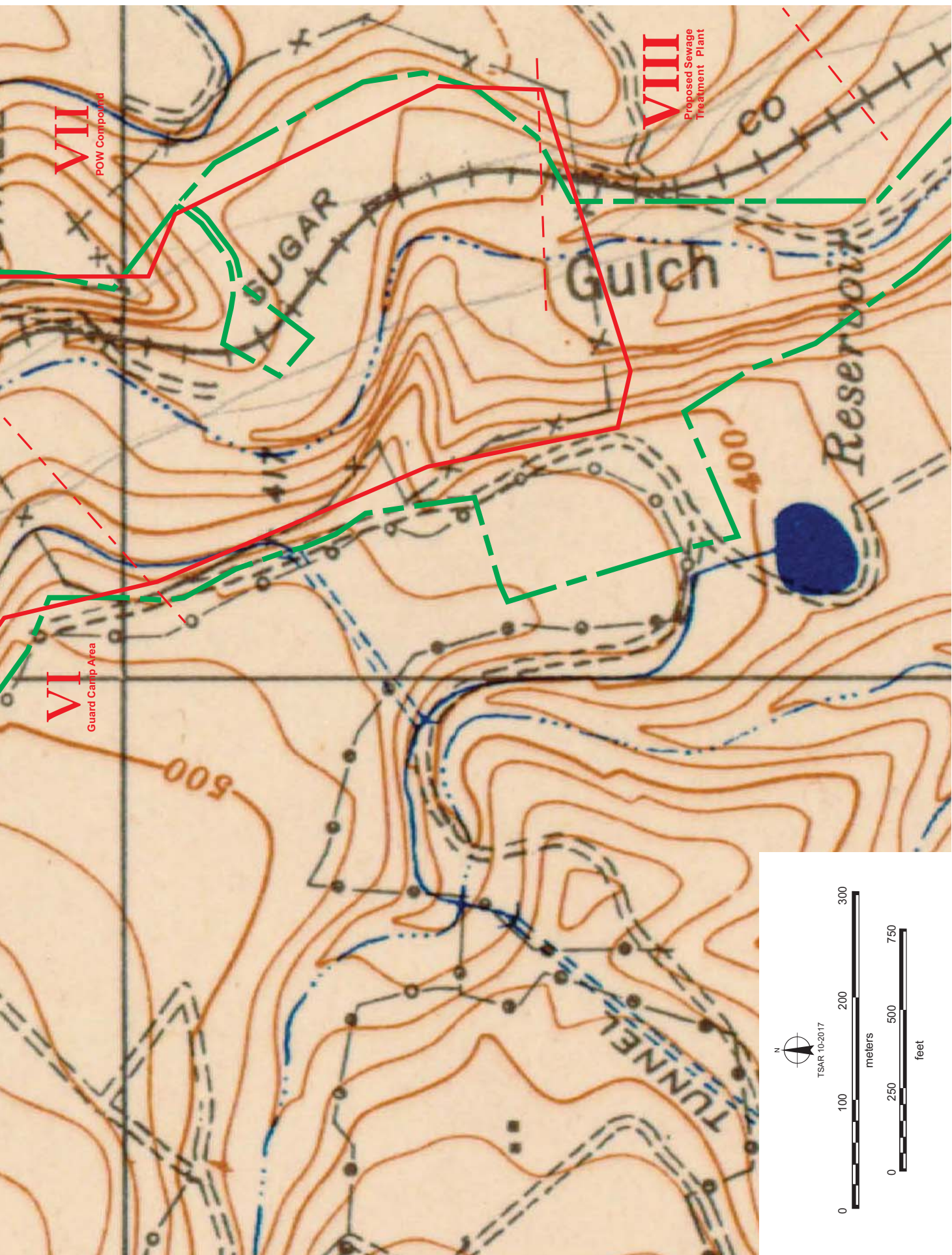
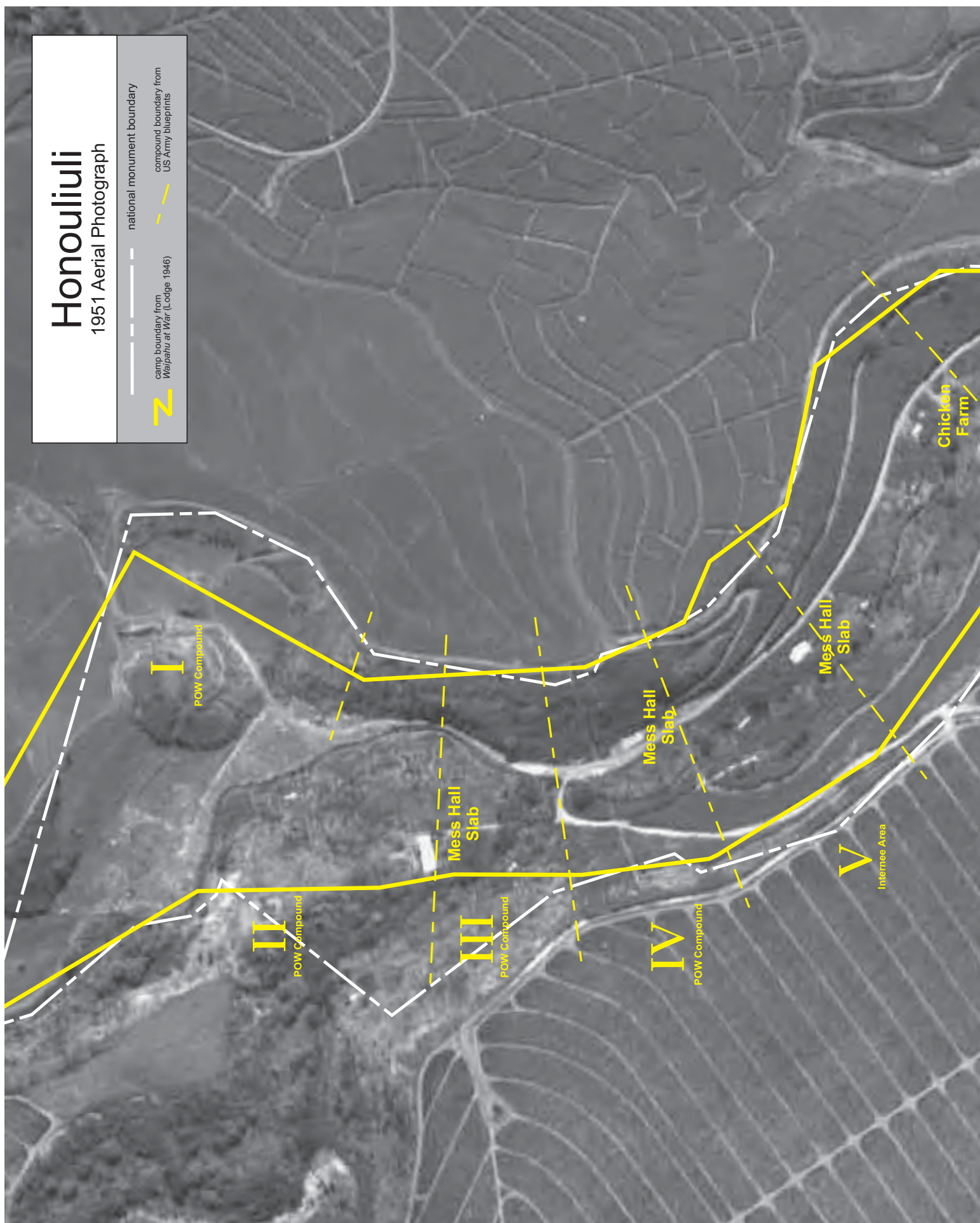


Figure B.8. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1943 War Department terrain map.

Honouliuli

1951 Aerial Photograph

 national monument boundary
 camp boundary from Waipahu at War (Lodge 1946)
 compound boundary from US Army blueprints



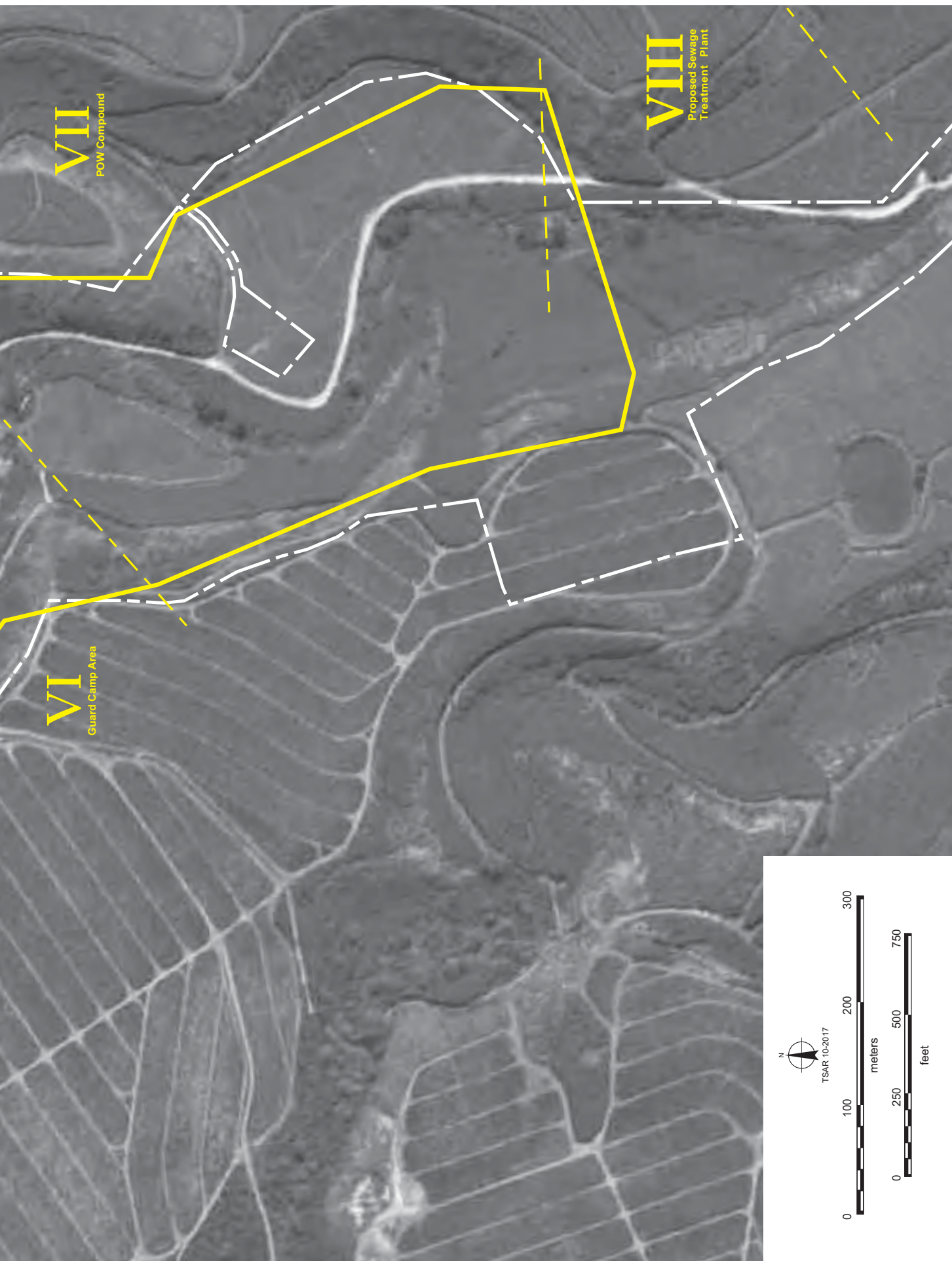


Figure B.9. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1951 USGS aerial photograph.

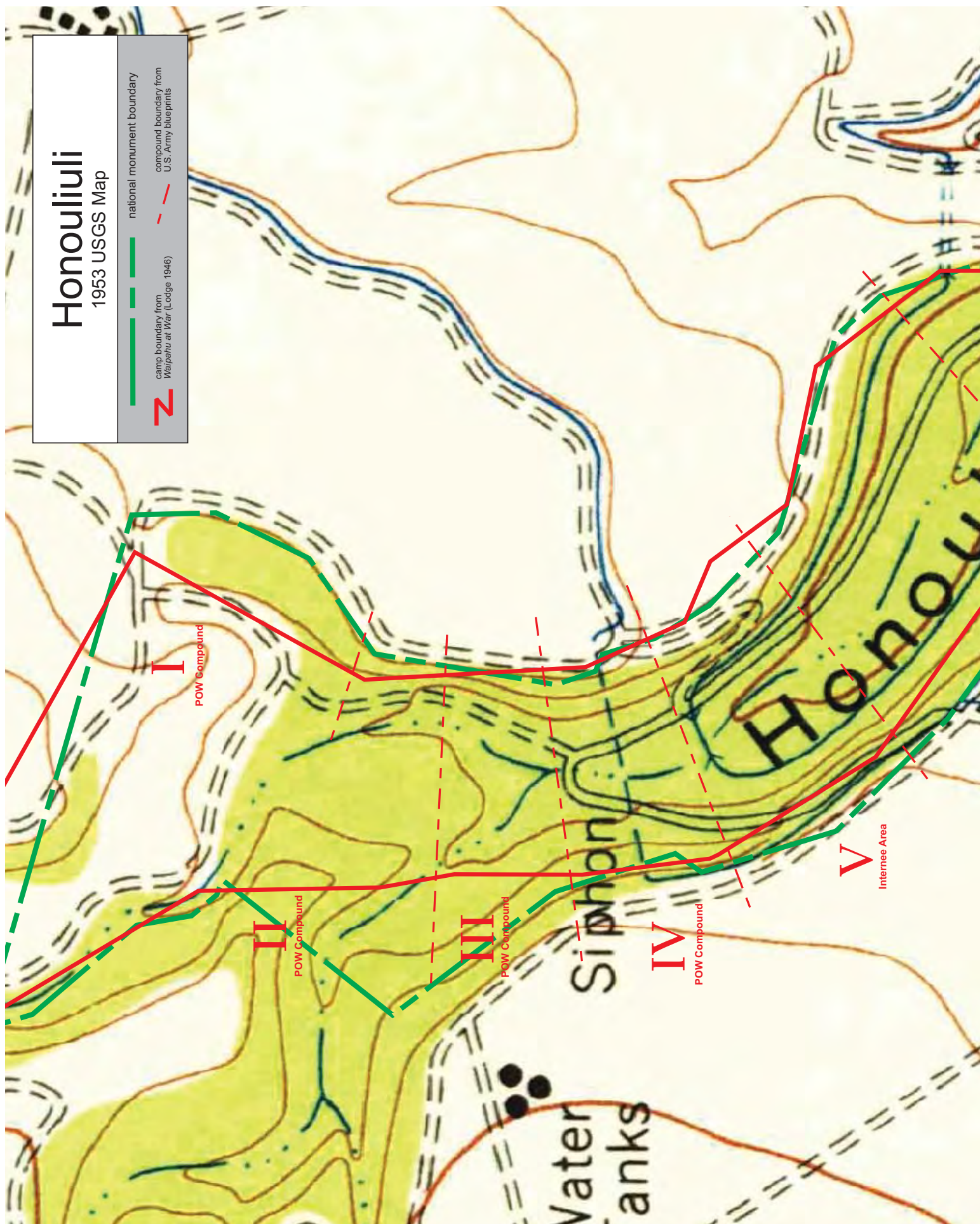




Figure B.10. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1953 USGS topographic map.



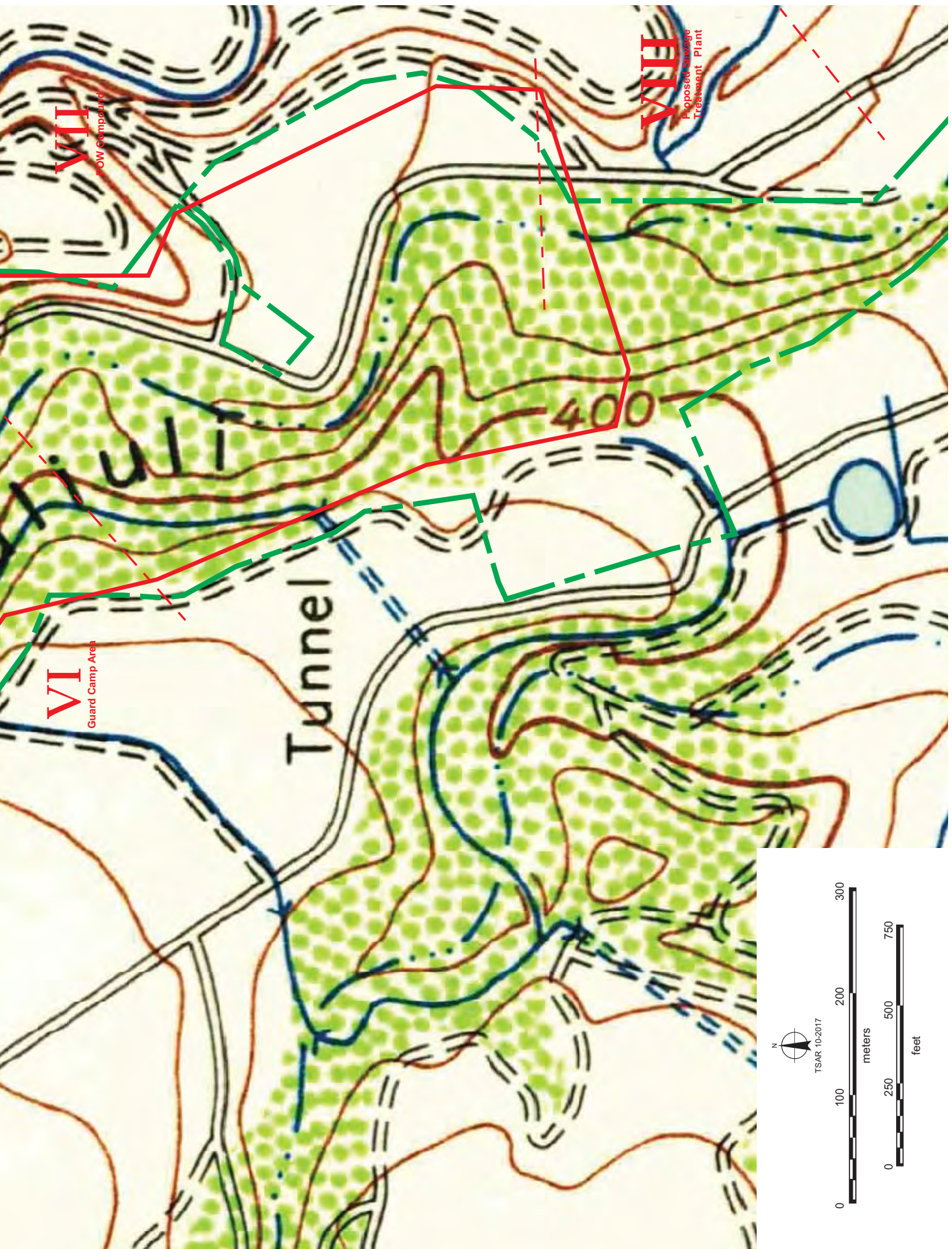
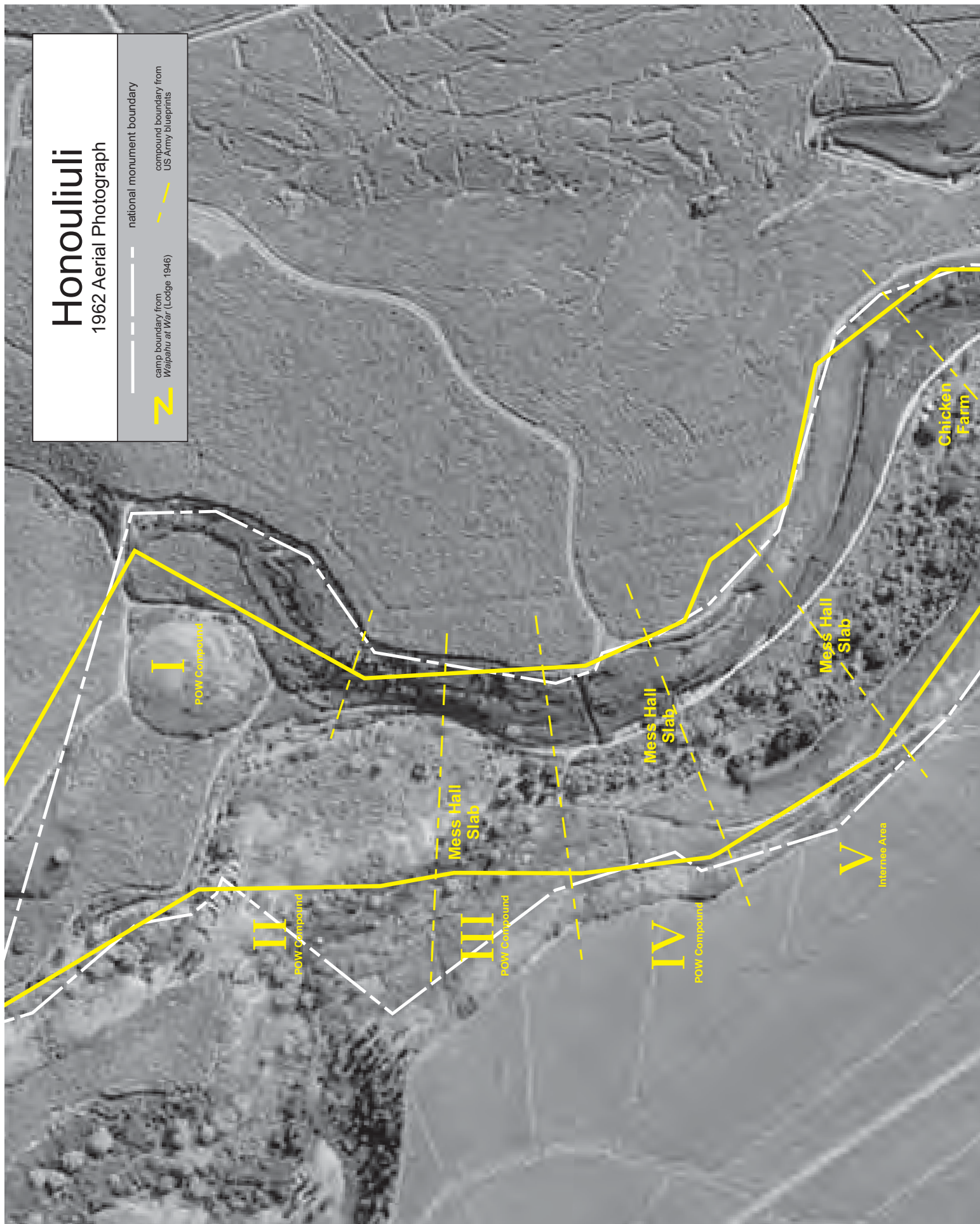


Figure B.11. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1960 USGS topographic map.



Honouliuli

1962 Aerial Photograph

camp boundary from
Walpanu at War (Lodge 1946)

national monument boundary

compound boundary from
US Army blueprints

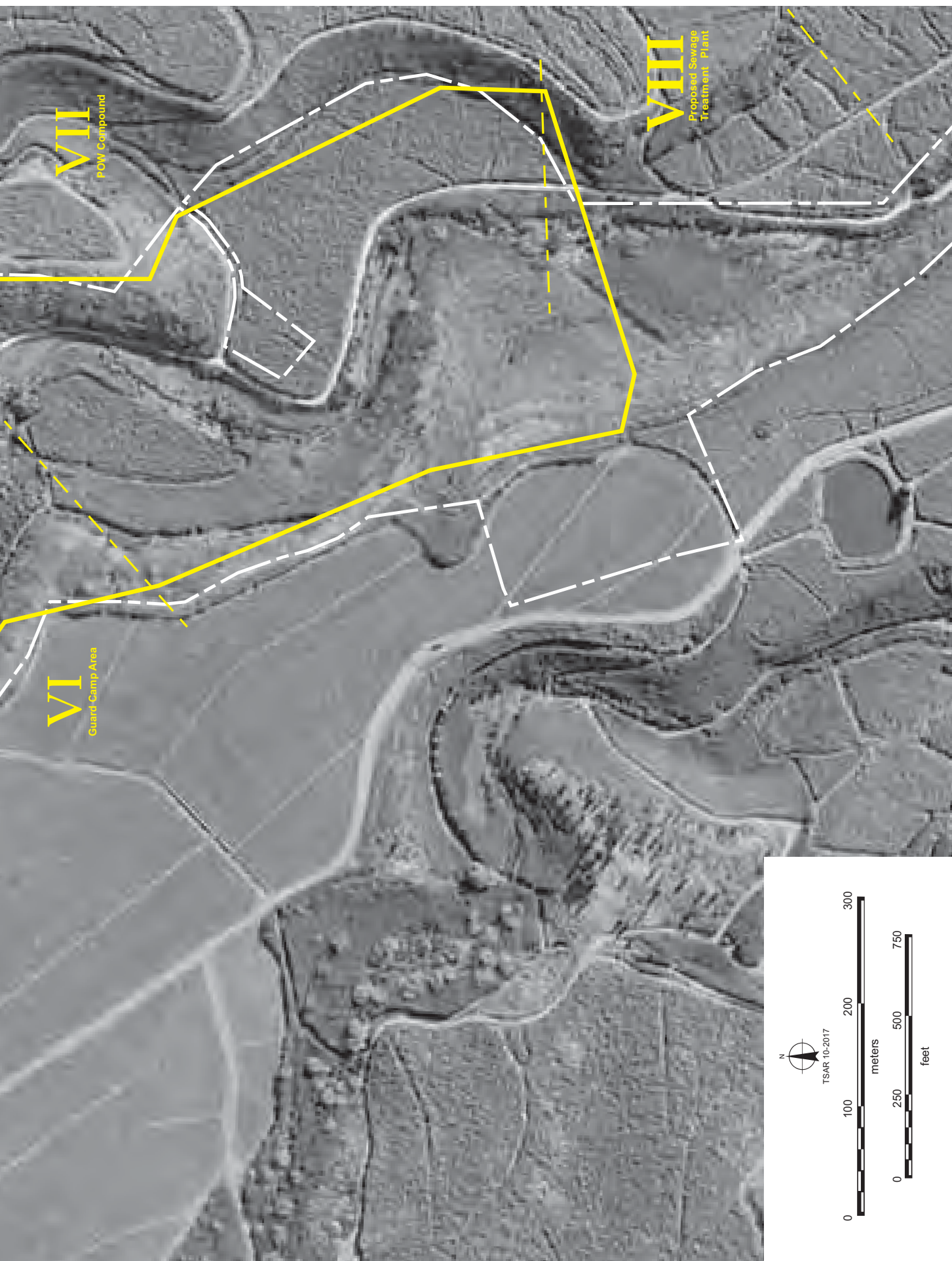


Figure B.12. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blue-prints superimposed on 1962 USGS aerial photograph.

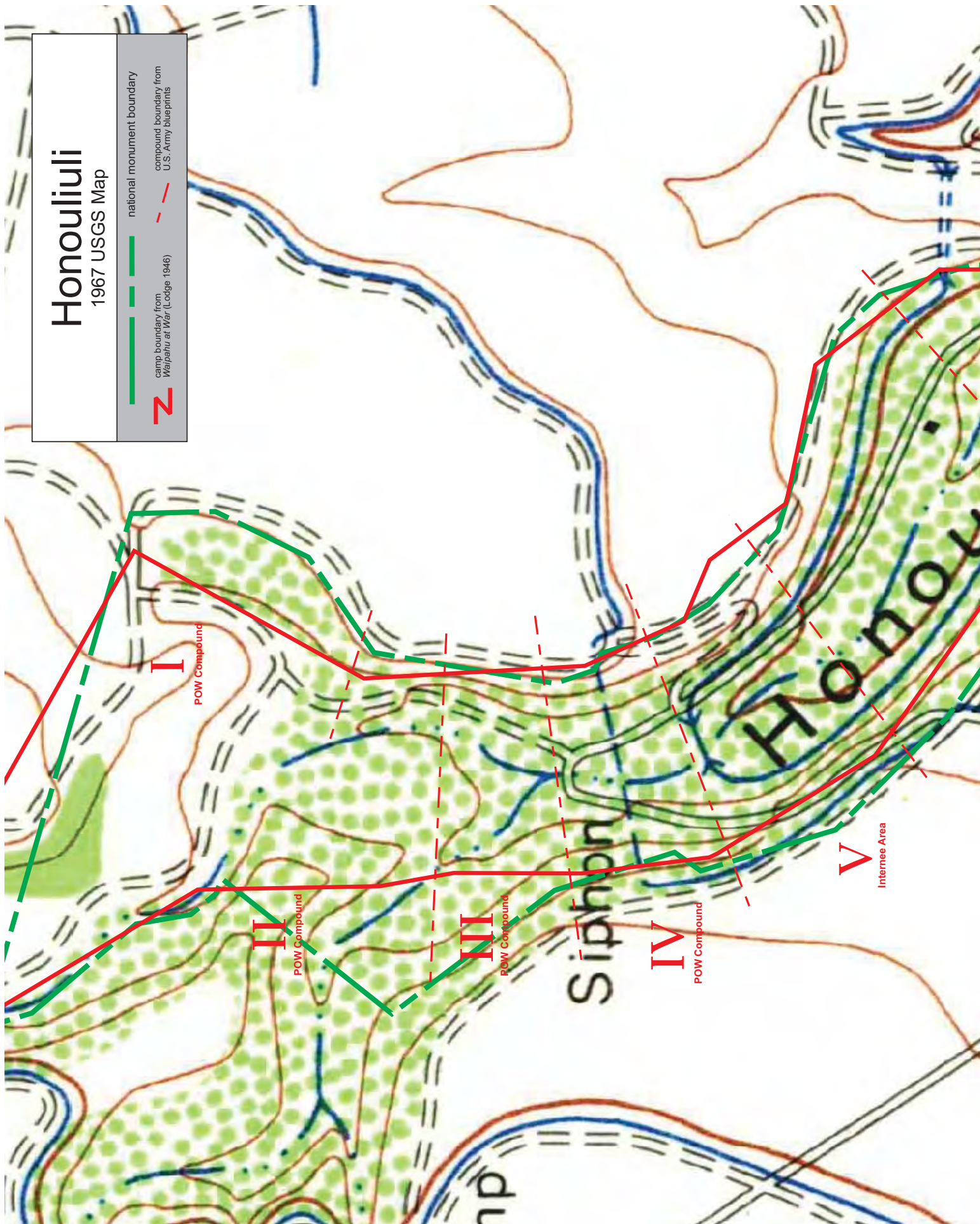




Figure B.13. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blue-prints superimposed on 1967 USGS topographic map.

Honouliuli

1977 Aerial Photograph

 national monument boundary
 camp boundary from Waipahu at War (Lodge 1946)
 compound boundary from US Army blueprints

I
POW Compound

II
POW Compound

Mess Hall
Slab

III
POW Compound

Mess Hall
Slab

IV
POW Compound

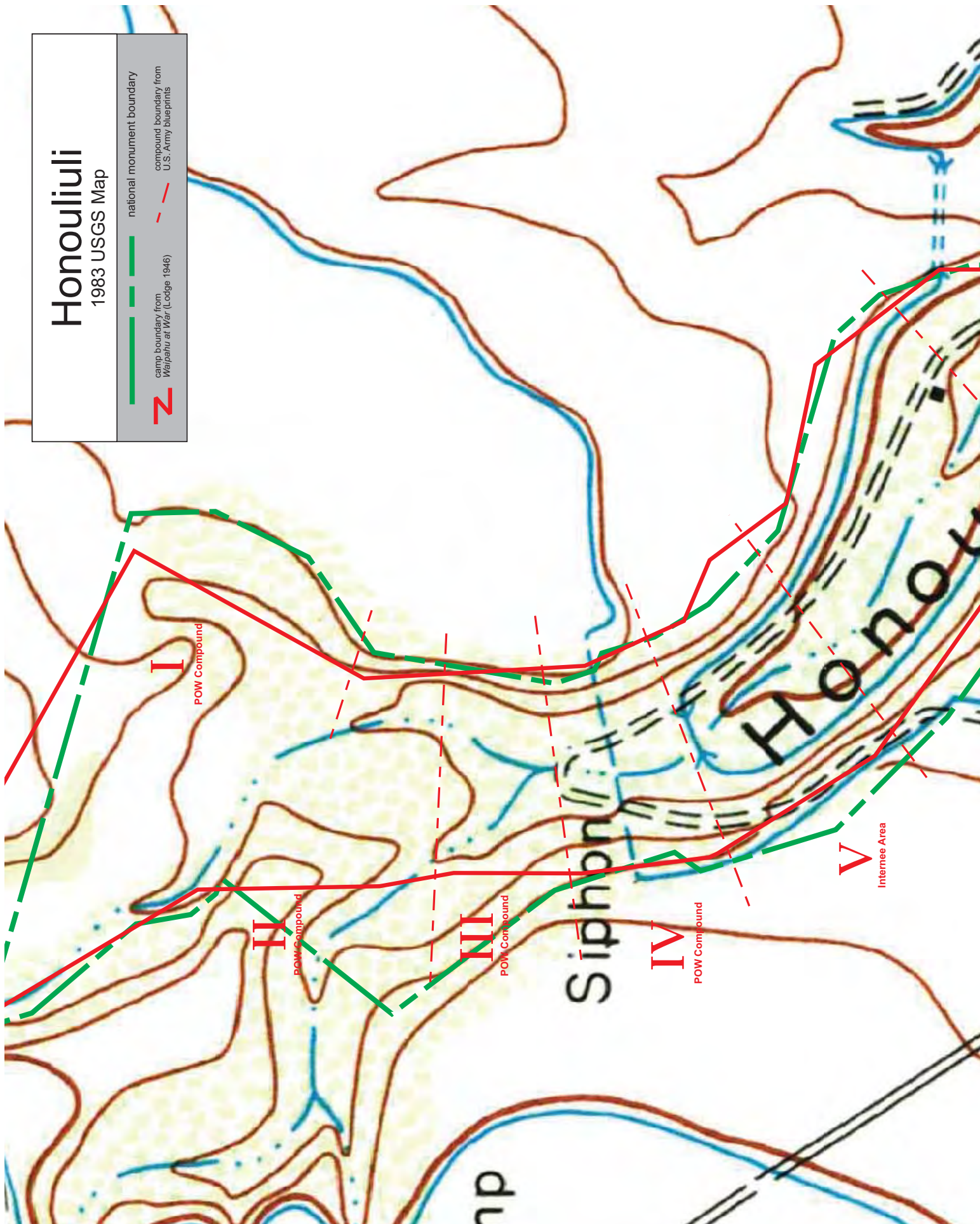
Mess Hall
Slab

V
Internee Area

Chicken
Farm



Figure B.14. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1977 USGS aerial photograph.



Honouliuli

1983 USGS Map

camp boundary from
Waipahu at War (Lodge 1946)

national monument boundary

compound boundary from
U.S. Army blueprints

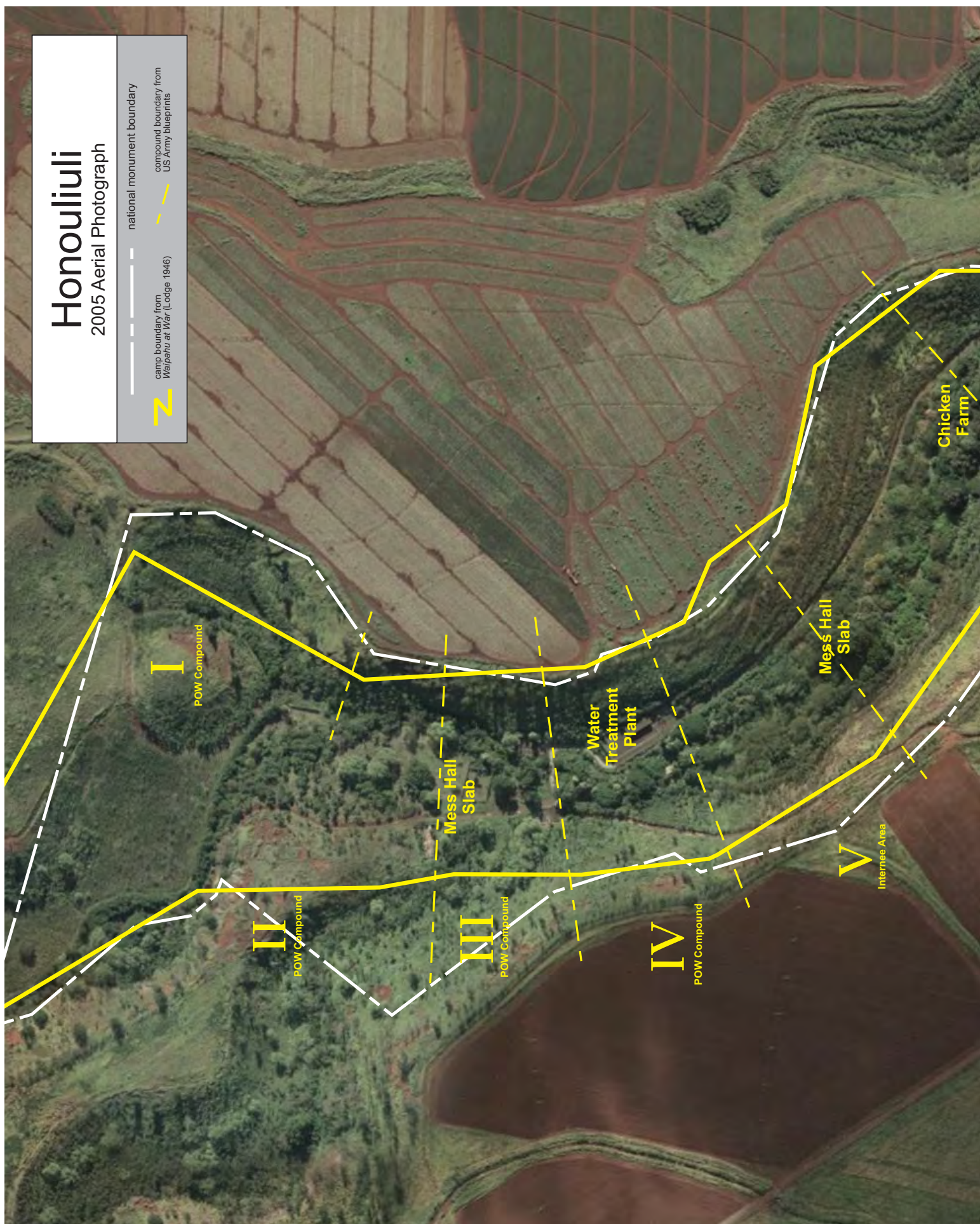


Figure B.15. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 1983 USGS topographic map.

Honouliuli

2005 Aerial Photograph

 camp boundary from Waipahu at War (Lodge 1946)
 national monument boundary
 compound boundary from US Army blueprints



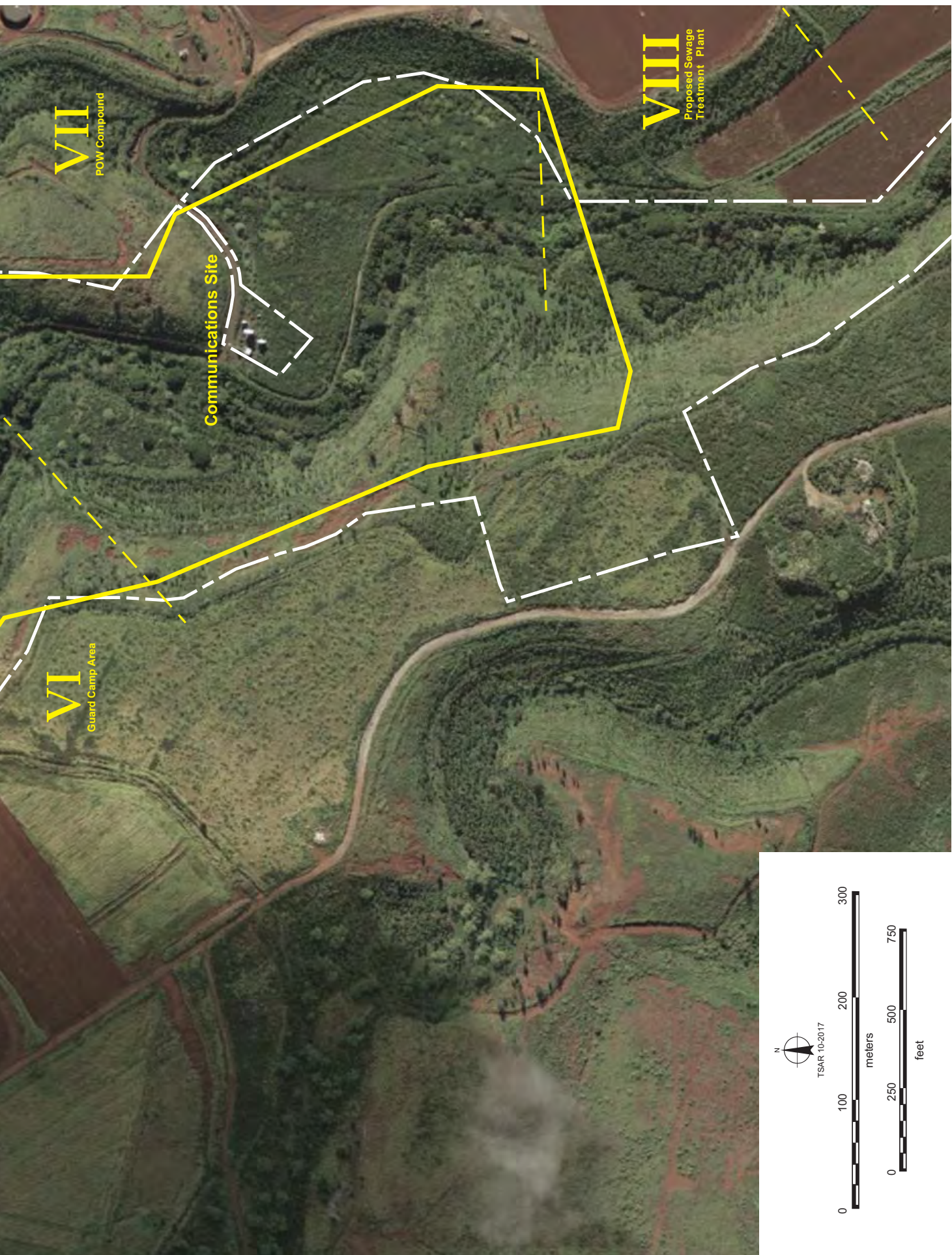


Figure B.17. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blue-prints superimposed on 2005 Google Earth aerial photograph.

Honouliuli

2013 Aerial Photograph

 camp boundary from
Waipahu at War (Lodge 1946)

 national monument boundary

 compound boundary from
 US Army blueprints

I
POW Compound

II
POW Compound

Mess Hall
Slab

III
POW Compound

Water
Treatment
Plant

IV
POW Compound

Mess Hall
Slab

V
Internee Area

Chicken
Farm

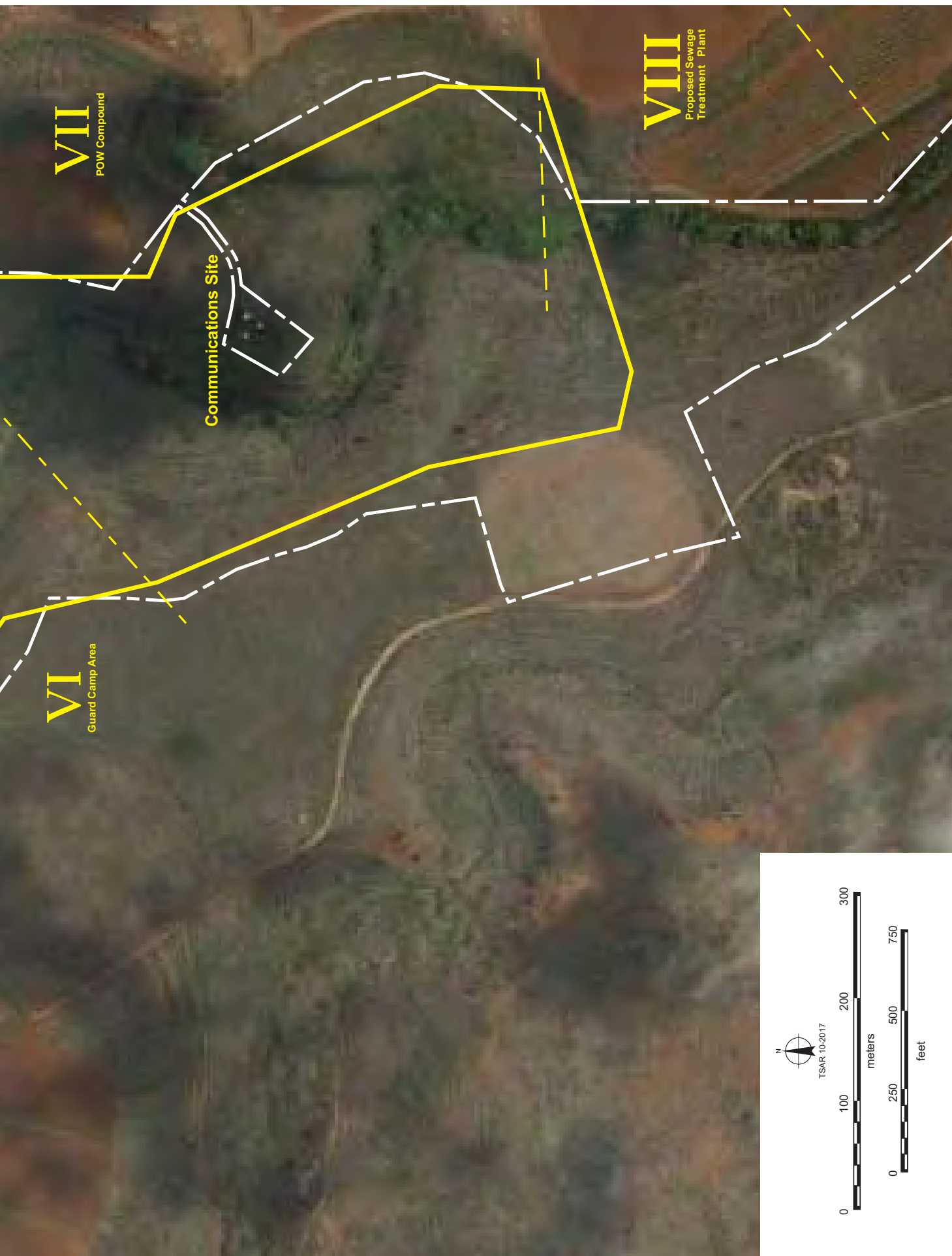
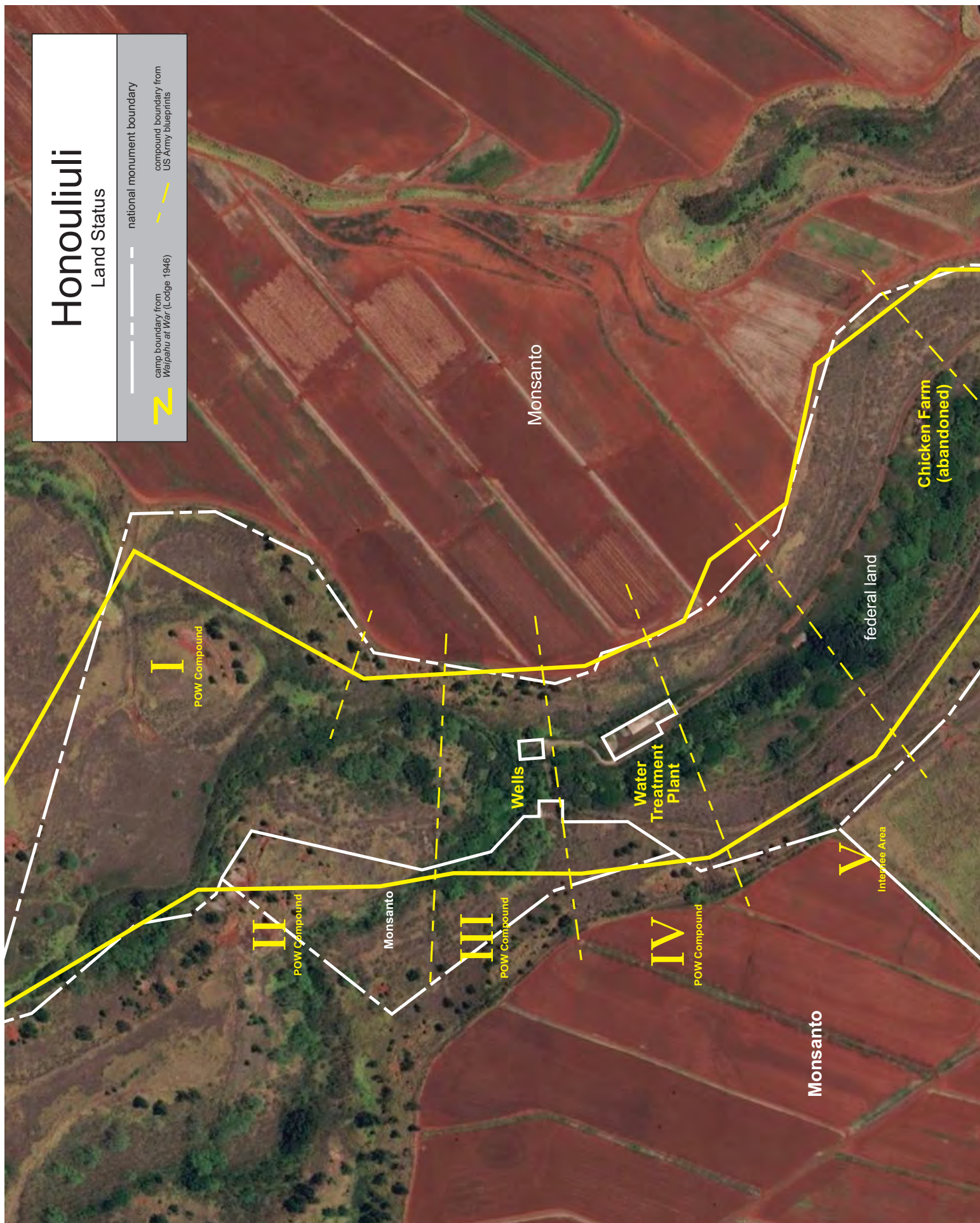


Figure B.16. Honouliuli National Monument boundary, camp boundary as depicted in *Waipahu at War*, and compound boundaries as depicted on U.S. Army blueprints superimposed on 2013 Google Earth aerial photograph.



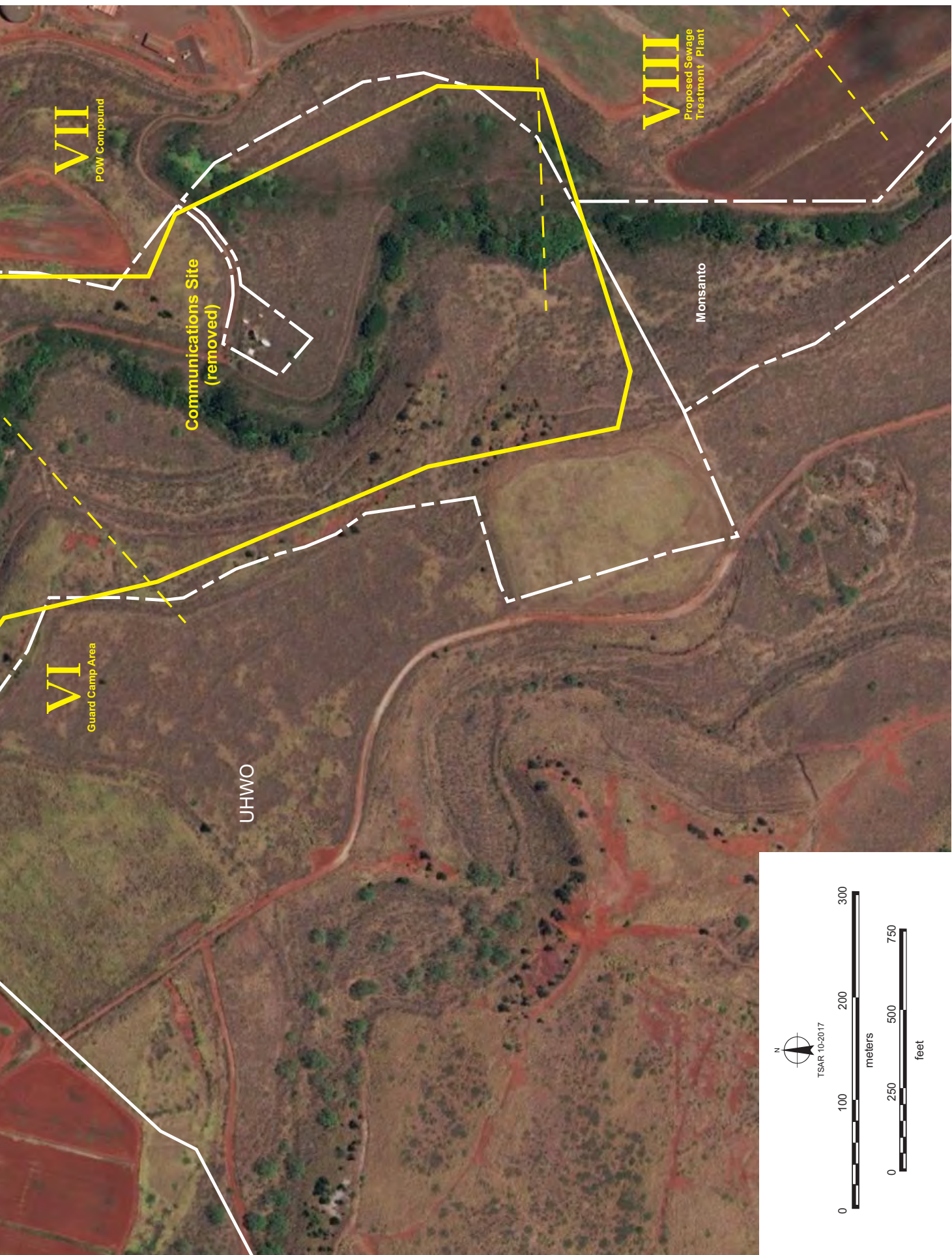


Figure B.18. Honouliuli land status superimposed on 2016 DigitalGlobe aerial photograph.



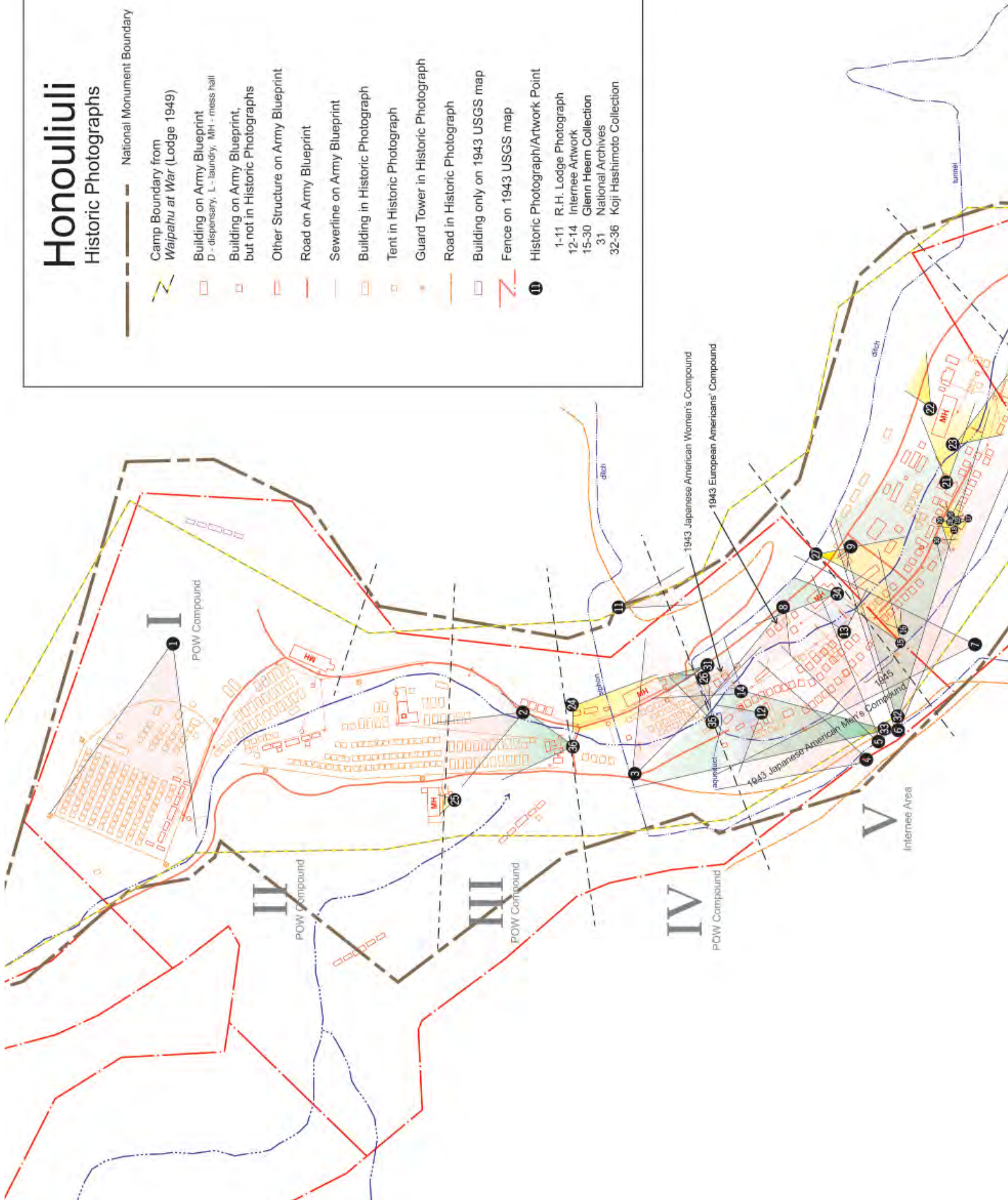
Appendix C

Historic Photographs

Honouliuli Historic Photographs

National Monument Boundary

-  Camp Boundary from *Waipahu at War* (Lodge 1949)
-  Building on Army Blueprint
D - dispensary, L - laundry, MH - mess hall
-  Building on Army Blueprint, but not in Historic Photographs
-  Other Structure on Army Blueprint
-  Road on Army Blueprint
-  Sewerline on Army Blueprint
-  Building in Historic Photograph
-  Tent in Historic Photograph
-  Guard Tower in Historic Photograph
-  Road in Historic Photograph
-  Building only on 1943 USGS map
-  Fence on 1943 USGS map
-  Historic Photograph/Artwork Point
1-11 R.H. Lodge Photograph
12-14 Internee Artwork
15-30 Glenn Heem Collection
31 National Archives
32-36 Koji Hashimoto Collection



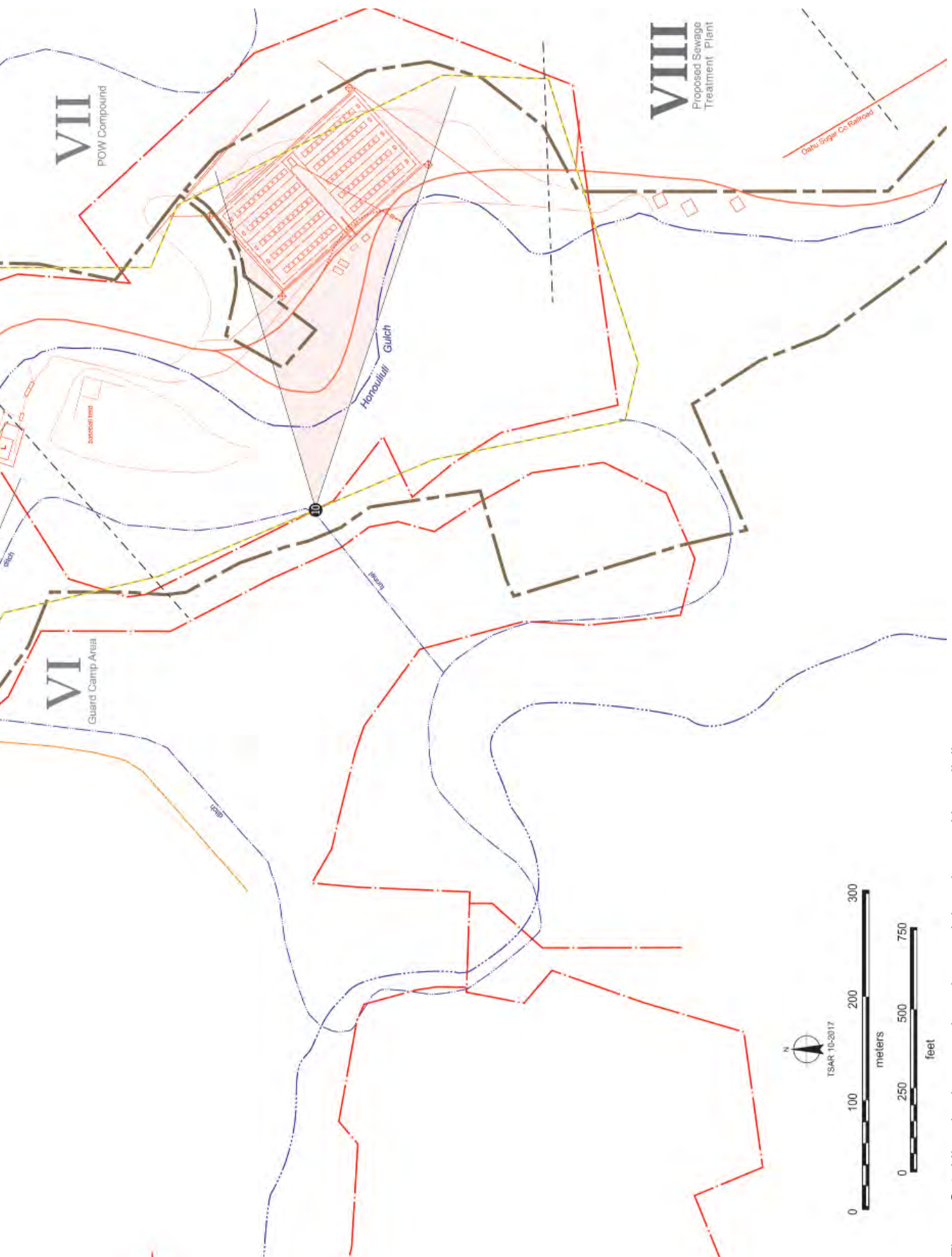


Figure C.1. Historic photograph and artwork locations at Honouliuli.

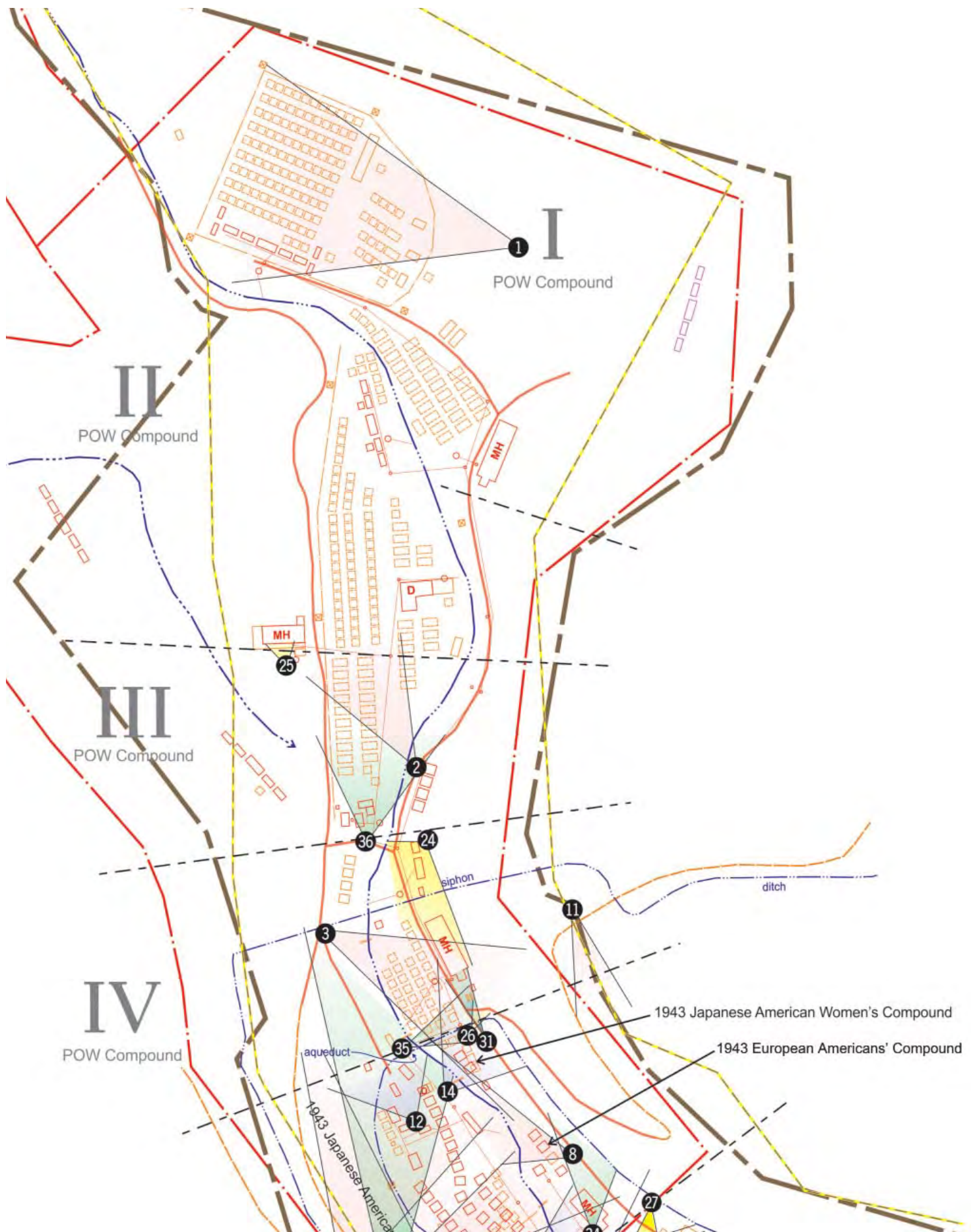


Figure C.2. Historic photograph and artwork locations, Compounds I, II, III, and IV.

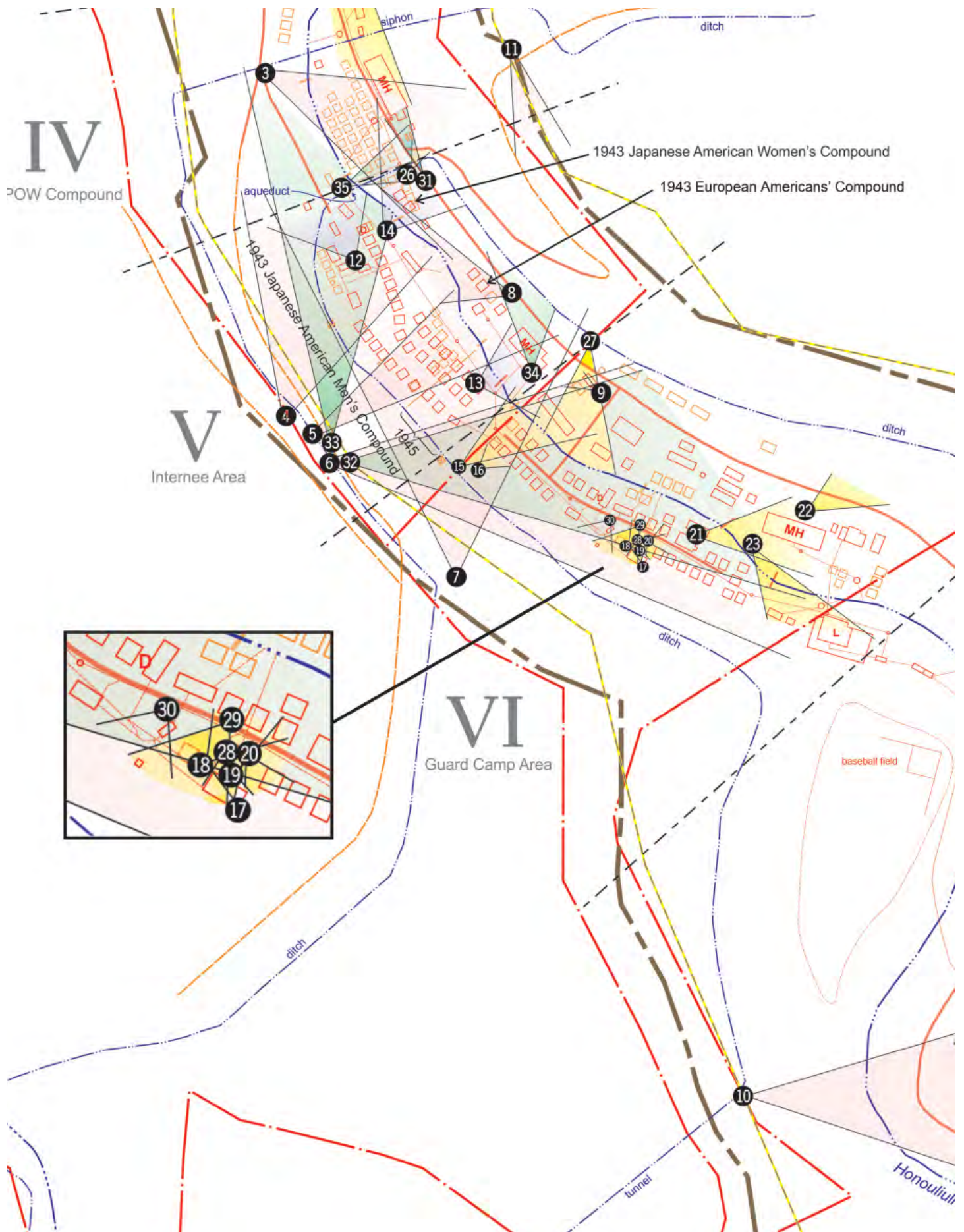


Figure C.3. Historic photograph and artwork locations, Compounds V and VI.

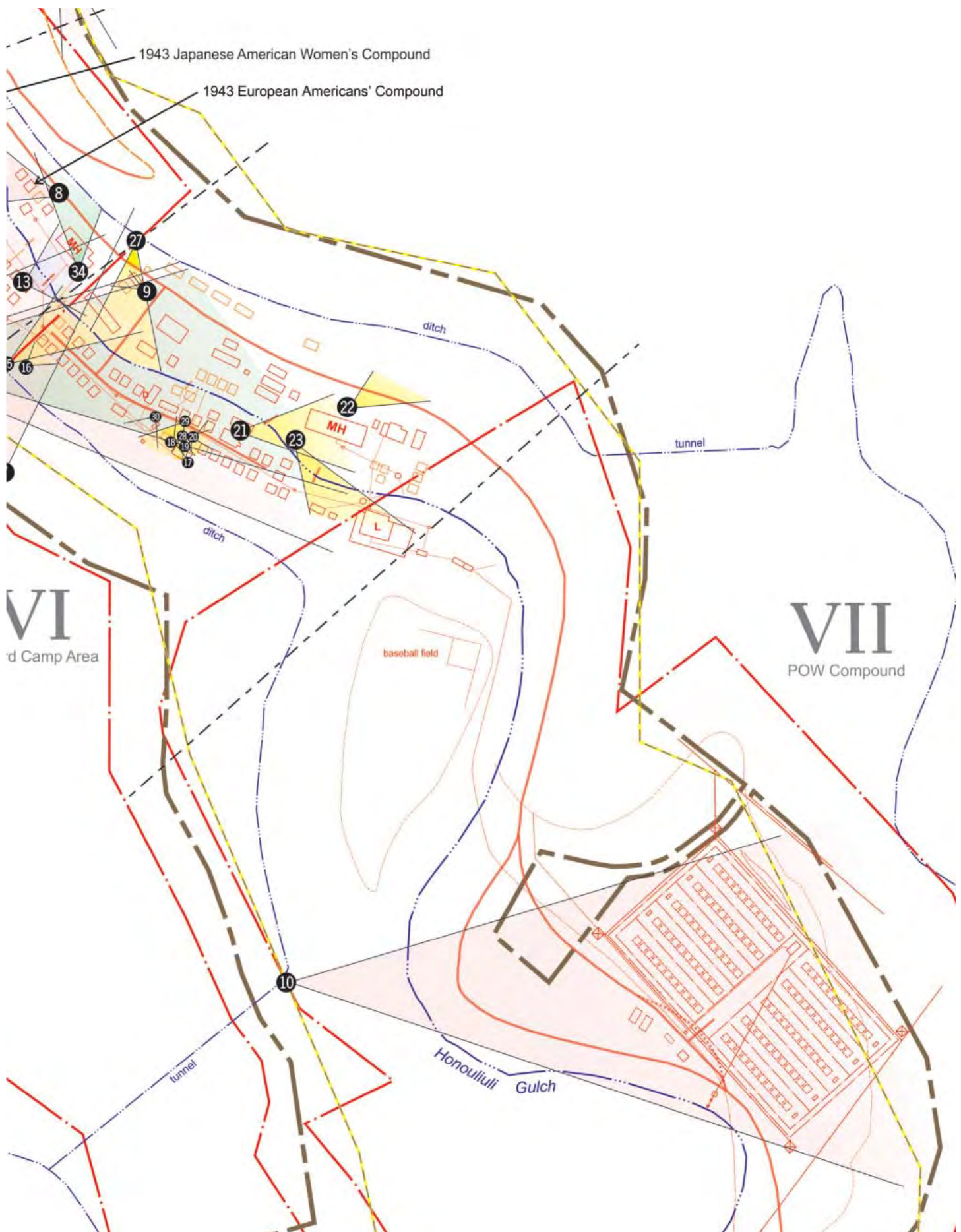


Figure C.4. Historic photograph and artwork locations, Compound VII.



Figure C.5. Lodge photograph location 1.



Figure C.6. Lodge photograph location 2.



Figure C.7. Lodge photograph location 3.



Figure C.8. Lodge photograph location 4.

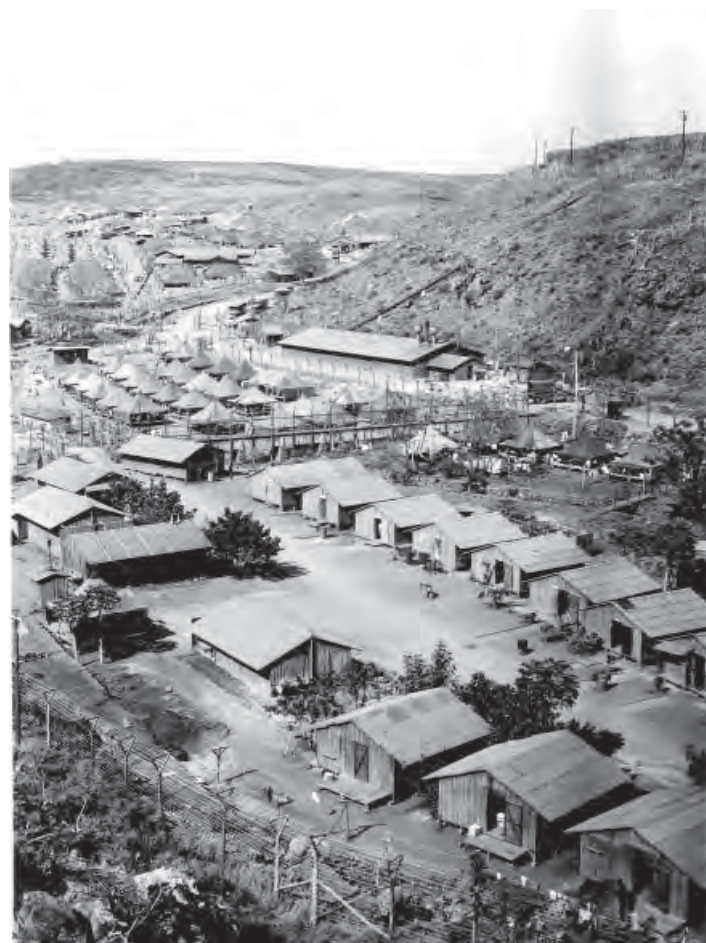


Figure C.9. Lodge photograph location 4.



Figure C.10. Lodge photograph location 5.



Figure C.11. Lodge photograph location 6.



Figure C.12. Lodge photograph location 6.



Figure C.13. Lodge photograph location 7.



Figure C.14. Lodge photograph location 8.



Figure C.15. Lodge photograph location 8.



Figure C.16. Lodge photograph location 9.



Figure C.17. Lodge photograph location 10.



Figure C.18. Lodge photograph location 11.



Figure C.19. Lodge photograph location unknown.



Figure C.20. Lodge photograph location unknown.



Figure C.21. Lodge photograph location unknown.



Figure C.22. Lodge photograph location unknown.



Figure C.23. Lodge photograph location unknown.



Figure C.24. Nishikawa artwork location 12.



Figure C.26. Nishikawa artwork location 14.



Figure C.25. Nishikawa artwork location 13.



Figure C.28. Nishikawa artwork location unknown.



Figure C.27. Nishikawa artwork internee mess hall interior.



Figure C.29. Heern photograph location 15.



Figure C.30. Heern photograph location 16.



Figure C.31. Heern photograph location 16.



Figure C.32. Heern photograph location 16.



Figure C.33. Heern photograph location 16.



Figure C.34. Heern photograph location 16.



Figure C.35. Heern photograph location 17.



Figure C.36. Heern photograph location 17.



Figure C.37. Heern photograph location 17.



Figure C.38. Heern photograph location 17.



Figure C.39. Heern photograph location 17.



Figure C.40. Heern photograph location 17.



Figure C.41. Heern photograph location 17.



Figure C.42. Heern photograph location 17.



Figure C.43. Heern photograph location 17.



Figure C.44. Heern photograph location 17.



Figure C.45. Heern photograph location 18.



Figure C.46. Heern photograph location 18.



Figure C.47. Heern photograph location 18.



Figure C.48. Heern photograph location 18.



Figure C.49. Heern photograph location 18.



Figure C.50. Heern photograph location 18.



Figure C.51. Heern photograph location 18.



Figure C.52. Heern photograph location 18.



Figure C.53. Heern photograph location 18.



Figure C.54. Heern photograph location 18.



Figure C.55. Heern photograph location 18.



Figure C.56. Heern photograph location 18.



Figure C.57. Heern photograph location 18.



Figure C.58. Heern photograph location 18.



Figure C.59. Heern photograph location 18.



Figure C.60. Heern photograph location 18.



Figure C.61. Heern photograph location 18.



Figure C.62. Heern photograph location 18.



Figure C.63. Heern photograph location 18.



Figure C.64. Heern photograph location 18.



Figure C.65. Heern photograph location 18.



Figure C.66. Heern photograph location 18.



Figure C.67. Heern photograph location 18.



Figure C.68. Heern photograph location 18.



Figure C.69. Heern photograph location 19.



Figure C.70. Heern photograph location 20.



Figure C.71. Heern photograph location 21,



Figure C.72. Heern photograph location 22.



Figure C.73. Heern photograph location 22.



Figure C.74. Heern photograph location 22.



Figure C.75. Heern photograph location 23.



Figure C.77. Heern photograph location 24.



Figure C.78. Heern photograph location 24.



Figure C.76. Heern photograph location 24.

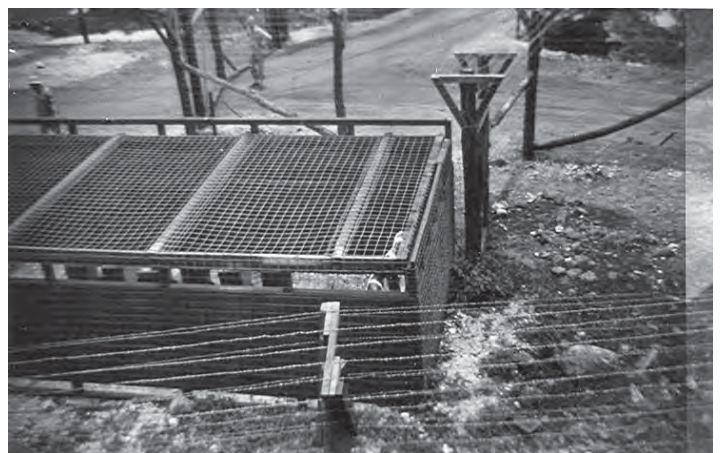


Figure C.79. Heern photograph location 24.



Figure C.80. Heern photograph location 25.



Figure C.81. Heern photograph location 26.



Figure C.82. Heern photograph location 27.

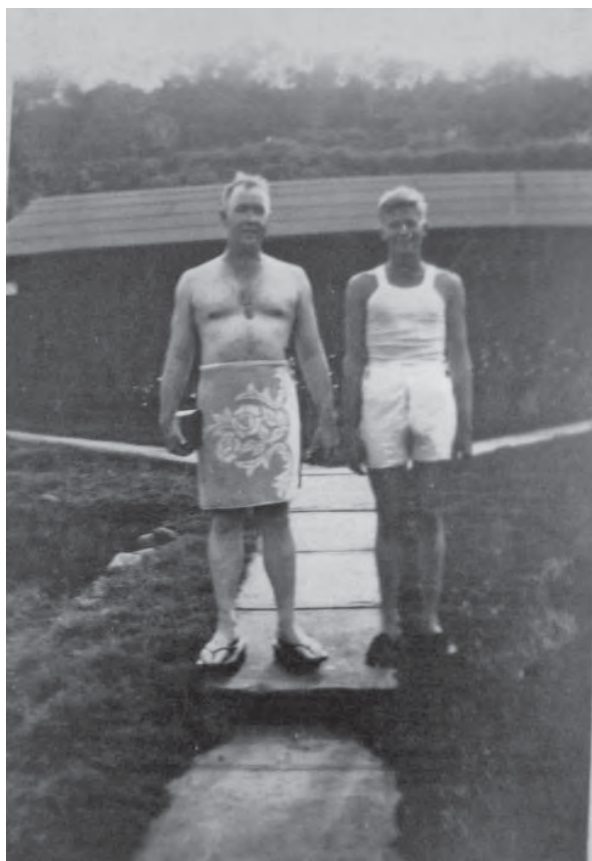


Figure C.83. Heern photograph location 28.



Figure C.84. Heern photograph location 29.



Figure C.85. Heern photograph location 29.



Figure C.86. Heern photograph location 30.



Figure C.87. Heern photograph location unknown.



Figure C.88. Heern photograph location unknown.



Figure C.89. Heern photograph location unknown.



Figure C.90. Heern photograph location unknown.

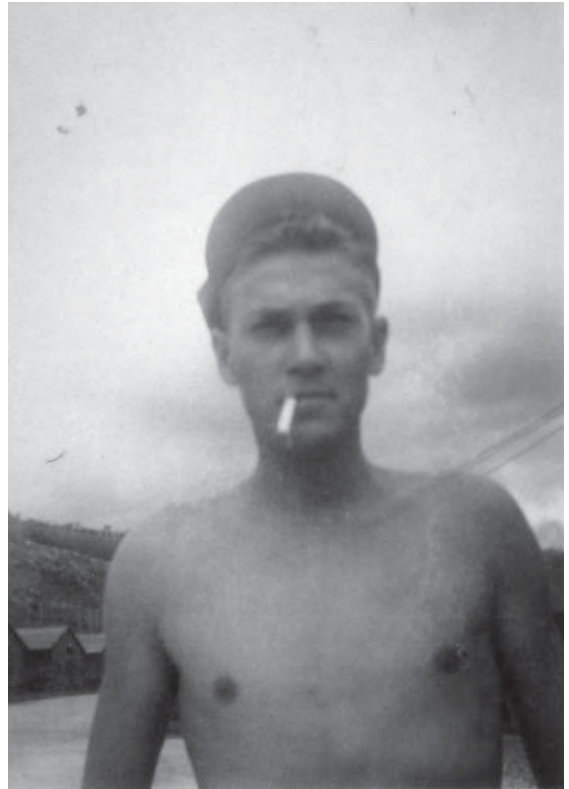


Figure C.91. Heern photograph location unknown.



Figure C.92. Heern photograph location unknown.



Figure C.93. Heern photograph location unknown.



Figure C.94. Heern photograph location unknown.

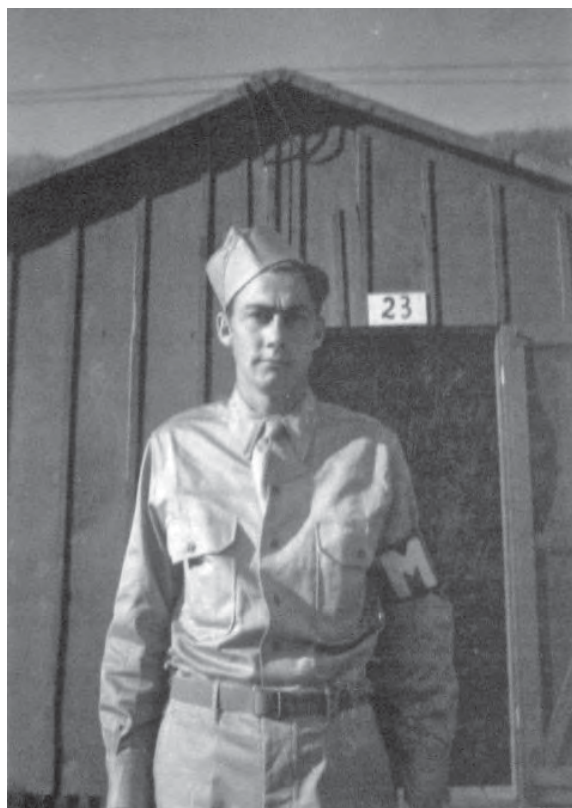


Figure C.95. Heern photograph location unknown.



Figure C.96. Heern photograph location unknown.



Figure C.97. Heern photograph location unknown.



Figure C.98. Heern photograph location unknown.



Figure C.99. Heern photograph location unknown.



Figure C.100. Heern photograph location unknown.



Figure C.101. Heern photograph location unknown.



Figure C.102. Heern photograph location unknown.



Figure C.103. Heern photograph location unknown.



Figure C.104. Heern photograph location unknown.



Figure C.105. Heern photograph location unknown.



Figure C.106. Heern photograph location unknown.



Figure C.107. Heern photograph location unknown.



Figure C.108. Heern photograph location unknown.



Figure C.109. Heern photograph location unknown.



Figure C.110. National Archives photograph location 31.



Figure C.111. JCCH photograph unknown location.



Figure C.112. Hashimoto photograph location 32.



Figure C.113. Hashimoto photograph location 33.



Figure C.114. Hashimoto photograph location 33.



Figure C.115. Hashimoto photograph location 34.



Figure C.116. Hashimoto photograph location 35.



Figure C.117. Hashimoto photograph location 36.



Appendix D

Memory Maps

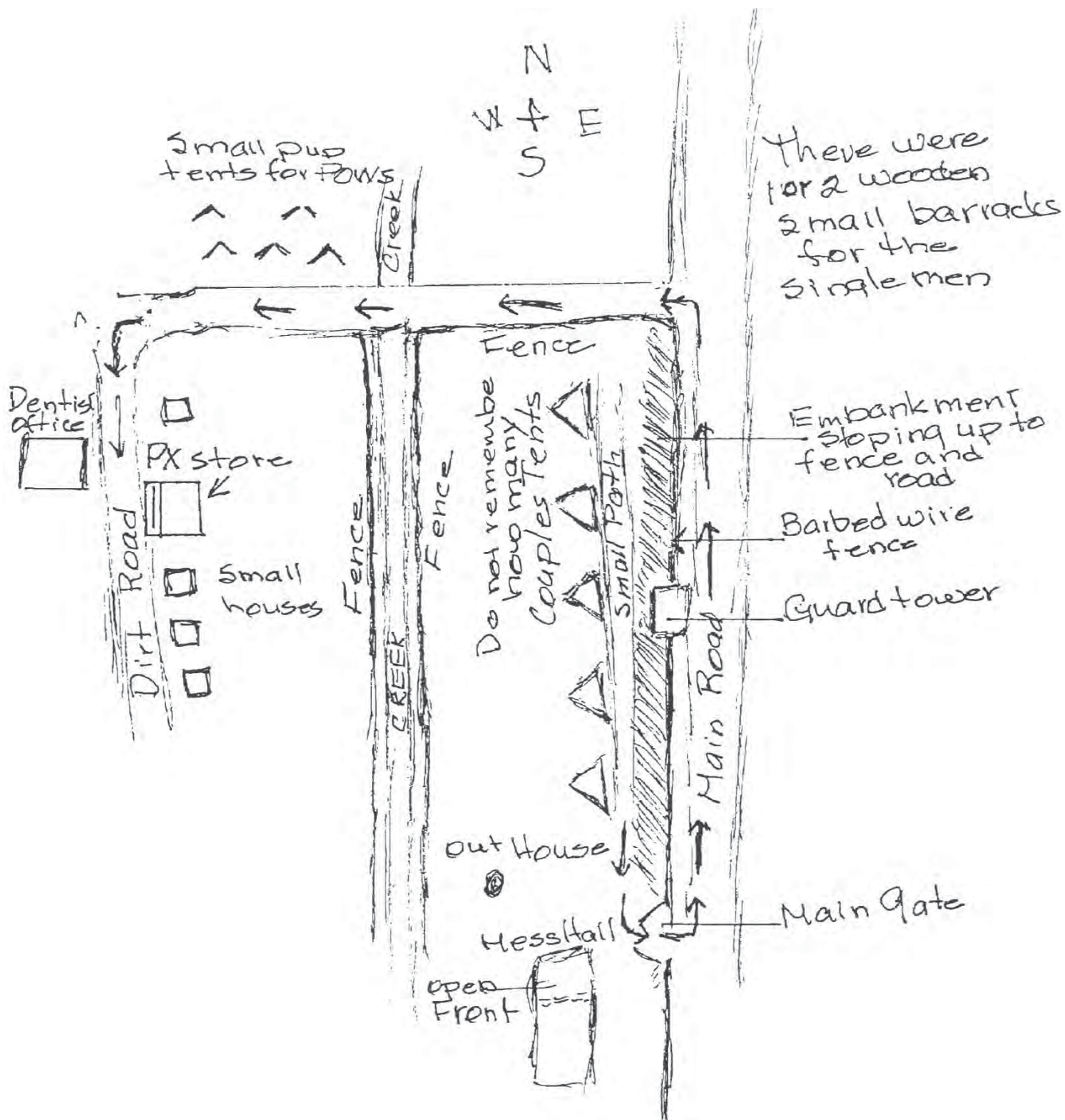


Figure D.1. Doris Nye memory map.

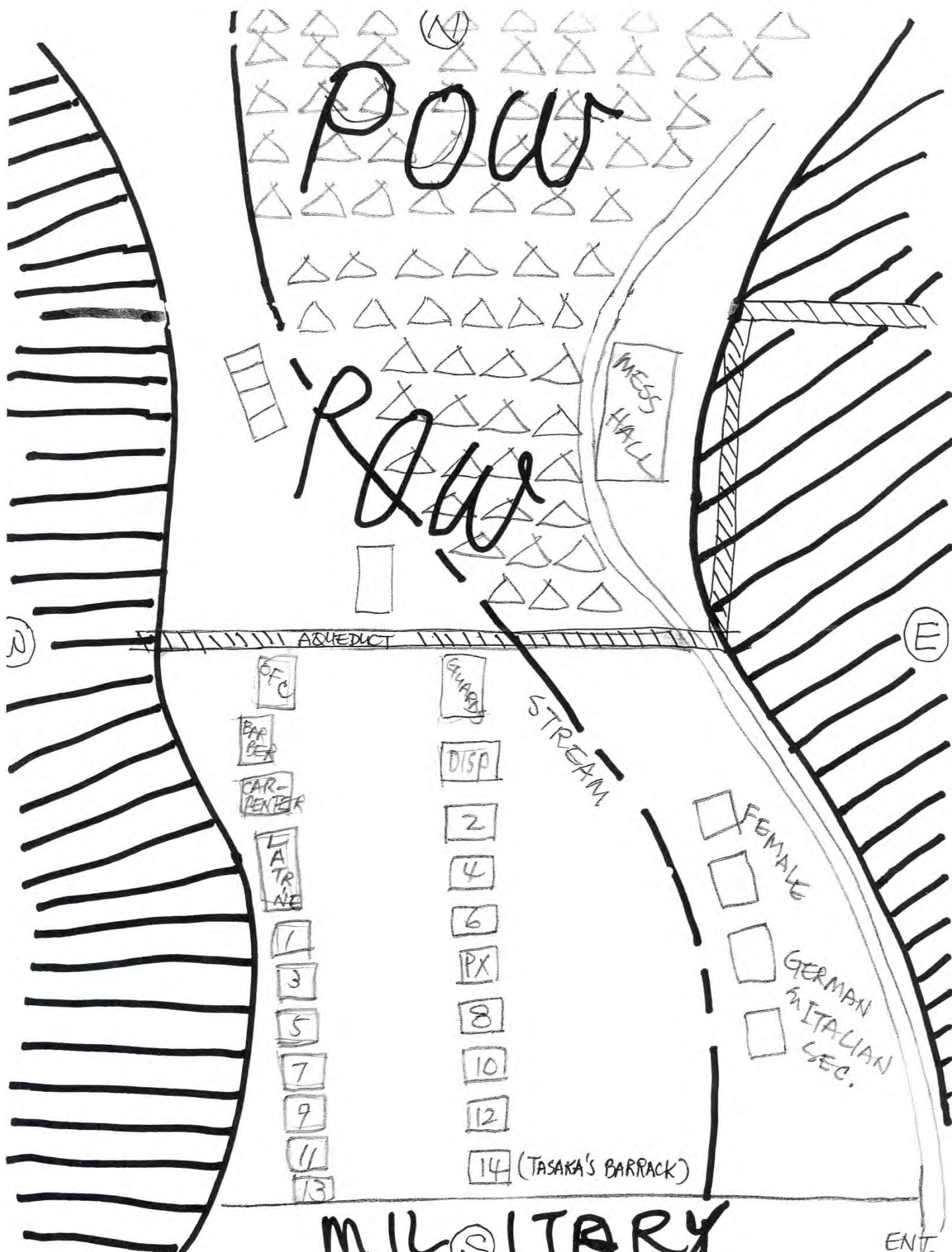


Figure D.2. Yoshitami Tasaka memory map.

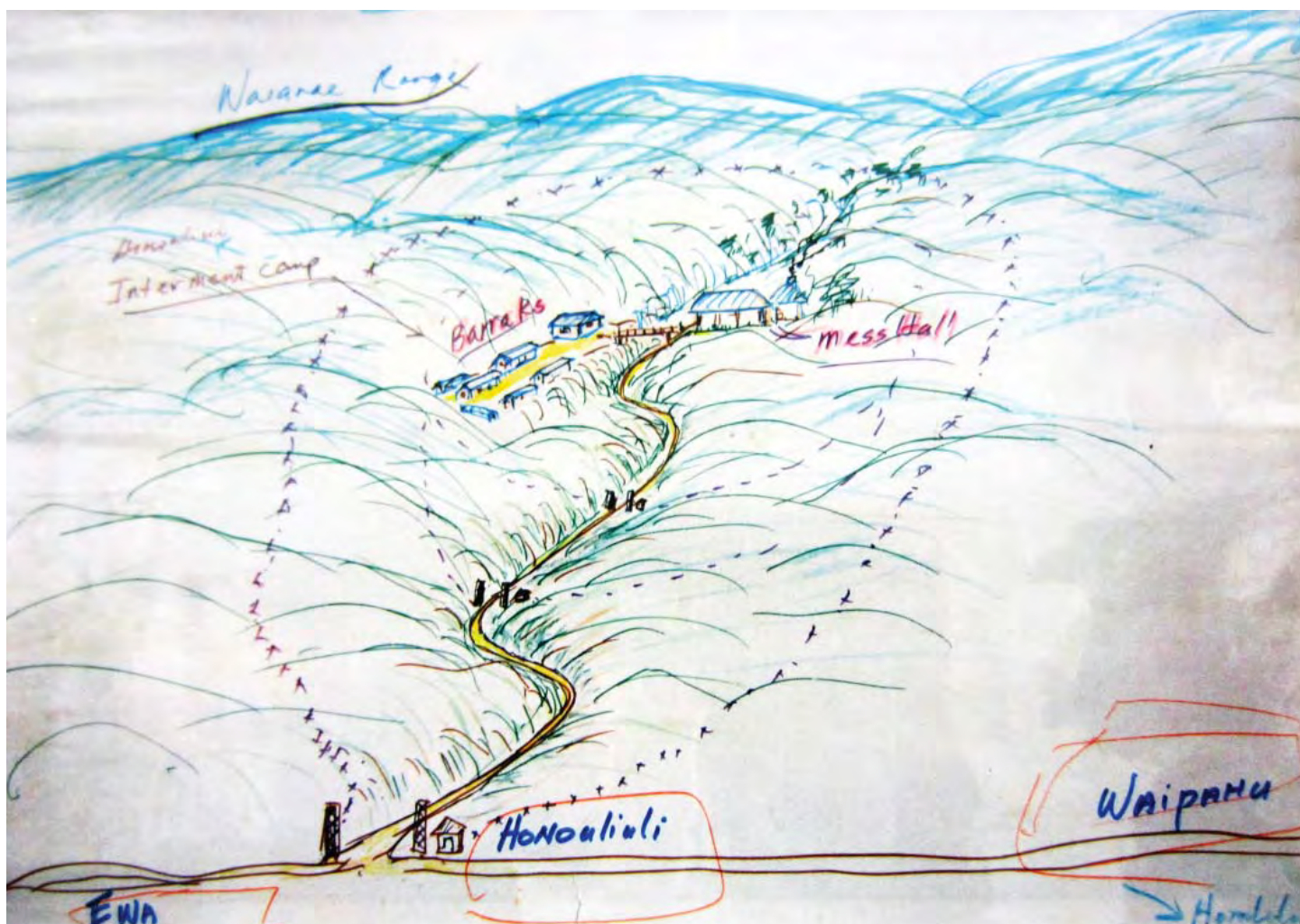


Figure D.3. Shuzo Takahashi memory map.



Figure D.4. Shuzo Takahashi memory map detail.



Appendix E

Features Recorded

Table E.1. Features Recorded at Honouliuli, 2006-2017

Table E.1. Features Recorded at Honouliuli, 2006-2017												
Fea. No.	Description	Project Year										Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	2017		
I-1	Pipe		●								Mapped	
I-2	Mess Hall Location		●	●					●		Probed	
I-3	Concrete Troughs			●							Cleared, Mapped	
I-4	Concrete Trough Fragments			●								
I-5	Garbage Incinerator				●	●				●	Cleared, Mapped	
II-1	Mess Hall Foundation	●	●	●						●	Partially Cleared, Mapped	
II-2	Shower Building Foundation		●	●		●				●	Cleared, Mapped	
II-3	Cesspool		●							●		
II-4	Cesspool	●	●								Partially Cleared, Mapped	
II-5	Pipe		●			●					Mapped	
II-6	Structural Debris		●									
II-7	Concrete Remnant		●	●								
II-8	Structural Debris and Artifacts		●									
II-9	Concrete Remnant		●									
II-10	Pipe and Artifacts		●									
II-11	Rock Wall		●							●		
II-12	Drilled Holes in Rocks		●							●	not relocated 2017	
II-13	Pit Latrine Depression			●						●		
II-14	Inscription		●									
II-15	Wood Poles	●								●	not relocated 2017	
II-16	Pit Latrine Depression			●						●		
II-17	Shower Building Foundation			●					●		Cleared, Mapped	
II-18	Cesspool			●					●		Mapped	
II-19	Pit Latrine Depression			●					●	●		
II-20	Pit Latrine Depression			●					●			
II-21	Concrete Post Support					●						
II-22	Culverts					●				●	Mapped	
II-23	Drilled Hole in Rock					●						
II-24	Water Trailer								●			
II-25	Gate								●			
II-26	Rock Alignment								●		Partially Cleared	
II-27	Metal Pipes					●			●		Cleared	
II-28	Wood Poles								●	●	Cleared	
II-29	Pit Latrine Depression								●	●		
II-30	Pit Latrine Depression								●	●		
III-1	Garbage Incinerator	●	●							●	Cleared, Mapped	

Table E.1. Features Recorded at Honouliuli, 2006-2017

Fea. No.	Description	Project Year								Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	
III-2	Concrete Structure	●	●							Cleared, Mapped
III-3	Cesspool	●	●							Cleared, Mapped
III-4	Shower Building Foundation			●					●	Cleared, Mapped
III-5	Septic Tank			●					●	Cleared, Mapped
III-6	Pit Latrine Depression			●						
III-7	Pit Latrine Depression			●						
III-8	Pit Latrine Depression			●						
III-9	Pit Latrine Depression			●						
IV-1	Sewer Manhole	●	●							
IV-2	Guard Tower Footings				●					Excavated, Mapped
IV-3	Concrete Footing				●				●	not relocated 2017
V-1	Mess Hall Foundation	●	●	●					●	Cleared, Mapped
V-2	Structural Debris	●	●						●	
V-3	Rock Wall	●	●						●	
V-4	Rock Alignment	●	●	●					●	
V-5	Post		●							
V-6	Vehicle and Parts	●	●	●						
V-7	Latrine and Shower Foundation		●		●					Partially Cleared, Mapped
V-8	Structural Debris		●	●						
V-9	Sewer Manhole with Inscription		●		●				●	
V-10	Rock Wall		●							
V-11	Rock Wall		●						●	
V-12	Pond (?)		●						●	Cleared
V-13	Guard Tower Footings		●			●			●	Excavated, Mapped
V-14	Pipe		●						●	
V-15	Rock Wall		●						●	
V-16	Road		●						●	
V-17	Rock Wall			●					●	
V-18	Rock Wall			●					●	
V-19	Rock Wall			●					●	
V-20	Sidewalk			●						Cleared, Mapped
V-21	Concrete Slab			●						Partially Cleared, Mapped
V-22	Vertical Pipe and Wood Post			●						
V-23	Septic Tank			●						Cleared, Mapped
V-24	Pipeline			●						Mapped
V-25	Septic Tank			●						Partially Cleared, Mapped

Table E.1. Features Recorded at Honouliuli, 2006-2017

Fea. No.	Description	Project Year										Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	2017		
V-26	Latrine and Shower Foundation			●						●	Cleared, Mapped	
V-27	Drilled Posthole (?) in Rock				●							
V-28	Rock Wall					●				●	Cleared	
V-29	Rock Wall								●			
VI-1	Building Foundation		●							●	Mapped	
VI-2	Building Foundation		●							●	Mapped	
VI-3	Generator Building Foundation		●					●			Partially Cleared, Mapped	
VI-4	Building Foundation		●	●						●	Partially Cleared, Mapped	
VI-5	Cesspool		●	●						●		
VI-6	Building Footers		●	●		●						
VI-7	Structural Debris		●									
VI-8	Structural Debris		●									
VI-9	Structural Debris		●									
VI-10	Structural Debris		●									
VI-11	Structural Debris		●									
VI-12	Cesspool		●							●	Mapped	
VI-13	Rock Wall		●					●		●		
VI-14	Rock Wall		●							●		
VI-15	Guy-Wire Anchor		●									
VI-16	Laundry Tubs and Toilet		●					●		●		
VI-17	Concrete Slab (barracks location)		●								Cleared, Mapped	
VI-18a	Concrete Slab (barracks location)		●			●				●	Cleared, Mapped	
VI-18b	Concrete Slab (barracks location)				●					●	Cleared, Mapped	
VI-19	Concrete Slab (barracks location)		●							●	Cleared, Mapped	
VI-20	Concrete Slab (barracks location)		●									
VI-21a	Building Foundation		●								Partially Cleared, Mapped	
VI-21b	Sidewalk		●								Partially Cleared, Mapped	
VI-21c	Footers		●								Mapped	
VI-22	Cesspool		●							●	Mapped	
VI-23	Structural Debris (barracks location)		●									
VI-24	Structural Debris		●							●		
VI-25	Structural Debris		●							●		
VI-26	Structural Debris		●							●		
VI-27	Structural Debris		●									
VI-28	Rock Wall		●									
VI-29	Structural Debris		●							●		

Table E.1. Features Recorded at Honouliuli, 2006-2017

Fea. No.	Description	Project Year									Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	2017	
VI-30	Pipe and Artifacts		●								
VI-31	Latrine and Shower Foundation		●								Partially Cleared, Mapped
VI-32a	Latrine and Shower Foundation		●			●				●	Cleared, Mapped
VI-32b	Sidewalk		●			●				●	Cleared, Mapped
VI-32c	Pipe		●			●				●	
VI-33	Septic Tank		●			●				●	Cleared, Mapped
VI-34	Septic Tank		●								Mapped
VI-35	Wood Pole		●	●							Displaced by Flood
VI-36	Sewer Manhole Depression		●							●	
VI-37	Sewer Manhole Cover		●					●		●	
VI-38a	Water Tank Foundation		●							●	Mapped
VI-38b	Pipe		●							●	
VI-39	Pipe (barracks location)		●		●						
VI-40	Pipe		●								
VI-41	Bridge Abutments		●								Mapped
VI-42	Road		●							●	
VI-43	Rock-Lined Path (barracks location)		●							●	Mapped
VI-44	Rock Wall		●							●	
VI-45	Rock Wall		●							●	
VI-46	Rock Wall		●							●	
VI-47	Ditch		●								
VI-48	Possible Rock Foundation		●								
VI-49	Laundry Building Foundation		●		●			●	●	●	Partially Cleared, Mapped
VI-50	Guard Tower Footings				●	●				●	Excavated, Mapped
VI-51	Rock Steps				●						Cleared
VI-52	Sewer Manhole				●					●	
VI-53	Rock Wall				●	●				●	Cleared
VI-54	Drilled Hole in Rock							●			
VI-55	Rock Wall							●		●	
VI-56	Rock Wall							●		●	
VI-57	Dump Truck and Trash							●			
VI-58	Pile of Boulders							●			
VI-59	Metal Gate Post							●	●		
VI-60	Fenceline							●			
VII-1	Septic Tank		●								Cleared, Mapped
VII-2	Septic Tank		●								Cleared, Mapped

Table E.1. Features Recorded at Honouliuli, 2006-2017

Fea. No.	Description	Project Year									Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	2017	
VII-3	Septic Tank		●								
VII-4	Fence Remnants		●							●	
VII-5	Posts		●							●	
VII-6	Structural Debris		●			●				●	
VII-7	Concrete Trough					●	●				
VII-8	Trash Dump and Building Debris					●	●				
VII-9	Metal Power Pole					●	●	●	●	●	Mapped
VII-10	Concrete Fragments					●	●				
VII-11	Drilled Posthole in Rock						●				
VII-12	Mounds and Depressions						●			●	
VII-13	Metal Power Pole						●	●			Mapped
VII-14	Concrete Slab Fragments								●	●	
VII-15	Concrete Fragment								●	●	
VII-16	Cut Wood Power Pole								●	●	Cleared
VII-17	Portable Fuel Tank									●	
VII-18	Concrete Trough									●	
VII-19	Concrete Trough									●	
VII-20	Cut Wood Power Poles									●	
VII-21	Cut Concrete Slab									●	
VII-22	Concrete Trough									●	
VII-23	Concrete Trough									●	
VII-24	Concrete Trough									●	
VIII-1	Concrete Fragments						●				
VIII-2	Metal Power Pole							●			
L-1	Ditch and Aqueduct	●	●	●	●	●		●		●	
L-1a	Aqueduct Flume	●	●	●				●			Cleared
L-1b	Inscription “Aug 30, 1920”	●	●							●	
L-1c	Pipe Outlet into Ditch		●								
L-1d	Sealed Gate with 1943 Inscription		●		●					●	Cleared, Mapped
L-1e	Sealed Gate and Lumber		●							●	
L-1f	Wood Bridge over Ditch		●							●	
L-1g	Wall along Ditch	●	●								
L-1h	Sealed Gate				●						
L-1i	Sealed Gate				●						
L-1j	Lumber Scatter				●						
L-1k	Sealed Gate					●					

Table E.1. Features Recorded at Honouliuli, 2006-2017

Fea. No.	Description	Project Year									Other Work Completed
		2006	2008	2009	2010	2011	2012a	2012b	2014	2017	
L-11	Concrete Spillway					●				●	
L-2	Ditch and Siphon		●		●		●				
L-2a	Siphon Footing and Bolt		●		●			●			
L-2b	Exposed Ditch Segment			●							
L-3	Road		●	●						●	
L-4	Road		●				●			●	
L4a	Creek Crossing						●	●	●		Cleared
L-5	Road			●						●	
L-6	Rock Berm						●	●			
L-7	Railroad Grade						●			●	
L-8	Old Highway						●			●	
L8a	Bridge/Box Culvert						●				
L-9	Road		●							●	
L-10	Berm						●			●	
L-11	Road				●					●	
M-1	Water Treatment Plant	●	●								Mapped
M-2	Well		●								Mapped
M-3	Well		●								Mapped
M-4	Shutoff Valve and Rock Wall		●								
M-5	Paved Road		●							●	
M-5a	Concrete Ford		●							●	
M-5b	Concrete Box Bridge		●						●	●	
M-6	Chicken Farm	●	●							●	
M-7	Concrete Slab	●	●								Mapped
M-8	Loading Pen	●	●								Mapped
M-9	Corrals and Stalls	●	●								
M-10	Wood Structure	●	●							●	
M-11	Wood Structure		●								
M-12	Corral		●								Mapped
M-13	Water Tank		●							●	
M-14	Communications Site		●					●		●	Removed 2016
M-15	Vent Pipe						●	●		●	
M-16	Well and Metal Framework						●	●		●	
M-17	Pipe segment and Valve						●	●		●	



Appendix F
Rodney Santiago's Artifact Collection
Jeff Burton
&
An Interview with Rodney Santiago
Kelly Altenhofen



Figure F.1. Selected artifacts from Rodney Santiago's Honouliuli collection; a. beer with Owens Illinois Glass Co. basemark, b. beer with Foster-Forbes Glass Co. basemark, c. beer bottle with JAPAN basemark, d. salt shaker, e. New Fair Dairy Ltd. half pint bottle, f. Corning glass coffee cup, g. CLOROX jug, h. disinfectant jug with Owens Illinois Glass Co. basemark and 1966 date code, i. possible household product with "ADS/516" basemark, j. Pinaud hair tonic, k. food storage jar with Illinois Pacific Co. basemark, l. food storage jar with no marks, m. medical bottle with T.W.C. Co. basemark, n. soy sauce bottle with no marks, o. lotion bottle with "R in sun" basemark, p. hair dye bottle with no marks, q. BEST FOODS jar.

Rodney Santiago's Artifact Collection

2008

Jeff Burton

Mr. Rodney Santiago's artifact collection was inspected and photographed by the author and Mary Farrell in 2008 to provide information on what to expect during survey work at the Honouliuli (Figures F.1-F.7; Table F.1). Mr. Santiago leased the camp area for cattle grazing from the 1950s into the 1990s. The precise provenience of individual artifacts is unknown (that is, whether a bottle came from Compound I or Compound VI). However, all were reportedly collected from Honouliuli Gulch. The collection includes 50 bottles and jars, a salt shaker, a coffee cup, and a faucet.

Alcoholic Beverages

Three items in the collection are amber beer bottles. One is marked "JAPAN," one dates to 1941 or 1951, and one is modern. Also present in the collection is a modern wine jug. Beer and Saki bottles with "Japan" basemarks have been found at the Manzanar Relocation Center dump (Burton 1996).

Non-Alcoholic Beverages

A total of 19 bottles contained soda or non-carbonated soft drinks. Seven of the bottles were produced between 1942 and 1946. Three have ambiguous date codes indicating manufacture in the mid-1940s or mid-1950s. Four post-date the camp (1947, 1951, 1959, and 1961). Six have no specific dating information. However, returnable soda bottles (which most of these are) are hard to date, because the bottle manufacturing date is not necessarily the last use. Fourteen different brands are represented, including five local brands. The single most common bottle is for Coca-Cola; all four Coke bottles potentially date to the camp era.

Five milk bottles are represented in the collection. Of these, one pre-dates the camp, one dates to the 1940s or 1950s, two date to the 1950s, and one has no specific dating information. All are returnable bottles. It seems unlikely that any these are associated with the World War II camp.

Food Storage

Eleven items are food storage or condiment containers. Five are wide-mouth jars, including a "Best Foods" mayonnaise jar. The dating on these is not precise: one or two may predate the camp and the rest could date to the camp or post-camp era. There are two identical plain soy sauce bottles and a possible soy sauce bottle manufactured sometime between 1929 and 1951. Other condiments include a ketchup bottle with a likely 1944 date code and an unknown condiment bottle made sometime after 1944. One is a bottle embossed with "Morozoff," a confectionery and cake company founded in 1931 and headquartered in Kobe, Japan.

Food Serving

Food-serving items in the collection include an opaque white glass "Corning" coffee cup and a clear pressed glass salt shaker. Identical items have been found at mainland internment camps.

Hygiene and Grooming

Six items in the collection are related to hygiene and grooming; all could date to the camp era. Four are clear glass, including a "Listerine" bottle (with a 1942 date code), a lotion bottle (post 1935), a shampoo or lotion bottle (post 1945), and a Ed Pinaud hair tonic bottle (unknown date).

Two bottles are royal blue in color and are presumed to be for hair dye. One has Japanese characters (Figure A.3); fragments of an identical bottle was found at the Minidoka Relocation Center in Idaho (Burton 2005). The other bottle has no markings, but is of a color and shape not common in U.S. bottle manufacturing.

Medical

There are two medical items in the collection. These include a Vicks Nose Drop bottle and a serum bottle

Table F.1. Rodney Santiago's Honouliuli Artifact Collection.























Description/Product	Color	Mark	Maker	Date*
Barq's soda bottle †	clear	 Duraglas	Owens Illinois Glass Co., Oakland, CA	1945
Beer bottle	amber		Foster-Forbes Glass Co., Marion, IN	modern
Beer bottle	amber	JAPAN	Japanese	c. 1921-1940
Beer bottle †	amber		Owens Illinois Glass Co., Charleston, WV	1941 or 1951
Bireley's (fruit drink) bottle	clear			
Canada Dry bottle †	clear		Owens Illinois Glass Co.	1943 or 1953
Clorox jug	amber	 	Owens Illinois Glass Co., Oakland, CA	1954-1962
Coca-Cola bottle (Los Angeles)†	aqua		Owens Illinois Glass Co., Los Angeles, CA	1942
Coca-Cola bottle (Vallejo)	aqua		Owens Illinois Glass Co., Oakland, CA	1942
Coca-Cola bottle †‡	aqua		Owens Illinois Glass Co., Los Angeles, CA	1945
Coca-Cola bottle	aqua		Owens Illinois Glass Co., Oakland, CA	1946
Coffee Cup (glass)	white	CORNING TM REG	Corning Glass Works, Corning, NY	1919+
Condiment bottle	clear		Alexander H. Kerr & Co., Sand Springs, OK	1944+
Dairymen's Assoc. milk bottle	clear	 Duraglas	Owens Illinois Glass Co., Los Angeles, CA	1950
Dairymen's Assoc. milk bottle	clear	 Duraglas	Owens Illinois Glass Co.	1943 or 1953
Delaware Punch bottle	clear		Owens Illinois Glass Co., Oakland, CA	1945
E.P. Co. Ewa soda bottle	aqua	I. P. G. CO.	Illinois Pacific Glass Co., San Francisco, CA	1944 (?)
Ewa Soda Water bottle	aqua	E S W	Ewa Soda Water Ltd, Pearl City	
Ewa Soda Water bottle	aqua	E S W	Ewa Soda Water Ltd, Pearl City	
Faucet (metal)	brass	none		
Food storage jar	clear	none		
Food storage jar †	clear	BEST FOODS		Pat'd 1930
Food storage jar	clear		Hazel Atlas Glass Co., Wheeling, WV	1920-1964
Food storage jar	clear		Illinois Pacific Glass Co., San Francisco, CA	1925-1930
Food storage jar	clear		Owens Illinois Glass Co., Oakland, CA	1943 or 1953
Foremost milk bottle	clear	 Duraglas	Owens Illinois Glass Co., Streator, IL	1955
Hair dye (?) bottle	blue	none	Japanese (?)	

Table F.1 (continued). Rodney Santiago's Honouliuli Artifact Collection.

Description/Product	Color	Mark	Maker	Date*
Hair tonic bottle	aqua	E P P	Pinaud Inc, New York City	
Hair dye bottle ‡	blue	Japanese Characters	Japanese	
Household product (?) bottle †	aqua	A S		
Kauluwela soda bottle	clear	K		
Ketchup bottle	clear	M		1944 (?)
Listerine bottle †‡	clear		Owens Illinois Glass Co., Alton, IL	1942
Lotion (?) bottle †	clear			Pat'd 1935
Medical bottle, 60 MILS †	clear	T.C.W. CO. .S.A.	T.C. Wheaton Co., Millville, NJ	1888+
Morozoff bottle	clear	MOROZOFF		
Nehi soda bottle	clear		Owens Illinois Glass Co., Oakland, CA	1951
Nesbitts soda bottle	clear		Owens Illinois Glass Co.	1947
New Fair Dairy Ltd milk bottle	clear		Illinois Pacific Glass Co., San Francisco, CA	1902-1925
New Fair Dairy milk bottle	clear	N		
OK (soda) bottle	clear		Owens Illinois Glass Co., Oakland, CA	1944 or 1954
One half gallon jug	clear		Owens Illinois Glass Co., Oakland, CA	1966
Pepsi bottle	clear		Owens Illinois Glass Co., Oakland, CA	1959
Pepsi bottle	clear		Owens Illinois Glass Co., Portland, OR	1966
Salt shaker	clear	none		
Shampoo or lotion bottle	clear		Glass Containers Inc., Los Angeles	1945+
Smile soda bottle	clear			Pat'd 1922
Soy sauce bottle	clear	none		
Soy sauce bottle	clear	none		
Soy Sauce (?) Bottle	clear		Penn. Bottle Company, Sheffield, PA	1929-1951
Sunshine soda bottle	clear	SSS	Sunshine Soda Shop, Honolulu	pre 1959
Vicks Nose Drops bottle	clear		Vick Chemical Company	
Wine jug	aqua			modern

* based on date code or manufacturer date (from Toulouse 1971 and Lockhart 2004).

† present at Manzanar Relocation Center Dump.

‡ present at Minidoka Relocation Center Dump.



Figure F.2. BEST FOODS jar base.



Figure F.3. CLOROX jug base.



Figure F.4. Corning coffee cup base.



Figure F.5. Soda bottles from Rodney Santiago's Honouliuli collection; a. Kauluwela, b. Nesbitt's, c. Nehi, d. OK (Honolulu, T.H.), e. Smile, f. Sunshine Beverages, g. Barq's, h. E.P. Co., i. Ewa Soda Water, j. Delaware Punch, k. Pepsi-Cola, l-n. Coca-Cola.

with the T.C. Wheaton Company basemark. Wheaton bottles are common at mainland internment sites.

Household

Four artifacts in the collection are classified as household items. One is an amber “Clorox” bottle of the style made between 1954 and 1962. One is a clear half-gallon jug with 1966 date code. One has the basemark “ADS / 516.” Although the manufacturer and contents of this bottle is unknown, bottles of this type were found at the Manzanar Relocation Center dump. The final object is a metal outdoor faucet, threaded for a hose.

Table F.2. Summary of Bottle and Jar Types in Rodney Santiago’s Artifact Collection.

Contents	Count
Beer	3
Wine	1
Soda and Non-Carbonated Drinks	19
Milk	5
Food Storage and Condiments	11
Hygiene and Grooming	6
Medical	2
Household	3
Total	50



Figure F.6. Hose faucet.

Summary

The bottles and containers are summarized by type in Table F.2. Mr. Santiago’s collection includes items that date to the internment and POW camp period, as well as several that post-date World War II and some that may date to before the camp was established. The artifacts likely associated with the World War II camp include beer and soda bottles, a coffee cup, a salt shaker, and most of the containers for hygiene, grooming, medical, and household products.

The containers are not the large sizes characteristic of institutions. Other than the salt shaker and possibly the coffee cup, they were personal items, purchased at a canteen or acquired in a care package, rather than items provided by the military. All were likely casually discarded, rather than systematically removed to a dump or landfill. Similar items were found during archaeological work at the Manzanar and Minidoka relocation center sites, on the mainland.



Figure F.7. Japanese hair dye bottle.

An Interview with Rodney Santiago 2010

Kelly Altenhofen

Rodney Santiago ranched in the immediate vicinity of the former site for the Honouliuli Internment Camp for approximately 50 years. He began ranching in the area in 1958 by “fencing up” the immediate area and stocking 1200 to 1500 acres with horses and cattle up to the foot of the mountains. Prior to his arrival the Oahu Sugar Cane Company had production operations in this area. Rodney raised Black Angus, Hereford/Brangus cattle and horses on the former site of the compound with the aid of corrals and fences that he put in place. Water supplied from higher elevations enabled his livestock to graze the area year-round in a rotational grazing system. According to Rodney, approximately 60 head of livestock were continually stocked in the vicinity of the 100-150 acres that comprised the former Honouliuli site. The bottom land could support a full 150-200 head of livestock total.

Rodney grazed approximately 400 acres on the top portion of the site where Monsanto currently raises corn. Much of the former camp foundations and sewage draining systems were readily visible when Rodney’s cattle grazed the area. The open cesspools posed a potential threat to cattle grazing near the former camp and care had to be taken when walking around the camp site. At this time a chicken ranching operation also occupied one of the former buildings associated with the camp.

Rodney found old bottles, dinnerware and dishes on a regular basis in the area of the former camp. Soda, Clorox, Listerine, and other various bottles were common on the site area. He still has examples of these items at his house. He really only remembers the area having slabs as in his opinion the Army was keen to remove traces of the site from view once the war was over.

Rodney trapped feral pigs (*Sus scrofa*) in the vicinity of the site since he first started grazing the area and up until he stopped. The area surrounding the camp was historically placed into sugar cane production and he believes this provided a ready food source for the feral pigs in the valley. Water was also in abundance, creating suitable habitat for their rapid and continued

reproduction. Some of the feral hogs weighed in excess of 200 pounds. The drainage also provided water for the feral hogs. The stream in the bottom near the camp provided habitat for prawns, crawfish, and catfish in the “old days.” The reservoir on the top of the allotment also provided habitat for wildlife and feral pigs.

Rodney still ranches in the area but not in the vicinity of the former camp. He charges people to pasture their horses. Rodney states that he placed most of the fencing in the area that comprises the immediate location of the former camp today. His fencing materials consisted of square railroad ties, round telephone poles, and other posts held together with railroad spikes and various other nails. He also stated that he put in most of the barbed wire and that when he arrived there was only “smooth wire” in the vicinity of the camp visible. He used cut and split boards to round out his fencing operations.

Native grasses comprised the original grassland areas of the former Honouliuli site but were supplanted by a monoculture of “Guinea Grass.” Guinea or Buffalo Grass (*Panicum maximum*) is a native grass of Africa introduced to almost all tropical countries as a source of animal fodder. This grass was reported to have been brought to O’ahu by the Hawaii Meat Company. It has since supplanted the native Hawaiian grasses in the well-watered areas that comprise the drainage where the camp was located.

This grass was beneficial for maintaining cattle in the area yearlong. Rodney managed his livestock in the bottom through a series of paddocks, stables, and corrals. He also had cattle on the uplands where corn is currently cultivated. Cattle would come in to the bottom land to obtain water and Rodney could use his corrals to collect his cattle for branding or sale. He used a one-way door similar to a pig trap. Cattle could push the door open but the door closed behind them once they were in the corral. He used thick rubber bands to make a trapdoor system work. He would brand down in the bottom with the aid of a squeeze chute. This enabled him to save time and money dur-

ing branding.

Rodney also stated that the area provided habitat for quail (*Callipepla californica*), chukar (*Alectoris chukar*), and wild turkeys (*Meleagris gallopavo*). The wild turkeys were hunted in the area from 1935-1938. He stated that there were no feral goats (*Capra hircu*) in the area but that Schofield Barracks had goats. He hunted the feral pigs in his area with dogs and with traps and snares. He also stated that he planted mango, macadamia, avocado and date palm trees in the bottom. The wild tomatoes in the area are a result of seed runoff from upland farms and not remnants of the POW gardens according to Rodney.

The foundations and cesspools were visible because his cattle grazed the grass down low enough to keep them open. The cesspools were 10-15 feet deep and had gravel bottoms that did not fill with water so the drain system may have still been working. Usually the pits remained dry and may not have had an inlet still functioning. The Army brought in gravel to the site and coral for the roadbeds.

Rodney remembers that movies such as “Tora, Tora Tora” were filmed (1970) in the vicinity of the site and that the old vehicles located in the bottom may have been movie props or brought in by the Army. (Note: Locations listed for the filming of this movie other than the obvious ones at Ford Island consisted of the following: Barbers Point NAS, Downtown Honolulu; Kahili district, Honolulu; Koko Head, O’ahu; Opana Point, O’ahu; Navy Fire School, Aiea; Submarine School, Navy Yard; Schofield Barracks, O’ahu; Fort Shatter, O’ahu; Kolekole Pass and pineapple fields, O’ahu; Chinaman’s Hat, O’ahu; Waikiki Beach, O’ahu; RCA Office, Downtown Honolulu; Navy Ferry Landing; Aloha Tower).

Farmers pushed in some of the slabs at Honouliuli before he arrived in order to gain additional bottom farm land at the site. The first grass at the site consisted of native “Koa” grass and was supplanted by the introduction of what Rodney referred to as “California grass.” California grass (*Brachiaria mutica*) is also known as “para grass.” It is an invasive and an alien grass introduced from Africa to various warm and tropical climates. (Note: California grass grows from three to ten feet long. It can be found growing near water and moist wet soil. California grass can conceal

many things when it is grown thick. Koa (*Acacia koa*) trees are present on the site. The Koa is a dense grained tree that is currently considered the most valuable of the common native timber species in Hawai‘i. Koa frequently has curly grain and striking coloration and has excellent working properties. It grows in nearly pure stands or in admixtures with ohia (*Metrosideros polymorpha*). Koa belongs to the thornless, phyllodinous group of the *Acacia* subgenus *Heterophyllum*. Livestock and in particular cattle grazing is considered incompatible with Koa forest restoration due to the damage they cause to young seedlings and the removal of seeds from accelerated erosion. Koa forests were more extensive in the past than they are today. Land clearing, poor cutting practices, and destruction by animals, insects, and fire have all taken a toll).

Rodney stated that Guinea grass put weight on cattle effectively even when it was coarse and dry. In the winter cattle would stay in the uplands and not come down to the bottom to drink. Cattle made their way into the forested uplands but never became feral. He and rancher Buddy Gipson accounted for all of their cows every year.

Rodney thinks that the sight could be continued to be grazed by cattle and this would effectively keep the tall grass down to a manageable level. He suggested fencing the area and overstocking the bottom for a short duration-high intensity grazing regime and then maintaining the bottomland with the proper stocking level later on.

Rodney still thinks the buildings represented a “sore thumb” for the government and that’s why they were taken down so quickly at Honouliuli. This served to get rid of evidence of the camp’s existence. He took newspaper reporters and people from Channel 4 and 8 News down to the site over the years and the photos that they took would have been when cattle still had the area cleared of tall grass. People would fly over the site with helicopters and scare his livestock. Curious people were constantly in and out of the site and would ask him questions about the camp.

He would be willing to revisit the site with researchers but not until his health improved and that the tall grass would hinder his ability to show site features. He could still point out things from the main road and assist in future surveys.

地獄谷



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