SCS Project Number 714-DRR-1

AN ARCHAEOLOGICAL DATA RECOVERY REPORT FOR THE KALOKO HEIGHTS PROJECT IN KOHANAIKI AND KALOKO AHUPUA‘A NORTH KONA DISTRICT HAWAI‘I ISLAND, HAWAI‘I [TMK 3-7-3-09:32]

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Exhibit 41

ABSTRACT

Scientific Consultant Services, Inc. (SCS) has performed this Data Recovery Project for Kaloko Heights Associates, LLC on approximately 213 acres of the Kaloko Heights project area in Kohanaiki and Kaloko Ahupuaʻa, North Kona, Hawaiʻi Island, Hawaiʻi (TMK:3-7-3-09:32).

Eighteen sites were subject to Data Recovery and included four site types: the Kohanaiki Homesteads, defined as the documented historic homesteads occurring within the project area; 2) the walled fields, defined as a series of primarily agricultural sites confined within a distinct system of *ahupua'a*; 3) permanent habitations, defined as sites other than the Homesteads that exhibit features containing architecture, artifacts, and food midden indicating long term residence; 4) caves which show evidence of temporary habitation and/or water collection.

Primary goals for Data Recovery focused on the historical Kohanaiki Homesteads, and several pre-Contact permanent habitation sites. Habitation site Data Recovery focused on identifying temporal periods and functional areas within the sites. Wide-ranging successful results are detailed within.

A secondary goal for Data Recovery was less successful: the exploration of the rarely-examined traditional Hawaiian practice of collecting fresh water in caves. Previous Inventory Survey results found six project area caves to contain imported botanical remnants: Sites 10718, 10721, 10729, 10751, 10753, and 10755. These remnants were directly associated with areas of ceiling drip and water erosion on rock. SCS archaeologists planned to submit viable samples of these botanical remnants, suspected to be decomposed water collection devices (*e.g.*, gourds / vessels), for radiocarbon analysis. Such samples were collected, however, after laboratory processing, none of these samples produced material with structural integrity suitable for radiocarbon dating submission. Water collection results indicated enough output to show that cave drip may have served as a potential water collection method for tradition period inhabitants of the project area. However, without dated botanical samples from these particular drip areas of the site (*i.e.*, gourd / vessel remnants) serving as a link to a collection practice, no conclusive statements can be made.

Thirteen botanical samples were submitted for radiocarbon dating analysis. These thirteen samples were selected from six different project area sites, within features showing a wide variety of form and function. Results, when calibrated to 2 Sigma, included date ranges as early as A.D. 1300-1430 at one Homestead, to as recently as A.D. 1810-1960 at another permanent habitation site.

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INTRODUCTION

Stanford Carr Development, LLC proposes to develop approximately 213 acres into residential and light commercial occupancy in portions of the *ahupua‘a* of Kohanaiki and Kaloko (Figure 1) in TMK: 3-7-3-09:32 (Figure 2), North Kona, island of Hawai‘i. The project area is an irregular polygon defined by Hina Lani Street to the south, a border at the *makai* end of residential development to the east, the boundary between the *ahupua‘a* of Kohanaiki and ‘O‘oma to the north, and a western border (perpendicular to the northern boundary) at roughly the 720 ft. elevation.

Scientific Consultant Services, Inc. (SCS) conducted Archaeological Inventory Survey (AIS) on this property (Wolforth *et. al* 2005), hereafter referred to as the Kaloko Heights project, to identify and evaluate historical properties pursuant to state cultural resource management regulations (HAR § 275 and 276). The Inventory Survey (SCS 455-AIS-2) report was approved by the State Historic Preservation Division (SHPD) with a letter dated October 24, 2005 (SHPD Log No. 2005.2296) concurring with the recommendation for Data Recovery work. A Data Recovery Plan (Wolforth 2006b) accepted by SHPD (Log No. 2006.2022; Doc No. 0606CM17; June 15, 2006) guided the scope of this Data Recovery project.

GENERAL OVERVIEW OF RESULTS OF THE INVENTORY SURVEY

The Inventory Survey determined that approximately half of the project area has been bulldozed. The bulldozed portion is within Kaloko Ahupua`a, and is south of the wall that marks the boundary between Kaloko and Kohanaiki Ahupua`a. The Kohanaiki side has not been bulldozed (Figures 3 and 4).

There are various types of pre-Contact archaeological resources in Kohanaiki. Most are agricultural features. There are also habitation features, trails, *heiau*, caves, and burials. Although the Kaloko side has been bulldozed, there are traditional archaeological sites, mostly caves, that remain. There are also historic sites in the project area, most prominently represented by the Kohanaiki Homesteads.

Twenty-six sites were recommended for Data Recovery (Table 1) in the AIS (Wolforth *et al*. 2005) and were detailed in the Data Recovery Plan (Wolforth 2006b). The principal research topic outlined in the Data Recovery Plan (DRP) was to examine pre-Contact and historic patterns of permanent habitation among the subject sites. This would focus on the historic Kohanaiki Homesteads, and several pre-Contact permanent habitation sites.

A secondary research topic was to explore the rarely-examined pre-Contact Hawaiian practice of collecting fresh water in caves. Inventory Survey results found several project area caves to contain imported botanical remnants. These remnants were directly associated with areas of ceiling drip and water erosion on rock. SCS archaeologists planned to submit viable samples of these botanical remnants, suspected to be decomposed water collection devices (*e.g*., gourds) for radiocarbon analysis.

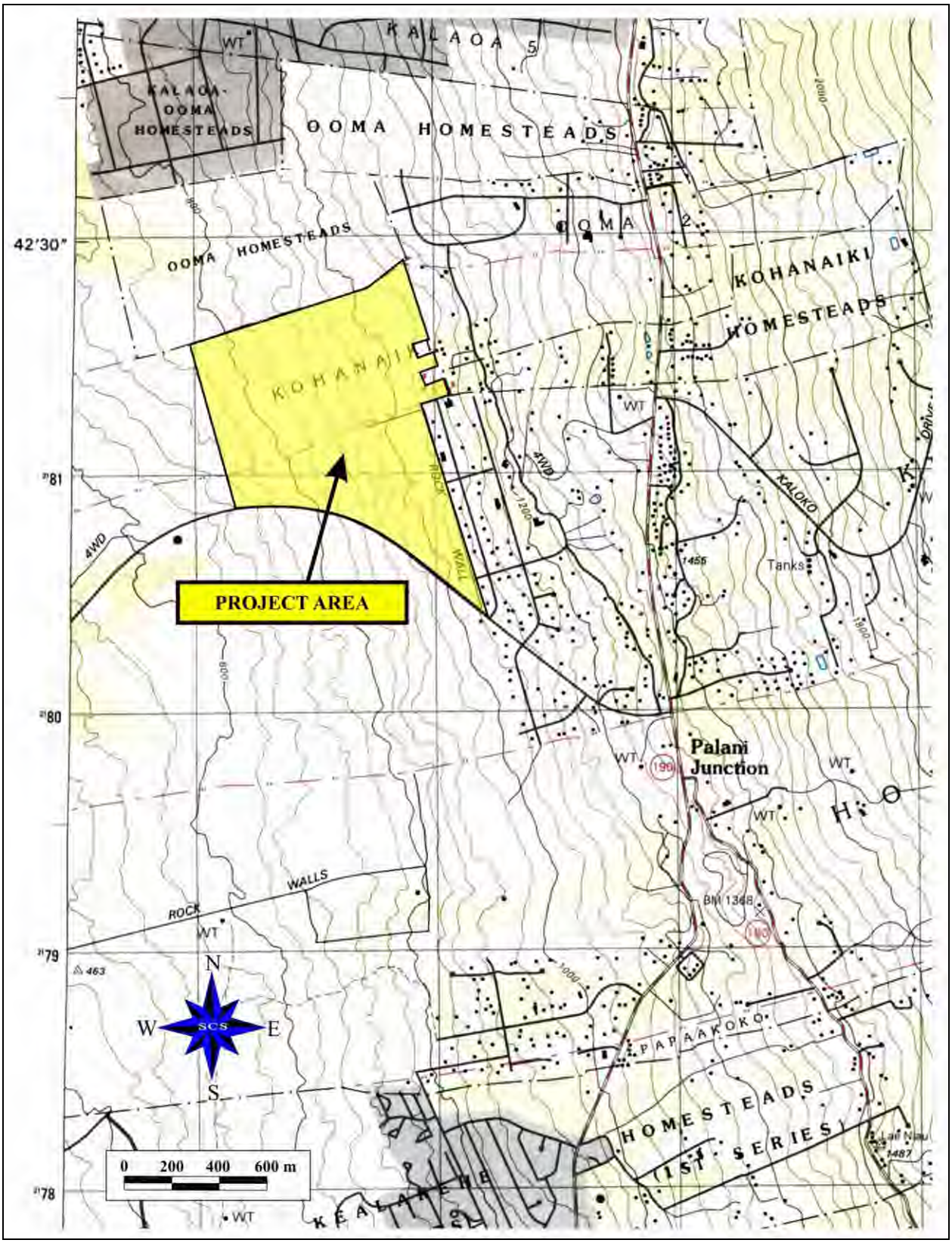


Figure 1: Project Location on USGS Quadrangle Map.

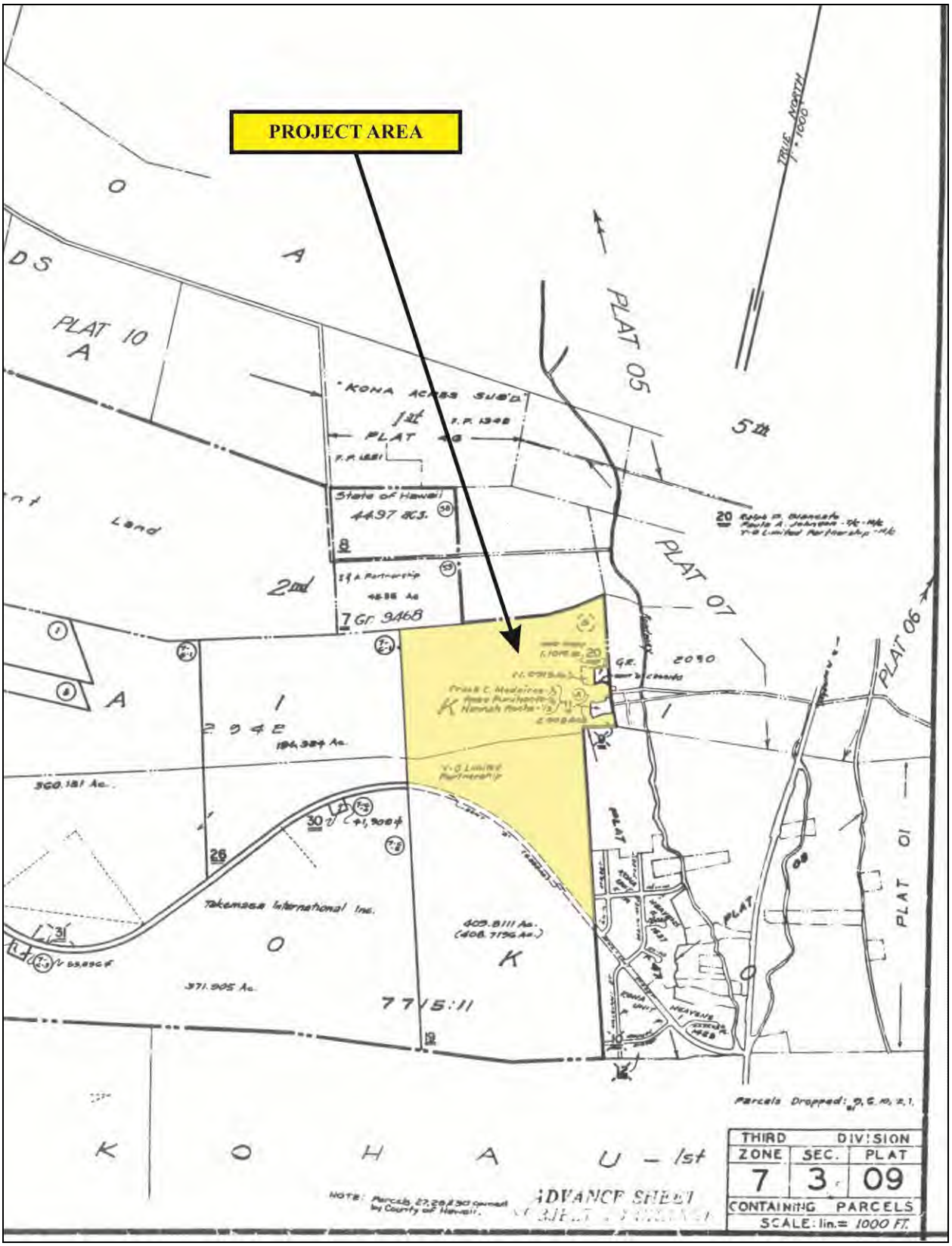


Figure 2: Tax Map Key [TMK] Depicting Project Area.

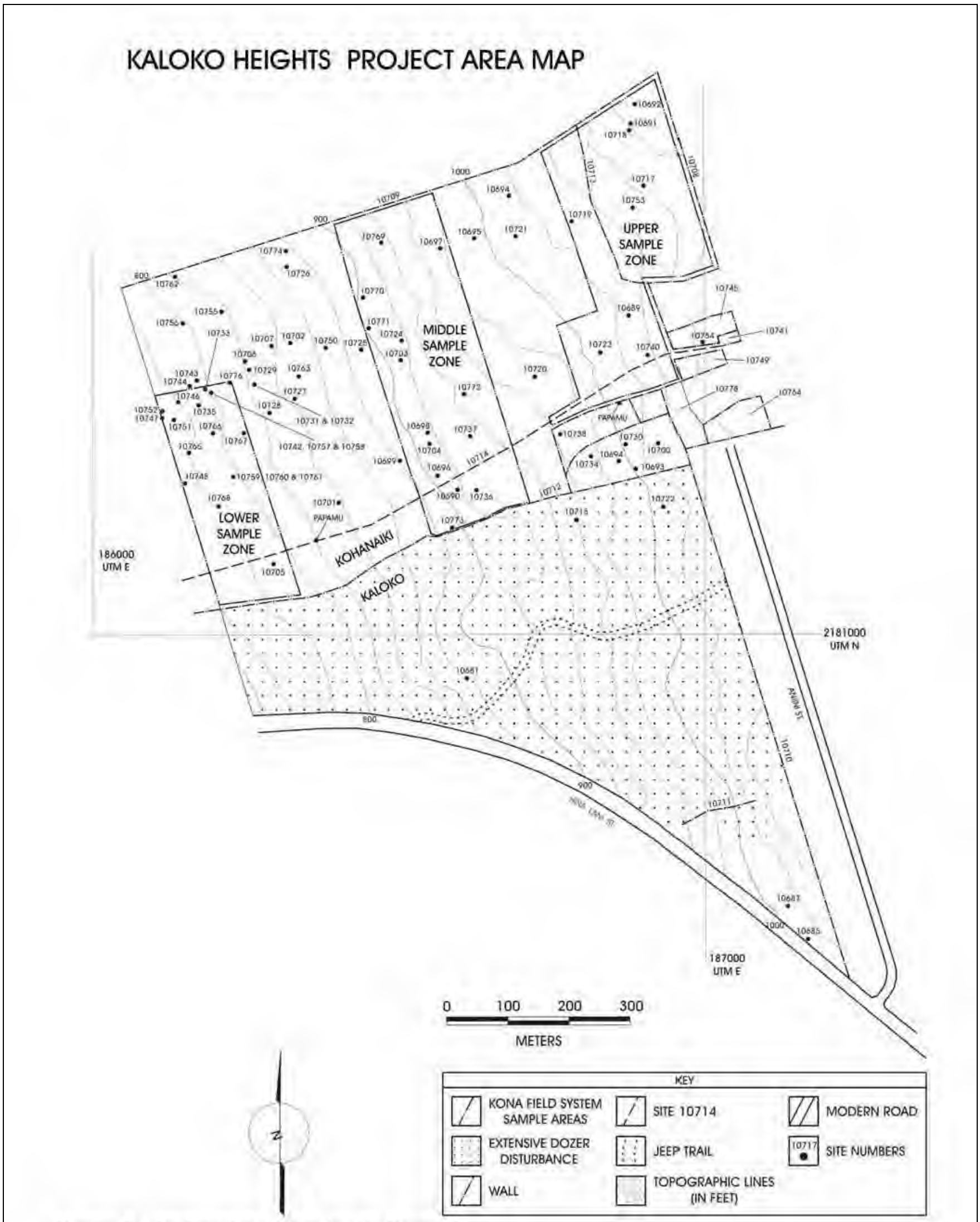


Figure 3. Archaeology Sites in the Project Area.

Figure 3: Plan View Map of Project Area Sites.

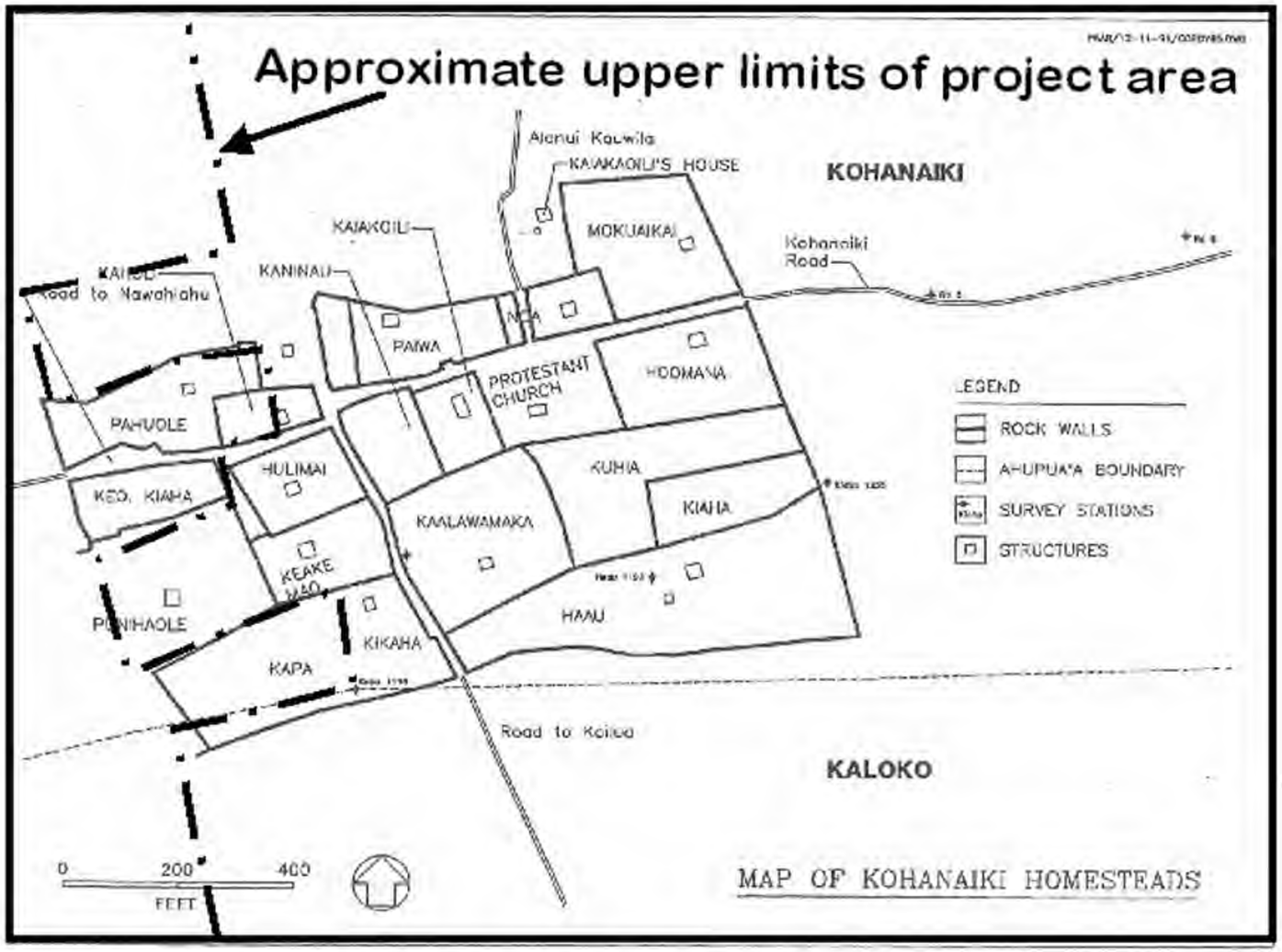


Figure 105. Map of the Kohanaiki Homesteads. (Adapted from Emerson 1888e).

Figure 4: Project Area Homestead Map.

Table 1: 26 Sites Recommended for Data Recovery within AIS (Wolforth *et. al* 2005)

Site #	Site Type	Function	Significance Criterion	Recommended Treatment
10690	Complex	Permanent habitation	D	DR
10693	Walled fields	Habitation and garden	D	DR
10694	Complex	Permanent habitation	D	DR
10700	Walled fields	Habitation and garden	D	DR
10705	Complex	Permanent habitation	D	DR
10706	Enclosure	Permanent habitation/ceremonial	D	DR
10721	Cave	Water source	D	DR
10729	Cave	Water source/ ceremonial/habitation	D	DR
10730	Walled fields	Habitation and garden	D	DR
10732	Cave	Temporary habitation	D	DR
10734	Walled fields	Habitation and garden	D	DR
10735	Complex	Permanent habitation	D	DR
10737	Complex	Permanent habitation	D	DR
10742	Cave	Permanent habitation	D	DR
10743	Cave and petroglyphs	Temporary habitation	D	DR
10751	Cave	Water source	D	DR
10753	Cave	Water source	D	DR
10755	Cave	Water source/ ceremonial	D	DR
10756	Cave	Water source/storage	D	DR
10757	Cave	Permanent habitation	D	DR
10758	Cave	Permanent habitation	D	DR
10763	Trail with petroglyph	Pathway	D	DR
10764	Homestead, Kapa	Historic homestead	D, E	DR
10767	Trail with petroglyph	Pathway	D	DR
10768	Complex	Permanent habitation	D	DR
10778	Homestead, Punihaole	Historic homestead	D, E	DR

Under the hypothesis that the environment around several of these cave sites had not changed significantly in three centuries (in terms of rainfall patterns and topography), Data Recovery sought to gauge the amount of fresh water drip over a period of months at these interior cave sites. This data could be useful in determining the frequency of cave use, and if they functioned as viable water sources at all.

REPORT ORGANIZATION AND METHOD

The following report deals with 18 of the 26 archaeological sites nominated for Data Recovery within the Kaloko Heights project area (Wolforth 2006b). The eight sites of lowest priority in Data Recovery Planning were not subject to Data Recovery fieldwork. These eight sites were taken off the list of potential Data Recovery locations as this study progressed, due to the changing relevance of excavation within these locations (compare Table 1 with Table 2). Based on excavation findings at the 18 higher ranking sites, priorities necessarily adapted with intent to reveal new data rather than repeat earlier confirmed findings.

The 18 sites detailed within this DRR are broadly categorized into 4 classes of sites with specific, individual research questions posed in each category. These classes are: 1) the Kohanaiki Homesteads, defined as the documented historic homesteads occurring within the project area; 2) the Walled fields, defined as a series of primarily agricultural sites confined within a distinct system of *ahupua'a*; 3) Permanent Habitations, defined as sites exhibiting features containing architecture, artifacts, and kitchen debris indicating long term residence; 4) Caves which indicate temporary habitation and/or water collection.

In the subsequent text each of these classes are approached by first outlining the research questions being asked of them, then by describing the individual sites in terms of both previous investigation and the present study, and lastly by discussing how the data for each site relates to the research questions.

Table 2: 18 Sites Subject to Data Recovery

Site #	Site Type	Function	Significance Criterion	Recommended Treatment
10690	Complex	Permanent habitation	D	DR
10700	Walled fields	Habitation and garden	D	DR
10706	Enclosure	Permanent habitation/ceremonial	D	DR
10718	Cave	Theoretical water collection location	D	DR
10721	Cave	Theoretical water collection location	D	DR
10729	Cave	Theoretical water collection location	D	DR
10730	Walled fields	Habitation and garden	D	DR
10734	Walled fields	Habitation and garden	D	DR
10735	Complex	Permanent habitation	D	DR
10737	Complex	Permanent habitation	D	DR
10742	Cave	Permanent habitation	D	DR
10751	Cave	Theoretical water collection location	D	DR
10753	Cave	Theoretical water collection location	D	DR
10755	Cave	Theoretical water collection location	D	DR
10758	Cave	Permanent habitation	D	DR
10764	Homestead, Kapa	Historic homestead	D, E	DR
10768	Complex	Permanent habitation	D	DR
10778	Homestead, Punihaole	Historic homestead	D, E	DR

FIELD METHODS

Data Recovery fieldwork was conducted from August 11, 2006 through November 24, 2006. Intermittent, follow-up fieldwork was conducted periodically in December 2006 through March 2007 (water collection within six cave sites). SCS staff archaeologists in the field included Ryan Calma, B.A.; Glenn Escott, Ph.D.; Kirk Johnson, B.A.; Randy Ogg, B.A.; and Donna Shefcheck, B.A. Tomasi Patolo, B.A. was the Field Director; Thomas R. Wolforth, M.S. was the Principal Investigator.

Three types of excavations were utilized. These were:

Excavation Units (EUs)

Excavation units of varying sizes, but usually 1.00 x 1.00 meter or 0.50 x 0.50 m square, were excavated by both natural and arbitrary 10 cm levels. These were mainly used on features that were thought to have a high potential in yielding occupational data, and used where precise vertical control was required.

Stratigraphic Trenches (STs)

These are excavations of varying length, but usually 1.00 m wide and often completely bisect a feature. These were used to examine subsurface architecture in addition to being an attempt at producing larger volumes of cultural material than the EUs. Stratigraphic trenches were also excavated by both natural and arbitrary 10 cm levels.

Shovel Probes (SPs)

Excavations approximately 0.40 m in diameter used to quickly assess the presence or absence of cultural material in hopes of identifying activity areas.

All three of these excavation types, with the exception of specific STs, were screened. Only the EUs and STs were profiled, however, although SPs had final depth and the number of layers noted. All units were also either excavated to bedrock or into the readily identifiable culturally-sterile substrate that directly overlays it.

LABORATORY METHODS

All maps, photographs, and drawings were digitally enhanced and drafted. All artifacts and other cultural materials were processed (*i.e.*, weighed, sorted, cataloged, analyzed, etc.) at the Honolulu laboratory (Appendix A). These materials are being curated at main SCS office in Honolulu. Thirteen radiocarbon assays from six different sites were generated from BETA Analytic Radiocarbon Dating Laboratory. Table 3 shows a date range for the thirteen single botanical samples and from which sites they were recovered. More specific dating data is within the text under the specific excavation summary. The radiocarbon dates were calibrated using OxCal calibration to facilitate comparison with the corpus of Hawaiian radiocarbon dates (Appendix B).

Table 3: Radiocarbon dates generated from thirteen excavated botanical samples

Site number	Site type	Date range calibrated at 2 Sigma
10690	Permanent habitation	A.D.1660-1960
10690	Permanent habitation	A.D.1660-1960
10706	Permanent habitation	A.D.1660-1890
10706	Permanent habitation	A.D.1810-1960
10706	Permanent habitation	A.D.1800-1960
10706	Permanent habitation	A.D.1320-1480
10734	Walled field	A.D.1520-1810
10734	Walled field	A.D.1480-1670
10735	Permanent habitation	A.D.1320-1480
10742	Cave	A.D.1640-1820
10778	Homestead	A.D.1470-1660
10778	Homestead	A.D.1300-1430
10778	Homestead	A.D.1640-1960

KOHANAIKI HOMESTEADS

Approximately 20% of the original 18 abandoned Kohanaiki Homesteads is located within the project area. Two homesteads, Kiaha and Pahuole, are completely within the Kaloko Heights project area, with portions of three others, Kapa, Punihaole and Kaholi, occurring partially in the project area. Most of the homestead area beyond the project has been destroyed by previous development *mauka.* For each of the three homesteads that are partially within the project, the portion that contained the primary residence is outside of the project area and also destroyed by previous development. The Inventory Survey (Wolforth *et. al* 2005) recommended Data Recovery for two of these partially remaining homesteads: Site 10764 (Kapa), and Site 10778 (Punihaole) (Figures 5 and 6).

Kapa Homestead, Site 10764

Approximately two-thirds of the Kapa Homestead is within the project area. The other one-third is to the east and south of the project area. Thirty-four Kapa Homestead features were identified within the project area, with the old Emerson map of the homesteads indicating that the house for this homestead was located outside of the current project area.

Previous excavation within Feature 1, the largest platform in the site, indicated that there were no material remains in the shallow paving on the outcrop. Based on the Inventory Survey excavations and historical documentation, it appears that the Kapa family resided in the eastern one-third of the homestead and farmed the western two-thirds.

Punihaole Homestead, Site 10778

Over half of the Punihaole homestead, including the area where the house was located, is beyond the project area, and has been bulldozed. Thirty features were recorded, and no excavation units were dug.

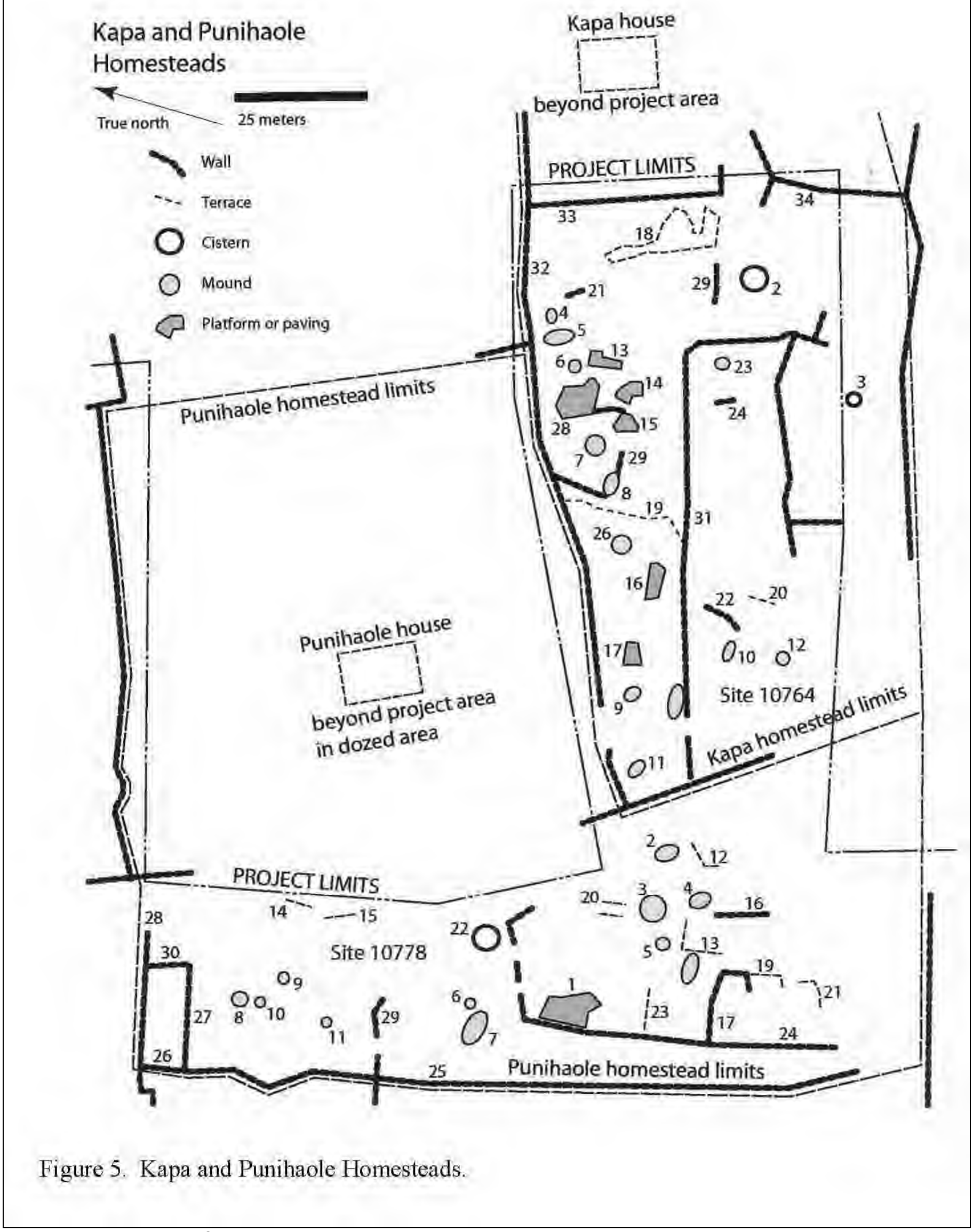


Figure 5: Plan View Map of Kapa and Punihaole Homesteads showing Detail immediately beyond Project Area.

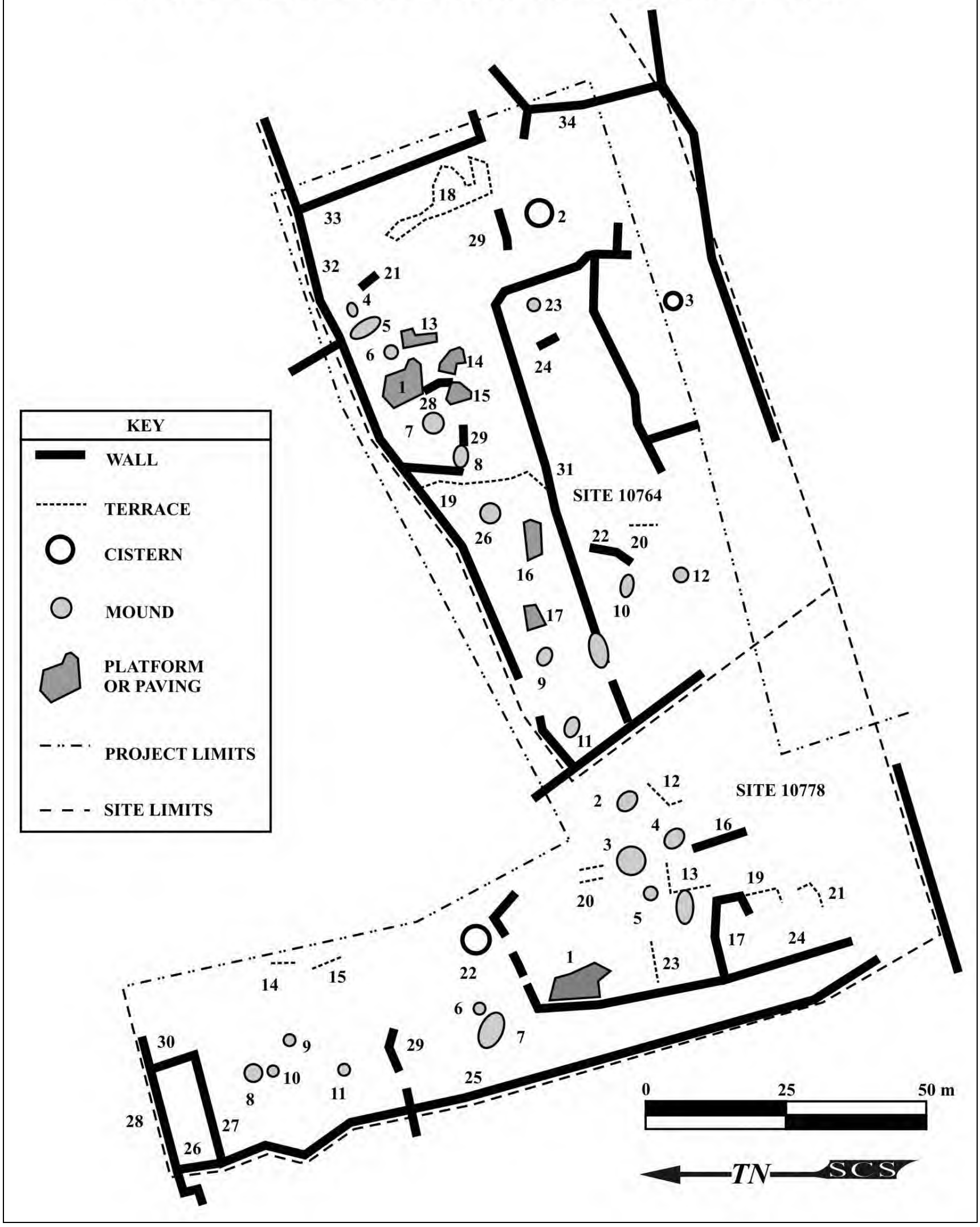


Figure 6: Plan View of Kapa (10764) and Punihaole (10778) Homestead features within Project Area.

Homestead Data Recovery

Data Recovery at the homesteads was designed to: 1) examine whether there are pre-Contact deposits somewhere within the homestead; 2) find and examine activity areas and their functions, and; 3) determine whether there were other areas of habitation in the homesteads other than the missing central houses. Information about any or all of these situations is essential to understanding how a homestead evolved and operated.

In order to answer these questions shovel probes were initially utilized to identify material remains that might provide insights into activity areas. The recordation of these probes included notation of quantity and type of material remains, and depth of probe to bedrock, but did not include profiling. This approach was hoped to maximize opportunities to identify activity areas and their patterning which then could be examined with controlled excavation.

Controlled excavation units were conducted at areas within each of the homesteads, as indicated by the results of the probing, at the Feature 1 platform in the Punihaole homestead, in addition to being used to obtain macrobotanical data from stone and non-stone features. The excavation of the platform was performed because it was thought to possibly represent a second contemporaneous house, an earlier house, or some other kind of activity area.

SITE 10764

PREVIOUS INVESTIGATIONS

The SCS Inventory Survey (Wolforth *et. al* 2005) identified 34 features in the historic Kapa Homestead [Barrera (1988) identified 22 and labeled each as an individual site] (Table 4). The Emerson map indicates that the primary habitation area of this Homestead was beyond the Kaloko Heights project area, and the previous investigations confirmed that few of the features within the project area resembled permanent habitations.

Although the Barrera report indicates that he conducted no excavations at the site, the Wolforth *et. al* (2005) survey excavated a single test unit in Feature 1, a faced platform/modified outcrop, lying on a moderate southwest slope. This feature's architecture was primarily confined to the feature's eastern two thirds, with facing on both its east and west sides. Construction was of piled and stacked small to large boulders, mostly on the sides of the outcrop, but also on the east portion of its surface. Soil occurred on this outcrops surface also. Three small blisters were visible on the outcrop, all of which had no lateral extent beyond their surface openings. All were also less than a meter in diameter, and average around 50 cm in depth.

A single 1.0 by 3.0 m TU was placed on the feature's east half, primarily to investigate feature function. It was oriented on a rough north-west axis that not only crossed the feature's south facing, but also bisected the eastern-most blister. Excavation of this unit revealed that the facing rested directly upon bedrock and also that the fill retained by the facing included substantial slabs of up-thrust bedrock. The loose rock of this fill didn't exceed 0.50 m in depth and overlay a single soil layer about 0.30 m thick. Soil was a very dark brown (10YR 2/2), organic silt, and had the previously described rock fill in only limited areas. Soil, both at the bottom of the blister and in the area in front of the facing was thin and did not exceed 0.10 m in depth before bedrock was encountered. Only a 0.5 by 0.5 m area located in the unit's north corner was screened with no midden or artifacts recovered from the unit as a whole.

Table 4: Site 10764 Features Identified by Wolforth *et. al* (2005) and Barrera (1988).

Feature	Type	Size (in meters)	Previous #
1	Agricultural platform	6.3 wide x 6.8 long	10771
2	Cistern	7.0 diam x 1.6 deep	10765
3	Storage hole	3.3 long x 1.4 high	10780
4	Agricultural mound	2.0 diam x 0.3 high	10767
5	Agricultural mound	3.0 diam x 0.4 high	10768
6	Agricultural mound	2.0 diam x 0.7 high	10769
7	Agricultural mound	3.0 diam x 0.8 high	10774
8	Agricultural mound	8.0 long x 0.8 high	10775
9	Agricultural mound	2.0 diam x 1.0 high	10779
10	Agricultural mound	3.0 diam x 0.7 high	10784
11	Agricultural mound	3.0 diam x 0.7 high	10786
12	Agricultural mound	2.0 diam x 0.7 high	10785
13	Agricultural platform	2.4 wide x 5.3 long	10770
14	Agricultural platform	2.8 wide x 4.8 long	10772
15	Agricultural platform	3.0 wide x 4.0 high	10773
16	Agricultural platform	2.1 wide x 6.3 long	10771
17	Agricultural platform	3.3 wide x 3.9 long	10778
18	Dozed feature	6.7 wide x 13.8 long	10764
19	Agricultural terrace	4.3 wide x 11.7 long	10776
20	Agricultural terrace	1.2 wide x 1.5 long	10782
21	Internal division wall	1.0 wide x 0.4 high	10766
22	Internal division wall	0.5 wide x 1.0 high	10783
23	Agricultural mound	1.0 diam x 0.3 high	SCS 1
24	Internal division wall	0.2 wide x 0.3 high	SCS 2
25	Agricultural mound	2.0 diam x 0.4 high	SCS 3
26	Agricultural modified outcrop	1.2 wide x 0.5 high	SCS 4
27	Stone steps	1.0 wide x 0.2 high	SCS 5
28	Internal division wall	0.5 wide x 0.3 high	SCS 6
29	Internal division wall	0.5 wide x 0.3 high	SCS 7
30	Homestead boundary wall	2.0 wide x 0.6 high	15540 F. A
31	Homestead boundary wall	0.8 wide x 0.9 high	15540 F. B
32	Homestead boundary wall	1.0 wide x 0.6 high	15540 F. C
33	Homestead boundary wall	0.7 wide x 0.7 high	15540 F. D
34	Homestead boundary wall	0.8 wide x 0.9 high	15540 F. E

The lack of cultural material appeared to give this feature an agricultural function. There were several other outcrops modified into platforms in this homestead, their small size precluding use as habitation foundations, especially for a historic house. The suite of features in the project area appeared to be agricultural features (except for the cistern, steps, and walls). There were also several internal divisions in the Kapa Homestead, the significance of which was not clear. They could, however, represent ancient or historic divisions of the land to segregate garden areas.

CURRENT DATA RECOVERY INVESTIGATIONS

The present study of Site 10764 was conducted by excavating 59 shovel probes, 1 excavation unit and 3 stratigraphic trenches. The shovel probes were excavated in a 60.0 x 35.0 m grid which included Features 1, 5, 6, 7, 8, 13, 14, 15, 16, 19, 27, 28, 29 and 32; the excavation unit excavated in Feature 2; and the stratigraphic trenches were excavated in Features 9, 17, and

19. The shovel probe grid was oriented so that its long axis was 50 degrees off of magnetic north, with probes spaced 5.0 m apart. Much of the southeastern portion of this grid was on exposed bedrock and was consequently not probed, similarly to the probes placed on features. The data gained from these probes is presented in Table 5, while the excavation unit and stratigraphic trenches will be discussed individually along with further observations of the features in which they were placed.

Table 5: List of SPs Conducted in Site 10764

SP	Bottom Depth	Layers	Cultural Material
A-1	0.13	1	Marine Shell, Flat Glass
A-2	0.47 m	1	C14
A-3	0.20 m	1	none
A-4	Bedrock-voided		
A-5	Bedrock-voided		
A-6	0.24 m	1	none
A-7	0.05 m	1	none
A-8	0.37 m	2	none
A-9	0.05 m	1	none
A-10	0.13 m	1	none
A-11	0.15 m	1	none
A-12	0.25 m	1	none
A-13	Bedrock-voided		
B-1	0.39 m	1	Marine Shell
B-2	0.14 m	1	none
B-3	0.40 m	1	none
B-4	Bedrock-voided		
B-5	Bedrock-voided		
B-6	0.26 m	1	none
B-7	0.55	1	none
B-8	0.30 m	2	C14
B-9	0.10 m	1	none
B-10	Bedrock-voided		
B-11	Feature 1-voided		
B-12	Bedrock-voided		
B-13	0.40 m	1	none
C-1	0.20 m	1	none
C-2	0.14 m	1	none
C-3	Feature 16-voided		
C-4	Bedrock-voided		
C-5	Bedrock-voided		
C-6	0.15 m	1	none
C-7	0.70 m	1	none
C-8	Bedrock-voided		
C-9	Bedrock-voided		
C-10	Bedrock-voided		
C-11	0.10 m	1	none
C-12	0.20 m	1	none
C-13	0.28 m	1	none
D-1	0.34 m	1	none
D-2	0.18 m	1	none

SP	Bottom Depth	Layers	Cultural Material
D-3	0.13 m	1	none
D-4	Bedrock-voided		
D-5	0.32 m	1	none
D-6	0.18 m	1	none
D-7	0.15 m	1	none
D-8	0.10 m	1	none
D-9	0.10 m	1	none
D-10	0.15 m	1	none
D-11	0.20 m	1	none
D-12	0.25 m	2	none
D-13	Bedrock-voided		
E-1	0.10 m	1	none
E-2	0.10 m	1	none
E-3	0.25	1	none
E-4	0.25 m	1	none
E-5	0.20 m	1	none
E-6	0.10 m	1	none
E-9	0.20 m	1	none
E-10	Bedrock-voided		
E-11	0.20 m	1	Brass Fastener
E-12	0.08 m	1	none
E-13	Bedrock-voided		
F-1	0.05 m	1	none
F-2	0.39 m	2	none
F-3	0.15 m	1	none
F-4	0.21 m	1	none
F-5	0.15 m	1	none
F-9	0.10 m	1	none
F-10	0.25 m	1	none
F-11	0.05 m	1	none
F-12	0.29 m	1	none
F-13	0.20 m	1	none
G-1	Bedrock-voided		
G-2	0.31 m	1	none
G-3	0.30 m	1	none
G-4	0.38 m	1	none
G-12	0.19 m	1	none
G-13	Bedrock-voided		
H-1	Bedrock-voided		
H-2	Bedrock-voided		
H-3	Bedrock-voided		

Feature 2 and EU-1

Feature 2 was initially described as "a cistern measuring 7.0 m in diameter and 1.6 m deep. It stood 2.0 meters high on the downhill side and 0.90 m high on the uphill. The interior surfaces were plastered, although the structure itself was of dry masonry. The rocks measured between 0.30 by 0.30 by 0.60 m and 0.50 by 0.50 by 0.75 m" (Barrera 1988: 16). The current study found the Feature to be quite collapsed on its southeastern half, but appearing to originally have a square exterior, measuring approximately 6.0 x 6.0 m, with a 2.0 m diameter circular hole in its center. This hole was also measured as up to 2.0 m deep, with plaster occurring only on its west side and having 4 long pieces of iron rebar spanning the opening. This rebar, however, did

not appear to be contemporaneous with the original construction. The architecture was also observed to include a fair amount of coral and a minor amount of cement (Figure 7).

Excavation Unit 1 was a 1.50 by 1.00 m excavation placed in the interior of the feature primarily as an attempt to determine its age. The unit was situated so that its long axis was 235 degrees, with its southwest end abutting the plastered interior of the structure. Excavation of the EU revealed a 0.05 to 0.10 m layer of organic debris containing some modern trash underneath which was a single layer of 10 YR 2/2 very dark brown silt loam with abundant poorly sorted rock (Figure 8). The unit was terminated upon reaching a plastered floor 0.35 to 0.40 m below the interiors surface. Cultural material recovered from the unit included metal can fragments, an iron plate, a square nail, glass and marine shell (included in the plaster). Items not collected included rodent bone and pebble to cobble sized pieces of coral.

Feature 19 and ST-1

Feature 19 was previously described as an 11.70 m north-south x 4.30 m east-west terrace, up to 0.90 m in height (Barrera 1988:17). Further inspection of the Feature, however, showed it to have 2 levels, separated from each other by about a meter, with its lower level exhibiting considerable facing. This lower level was up to 0.50 m in height and retained soil, while the upper level was somewhat mounded, up to 0.60 m in height and retained pebbles and cobbles.

Stratigraphic Trench 1 was placed in the Feature in order to understand feature function and obtain possible macrobotanical material. It measured 4.70 m east-west x 1.00 m north-south and was excavated in 2 stratigraphic layers, although it was not screened. This excavation revealed that soil only occurred behind the lower level, with subsurface piled boulders forming the retaining element for the upper level, its pebble and cobble fill resting directly on bedrock (Figure 9). The 2 soil layers behind the lower level were Layer I, an up to 0.20 m thick 10 YR 3/2 very dark gray brown silt with about a 2 % rock content, below which was Layer II, an up to 0.50 m thick 10 YR 4/3 brown silt with about a 5% rock content which rested on bedrock. Observed cultural material from this trench was limited to a small amount of charcoal located in Layer II, and a 2 cow bone fragments located in the rock of the upper level.

Feature 9 and ST-2

Feature 9 was initially described as a 2.20 by 2.60 m mound between 0.80 and 1.00 m in height (Barrera, 1988: p 17). A further detail noted during this study was large cobble facing occurring along the majority of the feature's north and east sides (Figure 10).

Trench 2 was a 1.00 x 3.00 m unit with its long axis oriented north-south placed across the center of the Feature. The purpose of this trench was to determine the function of Feature 9 (although it was not screened), and obtain possible macrobotanical material as a "grab" sample. Excavation of the unit revealed a thin duff layer, under which were 2 soil layers resting on a low, bedrock mound (Figure 11). Layer I was an up to 0.50 m thick 10 YR 2/2 dark brown loose silt loam with about an 80% pebble and small cobble content. Layer II was a 10 YR 3/2 dark grayish brown silt loam, up to 0.40 m thick, with about a 50% small to large cobble content. No cultural material was observed in either of these layers.

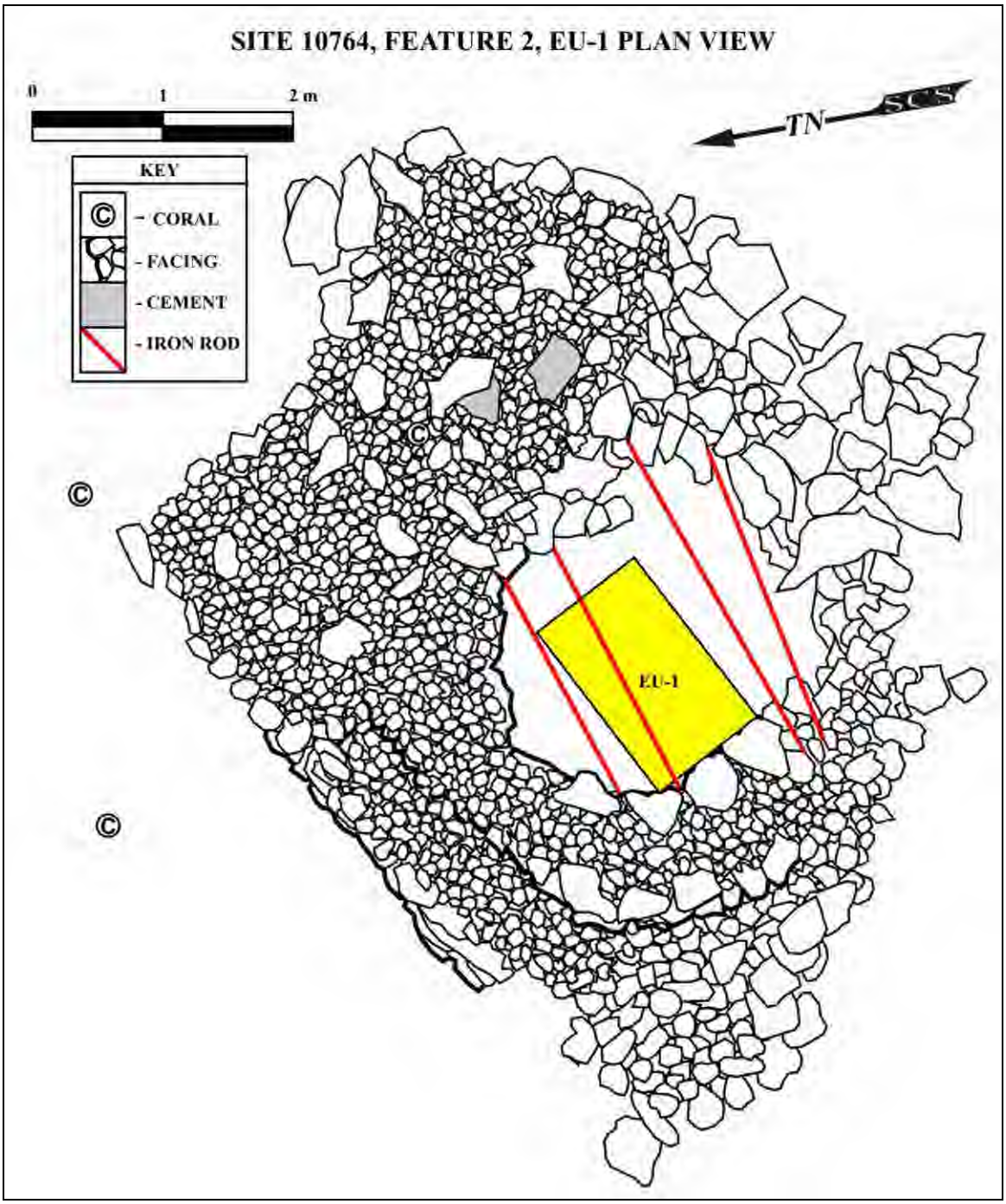


Figure 7: Site 10764, Feature 2, EU-1, Plan View.

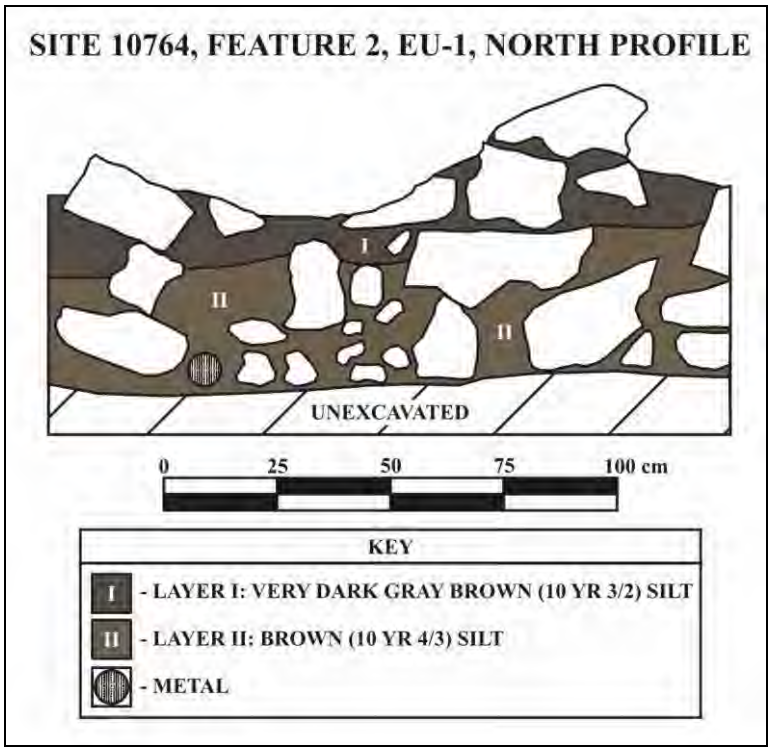


Figure 8: Site 10764, Feature 2, EU-1, North Profile.

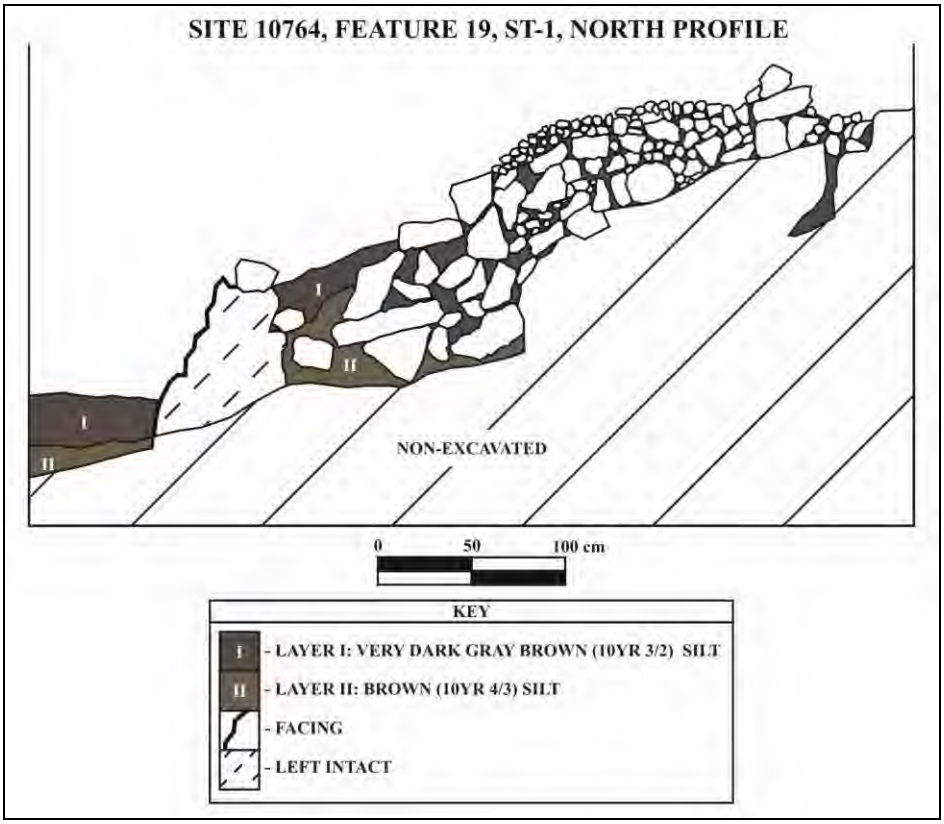


Figure 9: Site 10764, Feature 19, ST-1, North Profile.

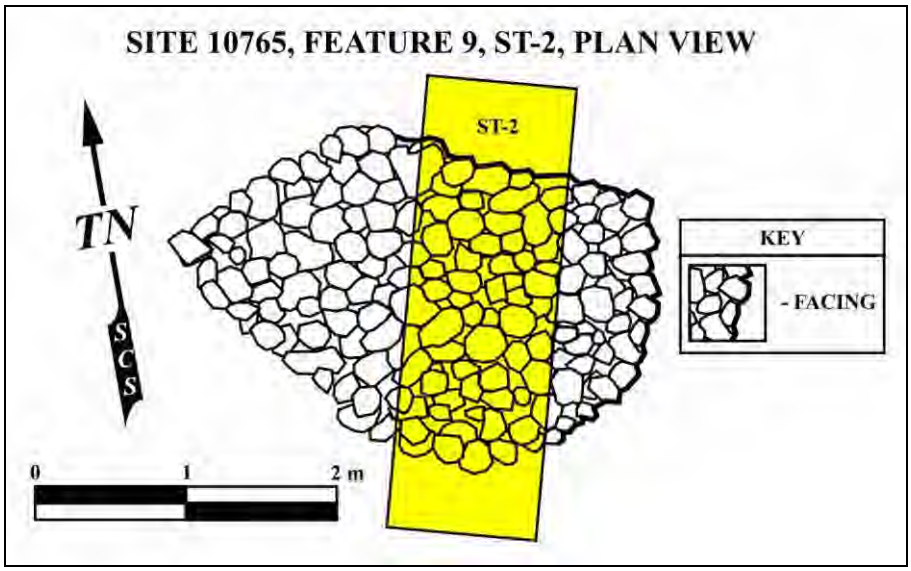


Figure 10: Site 10764, Feature 9, ST-2, Plan View.

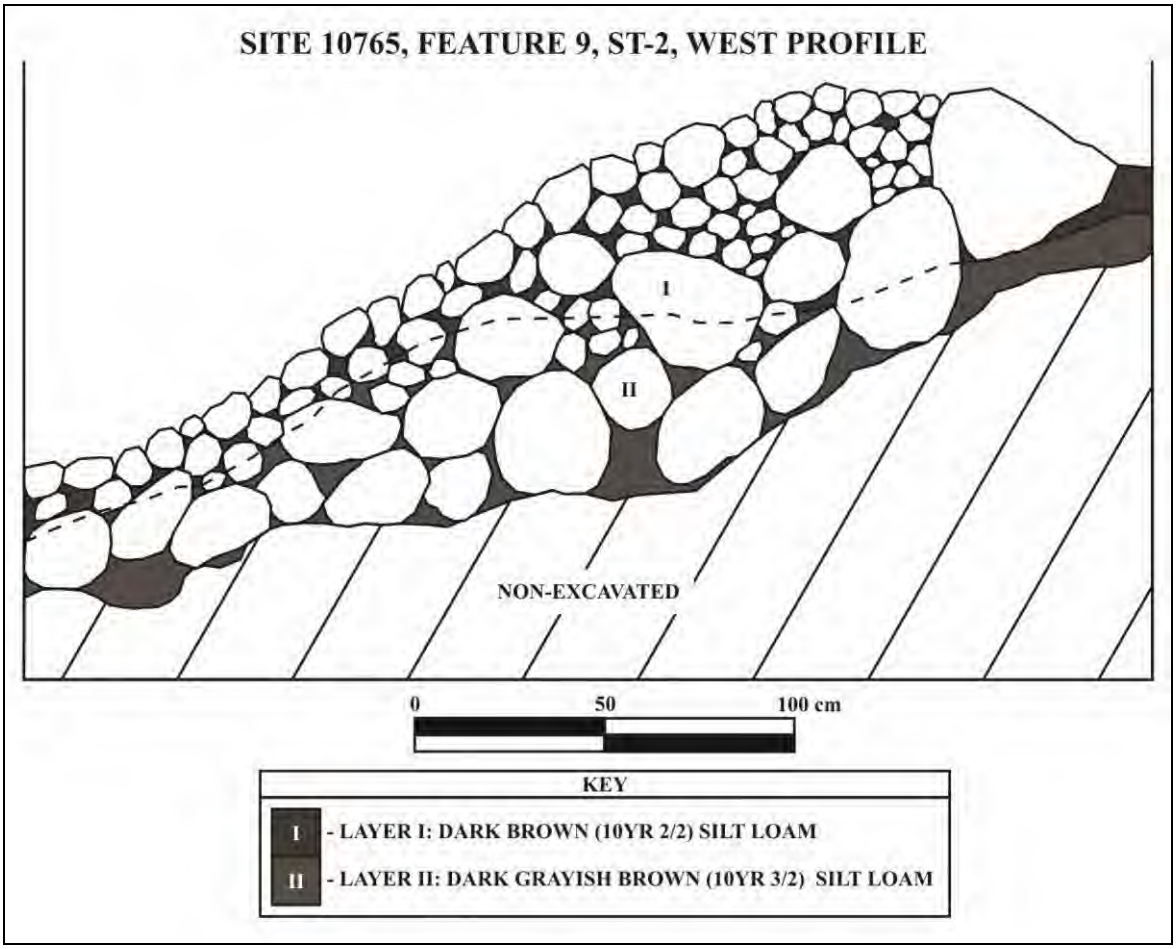


Figure 11: Site 10764, Feature 9, ST-2, West Profile.

Feature 17 and ST-3

Feature 17 was described by Barrera as a 3.30 by 3.90 m platform up to 0.90 m in height (1988: p 17). SCS, however, found the feature to be considerably longer, although much of the feature was also covered by organic debris. Once cleared it was determined to be an oval shaped mound with a fairly level top measuring up to 6.00 m in length, with its long axis oriented northeast-southwest. Facing also occurred on most of its exterior, this facing being most prominent on its down-slope side (Figure 12).

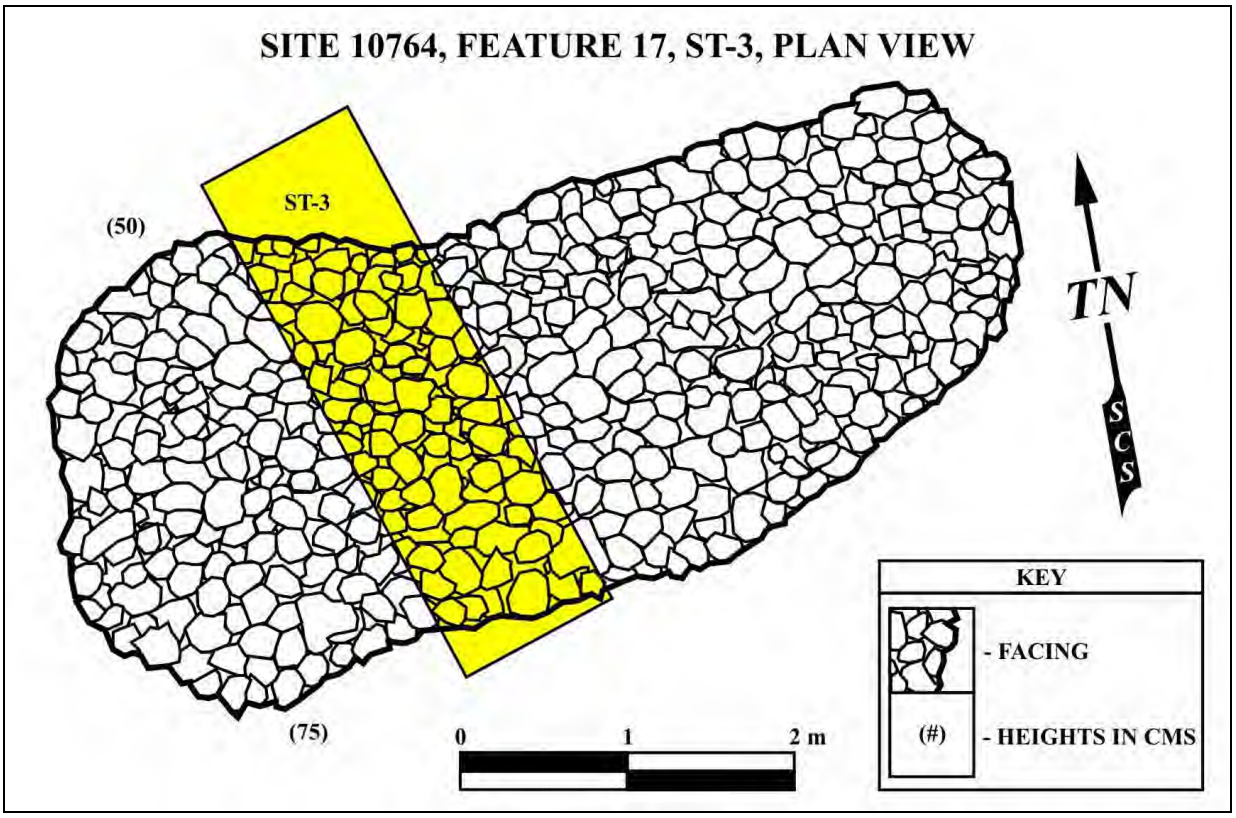


Figure 12: Site 10764, Feature 17, ST-3, Plan View.

Trench 3 was a 1.00 by 3.30 m unit placed across the southwestern half of the Feature, oriented northwest-southeast, in order to understand feature function, temporal placement and obtain possible macrobotanical material. Excavation revealed 2 layers overlying bedrock which averaged 0.35 m thick in the southeast majority of the trench, but due to collapsing bedrock, achieved a depth of around 0.50 m in the northwest portion of the trench (Figure 13). Layer I was an organic duff with about a 50% pebble and cobble content having a maximum thickness of 0.20 m. Layer II was a 10 YR 4/3 brown silt loam with about a 70% rock content and also having many roots. Although not screened, the only cultural material observed during excavation was a few pieces of dark green bottle glass. The finish to this bottle, however, was collected and proved to be an applied finish shaped with a lipping tool.

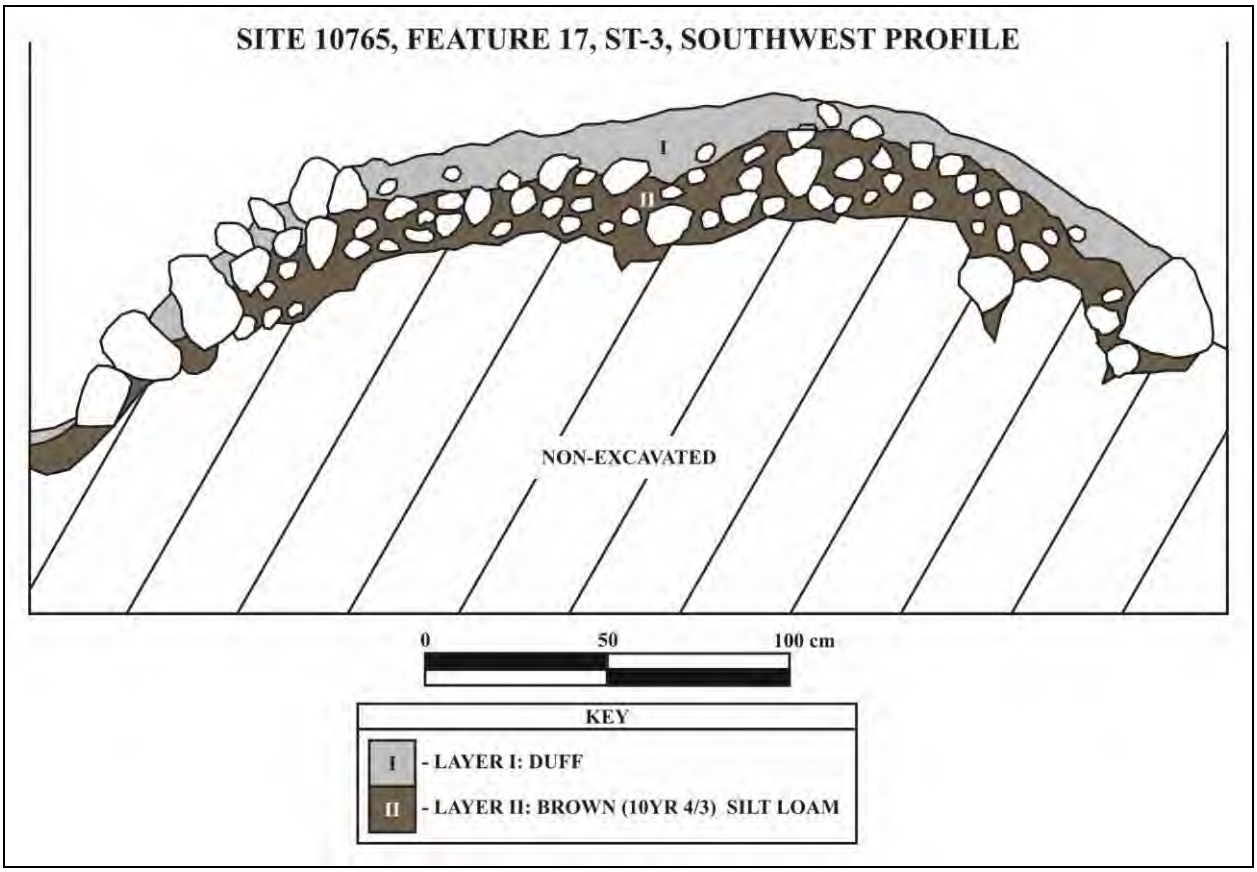


Figure 13: Site 10764, Feature 17, ST-3, Southwest Profile.

SITE 10778

PREVIOUS INVESTIGATIONS

The SCS Inventory Survey (Wolforth *et. al* 2005) identified 30 features in the historic Punihaole Homestead [Barrera (1988) identifying 17] (Table 6). Although the main habitation feature associated with this homestead that is shown on the Emerson map beyond the Kaloko Heights project area, Feature 1 may have been another habitation feature in this large, possibly, multi-residential, homestead.

Table 6: List of Features Identified by SCS & Barrera.

Feature	Type	Size (in meters)	Previous #
1	Habitation platform	7.3 wide x 8.1 long	10795
2	Agricultural mound	3.0 diam x 0.5 high	10787
3	Agricultural mound	5.0 diam x 0.8 high	10789
4	Agricultural mound	4.0 diam x 0.5 high	10790
5	Agricultural mound	2.0 diam x 0.5 high	10792
6	Agricultural mound	2.0 diam x 0.9 high	10796
7	Agricultural mound	7.0 long x 0.8 high	10797
8	Agricultural mound	2.0 diam x 0.5 high	10798
9	Agricultural mound	2.0 diam x 0.5 high	10799

Feature	Type	Size (in meters)	Previous #
10	Agricultural mound	1.5 diam x 0.4 high	10800
11	Agricultural mound	1. 5 diam x 0.4 high	10801
12	Agricultural terrace	4.0 wide x 6.2 long	10788
13	*Kuaiwi* & Agricultural terrace	6.9 wide x 11.6 long	10793
14	Agricultural terrace	4.9 wide x 19.5 long	10762
15	Agricultural terrace	2.4 wide x 6.6 long	10763
16	Internal division wall	1.9 wide x 0.4 high	10791
17	Internal division wall	1.5 wide x 1.0 high	10794
18	Agricultural mound	1.5 diam x 0.3 high	SCS I
19	Agricultural terrace	0.4 wide x 4.0 long	SCS 2
20	Agricultural terrace	4.0 wide x 10.0 long	SCS 4
21	Agricultural terrace	2.0 wide x 2.0 long	SCS 5
22	Cistern	2.0 diam x 0.4 high	SCS 6
23	*Kuaiwi*	2.0 wide x 0.4 high	SCS 7
24	Internal division wall	0.7 wide x 0.8 high	15540 F. F
25	Homestead boundary wall	0.8 wide x 1.2 high	15540 F. G
26	Homestead boundary wall	0.9 wide x 1.2 high	15540 F. R
27	Internal division wall	0.9 wide x 0.9 high	15540 F. S
28	Homestead boundary wall	1.0 wide x 1.2 high	15540 F. T
29	Internal division wall	1.3 wide x 0.8 high	15540 F. W
30	Internal division wall	0.7 wide x 1.1 high	15540 F. AJ

As in Site 10764, Barrera conducted no excavation; SCS (Wolforth *et. al* 2005) tested a portion of Feature 5, a small, oval-shaped mound lying on a moderate southwest facing slope. The entire feature did not exceed 50 cm in height above the surrounding ground surface and was substantially faced on both its north and south sides. Facing was composed of medium sized *pahoehoe* slabs and medium to large cobbles with a few of the cobbles in the lower portions of the facing possibly dressed. Fill retained by this facing consisted of large pebbles to large cobbles. A trench placed within this feature, ST-l, measured 2.0 by 1.0 m and sought to answer the question regarding the feature's potential to conceal human remains. ST-1's orientation was north-south so that both ends of the trench crossed the facing on both sides of the feature. Excavation revealed that although the south facing where this trench was placed was minimal, the north facing was up to 0.40 m thick and extended considerably below the surrounding ground surface.

Two soil layers were identified, the lowermost of these confined to a portion of the unit outside the feature. The pebble-cobble fill penetrated the uppermost soil layer (Layer I), which averaged 0.20 m thick and was a very dark brown (10 YR 2/2), organic silt with about 70% natural cobbles and pebbles in only the southern portion of the unit. In the northern portion, fill rested upon a large boulder that appears culturally placed due to the soil underneath it, and its elevation above the base of the facing. Layer II, was a 0.18 m thick, very dark gray (10YR 3/1), inorganic silt only visible in the extreme south portion of the unit, outside of the feature. Cultural material recovered from this unit was sparse, but included marine shell, small mammal bone and charcoal. The charcoal, however, was recovered from soil Layer II, outside of the feature. Feature 5 probably represented another agricultural feature in this homestead. The few marine shell pieces were determined to probably be debris from the ubiquitous presence of marine food midden in an ancient and historic homestead area.

CURRENT INVESTIGATIONS

The SCS Data Recovery of Site 10778 took the form of 56 excavated shovel probes, 8 excavation units and 5 stratigraphic trenches, as well as three radiocarbon dated samples. Two new features were also identified, Features 31 and 32. Shovel probes were spaced 5.00 m apart on a grid oriented on 65˚ and 335˚ angles from magnetic north and although a line of shovel probes started almost at Feature 11 in the site's northern half, the majority of the probes were clustered around Features 13, 16, 17, 18, 19, 24, 31 and 32, in the site's southern half (Figure 14). It was also in this area that almost all of the excavation units and stratigraphic trenches were placed (Figure 15). In addition, most probes placed directly on features were not excavated. The data gained from the probes is presented below in Table 7, while each excavation unit and stratigraphic trench will be discussed along with further observations of the features in which they were placed.

Table 7: List of SPs Conducted Within Site 10778

SP	Bottom Depth	Layers	Cultural Material
A-1	Feature 11-voided.		
B-1	0.32 m	1	none
C-1	0.25 m	1	V-Glass, Marine Shell
D-1	0.25 m	2	V-Glass, Marine Shell
E-1	Bedrock-voided		
F-1	Bedrock-voided		
G-1	0.24 m	1	none
H-1	Bedrock-voided		
I-1	0.17	1	none
J-1	0.29 m	2	none
J-2	0.35 m	1	none
J-3	Bedrock-voided		
K-1	Bedrock-voided		
K-2	0.25	1	none
K-3	0.32	1	none
L-1	0.40	1	none
L-2	0.22	1	none
L-3	Bedrock-voided.		
M-1	Feature 1-voided		
N-1	0.16m	1	none
N-2	Bedrock-voided		
N-3	0.54 m	2	none
N-4	0.25 m	1	V-Glass
N-5	Bedrock-voided		
O-1	0.28 m	1	none
O-2	0.32 m	2	none
O-3	0.31 m	1	none
O-4	0.27 m	1	none
O-5	0.50 m	2	V-Glass, Marine Shell
O-6	0.14 m	1	none
P-1	0.20 m	1	none
P-2	0.47 m	1	none
P-3	0.31 m	1	none
P-4	0.15 m	1	none
P-5	0.25 m	1	V-Glass, Marine Shell

SP	Bottom Depth	Layers	Cultural Material
P-6	0.42 m	1	Marine Shell
Q-1	0.13 m	1	none
Q-2	0.20 m	1	V-Glass, Marine Shell, C14
Q-3	0.35 m	2	Coral, Ground Stone
Q-4	0.30 m	2	V-Glass
Q-5	0.42 m	2	V-Glass, Marine Shell, C14
Q-6	Bedrock-voided		
R-1	0.20 m	2	none
R-2	0.31 m	1	C14
R-3	0.14 m	1	none
R-4	0.31 m	2	Marine Shell
R-5	0.14 m	1	Marine Shell, Coral
R-6	0.13 m	1	none
S-1	0.44 m	2	V-Glass, Marine Shell, C14
S-2	0.19 m	1	V-Glass
S-3	0.30 m	2	V-Glass
S-4	0.31 m	1	none
S-5	0.28 m	2	V-Glass, Marine Shell, C14
S-6	0.28 m	2	Marine Shell
S-7	0.15 m	1	V-Glass
S-8	0.36 m	2	V-Glass
T-1	0.52 m	2	Marine Shell, C14
T-2	0.45 m	2	V-Glass, Marine Shell, C14
T-3	Bedrock-voided		
T-4	0.30 m	1	V-Glass, Marine Shell, C14
T-5	0.40 m	1	Marine Shell, C14, Bone
T-6	0.55 m	1	V-Glass, Marine Shell, C14
T-7	Disturbance- voided		
U-1	0.56 m	2	V-Glass, M-Shell, C14, Bone
U-2	0.30 m	1	V-Glass, Marine Shell, Coral
U-3	0.25 m	1	V-Glass, Marine Shell, Coral
U-4	0.47 m	2	V-Glass, Basalt, M-Shell, Coral, C14
U-5	Bedrock-voided		
U-6	0.06 m	1	V-Glass, Marine Shell
U-7	0.30 m	1	Marine Shell, Coral

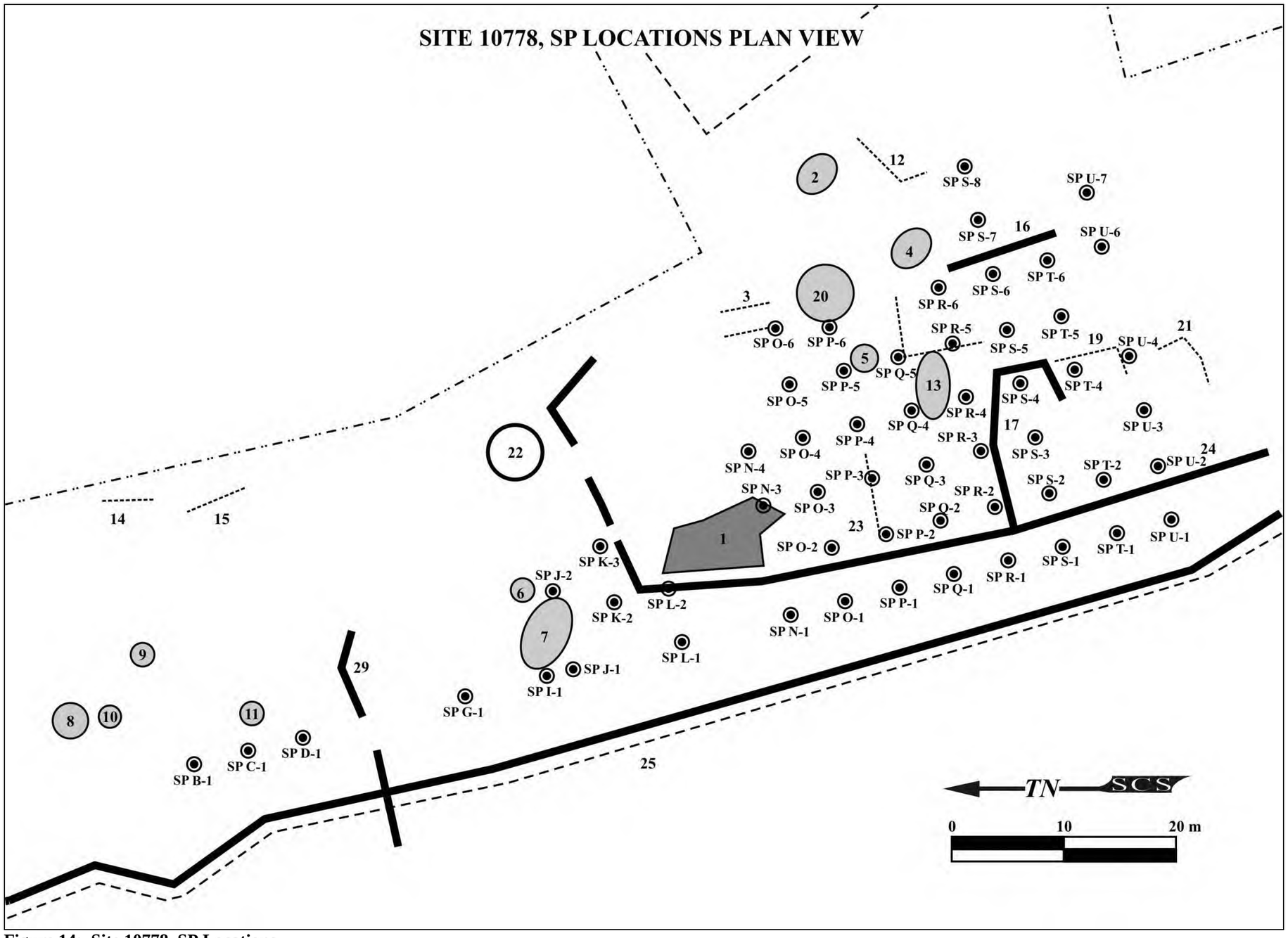


Figure 14: Site 10778, SP Locations.

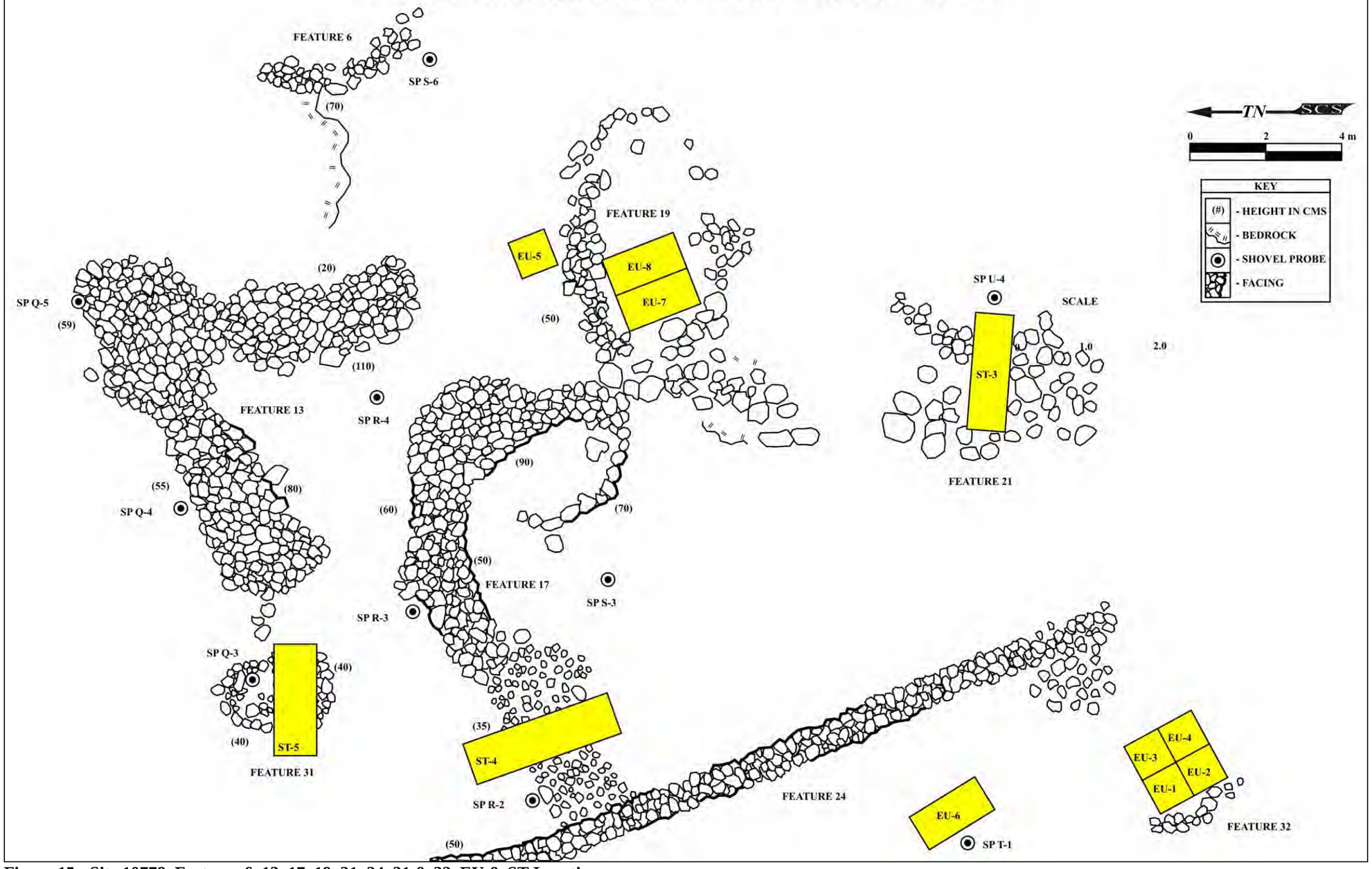


Figure 15: Site 10778, Features 6, 13, 17, 19, 21, 24, 31 & 32, EU & ST Locations.

Feature 32 and EUs 1, 2, 3 and 4

Feature 32 was a barely discernable soil filled terrace identified during the current study. The Feature was located between Features 24 and 25, both walls, with its architecture oriented roughly northwest-southeast. This architecture consisted of no more than 2 courses of boulders and large cobbles, about 0.35 m in height and 2.60 m in length. The level soil behind this retaining element extended no more than 3.00 m northeast before the slope began to rise again.

Excavation Units 1, 2, 3, and 4 were a block of contiguous 1.00 by 1.00 m units placed in the level soil of the Feature and oriented to magnetic north. EU-1 was the northwest unit, EU-4 the northeast, EU-2 the southwest unit and EU-3 the southeast. The block was placed in this feature due to the amount of material recovered from Shovel Probe U-1, located in the southwest portion of EU-1. Excavation of this block revealed 3 layers in all four units (Figure 16).

Layer I was a 7.5 YR 2.5/2 very dark brown silt loam with up to a 30% pebble and cobble content and extending up to 0.17 m below surface. Layer II was a 10 YR 2/1 black silt with up to a 75% rock content, mostly of small pebbles. The layer's color became a bit lighter in EU-3, and ranged in depth between 0.20 and 0.36 m below surface. Bedrock began appearing in Layer II also. Layer III was a 10 YR 4/1 very dark gray ashy silt with up to a 15% cobble and pebble content extending between 0.23 and 0.69 below surface before reaching bedrock in the entire block. Layer III was deepest in EU-1, while minimal in EU-4. Roots were prominent in all 3 layers. Large amounts and varieties of cultural material occurred in each layer, although Layer III contained the highest quantities. These included marine shell, volcanic glass, basalt debitage, coral, mammal and fish bone, burnt *kukui* shell, waterworn pebbles and charcoal. Several adze fragments and a human molar fragment were recovered also (see Appendix A).

Radiocarbon Date Data

SCS submitted a 0.4 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC627). The sample was screened from within Site 10778, Feature 25A, EU-1, Layer III, 31-48 cmbs. The sample shows a 95.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1470 to 1660, the chronology for this Layer falls within the pre-Contact period (see Appendix B).

EU-5

Excavation Unit 5 was a 1.00 by 1.00 m unit not associated with a feature, but located immediately to the north of Feature 19. This unit was also just to the west of SP S-5, which yielded a large amount of volcanic glass. The EU was excavated stratigraphically in 3 layers (Figure 17). Layer I was a 2.5 YR 3/4 dark brown organic silt with no rock extending between 0.04 and 0.10 m in depth below surface. Layer II was a 10 YR 3/2 dark grayish brown silt with a minor amount of rock extending up to 0.25 m below the surface. Bedrock also occurred in the northwest portion of the unit at the bottom of this layer. Layer III was a 10 YR 4/3 brown silt, also with a minor amount of rock, extending to a maximum depth of 0.35 m below surface before bedrock occurred throughout the entire bottom of the unit. Cultural material recovered from this unit occurred primarily in Layer II, but also occurred to a lesser extent in Layer III. This material consisted of marine shell, large amounts of volcanic glass, coral, fish and mammal bone.

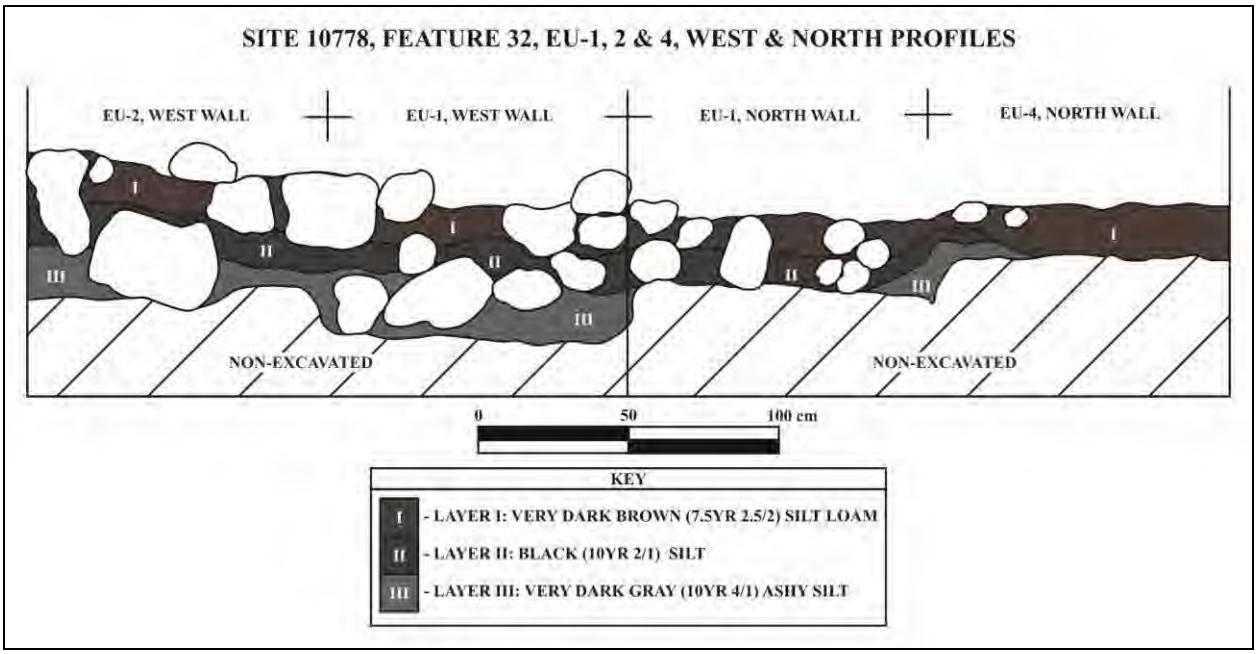


Figure 16: Site 10778, Feature 32, EUs 1,2 & 4, West & North Profiles.

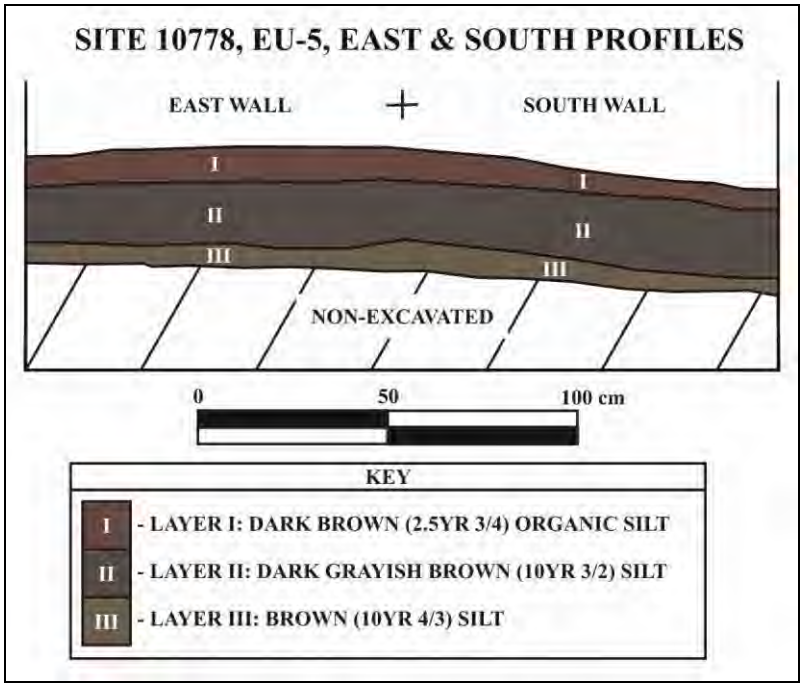


Figure 17: Site 10778, EU-5, East & South Profiles.

EU-6

Excavation Unit 6 was a 1.00 by 2.00 m unit located about 4.00 m north of EUs 1, 2, 3 and 4, in the nearly level area between Features 24 and 25. The unit was placed in this area to further investigate the large quantities of cultural material observed in SP T-1, immediately adjacent to the west, and had its long axis oriented northwest-southeast. The EU was excavated in arbitrary 0.10 m levels and revealed 4 layers with a subsurface feature overlying bedrock (Figure 18). Layer I was a 5 YR 2.5/2 dark reddish brown organic silt loam with a minimal rock content achieving a maximum depth of 0.13 m below surface. Removal of this layer also exposed bedrock in the northern one fourth of the unit. Layer II was a 7.5 YR 2.5/1 black silt loam with about a 70% rock content, mostly of small pebbles which reached a depth of 0.30 m below surface and also exposed the top of subsurface 25.1 in the southeastern portion of the unit. This subsurface feature, excavated separately, was a roughly stacked boulder and bedrock lined hearth with a 10 YR 6.2 light brownish gray ashy silt fill overlying bedrock. Layer III was a 2.5 YR 2.5/1 black silt loam with about a 50% pebble content overlying bedrock in all but the southeast corner of the unit. Ash staining from the subsurface feature also occurred in this layer which had maximum depth of 0.59 m below surface. Layer IV was a 7.5 YR 3/2 dark brown silt occurring only in the southeast corner of the unit and was only about 0.05 m thick. Cultural material was recovered from the subsurface feature fill and Layers II and III, although the largest quantities were from Layer III. This material included marine shell, urchin, volcanic glass, basalt debitage, a hammerstone, adze fragments and charcoal. A soil sample was also taken from the subsurface feature.

Radiocarbon Date Data

SCS submitted a 1.4 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC626). The sample was screened from within Site 10778, Feature 25, EU-6, SSF 25.1, 40-56 cmbs. The sample shows a 95.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1300 to 1430, the chronology for this Subsurface Feature falls within the early pre-Contact period (see Appendix B).

Feature 19 and EUs 7 and 8

Excavation Units 7 and 8 were 2 contiguous units placed in Feature 19, initially identified during the SCS inventory survey and test as an agricultural terrace. Further inspection of the feature during the current study, however, revealed more details. This platform-like terrace was fairly level on its western two-thirds but slightly raised on its eastern third. It was raised above the ground surface on its north, east and west and was delineated on its south side by a boulder and cobble alignment. There appeared to be a 0.50 m wide, 3 stepped stairway on the Features west end, but this may have been coincidental. Feature 19 was attached to Feature 17 at its northwest corner, although Feature 19 was about 0.25 m higher. A modified outcrop extends southwest off of the Features southwest corner, while exposed bedrock, level with its surface, lay just on the other side of the southern cobble and boulder alignment.

Excavation Units 7 and 8 were two 1.00 by 2.00 m units placed on the western half of the Feature, side by side in order to investigate feature function and its relationship with the material recovered in nearby EU-5. The units had their long axis oriented 344˚ off of true north, with EU-7 being the western most unit and EU-8 on the east. EU-7 was excavated first and proved to be shallow with a duff layer and single soil layer, reaching a maximum depth of 0.28 m below the

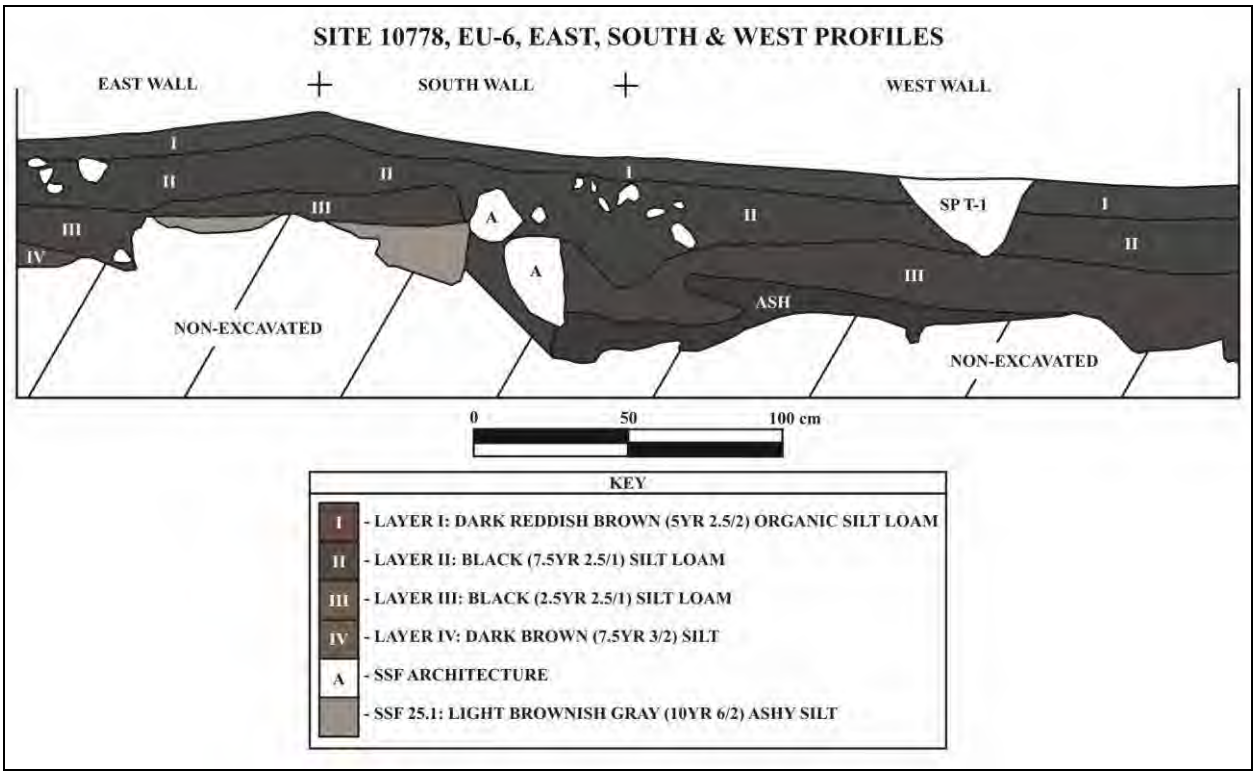


Figure 18: Site 10778, EU-6 East, South & West Profiles.

surface. This unit, however, yielded a large amount of cultural material, primarily volcanic glass, which then predicated the excavation of EU-8. This second EU proved to be much deeper, revealing 4 soil layers before it was terminated at a maximum depth of 0.70 m below the surface (Figure 19). Layer I was the organic duff layer about 0.10 m thick. Layer II was a 2.5 YR 2.5/2 very dusky red silt loam with about a 60% rock content and a maximum depth of about 0.20 m below the surface. Layer III was a 7.5 YR 3/1 very dark gray silt loam containing several ash pockets. It also had about a 70% rock content and rested on bedrock in the majority of the unit. Layer IV occurred only in the southern portion of the unit and was a 7.5 YR 2.5/2 very dark brown silt loam with about a 70% pebble and cobble content being about 0.10 m thick. Cultural material was recovered from all layers, but the vast majority came from Layer III. This material consisted of large quantities of volcanic glass, marine shell, coral, fish, bird and mammal bone, basalt debitage, a piece of ground stone, a piece of chert, a coral file and large amounts of charcoal.

Radiocarbon Date Data

SCS submitted a 0.8 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC625). The sample was screened from within Site 10778, Feature 19, EU-8, Layer III, level 7, 60-70 cmbs. The sample shows a probability distribution when calibrated to 2 Sigma, that with a date range of A.D. 1640 to 1960, is weighted toward a chronology for this Layer falling within the early post-Contact period (see Appendix B).

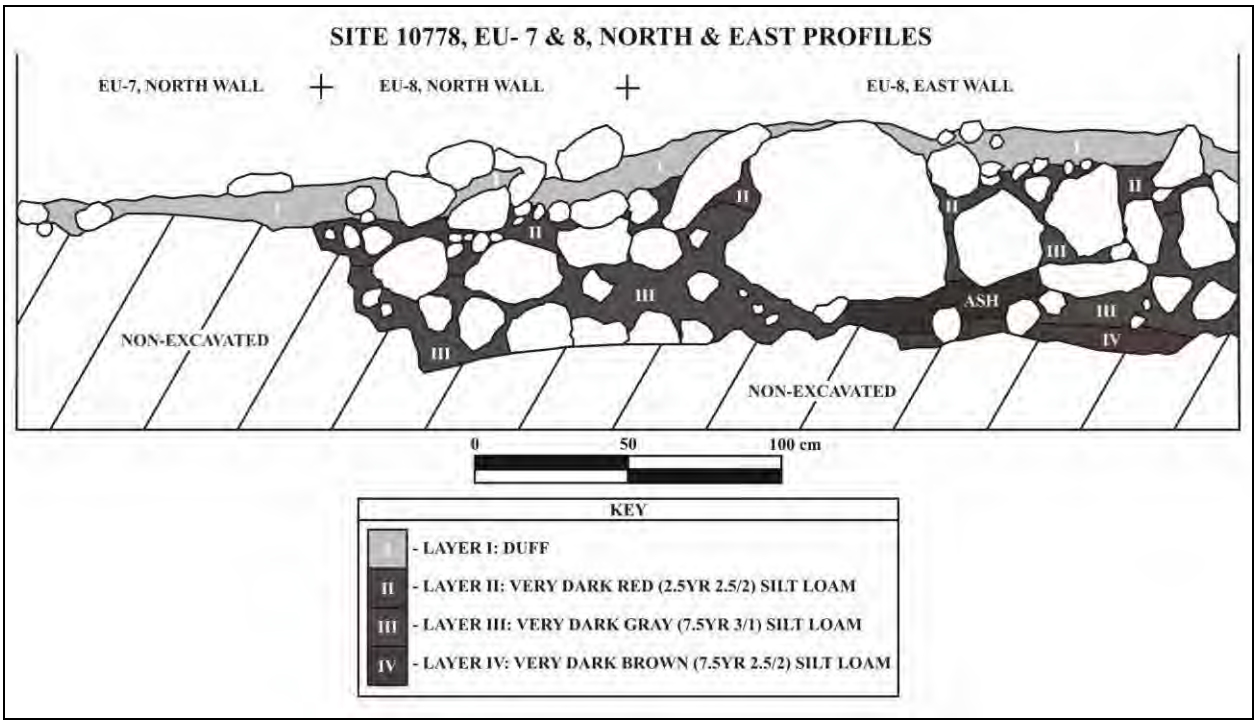


Figure 19: Site 10778, Feature 19, EUs 7 & 8, North & East Profiles.

Feature 22 and ST-1

Feature 22 extended off of Feature 24, a wall, to its north, and was interpreted as a well or unfinished cistern. This feature was a rectangular platform 3.25 m northeast-southwest by 2.25 m northwest-southeast with a 1.20 by 0.95 m hole in its center, up to 1.29 m deep. Construction was of stacked boulders up to 8 courses high in the Feature's interior and 4 courses high on its exterior. Two basalt slabs overhung the interior of the Feature, on its southeast side, and there was a large upright slab located at the eastern corner of its exterior. Slab stones on the southeast side were almost flush with the ground surface, possibly for access, while the Feature was somewhat tumbled on its south side (Figure 20).

Stratigraphic Trench 1 was a 3.00 by 1.00 unit excavated in order to understand feature function and its temporal placement. The unit was placed with its long axis oriented 62˚ by 242˚off of magnetic north, and situated so that its northeast end abutted the wall of the Feature's interior, while its southwest end extended outside of the exterior. The trench was excavated in 3 stages, rather than layers. In the first stage the matrix at the bottom of the cistern was excavated and screened revealing a single soil layer consisting of a 10 YR 3/2 very dark grayish brown organic silt loam with about a 50% pebble and cobble content. Bedrock was reached at 0.52 m below the Feature's interior surface with the excavation also revealing an incipient waterworn pebble pavement from between 0.16 to 0.20 m. During the Trench's second stage, the Feature's exterior architecture was removed leaving the interior wall intact. In the final stage, soil from underneath the architecture and outside of the Feature was removed but not screened. This soil also proved to be a single layer, up to 0.20 m thick, overlying bedrock (Figure 21). Cultural material recovered from this excavation consisted of 2 pieces of coral located in the soil from outside of the Feature.

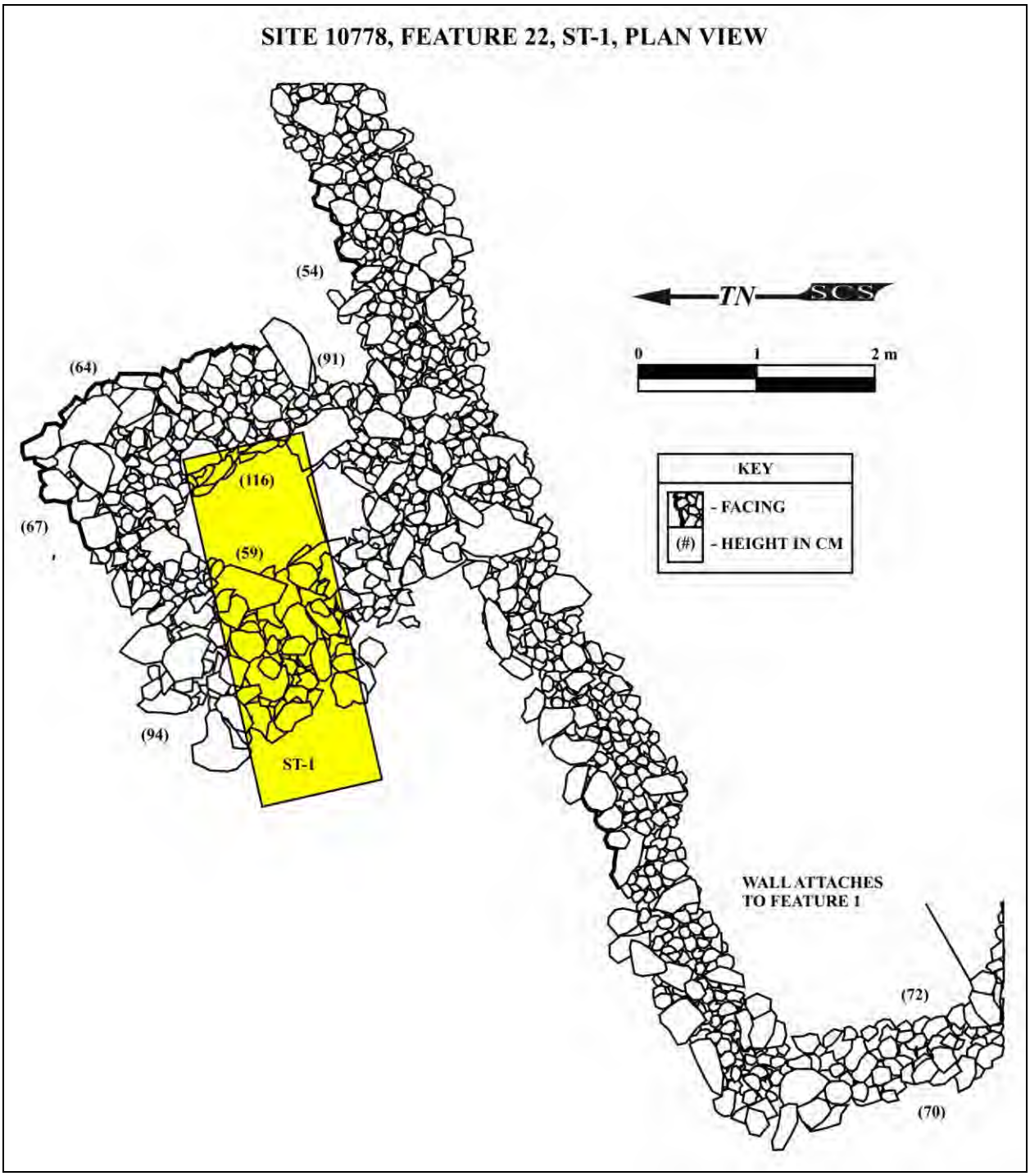


Figure 20: Site 10778, Feature 22, ST-1, Plan View.

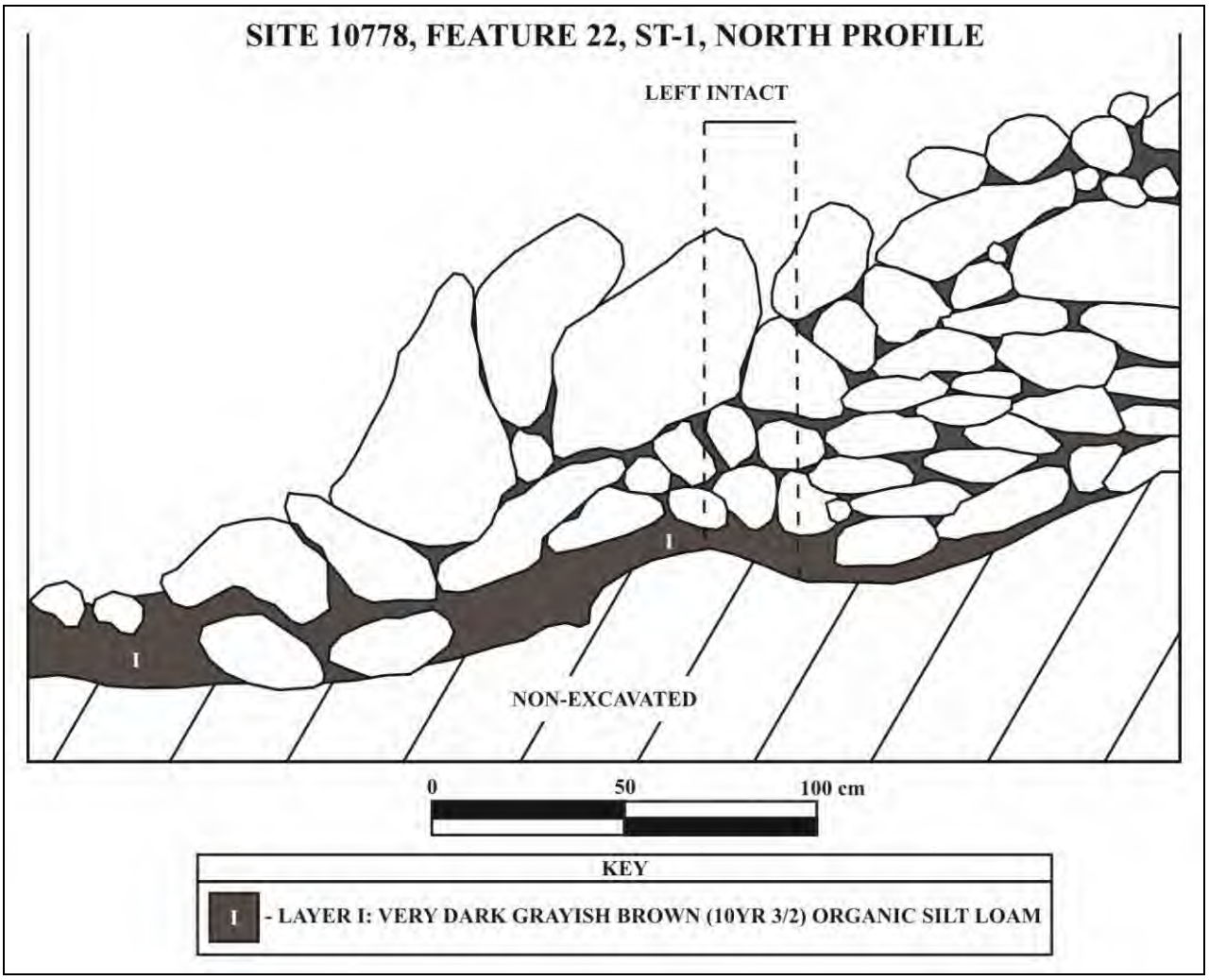


Figure 21: Site 10778, Feature 22, ST-1, North Profile.

Feature 1 and ST-2

Feature 1 was previously described as a habitation platform measuring 7.30 by 8.10 m reaching a height of 0.30 m on its uphill side and 12.10 m on its downhill side (Barrera 1988:18). The current study, however, found the Feature to differ slightly from the previous description and added further detail. Feature 1 was found to be an irregularly shaped, bi-level platform measuring 9.25 m long east-west by 8.50 m wide north-south and reaching a maximum height of 1.40 m on its down slope side. Construction on its west side was of medium to small boulders with piled and stacked segments on the remainder of the Feature. There were also short segments that were faced, although large portions of the Feature were tumbled. The surface of Feature 1 was roughly divided in half with its west half level, and paved with small boulders, and its east half elevated, slightly sloping and contained small to medium sized cobbles. A triangular white tin bowl was also observed about 1.50 m south of the Feature's southeast corner (Figure 22).

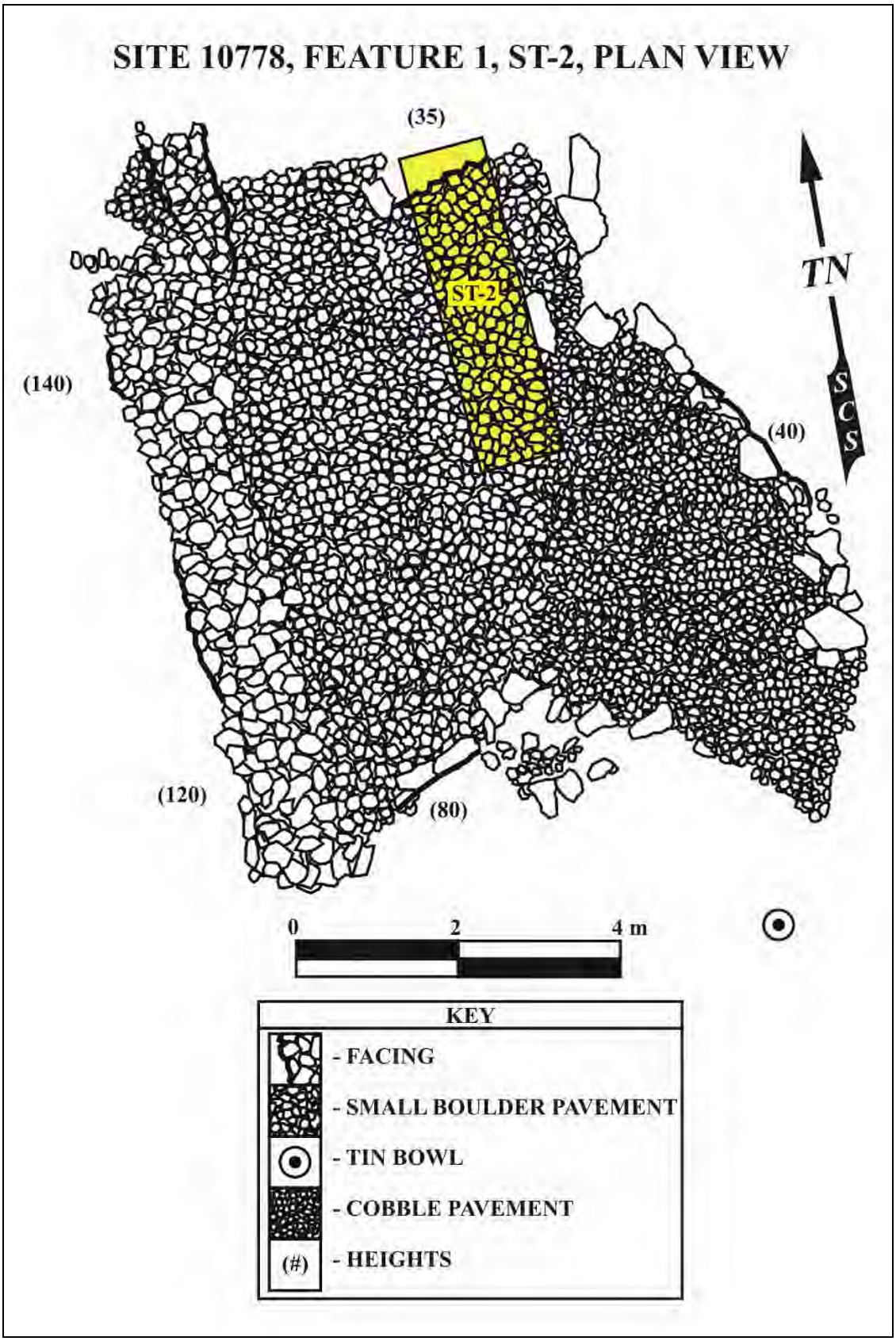


Figure 22: Site 10778, Feature 1, ST-2, Plan View.

Stratigraphic Trench 2 was a 1.00 by 4.00 m long excavation extending into the Feature, southeast, from its northwestern edge in order to investigate feature function. The unit was excavated by first removing feature architecture and subsequently revealed 3 soil layers (Figure 23). The architectural layer demonstrated a retaining element, faced on both its interior and exterior, with soil and rock fill behind it. The exterior facing tended to be of small boulders placed vertically, as opposed to the interior facing which consisted of larger boulders placed flat. Soil Layer I was a 10 YR 3/2 very dark brown silt with about a 20% rock content that extended from underneath the architecture and portions of the trenches surface to bedrock, at a maximum depth of 0.52 m below surface. Layer I also occurred outside of the Feature, but was much thinner there, averaging 0.10 m. Layer I-A was a thin isolated soil located above Layer I only in the retaining element. This layer was a 5 YR 2.5/1 black silt from 0.04 to 0.07 m thick with almost no rock. Layer II was only observed outside of the Feature and consisted of a 10 YR 3/3 dark brown silt, also with almost no rock, that averaged about 0.20 m in thickness and overlay bedrock. With the exception of some small mammal bone located in the architecture, cultural material from this excavation was only recovered from Layer I. This recovered material consisted of volcanic glass, marine shell, additional mammal bone, a hammerstone, a polished basalt fragment and charcoal.

Feature 21 and ST-3

Stratigraphic Trench 3 was placed in Feature 21, first described by the SCS Inventory Survey as a 2.00 m long, 2.00 wide, agricultural terrace. The current study, however, found the feature to be slightly larger, measuring 5.00 m north-south by 4.00 m east-west and to retain soil on its east side. Construction was primarily of stacked boulders with much collapse below.

ST-3 was a 1.00 by 3.00 m unit placed in Feature 21 on an east west long axis in order to further investigate feature architecture, collect macrobotanical remains and explore the nature of the cultural material recovered from SP U-4, located immediately above the ST. Excavation of this unit revealed 3 soil layers, 2 of which were retained by the Feature's architecture and 1 of which occurred underneath (Figure 24). The 2 soil layers that were retained by the architecture also occurred below the terrace. Layer I was a 7.5 YR 2.5/2 organic silt, about 0.08 m thick at its maximum, with about a 20% pebble content. Layer II was a 10 YR 2/1 black silt loam with a 10% pebble content and a maximum depth of 0.16 m below surface where the majority rested on bedrock. Layer III only occurred underneath the Feature's architecture and a little behind it. This layer was a 10 YR 3/2 very dark grayish brown silt with about a 50% pebble content and extending to a maximum depth of 0.28 m below surface. The Feature's architecture proved to be mostly of cobbles and small boulders on the surface with only a small subsurface boulder retaining element. Cultural material occurred in all soil layers, but the majority was recovered from Layer II, behind the retaining element. This material consisted of volcanic glass, marine shell and coral. A soil column was also taken from the profile in order to recover macrobotanical remains.

Feature 17 and ST-4

ST-4 was placed in Feature 17 identified by Barrera as a core filled wall 20.00 m in length, 1.50 m wide and 1.00 m high (1988:18). Examination during this study proved the wall to be about 8.00 m shorter, however, extending east off of Feature 24, another wall, and then curving a short distance to the south. The major portion of this southern section also serves

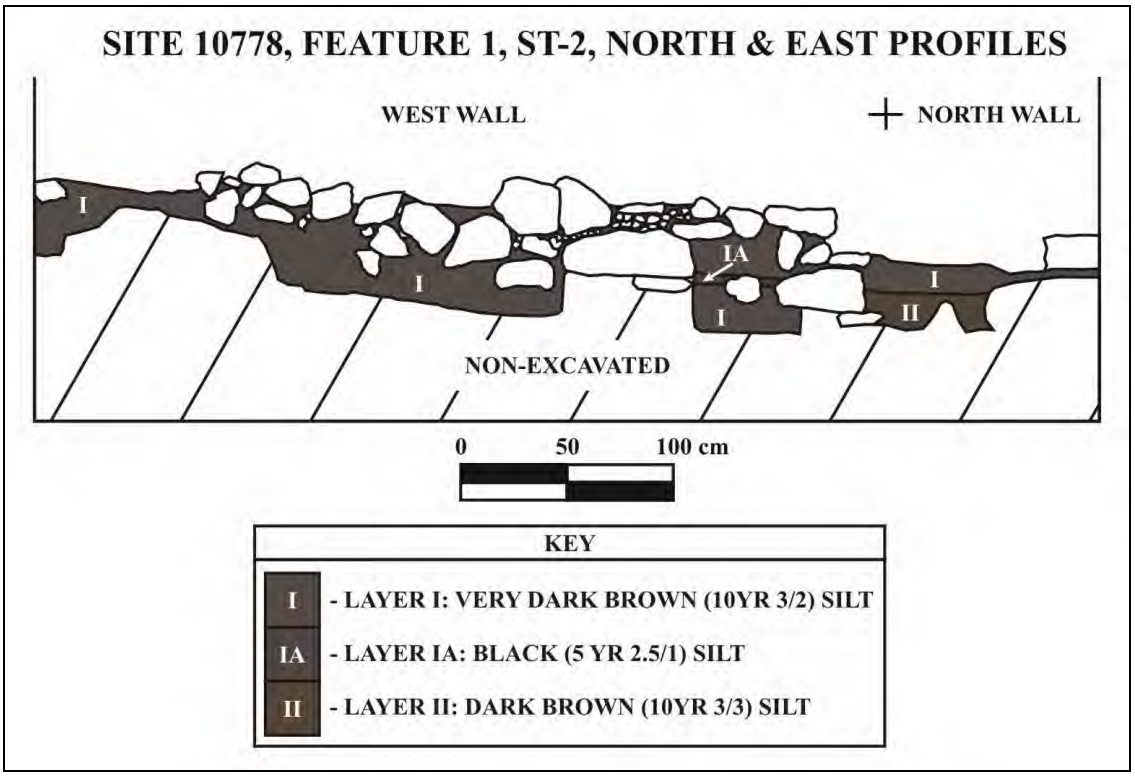


Figure 23: Site 10778, Feature 1, ST-2, North & East Profiles.

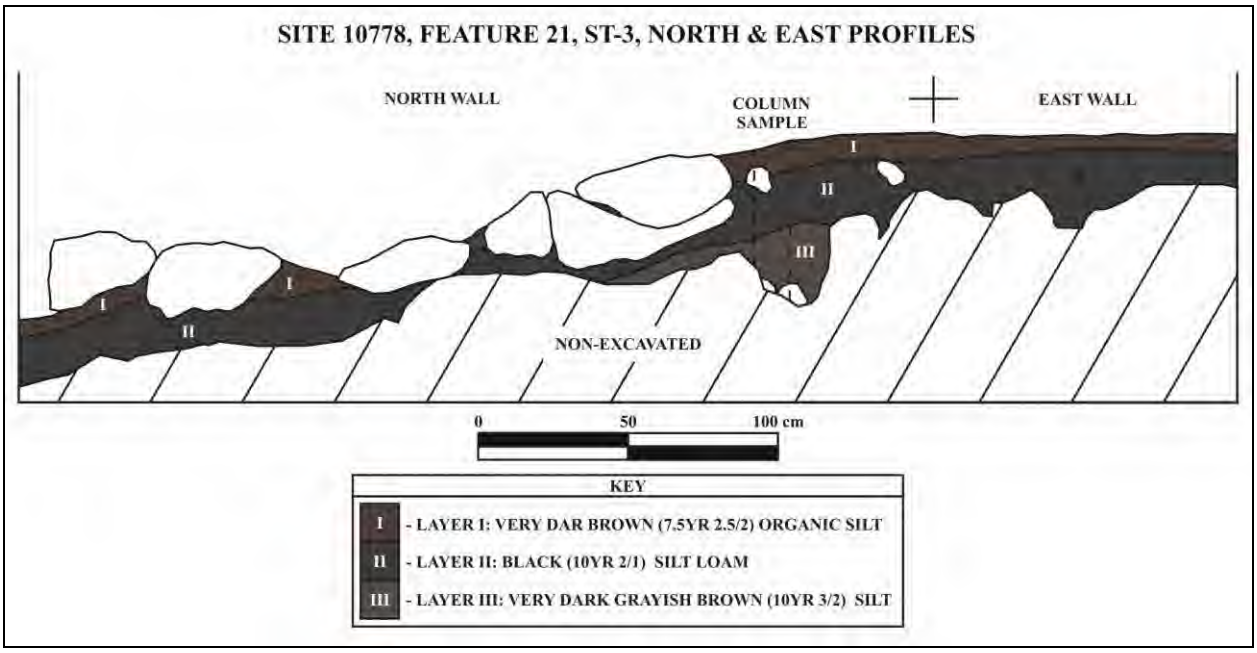


Figure 24: Site 10778, Feature 21, ST-3, North & East Profiles.

as backing for a small soil filled terrace occurring on its west side. The eastern portion of the wall, before the southern curve, is fairly massive and well faced while its western 4.00 m, before it intersects Feature 24, is barely more than a low mound of small to large cobbles.

Stratigraphic Trench 4 was placed across the western portion of Feature 17 in order to understand feature architecture and was a 1.00 by 4.00 m excavation with its long axis oriented north-south. Excavation of this trench revealed a shallow architectural layer, up to 0.17 m thick, under which lay 2 soil layers (Figure 25). Bedrock was also exposed in a portion of the unit after the removal of the architecture. Soil Layer I actually contained a small portion of architecture and also proved to be quite shallow, 0.04 to 0.12 m thick. This Layer was a 10 YR 3/2 very dark grayish brown organic silt with almost no rock content. Layer II was a 7.5 YR 3/1 very dark gray silt, also with very little rock, achieving a maximum thickness of 0.24 m. Removal of this layer exposed bedrock across the entire trench. Cultural material recovered from this excavation consisted of volcanic glass, marine shell, coral and charcoal and was primarily recovered from its north portion, outside of the Feature, in Layer II. No cultural material was recovered from either the architecture or Layer I.

Feature 31 and ST-5

Feature 31 was also a previously unidentified feature and was a low oblong shaped mound lying about 3.00 m north of Feature 17. This mound measured 3.00 m north-south by 2.30 m east-west and was up to 0.70 m high. Its surface consisted mainly of pebbles and small cobbles, although much of its perimeter was lined with small boulders.

Stratigraphic Trench 5 was a 1.00 by 3.00 m unit which bisected the mound across its center on an east west axis in an effort to understand the Feature's function and construction. The Trench also bisected SP Q-3, on the Trenches north side, and at least 0.40 m on its west end lay off of the Feature. ST-5 was excavated as a mixed architectural and soil layer with a single underlying soil layer (Figure 26). Layer I was the mixed soil and architectural layer which included a fair amount of organic material. Soil in this layer was a 7.5 YR 3/1 very dark gray silt loam with about a 60% pebble and cobble content and a maximum depth at the center of the feature of about 0.40 m below surface. Layer II was a 7.5 YR 2.5/1 black silt loam with about a 35% cobble content achieving a maximum depth of 0.51 m below surface and overlying sloping bedrock. Cultural material was distributed fairly evenly between the 2 layers and consisted of moderate amounts of volcanic glass and marine shell, smaller amounts of coral, a hammerstone and charcoal.

KOHANAIKI HOMESTEADS SUMMARIES AND DISCUSSIONS

When one examines the results of the data recovery in each of the two homestead sites, Site 10764 and Site 10778, the contrasts are remarkable.

Site 10764

Although Site 10764 was shovel probed extensively, only 5 of these probes yielded cultural material, with 2 of them producing small amounts of charcoal, 2 producing historic items and 1 a small amount of marine shell. Because both marine shell and charcoal cannot definitely be assigned to the pre-Contact period, this data does not point to a traditional use of the area. Indeed, one of the 2 probes yielding marine shell also produced flat glass. Three of these probes

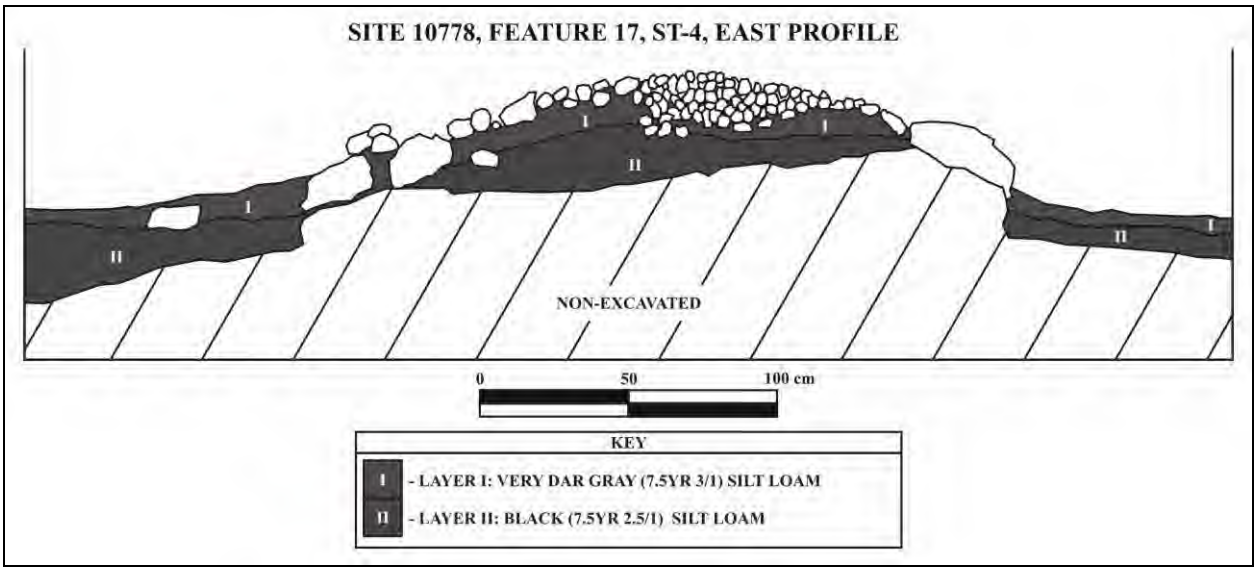


Figure 25: Site 10778, Feature 17, ST-4, East Profile.

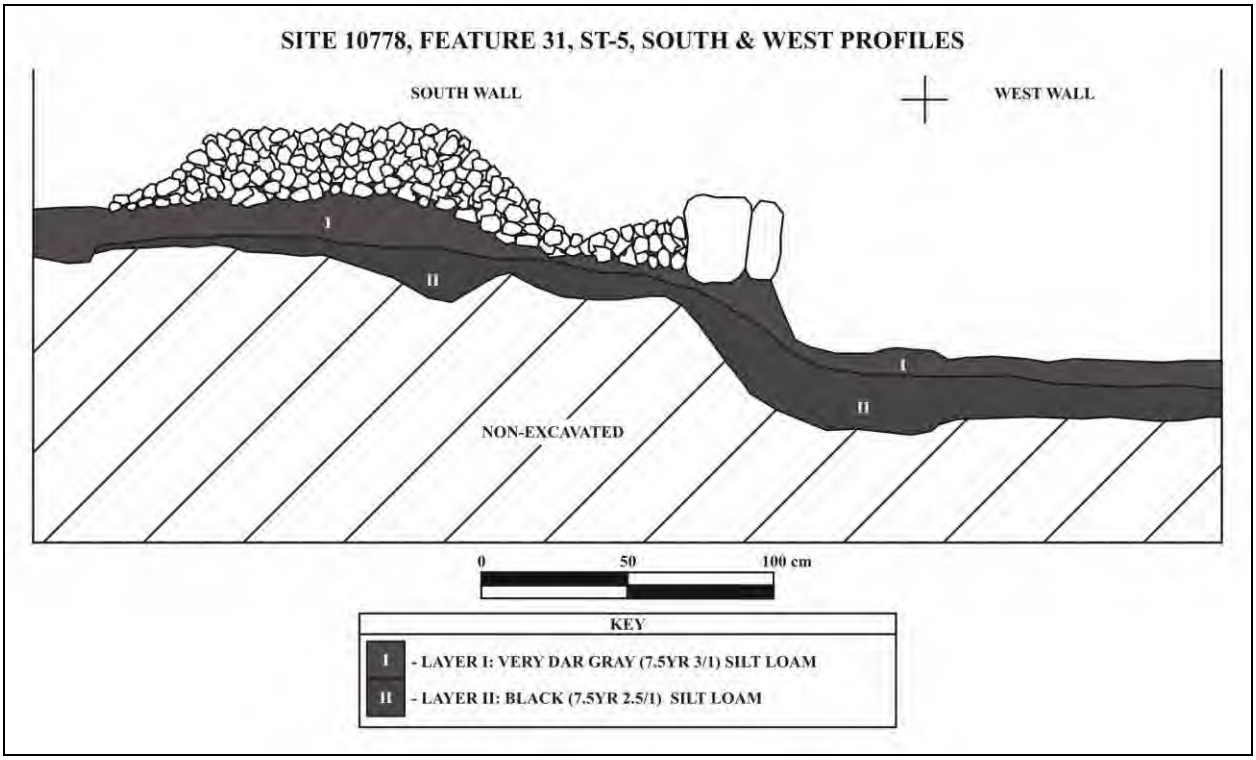


Figure 26: Site 10778, Feature 31, ST-5, South & West Profiles.

were clustered in the northwest corner of the site, while the other 2 were in the central portion and the southeast portion. This relative lack of data demonstrates that, in this area of the site at least, material generating activities were focused almost completely on the site's surface features. In addition, the shallowness of most of the probes demonstrated that agriculture was probably focused on the surface features also.

Data from the 4 units excavated at the site was relatively sparse also, with only EU-1, placed within a historic cistern producing any significant amount of material. Again, the sparse material observed in the other units was almost solely historical and points toward the complete absence of prehistoric use in this area (see Appendix A).

Site 10778

By contrast, the data generated from Site 10778 present a very different picture. Over half of the 57 excavated shovel probes at this site produced cultural material, and the ones that did present a clear picture of inter-feature activities focusing on the southern area of this portion of the homestead. In addition, of the large amount of material generated from the subsurface investigations of this site, only a single item, a piece of chert from EU-7, can be considered historic. Indeed, the only feature at the site thought to be definitely historic, Feature 22, a possible cistern, did not produce any historic material.

Two of the three radiocarbon dated samples from Site 10778 excavations produced distinctly pre-Contact dates.

The ST excavated in the possible habitation at this site, Feature 1, confirmed this assumption, or pointed toward it at least being a work surface. The amount of midden recovered was negligible compared to the amount of artifacts (*Cypraea* shell can be both midden or artifact), but again, if this was a habitation, it was pre-Contact and probably did not relate to the historic activities at this homestead.

The presence of subsurface hearths in the southern portion of this site deserves some comment. Although no subsurface feature was recorded for the block of units placed in Feature 32, a soil filled terrace, the ashy nature of Layer III and the large volume of charcoal recovered point to one being adjacent. An actual subsurface feature, however, was excavated in EU-6 located about 4.00 m north, but whether the ash and charcoal located in Feature 32 relates to this hearth or another undiscovered one is problematical. The presence of these hearths, assumed to be cooking features, in an area having no visible habitation features is interesting. Questions arise as to whether nearby features functioned as habitations, although not recognized as such. Probably the best candidate for this scenario would be Feature 19, originally identified as a rock filled agricultural terrace, although excavation of this feature yielded dense quantities of cultural material (see EUs 7 and 8).

The large volume of volcanic glass recovered from this area of the site also deserves comment. This area was potentially a specialized workshop involved in tool production or some other specific activity requiring volcanic glass. At the minimum, there is no doubt that the people occupying this area had access to large volumes of this material which may point toward specific ties with other populations of the island, or may even indicate wealth differentiations.

Finally it must be pointed out that much of the area of these homesteads selected for Data Recovery has been previously destroyed, and the areas left intact present only a limited, and perhaps biased, picture. The lack of prehistoric material at Site 10764 contrasting with that in 10778, adjacent and at a slightly lower elevation, may indicate prehistoric environmental preferences which study of adjacent areas could confirm or deny.

WALLED FIELDS

The Walled Fields class of sites were divided into five sites: 10693, 10700, 10716, 10730, and 10734 (Figure 27). One site (10716) was a network of *kuaiwi* and terraces, and the rest of the sites were the features that were separated by these *kuaiwi* and terraces. Many excavations were conducted in this area in the earlier investigations of Barrera (1991), and indicated that the area was used primarily during pre-Contact. Hydration rind dates showed the area to be occupied from as early as the 1400s AD through the late 1600s, and excavation revealed very few historical material remains.

The area was also adjacent to the Kohanaiki Homesteads, and may have represented what the Kohanaiki Homesteads looked like prior to the historical developments in the homesteads. Habitation areas, identified by their high quantity and diversity of material remains, occurred as Feature 1 at Site 10693, Feature 1 at Site 10700, Feature 1 at Site 10730 and Feature 1 at Site 10734 and there appeared to be a relationship of these habitation features to "garden areas", delineated by the *kuaiwi.* It was noted that these resembled the settlement configurations of the chronologically later, and nearby Kohanaiki Homesteads. Consequently, an understanding of the Walled Fields area was thought to provide insight into pre-Contact agriculture and habitation, and the transition into historical patterns of agriculture and habitation.

Walled Fields Data Recovery

Data Recovery conducted in the Walled Fields area was designed to address the question: How were pre-Contact residential units arranged on the agricultural landscape? This question was approached by combining the examination of the existing data available from the previous test excavations, with spatial analysis of these features, and excavations at one of the habitation features (Site 10734, Feature 1). The quantity of the previous test units at these sites precluded the need to conduct many additional excavation units. Excavation units were, however, conducted at Feature 1 at Site 10734, primarily to examine whether there was indeed (as suggested in Barrera 1991) evidence of multiple episodes of occupation.

SITE 10700
PREVIOUS INVESTIGATIONS

This site was recorded and excavated by Barrera (1985, 1991). The information from this work is summarized here.

Site 10700 consisted of 26 features within an approximately 0.7 acre area bounded to the east and west by portions of the historic wall network encircling the Walled Fields area, and bounded to the north and south by part of the *kuaiwi* network designated Site 10716. In addition to its habitation feature, there were three distinct groups of features at Site 10700: (1) to the east (upslope), a group of five features bounded (to their east and west) by remnant cross-slope

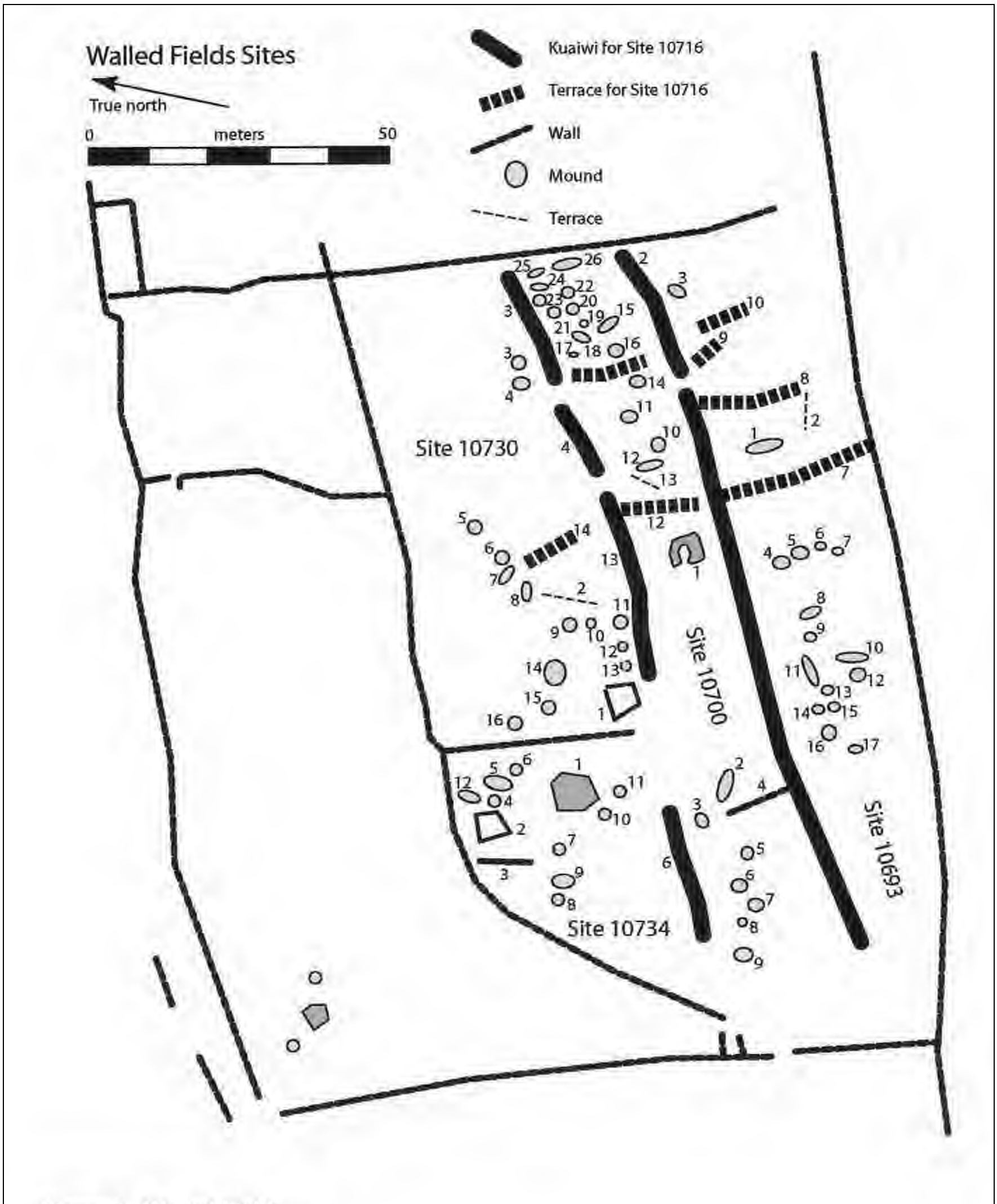


Figure 27: Sites 10700, 10730 & 10734, Feature Locations.

terraces; (2) an easternmost (highest in elevation) group of 12 features bounded by a remnant cross-slope terrace (to the west), and by a portion of the historic wall network encircling the Walled Fields area; and, (3) a westernmost group of eight features (seven mounds and one wall) bounded (to the west) by a portion of the historic wall network encircling the Walled Fields area. No subsurface testing or dismantling of features was conducted at the westernmost group of features (Group 3), while only one feature in the easternmost group (Group 2) was excavated (via a single trench). The majority of subsurface testing *(i.e.*, excavation and feature dismantling) was conducted at Group 1, and at a C-shape habitation feature (Feature 1).

A modest amount of traditional artifacts-mostly stone tools and their manufacturing byproducts-and midden-mostly marine shell, but also including mammal, bird, and fish bone, *kukui* nut shell, and charcoal-was recovered in excavation at Site 10700. Three historic era artifacts (two bottle glass sherds and one unidentifiable metal fragment) were recovered in two of the mounds (Features 11 and 13), but no historic artifacts were recovered at the main habitation feature (Feature 1). This, along with the dating, suggests the site is solidly within the pre-Contact era, but that some degree of site utilization into the post-Contact era has also occurred.

Two hydration rind dates were obtained from Feature 1 at Site 10700, and one hydration rind date was obtained from the terrace designated Feature 13. The dates for the C-shape indicate terminal pre-Contact date for its utilization, with the date for the terrace being from the middle 17th century.

Feature 1

Barrera found Feature 1 to be a C-shape habitation shelter measuring 6.0 m by 9.4 m, with a maximum height of 0.40 m above the ground surface, on the east (upslope) side, and 1.50 m above the ground surface, on the west (downslope) side. Feature 1 was located near the center of the site, and was bounded by portions of the *kuaiwi*/cross-slope terrace network (Site 10716) to the south, east, and north. The Feature was constructed by building a gently sloping terrace against a hillside creating a level area on top of which was placed the C-shape, its opening to the north. The entire structure rested directly on the *pahoehoe* bedrock with its architecture being of dry-stacked, angular, basalt cobbles.

Fourteen 1.0 by 1.0 m test units, eventually joining up to form two, intersecting trenches, were excavated at Feature 1. The test units sampled most of the interior space formed by the low walls, completely breached the south and east walls, and partially breached the west wall. Excavation revealed a soil deposit, up to 70 cm in thickness containing angular basalt cobbles, midden, traditional artifacts, and ash.

Cultural materials recovered in excavation included: 69 pieces of volcanic glass debitage, angular waste, and utilized flakes, two basalt adze fragments, four adze flakes, six basalt flakes, one basalt core, four basalt manuports, and one echinoid spine abrader.

A total of 1,424.6 g of invertebrate remains were recovered in excavation at Feature 1. The vast majority (1,332.6 g, or 93.6%) was shell, with smaller amounts of sea urchin (Echinoidea) (89.8 g) and crab (Crustacea) (4.3 g). With the exception of 41.4 g of *Theodoxus verspertinus* (a brackish-water species), the shells all represent marine species, including at least

12 different taxa. Floral remains included: 640.2 g of charcoal, 29.8 g of *kukui (Aleurites moluccana)* shell, and 12.7 g of charred *kukui* nut shell.

Vertebrate remains recovered in excavation at the C-shape designated Feature 1 included nondiagnostic fish (16.9 g), one specimen of chicken *(Gallus gallus),* six specimens of bird (including one *Bulweria bulwerii),* dog *(Canis familiaris)* (8 specimens), pig *(Sus scrofa)* (2 specimens), rat *(Rattus exulans)* (1 specimen), and other non-diagnostic mammal (3 specimens), and vertebrate (3 specimens).

Two hydration rind dates were obtained from Excavation Unit G-4, in the center of the enclosed area: A.D. 1660-1678, from 10-20 cmbs; and A.D. 1491-1547, from 20-30 cmbs.

CURRENT INVESTIGATIONS

The present SCS study found Feature 1 at Site 1700 to somewhat resemble Barrera's description, but with details not included. Chief among these was its attachment to a U-shaped structure on the Feature's north side. This structure was formed by a northeast-southwest trending wall about 3.00 m from the Feature's south side, a poorly formed north-south wall to its east, and another northeast-southwest wall attached to the Features north by a wide, 3.00 m long construction. The northern wall terminated at its juncture with the wall on the east, but also had a lobe extending 5.00 m to the northeast at this juncture which was faced on its west side. The construction which attached the Feature to the northern wall was also quite high on its west side, measuring up to 0.90 m above ground surface. Another detail ignored by the previous descriptions was that a significant portion of the C-shape's eastern wall was created by mounding soil, over which there were scattered cobbles. A final minor difference between Barrera's and the SCS observations was that SCS found the Feature's construction to include a significant amount of small boulders (Figure 28).

Because a significant amount of time has passed since the excavations at Feature 1, other discrepancies between the past and current observations may be due to erosional processes, or the excavations themselves. The trenches appeared longer than Barrera's original map, but this may be due to collapse. In addition, where he placed the rock from trench excavation may account for the southeast section of the C shape appearing wider than originally described.

SITE 10730

PREVIOUS INVESTIGATIONS

This site was recorded and excavated by Barrera (1985, 1991). The information from this work is summarized here.

Site 10730 consisted of 16 features within a 10-acre area bounded to the east, north, and west by portions of the historic wall network encircling the Walled Fields area. The site was bounded to the south by portions of the *kuaiwi* network designated Site 10716, with one remnant cross-slope terrace, also part of Site 10716, dividing this habitation site complex into two, roughly equal portions. These were an upper area (to the east), consisting mostly of open fields and a few mounds; and, a lower area, consisting of a habitation enclosure (Feature 1), a terrace

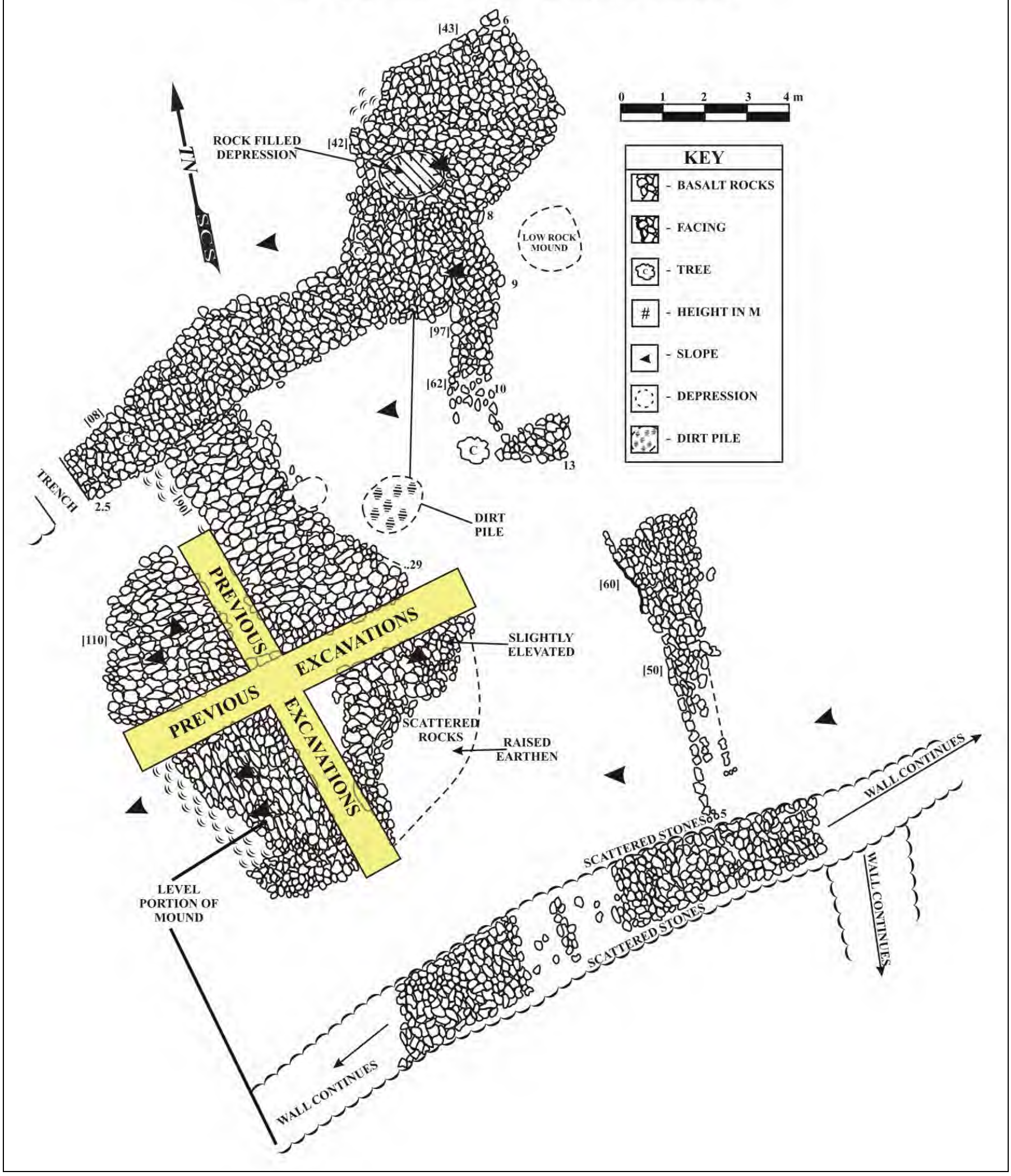


Figure 28: Site 10700, Feature 1, Plan View.

(Feature 2), and numerous mounds. The habitation enclosure was located in the extreme southwestern corner of the site complex, with 2 *kuaiwis* immediately adjacent.

Five trenches were excavated at Site 10730, two at Feature 1 and one each at Features 8, 9, and 14. Only Feature 1 is formally described below, but this description also includes results of subsurface testing and analysis of material finds. Recovered materials included a small amount of traditional artifacts, consisting mostly of stone tool debitage, and a small amount of midden. One hydration rind date obtained from Feature 1 suggested a late pre-Contact occupation for this site.

Feature 1

Feature 1 was an enclosure measuring 4.9 m by 5.8 m, with maximum heights ranging from 70 cm above the ground surface (upslope side) to 100 cm above the ground surface (downslope side). A wall measuring 1.7 by 2.0 m was attached to the northwest corner of the enclosure, adjacent to an entrance on its north side. The enclosure and the wall were constructed of dry-stacked, angular, basalt cobbles and small boulders resting directly on the *pahoehoe* bedrock.

Ten 1.0 by 1.0 m test units, eventually joining up to form one T-shaped (perpendicular) trench, were excavated at Feature 1. Excavation yielded a single, unstratified deposit, up to 30 cm in thickness, at the base of the enclosure walls. The deposit consisted of cobbles and boulders in a soil matrix, including a modest sample of traditional artifacts and midden.

Cultural materials recovered in excavation included: three specimens of volcanic glass debitage, one basalt adze fragment, two basalt flakes, and one basalt manuport. A small amount of midden was recovered during the excavation at Feature 1, including 31.6 grams of shell, 7.0 grams of *kukui (Aleurites moluccana),* and 0.6 grams of charred *kukui* nut shell. Charcoal was relatively abundant (141.0 g), but no bone was recovered.

The single hydration rind date of A.D. 1618-1642 was obtained from 0-30 cmbs within the enclosure in Unit E-5.

CURRENT INVESTIGATIONS

The current SCS observations at Feature 1 found it similar to the description given by Barrera (1991:24-26). The present study found the northeast interior wall faced and up to 5 courses high, while its northwest wall is possibly two-tiered. Although not in the narrative, the previous map of Feature 1 shows a bedrock shelf located immediately on the Feature's southeast side. While the present study noted some bedrock in this area, it appeared to SCS to have more the appearance of a terrace. This, however, may be due to the previous excavations and their placement of back-dirt (Figure 29).

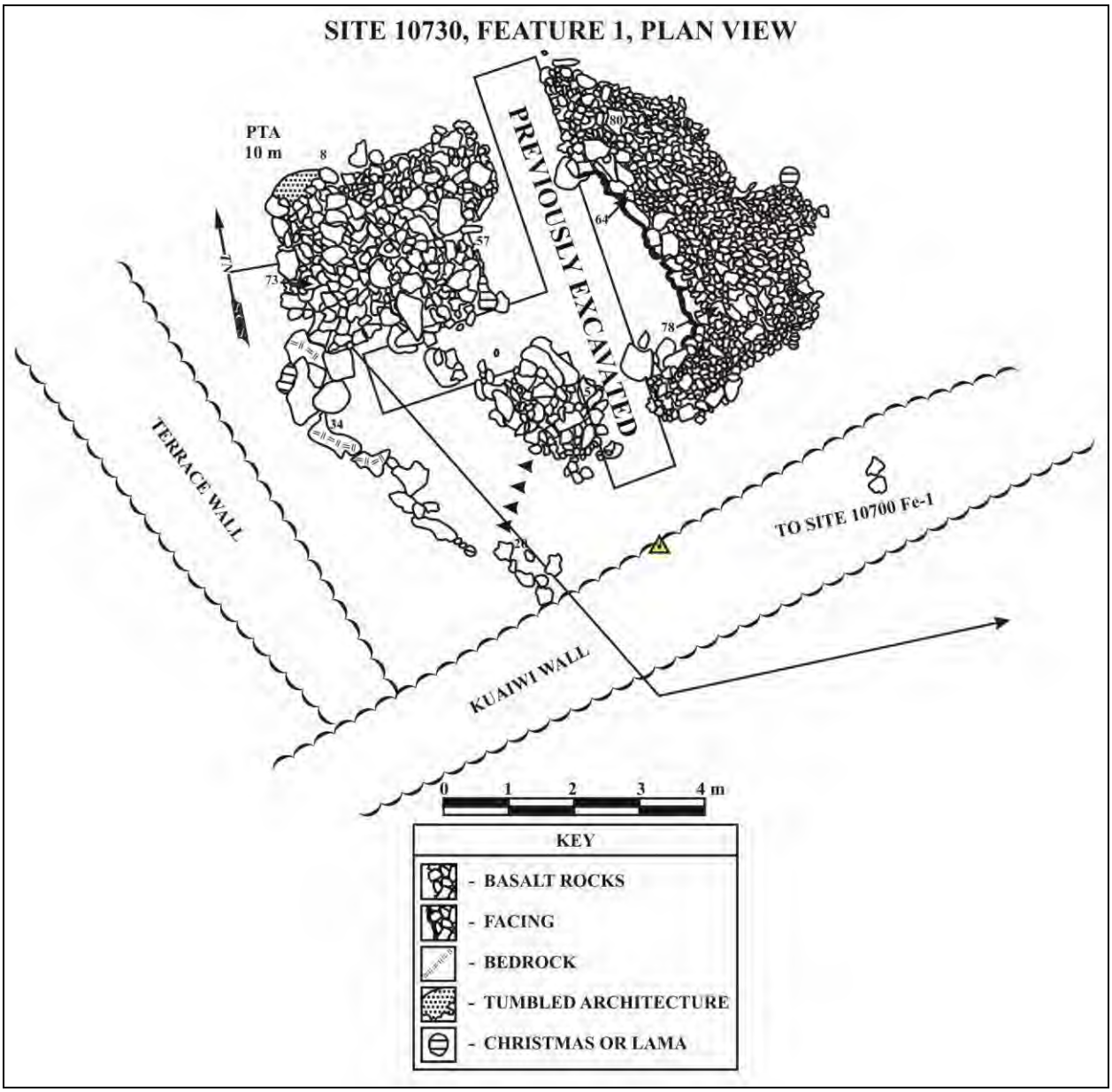


Figure 29: Site 10730, Feature 1, Plan View.

SITE 10734
PREVIOUS INVESTIGATIONS

This site was recorded and excavated by Barrera (1988, 1991), summarized below:

Site 10734 consisted of 12 features within a 0.3-acre area bounded to the east, north, and west by portions of the historic wall network encircling the Walled Fields area, and bounded to the south by part of the *kuaiwi* network designated Site 10716. Barrera (1988, 1991) interpreted this site as a habitation complex, and recovered a relatively abundant sample of traditional artifacts and midden. This habitation complex was centered on two main features, a modified lava dome/platform (Feature 1) and an enclosure (Feature 2). With the exception of one collapsed wall (Feature 3), the remaining features were all mounds. A remnant portion of a *kuaiwi* (part of Site 10716) was located 5 to 10 m south-southwest of the these features, separating it from Site 10700.

Three trenches and twenty-nine 1.00 by 1.00 m test units were excavated at the Site. Two of the trenches were at Feature 2, while one was placed at Feature 10. All test units were excavated at the modified lava dome (Feature 1). In addition, one mound (Feature 6) was partially dismantled.

Eight hydration rind dates were obtained from two features at Site 10734. Seven of the dates were from the modified lava dome/platform (Feature 1), while a single date of 1468-1496 obtained from the mound designated Feature 10.

Only Features 1 and 2 are formally described below, but they include the results of subsurface testing and the analysis of its material finds where applicable.

Feature 1

Feature 1, the largest structure at Site 10734, was a modified lava dome measuring 7.30 by 7.30 m, with a maximum height of 0.90 m above the ground surface. Dry-stacked rock walls, 1.00 to 2.00 m wide, were built around three sides, acting as retaining walls and serving to create a platform surface of 53.00 m^2. Feature 1 was constructed of angular, basalt pebbles, cobbles, and small boulders, resting directly on the lava dome surface, itself, or on the adjacent *pahoehoe*, from which the dome rises.

Twenty-nine 1.00 by 1.00 m test units were excavated at Feature 1, with 23 test units placed within the structure itself, and 6 test units excavated just outside the structure, to the west. Excavation revealed a single, unstratified, cultural layer of varying thickness, composed of angular basalt pebbles and cobbles, midden, and traditional artifacts. Thickness of the layer varied from zero, where the underlying lava dome was at the surface, to 0.70 m, where relatively deep pockets in the lava occurred. Much root disturbance was observed in this matrix, however, and there is the possibility it was originally stratified.

Cultural materials recovered in excavation included: 1,972 pieces of volcanic glass debitage, angular waste, and utilized flakes, one nodule of volcanic glass, four basalt adze fragments, one basalt adze-reduction flake, nine basalt flakes, two water worn cobbles, and one drilled dog *(Canis familiaris)* tooth. Material was recovered from both within and outside of the

structure.

A total of 1,555.0 g of invertebrate remains was recovered in these excavations, with the vast majority (1,510.0, or 97%) being marine shell, with smaller amounts being sea urchin (Echinoidea) (43.9 g) and crab (Crustacea) (1.1 g). With the exception of 62.5 g of *Theodoxus vespertinus*—a brackish-water species—the shells all represent marine species and include at least ten different taxa. Floral remains included 320.1 g of charcoal, 1447.8 g of *kukui (Aleurites molueeana)* shell, a small amount (27.2 g) of burnt *kukui* nut shell, and 1.9 g of indeterminate material.

Vertebrate remains recovered in the excavations at Feature 1 included non-diagnostic fish (0.3 g), bird (2 specimens), pig *(Sus serofa)* (2 specimens), horse *(Equus eaballus)* (2 specimens), cow *(Bos taurus)* (5 specimens), rat *(Rattus* sp.), and other non-diagnostic mammal (9 specimens) and vertebrate (6 specimens). Of these, the horse and the cow are clearly historically introduced species, and the pig and the rat may be also. These faunal data are suggestive of a historic era component at Site 10734.

Seven hydration rind dates were obtained from a single test unit located within the Feature. The dates were obtained from volcanic glass recovered from seven successive arbitrary levels, and the results are generally in agreement with the level designations *(i.e.,* older dates are deeper than younger dates). These dates range from the late 15th century to the middle 17th century.

Feature 2

Feature 2 was an enclosure measuring 4.90 by 5.20 m, with a maximum height of 1.20 m above the ground surface. The enclosure was constructed of dry-stacked, angular, basalt cobbles and small boulders. A small opening (0.75 m wide) was located in the feature's southwest corner. Excavation demonstrated that some of the cobbles and boulders comprising the base of the feature were placed directly on the *pahoehoe* bedrock, while other basal stones were placed upon a thin soil layer.

Two trenches were excavated in the interior of the enclosure. The shorter trench measured 4.0 m in length; the longer trench measured 6.0 m, and breached both the east and west sides of the enclosure. The longer trench showed a thin 0.10 m soil layer underlying portions of the enclosure walls.

A modest amount of midden and artifacts was recovered in excavation at Feature 2. Midden consisted of 13.9 g of shell (*Cypraea* caputserpentsis, *Cypraea* sp., and non-diagnostic) and 0.7 g of *kukui* (*Aleurites moluccana*) nut shell. Four pieces of volcanic glass debitage were also recovered.

No hydration rind dates were obtained for Feature 2 at Site 10734.

CURRENT INVESTIGATIONS

The SCS Inventory Survey (Wolforth *et. al* 2005) of Site 10734 took the form of making additional observations and more detailed maps of Features 1 and 2 and 4 excavation units, 1 placed in Feature 1 and 3 placed in Feature 2.

Feature 1 and EU-1

Although the current study made a detailed map of Feature 1, because of the extensive previous excavations (53 cubic m), and the intervening time, it is difficult to determine its original condition. Breaches in the architecture on the northeast, southwest and southeast sides are obviously due to these excavations, but the construction SCS observed on the Feature's northwest side is questionable. The 1985 and 1991 maps do not show a wall here, but the profiles do show architecture or tumble (it's difficult to determine which), extending out from the dome. With the SCS map showing that the architecture in this area was not only faced on its northwest and northeast sides, but also on a portion of its southeast (interior) side, the suspicion is that much of this part of the Feature is spoil from the previous excavation. Never the less, due to the extensive cultural material derived from this feature, and the possibility of a stratified deposit, it was decided to excavate an additional EU associated with it (Figure 30).

Excavation Unit 1 was a 1.00 by 2.00 m unit placed on the Feature's exterior, immediately south of its architecture. The EU was oriented so that its long axis was northeast-southwest and was excavated as 5 arbitrary levels occurring in 2 natural layers (Figure 31). A shallow, approximately 0.70 diameter depression also occurred in the unit's southwest half. Layer I was excavated in 2 levels and was a 0.18 m thick 10 YR 3/2 very dark grayish silt with almost no rock. Layer II was a 10 YR 4/2 dark grayish brown silt with about a 5% pebble content extending to bedrock at a maximum depth of 0.60 m below surface. Cultural material from this EU was recovered from both layers, although the vast majority was derived from Layer I. This material included large quantities of volcanic glass, marine shell, basalt debitage, urchin, coral, bone, kukui shell and charcoal. A disarticulated, unidentified long bone was also recovered from the upper portion of Layer II in the southwest portion of the unit. Although not collected and left in the unit, it's disarticulation, the lack of an excavated pit, and the recovery of other large mammal bones from the Feature (see above) indicates that in all probability, it is other than human.

Radiocarbon Date Data

SCS submitted a 0.6 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC621). The sample was screened from within Site 10734, Feature 1, EU-1, Layer II, level 2, 45-56 cmbd. The sample shows an 88.5% probability when calibrated to 2 Sigma, that with a date range of A.D. 1520 to 1810, the chronology for this Layer falls within the transitional time period between pre-Contact and post-Contact (see Appendix B).

Feature 2 and EUs 2, 3 and 4

The current observations of Feature 2 at Site 10734 added detail and differed somewhat from those recorded by Barrera (1991). While the current study also incorporates Barrera's Feature N as part of Feature 2, an initial difference was that the Feature demonstrated a trapezoid shape with its proximity to the historic northern enclosure walls of Site 10734 being much closer

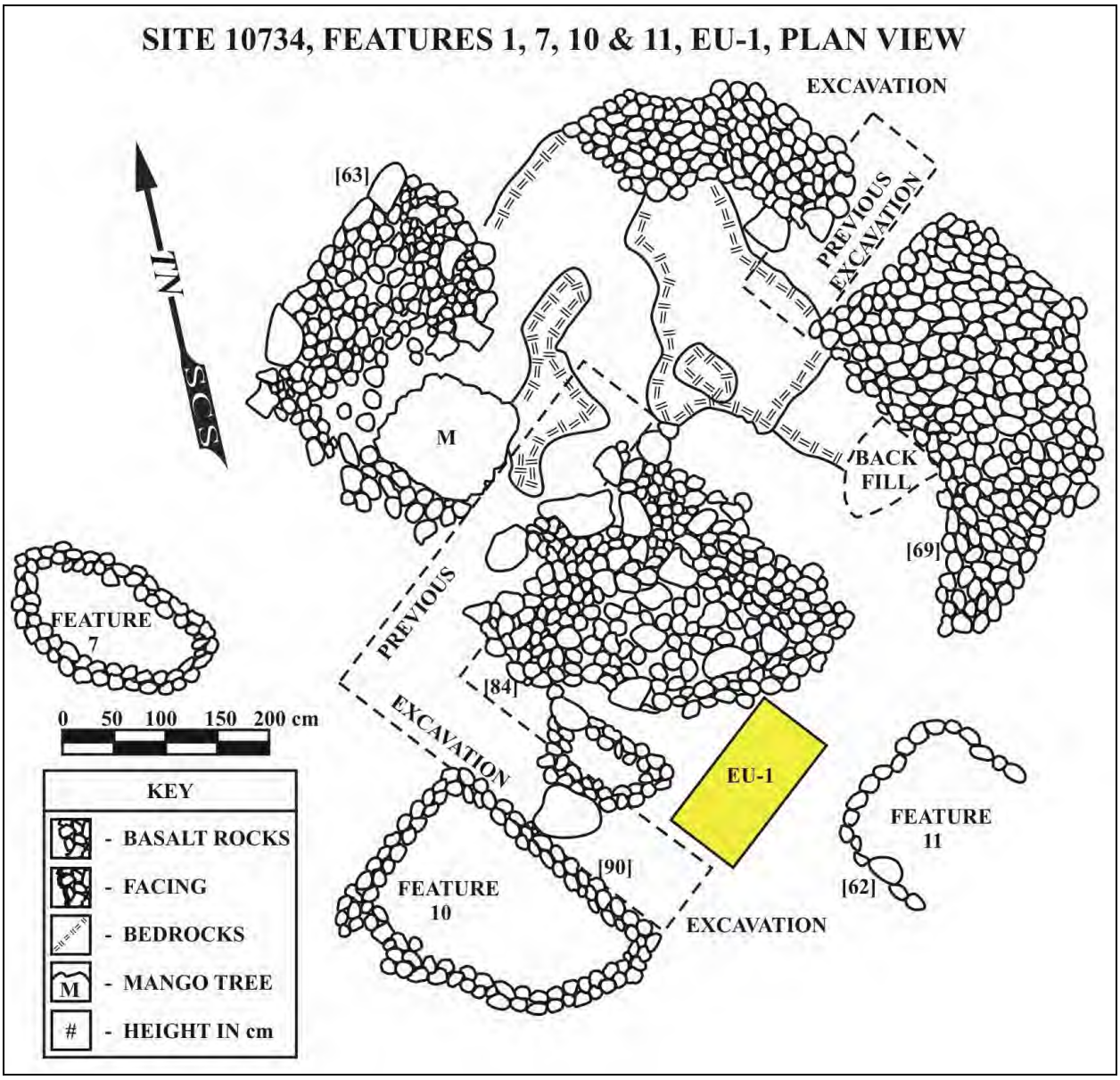


Figure 30: Site 10734, Features 1, 7, 10 & 11, EU-1, Plan View.

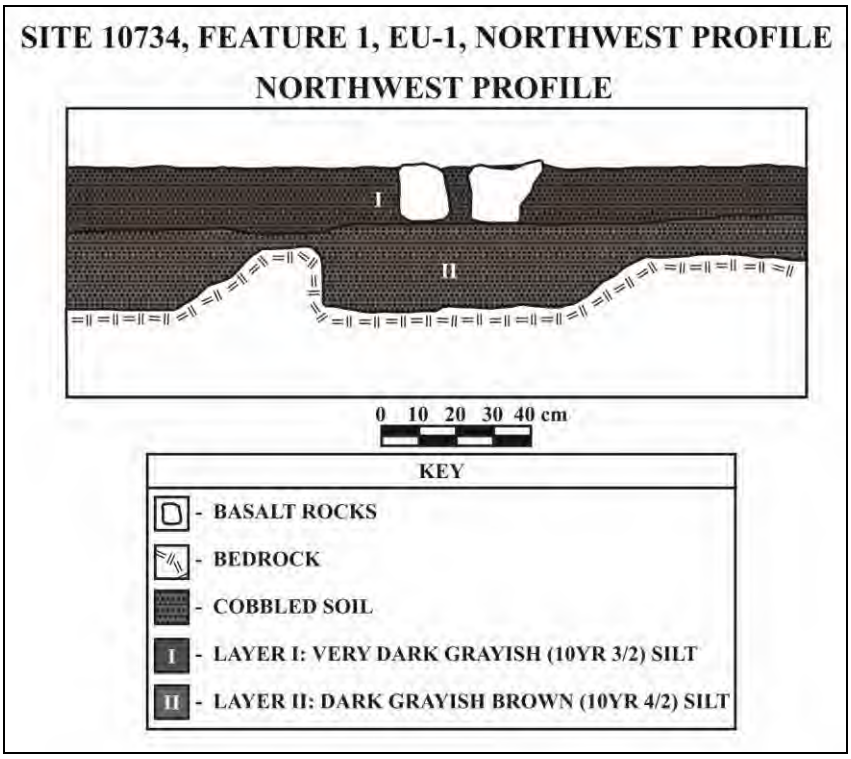


Figure 31: Site 10734, Feature 1, EU-1, Northwest Profile.

than previously indicated. Facing was also observed on the majority of the interior of the Feature's northwestern wall, where it achieved its greatest height of 1.34 m. Although up to 0.85 m high, the Feature's southeastern wall was observed to be poorly constructed, and the Feature's western entrance located further to the northwest than demonstrated on the previous map. In addition, Feature 2's northeast wall was found in the present study to be mostly non-existent, but this is accounted for by the previous excavations. Lastly, Feature N of the 1991 study was described in more detail as a possibly collapsed wall with partial facing, up to 0.80 m high, on its west side (Figure 32).

Excavation Unit 2 was a 1.00 by 2.00 m unit with its long axis oriented northwest-southeast and placed directly adjacent, on the northeast side of the former Feature N, with its northwestern side abutting the exterior of the enclosures southeast wall. The purpose of EU-2 was to explore the relationship between former Feature N and the enclosure, in addition to looking at disposal patterns immediately outside of the main feature. After initial removal of the organic debris and loose, scattered rock occurring on the Unit's surface, it was excavated in 3 arbitrary levels within 2 natural layers and also revealed a subsurface feature, SSF 2-1 (Figure 33). Layer I was a 0.14 m thick 7.5 YR 4/2 brown sandy loam with about a 15 to 20% pebble content. Layer II was up to 0.40 m in thickness and was a 7.5 YR 3/2 dark brown silt loam with about a 35% pebble content. SSF 2-1 was revealed at about 0.23 m below surface, at the bottom of the first arbitrary level in Layer II, and extended all the way to bedrock at the base of the unit. The matrix of this SSF was the same as Layer II with the exception that it contained dense amounts of small pieces of charcoal. There was no evidence of in situ burning, however, (no ash, fire affected rock, oxidized soil, etc.) and the charcoal may have been collected in this area by

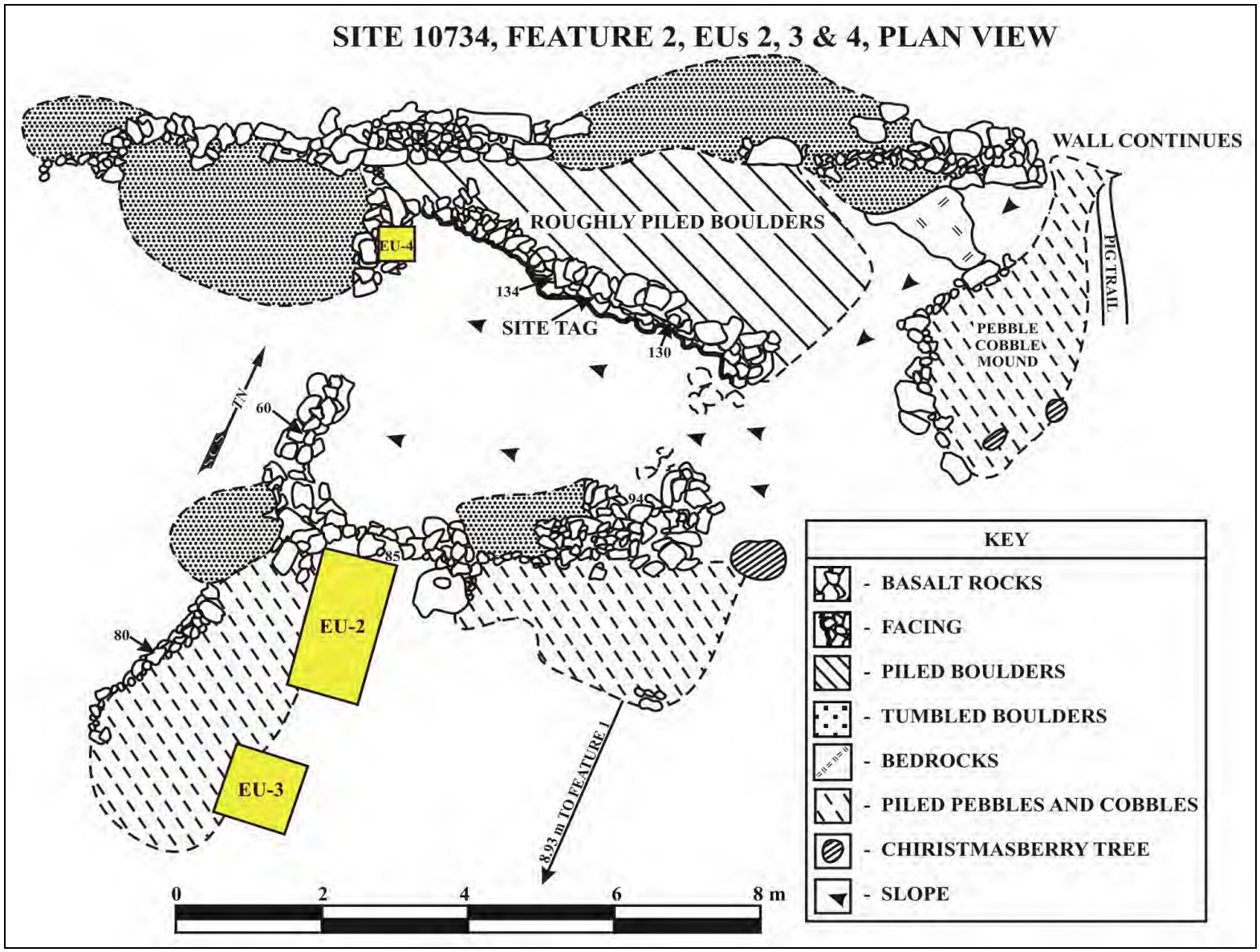


Figure 32: Site 10734, Feature 2, EUs 2, 3 & 4, Plan View.

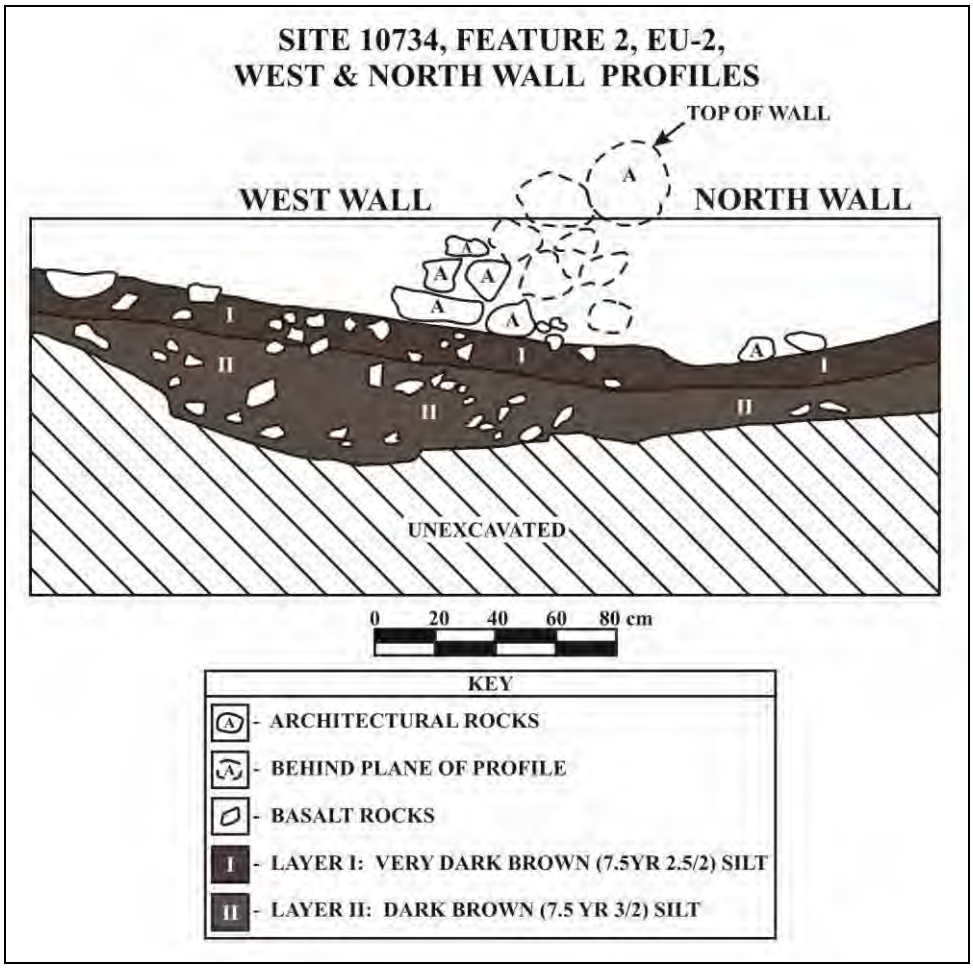


Figure 33: Site 10734, Feature 2, EU-2, West & North Profiles.

natural processes. The profile of the Unit's west wall also reveals that the architecture of former Feature N was primarily confined to the surface and therefore post-dated the subfeature. Cultural material recovered from EU-2 was minimal, came from both layers, and consisted of minor amounts of volcanic glass and marine shell, a piece of basalt debitage, a piece of coral and charcoal.

Radiocarbon Date Data

SCS submitted a 0.2 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC622). The sample was screened from within Site 10734, Feature 2, EU-2, SSF 2.1, 23-48 cmbs. The sample shows a 91.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1480 to 1670, the chronology for this SSF falls within the pre-Contact period (see Appendix B).

Excavation Unit 3 was a 1.00 by 1.00 m unit placed about 1.00 m to the southeast of EU-2 and situated so that its northwest edge went about 0.30 m into the architecture of former Feature N. The Unit was placed at this location in order to further understand the former Feature N's architecture and excavated stratigraphically, also revealing 2 layers underlying an organic deposit (Figure 34). Layer I was a 7.5 YR 2.5/2 very dark brown silt with a 30% rock content

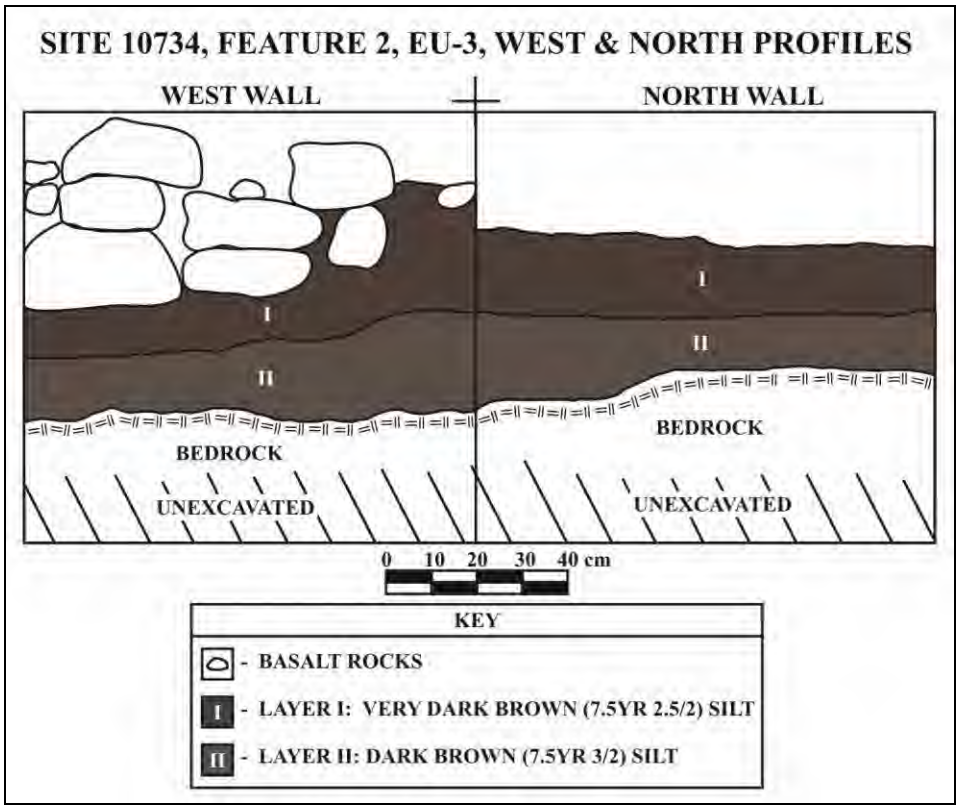


Figure 34: Site 10734, Feature 2, EU-3, West & North Profiles.

and up to 0.25 m thick. Layer II was a 7.5 YR 3/2 dark brown silt with about a 25% cobble content and was up to 0.30 m thick. Again, material from this unit was minimal, consisting of a single piece of volcanic glass and some rodent bones that were not collected. Unlike EU-2, however, this unit demonstrated that the architecture of former Feature N penetrated layer I by about 0.15 m.

Excavation Unit 4 was a 0.50 by 0.50 m unit placed within a ring of large cobbles that stem off the interior of the enclosure, in its northwest corner. The purpose of this unit was to explore the nature of this ring and to determine whether it was indeed cultural, or coincidental. Excavation of this unit, after the removal of organic debris, revealed a single, thin, soil layer overlying bedrock. This layer, Layer I, was a 7.5 YR 2.5/2 very dark brown silt loam with about a 10% cobble content extending to a maximum depth of 0.10 m before reaching bedrock. The only cultural material recovered from this excavation was a single piece of marine shell. Considering its depth, this unit was not profiled.

WALLED FIELDS SUMMARIES AND DISCUSSIONS

Five sites in the project area were categorized as "Walled Fields", of which 3 were selected for Data Recovery. The primary question posed for these sites was how were pre-Contact residential units arranged on the landscape. This question was approached by closer examination of the habitation features at these sites, controlled excavation at Site 10734, and comparing size of habitation features to garden spaces.

Site 10700

Site 10700 consisted of 26 features within an approximately 0.7 acre area bounded to the east and west by portions of the historic wall network encircling the Walled Fields area, and bounded to the north and south by part of the *kuaiwi* network designated Site 10716. Only 1 of these features was determined to be a habitation feature, however, and was excavated by Barrera during his 1991 study. During the present investigation of this feature, Feature 1, a map was made in further detail finding the feature to differ slightly from its original description. Many of these differences, however, may have been due to previous excavations and subsequent erosional processes.

Site 10730

Site 10730 consisted of 16 features contained within a 1.0 acre area bounded to the east, north and west by a historic wall network, and to the south by the *kuaiwi* network of Site 10716. Again, only one feature at this site was determined to be a habitation feature, Feature 1, a small enclosure. Ten 1.00 by 1.00 m units were excavated in this feature during the 1991 study which yielded a relatively small amount of cultural material considering the size of the area investigated. The present study mapped this feature in further detail and found it to differ only slightly from its previous description. As similar to Feature 1 at Site 10700, however, much of these differences may be attributed to the previous excavations and subsequent erosion.

Site 10734

Site 10734 consisted of 12 features within a 0.3-acre area bounded to the east, north, and west by portions of the historic wall network encircling the Walled Fields area, and bounded to the south by part of the *kuaiwi* network designated Site 10716. Two features at Site 10734 were determined to be habitation features: Feature 1, an extensively modified lava dome; and Feature 2, a small enclosure.

Previous excavations by Barrera (1991) at Feature 1 consisted of 29 square meters and produced a large amount of both manufactured items and food remains. Several hydration dates were obtained from this feature indicating a late 15^{th} century to middle 17^{th} century occupation and the remains of horse and cow indicate a historical occupation also. An SCS radiocarbon submission confirms this pre-Contact to Historic date. A single 1.00 by 1.00 m excavation unit was placed by the current study immediately outside of the feature, to its south. This unit revealed 2 layers taken to a maximum depth of 0.60 m below surface and produced significant quantities of volcanic glass, marine shell, basalt debitage, urchin, coral, bone, *kukui* shell and charcoal. A large unidentified long bone was also observed and left *in situ* and probably indicates the historic component.

Feature 2 had 10.00 meters excavated within it during the 1991 investigations which revealed a thin soil layer yielding only small amounts of cultural material. The current investigations mapped the feature in further detail and also placed three excavation units within and outside of it. EU-2 was a 1.00 by 2.00 m unit placed on the northeast exterior of the feature and revealed 2 layers and a subsurface feature. The architecture of Feature 2 lay above this subsurface feature indicating an earlier occupation, although this SSF appeared to represent disposal of burned material rather than an in-situ event. EU-2 achieved a maximum depth of 0.54 m below surface and yielded only a small amount of cultural material that was radiocarbon dated

resulting in a distinctly pre-Contact chronology. Excavation Unit 3 was placed about a meter to the southeast of EU-2 and minus the subsurface feature, was similar in stratigraphy and cultural material to EU-2. The final unit placed in Feature 2 was EU-4, a 0.50 by 0.50 m unit placed within a ring of cobbles in the interior of the feature. This unit revealed a single 0.10 m thick layer overlying bedrock and yielded only a single marine shell and a small amount of charcoal.

When considering the approaches to the primary research question addressed of the sites categorized as "Walled Fields" (How were pre-Contact residential units arranged on the landscape?), at least one major problem quickly becomes apparent. Several of the site boundaries are delineated by historic period walls that may or may not reflect pre-Contact site delineations. Although it may seem logical to divide these sites based on *kuaiwi* distribution, care must be taken not to impose this theory.

In addition, we presently cannot be certain whether the habitation features were occupied contemporaneously, or represent occupation and abandonment over the course of time. One intriguing observation concerning residential placement in these sites, however, is the fact that the features deemed habitations are clustered relatively near each other. This may indicate environmental preferences, or, if they indeed represent separate contemporaneous family groups, indicate co-operational ties. These ideas, however, require more data along with a further examination of the existing data.

PERMANENT HABITATION

Seven permanent habitation sites were recommended for Data Recovery in the AIS: 10690; 10694; 10705; 10706; 10735; 10737, and; 10768. A sample of five of those was excavated in data recovery implementation in addition to the cave complex including sites 10742 and 10758. These were sites 10690, 10706, 10735, 10737 and 10768,

Site 10690

Site 10690 had six features over an area of about 45 by 25 m. The features included an irregular-shaped enclosure, four terraces, and a trail. During the 2006 SCS study, subsurface testing was conducted at all features for a total of 10 m^2 (3 TUs, 2 STs). Cultural materials recovered in excavation consisted exclusively of traditional artifacts, including several adze fragments and/or preforms, a coral abrader, and several volcanic glass cores. No historic artifacts were observed at the ground surface or recovered in excavation. Midden included invertebrates (including at least 17 taxa of shell), vertebrates (including fish and dog), charcoal, *kukui* nut shell, and coral.

Site 10706

Site 10706 was a 2 feature site with Feature 1 defining its size, Feature 2 being a small modified outcrop located within Feature 1. Feature 1 was a large rectilinear enclosure that utilized bedrock outcrops in its east wall and southwest corner. Walls ranged from around 1.5 to 2.0 m thick and were constructed of stacked boulders and cobbles with an interior pebble fill. Interior facing was most noticeable on its north and west walls, although limited areas occurred on the east wall also. Exterior facing occurred almost exclusively on the north wall. Much of the existing facing was of nicely stacked boulders. The exterior of the west wall was quite collapsed,

but from the terminus of its rubble to the top of the wall, it was over 2.0 m high. An entrance may have occurred in the southern portion of the west wall. One excavation unit encountered a small amount of charcoal (1.6 g), marine shell (*Cypraea* sp.) (7.3 g), a single piece of branch coral (12.3 g), and two pieces of volcanic debitage. All of this material was derived from Layer II.

Site 10735

The 2005 SCS investigations determined Site 10735 to be a permanent habitation site covering an area 15.0 by 40 meters with all features at this site located directly *makai* of a complex of caves (Sites 10733, 10742 and 10744). Site 10735 and the nearby caves were situated within the modified landscape of the Kona Field System. No previous excavation had been conducted at this site and no radiocarbon date obtained.

Site 10737

This site had five features, including a dry-stacked, rectangular enclosure, within an area of 17.0 by 30.0 m. During the 1988 and 1991 Barrera investigations, a total of 35 m^2 was excavated within Site 10737 yielding only historical artifacts. Most of this material was recovered from the enclosure, but some was recovered from a front 'yard'. No radiocarbon dates were obtained at this site, and the material remains were not analyzed for socio-economic indicators. Invertebrate remains included 106.2 g of marine shell, including a single cowrie (weighing 50.6 g), representing at least four distinct taxa. No vertebrate remains were recovered in excavation. Floral remains consisted of charcoal (63.4 g) and *kukui* (*Aleurites moluccana*) (1,119.7 g). The relatively large amount of *kukui* was interpreted by Barrera (1988, 1991) as a natural occurrence, rather than a cultural introduction due to the large number of nearby *kukui* trees and the fact that these finds predominantly derived from the upper 5 cm of the excavations.

Sites 10742 and 10758

Sites 10742 and 10758 were three sinks (one with a natural arch over it) that were linked together. The previous SCS study found the principal activity area where cultural material and modification was most noticeable along the westernmost opening of Site 10742. A coral abrader, charred material, *opihi*, and Echinoidea (urchin species) were present among the modified roof fall. An ashy look to the soil may have represented a burned area. A paving in Site 10758 had urchin remains.

Site 10768

Site 10768 had 43 features, 35 of which were agricultural features. No excavation was undertaken at this site during the 2005 SCS survey, but based on the site's size, number of features, feature distribution, and feature types, the site was interpreted as a pre-Contact permanent habitation and garden. Of the 35 features interpreted as agricultural, 23 were mounds, 4 were *kuaiwi*, 3 were linear mounds, 3 were terraces, 1 was a large C-shape, and 1 was the modified edge of a flow. There were two platforms and three enclosures that were probably directly related to habitation.

PERMANENT HABITATION DATA RECOVERY

Data recovery at the permanent habitations sites was primarily designed to answer the question of how areas immediately surrounding the stone features at habitation sites used?

Site 10690 had been previously mapped in detail, and the test units SCS excavated (Wolforth *et. al* 2005) recovered material remains, including radiocarbon dates, sufficient to understand the activities conducted at the stone features. It was then expected that food processing and cooking, tool manufacture and maintenance, debris disposal, and other activities were conducted off the stone features. Data recovery was then designed to examine how the area around the stone features and the areas of soil within the stone features were used. Results of these units were expected to yield insights into 1) how each feature was used differently/or the same from each other, 2) how different or similar activities were conducted within each feature, and 3) how areas around stone features were used.

During the SCS Inventory Survey (Wolforth *et. al* 2005), Site 10706 was mapped in detail, and a single test unit recovered material remains within the enclosure. The primary data recovery task was then designed to locate the activity areas within and around the walls.

Site 10735 was a complicated site with features on the surface and below ground. In addition, the main cave opening had been extensively modified. Data recovery was therefore designed to locate the activity areas within the various types of features in this unusual site.

Site 10737, although yielding strictly historic material, may have also been utilized in earlier times and was therefore suspected of representing a multi-component site. As no materials from this site had been dated, additional work involving both stratigraphic observations and chronometric dating was thought to be necessary to resolve this question. The historical homestead also needed to be mapped in more detail.

Sites 10742 and 10758 were two caves whose proximity suggested that they might be related. Data recovery efforts for these sites were consequently designed to examine whether similar activities took place at the different caves (suggesting separate sites), or if different activities took place at the different caves (suggesting parts of a single residential unit).

Site 10768 had been mapped in general, but the habitation platforms had not been mapped in detail. In addition to performing this task, it was again thought that data from this site would provide information on how functions were distributed around the site.

SITE 10690

PREVIOUS INVESTIGATIONS

Site 10690 was located in Kohanaiki *ahupua'a* at an elevation of 920 ft. It lay on the older of the two Hualalai flows and its dominant overstory species were christmasberry and *alahe 'e.* Additional plants noted on site included *noni,* guava, and mango.

Site 10690 consisted of six features occupying an area of about 45 m by 25 m (Table 8). The features included an irregular-shaped enclosure, four terraces, and a trail. These lay on a moderate, southwest-facing slope directly south of Site 10714, the historic *Mauka-Makai* road. With the exception of the trail, subsurface testing (excavation) was conducted at all features. The primary objectives were to determine whether or not the features were traditional habitations, and to understand their architecture. The stratigraphic trench in the terrace designated Feature 6, however, was placed to determine if this feature contained human remains.

Table 8: Site 10690 Features

Fe. #	Type	L (m)	W (m)	H (m)	Excavation Units
1	Enclosure	14.0	10.0	0.80	One 1.0 x 1.0 m (Tu-1)
2	Terrace	5.50	5.50	0.85	One 1.0 x 1.0 m (TU-2)
3	Terrace	5.50	3.0	0.75	One 1.0 x 2.0 m (ST-2)
4	Terrace	13.50	5.0	0.35	One 1.0 x 1.0 m (TU-3)
5	Trail	10.0	1.0		None
6	Terrace	6.0	5.0	0.85	One 1.0 x 5.0 m (ST-1

A total of 10.00 m^2 (three TUs, and two STs) were excavated at Site 10690. Cultural materials recovered in excavation consisted exclusively of traditional artifacts, including several adze fragments and/or performs, a coral abrader, and several volcanic glass cores. No historic artifacts were observed at the ground surface or recovered in excavation. Midden included Invertebrates (including at least 17 taxa of shell), Vertebrates (including fish and dog), charcoal, *kukui* nut shell, and coral.

The site was interpreted as a traditional habitation with associated work areas. Features 1 through 4 were interpreted as ancillary features to Feature 6. The terrace (Feature 6), which was more complex architecturally than the other features and which yielded the bulk of the cultural materials, may have also documented an earlier (and more permanent) phase of site occupation. Two radiocarbon dates were obtained for this site, indicating a late pre-Contact date of occupation.

Feature 1

Feature 1 was an enclosure on a *pahoehoe* outcrop, with some level or slightly south-sloping soil. The majority of all interior walls were well-faced with large cobbles, boulders, and at least five vertical slabs. The exterior of these walls were faced only in a small area on its

southwest side, and wall thickness ranged from 1.0 meter to a single course of cobbles. A three - sided terrace (Feature 2) was attached to the northern portion of the west side of this feature. A single 1.0 by 1.0 m test unit (TU-I) was excavated in Feature 1, directly off of its southwest wall. TU-l revealed two layers and a total depth of 0.27 m. Layer I was a 0.07 m thick, very dark grayish brown (l0 YR 3/2) rocky silt. Layer II was a 0.20 m thick, black (l0 YR 2/1) silt. TU-l demonstrated that the wall was constructed directly atop the bedrock, and the interior soil was quite shallow. No artifacts were recovered in TU-l. Feature 1, while somewhat small, was not outside of the size range for a traditional Hawaiian house compound.

Feature 2

Feature 2 was a square, three-sided terrace abutting the enclosure designated Feature 1 and extending to the west. Most of this terrace was soil-filled, but its sides were well-defined by boulders and cobbles on *pahoehoe*. A 1.00 by 1.50 m pebble pavement occurred in the southeast corner of the terrace, and a small, 0.80 m deep possible storage area of *pahoehoe* boulders was attached to the exterior of the feature's southwest corner.

A single 1.00 by 1.00 m test unit (TU-2) was excavated in Feature 2 near its eastern margin, where it attached to the enclosure designated as Feature 1. TU-2 exhibited two soil layers and extended to nearly 0.30 m below surface. Layer I was a 0.10 m thick, very dark grayish brown (10 YR 3/2) silt. It yielded 9 marine shell fragments and at its base exposed a possible hearth (Table 9). This subsurface feature, which lacked formal structure, rested directly on the bedrock and contained large quantities of charcoal. Layer II was an 0.18 m thick, very dark gray (10 YR 3/1) silt. It also yielded an adze fragment and 6 marine shell fragments. Feature 2 was consistent with the characteristics of a traditional work area, associated with the enclosure (Feature 1).

Table 9: Site 10690, Feature 2, TU-2, Midden.

Layer	Collected Material	Weight (grams)	Count	Remarks
I	Invertebrates	13.5	-	Taxa: *Theodoxus* sp., *Cypraea* sp., *Conus* sp., non-diagnostic marine shell
	Charcoal	12.7	-	-
	Kukui	0.3	-	-
II (SSF 2.21)	Invertebrates	6.9	-	Taxa: *Cel/ana* sp., *Cypraea* sp.
	Coral	0.9	2	Non-Branch
	Charcoal	44.4	-	-
	Charcoal	0.1	-	-
	Kukui	1.0	-	-

One conventional radiocarbon determination of 150 ± 50 BP (Beta No. -197058) was obtained from Layer II (15-33 cmbs), TU-2, Feature 2, at Site 10690. Calibrated dates (Oxcal v. 3.5) were (1 sigma) A.D. 1660-1890 (0.83), and A.D. 1910-1950 (0.17); and (2 sigma) A.D. 1650-1960 (1.00).

Feature 3

Feature 3 was a rectilinear terrace, with an interior surface primarily of cobbles, but with some boulders also. The terrace abutted a *pahoehoe* outcrop, which extended from underneath the west side of the terrace designated Feature 2, and had facing on several sides. Feature 3 indicated a work area associated with the enclosure (Feature 1).

A single 2.0 by 1.0 m stratigraphic trench (ST-2) was excavated in this feature, positioned so as to cross its west face. This excavation revealed a single course of foundation boulders with an interior fill of mixed boulders and cobbles. The mainly cobble surface of this feature was a pavement. No artifacts were recovered in excavation at this feature.

Feature 4

Feature 4, the lowermost terrace, was a soil-filled structure with piled cobbles and boulders defining its long, west face, and piled boulders defining its short, east face. The east edge of this feature rested on *pahoehoe,* extending from underneath it, and its north edge was also defined by *pahoehoe*. A gap in the architecture of the west face appeared to be an entryway from which Feature 5, a trail, extended. Feature 4 indicated a work area associated with the enclosure (Feature 1).

A single 1.0 by 1.0 m test unit (TU-3) was excavated in the soil-filled interior of this feature, toward its south end. This excavation revealed a single, shallow soil layer resting upon bedrock, with no cultural material recovered. Layer I was a 0.20 m thick, very dark grayish brown (l0YR 3/2) silt.

Feature 5

Feature 5, a short trail, extended from a gap in the west face of Feature 4, paralleling it in a northern direction for about 10.00 m before joining the historic *Mauka-Makai* Road (Site 10714). No excavation was conducted at Feature 5.

Feature 6

Feature 6 was a terrace located about 16 m northeast of the enclosure designated Feature 1, and separated from the south side of the historic *Mauka-Makai* Road (Site 10714) by a 3.00 m wide *pahoehoe* outcrop with a deep, possibly utilized, *puka*. It was a complex structure located on a southwest-facing slope, with a soil-filled northwest half. The architecture, which defined the southeast half of the feature, was stepped along a northwest-southeast axis, with this step represented by a 0.10 to 0.20 m rise in the northeast half. Facing occurred on all but the upslope side of the feature, and a 0.75 m wide pebble pavement occurred directly underneath its southeast face, extending its entire length.

A single 1.0 by 4.0 m stratigraphic trench (ST-l) was placed in the architecture of this feature, parallel with its long axis. ST-1 was excavated in two halves with differences in both architecture and cultural material noted between the two halves. The lower, southwest half of the architecture appeared to be an addition to the northeast half. Construction exhibited a cobble and pebble pavement (portions of which were then buried by tumble from the northeast half), with a large cobble fill occurring underneath it. Boulders in this half only occurred at its contact with bedrock and its southwest face.

By contrast, the northeast half had a continuous boulder and cobble fill from its surface to bedrock, and exhibited a buried facing, which the pebble and cobble pavement of the southwest half abutted. Two soil layers occurred in the trench with Layer I being thin, and almost immediately under the surface architecture of the southwest half, then being deeper and thicker in the northeast half. Layer II was the thickest soil layer, and contained the majority of the cultural material. Layer II rests directly atop the bedrock, and while the feature's architecture penetrated it, it also exhibited substantial areas that appeared to lack architecture.

Cultural material occurred in both layers of ST-l (Tables 10, 11, 12). Although not screened, ST-1 yielded relatively large quantities of traditional artifacts and midden, including several adze fragments and/or pre-forms, a coral abrader, and several volcanic glass cores. No historic artifacts were observed at the ground surface or recovered in excavation. Midden included Invertebrates (including at least 17 taxa of shell), Vertebrates (including fish and dog), charcoal, *kukui* nut shell, and coral.

Table 10: Site 10690, Feature 6, ST-1, Midden.

Layer	Collected Material	Weight (grams)	Count	Remarks
Arch	Invertebrates	3.2	-	Taxa: *Nerita* sp., *Cypraea* sp.
	Coral	54.1	3	2 pieces poss. Branch 49.1 g
I and II	Invertebrates	115.4	-	Taxa: *Cellana* sp., *Nerita* sp., *Theodoxus* sp., *Strom bus* sp., *Cypraea* sp., *Cassis corn uta, Drupa* sp., *Purpura aperta, Conus* sp., *Brachidontes* sp., *Isognomon* sp., non-diagnostic marine shell, Echinoidea
	Vertebrates	0.4	-	Fish
	Coral	12.1	25	18 pieces poss. Branch 6.8 g
	Kukui	4.1	-	
	Charcoal	6.5	-	-
	Bulk Cultural Material	14.7	-	118" screen
II	Invertebrates	215.8	-	Taxa: *Cellana* sp., *Nerita* sp., *Theodoxus* sp., *Cypraea* sp., *Drupa* sp., *Conus* sp., Zonitoidae, *Brachidontes* sp., *Isognomon* sp., *Chama* sp., *Tellina* sp., non-diagnostic marine shell, Echinoidea
	Vertebrates	1.2	-	Taxa: Fish, *Canis familiaris*
	Coral	39.2	1	Non-Branch
	Bulk Cultural Material	11.5	-	118" screen

Table 11: Site 10690 Invertebrate Remains.

Feature	6	6	6	2	2	Total (grams)
Subsurface Feature	-	-	-	-	2.21	
Unit	ST-l	ST-l	ST-1	TU-2	TU-2	
Layer	Arch	I and II	II	I	II	
GASTROPODA						
Cellana sp.	-	9.2	0.9	-	1.9	12.0
C. *exarata*	-	0.4	-	-	-	0.4
C. *sandwicensis*	-	1.7	-	-	-	1.7
Nerita picea	0.4	1.3	0.8	-	-	2.5
Theodoxus neglectus	-	10.2	20.1	0.2	-	30.5
Strombus sp.	-	0.5	-	-	-	0.5
Cypraea sp.	2.8	31.5	50.1	7.6	4.8	96.9
C. *caputserpentis*	-	-	10.0	-	-	10.0
Cassis corn uta	-	5.8	-	-	-	5.8
Drupa sp.	-	2.4	2.8	-	-	5.2
D. ricina	-	3.1	1.6	-	-	4.7
Purpura aperta	-	1.8	-	-	-	1.8
Drupa morum	-	5.2	10.2	-	-	15.4
Conus sp.	-	3.2	-	-	-	3.2
Conus catus	-	-	3.8	-	-	3.8
Conus chaldaeus	-	-	-	5.5	-	5.5
Zonitidae	-	-	0.2	-	-	0.2
Non-Diagnostic Gastropoda	-	0.7	1.4	0.2	-	2.3
TOTAL GASTROPODA	3.2	77.1	101.9	13.5	6.7	202.4
BIVALVIA						
Brachidontes crebristriatus	-	16.6	99.7	-	-	116.3
Isognomon californicum	-	10.0	8.3	-	-	18.3
Isognomon perna	-	-	1.8	-	-	1.8
TOTAL BIVALVIA	0	26.6	109.8	0	0	136.4
ECHINOIDEA						
H eterocentrotus mammillatus	-	11.4	1.2	-	-	11.4
Non-Diagnostic Echinoidea	-	-	1.0	-	-	1.0
TOTAL ECHINOIDEA	0	11.4	2.2	0	0	12.4

Table 12: Site 10690 Traditional Artifacts.

Feature	Unit	Layer	Artifact Type	Length (em)	Width (em)	Thick. (em)	Count	Remarks
6	ST-l	Arch.	Volcanic Glass Core Fragment	2.30	2.24	1.37	1	Thick flake struck off a larger core; single prepared platform
		I	Basalt Adze Fragment	3.69	1.73	0.75	1	Overall dimensions intact; large fragment removed from adze bit; polish on 4 surfaces

Feature	Unit	Layer	Artifact Type	Length (em)	Width (em)	Thick. (em)	Count	Remarks
			Basalt Adze Fragment	-	3.30	1.46	1	Fragment is of the bit end of the tool; piece medially fractured and large fragment is missing from the bevel
		I and II	Volcanic Glass Debitage	-	-	-	18	9 IF; 4 SF; 2 PF; 3 NDF
			Volcanic Glass Core	1.66	1.34	0.98	1	Multiple, prepared striking platforms
		II	Worked Basalt Pebble	3.83	3.61	2.18	1	Most of the pebbles surface is smooth (possibly water-worn) the entire circumference of the stone has been lightly battered
			Coral Abrader Fragment	-	-	1.30	1	Fragment is tabular with 3 worked facets
			Basalt Adze Preform	13.2	11.40	4.00	1	Highly vesicular basalt roughed out to an oval shape
			Basalt Debitage	-	-	-	1	One IF
			Volcanic Glass Debitage	-	-	-	11	Eight IF; 1 SF; 2 NDF
			Volcanic Glass Core	2.91	2.22	1.68	1	Chill glass core; based on thick flake
			Volcanic Glass Core	-	-	-	1	Fragment; single, prepared striking platform
			Volcanic Glass Core	-	-	-	1	Fragment; single, prepared striking platform
2	TU-2	II	Basalt Adze Fragment	-	-	-	1	Adze fragment; 1 polished surface

IF = Interior Flake; SF = Secondary Flake; NDF = Non-Diagnostic Flake

CURRENT INVESTIGATIONS

The present study of Site 10690 was conducted by excavating 6 shovel probes and 20 excavation units (Figure 35). The shovel probes were excavated in 2 lines oriented at 40 and 16 degrees from true north, and lay between Feature 6 and the remainder of the site's features. Excavation units were associated with Features 1, 2, 3, 4 and 6, with the addition of 2 excavated units that were not associated with features. The data gained from the probes is presented below in Table 13, while the excavation units are discussed individually. In addition, it should also be noted that units omitted out of numerical sequence (Excavation Units 11, 13, 15 and 18) were not excavated, while 3 units (Excavation Units 1, 4 and 7) did not have their profiles drawn, either due to shallowness, or their identical nature to adjacent units.

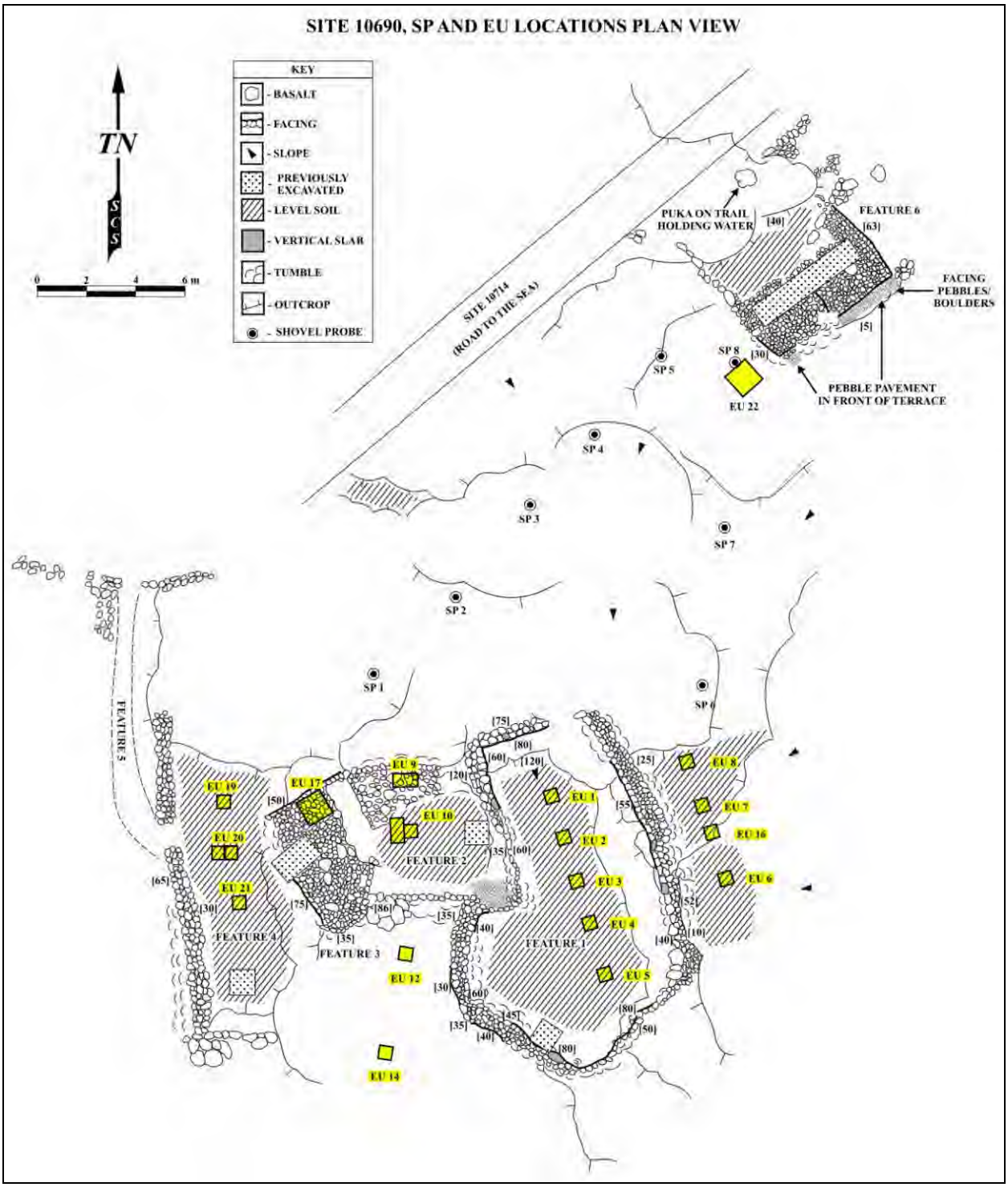


Figure 35: Site 10690, SP & EU Locations.

Table 13: List of SPs Conducted Within Site 10690

SP	Bottom Depth	Layers Material	Cultural
1	0.35 m	1	Coral, C14
2	0.38 m	1	C14
3	Bedrock-void		
4	Bedrock-void		
5	0.38 m	1	none
6	0.24 m	1	none
7	0.13 m	1	none
8	0.17 m	2	V-glass, Marine shell

Feature 1 and EUs 1-5

The present study found Feature 1 to differ little from the previous description.

Excavation Unit 1 was a 0.50 by 0.50 m unit located in the northwest corner of the feature's interior, about 0.50 m upslope of the west facing wall. The unit was excavated to assist in determining feature function and locate activity areas, removed as a single layer and level and reached a maximum depth of 0.08 m before encountering bedrock. This level was a 10 YR 2/2 very dark brown silt loam with a 10% pebble content that yielded no cultural material.

Excavation Unit 2 was another 0.50 by 0.50 m unit located 2.00 m south of EU-1 and about 1.00 m east of the feature's western wall. The unit was excavated in 2 levels within a single stratigraphic layer which was a 10 YR 2/2 very dark brown silt loam containing about 20% pebbles and cobbles (Figure 36). This layer reached bedrock at a maximum depth of 0.19 m below surface and only yielded a moderate amount of charcoal, located in level 2.

Excavation Unit 3 was the third 0.50 by 0.50 m unit in a north-south line within Feature 1, located 2.00 m south of EU-2 and 2.00 m east of the feature's western wall. Again, the purpose of the unit was to determine feature function and locate activity areas and excavated as 2 levels within a single layer (Figure 37). This layer was the same as that observed in EU-2, reached bedrock at a maximum depth of 0.18 m below surface, and yielded no cultural material.

Excavation Unit 4 was the fourth 0.50 by 0.50 m unit in the north-south line within Feature 1 and located 2.00 m south of EU-3. With the exception of maximum depth (0.23 m below surface), everything was the same as EU-3.

Excavation Unit 5 was the south most 0.50 by 0.50 m unit in a north-south line within Feature 1, and located 2.00 m south of EU-4 and about 0.50 m north of a bedrock outcrop. This unit also was excavated to determine feature function and identify activity areas, but in contrast to the previous units, exhibited 2 layers (Figure 38). Layer I was removed in 2 arbitrary levels and was a 10 YR 2/2 very dark brown silt loam with about a 15% pebble and cobble content and

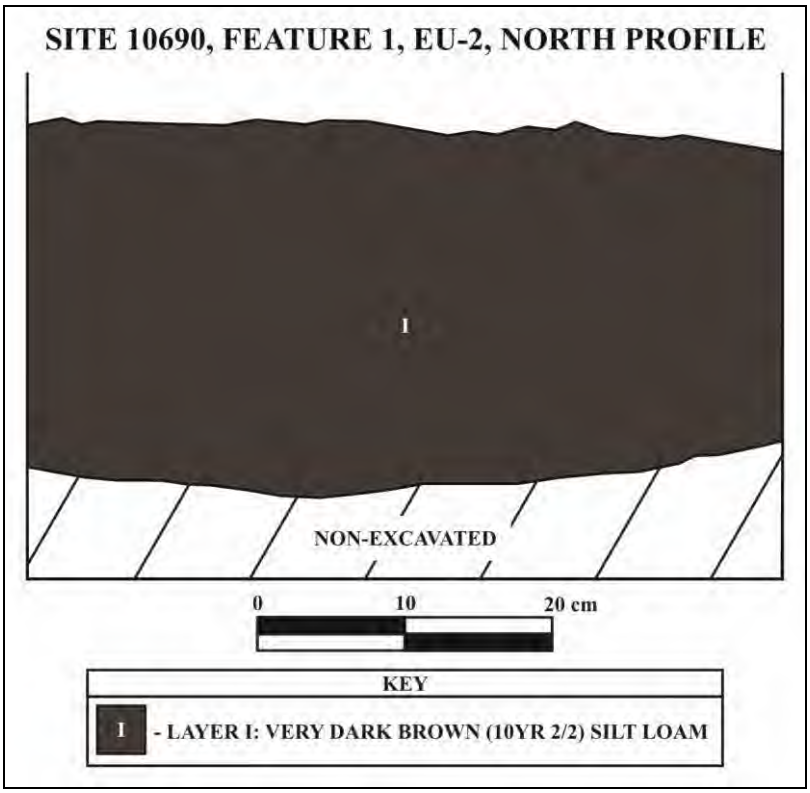


Figure 36: Site 10690, Feature 1, EU-2, North Profile.

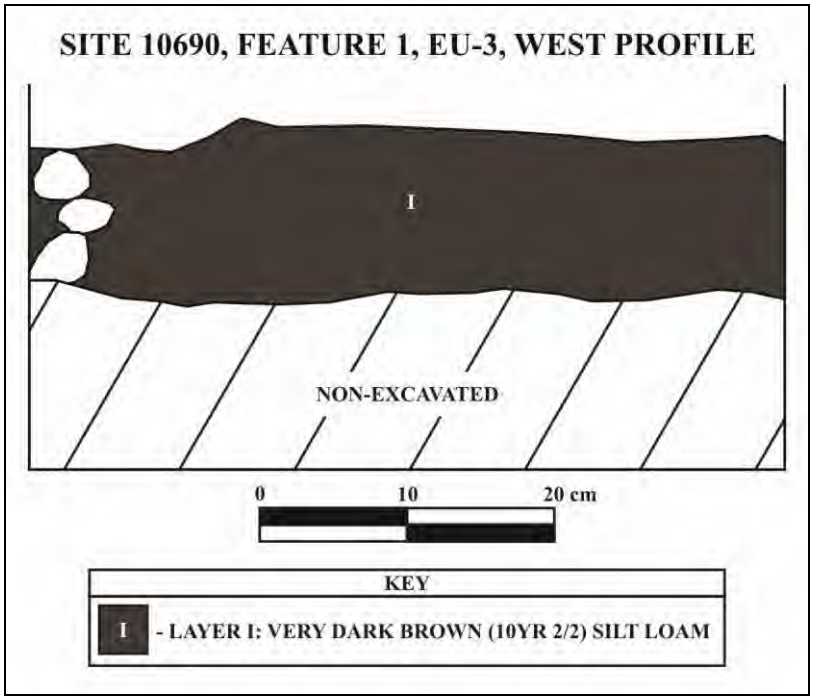


Figure 37: Site 10690, Feature 1, EU-3, West Profile.

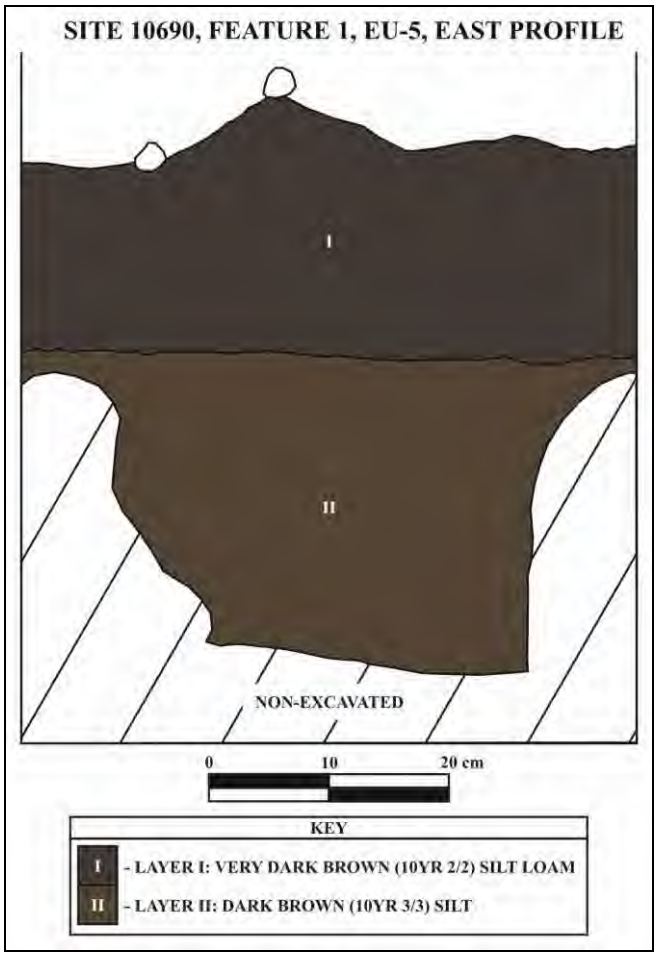


Figure 38: Site 10690, Feature 1, EU-5, East Profile.

having a maximum depth of 0.14 m below surface. Layer II was then removed in 3 arbitrary levels and was a 10 YR 3/3 dark brown silt with a 15-20% rock content, rock increasing with depth. The maximum depth of the unit was at 0.39 m below surface with its only cultural material being a few pieces of charcoal observed in Level 5, Layer II.

Excavation Units 6-8 and 16

EUs 6, 7, 8 and 16 were not associated with any feature at the site, and placed in an area of level soil east of Feature 1.

Excavation Unit 6 was the southern most unit in a north-south line of four 0.50 by 0.50 m units situated in a soil filled level area to identify possible activity areas immediately outside of Feature 1. It was also 2.00 m northeast and slightly upslope of the southeast corner of the feature. EU-6 was excavated in 2 levels within 2 stratigraphic layers (Figure 39). Level 1, Layer I was a 7.5 YR 3/1 very dark gray silt with almost no rock content extending to a depth of 0.12 m below surface. Level 2, Layer II was then a 7.5 YR 3/2 dark brown silt loam with a moderate pebble content resting on bedrock at a maximum depth of 0.23 m below surface. Neither layer produced any cultural material.

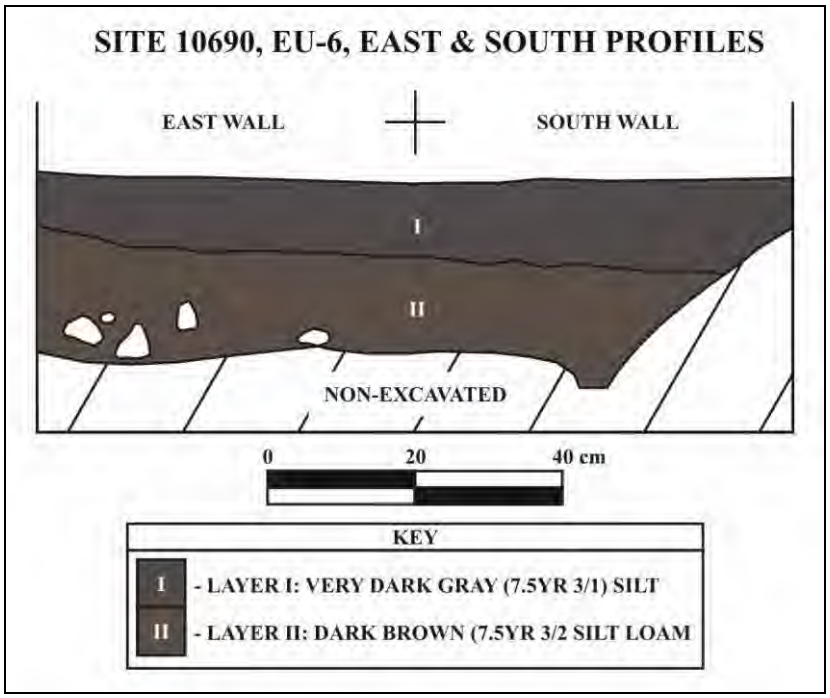


Figure 39: Site 10690, EU-6, East & South Profiles.

Excavation Unit 7 was the second 0.50 by 0.50 m unit in the north-south line and was located 3.50 m north of EU-6. This unit yielded the same results as EU-6 and had a maximum depth of 0.27 m below surface.

Excavation Unit 8 was the northernmost 0.50 by 0.50 m unit in the north-south line of units, was 2.00 m north of EU-7 and less than 1.00 m east of Feature 1's eastern wall. The EU was placed to identify possible activity areas in this vicinity, and excavated in 4 arbitrary levels within 2 layers (Figure 40). Layer I was a single level reaching a maximum depth of 0.08 m below surface and was again a 7.5 YR 3/1 very dark gray silt with no rock content. Layer II contained 3 levels and was similar to the Layer II observed in EUs 6 and 7. Maximum depth of the unit upon reaching bedrock was 0.40 m below surface. Again, no cultural material was recovered.

Excavation Unit 16 was the final 0.50 by 0.50 m EU placed in this north-south line, and was located about 2.00 m north of EU-6 and 1.00 m south of EU-7 in an area of level soil that appeared to have more depth than the surrounding areas. The unit was excavated in 4 arbitrary levels within 2 layers (Figure 41). Layer I was slightly different from other units in this line and was a 10 YR 3/2 very dark grayish brown silt with no rock content. Only 1 level was excavated in this layer which had a maximum depth of 0.14 m below surface. Layer II, however, was similar to that of the other units in the line and was a 7.5 YR 3/2 dark brown silt loam with a 15 to 20% pebble and cobble content. This layer contained the other 4 levels in the unit and exposed bedrock in the entire unit at a maximum depth of 0.43 m below surface. The only cultural material located in this unit was charcoal, found only in Layer II.

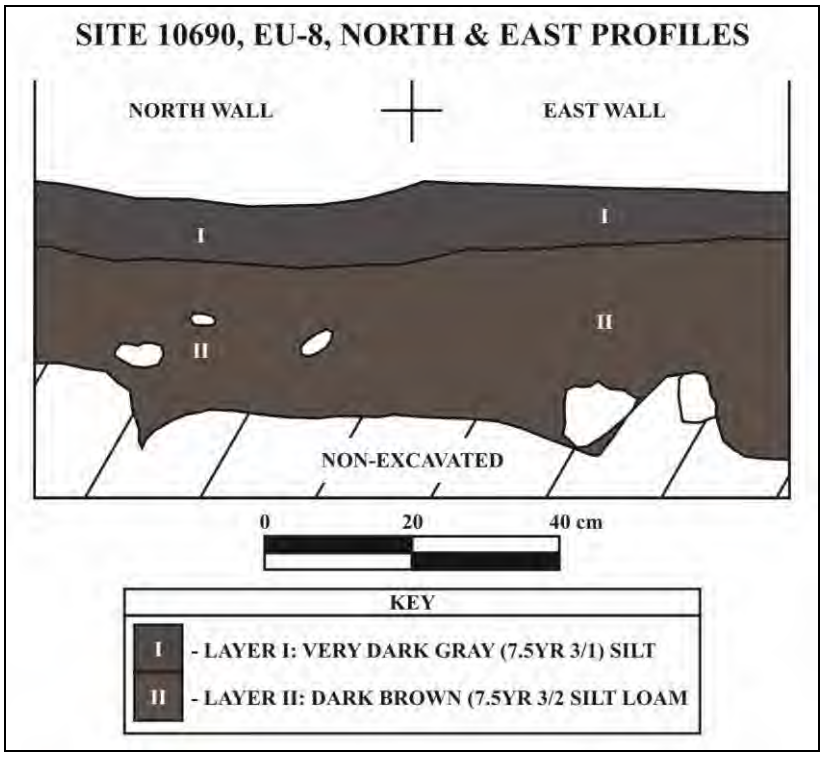


Figure 40: Site 10690, EU-8, North & East Profiles.

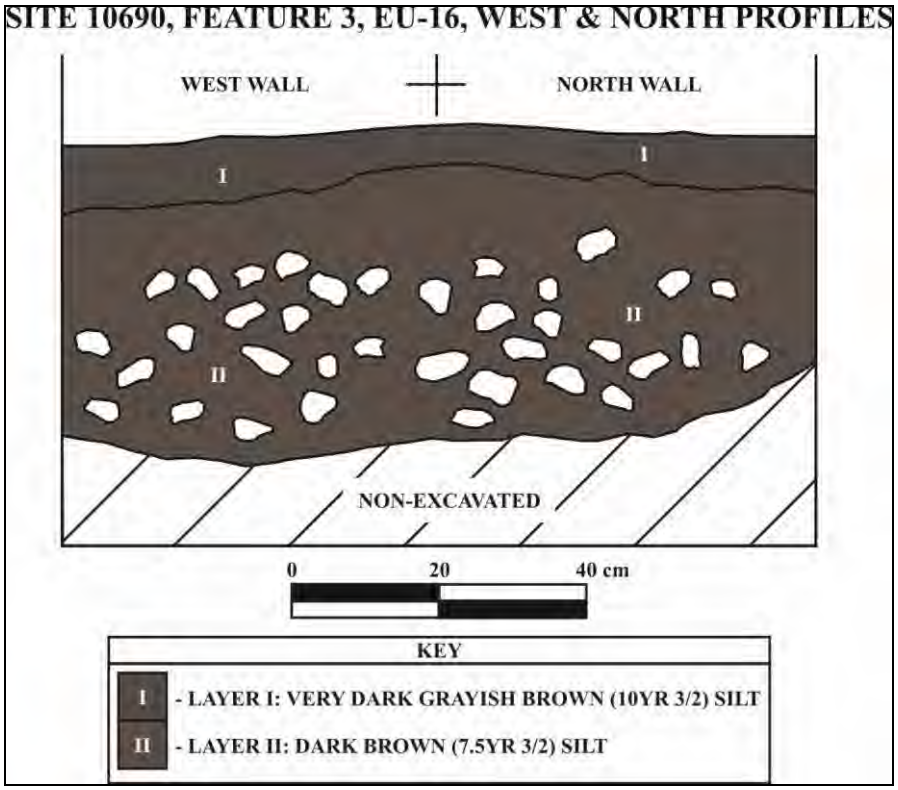


Figure 41: Site 10690, Feature 3, EU-16, West & North Profiles.

Feature 2 and EUs 9, 10 and 10 Extension

The current SCS study did not record any additional information to indicate Feature 2 at Site 10690 differed substantially from the previous description.

Excavation Unit 9 was a 0.50 by 1.00 m unit placed within the feature's northern retaining element, toward its northwestern edge. The unit's long axis was oriented east-west and was excavated in order to better understand feature function. EU-9 was excavated in 3 arbitrary levels within an architectural layer and a soil layer (Figure 42). The architectural layer consisted of roughly piled unsorted pebbles cobbles and boulders and was relatively shallow, terminating at a maximum depth of 0.19 m below surface. Layer I soil was then a 7.5 YR 3/1 very dark gray silt loam with up to a 75% pebble cobble and boulder content, much of it decomposing bedrock. Bedrock was also exposed quite early in this excavation, with the soil occurring in crevices and reaching a depth of 0.36 m below surface. Cultural material recovered from this unit consisted of small amounts of marine shell, urchin and charcoal, volume increasing slightly with depth. A possible hammer stone was also recovered at 0.21 m below surface.

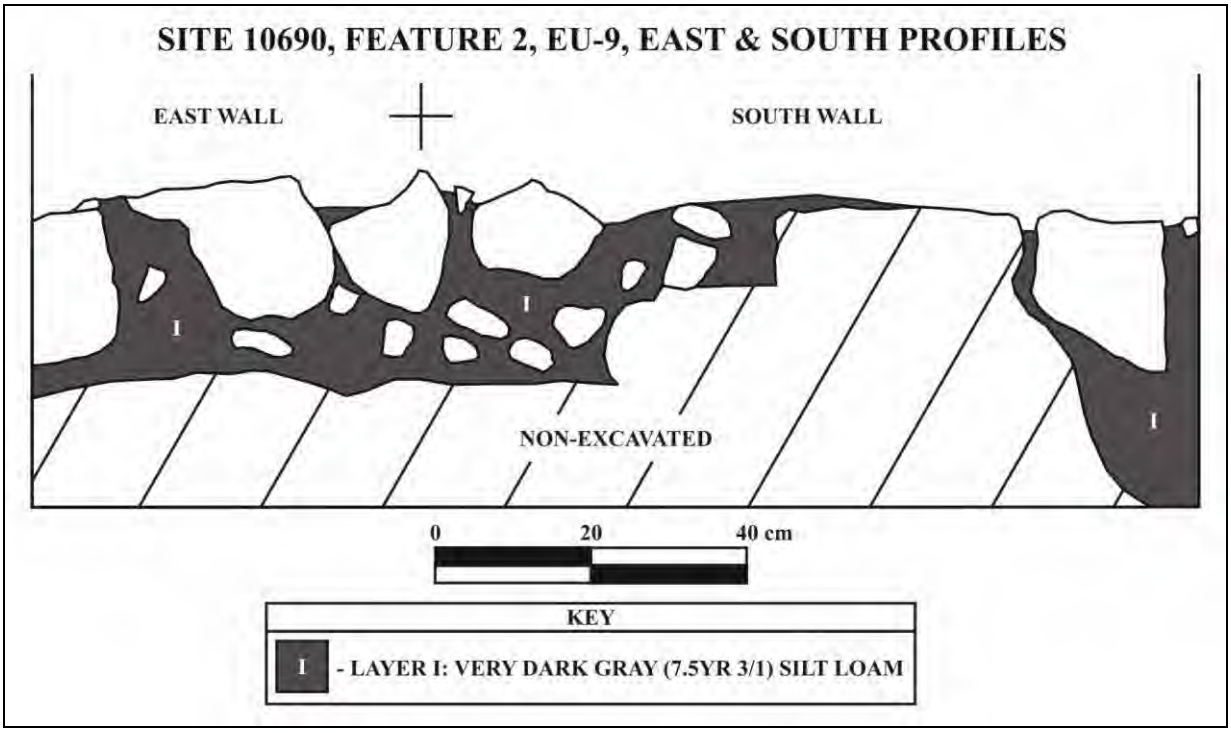


Figure 42: Site 10690, Feature 2, EU-9, East & South Profiles.

Excavation Unit 10 was a 0.50 by 0.50 m unit placed in the level soil area retained by the terrace's architecture in order to explore its potential for yielding cultural material. The unit was excavated as a single stratigraphic level revealing a 7.5 YR 3/1 very dark gray silt loam with about a 40% unsorted rock content and a maximum depth of 0.25 m below surface (Figure 43). Much of this soil also occurred within crevices of the bedrock. Only a single marine shell was recovered from EU-10, but enough dispersed charcoal was found to warrant an extension.

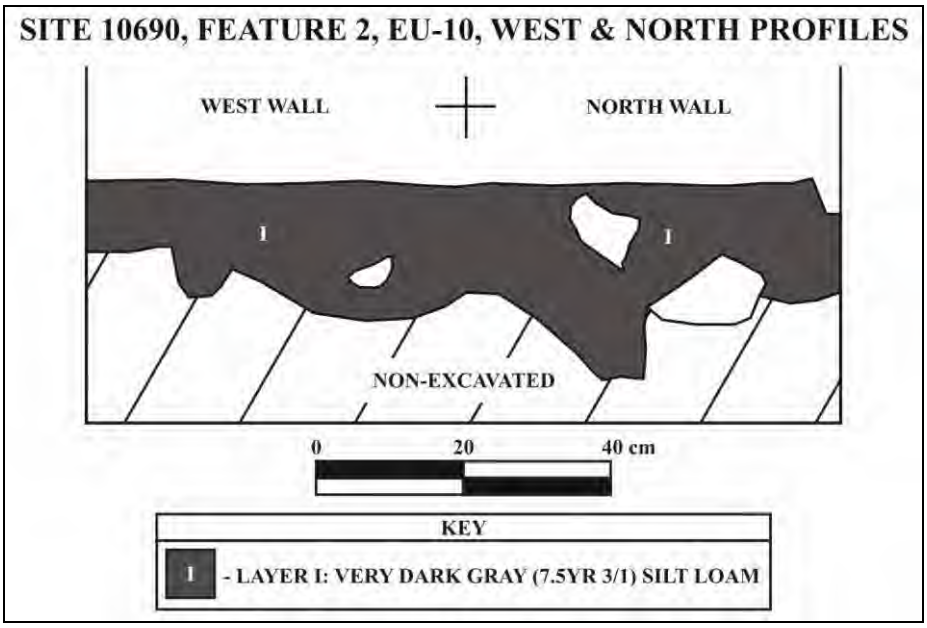


Figure 43: Site 10690, Feature 2, EU-10, West & North Profiles.

Excavation Unit 10 Extension was a 1.0 by 0.50 m unit with its long axis oriented north-south and placed in the level soil area of Feature 1, immediately west of EU-10. The unit was excavated to explore the source of the charcoal found in EU-10 and was excavated as 3 arbitrary levels within a single soil layer (Figure 44). This layer was similar to that described for EU-10, reached a maximum depth of 0.30 m below surface, and yielded moderate amounts of marine shell, charcoal, a piece of chert and a piece of possible ground stone. The majority of this material was found in level 2.

Radiocarbon Date Data

SCS submitted a 2.2 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC615). The sample was screened from within Site 10690, Feature 2, EU-10 extension, Layer I, level 2, 10-20 cmbs. The sample did not provide a distinct pre-Contact versus Historic date, as the 2 Sigma calibration resulted in a range of A.D. 1660 to 1960 (95.4% probability) (see Appendix B).

Excavation Units 12 and 14

12 and 14 were not associated with any feature at the site, and placed in an area of level soil west of Feature 1, and south of Feature 2.

Excavation Unit 12 was a 0.50 by 0.50 m excavation located in a level soil area, and lay about 1.00 m west of Feature 1's west wall. The unit was placed in this locale in order to explore its possibility for yielding a cultural deposit. The unit was excavated as a single stratigraphic layer, had a maximum depth of 0.10 m below surface, and yielded no cultural material (Figure 45). This layer was 7.5 YR 3/2 dark brown silt with a small amount of pebbles.

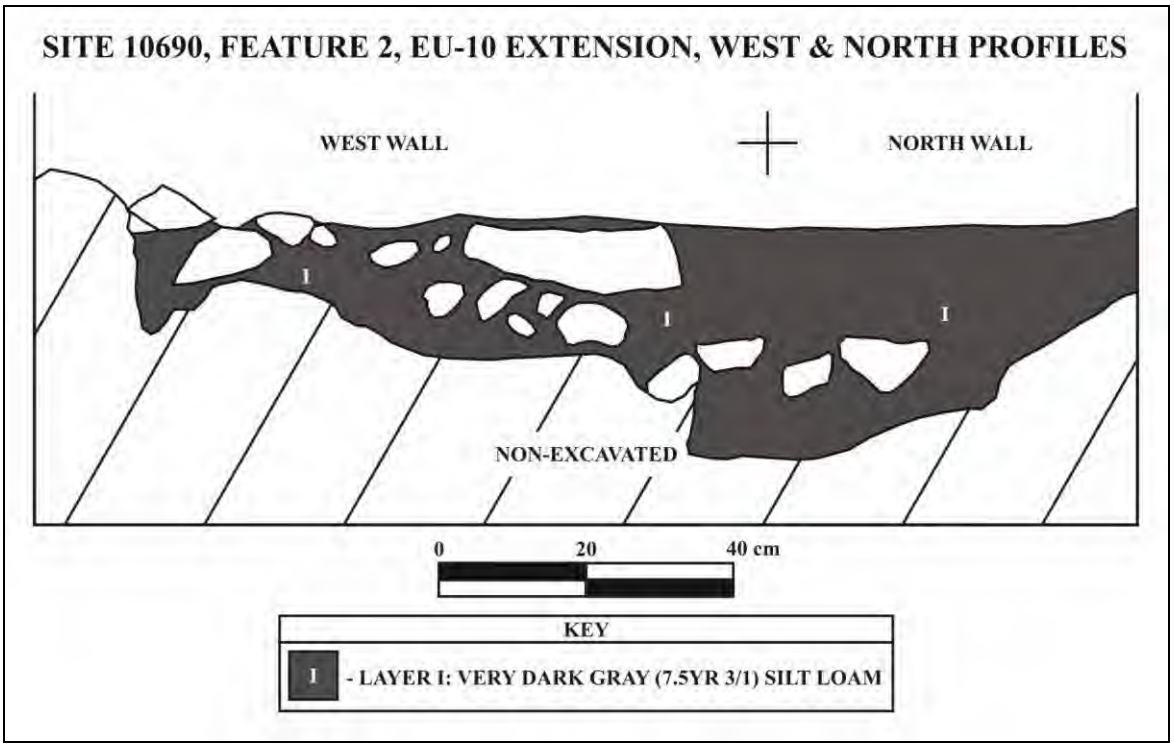


Figure 44: Site 10690, Feature 2, EU-10 Extension, West & North Profiles.

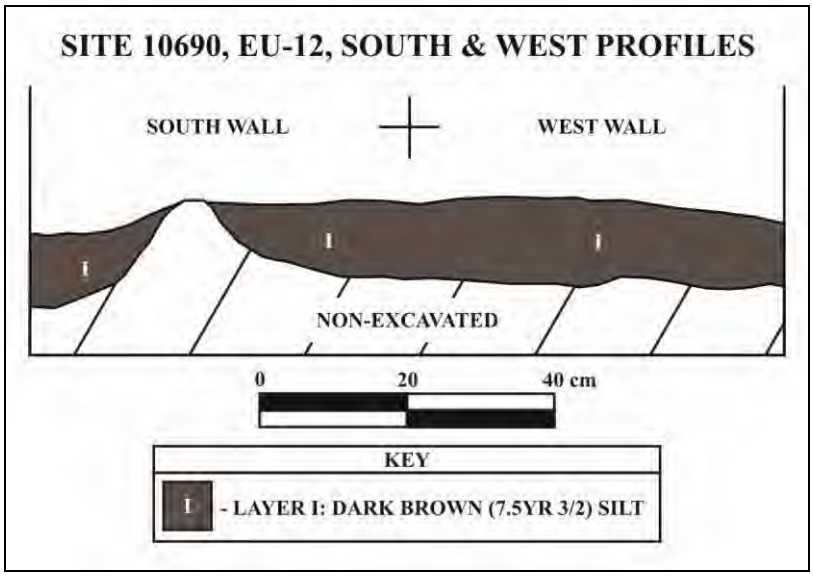


Figure 45: Site 10690, EU-12, South & West Profiles.

Excavation Unit 14 was another 0.50 by 0.50 m unit located about 5.00 m south of EU-12 and excavated in order to explore the area outside of the site's features. The unit was excavated in 3 arbitrary levels within 2 natural layers (Figure 46). Layer I had only a single level, was a 7.5 YR 3/2 dark brown silt with almost no rock and had a maximum depth of 0.08 m below surface. Layer II contained 2 levels, was a 10 YR 3/2 very dark grayish brown silt with about a 2% cobble content and overlay bedrock at a maximum depth of 0.32 m below surface. Recovered from this excavation were small amounts of marine shell and charcoal, only located in Layer II.

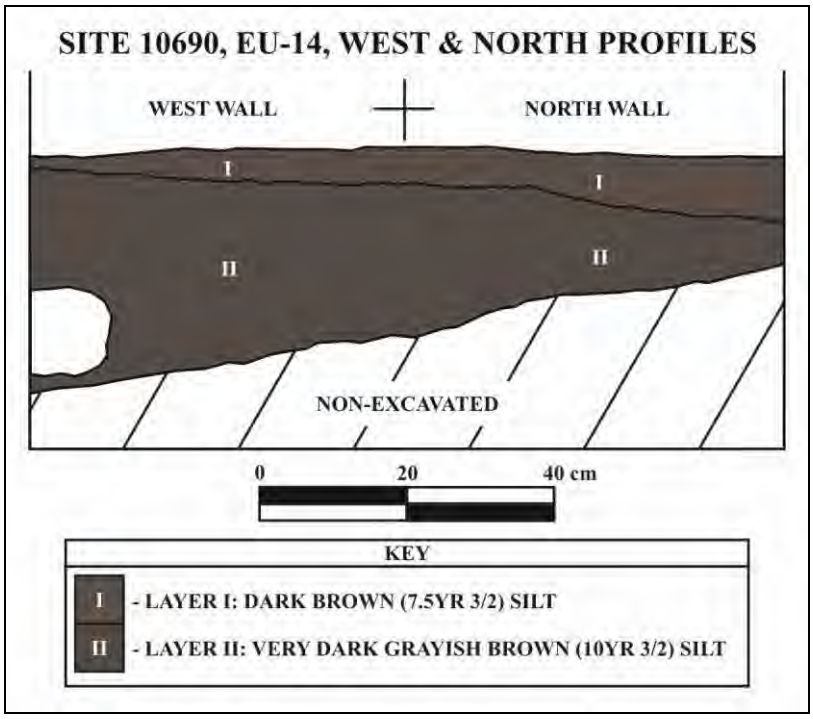


Figure 46: Site 10690, EU-14, West & North Profiles.

Feature 3 and EU-17

The present investigations offered little more information on Feature 3, other than the facing on its north wall was of stacked boulders.

Excavation Unit 17 was a 1.00 by 1.00 m excavation unit, located along the north margin of the feature, just behind its facing. The unit was excavated in order to determine feature function and reveal its architecture. The EU was excavated in an architectural layer and a single soil layer (Figure 47). The architectural layer was comprised of cobbles and boulders, the size of the rocks increasing with depth and from west to east, cobbles primarily observed in the eastern third of the unit. This Layer also had a maximum depth of 0.72 m below surface. Layer I, the soil layer was a 10 YR 3/2 very dark grayish brown silt with about a 2% rock content overlying bedrock at a maximum depth of 0.97 m below surface. Cultural material located in EU-17 consisted of marine shell and charcoal which was only observed in Layer I.

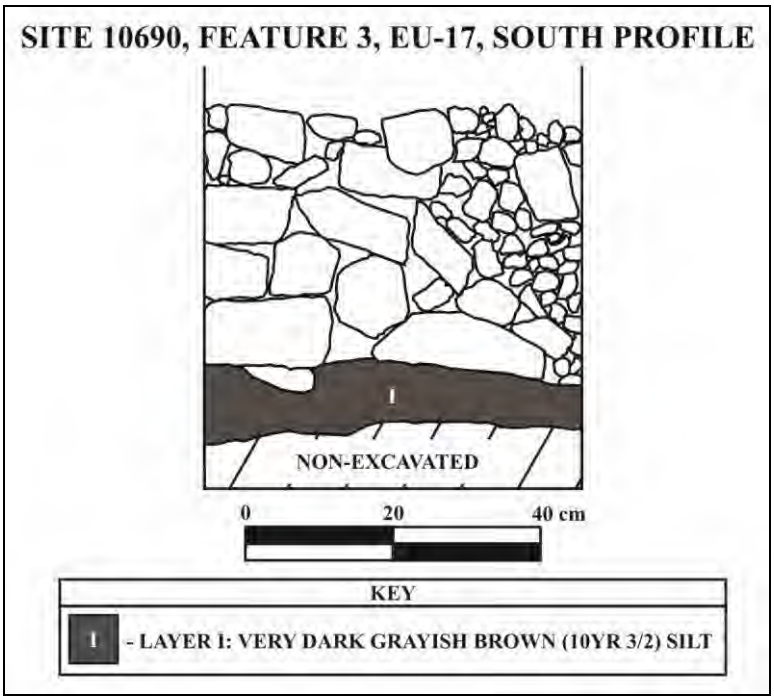


Figure 47: Site 10690, Feature 3, EU-17, South Profile.

Feature 4 and EUs 19-21 and 20 Extension

Feature 4 was not reported in the present SCS study to differ in any aspect from the feature's previous description.

Excavation Unit 19 was a 0.50 by 0.50 m unit located in the center of the north portion of the feature, in its level soil. The unit was placed in order to more fully understand the feature's function, and excavated in 3 arbitrary levels within 2 layers (Figure 48). Layer I was a single level that consisted of a 10 YR 3/2 dark grayish brown silt and had just a minor amount of rock. This layer had a maximum depth of 0.10 m below surface. Layer 2 was removed in 2 levels and was a 10 YR 3/3 dark brown silt with about a 10% pebble and cobble content exposing bedrock in the entire unit at a maximum of 0.32 m below surface. Bedrock was noted as sloping downward to the west with no cultural material recorded in the entire unit.

Excavation Unit 20 was a 0.50 by 0.50 m unit located also located in the level soil area of Feature 4, 2.00 m south of EU-19. Again, this unit was placed to more fully understand the feature's function. EU-19 was excavated in 4 arbitrary levels within 2 natural layers (Figure 49). Level 1 was the only level in Layer I and was a 10 YR 3/2 dark grayish brown silt with little rock having a maximum depth of 0.12 m below surface. Layer II contained the rest of the levels and was a 7.5 YR 2.5/2 very dark brown silt loam with about a 5% cobble content that reached bedrock at a maximum depth of 0.39 m below surface. The bottom of Level 3 and all of Level 4 in this layer also exhibited charcoal staining, although only a minor amount of marine shell and charcoal were retrieved from them. No cultural material was observed in Layer I.

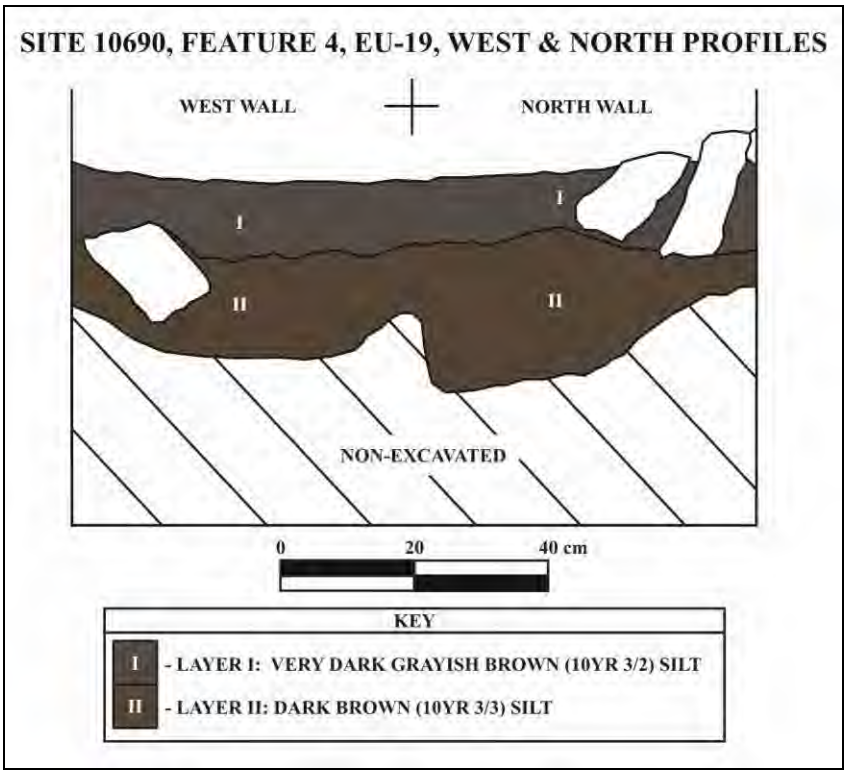


Figure 48: Site 10690, Feature 4, EU-19, West & North Profiles.

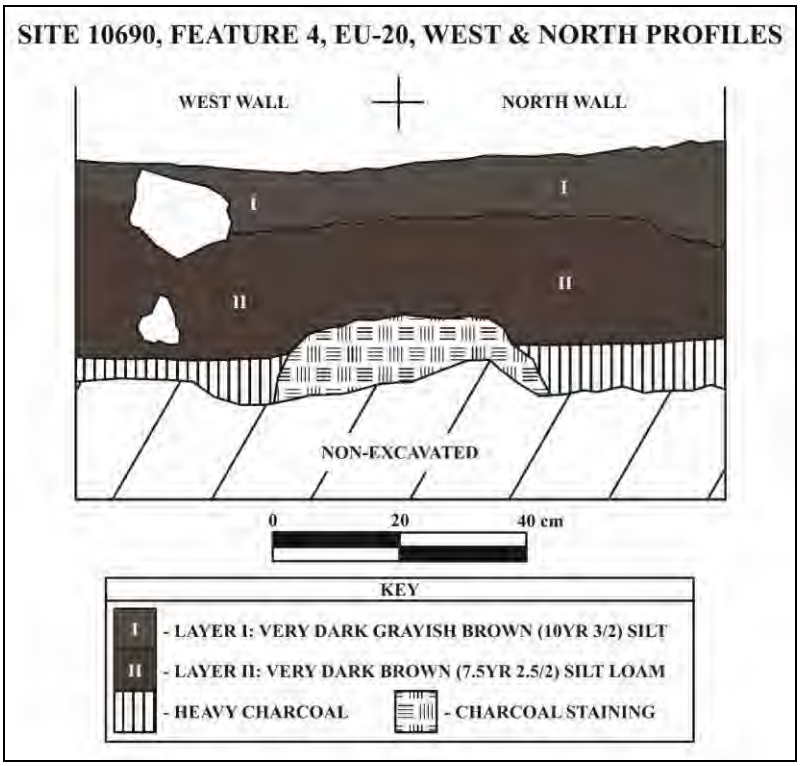


Figure 49: Site 10690, Feature 4, EU-20, West & North Profiles.

Excavation Unit 20 Extension was a 0.50 by 0.50 m unit attached to EU-20, at the former unit's west end and placed in order to further determine the nature of the previously identified charcoal stain. The unit was also excavated in 4 levels within 2 layers and included a subsurface feature (Figure 50). Both Layers I and II were similar to the Layers described in EU-20, with bottom depths of 0.10 and 0.47 m below surface. Subsurface Feature 4/1, however, was exposed in the top of Level 4 in the northeast portion of the unit where the charcoal staining observed in the adjacent unit defined itself. This SSF was a isolated area containing much charcoal, was screened separately and had a bulk sample taken from it. Cultural material from this unit consisted of marine shell, charcoal and a marine shell button. The marine shell and marine shell button were recovered from the first level of Layer II, while the charcoal was found in all levels of the layer. Again, no material was observed in Layer I.

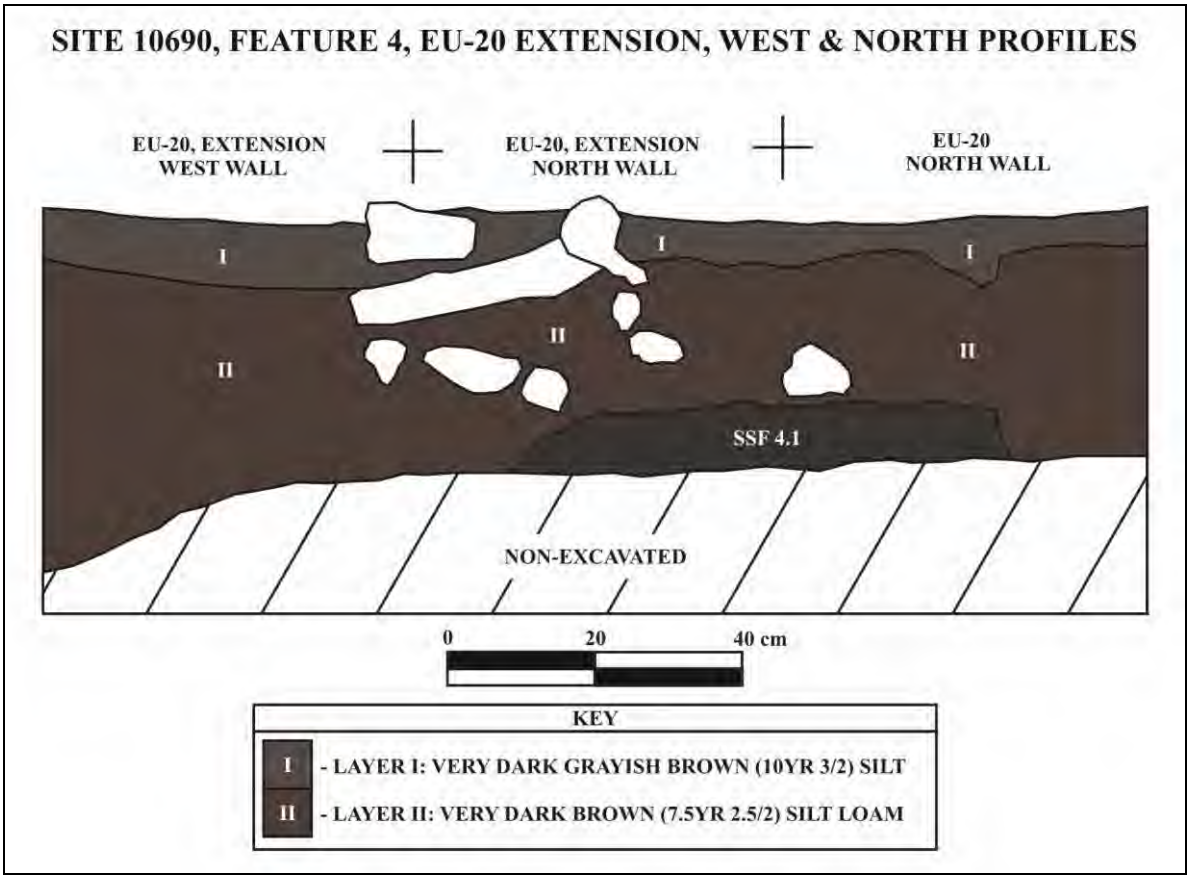


Figure 50: Site 10690, Feature 4, EU-20 Extension, West & North Profiles.

Radiocarbon Date Data

SCS submitted a 0.7 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC616). The sample was screened from within Site 10690, Feature 4, EU-20 extension, SSF 4.1, 30-36 cmbs. The sample did not provide a distinct pre-Contact versus Historic date, as the 2 Sigma calibration resulted in a range of A.D. 1660 to 1960 (95.4% probability) (see Appendix B).

Excavation Unit 21 was the final 0.50 by 0.50 m unit excavated in Feature 4, and was located 2.00 m south of EU-20, and just west of the test unit excavated in the feature during the previous investigations. The unit was excavated to further explore the nature of the feature and was excavated in 2 levels within 2 Layers (Figure 51). Layer I was Level 1 and was a 10 YR 3/3 dark brown silt with a minor amount of rock having a maximum depth of 0.10 m below surface, exposing bedrock in the eastern portion of the unit. Layer II was Level 2 and was a 10 YR 4/2 dark grayish brown silt, also with almost no rock, having a maximum depth of 0.20 m below surface. No cultural material was observed in either of these layers within this unit.

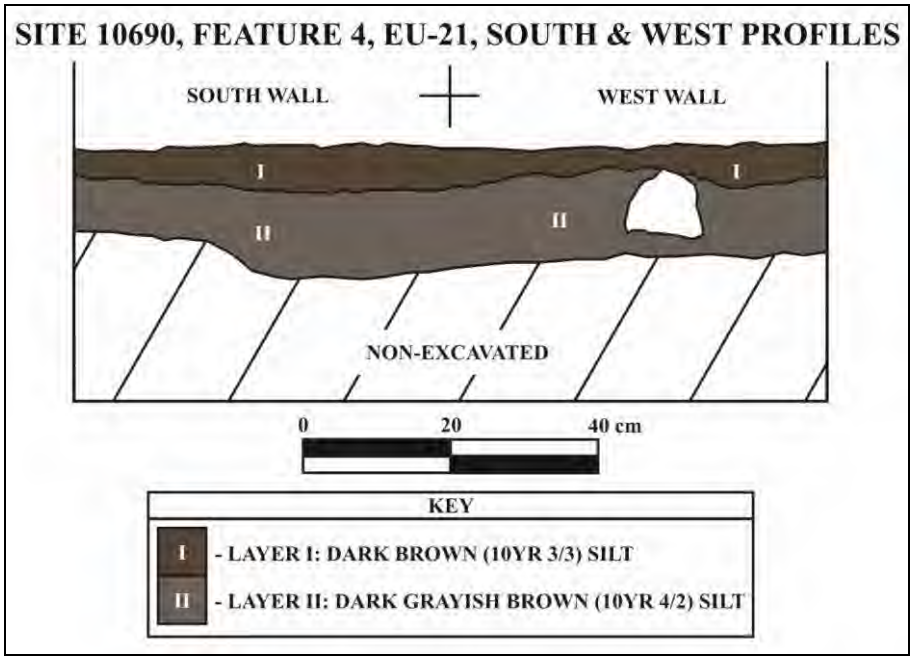


Figure 51: Site 10690, Feature 4, EU-21, South & West Profiles.

Feature 6 and EU-22

Feature 6, in these investigations, was noted to be similar to the previous descriptions with the exception that the present study observed a small, low, soil filled terrace attached to the southern corner of the feature.

Excavation Unit 22 was a 1.00 by 1.00 m unit which incorporated SP-8 in its northern half and was placed in the small attached terrace in order to further understand the nature of the deposit identified in the SP. EU-22 was excavated stratigraphically as 2 layers (Figure 52). Layer I was a 0.04 m thick layer of organic duff overlying the soil layer. Layer II was a 10 YR 2/2 very dark brown silt with about a 65% very small pebble content terminating at bedrock at a maximum of 0.24 m deep (this depth occurring in a small pocket within the bedrock). Cultural material from this unit included 1 piece of marine shell, 1 piece of coral and 3 pieces of volcanic glass. All of this material was from Layer II and was very similar in density to the material recovered from SP-8.

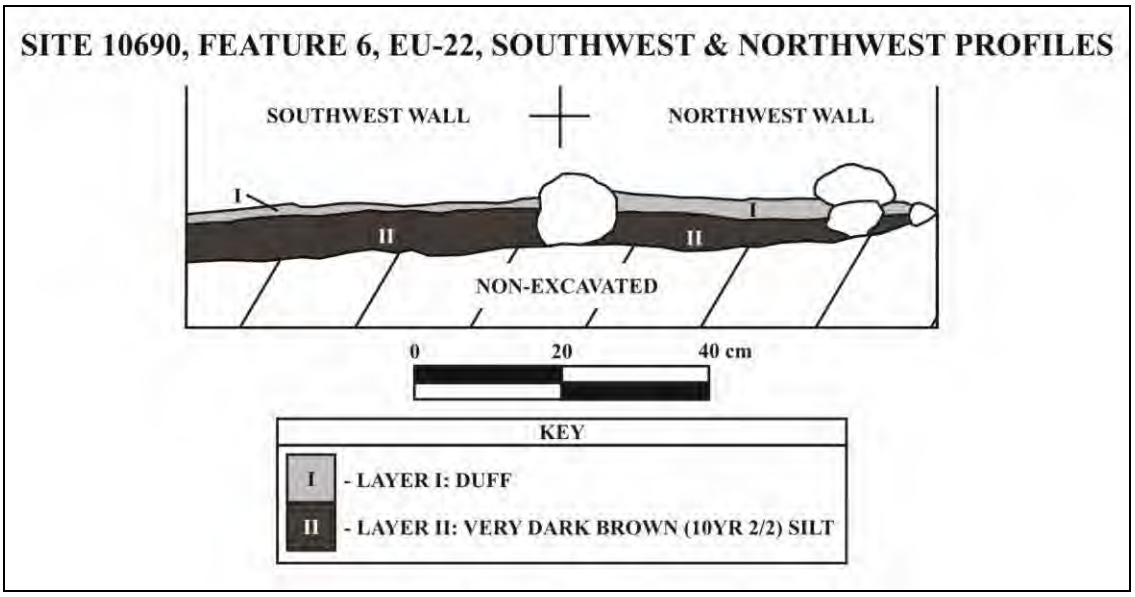


Figure 52: Site 10690, Feature 6, EU-22, Southwest & Northwest Profiles.

SITE 10706

PREVIOUS INVESTIGATIONS

Site 10706 lay in the northwest corner of the project area, 50.0 m west of Site 10702, in Kohanaiki *Ahupua'a.* It occured slightly above the 820 ft. elevation contour, on the older of the project area's two Hualalai flows, and had an overstory dominated by christmasberry and *alahe'e.*

The site consisted of two features lying on a moderately steep southwest slope. Feature 1 defined the size of the site, which was 25.0 m north-south by 23.0 m east-west.

Based on its size and construction, Feature 1 is thought to have been a traditional Hawaiian house compound. The presence of branch coral also points toward ceremonial activities.

Feature 1

Feature 1 was a large rectilinear enclosure that utilized bedrock outcrops in its east wall and southwest corner. Walls ranged from around 1.5 to 2.0 m thick and were constructed of stacked boulders and cobbles with an interior pebble fill. Interior facing was most noticeable on its north and west walls, although limited areas occurred on the east wall also. Exterior facing occurred almost exclusively on the north wall. Much of the existing facing was of nicely stacked boulders. The exterior of the west wall was quite collapsed, but from the terminus of its rubble to the top of the wall, it was over 2.0 m high. An entrance may have occurred in the southern portion of the west wall.

TU-l, a 0.50 by 0.50 m unit placed a few meters from the northwest corner of this feature, was the only unit excavated in the site. TU-l was excavated mainly to establish the presence or absence of cultural material in the feature, and extended to 0.25 m below surface before encountering bedrock. Two soil layers were revealed: Layer I was a dark grayish brown (10YR

3/2) duff and silt layer comprising the majority of the excavation; Layer II was a 0.05 m thick, very dark brown (10 YR 2/2) sticky silt lying directly above the bedrock. Cultural material retrieved from this unit included a charcoal (1.6 g), marine shell *(Cypraea* sp.) (7.3 g), a single piece of branch coral (12.3 g), and two pieces of volcanic glass. All of this material was derived from Layer II.

Feature 2

Feature 2 was a modified outcrop occurring within the eastern portion of Feature 1. It was about 4.0 m north-south by 2.0 m east-west, and had little visible form other than being large boulders to large cobbles stacked on a bedrock outcrop. It was about 1.2 m high as measured from the bottom of its down-slope side.

CURRENT INVESTIGATIONS

The present study of Site 10706 was conducted by excavating 18 shovel probes and 5 excavation units (Figure 53). The shovel probes were excavated both inside and outside Feature 1, while the excavation units were only placed inside the Feature. The shovel probes were placed on a grid oriented 70 degrees off of true north, with probes mostly spaced 5.0 m apart. The data gained from these probes is presented below in Table 14, while each excavation will be discussed individually.

Feature 1 and EUs 1-5

With the exception of a possible 3.00 m north-south by 2.00 m east-west platform located in the northeast corner of Feature 1's interior, current observations of the feature found it to be essentially the same as previously described.

Excavation Unit 1 was a 1.00 by 1.00 m unit placed in the northwest portion of Feature 1 in order to further explore the nature of the large amount of charcoal recovered from SP B-3, which it incorporated in the EU's southeast corner. The Unit was also about 0.50 m from the north side of Feature 2, and about 1.50 m below Feature 1's eastern (northeastern) wall. Excavation of the unit was performed in 3 arbitrary levels within 2 natural layers (Figure 54). Level 1 was the only level excavated in Layer I and was a 7.5YR 2.5/1 black silt loam with a small pebble content achieving a maximum depth of 0.11 m below surface. Levels 2 and 3 contained Layer II which was a 10 YR 2/1 black silt, also with a small pebble content achieving bedrock throughout the unit at 0.29 m below surface, although bedrock appeared in the eastern 2/3rds of the unit at the bottom of Level 2. The majority of the cultural material was recovered from Level 2, but it also occurred in Level 1. This material consisted of a moderate amount of volcanic glass, marine shell, burned *kukui* shell and charcoal.

Radiocarbon Date Data

SCS submitted a 0.6 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC617). The sample was screened from within Site 10706, Feature 1, EU-1, Layer II, level 1, 9-20 cmbs. The sample shows a 79.3% probability when calibrated to 2 Sigma, that with a date range of A.D. 1660 to 1890 the chronology for this Layer falls within the late-pre-Contact to early-Historic period (see Appendix B).

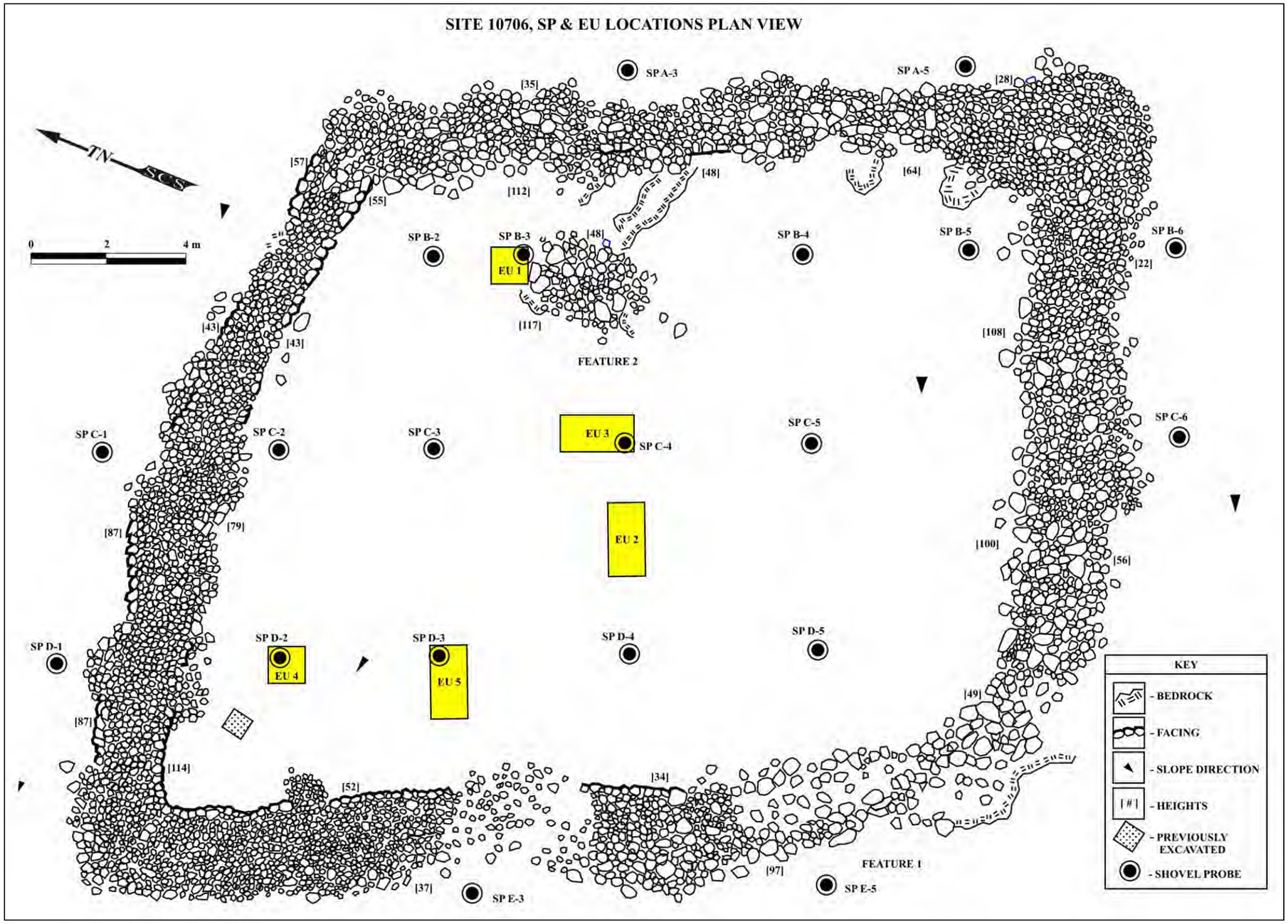


Figure 53: Site 10706, SP & EU Locations.

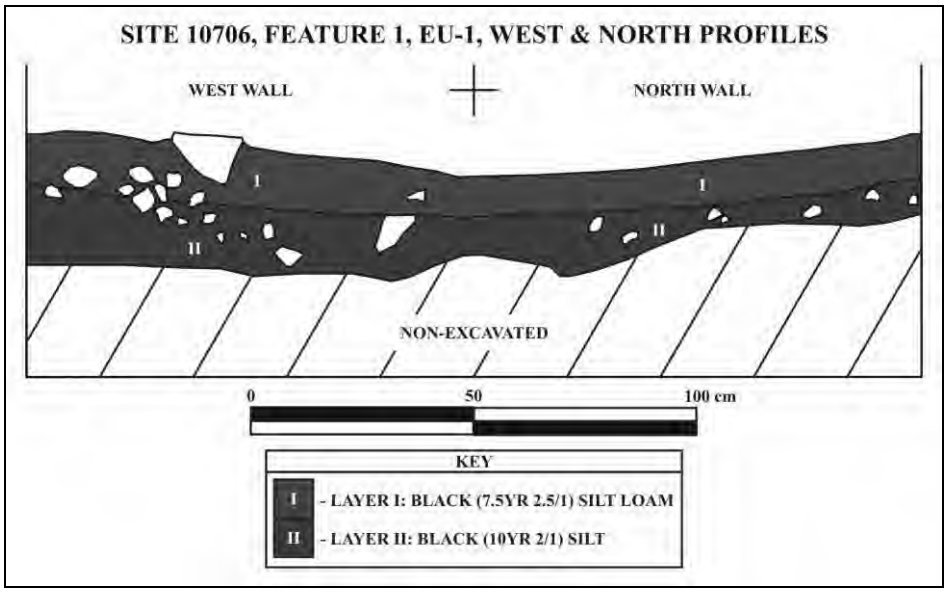


Figure 54: Site 10706, Feature 1, EU-1, West & North Profiles.

Table 14: List of SPs Conducted Within Site 10706

SP	Bottom Depth	Layers	Cultural Material
A-3	0.31 m	1	none
A-5	0.12 m	1	V-Glass
B-2	Feature-voided		
B-3	0.19 m	1	V-Glass, M Shell, Coral, H2Oworn, C14
B-4	Bedrock-voided		
B-5	0.10 m	1	V-Glass
B-6	0.30 m	1	none
C-1	0.07 m	1	none
C-2	0.34 m	1	V-Glass, Marine Shell
C-3	0.25 m	2	V-Glass, Marine Shell, C14
C-4	0.22 m	1	V-Glass, Marine Shell, Fish Bone
C-5	0.10 m	1	V-Glass
C-6	0.20 m	1	V-Glass
D-1			none
D-2	0.54 m	3	V-Glass, Marine Shell, Fish bone, C14
D-3	0.38 m	3	V-Glass, Marine Shell, Fish bone, C14
D-4	0.18 m	1	V-Glass, Fish Bone, C14
D-5	0.16 m	1	Marine Shell, Kukui
E-3			V-Glass
E-5			none

Excavation Unit 2 was a 1.00 by 2.00 m unit, oriented roughly east-west, and placed in the central portion of the south half of the Feature, near the west end of the highest portion of the Feature's interior which contained much exposed bedrock. The purpose of this unit was to delineate a possible workshop due to the large amounts of volcanic glass recovered from SPs D-4 and C-4. EU-2 was excavated stratigraphicaly and revealed 2 layers (Figure 55). Layer I was a 7.5 YR 3/1 dark brown silt with about a 4% rock content reaching a maximum depth of 0.08 m below surface. There were also many roots in this layer and much of the central portion of the unit was exposed bedrock after it was removed. Layer II was a 10 YR 2/1 black silt, also with about a 4% rock content, achieving a depth of 0.13 m below surface in the west end of the unit, and a maximum depth of 0.31 m below surface in the eastern end of the unit. Recovered cultural material consisted of volcanic glass, marine shell, coral and charcoal and was located in both layers. The majority of this material, however, was found in Layer I, which contained a large amount of volcanic glass.

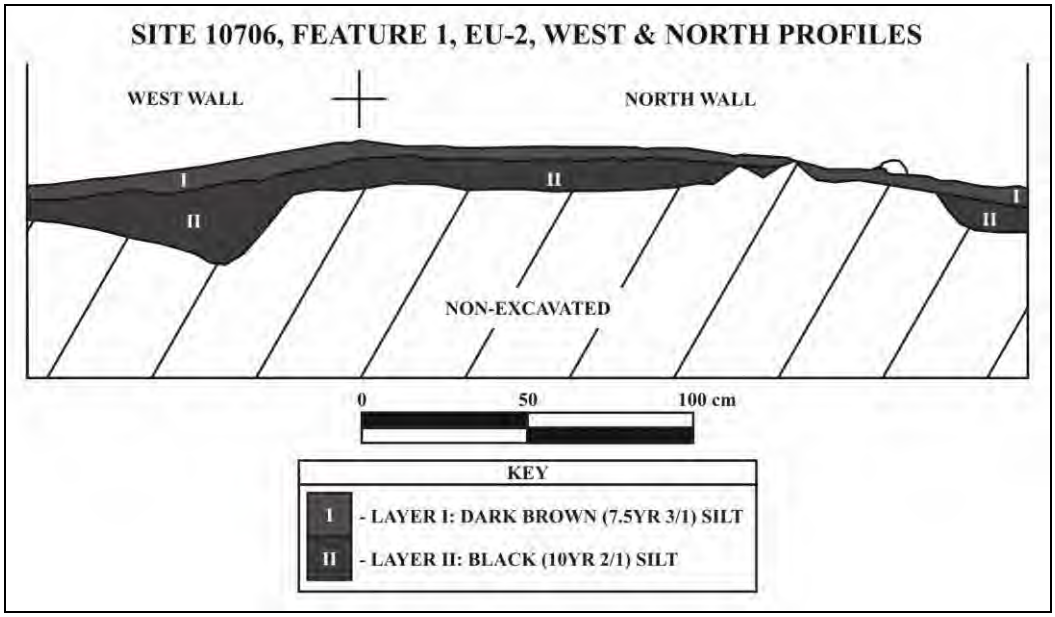


Figure 55: Site 10706, Feature 1, EU-2, West & North Profiles.

Excavation Unit 3 was a 1.00 by 2.00 m unit, its long axis roughly oriented north-south, situated 5.00 m north (northwest) of EU-2, and about 4.00 m west (southwest) of Feature 2. The purpose of this unit was to explore the nature of the cultural deposit revealed in Sp C-4, which was incorporated in the EU's southwest corner. EU-3 was excavated stratigraphically and demonstrated 3 different layers (Figure 56). Layer I was a 10 YR 2/2 dark brown silt with only a few cobbles reaching a maximum depth of 0.05 m below surface. Layer II was a 7.5 YR 2.5/2 very dark brown silt with about a 40% cobble content achieving a maximum depth of 0.15 m below surface. Layer III was a 10 YR 2/1 black silt with about a 5% cobble content extending to 0.37 m below surface where bedrock was achieved in the entire unit. Cultural material was recovered from all 3 layers, with the majority derived from Layer II and the top of Layer III. Layer I yielded only volcanic glass, while Layer II contained volcanic glass, marine shell, polished basalt and charcoal. The upper portion of Layer III yielded volcanic glass, marine shell and charcoal.

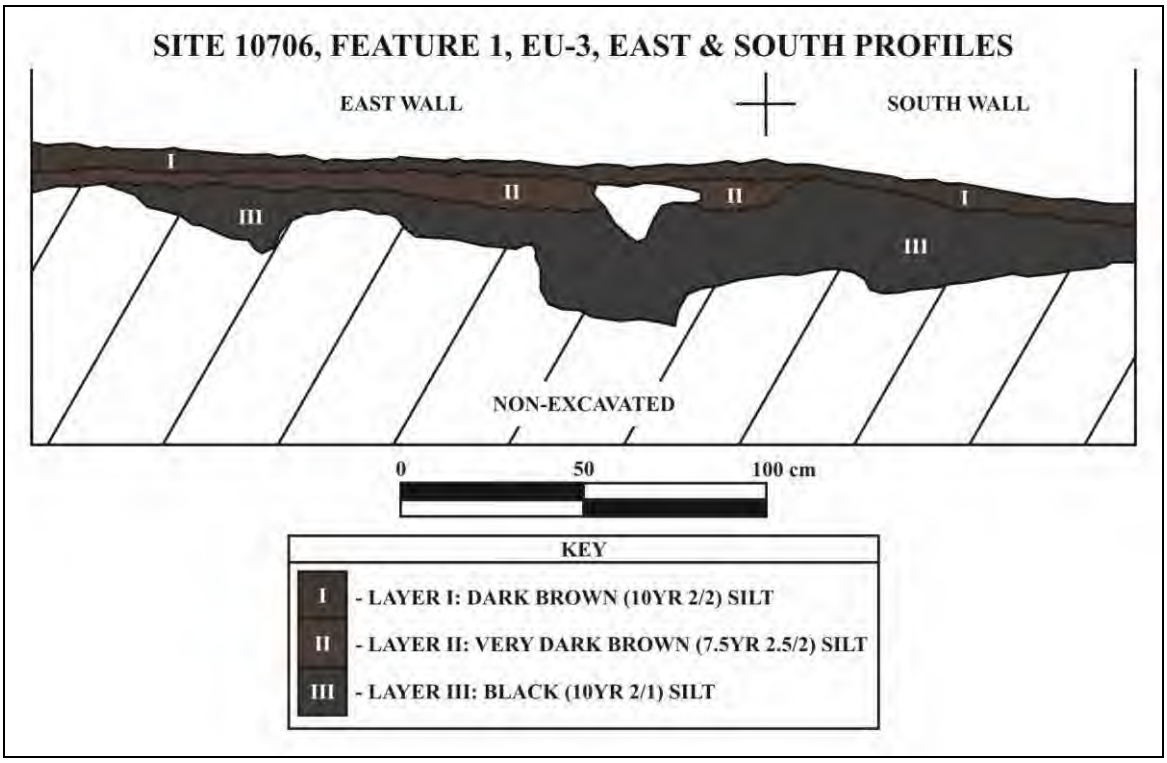


Figure 56: Site 10706, Feature 1, EU-3, East & South Profiles.

Radiocarbon Date Data

SCS submitted a 0.2 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC618). The sample was screened from within Site 10706, Feature 1, EU-3, Layer II, 4-15 cmbs. The sample shows a 75.0% probability when calibrated to 2 Sigma, that with a date range of A.D. 1810 to beyond 1960 the chronology for this Layer likely falls within the late-Historic period (see Appendix B).

Excavation Unit 4 was a 1.00 by 1.00 m unit located in the northwest corner of the feature, just upslope of the test unit excavated during the previous SCS inventory survey, and incorporated SP D-2 in the unit's northeast corner. The purpose of this unit was to better understand the nature of the deposit revealed by the shovel probe, and also to see how this area of the Feature related to other areas. EU-4 was excavated in 5 arbitrary levels within 4 layers (Figure 57). Level 1 was the only level in Layer I and consisted of a 10 YR 3/2 very dark grayish brown silt with about 5% cobbles primarily occurring near the base of the layer. A large tree root also occurred in this layer which reached a maximum depth of 0.10 m below surface. Layer IIa was a pocket of matrix occurring only in the northwest corner of the unit in Level 2 and consisted of a 10 YR 3/1 to 4/1 dark brown to dark gray silt with about a 15% rock content and achieving a maximum depth of 0.21 m below surface. Layer II also occurred in the south half of the unit in Level 2, but continued to include Levels 3 and 4, reaching a maximum depth of 0.42 m below surface. This layer consisted of a 10 YR 2/1 black silt with about up to a 40% rock content, this content increasing with depth. Layer III only occurred in Level 5 and was a relatively thin 7.5YR 2.5/1dark gray sandy loam with about a 30%cobble content resting on bedrock. Maximum depth for this Layer was 0.58 m below surface. Cultural material from this excavation occurred in all levels, with the largest amounts recovered from Layer II. Along with

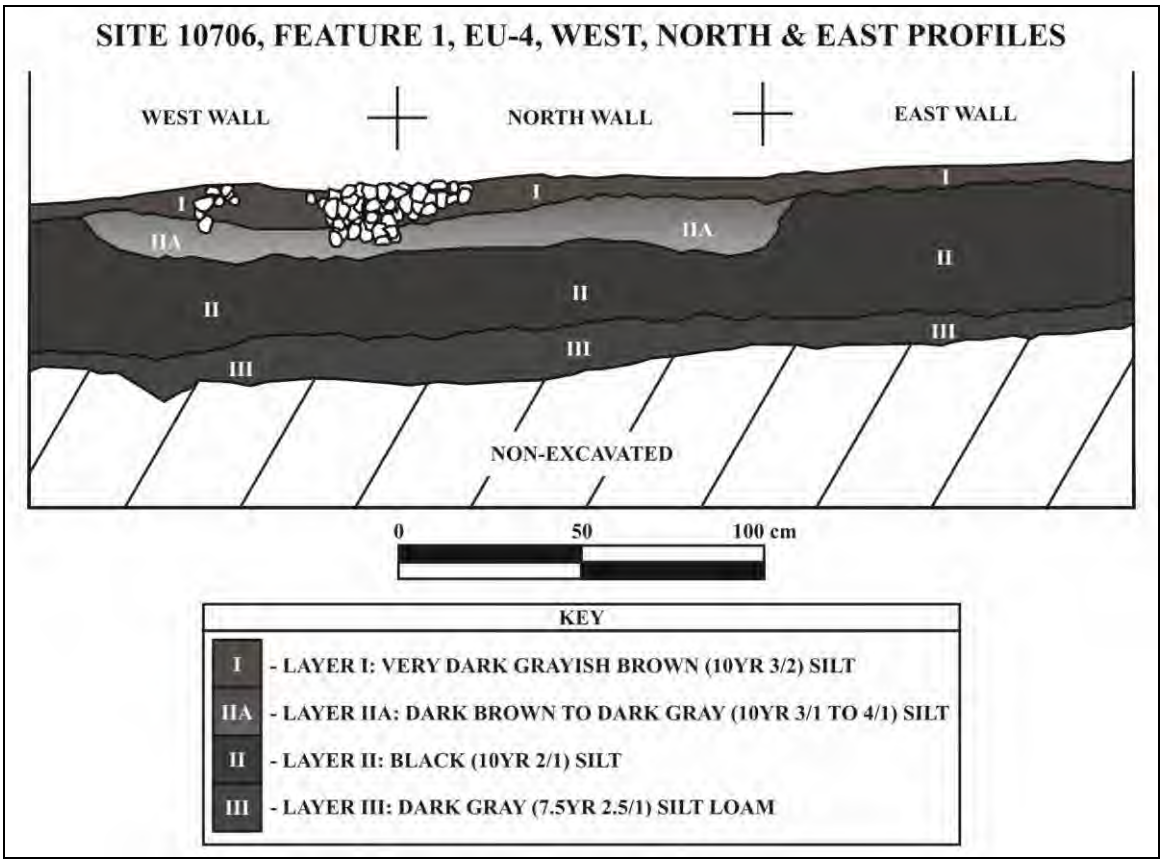


Figure 57: Site 10706, Feature 1, EU-4, West, North & East Profile.

volcanic glass, marine shell, fish, bird and mammal bone, several tools were found. These included an adze from Layer IIa, a hammerstone, a complete coral abrader and a coral abrader fragment from Layer II, Level 4, and a bone pick from Layer III, Level 5. Charcoal was also ubiquitous, and an unidentified tooth, left in the unit, was recovered from Layer II, Level 3.

Radiocarbon Date Data

SCS submitted a 1.2 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC619). The sample was screened from within Site 10706, Feature 1, EU-4, Layer II, level 3, 30-42 cmbs. The sample shows a 67.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1800 to 1960, the chronology for this Layer falls within the Historic period (see Appendix B).

Excavation Unit 5 was located about 5.00 m south (southeast) of EU-4, was also in the northwestern portion of the Feature and incorporated SP D-2 in its northeast corner. EU-5 was oriented roughly east-west (northeast-southwest) and was situated so that its western end incorporated collapse from Feature 1's western wall. The unit was excavated by 5 arbitrary levels within 3 natural layers (Figure 58). Layer I only occurred in Level 1 and was a 5 YR 3/1 very dark gray silt loam with about a 35% pebble content, most notably in its western half and reached a maximum depth of 0.12 m below surface. Layer II was comprised of Levels 2 and 3 and was a 10 YR 2/1 black silt with about a 35% rock content of mostly very small pebbles, but with a few larger pebbles and cobbles. This layer's maximum depth was 0.32 m below surface.

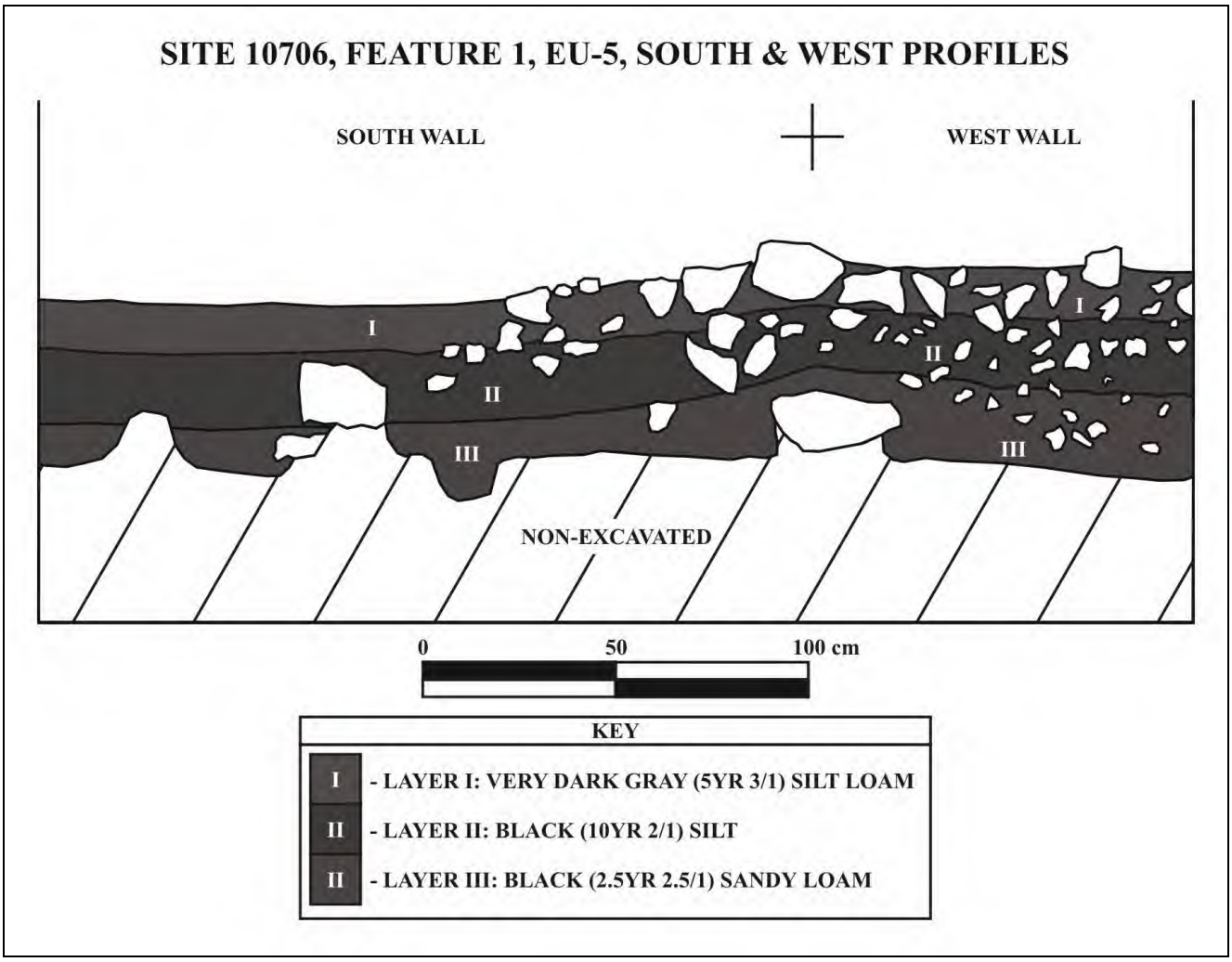


Figure 58: Site 10706, Feature 1, EU-5, South & West Profile.

Layer III was made up of Level 4 in the eastern portion of the unit, Levels 4 and 5 in the western portion of the unit. This layer was a 2.5 Y 2.5/1 black coarse sandy loam with a similar rock content to Layer II and achieved bedrock at a maximum depth of 0.55 m below surface. Cultural material occurred in all 3 layers, but mainly came from Layer II and the first level of Layer III. Cultural material also was notably denser in the western half of the unit. This material included large quantities of volcanic glass, marine shell, urchin, bone, branch coral, and waterworn pebbles. Level 4 contained the largest quantities of bone, while the waterworn pebbles from level 2 may be possible tools.

Radiocarbon Date Data

SCS submitted a 0.6 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC620). The sample was screened from within Site 10706, Feature 1, EU-5, Layer II, level 2, 20-32 cmbs. The sample shows a 95.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1320 to 1480 the chronology for this Layer clearly falls within the pre-Contact period (see Appendix B).

SITE 10735

PREVIOUS INVESTIGATIONS

Site 10735 was located within the Kohanaiki Ahupua'a at the 790 ft. elevation contour with vegetation in this area dominated by alahe'e (Psydrax odorata), christmasberry (Schinus terebinthifolius) and haole koa (Leucaena leucocephala).

Site 10735 was determined to be a permanent habitation site covering an area 15.0 by 40 m. All of these features were located directly *makai* of a complex of caves (Sites 10733, 10742 and 10744). Site 10735 and the nearby caves were situated within the modified landscape of the Kona Field System. No excavation was conducted at this site during the inventory survey and no radiocarbon date was obtained.

There were two sinks associated with the cave in Kohanaiki at 800 ft. elevation. The southwestern sink was entirely modified with terracing that leveled the surface within the sink. The opening to the northeast connected to a small chamber (Chamber 1) that had been entirely modified with terracing and cleared areas.

There was a wall that blocked the entrance to Chamber 2 that connected to the southern portion of the sink. The opening was vertical and connected to a constructed ramp in the cave interior. A wall of boulders spanned the width of the chamber a meter further south of the ramp. The only potentially cultural debris on the cave floor was *kukui.*

Chamber 1 was the most likely a habitation area. Light could reach the chamber interior, and there was no constriction at the entrances to this area. The terraces and cleared areas within the chamber were similar to living areas ubiquitous on the ground surface.

Chamber 2 appeared lightly used or used more heavily in a manner that did not leave any artifacts behind. The constricted entrance, built ramp, and wall spanning the chamber indicated that a substantial effort was put into creating a certain kind of space in this chamber. It is conceivable that Chamber 2 represented a refuge space that was under the control of, and perhaps designed solely for, the inhabitants, or users of Chamber 1. In a similar vein, Chamber 2 may have been used to store perishables that were used by people using Chamber 1 in this medium sized cave.

Feature 1

Feature 1 was a platform situated on the ground above the south sink. The northwest edge of Feature 1 was incorporated into the edge of the sink, while the other three edges were raised above the surrounding ground directly adjacent to the sink. The northwest edge of the platform was raised 1.5 meters above the floor of the sink while the other edges of the platform had heights ranging from 10 to 20 cm. The surface of the platform was a rough boulder pavement with a depression near the west center portion. The depression measured 40 by 40 cm with a depth of 25 cm.

Feature 2

Feature 2 was another platform with one of its edges incorporated into the edge of the south sink. The east edge of the platform was raised 1.5 m above the floor of the sink while the other three sides were raised above the surrounding ground surface by 20 to 45 cm. The surface of the platform was a rough boulder pavement.

Feature 3

Feature 3 was a two-tiered platform in the south sink. The upper tier of the platform was a 5.0 by 4.0 m boulder-paved surface, raised 40 cm above the lower tier. The north, east, and south edges of the upper tier were raised above the surrounding ground surface by 35 cm. The lower tier of the platform was 5.0 by 3.0 m with a boulder slab paved surface. The lower tier was raised 25 cm above the surrounding ground surface.

Feature 4

Feature 4 was a platform situated in Chamber 1. This platform was 4.0 by 8.0 m with a cobble pavement. This platform was raised 0.30 to 0.90 m. Directly adjacent to the northeastern corner of this platform was an inaccessible opening to Cave Site 10742.

Although no cultural material was observed on the surface, the features making up this site were interpreted as non-agricultural. These features may have been part of a permanent habitation complex, which also included Site 10744. This evaluation was based upon the size, form and location of the six features.

CURRENT INVESTIGATIONS

The present study of Site 10735 was conducted by excavating 4 excavation units and 2 stratigraphic trenches. The excavation units were excavated in Feature 1, 2, 4 and 5 while the stratigraphic trenches were excavated in Features 3 and 4 (Figure 59). In the following discussion, each excavation unit and stratigraphic trench will be discussed individually along with further observations of the features in which they were placed, if applicable.

Feature 2 and EU-1

Feature 2 was observed during this study to be little different than original recorded. Added detail, however, indicated that the feature's surface was very rough and included cobbles along with its boulders and had almost no pebble sized rock. The smaller of these rocks were concentrated toward the feature's center which gave the appearance of a rough cobble pavement.

Excavation Unit 1 was a 1.00 by 2.00 m unit, its long axis oriented northwest-southeast located toward the center of Feature 2 with the purpose of determining its function and temporal placement. The EU was excavated stratigraphically revealing an architectural layer overlying 2 soil layers (Figure 60). The architectural layer contained essentially the same sized rock as that observed on the surface, but also contained large quantities of organic material combined with some sediment that had settled into it in from above. Architecture extended to a maximum depth of 0.48 m below surface. Layer I was a 10 YR 2/2 very dark brown loam with about a 35% pebble content reaching bedrock at a maximum depth of 0.55 m below surface in the southeast half of the unit, and overlay Layer II at 0.50 m below surface in the northwestern portion of the

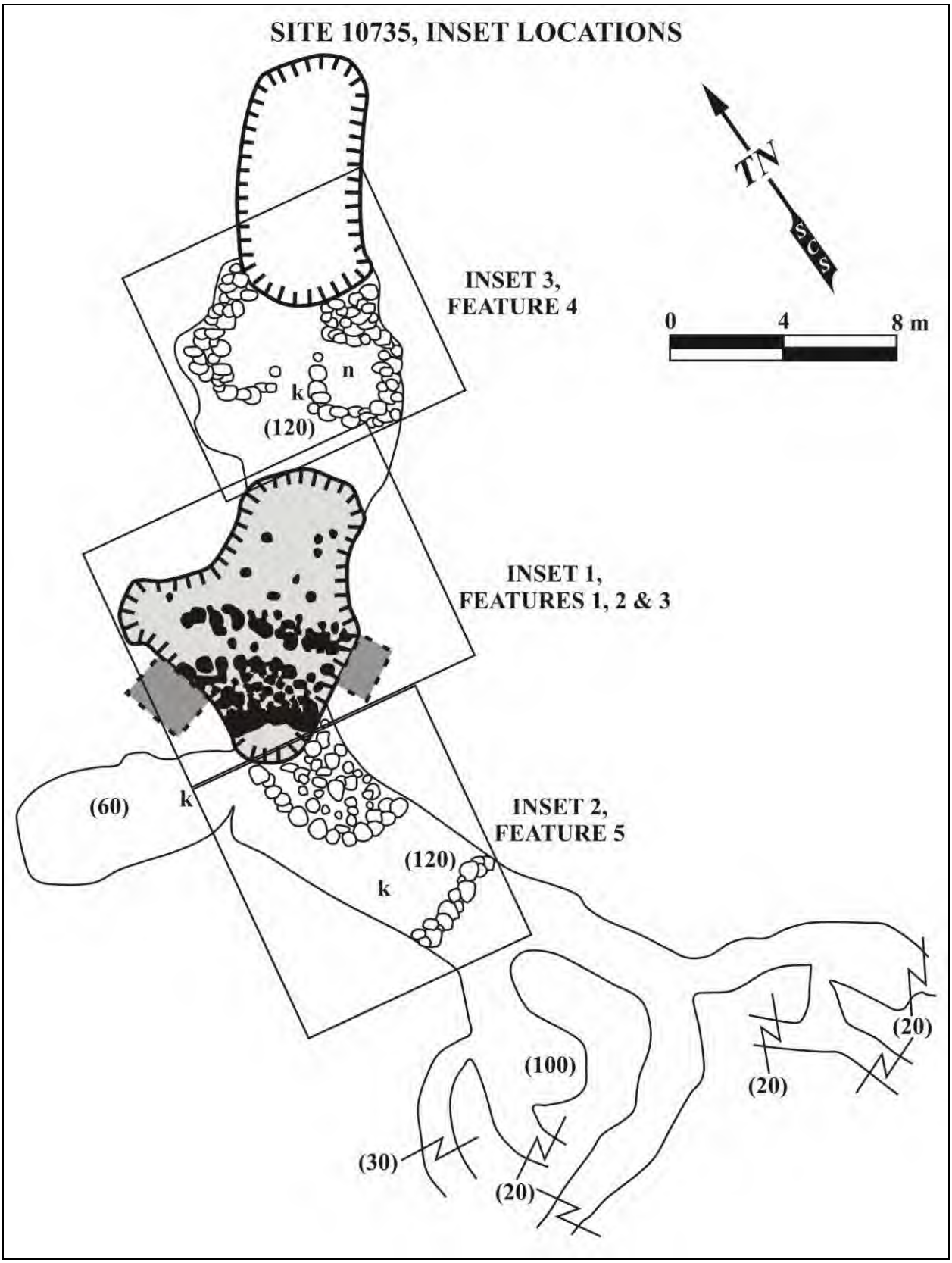


Figure 59: Site 10735, Inset Locations.

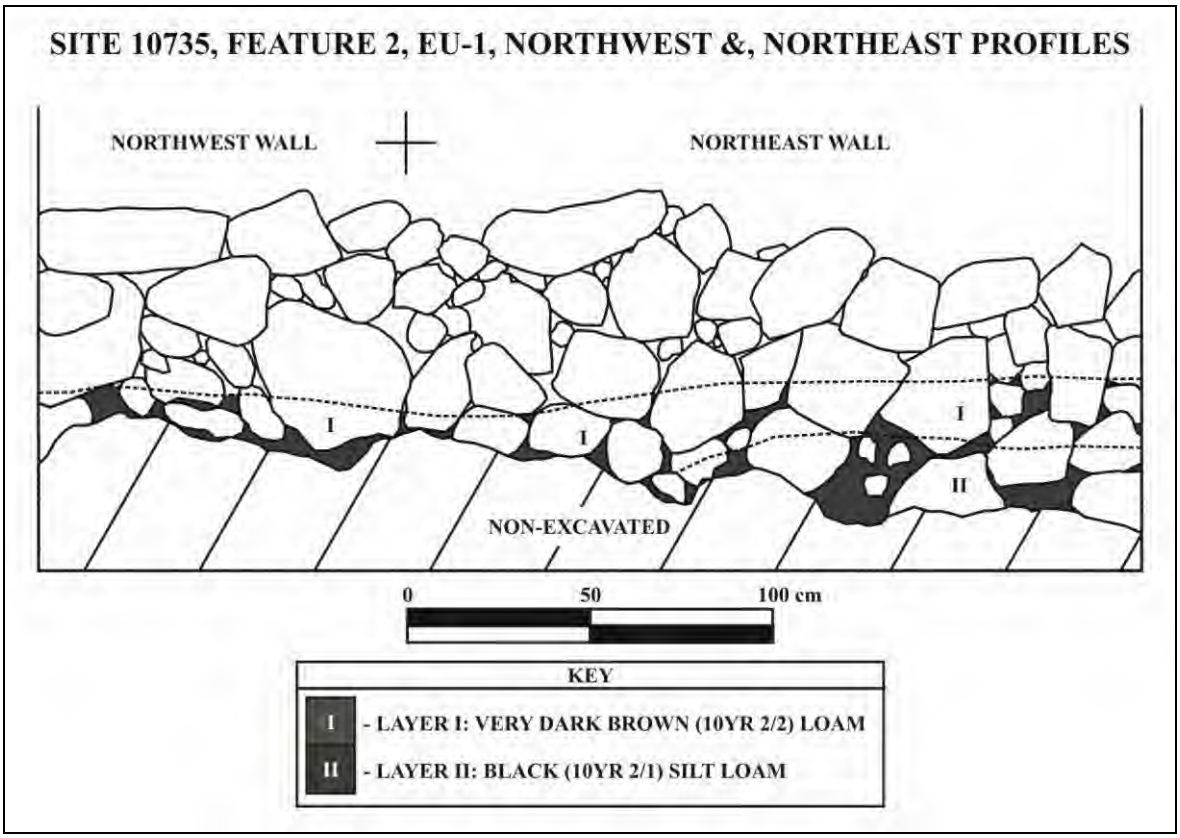


Figure 60: Site 10735, Feature 2, EU-1, Northwest & Northeast Profiles.

unit. Layer II only occurred in the northwestern half of the EU and was a 10 YR 2/1 black silt loam with up to a 40% cobble and pebble content which overlay bedrock at a maximum depth of 0.61 m below surface. The amount of cultural material recovered from this unit was modest and was from all three layers, but mainly from Layer I. This material consisted of volcanic glass, marine shell, urchin, *kukui* shell, charcoal, and a single piece of chert obtained from the northwestern half of the unit.

Radiocarbon Date Data

SCS submitted a less than 0.1 gram sample of an unidentified species of wood to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC623). The sample was screened from within Site 10735, Feature 2, EU-1, Layer II, level 1, 50-61 cmbs. The sample shows a 95.4% probability when calibrated to 2 Sigma, that with a date range of A.D. 1320 to 1480, the chronology for this Layer falls within the pre-Contact period (see Appendix B).

Feature 1 and EU-2

Feature 1 was found to vary slightly from its previous description primarily by measurements. The current study found the feature to achieve a maximum height above the sink floor of 1.18 m, and its west side to be 0.30 m above ground surface. The feature was also found to measure 6.50 m northeast-southwest by 5.00 m northwest-southeast and to have its northwestern perimeter, which lies directly above the sink, comprised of boulders of a larger size than its interior.

Excavation Unit 2 was a 1.00 by 1.00 m unit placed directly upon the depression observed in the feature's initial description in order to explore its nature. After the removal of its architecture, the unit was excavated in 2 arbitrary levels within a single layer (Figure 61). Architecture proved to be of similar boulders as those observed on the feature's surface and achieved a maximum depth of 0.57 m below surface before soil was encountered. Excavation revealed the architecture to continue into Layer I and to also contain several large, slab shaped boulders. The soil of Layer I was a 10 YR ¾ brown silt with up to a 60% pebble content and reached bedrock at a depth of 0.79 m below surface. Only a minor amount of charcoal was recovered from this unit, occurring in Layer I.

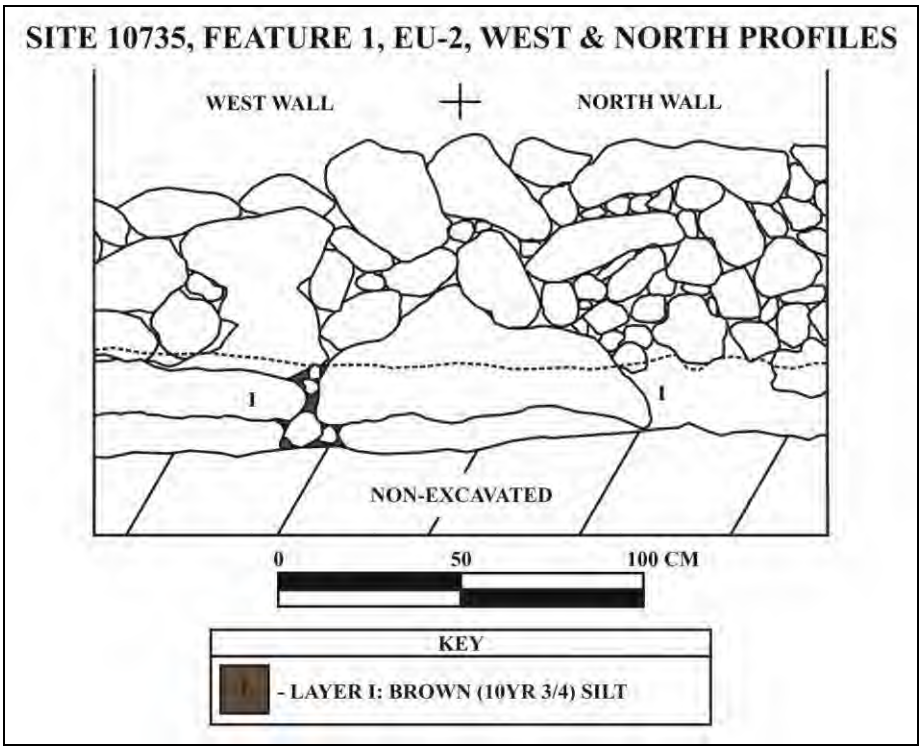


Figure 61: Site 10735, Feature 1, EU-2, West & North Profiles.

Feature 5 and EU-3

Feature 5 was the number given in the present investigations to the construction the inventory survey described as a ramp located behind the entrance wall to Chamber 2. This construction, however, was found to be more of a level, pebble-small cobble pavement than a ramp, with only its northern portion having any slope. The current study also found architecture occurring on the east and west sides of this pavement, restricting access to a west chamber, and narrowing further access to Chamber 2, to the southeast (Figure 62).

Excavation Unit 3 was a 1.00 by 1.00 m unit placed on the northeastern half of the pavement, toward the entrance into Chamber 2, and was situated to investigate this feature's function. The EU was excavated as a single layer, reaching bedrock at a maximum depth of 0.59 m below surface (Figure 63). This layer consisted of a 10 YR 2/1 black silt loam with about a 0.10 m layer of pebbles and cobbles overlying a cobble and boulder fill, leveling the cave floor.

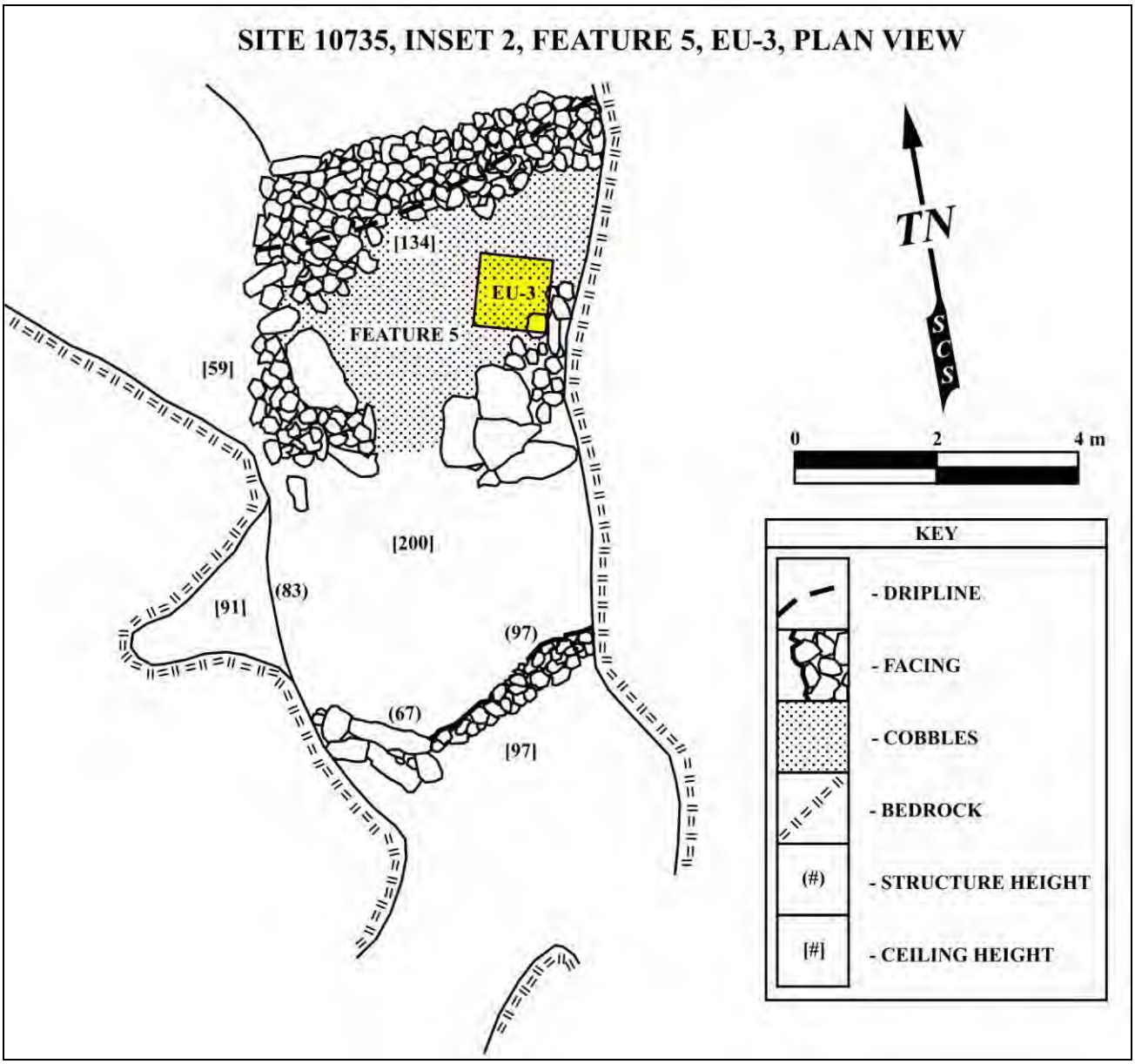


Figure 62: Site 10735, Inset 2, Feature 5, EU-3, Plan View.

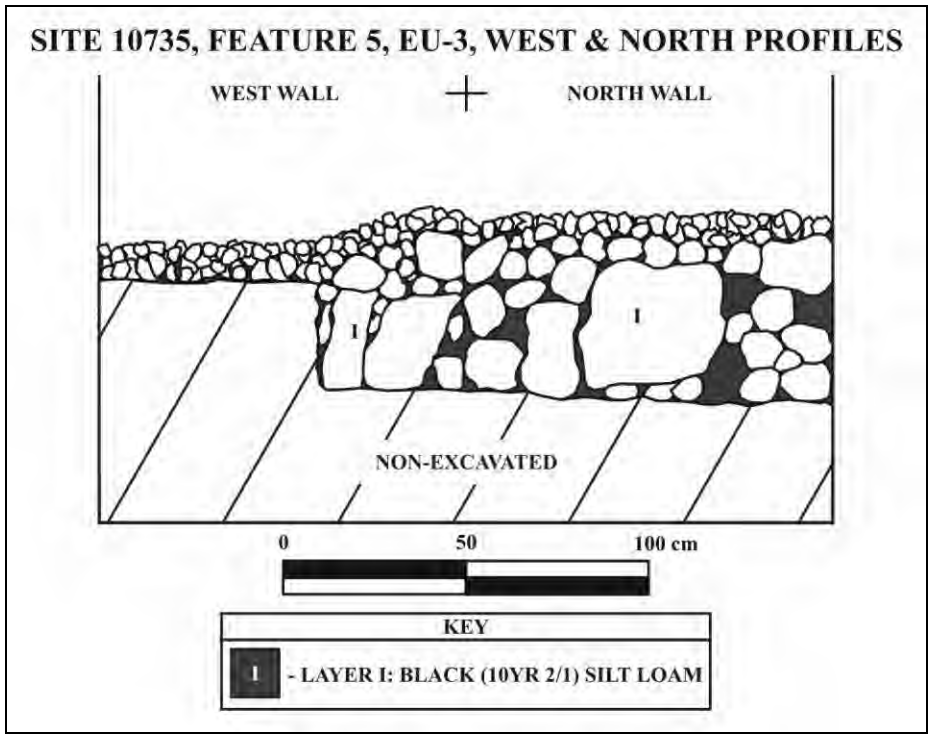


Figure 63: Site 10735, Feature 5, EU-3, West & North Profiles.

Rock constituted about 75% of this layer and the pavement was found to directly overlie bedrock in the southwestern portion of the unit. Cultural material recovered from this excavation consisted of minor amounts of marine shell, rodent bone and charcoal. Non-burnt *kukui* shell was also observed on the surface of the unit.

Feature 4, EU-4 and ST-2

The current investigations at Feature 4 found it to be quite different than originally mapped. The feature was actually made up of several constructions within Chamber 1. In the southern portion of the chamber, a narrow, notched platform, paved with cobbles, was observed to span from the driplines of both the eastern and western entrances. Architecture primarily occurred along the platform's northeastern perimeter, where a berm rises up to 0.74 m above the pavement, and along the 2.50 m long, 1.00 m wide, 0.50 m high notch that rises above the cave floor, toward the center of the platforms northwestern edge. Minor architecture also occurred on a small shelf, located adjacent to this platform, to the east. In the northwestern portion of the chamber, a small pebble pavement retained by slab architecture to its south and east, abuts boulder cave fall further to the north. Unsorted rubble fills the remainder of the chamber, in its west and east (Figure 64).

Excavation Unit 4 was placed on the southeastern portion of the feature, immediately south of the notch, and just behind southwestern berm. Excavation of this unit revealed a single layer of cobble architecture with no soil or cultural material overlying bedrock at a maximum depth of 0.71 m below surface. Because of this, no profile was drawn.

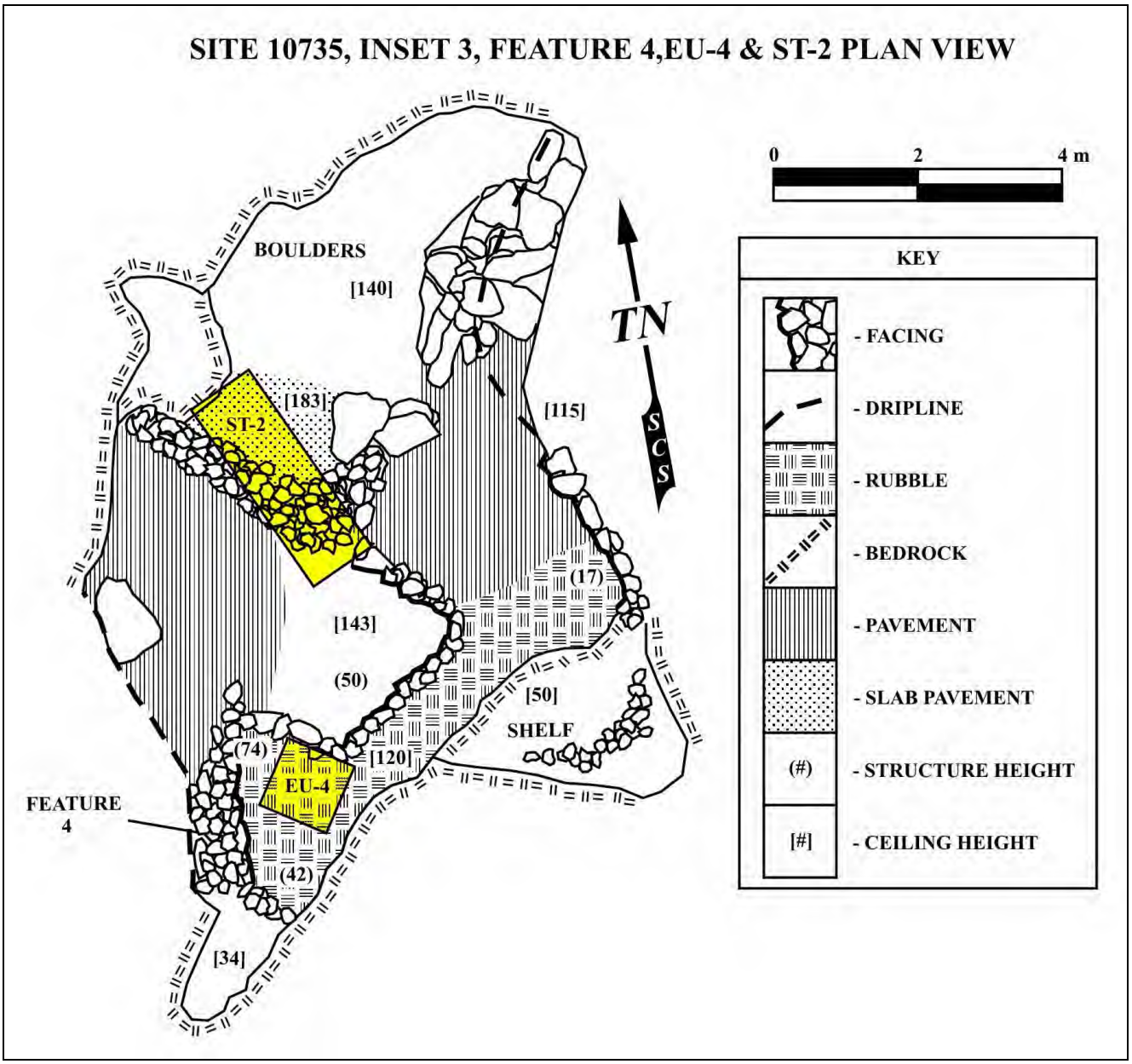


Figure 64: Site 10735, Inset 3, Feature 4, EU-4 & ST-2 Plan View.

Stratigraphic Trench 2 was a 1.00 by 3.00 m unit placed in the northwestern portion of Feature 4 which has already been described as a pavement retained on its south and east by slab architecture. The trench was oriented so that its long axis was roughly northwest-southeast and placed so that its northwestern 2/3rds lay on the pavement, while its southeast 1/3rd bisected the slab retaining element. The purpose of this trench was to determine the function and age of the feature. This ST was excavated stratigraphically as an architectural layer and a thin soil layer (Figure 65). Removal of the architecture revealed that most of the cobble pavement directly overlay bedrock in the northwestern end of the trench, while Layer I was exposed underneath only the southeastern portion of this pavement and the slab retaining element. This architectural layer was at the maximum of around 0.35 m thick. Layer I was a 10 YR 2/1 black silt with about a 30% cobble content that was 0.07 m thick at its maximum. Cultural material came from both the architecture and Layer I, but was sparse. This material consisted of marine shell, volcanic glass and charcoal, the majority of it coming from the southeastern end of the unit.

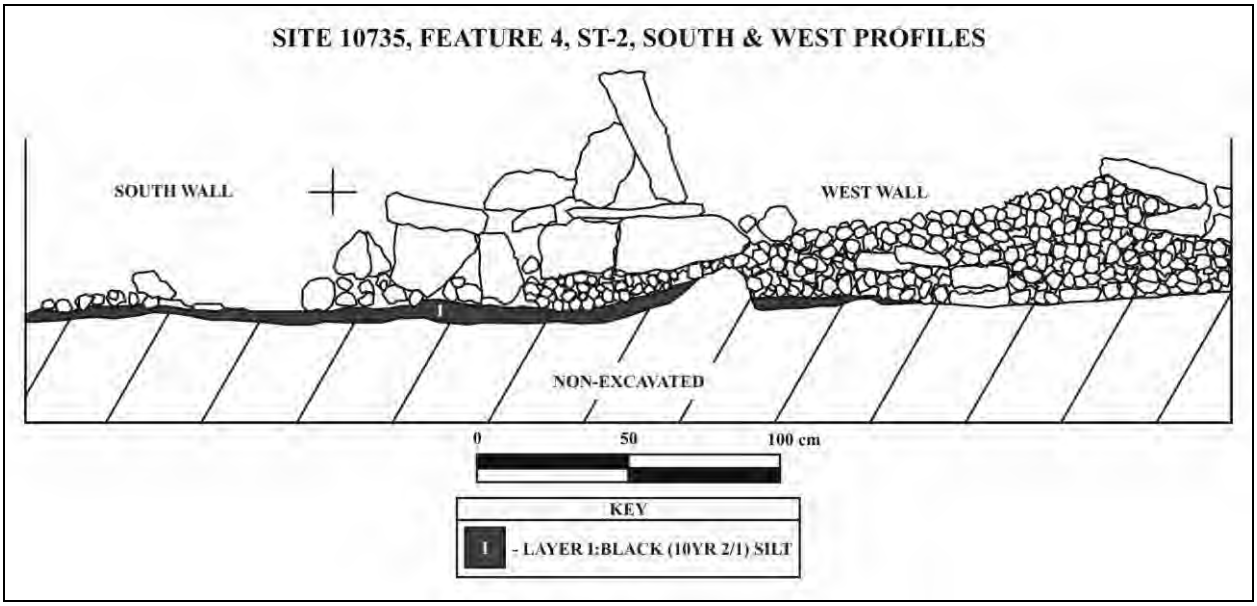


Figure 65: Site 10735, Feature 4, ST-2, South & West Profiles.

Feature 3 and ST-1

The current map of Feature 3 demonstrates a quite different interpretation of the feature from that recorded previously. In fact, it does not even show much of a feature at the bottom of the caves southern entrance, but instead shows a rough pavement, or surface, of small boulders and cobbles covering the majority of the floor, this surface having no internal elevation differences. Some architecture does occur, however, to the north and west, but it is well underneath the drip line of this opening.

Stratigraphic Trench 1 was a 1.00 by 3.00 m long excavation with its long axis oriented east-west. The ST was placed in the south half of the opening with the purpose of determining the nature and extent of the cultural deposit in the caves western opening. After removal of the unsorted surface rock, which extended to a depth of 0.35 m below surface, the unit was excavated in 3 arbitrary levels within 2 natural layers (Figure 66). Layer I contained Levels 1 and

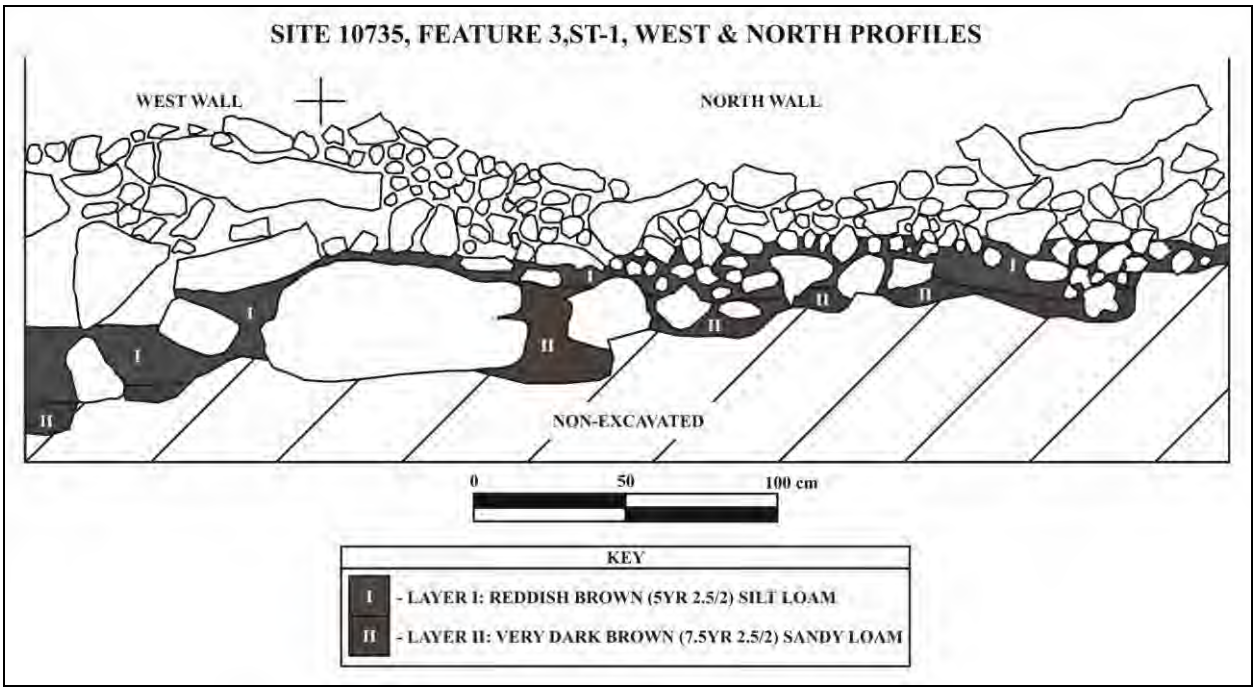


Figure 66: Site 10735, Feature 3, ST-1, West & North Profiles.

2 and was a 5 YR 2.5/2 reddish brown silt loam with up to a 90% rock content, mostly of pebbles. The layer extended to a maximum depth of 0.56 m below surface, with the soil in this layer appearing to be aeolean. Layer II contained Level 3 and was a 7.5 YR 2.5/2 very dark brown sandy loam with about a 30% rock content, mostly boulders and cobbles. This layer extended to a maximum depth of 0.82 m below surface, this depth being in a crevice of the bedrock. Cultural material in this trench was minimal, consisting of a single marine shell from Layer I, and what is probably natural charcoal, found in both layers.

SITE 10737

PREVIOUS INVESTIGATIONS

This section deals with a historic permanent habitation documented by Barrera (1988, 1991). The results of his work are summarized here.

Site 10737 was located towards the center of the project area, downslope (west) from the Walled Fields and 50.0 m north of the old *Mauka-Makai* road. The site consisted of five main features that included a dry-stacked, rectangular enclosure within an area of 17.0 by 30.0 m. Excavation yielded historic artifacts only, with no chronometric dates *(e.g.*, radiocarbon) obtained from any unit. There was the possibility, however, that the site may also have been utilized in earlier *(i.e.*, traditional) times, and therefore represented a multi-component site. As no materials from this site had been dated, additional work involving both stratigraphic observations and chronometric dating were necessary to resolve this question.

Feature 1

Feature 1 was a rectangular enclosure measuring (exterior) 6.4 m (west-southwest axis) by 9.5 m (north-northwest axis), with a maximum height of 1.6 m. The walls of the enclosure are 1.0 m wide. The opening to the enclosure, located on its west side, was 1.0 m wide.

Feature 2

Feature 2 was a slab-lined paving leading to the opening of the enclosure. The paving was roughly L-shaped, with maximum (exterior) dimensions of the two "arms" of the paving of 5.0 by 1.0 m, and 4.5 by 1.5.

Feature 3

Feature 3 was a low retaining wall constituting the base of the terraced area in front of the enclosure. The wall extended 17.0 m against a bedrock outcrop, with a maximum height of 0.90 m above the ground surface. The terraced area, located to the north and east of Feature 3, was partially filled in with pebbles and cobbles.

Feature 4

Feature 4 was a free-standing wall measuring 8.80 m in length by 0.75 m in width, with a maximum height of 0.75 m above the ground surface. This wall linked up with the retaining wall designated as Feature 3.

Feature 5

Feature 5 was the terraced area in front of the opening of the enclosure (to its west--southwest). This terraced area was built up from the thin soil overlying the *pahoehoe* bedrock and/or from the bedrock, itself (in some areas), with basalt pebbles and cobbles.

Excavations

A total of 35 m^2 were excavated by Barrera within Site 10737, with 20 units placed within the enclosure and 15 units placed in an “L” shaped trench between Features 3 and 2. Three stratigraphic layers, designated Layers I through III, were identified in these excavations. The uppermost, Layer I consisted of 0.20-0.25 m of loose, angular basalt pebbles, was only present in the interior of the enclosure, and therefore represented an anthropogenic deposit. It. Layer II, located directly beneath the pebble layer designated Layer I, was located both within the enclosure and in the terraced area to the west-southwest. It consisted of 0.20 to 0.40 m of angular basalt pebbles and cobbles and was also an anthropogenic layer, as excavation revealed the entire site area had been built up by the addition of Layer II. The base of the walls of the enclosure was built on this prepared surface. Finally, Layer III, immediately beneath Layer II, was located only in the terraced area. It was the same as the overlying layer, with the addition of a soil-sedimentary matrix. Layer III, was probably the natural soil, resting directly on the *pahoehoe* bedrock.

A total of 33 historic artifacts were recovered in excavation. No traditional artifacts were recovered (Table 15). The majority (22 of 33, or 67%) of the finds were recovered within the interior of the enclosure *(i.e.,* Feature 1).

Table 15: List of Artifacts Recovered During Barrera Study

Feature #	Excavation Unit #	Layer	Description
1	D-5	I	1 Glass button
1	E-4	I	1 Metal button
1	E-4	I	1 Glass ornament
1	E-5	II (0-10 cmbs)	2 Metal fragments; 2 nails
1	E-6	I	2 Metal fastener
1	F-5	I	1 Glass button
1	F-5	II (0-10 cmbs)	1 Metal button
1	F-6	I	1 Glass button, 1 Metal button, 2 Glass ornaments
1	G-5	I	1 Metal button
1	G-6	I	1 Glass button, 1Screw, I Finger ring, 1 Bottle glass sherd
1	H-4	II (0-10 cmbs)	1 Ceramic button
1	H-5	I	1 Glass button
5	H-14	II (30-Bedrock)	1 Metal fragment
5	L-14	II (30-Bedrock)	1 Metal button
5	Q-14	I	1 Metal fragment
5	General terrace area	Surface	3 Bottle sherds, 5 ceramic sherds

cmbs = cm below the ground surface

Invertebrate remains consisted of 106.2 g of marine shell, including a single cowrie (weighing 50.6 g), representing at least four distinct taxa. No vertebrate remains were recovered in excavation. Floral remains consisted of charcoal (63.4 g) and *kukui (Aleurites moluccana)* (1,119.7 g). The relatively large amount of *kukui* was interpreted by Barrera (1988, 1991) as a natural occurrence, rather than a cultural introduction (i. *e.*, as "midden") due to the large number of extant *kukui* trees and the fact that these finds predominantly derived from the upper 0.05 m of the excavations.

CURRENT INVESTIGATIONS

The SCS data recovery of Site 10737 took the form of a small surface collection, 32 shovel probes and 4 excavation units (Figures 67 & 68; Table 16). Shovel probes were spaced 5.00 m apart on a rough grid oriented on a 313 degree angle from magnetic north. Three random shovel probes (SP-1 through 3) were excavated also. Three of the EUs were associated with features, EU-2 with Feature 5, EU-3 with Feature 3, and EU-4 with Feature 4.

In addition, 4 features not recorded by Barrera were identified.

Feature 6

Feature 6 was a short “L” shaped wall, located about 3.00 m east of Feature 1’s southeast corner. This wall measured 4.50 m northeast-southwest by 3.50 northwest southeast, was 1.00 m thick, up to 0.70 m high, and faced on both sides.

Feature 7

Feature 7 was a possible dismantled cooking oven located about 1.00 m southeast of Feature 1. It consisted of a crescent shaped pile of rubble, 5.50 m northeast-southwest by 3.00 m northwest-southeast.

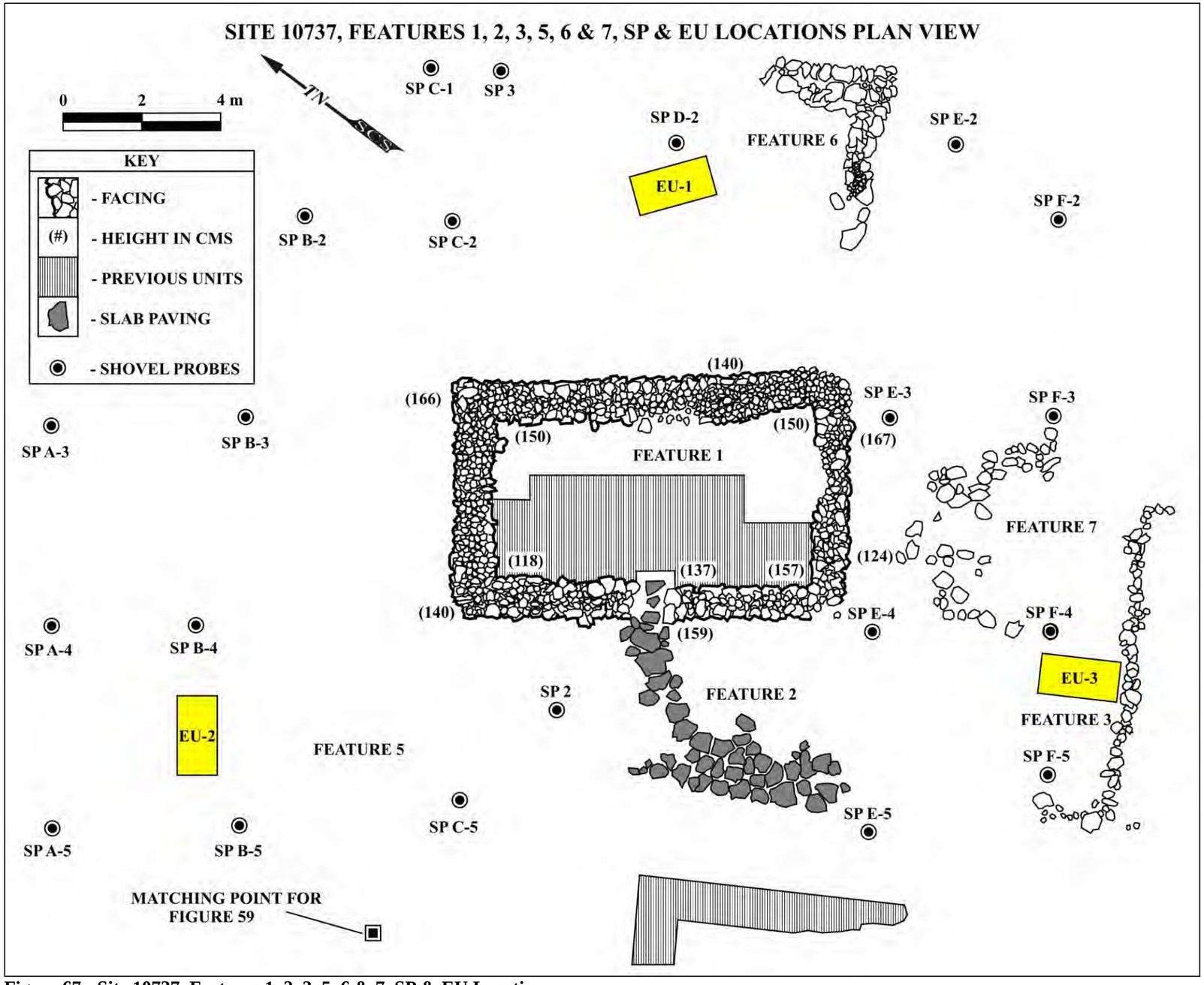


Figure 67: Site 10737, Features 1, 2, 3, 5, 6 & 7, SP & EU Locations.

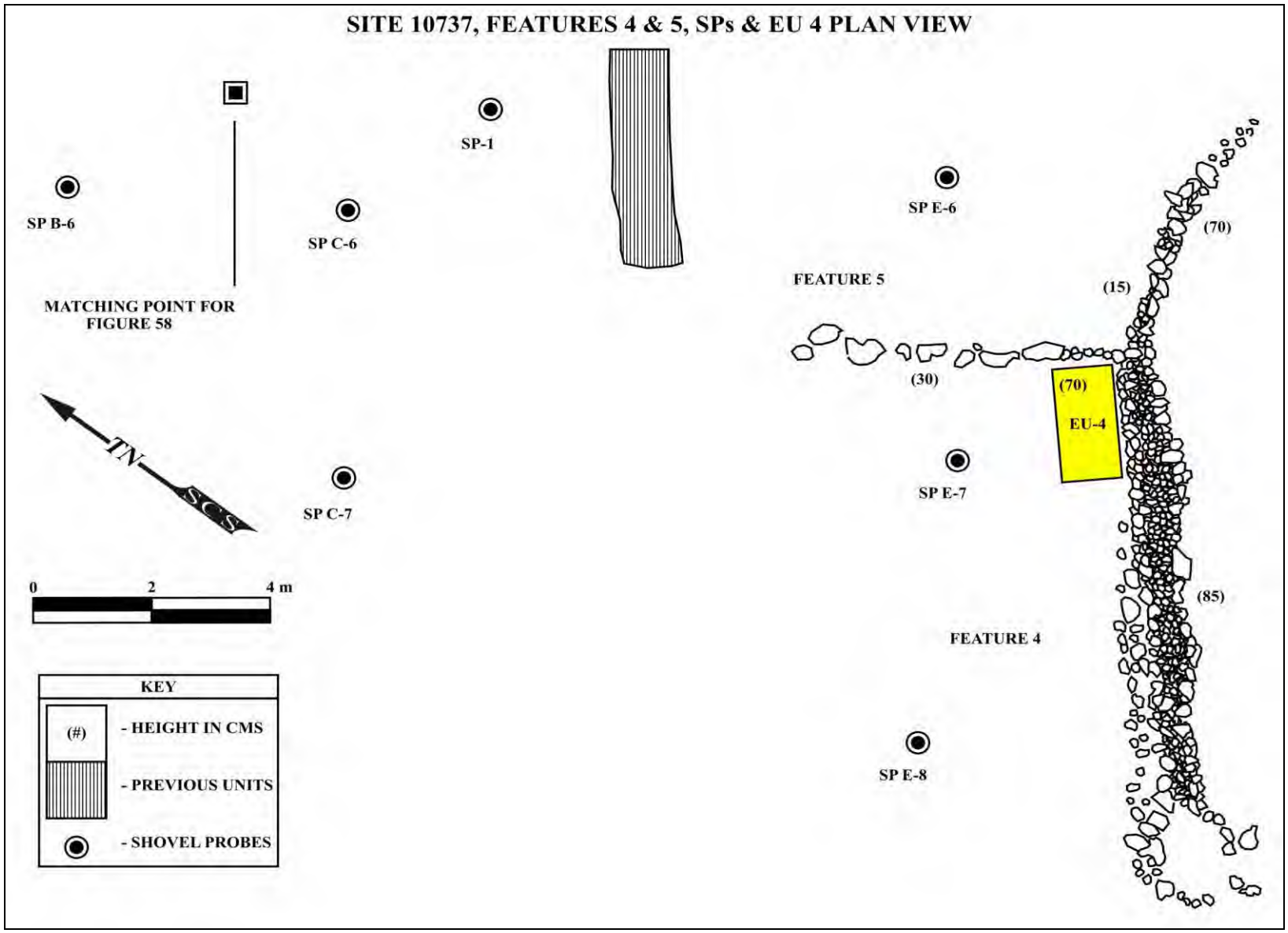


Figure 68: Site 10737, Features 4 & 5, SP Locations & EU-4.

Table 16: List of SPs Conducted Within Site 10737

SP	Bottom Depth	Layers	Cultural Material
A-3	0.46 m	2	C14
A-4	0.41 m	2	none
A-5	0.40 m	2	none
B-1	0.21 m	1	none
B-2	0.76 m	2	none
B-3	0.38 m	2	C14
B-4	0.30 m	2	Ceramics, Polished wood
B-5	0.23 m	2	Ceramics
B-6	0.65 m	2	none
C-1	0.19 m	2	none
C-2	0.44 m	1	none
C-5	0.34 m	2	none
C-6	0.31 m	2	none
C-7	0.21 m	2	none
D-1	0.15 m	1	none
D-2	0.70 m	1	C14
E-1	0.54 m	2	none
E-2	0.66 m	2	none
E-3	0.29 m	1	none
E-4	0.24 m	1	none
E-5	0.16 m	1	none
E-6	0.26 m	1	Marine shell
E-7	0.21 m	1	none
E-8	0.32 m	1	C14
F-1	0.56 m	1	none
F-2	0.24 m	1	none
F-3	0.37 m	1	none
F-4	0.71 m	1	none
F-5	0.48 m	2	none
SP-1	0.31 m	2	C14
SP-2	0.40 m	2	C14
SP-3	0.54 m	1	none

Feature 8

Feature 8 was a rough C-shape located about 14.00 m northeast of Feature 1. Construction is very rough, and the feature could have been natural or possibly predate the

historic features at the site. It measured 2.80 m northwest-southeast by 1.60 m northeast-southwest, with a maximum height of 0.48 m. Feature 8 had an interior paved with cobbles and its opening was to the northeast.

Feature 9

Feature 9 was a short wall located about 32.00 m southwest of Feature 1. It abutted an outcrop to create an "L" shape, was oriented northeast-southwest, with its construction about 2.50 m in length, 0.80 m width and about 0.80 m at its maximum height.

The data gained from the probes is presented below in table form, while each excavation unit will be discussed along with further observations of the features, where applicable.

EU-1

Excavation Unit 1 was not in any feature, but was situated on a level area upslope, east, of Feature 1. The unit was adjacent to SP D-2, measured 1.00 by 2.00 m and had its long axis oriented northwest-southeast. The unit was placed in this area to investigate the significant amount of charcoal that was recovered from this deep SP and revealed a single layer that was excavated in 3 arbitrary levels (Figure 69). Layer I was a 10 YR 3/2 very dark brown silt loam with about a 50% pebble content achieving a maximum depth of 0.24 m below surface. This unit also revealed several air pockets within the bedrock, explaining the depth of SP D-2. The only possible cultural material recovered from EU-1 was charcoal, but it was found throughout the layer, with no distinct place of origin.

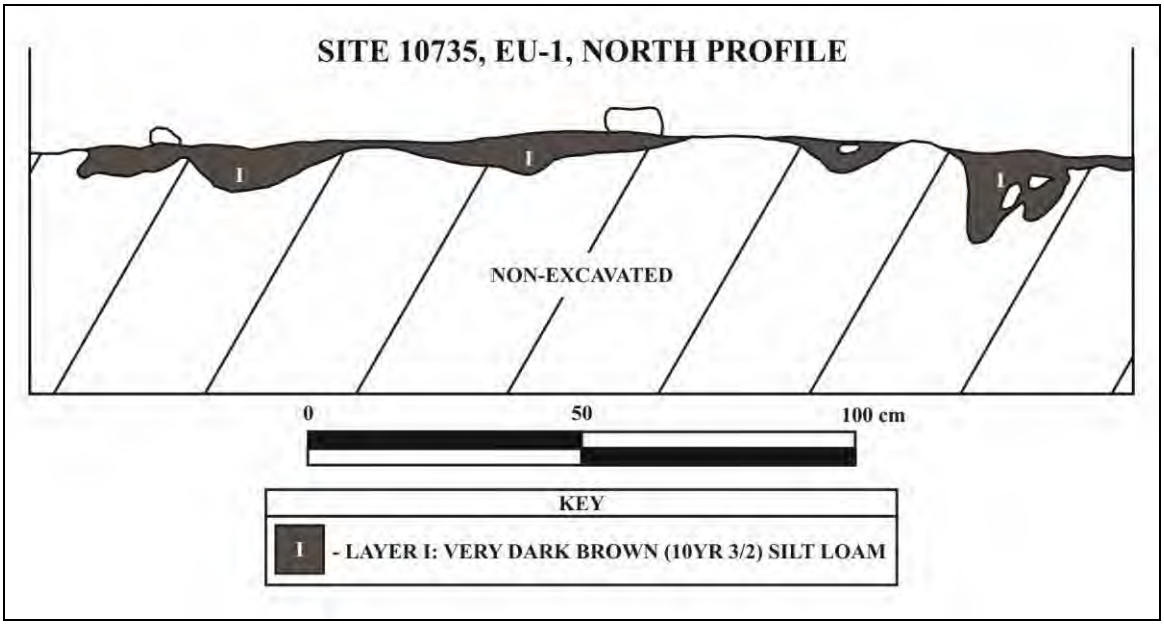


Figure 69: Site 10737, EU-1, North Profile.

Feature 5 and EU-2

Feature 5 was observed in the current study to be as described above, but found it to be little more than a paved extension of Feature 3, retained by the natural landform.

Excavation Unit 2 was a 1.00 by 2.00 m located in the northwestern portion of the Feature, about 6.00 m west of Feature 1, with its long axis oriented northeast-southwest. The EU lay between SP B-4 and SP B-5, both of which yielded ceramic fragments, and was excavated to see if this area had an underlying traditional component. EU-2 revealed 2 layers, removed in 3 arbitrary levels (Figure 70). Layer I, Level 1 consisted only of the pavement which was mainly of cobbles with a few pebbles and boulders achieving depths of between 0.16 and 0.32 m below surface before encountering Layer II. Layer II, contained Levels 2 and 3 and was a 7.5YR 3/2 dark brown silt loam with up to a 50% cobble content, rock mostly occurring in the southwest portion of the unit. Bedrock was reached at a maximum depth of 0.60 m below surface. The cultural material recovered from this EU consisted of only 4 pieces of ceramics, 2 from Layer I, 1 from Layer II, Level 2, and 1 from Layer II, Level 3.

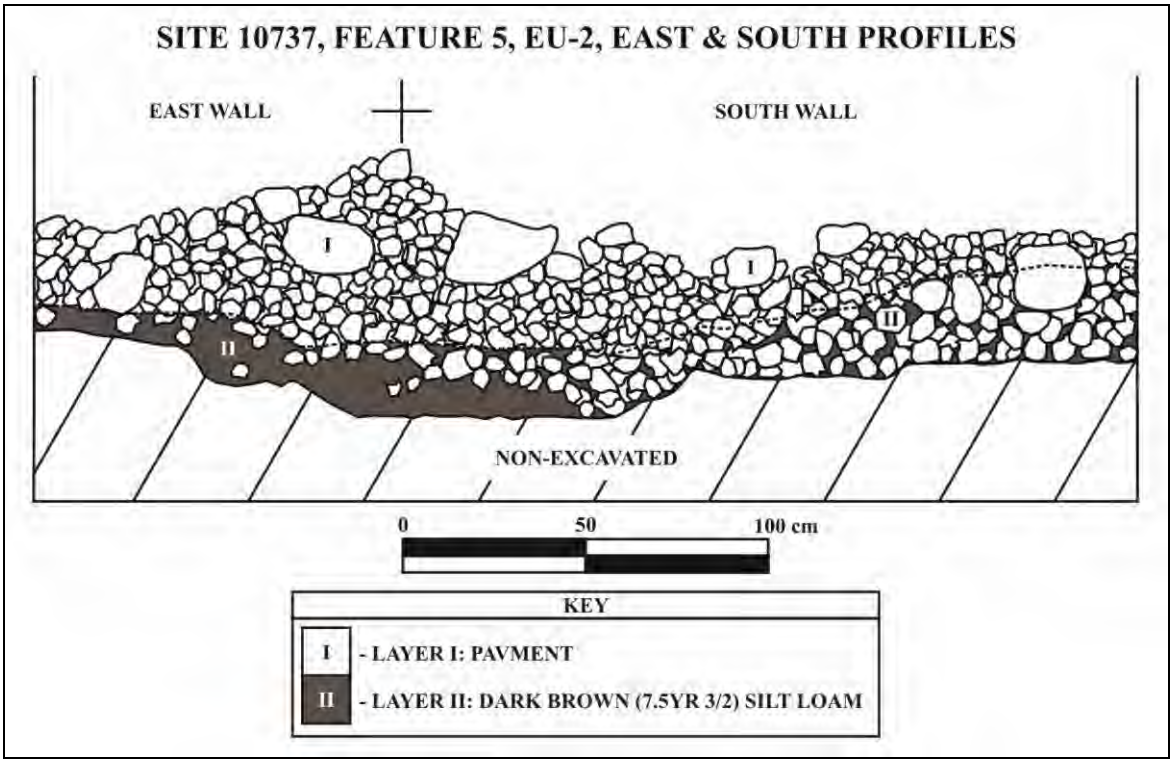


Figure 70: Site 10737, Feature 5, EU-2, East & South Profiles.

Feature 3 and EU-3

Feature 3 was observed in the current study to in fact be a terrace retaining element, rather than a free standing wall. This element was "L" shaped with its northeast-southwest portion being the most constructed. This portion had 3 to 4 courses, was up to 0.60 m wide and up to 0.90 high. This portion also incorporated small areas of bedrock, flush with the paved, fairly level retained surface. The northwest-southeast portion of the wall was attached to the first sections southwest end and demonstrated much less architecture. This portion had only a single course, and measured about 5.50 m in length, although the natural bedrock landform it incorporated extended to the northwest quite a bit further, and was described by Barrera as Feature 5. The architecture of this retaining element was of stacked, fairly uniform boulders, with almost no cobbles.

Excavation Unit 3 was a 1.00 by 2.00 m unit abutting the northeast-southwest portion of the retaining element of Feature 3, with its long axis oriented northwest-southeast. It was primarily located in the feature's pavement, adjacent to SP F-4, and excavated to explore the possibility of a prehistoric site component. EU-3 revealed 2 layers before reaching bedrock, an architectural layer and Layer I (Figure 71). The architectural layer consisted of the cobble and pebble pavement that was observed on the surface and was up to 0.90 m thick. Layer II was a thin soil layer of 10 YR 2/2 very dark brown silt loam with up to a 60% pebble content. Layer I had a maximum thickness of 0.15 m and a maximum depth of 1.30 m below surface. Cultural material recovered from this unit consisted of a piece of metal, located on its surface during the surface collection, and a single marine shell along with some charcoal located in Layer I.

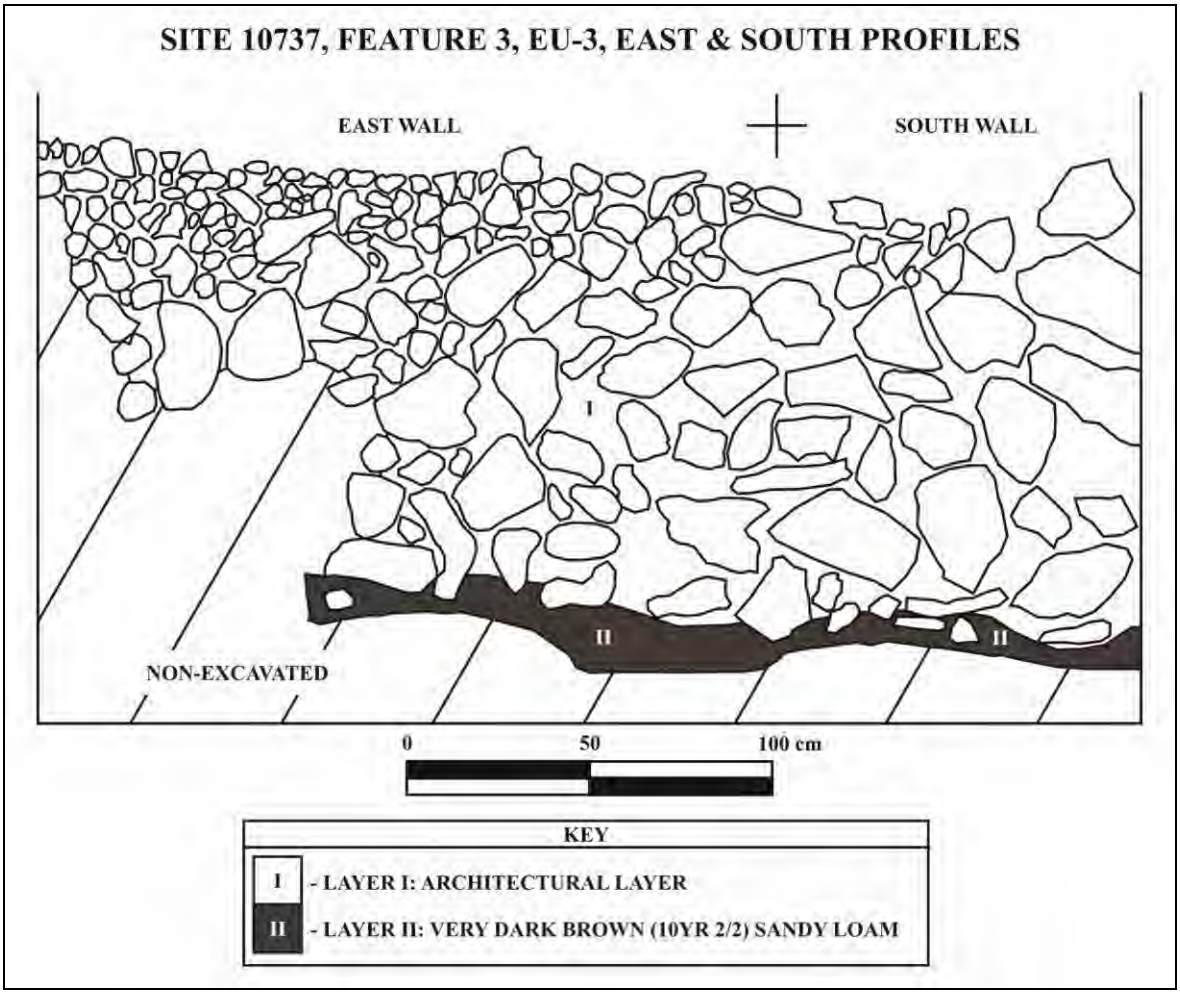


Figure 71: Site 10737, Feature 3, EU-3, East & South Profiles.

Feature 4 and EU-4

The present study found Feature 4 to be as described but added that it was up to 6 courses of small boulders high, bi-faced, core filled, and extended southwest from the corner of Feature 3.

Excavation Unit 4 was a 1.00 by 2.00 excavation located at the juncture of Features 3 and 4, immediately on the southwest side of Feature 4. It was oriented parallel to the wall, with its northeast end abutting the northwest-southeast portion of Feature 3. The surface of the unit, on its northeastern end, also had a considerable amount of tumble from the retaining element of Feature 3, while its southwestern half exhibited a surface of rocky soil. After the tumble was removed, EU-4 exhibited only a single soil Layer (Figure 72). Layer I was a 10 YR 2/2 very dark brown silt with about a 50% rock content, mostly of pebbles but with some cobbles. This layer overlay bedrock at about an average depth of 0.20 m below surface. Cultural material recovered from this excavation consisted of marine shell and lots of small metal fragments.

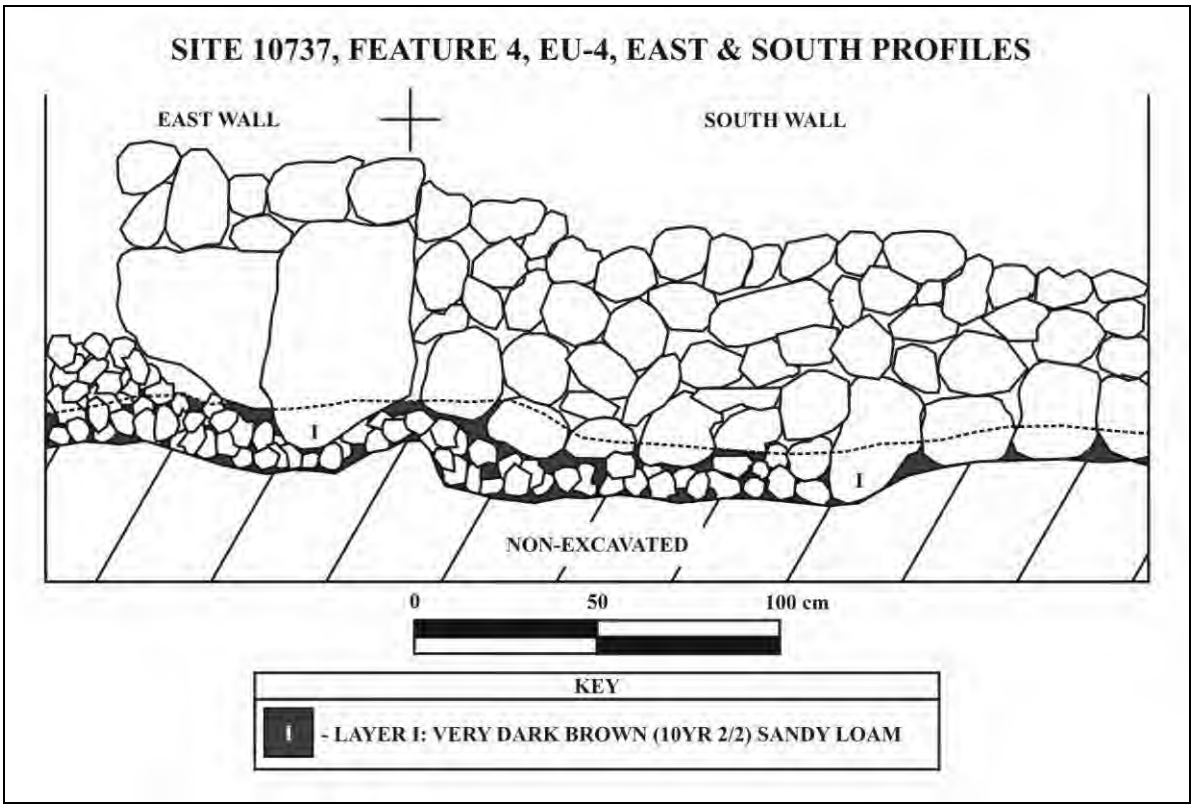


Figure 72: Site 10737, Feature 4, EU-4, East & South Profile.

SITES 10742 & 10758

PREVIOUS INVESTIGATIONS

Site 10742 was in Kohanaiki Ahupua'a at 800 ft. elevation. There were three sinks (one with a natural arch over it) that linked together. The principal activity area where cultural material and modification was most noticeable was along the westernmost opening. A coral abrader, charred material, *opihi,* and Echinoidea (urchin species) were present among the modified roof fall. An ashy look to the soil may have represented a burned area. The remainder of the cave had little indication of use. A small chamber connected Site 10742 to cave Site 10733, but this chamber was too small for human passage

Although no excavation was conducted at this site, nor was any material removed for dating analysis, the material remains and configuration of the cave (lacking constricted entrance, and rock stacking) suggested that the western portion of Site 10742 was probably used for - habitation, or was a preferred working area. This site was also interpreted as functionally associated with Sites 10757 and 10758.

Site 10758 was a cave at the 800 ft. elevation in Kohanaiki Ahupua'a. It was a small chamber with a sink near Site 10742. The paving and urchin remains suggested that eating, and perhaps sleeping took place within the cave. The combination of sinks and distribution of potential activities represented by the remains and configuration of the Sites 10742, 10757, and 10758 may have represented a *kau hale* situation with a subterranean twist. Site 10758 appeared to provide a sleeping quarter, while Site 10757 may have represented a cooking area. Site 10742 could then have been the main work and gathering place.

CURRENT INVESTIGATIONS

The present study of Sites 10742 and 10758 was conducted by excavating 3 excavation units and 2 stratigraphic trenches. Two EUs and a trench were excavated in Features 1 and 2 at Site 10742, while 1 ST and 1 EU were excavated in Feature 2 at Site 10758 (Figure 73). The data gained from these units and stratigraphic trenches will be discussed below, individually, along with the identification of features in which they were placed.

Site 10742, Feature 1 and ST 1 and EU 1

Feature 1 was the cultural modification to this complex occurring underneath the west end of the eastern most opening. This modification appeared to be little more than cobbles and boulders piled in a 2.00 m wide mound extending across the entire width of the cave, but did exhibit some ash. In addition, a small amount of midden was collected from the bottom of the adjacent opening (Figure 74).

Stratigraphic Trench 1 was a 0.75 by 2.00 m excavation with its long axis oriented northeast-southwest. This ST was placed on the feature so that its northeastern end extended into the opening, off of the feature and excavated to determine feature function and the amount of cultural activity that occurred at the site. The trench as excavated as an architectural layer, 2 soil layers and a subsurface feature (Figure 75). The architectural layer was of unsorted pebbles, cobbles and boulders and was mostly confined to the unit's southwestern half. In this area, the depth of this layer was up to 0.55 m below surface. Layer I was a 7.5 YR 2.5/2 very dark brown organic silt loam with up to an 80% cobble and pebble content that terminated on bedrock in the northeast portion of the unit, at 0.13 m below surface, and at 0.65 m below surface in the southwest portion. The removal of Layer I exposed Subsurface Feature 1.1 in the southwest half of the unit and Layer II in the remainder of the trench. SSF-1 was removed and screened separately and was a 10 YR 7/1 light gray ash with almost no rock overlying bedrock at a maximum depth of 0.78 m below surface. Layer II was a 10 YR 2/2 very dark brown sandy loam with about a 80% pebble content that overlay bedrock at a maximum depth of 0.76 m below surface. Although only a single marine shell was recovered from Layer I, both Layers II and SSF-1.1 yielded much charcoal, with the subsurface feature also yielding large amounts of marine shell.

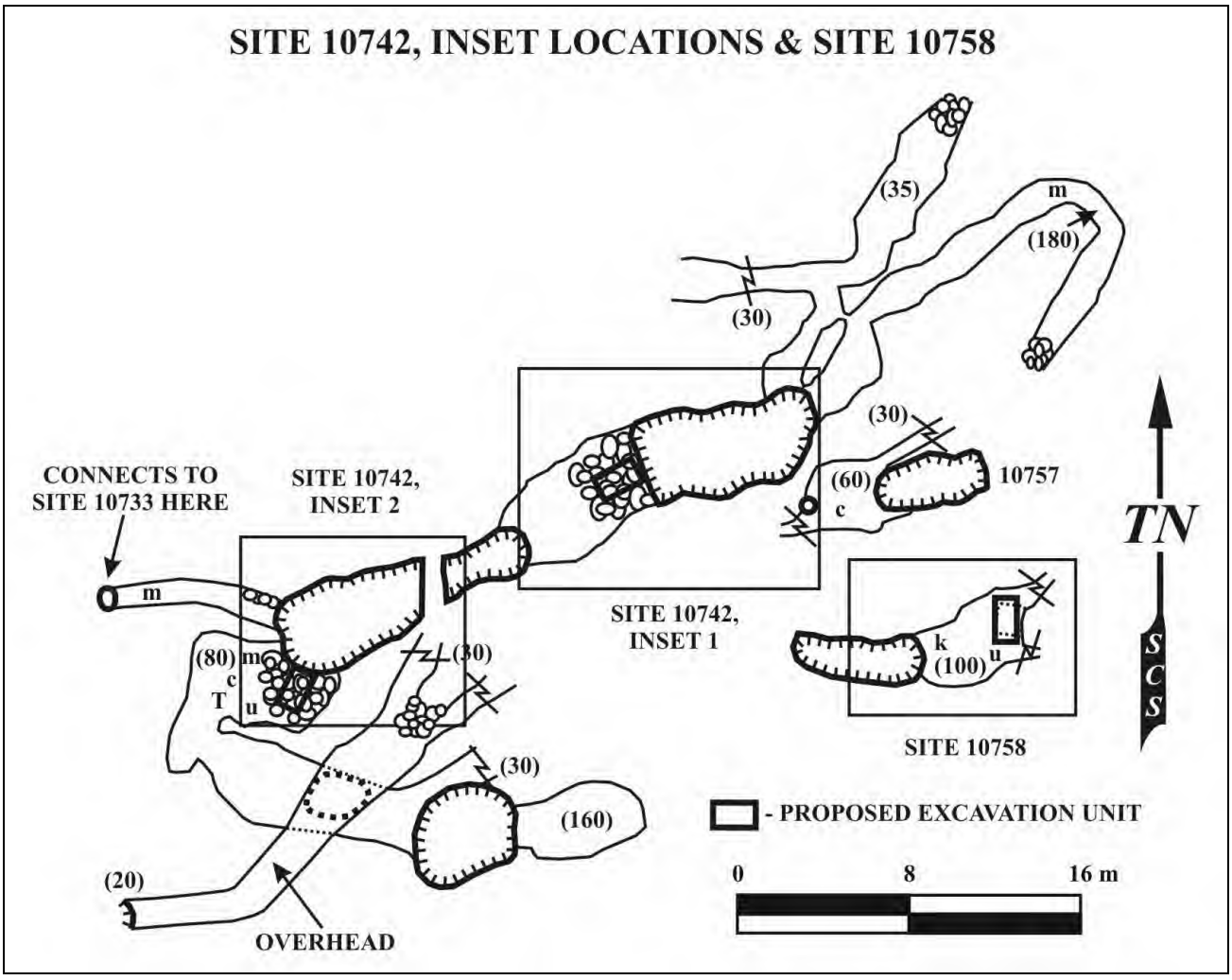


Figure 73: Sites 10742 & 10758, Inset Locations.

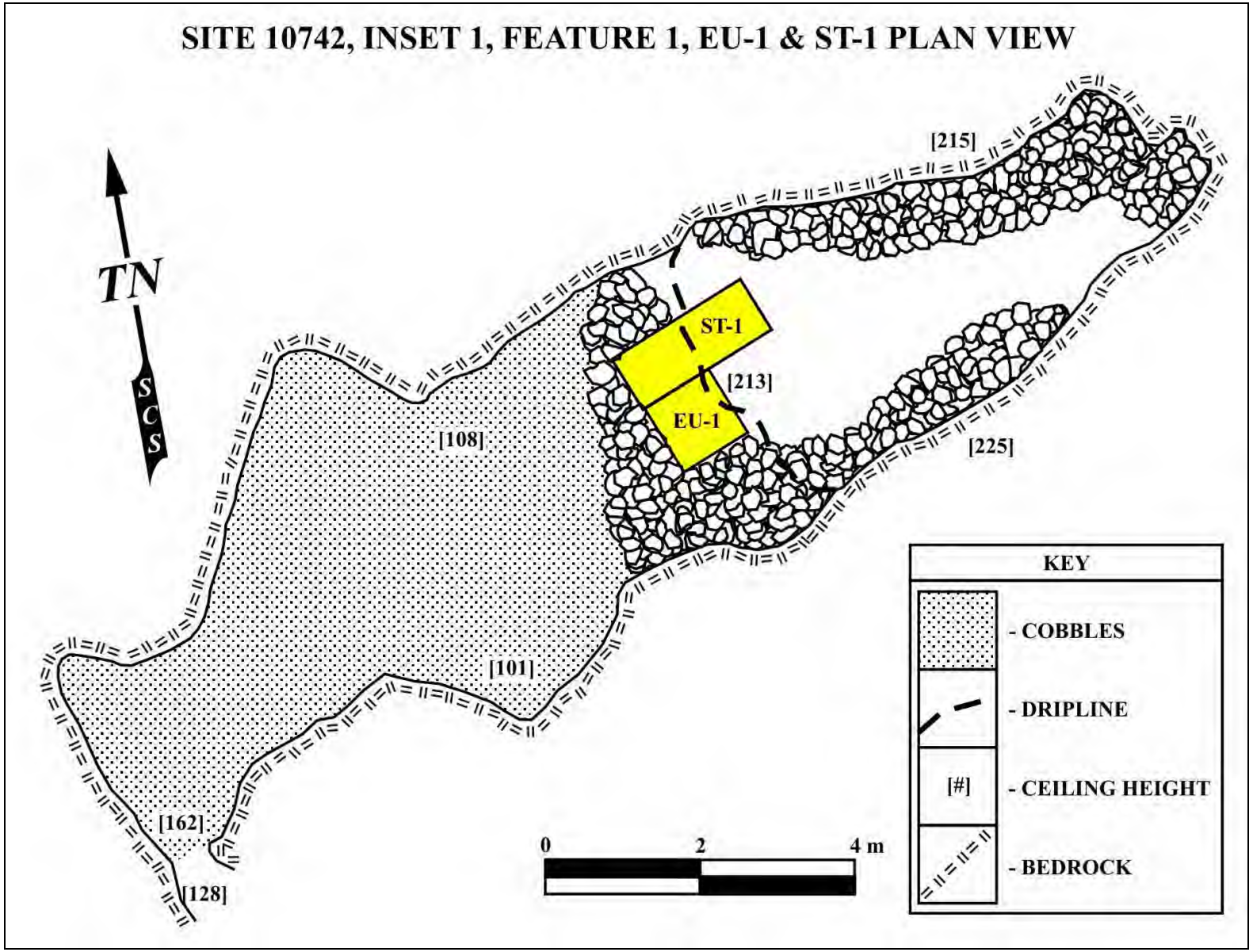


Figure 74: Site 10742, Inset 1, Feature 1, EU-1 & ST-1, Plan View.

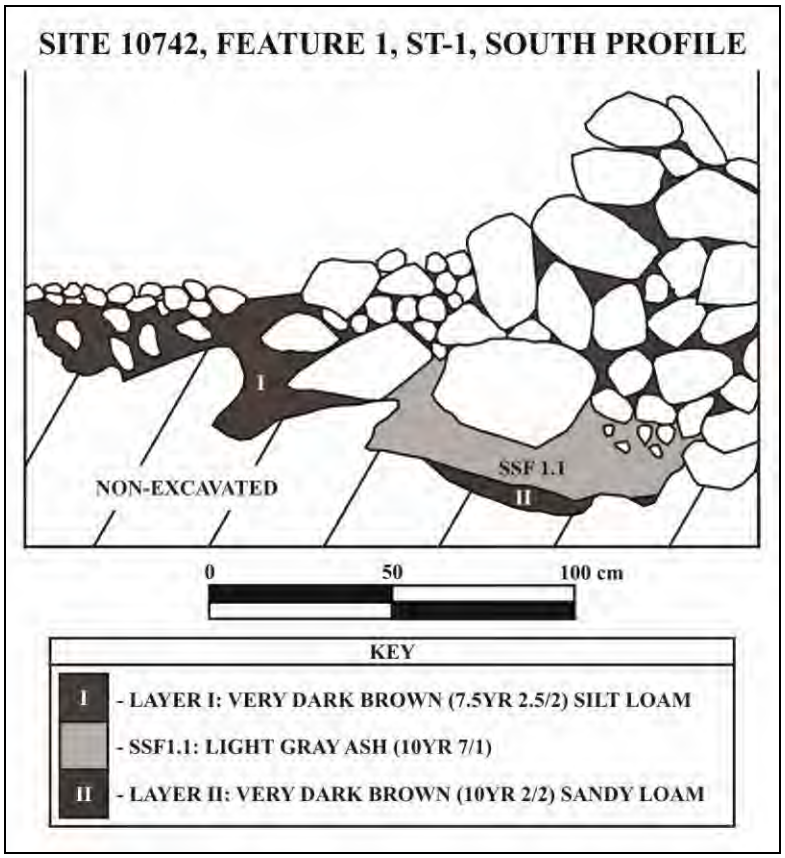


Figure 75: Site 10742, Feature 1, ST-1, South Profile.

Excavation Unit 1 was a 1.00 by 1.00 m unit placed adjacent to ST-1, on its southeast side at its southwest end. This unit was excavated in order to more fully expose SSF-1.1 and excavated in similar stratigraphic layers as that of the trench (Figure 76). The architectural layer in this unit reached a maximum depth of 0.81 m below surface. Layer I in this unit extended to a depth of another 0.08 m, exposing SSF-1.1 in the northwest portion of the unit. SSF-1.1, in this unit's profile, proved to be 0.20 m thick, while Layer II, somewhat indistinct in plan view from the SSF, overlay bedrock at a maximum depth of 0.90 m below surface. Cultural material in EU-1 was similar to that in ST-1 with the exception that some charcoal was observed in Layer I.

Radiocarbon Date Data

SCS submitted a 1.8 gram sample of *kukui* nut (*Aleurites moluccana*) to Beta Analytic, Inc. for AMS radiocarbon dating (SCSRC624). The sample was screened from within Site 10742, Feature 1, EU-1, SSF 1.1, 116-136 cmbd. The sample shows a 72.8% probability when calibrated to 2 Sigma, that with a date range of A.D. 1640 to 1820, the chronology for this SSF falls within the transitional pre-Contact to post-Contact period (see Appendix B).

Site 10742, Feature 2 and EU-2

Feature 2 was a boulder and cobble pavement located underneath the southwest end of the site's western most entrance. This pavement measured 3.50 m north-south, 4.00 m east-west and completely covered the width of the cave floor. Boulders were more prevalent in the northeastern 2/3rds of the feature, while 1.50 by 1.30 m depression, up to 0.50 m deep, occurred at its south end (Figure 77).

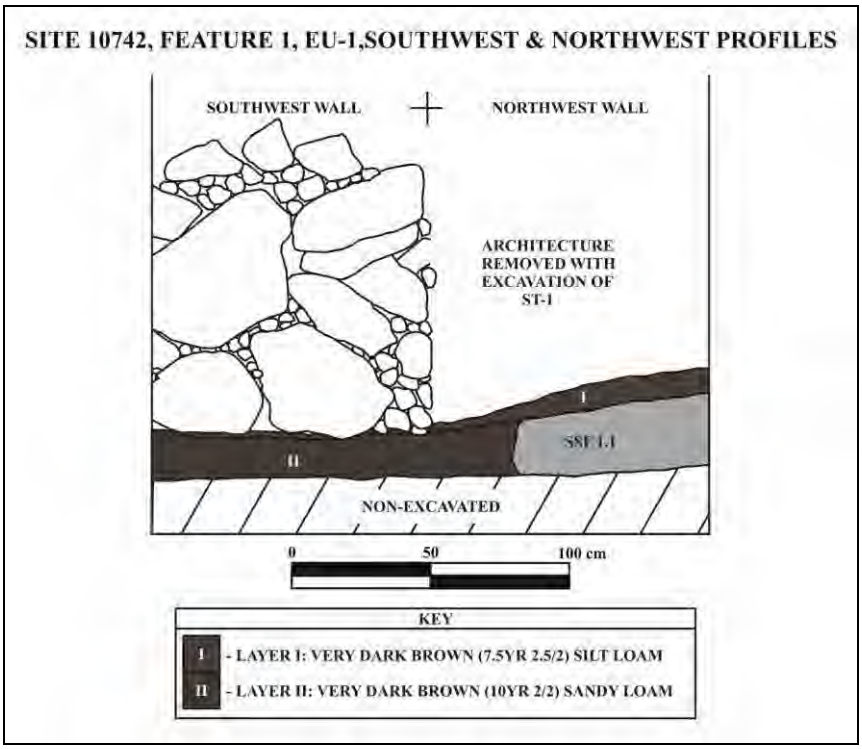


Figure 76: Site 10742, Feature 1, EU-1, Southwest & Northwest Profile.

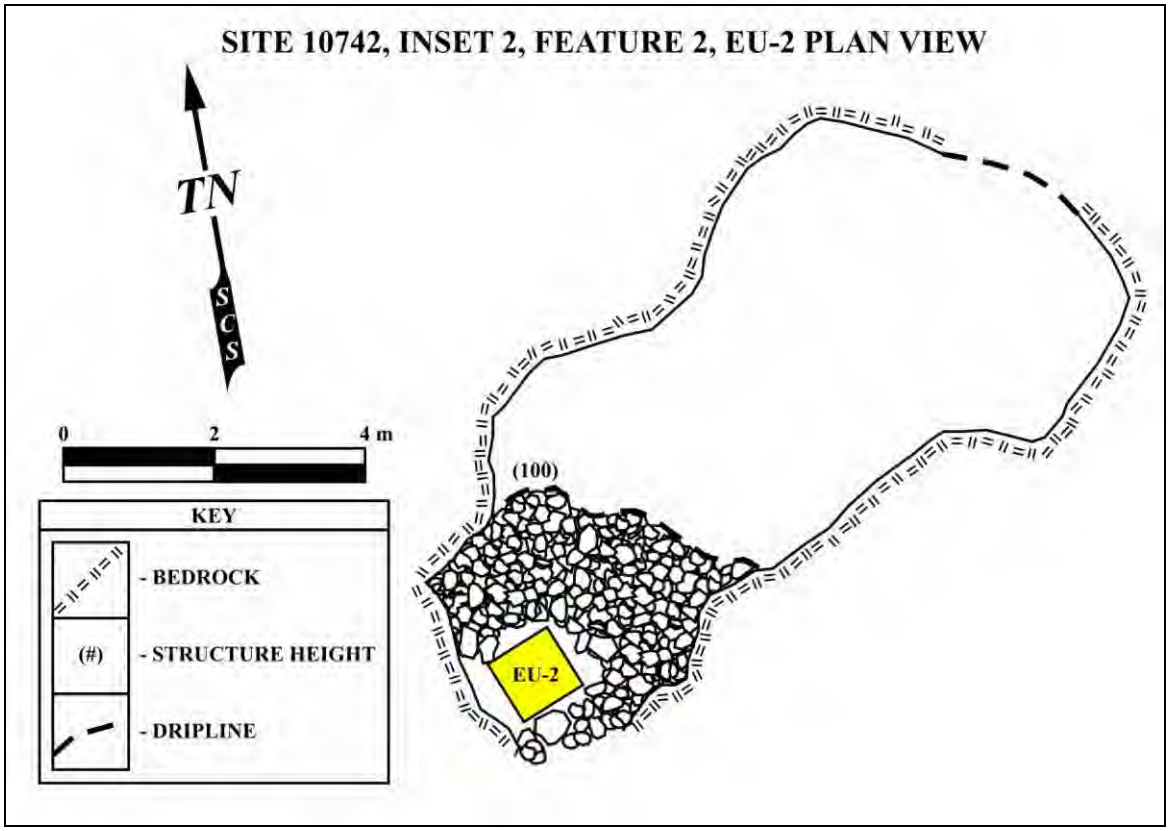


Figure 77: Site 10742, Inset 2, Feature 2, EU-2, Plan View.

Excavation Unit 2 was a 1.00 by 1.00 m unit placed on the previously described depression in order to understand its function. The unit was excavated stratigraphicaly and after the removal of the pavement revealed 3 soil layers overlying bedrock (Figure 78). The architectural layer was composed primarily of cobbles and extended to a depth of up to 0.30 m below surface. Layer I was a 10 YR 3/2 very dark grayish brown silt with only about 5% of cobbles achieving a maximum depth of 0.52 m below surface and exposed bedrock in several portions of the unit, extending out from the cave wall. Layer I-A was a 10 YR 3/3 dark brown silt with about a 10% cobble content with a maximum depth of 0.89 m below surface. Layer II was a 7.5 YR 2.5/1 black silt loam with about a small boulder content of about 3% and overlay bedrock at a maximum depth of 1.07 m below surface. Cultural material from this unit was limited to small moderate amounts of charcoal, found in all three soil layers but predominately in Layer II.

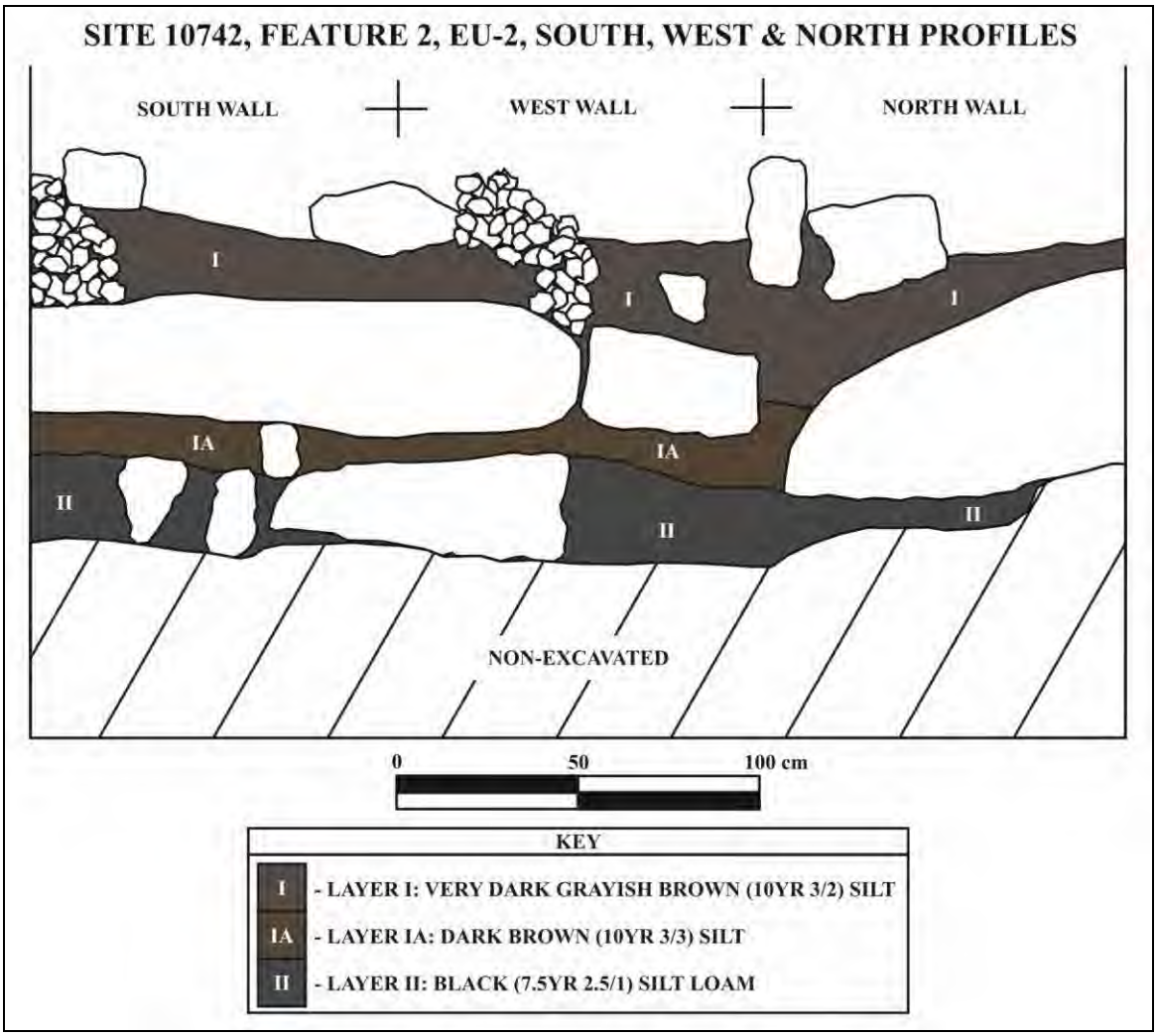


Figure 78: Site 10742, Feature 2, EU-2, South, West & North Profiles.

Site 10758, Feature 1

Feature 1 was the bottom of the only entrance to Site 10758. This feature exhibited a minor amount of cultural modification, primarily of stacked facing, up to 4 courses high (0.62 m) along its south wall.

Site 10758, Feature 2 with EU-1 and ST-1

Feature 2 was in the cave chamber immediately to the east of the opening, and demonstrated several cultural modifications. Three terraces were constructed in this chamber, 2 of which exhibited pavements. The terrace in the northeastern portion of the chamber was the largest, measuring 2.20 m northwest-southeast by 1.70 m northeast-southwest, and had a pavement abutting its southwest side. This terrace also obscured a constricted opening. The terrace in the south portion of the chamber measured 2.50 m east-west by 1.20 m north-south, and had a pebble pavement on its west, near the caves opening. The smallest terrace was located in the northwest corner of the chamber, was faced, and measured 1.20 m north-south by 0.60 m east-west. The chamber itself had a maximum height of 1.30 m and had a pebble, cobble and soil floor on which was located several pieces of marine and urchin shell (Figure 79).

Excavation Unit 1 was a 1.00 by 1.00 m unit placed on the chamber's pebble cobble and soil floor, immediately north of the southern terrace. The surface of the unit was mostly soil and was excavated to explore the function of the chamber. EU-1 was also excavated stratigraphically and exhibited only a single layer overlying bedrock (Figure 80). Layer I was a 10 YR 2/1 black silt loam with about a 50% rock content that reached a maximum depth of 0.07 m below surface. Cultural material recovered from this unit included a few pieces of marine shell, some volcanic glass, and a moderate amount of charcoal.

Stratigraphic Trench 1 was a 1.00 by 2.00 m excavation placed partially on the pavement of the northeast terrace and partially on the chambers floor. The trench was primarily situated to explore the terrace's architecture and had a long axis oriented northwest-southeast. The unit was excavated as a single layer and revealed that the pavement rested directly on bedrock while the soil was a 10 YR 2/1 black silt loam with bout a 50% pebble and cobble content (Figure 81). The maximum depth of the trench was 0.12 m and demonstrated that the terrace abutting the pavement also rested on bedrock and achieved a maximum height of 0.43 m above the cave floor. Cultural material recovered from this ST included volcanic glass, marine shell, bone and charcoal.

SITE 10768

PREVIOUS INVESTIGATIONS

Site 10768 was located within the Kohanaiki Ahupua'a between the 765 and 815 ft. elevation contours. Vegetation in this area was dominated by alahe 'e (Psydrax odorata), christmasberry (Schinus terebinthifolius), haole koa (Leucaena leucocephala) and vanous grasses.

The site consisted of 43 features, 35 of which are agricultural features. No excavation was undertaken at this site, but based on the site's size, number of features, feature distribution, and feature types, the site was interpreted as a pre-Contact permanent habitation and garden.

Of the 35 features interpreted as agricultural in function, 23 were mounds, 4 were kuaiwi, 3 were linear mounds, 3 were terraces, 1 was a large C-shape, and 1 was the modified edge of a flow. Basic information on all of the agricultural features is presented in Table 17.

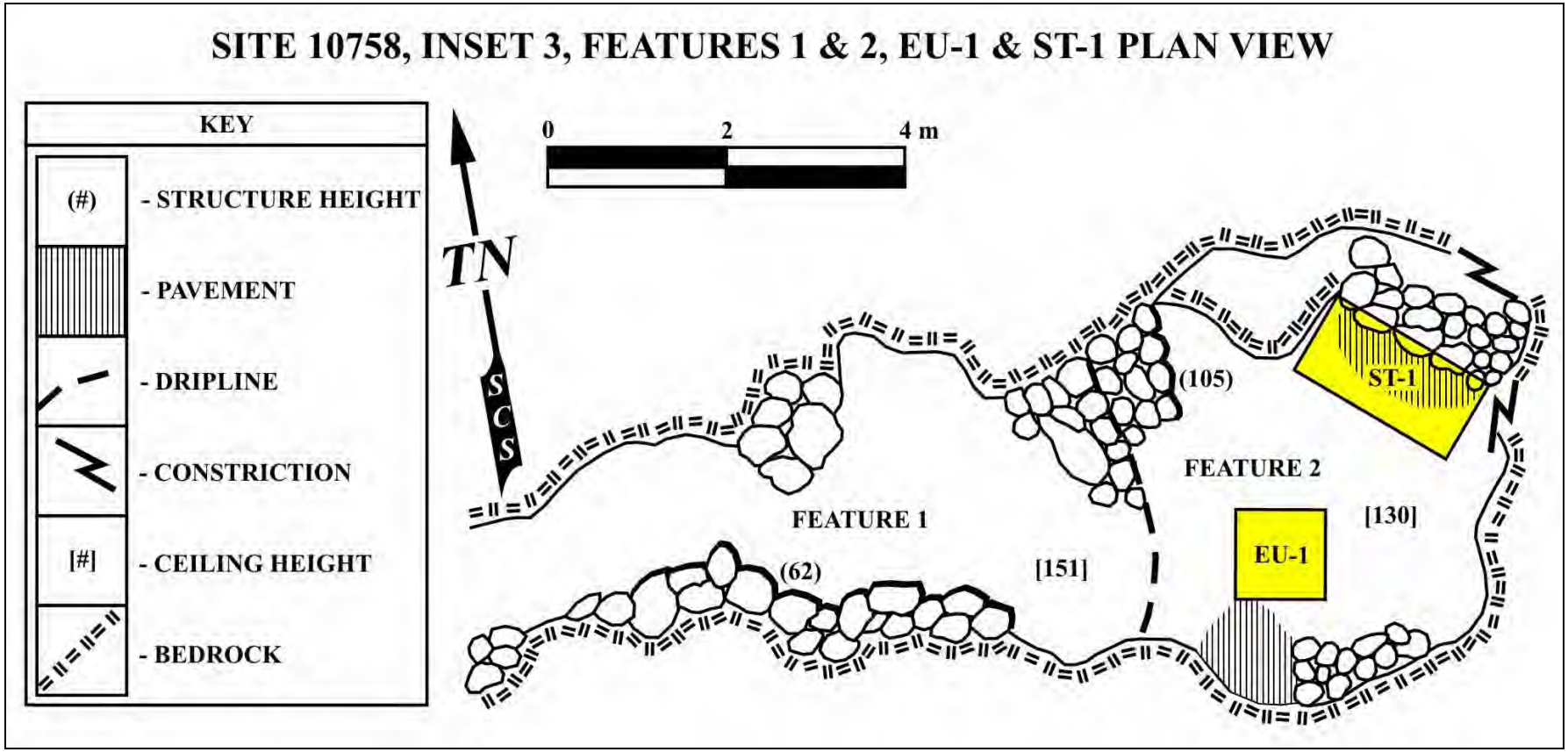


Figure 79: Site 10758, Inset 3, Features 1 & 2, EU-1 & ST-1, Plan View.

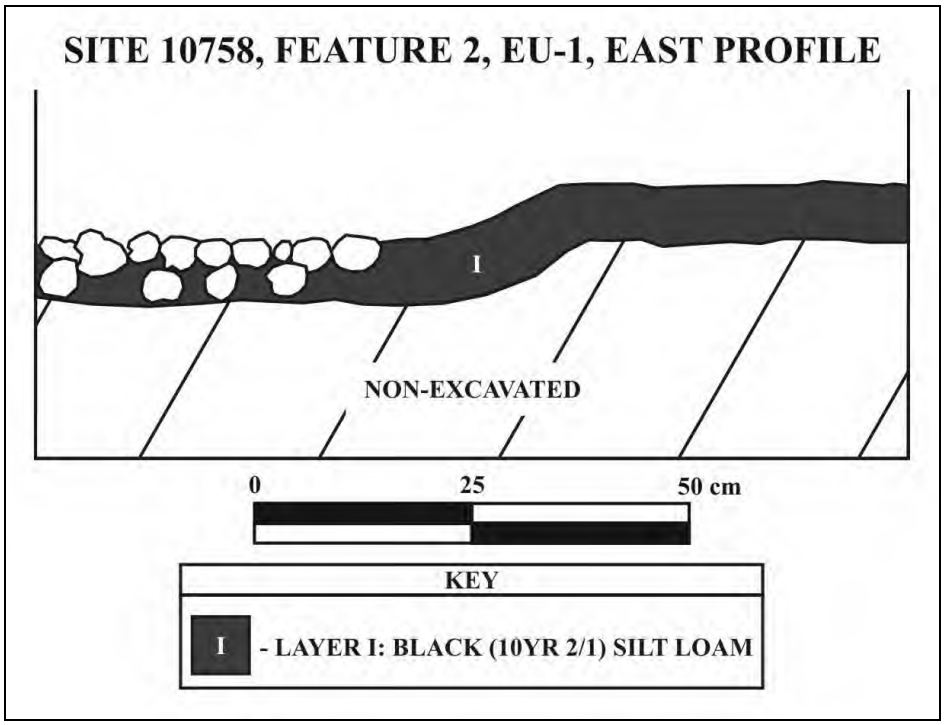


Figure 80: Site 10758, Feature 2, EU-1, East Profile.

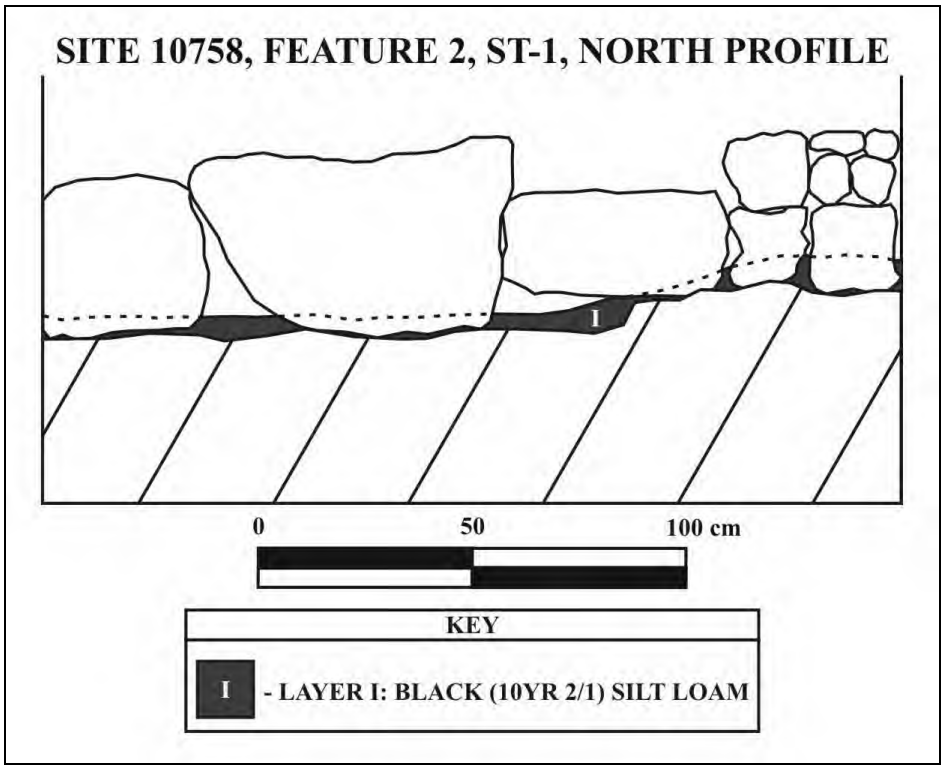


Figure 81: Site 10758, Feature 2, ST-1, North Profile.

Table 17: Features Found Within Site 10768

Fe.#	Type	Function	L(m)	W(m)	H(cm)
1	Platform with terrace	Habitation	7	7	20-40
2	Enclosure	Habitation	12	12	30-100
3	Enclosure	Animal Husbandry	15	25	70-120
4	Enclosure	Animal Husbandry	10	10	45-60
5	Enclosure	Animal Husbandry	30	47	60-70
6	Platform	Habitation	7	7	45
7	Enclosure	Habitation	5	5	110
8	Linear Mound	Agriculture	40	1-2	50-90
9	*Kuaiwi*	Agriculture	52	1-2	50-100
10	*Kuaiwi*	Agriculture	57	1-2	40-70
11	Linear Mound	Agriculture	25	1	45
12	Terrace	Agriculture	50	1-5	100-150
13	C-Shape (Large)	Agriculture	17	15	20-60
14	Mound	Agriculture	6	3	40
15	Mound	Agriculture	2	2	30
16	Mound	Agriculture	2	2	30
17	Mound	Agriculture	2	2	40
18	Mound	Agriculture	2	1	30
19	Mound	Agriculture	3	1	20
20	*Kuaiwi*	Agriculture	5	1	20
21	Mound	Agriculture	2	1	30
22	Terrace	Agriculture	8	2	35
23	Mound	Agriculture	2	1	45
24	Mound	Agriculture	3	3	60
25	Mound	Agriculture	4	2	75
26	Mound	Agriculture	2	2	30
27	Mound	Agriculture	2	2	40
28	Mound	Agriculture	4	2	40
29	Mound	Agriculture	2	2	100
30	Mound	Agriculture	5	3	110
31	Mound	Agriculture	1	2	30
32	Mound (Faced)	Agriculture	4	4	100
33	Mound	Agriculture	3	3	110
34	Terrace	Agriculture	4	3	60
35	Mound	Agriculture	4	2	40
36	Mound	Agriculture	1	1	20
37	Mound	Agriculture	2	1	20
38	Mound	Agriculture	4	2	40
39	Trail	Transportation	10	0.5	0
40	Linear Mound	Agriculture	5	1	25
41	*Kuaiwi*	Agriculture	15	3	40
42	Modified Edge of Flow	Agriculture	30	1	100
43	Mound	Agriculture	2	2	45

Feature 1

Feature 1 was a platform with an attached terrace located on the northern edge of the site. The platform was 7.00 by 5.00 m with a 7.00 by 2.00 m terrace attached to the west edge. The platform was raised 0.20 to 0.40 m above the surrounding ground surface and 0.35 m above the terrace. The west edge of the terrace was raised 0.20 m above the adjacent ground surface. The surface of the platform was a level, pebble paved, surface while the surface of the terrace was soil and bedrock. Although no cultural material was observed on the surface, Feature 1 was interpreted to be a habitation feature. This evaluation was based on the size, form and location of this feature.

Feature 2

Feature 2 was an enclosure located at the far western edge of this site. The interior of the enclosure was 8.00 by 7.00 m, with a roughly level, cobble and boulder surface. The walls of the enclosure were mostly mounded with some remnant facing present on the north, west and south sides. The heights of the walls range from 0.30 to 1.00 m while the widths of the walls ranged from 1.00 to 2.00 m. Although no cultural material was observed on the surface, Feature 2 was interpreted to be a habitation feature, an evaluation based on the size, form and location of this feature.

Feature 3

Feature 3 was an enclosure located near the middle of the site. The interior of the enclosure was 22.00 by 12.00 m, with a roughly level soil and bedrock surface. Feature 43, a mound was also located within this enclosure. The enclosure had four walls with no evident breaks/entrances. The heights of the walls ranged from 0.70 to1.20 m with remnant facing at various locations around the enclosure. All four walls of the enclosure were about 0.70 m wide. Although no cultural material was observed on the surface, Feature 3 was interpreted as an animal husbandry feature. This evaluation was based on the size, form and location of this feature.

Feature 4

Feature 4 was an enclosure attached to the outside of the east wall of Feature 3. The interior of this enclosure was 7.00 by 7.00 m, with a roughly level soil and bedrock surface. The enclosure had four walls with a 4.00 m break (probable entrance) in the SW corner. Feature 9 extended east from the SE corner of Feature 4. The west wall of Feature 4 was the east wall of Feature 3. The widths of the walls ranged from 0.70 to 1.50 m, with heights ranging from 0.45 to 0.60 m. There was no remnant facing on the north, east or south walls. Although no cultural material was observed on the surface, Feature 4 was interpreted as an animal husbandry feature. This evaluation was based on the size, form and location of this feature.

Feature 5

Feature 5 was an enclosure attached to the outside of the south wall of Feature 3. This enclosure measured 40.00 by 28.00 m, with a soil and bedrock surface. The enclosure had four walls with a 12.00 m break in the NW comer. The north wall of this enclosure is the south wall of Feature 3. The width of all four walls was about 0.70 m, with heights ranging from 0.60 to 1.20 m. There was remnant facing at various spots around the enclosure. Although no cultural

material was observed on the surface, Feature 5 was interpreted as an animal husbandry feature. This evaluation was based on the size, form and location of this feature.

Feature 6

Feature 6 was a rough platform located 3.00 m west of Feature 3. The platform was 7.00 by 7.00 m, with a rough boulder paved surface. The platform had a maximum height of 0.45 m. Although no cultural material was observed on the surface, Feature 6 was interpreted as a habitation feature. This evaluation was based on the size, form and location of this feature.

Feature 7

Feature 7 was an enclosure attached to the inside of the NW corner of Feature 5. The interior of this enclosure was 3.00 by 3.00 m, with a roughly level soil interior. The west wall of this enclosure was part of the west wall of Feature 5. The width of all four walls was about 0.70 m with interior heights of 1.10 m and exterior heights ranging from 0.05 to1.20 m. The exterior of the east wall was intentionally constructed to be 0.05 m tall. There was remnant facing on all four walls of the enclosure. Although no cultural material was observed on the surface, Feature 7 was interpreted as a habitation feature. This evaluation was based on the size, form and location of this feature.

Feature 39

Feature 39 was a trail oriented mauka-makai directly northwest of Feature 7. The pathway consisted of pahoehoe slabs serving as stepping-stones. Feature 39 was visible for 10.00 m. Although there was no physical evidence of the trail beyond what is reported here, it was oriented to connect to Feature 7 and Feature 2.

CURRENT INVESTIGATIONS

The SCS data recovery of Site 10778 took the form of 20 excavated shovel probes, 5 excavation units and 4 stratigraphic trenches (Figure 82). Shovel probes were spaced 5.00 m apart in 2 lines[oriented on 258 and 348 degree angles from true north, with the second line extending north from the first's west end. Excavation units were associated with Features 2, 6 and 7 while stratigraphic trenches were placed in Features 1, 2 and 6. The data gained from the probes is presented below in Table 18, while each excavation unit and stratigraphic trench will be discussed along with further observations of the features in which they were placed.

Feature 7 and EU-1

The present study found Feature 7 to differ little from the previous description. These investigations describe the feature as roughly oval in shape with core filled bi-faced walls stacked on an exposed bedrock outcrop. Facing occurred on the majority of the interior, but only on the southwest portion of its exterior. Some of the outcrop also served as the enclosures northwest corner. The Feature was found to measure 5.50 by 4.50 m in its interior, have walls 1.00 to 2.00 m thick and measure up to 1.30 m in its interior, and 1.40 m on its exterior. A portion of the feature's southwest corner was also fairly tumbled (Figure 83).

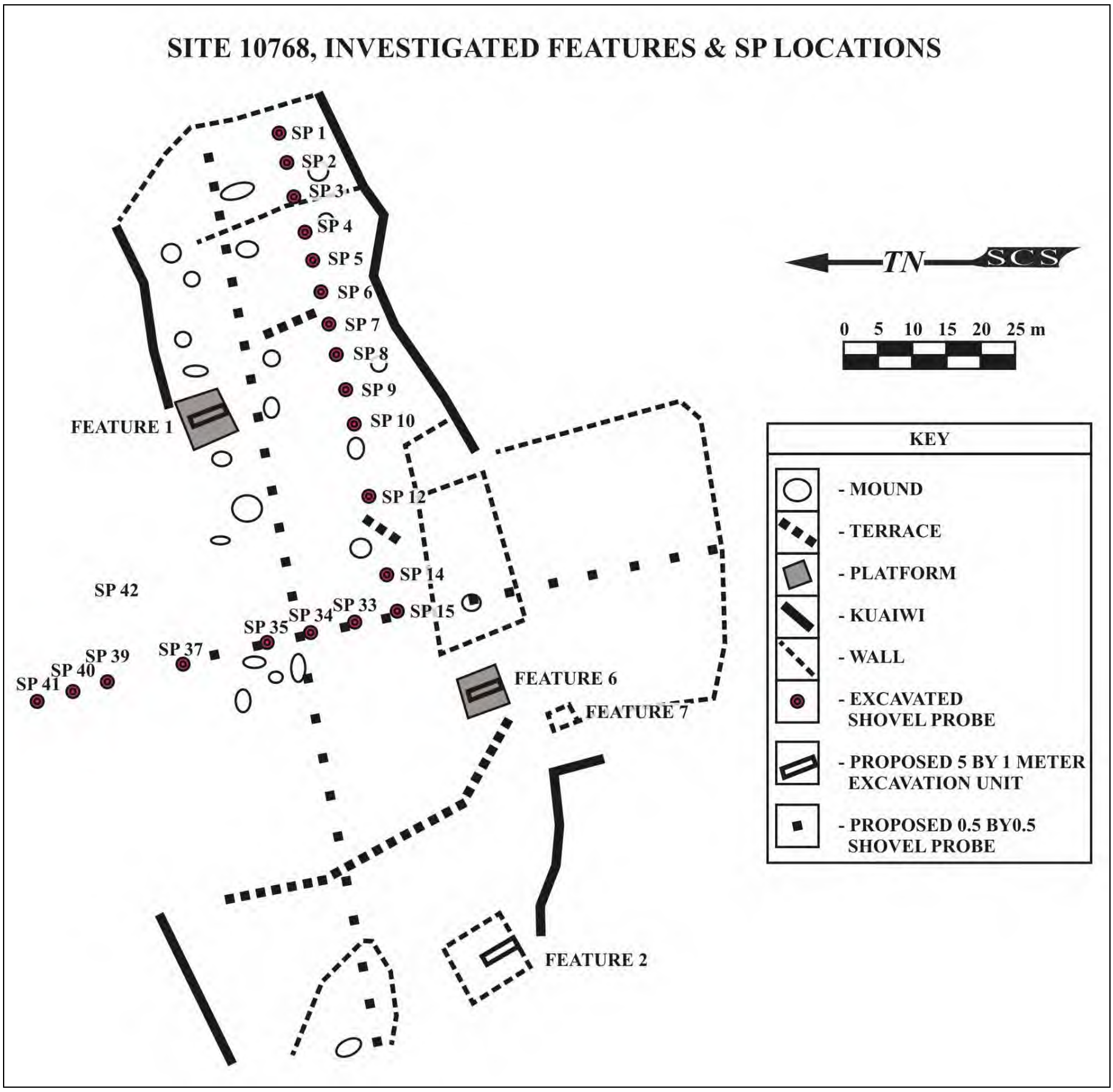


Figure 82: Site 10768, Investigated Features & SP Locations.

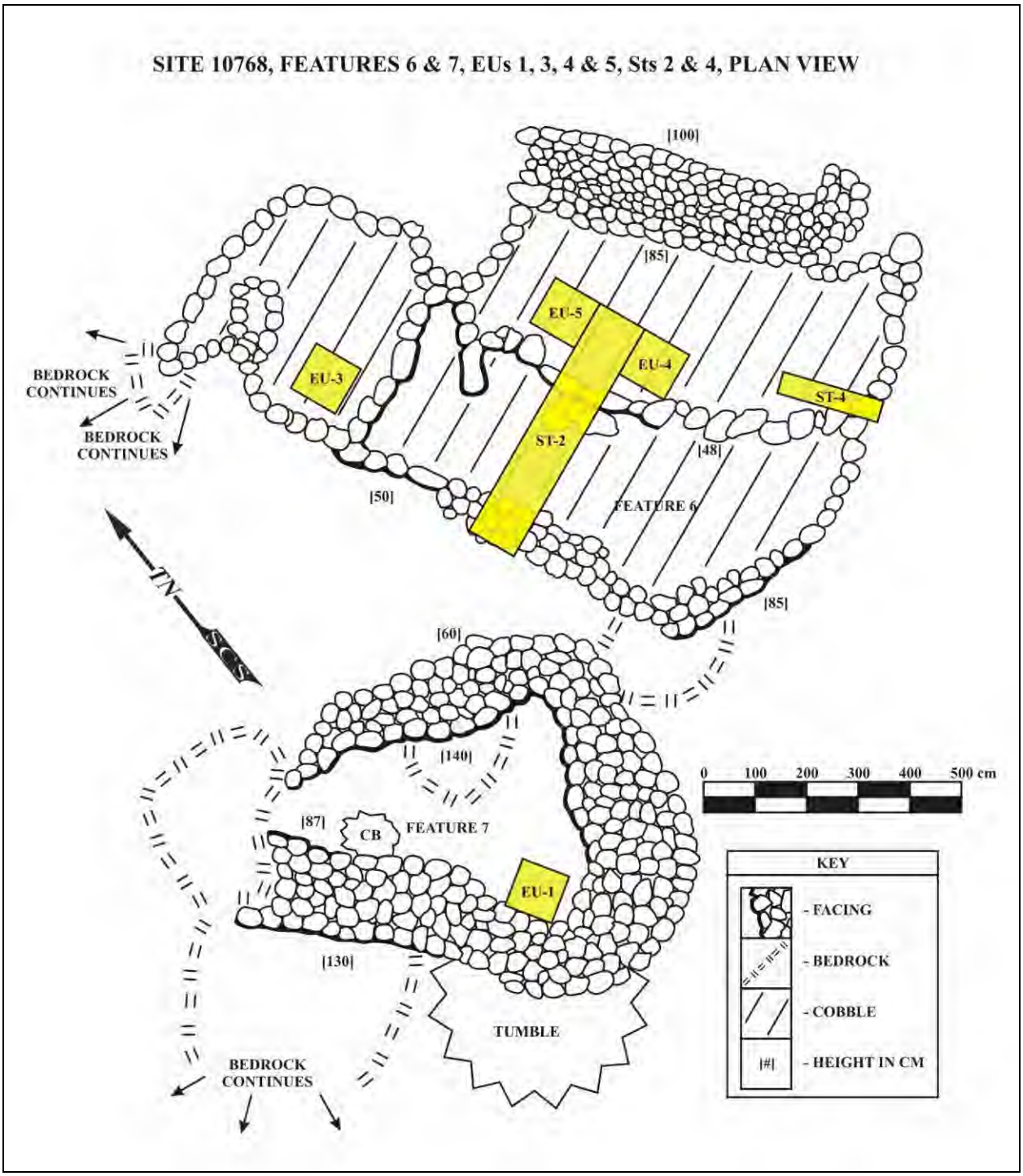


Figure 83: Site 10768, Features 6 & 7, EUs 1, 3, 4 & 5, STs 2 & 4, Plan View Map.

Table 18: List of SPs Conducted Within Site 10768

SP	Bottom Depth	Layers	Cultural Material
1	0.11 m	1	none
2	0.10 m	1	none
3	0.18 m	1	none
4	0.08 m	1	none
5	0.14 m	1	none
6	0.22 m	1	none
7	0.19 m	1	none
8	0.07 m	1	none
9	0.21 m	1	Marine shell
10	0.06 m	1	none
11	Bedrock-voided		
12	0.13 m	1	none
13	Bedrock-voided		
14	0.22 m	1	none
15	0.21 m	1	none
33	0.28 m	1	none
34	0.40 m		none
35	0.14 m	1	none
36	Bedrock-voided		
37	0.19m	1	none
38	Bedrock-voided		
39	0.23 m	1	none
40	0.16 m	1	Marine shell, C14
41	0.32 m		V-glass, Marine shell

Excavation Unit 1 was a 1.00 by 1.00 m unit placed in the southwest corner of Feature 7's interior, abutting its southwest wall, in an area that appeared to have the least surface bedrock. EU-1 was placed to explore feature function, oriented northwest southeast, and excavated in 7 arbitrary levels within 3 natural layers (Figure 84). After removing surface architectural tumble, Layer I was removed. This layer contained Levels 1 and 2 and was a 10 YR 2/2 very dark brown organic silt loam with about a 60% pebble and cobble content extending to 0.20 m below surface. Layer II contained Levels 3, 4 and 5 and was a 10 YR 2/1 black silt with about a 45% pebble and cobble content that extended to a maximum depth of 0.45 m below surface. Layer III contained Levels 6 and 7 and was a 10 YR 3/3 brown silt with up to an 80% rock content, primarily of decomposing bedrock. Although this layer continued, the unit was terminated at a depth of 0.50 m below surface when it was realized that Layer III was the sterile substrate. Cultural material was fair to moderate and was recovered from all 3 layers, but only the very upper portion of Layer III, where it met with Layer II. This material consisted of marine shell, coral and charcoal.

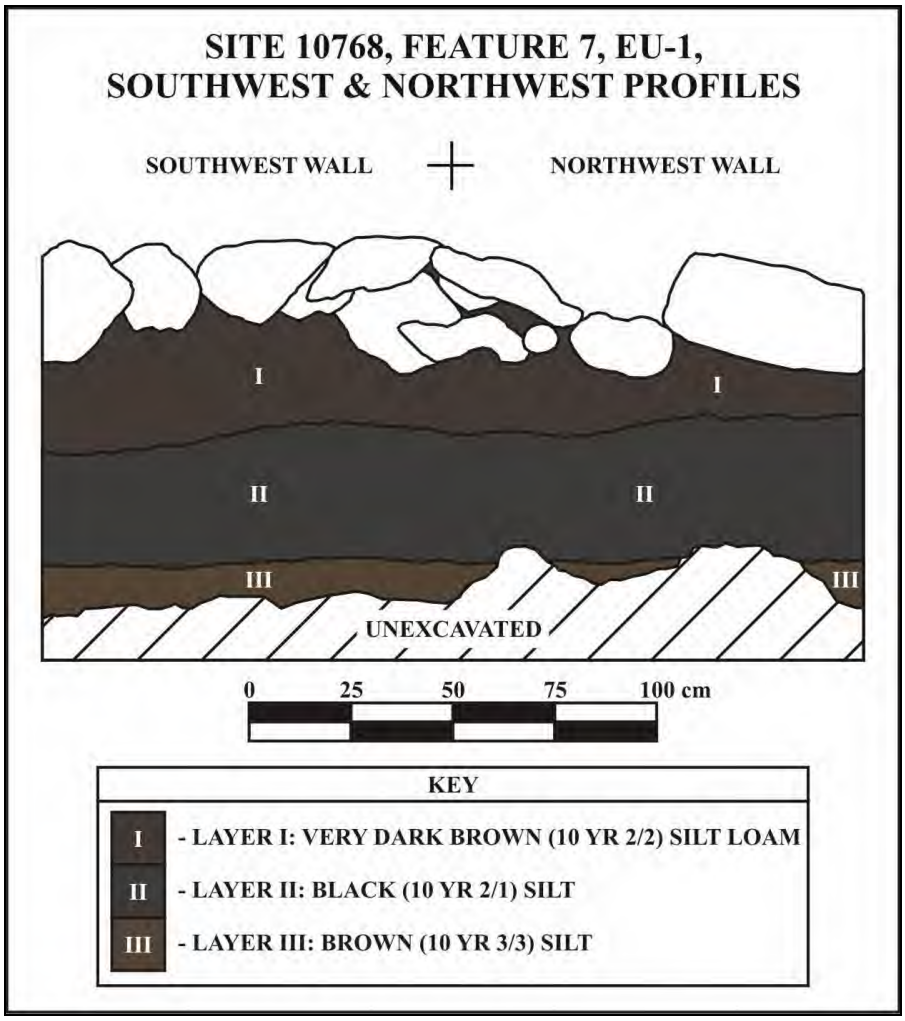


Figure 84: Site 10768, Feature 7, EU-1, Southwest & Northwest Profiles.

Feature 2 and EU-2 with ST-3

The current SCS investigations of Feature 2 differed somewhat from those of 2005 and offered additional data. The present investigations found the feature larger than originally reported with interior measurements of 12.00 m northwest-southeast and 8.70 m northeast southwest. With the exception of its southeast wall, the majority of the feature's walls were tumbled. Facing occurred on the entire exterior of this southeast wall and exterior portions of the southwest and northwest walls. Interior facing was only observed southeast, northeast and northwest corners. Exterior wall height ranged between 0.33 and 0.60 m, while interior heights were between 0.46 and 0.88 m. Walls also ranged between 1.20 and 2.00 m in thickness. Architectural additions to the structure included a short (2.00 m) wall of boulders extending northeast off of the feature's northeast wall, a core filled wall terminating in a large boulder which extended 5.00 m southwest off of the feature's southwest wall and a paved terrace attached to the exterior of the feature's south corner. The interior of the feature was also found to be not as level as originally recorded, have a 1.25 m diameter depression in its northwest half, and exposed bedrock in its northwest corner (Figure 85).

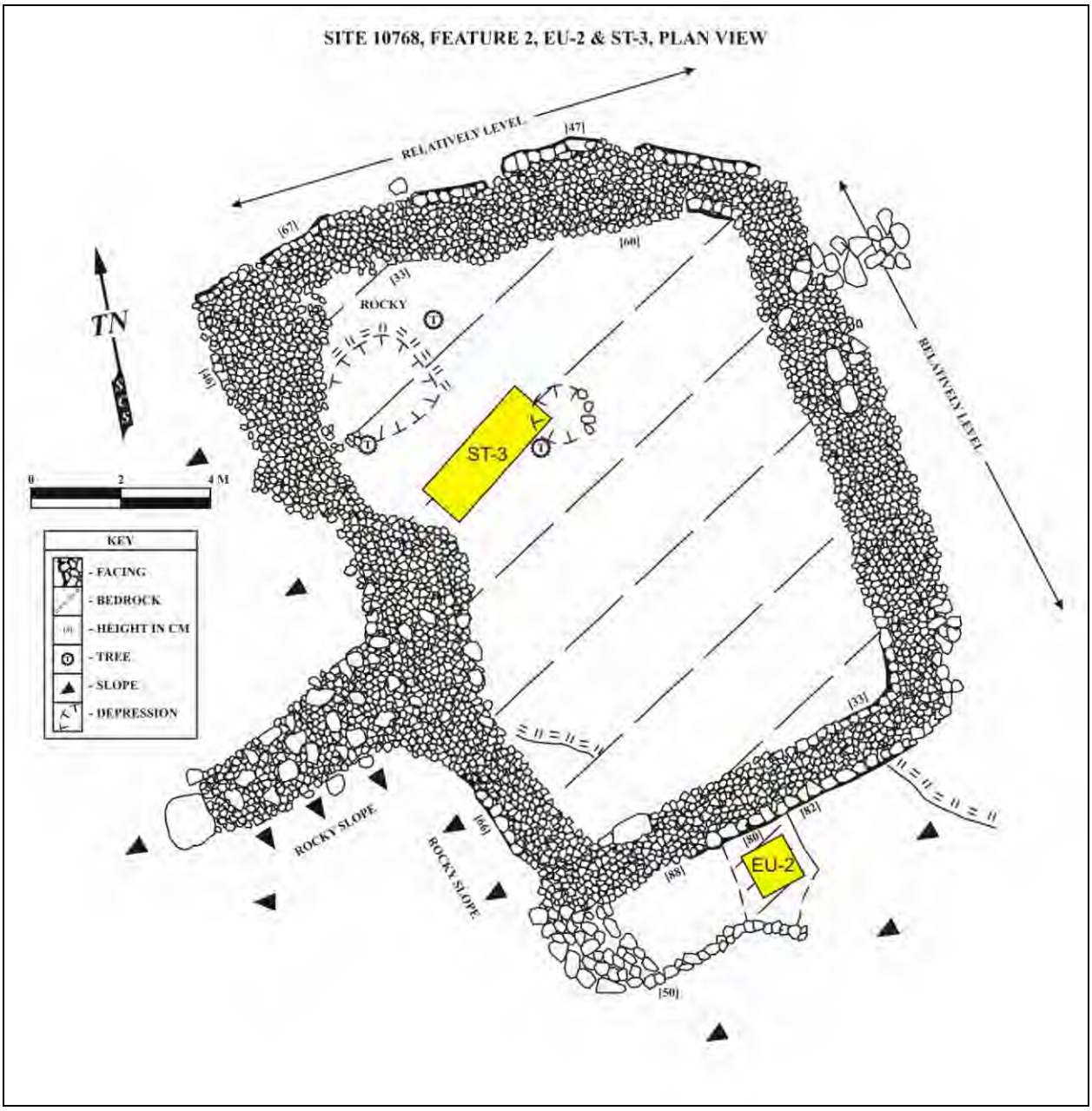


Figure 85: Site 10768, Feature 2, EU-2 & ST 3, Plan View.

Excavation Unit 2 was a 1.00 by 1.00 unit placed on the northeastern portion of the feature's exterior paved terrace in order to determine function and age of the feature. After the removal of a few boulders tumbled from the features southeastern wall, the unit was excavated as a single level (Figure 86). This level was almost completely terrace architecture, although a very thin (0.03 to 0.05 m thick) layer of black silt overlay the bedrock at unit bottom. Architecture consisted of unsorted rock from pebbles to boulders and extended to a depth of 0.83 m below surface. Cultural material recovered from this unit consisted of a single piece of marine shell, and a piece of charcoal, the charcoal located in the thin silt layer.

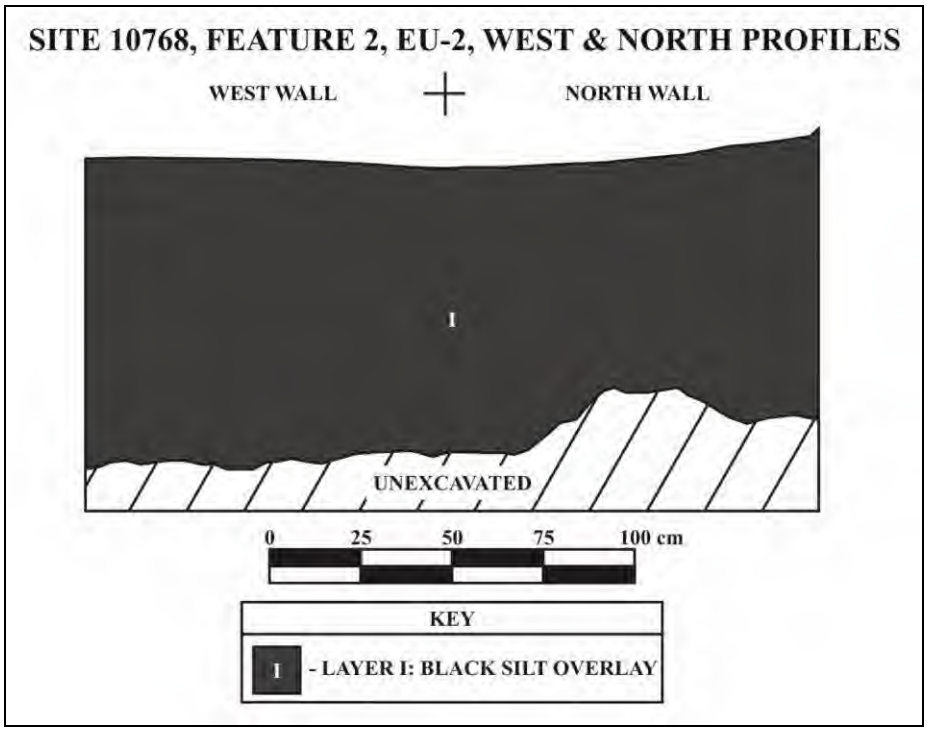


Figure 86: Site 10768, Feature 2, EU-2, West & North Profiles.

Stratigraphic Trench 3 as a 1.00 by 3.00 unit placed within the main enclosure of Feature 2, oriented northeast-southwest, situated so that its northeastern end lay in half of the previously described depression. The trench was excavated by first removing the loose surface rock, then removing Layer I in 3 arbitrary levels, and Layer II in 1 level (Figure 87). Surface rock consisted mostly of pebbles with some cobbles and only a few boulders. This layer extended to a maximum depth of 0.14 m below surface. Layer I was then encountered and consisted of a 5 YR 3/2 dark reddish brown silt with up to a 90% pebble content and extended to a maximum depth of 0.47 m below surface, where bedrock was exposed in the majority of the unit. Layer II was only removed from 2 pockets within the bedrock, did not show up in the profile, and was a culturally sterile 7.5 YR 3/2 dark brown silt loam with a 90% pebble content achieving a maximum depth of 0.60 m below surface. Cultural material from this trench consisted of marine shell, urchin, coral, charcoal and an adze fragment. This material was somewhat sparse, the majority of it recovered from Level 2 in Layer II.

Feature 6 and EUs-3, 4 and 5 with STs 2 and 4

The present investigations found Feature 6 to be a bi-level platform attached to the southwestern wall of Feature 3. This platform had 3 components, 2 of which were raised above the third. The lower component was the features southwestern most and was a quadrilateral level surface paved with boulder sized slabs and cobbles. Facing occurred on the portions of its southern and southwestern walls, which rise up to 0.85 m above the ground surface. Rising above this component 0.48 m, and attached to Feature 3, is the second level of the feature. This level had a paved pebble and cobble surface with some pahoehoe slabs in its southeast, but a soil and cobble surface in its northwest. The latter portion of this level was also faced on its southwest side. The last component was attached to the northwest end of the first, but was not

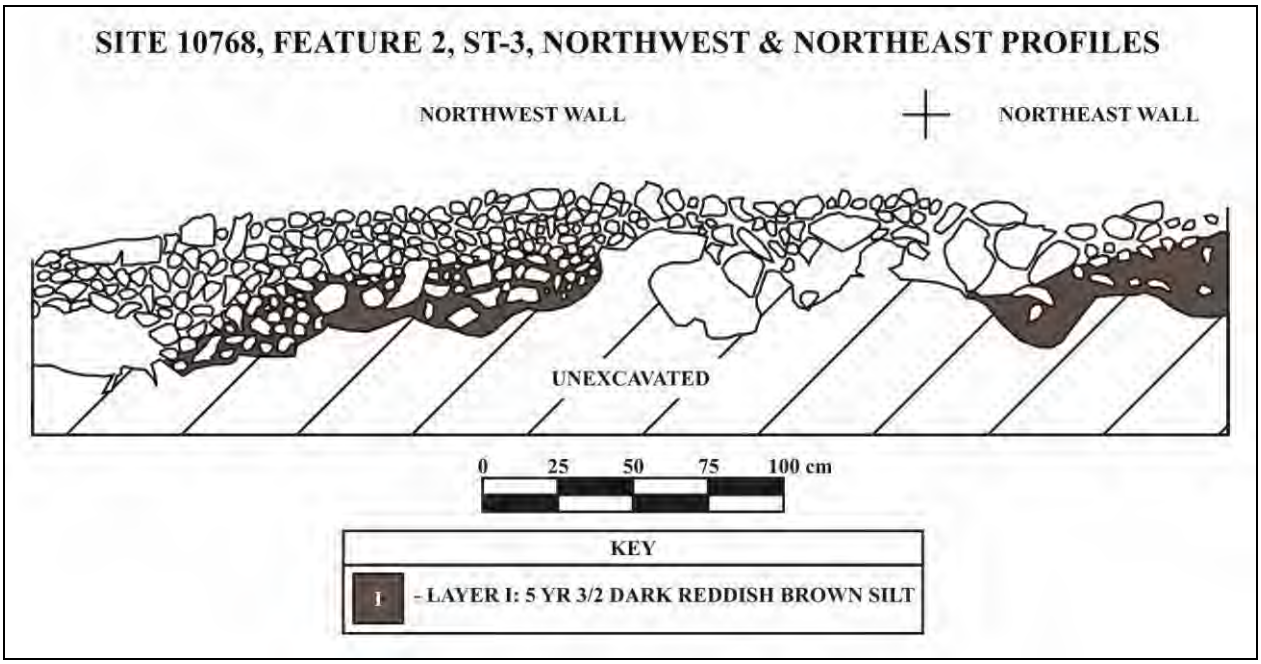


Figure 87: Site 10768, Feature 2, ST-3, Northwest & Northeast Profiles.

attached to the wall of Feature 3. This portion of the feature was raised above the first to the same level as the second and also had a paved pebble and cobble surface. Facing occurred only on the southeastern side of this component. A 1.50 m long alignment of boulders also extends southwest, onto the lower level from where the west corner of the second component and the east corner of the third component meet. Feature 7 lay about 1.00 m to the southwest of Feature 6.

Excavation Unit 3 was a 1.00 by 1.00 m unit placed on the northwest, or third component of Feature 6, in this component's southwest corner. The purpose of the unit was to determine the function and temporal placement of the feature. EU-3 was excavated stratigraphically, by removing the architecture and then removing 2 underlying soil layers (Figure 88). The unit's architecture consisted of the paving observed on the surface and several obscured boulders that extended to a maximum depth of 0.30 m below surface. Layer II was the first soil layer, although architecture extended into it also. This layer was a 10 YR 2/2 very dark brown silt with about a 75% rock content extending to 0.60 m below surface. Layer II was the second soil layer and was a 10 YR 2/1 black silt loam with considerably less rock than Layer I and exposed bedrock throughout the unit at a maximum depth of 0.84 m below surface. Cultural material recovered from this unit consisted volcanic glass, marine shell and charcoal. This material only occurred in the soil layers, with the majority of it occurring in Layer II.

Stratigraphic Trench 2 was a 1.00 by 5.00 m excavation placed across the lower component of Feature 6, and extending onto the soil and cobble portion of the second component. The trench was oriented northeast-southwest and was excavated in 6 arbitrary levels within 2 layers. The retaining elements of both levels, however, were left intact in order to expose their architecture. Layer I contained 4 levels in the ST's northeast 2 m, and 3 levels in its southwest 3 m. Layer I was a 10 YR 2/2 very dark brown silt loam with up to a 55% rock content. This rock was mostly cobbles with some pahoehoe slabs, the slabs mostly occurring in

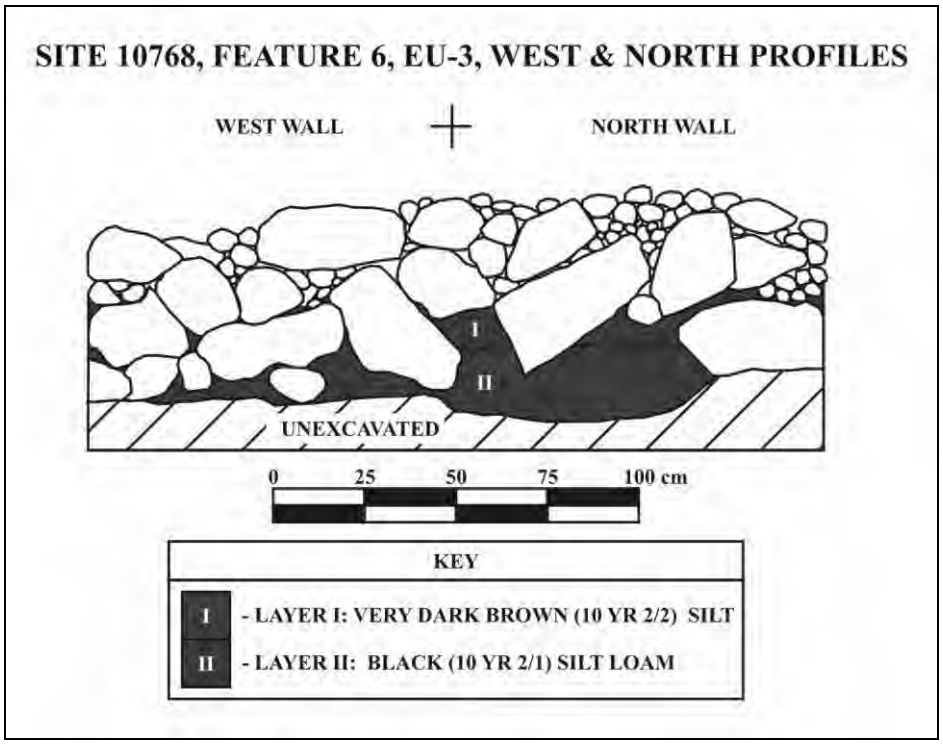


Figure 88: Site 10768, Feature 6, EU-3, West & North Profiles.

the southwestern 3 m. Layer I extended to a depth of 0.37 m below surface at its northeast end, and 0.21 m below surface at its southwest end, the layer somewhat following the surface contour of the feature. Layer II was a 10 YR 2/1 black silt with about a 50% rock content, mostly of cobbles and pebbles, but with a few pahoehoe slabs. This layer reached bedrock at 0.91 m below surface at the trench's northeast end, and 0.45 below surface at the southeast end. Cultural material recovered from this trench occurred in both layers and included both traditional and historical items. This material predominantly occurred in Layer II and the lower portion of Layer I in the northeast end of the unit, although it occurred evenly within Layer I in the southwest 2/3rds. Recovered was volcanic glass, marine shell, basalt debitage, bone, charcoal, ceramic fragments and a shell button. Importantly, the historic items occurred in both layers.

Excavation Unit 4 was 1.00 by 1.00 m unit placed adjacent to the southeast wall of ST-2, at the trench's northeast end. This EU extended out from the cobble and soil portion of the feature's second component, onto its pavement, and was excavated to further explore the cultural deposit recovered from the trench. EU-4 demonstrated a similar stratigraphy to that of the northeast portion of the trench, and also exhibited similar cultural material (Figure 89). This material occurred primarily in Layer II and consisted of volcanic glass, marine shell, coral, fish bone and charcoal. Notable was the absence of historic items.

Excavation Unit 5 was a 1.00 by 1.00 m unit placed adjacent to the northwest wall of ST-2, at the trench's northeast end, and was situated entirely on the cobble and soil portion of the feature's second component. Again, this unit was excavated in order to explore the question of whether this site had multiple temporal components and, like the trench, was excavated in arbitrary levels in order for more control. Similar stratigraphy was encountered, with 2 levels

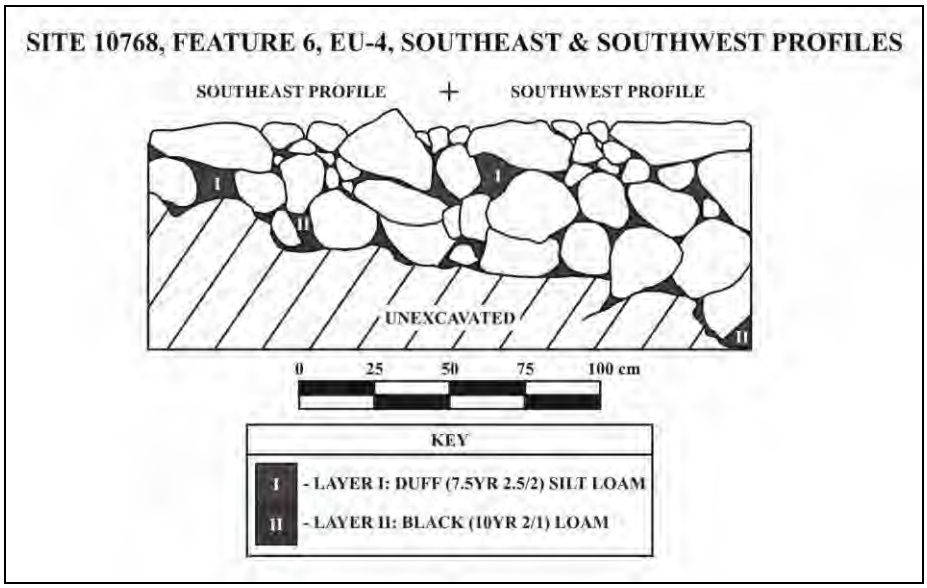


Figure 89: Site 10768, Feature 6, EU-4, Southeast & Southwest Profiles.

being excavated in Layer I and 2 levels excavated in Layer II (Figure 90). Layer I extended to a maximum depth of 0.29 m below surface and yielded marine shell, fish bone, coral, volcanic glass, chert, charcoal and a single basalt flake. Layer II extended to a maximum depth of 0.49 m below surface and yielded marine shell, volcanic glass fish bone charcoal and a pig tooth. The only possibly historic item that this unit produced was a piece of chert.

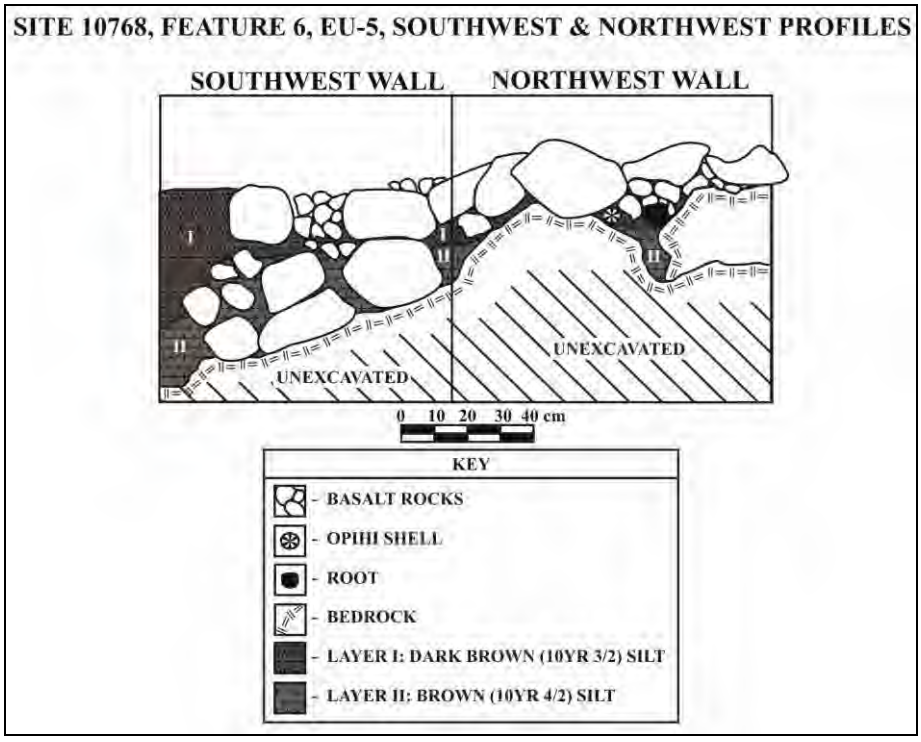


Figure 90: Site 10768, Feature 6, EU-5, Southwest & Northwest Profiles.

Stratigraphic Trench 4 was the final excavation in Feature 6 and was a 1.00 by 2.50 m unit situated so that it extended northwest from the second component's southeast perimeter. The unit was located entirely on this component's pebble and cobble surface and was excavated to again explore the potential of a multi-occupational site and also to explore feature function. The trench was excavated stratigraphically, again revealing 2 layers (Figure 91). Layer I was a 10 YR 3/2 dark brown silt loam with up to a 60% rock content, mostly of pebbles and cobbles, but with boulders also. This layer reached a maximum depth of 0.45 m below surface, exposing bedrock in both its southeastern end and western corner. Layer II was a 10 YR 4/2 brown silt loam with about a 60% pebble and cobble content exposing bedrock throughout the trench at a depth of 0.89 m below surface. Cultural material recoverd from this excavation included volcanic glass, marine shell, waterworn rocks, bone, coral and charcoal. No historical items were located and only slightly more of this material was obtained from Layer I than from Layer II.

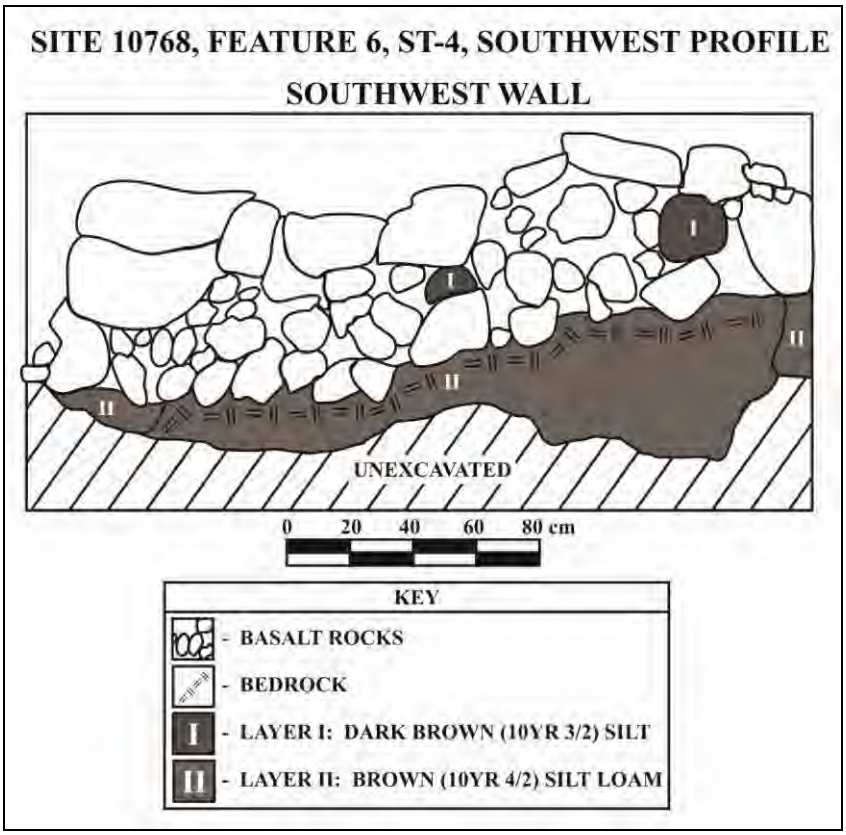


Figure 91: Site 10768, Feature 6, ST-4, Southwest Profile.

Feature 1 and ST-1

The current SCS study found Feature 1 at Site 10768 to differ from the earlier description. The latest observations found the feature to be a quadrilateral pebble and cobble paved platform with a large, rough C-shape of coarser material attached to its northwest side, and a soil filled terrace occurring immediately below its southwest side. The paved portion of this feature measured 5.00 m northeast-southwest by 4.50 m northwest-southeast and was up to 0.58 m above the retained soil of the terrace. This portion of the feature also exhibited stacking, or facing, on its southwest and a segment of its southeast sides. The attached C-shape measured

7.00 m north-south by 7.50 m east-west, with its opening facing west. The retaining element of the terrace measured 6.00 m, with its long axis northwest-southeast, and had a height of up to 0.31 m above the ground surface, to the southwest (Figure 92).

Stratigraphic Trench 1 was a 1.00 by 5.00 m excavation with its long axis oriented northeast-southwest and placed on the northwest portion of the paved element of the feature. The purpose of this unit was to determine feature function and temporal placement. ST-1 was excavated stratigraphically as an architectural layer, and 2 soil layers (Figure 93). The architectural layer was composed primarily of pebbles and cobbles, but had fitted boulders on the feature's southwest perimeter and revealed several boulders at its base. This layer reached a maximum depth of 0.26 m below surface. Layer I was then a 10 YR 2/2 very dark brown loam with, after the removal of the boulders, a 20% pebble content. Layer II was a 10 YR 2/1 black silt with up to an 80% rock content, mostly exfoliating bedrock, which reached bedrock at a maximum depth of 0.39 m below surface. Cultural material from this excavation was very sparse, occurring only in Layer II. This material consisted of volcanic glass, marine shell and a piece of plastic.

PERMANENT HABITATION SUMMARIES AND DISCUSSIONS

The primary question addressed at the permanent habitation sites chosen for Data Recovery was as follows: How were the inter-feature areas within these sites used? This question was approached differently at each site with varying results.

Site 10690

Only 6 shovel probes were excavated at this site, placed in 2 rough lines in the area between the cluster of Features 1, 2, 3 and 4, and the isolated Feature 6. Three of these probes proved positive, 2 of them located near this cluster and 1 of them adjacent to Feature 6.

Fifteen 0.5 by 0.5 m EUs were excavated in areas adjacent to, and on areas of level soil within the Features 1, 2, 3 and 4, however, in order to record stratigraphy. Five of these 0.5 by 0.5 m EUs proved positive, 2 of which generated extensions. Of the 5 EUs excavated in the level soil interior of Feature 1, an enclosure, only 2 yielded minor amounts of charcoal. In the area of level soil adjacent and to the east of Feature 1, the 4 of these EUs excavated at this location yielded similar results. The southernmost 0.5 by 0.5 m EU located about 4 m southwest of Feature 1 was the only of these units that did not generate an extension that produced charcoal in addition to marine shell.

The 2 0.5 y 0.5 EUs that generated enough material to warrant extensions were EUs 10 and 20, both of which were located in the level soil areas of the 2 terraces, Features 2 and 4. EU-10 and 10 extension were located in the level soil of Feature 2, immediately west of Feature 1. While EU-10 only yielded a single piece of marine shell, it produced enough charcoal to warrant its extension. This extension also yielded a significant amount of charcoal, but produced a significant amount of marine shell in addition to a single piece of chert, one of the two historic items found at this site. EU-20 was located in the level soil of Feature 4, the westernmost feature at this site, and exhibited a similar situation to EU-10. EU-10 extension however, while

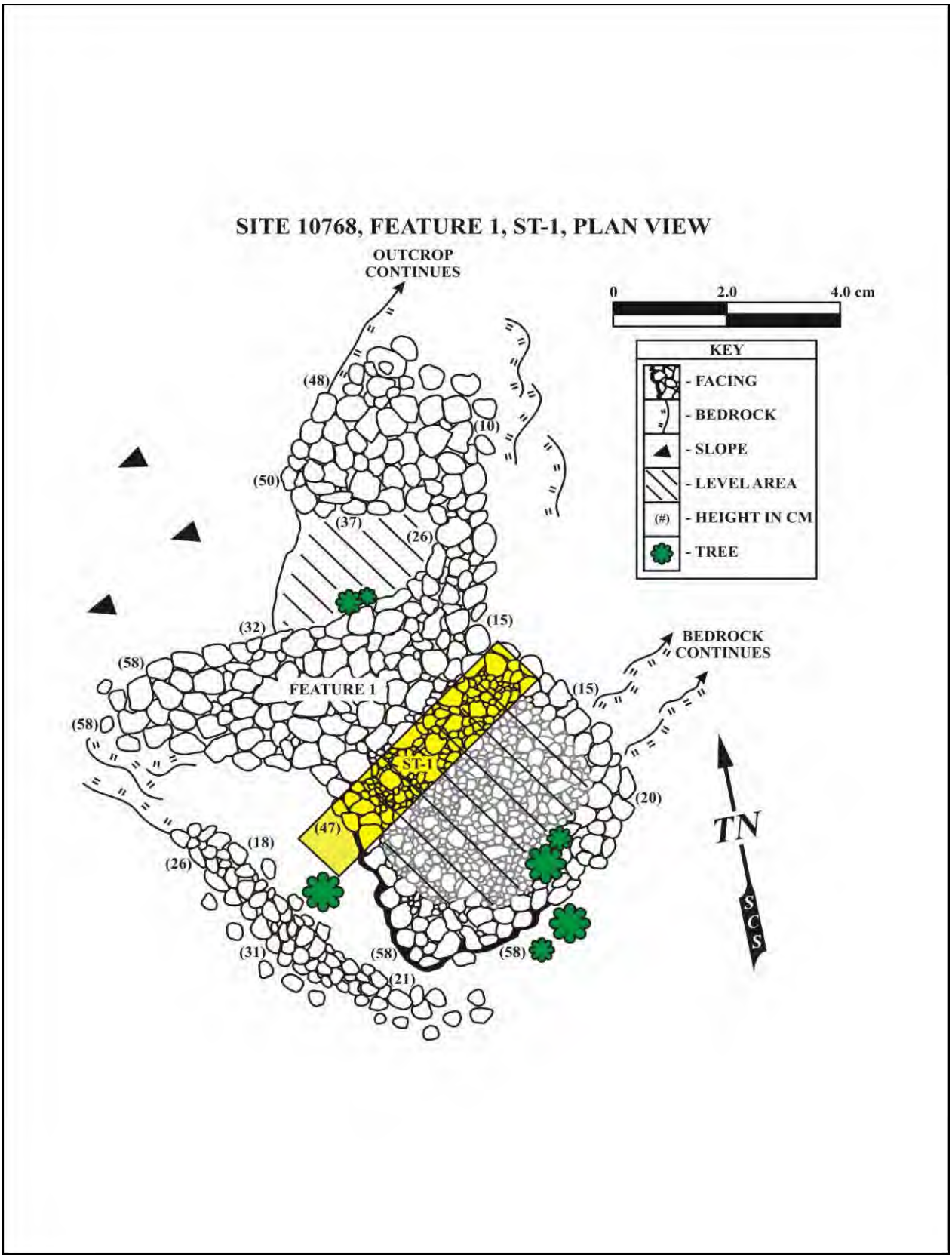


Figure 92: Site 10768, Feature 1, ST-1, Plan View.

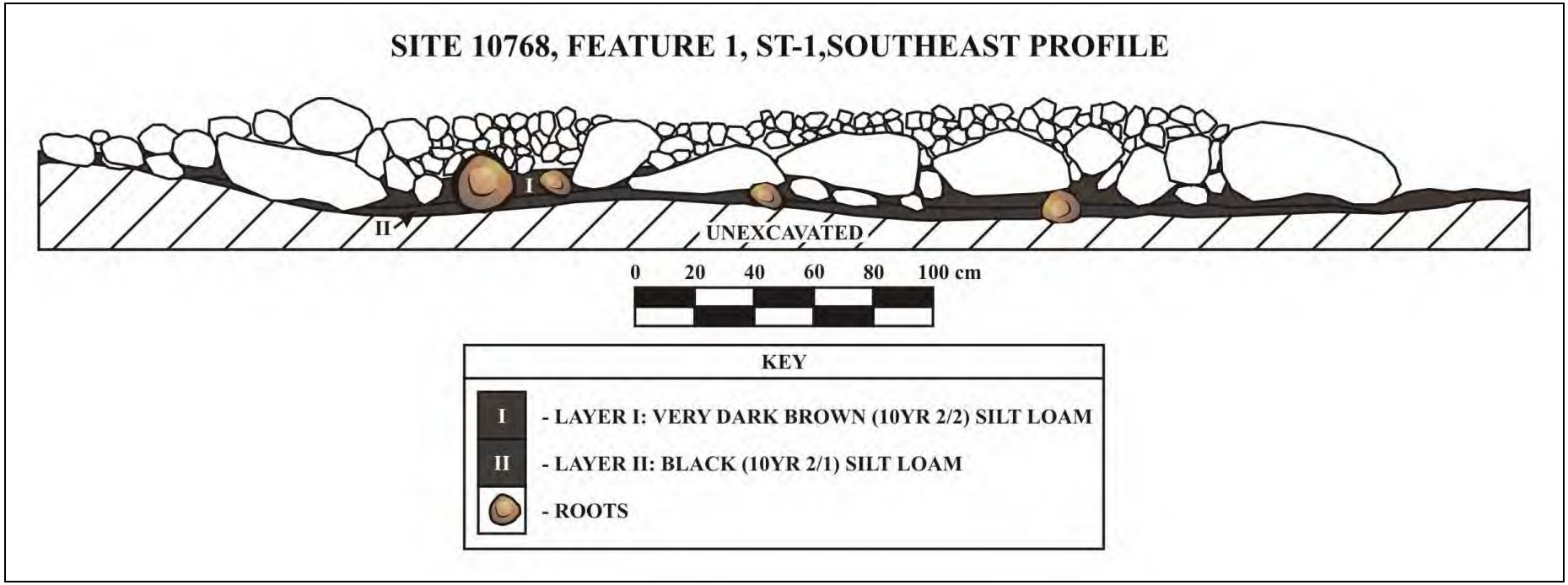


Figure 93: Site 10768, Feature 1, ST-1, Southeast Profile.

producing only a moderate amount of marine shell, demonstrated a subsurface feature in addition to a shell button. The lack of artifactual remains in both of these level soil areas points to their use primarily as cooking areas.

Two units placed directly on the architecture at Site 10690 were EU-9, a 1.0 by 0.5 m unit located on the architecture of Feature 2, and EU-17, a 1.0 by 1.0 m unit placed on the architecture of Feature 3. While EU-9 produced only a minor amount of charcoal, EU-17 yielded charcoal in significantly higher amounts but only a small amount of marine shell.

The final unit excavated at this site was EU-22, a 1.0 by 1.0 m unit placed in a barely discernable terrace, adjacent and to the south of Feature 6. This unit was predicated by, and incorporated SP-8 and produced similar results – minor amounts of volcanic glass and marine shell.

In summation, activities at Site 10690 would appear to focus on the features themselves (which includes their level soil areas), rather than those areas adjacent to the features. Food preparation on these areas also implies a habitation close by. Feature 6 was already determined as one of these, but Feature 1, which may have enclosed an organic habitation structure, may also have been one.

Site 10706

Of the 18 shovel probes excavated at Site 10706, a large enclosure with a modified outcrop in its interior, only 5 did not produce any cultural material. Virtually all of these negative SPs were located outside of the enclosure, and only 3 of the SPs outside of the Feature produced any material at all. Each of the probes outside of the feature that produced material, however, only produced a single piece of volcanic glass each. This contrasts greatly with the situation inside of the enclosure.

Although the 10 shovel probes and 5 excavation units located within the interior of the feature yielded large quantities of cultural material, there was no clear patterning to this material other than quantities increasing in the lower elevations of the feature. This phenomenon can easily be explained, however, by natural colluvial action. While EU-3 produced a substantial amount of charcoal and SP-D4 produced a remarkable amount of volcanic glass, no clear subsurface features were revealed during excavation and the artifactual material at the site, chiefly volcanic glass, co-occurred in near equal measure with midden material. Artifacts other than volcanic glass were sparse, but of note was a single piece of branch coral, an adze and a hammerstone. A fair amount of vertebrate remains were recovered as midden, including the remains of a juvenile pig recovered from EU-5, but the vast majority of it was marine shell.

In concluding this discussion of Site 10706, it appears that this site presents little data towards answering the primary question posed for permanent habitation sites - that of the nature of inter- feature area use.

Site 10735

While Site 10735 exhibited features both above and below the ground surface, data recovery focused on 2 surface features on the edge of the cave and 3 features in the caves

interior. Excavations consisted of 4 excavation units and 3 stratigraphic trenches and units were placed in all 5 of the caves identified features. EU-1 was placed in Feature 2, EU-2 placed in Feature 1, EU-3 placed in Feature 5, EU-4 and ST-2 placed in Feature 4 and ST-1 placed in Feature 3.

Feature 2 was identified as a small platform with a boulder and cobble surface located just above the west edge of the caves southern opening. Excavation of EU-1 yielded a moderate, but varied amount of marine shell, 3 volcanic glass flakes and a moderate amount of charcoal.

Feature 1 was described as another irregular shaped platform on the opposite side of the caves southern opening that had a small depression in its center. Excavation of EU-2 only produced a minor amount of charcoal.

Feature 5, in which EU-3 was placed was determined to be a pavement, rather than a ramp, as previously described and yielded only small amounts of fish bone, marine shell and charcoal.

Feature 4 was determined to be more complex than previously described and included a notched platform along with a slab faced pebble pavement. EU-4, placed on the platform produced nothing, but ST-2 placed through the pebble pavement proved to be the most productive excavation at the site yielding significant amounts of marine shell, large quantities of charcoal, 4 pieces of volcanic glass and a basalt flake.

Feature 3, located in the cave's southern opening and originally described as a 2 tiered platform, did not prove to be much of a feature at all. Stratigraphic trench 1, however, produced a fair amount of charcoal but only a minimal amount of marine shell.

When one looks at this data, it soon becomes apparent that calling this site a permanent habitation is somewhat debatable. Although there was a significant amount of modification to the caves interior, the only feature that produced any significant quantities of cultural material was the slab retained pebble pavement of Feature 4. The large trench excavated in this feature, while yielding significant amounts of charcoal and midden, only produced a minor amount of artifacts. It would consequently appear that this site would more appropriately be called a temporary habitation.

Site 10737

While 32 shovel probes were excavated at Site 10737, only 9 produced cultural material and 6 out of these 9 only yielded minor to moderate amounts of charcoal. Ceramics, however, were recovered from 2 of the probes and SP-E6 contained a small amount of marine shell.

The current study also placed four 1.00 by 2.00 m excavation units at Site 10737. These were placed east of Feature 1, a large historic enclosure, in the north portion of Feature 5, a vaguely defined low terrace with some paving, across the retaining element of Feature 3, another terrace, and at the junction of Features 3 and 4, a wall. EU-1, the unit placed north of Feature 1, revealed a single soil layer overlying bedrock and produced only a moderate amount of charcoal. EU-2, the unit in Feature 5, demonstrated 2 layers and yielded nothing else but historic ceramics.

EU-3, placed in Feature 3 also had 2 layers but only produced a single marine shell and charcoal. Lastly, EU-4, placed at the junction of Features 3 and 4, was excavated as a single layer but was the most productive of these 4 units containing significant amounts of metal and marine shell.

From the data described above it is fairly obvious that the shovel probes in this study did not identify any substantial subsurface activity areas and therefore did not shed much light on how the areas between surface features functioned. The stratigraphy of the site was also minimal, with each EU revealing a maximum of 2 layers. Historic artifacts were found in both of these layers, and although marine shell also occurred at the site, no traditional artifacts were observed. Consequently, regarding the specific research question posed for the data recovery of this site, the data provides no evidence for an underlying pre-Contact component.

Sites 10742 and 10758

The data recovery program at these 2 sites took the form of 3 excavation units and 2 stratigraphic trenches, 2 EUs and 1 ST placed in Site 10742, and 1 EU with 1 ST placed in Site 10758.

At Site 10742, ST-1 and EU-1 were placed in Feature 1, little more than a pile of unsorted rock located just under the drip line of the caves easternmost opening and spanning its entire width. A fair amount of surface midden had been noted in previous investigations, and visible soil had an ashy appearance. Stratigraphic trench 1 was excavated first and produced a moderate amount of marine shell, some fish bone and a subsurface hearth. Because of this hearth, EU-1 was then expanded off the trench and produced similar material, but also yielded a single piece of volcanic glass.

Excavation Unit 2 was placed in Feature 2 of Site 10742, described as boulder and cobble pavement located under the caves westernmost entrance. EU-2 was a 1.00 by 1.00 m unit with a maximum depth of 0.89 m below surface that produced only small to moderate amounts of charcoal.

Feature 2 at Site 10758 was a complex of modifications located in the chamber immediatly east of the caves only opening. This feature exhibited at least 3 terraces, 2 of which were paved. EU-1 at this site was placed on the soil floor of the chamber and was not associated with any of the terraces. This unit was a 1.00 by 1.00 m excavation, taken to a maximum depth of 0.07 m below surface, but had a moderate amount of marine shell and 4 pieces of volcanic glass. ST-1 was then placed in the pavement of the northeastern terrace of this feature. This excavation was also shallow but yielded moderate amounts of marine shell and charcoal and small amounts of bird and fish bone. Of note, however, is that this ST also yielded a relatively large amount of urchin, 16 pieces of volcanic glass and a volcanic glass core.

The primary data recovery question addressed to these two sites was, due to their close proximity, what were their functional relationships. If one looks at the data above, it would consequently appear that they functioned as a single entity, with differing activities taking place within them. The amount of volcanic glass in Site 10758 would point toward some processing activity, while the presence of the hearth at 10742 indicates food preparation.

Site 10768

The final site to be included in this data recovery program as a permanent habitation was 10768, a large complex of 43 features which included 2 platforms and 2 enclosures thought to be habitations.

A total of 37 relatively shallow shovel probes were excavated at this site, with only 3 producing cultural material. Remarkably, none of these 3 were located in the vicinity of supposed habitation features, with 2 located at the extreme north portion of the site. Cultural material recovered from these probes, however, was not dense, and there was no indication of any subsurface features.

Controlled excavations at Site 10768 took the form of 5 EUs and 4 STs placed in the 4 suspected habitation features. These were features 1, 2, 6 & 7.

Feature 7, a small, faced, roughly oval enclosure had a single EU placed in its southeast portion adjacent to the wall. This unit, terminated at 0.50 m below surface, exhibited 3 soil layers. All of which contained midden material, although at most, moderate amounts. No artifactual material was recovered from this unit.

Feature 2, another larger, partially faced enclosure had EU-2 and ST-1 placed within it. EU-2 proved to be very shallow and contained a single piece of charcoal and a single marine shell. ST-1, however, was deeper and yielded marine shell, urchin, coral, charcoal and an adze fragment. But this material was also somewhat sparse.

Feature 6, a 3 component, bi-level platform, was the feature at the site with the most units placed in it, with EUs 3, 4 and 5 and STs 2 and 4. EU-3 was the first unit placed in this feature and was located in a paved, partially faced component in the Feature's northwestern area. This unit was taken to 0.84 m below surface and produced significant amounts of marine shell, fish bone, a minor amount of pig bone and moderate amounts of volcanic glass. Stratigraphic Trench 2 was a 1.00 by 5.00 m excavation placed so that it bisected the both levels of the feature and produced large quantities of material, including volcanic glass, marine shell, basalt debitage, bone, charcoal, ceramic fragments and a shell button. Importantly, the historic items occurred in both layers. EUs 4 and 5 were placed on either side of the northeastern end of Trench 2, in the uppermost level of Feature 6. EU-4 was the unit placed on the southeast side of the trench, extended in 2 layers to 0.91 below surface and yielded marine shell, fish and small mammal bone, volcanic glass and a shell scraper. No historic items were recovered from this unit, however. EU-5 was the unit placed on the opposite side of the trench and exhibited the same stratigraphy although it was considerably shallower. Cultural material was similar to EU-4, but in larger quantities. The only possible historic item from this unit was a piece of chert occurring in the lower portion of Layer I. ST-4 was the final excavation placed in Feature 6 and was a 1.00 by 2.50 m unit located so that it extended from the southern perimeter of the Feature's upper component, north. This excavation again exhibited 2 layers, extended to 0.89 m below surface and produced marine shell, volcanic glass, coral, charcoal, bone and waterworn rocks in moderate amount. No historical items were recovered, however.

Feature 1 was a quadrilateral, pebble and cobble paved platform with a rough C-shape attached to its northwest side. ST-1 was the only unit placed in this feature and was a 1.00 by 5.00 m excavation revealing an architectural layer with 2 underlying soil layers reaching a maximum depth of 0.39 m below surface. Cultural material from this excavation was very sparse, consisted of volcanic glass, marine shell and a piece of plastic and occurred only in Layer II.

In reviewing the above data, Site 10768 did not generate a significant amount of information toward our understanding of site use in the intervening areas between features, other than if this use did occur it left a relative lack of cultural material. Investigations at this site did, however, surprisingly demonstrate a historic component at least at one of the features. This may point toward a transitional period occupation of the site. Of the 4 features investigated, only Feature 7 did not generate any artifactual material and this fact leads one to suspect its classification as a habitation feature. The other investigated features, however, did produce the manufactured items consistent with what is presently thought to indicate habitation.

WATER COLLECTION CAVE SITES

A secondary research topic of Data Recovery was to explore the rarely-examined pre-Contact Hawaiian practice of collecting fresh water in caves. Inventory Survey results found six project area caves to contain imported botanical remnants: Sites 10718, 10721, 10729, 10751, 10753, and 10755. These remnants were directly associated with areas of ceiling drip and water erosion on rock. SCS archaeologists planned to submit viable samples of these botanical remnants, suspected to be decomposed water collection devices (*e.g.*, gourds) for radiocarbon analysis.

Such samples were collected, however, after processing, none of these samples produced material with structural integrity suitable for radiocarbon dating submission.

Under the hypothesis that the environment around several of these cave sites had not changed much in three centuries (in terms of altering rainfall patterns and topography), Data Recovery sought to gauge the amount of fresh water drip over a period of months at these interior cave sites. The project area contains no streams or springs that would have served as water collection points, thus the delayed drip within cave may have served as water collection areas in days and weeks following rains. This data could be useful in determining the frequency of possible use of these cave sites, and if they functioned as viable water sources at all.

Buckets were placed within these six sites as part of Data Recovery investigations. Results indicated enough output to show that caved drip may have served as a viable water collection method for tradition period inhabitants of the project area. However, without dated botanical samples from these particular drip areas of the site (*i.e.*, gourd / vessel remnants) serving as a link to a collection practice, no conclusive statements can be made.

REFERENCES

Barrera, W. Jr.
1988 *Kohanaiki, North Kona, Hawaii Island: Archaeological Excavations Interim Report*. Prepared for Richard M. Sato and Associates, Honolulu.

Barrera, W. Jr.
1991 *Kohanaiki, North Kona, Hawaii Island: Archaeological Inventory Survey and Data Recovery*. Prepared for Richard M. Sato and Associates, Honolulu.

Wolforth, T.R.,
2006a *Inventory Survey for 125 Acres in Keopu 3rd, North Kona District, Island of Hawaii: Investigations into the Kula and Kalu'ulu Zones of the Kona Field System Near Kailua*. SCS Project Number 601-1. Prepared for SCD Keopu. Scientific Consultant Services, Inc.

Wolforth, T.R.
2006b *Data Recovery Plan for Kaloko Heights including Interim Protection and Monitoring Plan: Kohanaiki and Kaloko Ahupua'a*. SCS Report 541 Data Recovery-2. Prepared for Paul Kay Kaloko Heights Associates, LLC. Scientific Consultant Services, Inc.

Wolforth, T.R., C. Monahan, K. Johnson, T. Paikuli-Campbell, and R. L. Spear
2005 *Archaeological Inventory Survey of the Northern Portion of the Kaloko Heights Project in Kohanaiki and Kaloko Ahupua'a: Settlement Pattern Investigations in the Southern Kekaha Middle Elevations*. SCS Report 455-AIS-2. Prepared for Stanford Carr, LLC. Scientific Consultant Services, Inc.

APPENDIX A: TOTAL CULTURAL MATERIAL RECOVERED

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
1A	10690	-	-	SP-1	-	-	-	-	Midden	Mshell	Drupa sp.	-	0.2	
1B	10690	-	-	SP-1	-	-	-	-	Midden	Coral	-	-	0.5	
1C	10690	-	-	SP-1	-	-	-	-	Midden	Charcoal	-	-	3.9	Fragmentary, from screen
2	10690	-	-	SP-2	-	-	-	-	Midden	Charcoal	-	-	7.5	
3A	10690	-	-	SP-8	-	-	-	-	Traditional	Flake	Vglass	2	-	
3B	10690	-	-	SP-8	-	-	-	-	Midden	Mshell	Cypraea sp.	-	0.2	
4A	10690	6	-	EU-22	I	4-24	-	-	Midden	Mshell	Cypraea sp.	-	0.4	
4B	10690	6	-	EU-22	I	4-24	-	-	Midden	Coral	-	-	0.9	
4C	10690	6	-	EU-22	I	4-24	-	-	Traditional	Flake	Vglass	2	-	
5	10690	6	-	EU-22	I	-	31	25 SW/34SE	Traditional	Flake	Vglass	1	-	
6A	10690	3	-	EU-17	I	-	89-117	-	Midden	Mshell	Drupa sp.	-	1.1	
6B	10690	3	-	EU-17	I	-	89-117	-	Midden	Mshell	Nerita sp.	-	0.3	
7	10690	3	-	EU-17	I	-	89-117	-	Midden	Charcoal	-	-	31.4	Fragmentary, but some pieces are large, weighing up to 1.0 g each
8	10690	4	-	EU-20 ext	II/1	10-20	-	-	Midden	Charcoal	-	-	6.4	
9A	10690	4	-	EU-20 ext	II/1	10-20	-	-	Midden	Mshell	Cypraea sp.	-	1.6	
9B	10690	4	-	EU-20 ext	II/1	10-20	-	-	Midden	Mshell	Nerita sp.	-	0.3	
9C	10690	4	-	EU-20 ext	II/1	10-20	-	-	Midden	Mshell	Cellana sp.	-	0.2	
9D	10690	4	-	EU-20 ext	II/1	10-20	-	-	Historic	Button	Mshell	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
10	10690	4	-	EU-20 ext	II/2	20-30	-	-	Midden	Charcoal	-	-	38	Several large pieces, up to 1.0 g, possibly identifiable for specie
11	10690	4	-	EU-20 ext	SSF 4.1	30-35	-	-	Midden	Mshell	Cypraea sp.	-	1.5	
12	10690	4	-	EU-20 ext	SSF 4.1	30-35	-	-	Midden	Charcoal	-	-	21.4	Many pieces over 0.5 g, large pieces up to 1.8g, possibly identifiable for specie
13	10690	4	-	EU-20 ext	SSF 4.1	30-35	-	-	Midden	Soil Sample	-	-	-	
14	10690	4	-	EU-20 ext	SSF 4.1	30-35	-	-	Midden	Charcoal	-	-	60.4	Large pieces range from 0.5-1.4 g, with good quality, probably identifiable for specie
15	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Charcoal	-	-	22.9	
16	10690	2	-	EU-10	I/2	20-30	-	-	Midden	Mshell	Cypraea sp.	-	0.7	
17	10690	2	-	EU-10	I/2	20-30	-	-	Midden	Charcoal	-	-	1.6	
18	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Charcoal	-	-	43.8	
19	10690	2	-	EU-10	I/3	10-20	-	-	Historic	Flake	chert	1		
20A	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Nerita sp.	-	5.3	
20B	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Drupa sp.	-	1.7	
20C	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.3	
20D	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Cypraea sp.	-	1.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
20E	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Littorina Pintado	-	0.3	
20F	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Mshell	Isognomon sp.	-	0.1	
20G	10690	2	-	EU-10	I/3	10-20	-	-	Midden	Coral	-	-	0.2	
21	10690	2	-	EU-10	I/2	15	-	-	Midden	Bird Feather	unknown	1	-	
22	10690	2	-	EU-10	I/2	15	-	-		Lithic	basalt	1		Probably not an artifact!
23A	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Nerita picea	-	11.3	
23B	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	5.7	
23C	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Isognomon sp.	-	1.8	
23D	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Neothais harpa	-	0.7	
23E	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Cypraea sp.	-	0.4	
23F	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Littorina Pintado	-	0.3	
23G	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Bone	Fishscale	1	-	
23H	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	unknown mshell	-	0.3	
23I	10690	2	-	EU-10	I/1	0-12	-	-	Midden	Mshell	Drupa sp.	-	1.9	
24	10690	1	-	EU-2	I/2	11-19	-	-	Midden	Charcoal	-	-	3.8	
25	10690	2	-	EU-9	I/1	0-19	-	-	Midden	Mshell	Cypraea sp.	-	1.1	
26	10690	2	-	EU-9	I/1	0-19	-	-	Midden	Charcoal	-	-	6	
39	10690	2	-	EU-9	I/3	21	-	-	VOID	-	Basalt	1	-	Waterworn-type cobble; manuport
27	10690	2	-	EU-10	I/2	10-15	-	-	Midden	Mshell	Nerita sp.	-	0.1	
28	10690	-	-	EU-10	I	0-25	-	-	Midden	Charcoal	-	-	23.9	
29	10690	-	-	EU-11	-	Surface	-	-	Midden	Coral	-	-	155.2	
30A	10690	-	-	EU-14	II/1	7-18	-	-	Midden	Mshell	Nerita polita	-	1.2	
30B	10690	-	-	EU-14	II/1	7-18	-	-	Midden	Mshell	Septifer sp.	-	0.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
30C	10690	-	-	EU-14	II/1	7-18	-	-	Midden	Mshell	Cypraea sp.	-	0.5	
31	10690	-	-	EU-14	II/1	7-18	-	-	Midden	Charcoal	-	-	18.2	Largest pieces 0.2-0.7 g, maybe identifiable for specie.
32	10690	-	-	EU-14	II/2	16-29	-	-	Midden	Charcoal	-	-	26.4	Largest pieces 05-1.0 g, fragmentary, but some may be identifiable
33	10690	-	-	EU-16	II/2	17-28	-	-	Midden	Charcoal	-	-	5.9	mostly small pieces under 0.1 g, one piece 0.6g. Specie? Maybe not…
34	10690	4	-	EU-16	II/3	24-34	-	-	Midden	Charcoal	-	-	4.6	highly fragmentary, with two pieces around 0.5 g
35	10690	4	-	EU-20	II/1	10-22	-	-	Midden	Charcoal	-	-	4.3	large pieces 0.2-0.4 g, with one piece of burnt kukui among the smaller pieces
36	10690	4	-	EU-20	II/2	21-31	-	-	Midden	Charcoal	-	-	13.9	two larger pieces, 0.4 to 0.6 g. Probably not specie identifiable
37A	10690	4	-	EU-20	I/2	21-31	-	-	Midden	Mshell	Nerita polita	-	0.4	
37B	10690	4	-	EU-20	I/2	21-31	-	-	Midden	Mshell	Nerita picea	-	0.2	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
38	10690	4	-	EU-20	II/3	30-39	-	-	Midden	Charcoal	-	-	18.8	largest pieces 0.4 to 0.9 g but these pieces have a lot of roots going through them. Among the smaller pieces are several pieces of burnt kukui.
1	10706	-	-	SP-A5	-	0-12	-	-	Traditional	Flake	Vglass	1	-	
2	10706	-	-	SP-B2	-	0-8	-	-	Traditional	Flake	Vglass	1	-	
3A	10706	-	-	SP-B3	-	0-19	-	-	Traditional	Flake	Vglass	3	-	
3B	10706	-	-	SP-B3	-	0-19	-	-	Midden	Coral		-	5.7	
3C	10706	-	-	SP-B3	-	0-19	-	-	Midden	Mshell	Cypraea sp.	-	3.4	
3D	10706	-	-	SP-B3	-	0-19	-	-	Midden	Mshell	Nerita picea	-	0.1	
3E	10706	-	-	SP-B3	-	0-19	-	-	Midden	Charcoal		-	7.2	
4	10706	-	-	SP-B5	-	0-10	-	-	Traditional	Flake	Vglass	5	-	
5A	10706	-	-	SP-C2	-	0-34	-	-	Traditional	Flake	Vglass	2	-	
5B	10706	-	-	SP-C2	-	0-34	-	-	Midden	Mshell	Echinoderm sp.	-	0.8	
5C	10706	-	-	SP-C2	-	0-34	-	-	Midden	Mshell	Cypraea sp.	-	12.7	
5D	10706	-	-	SP-C2	-	0-34	-	-	Midden	Mshell	Unknown	-	0.9	
6A	10706	-	-	SP-C3	-	0-23	-	-	Traditional	Flake	Vglass	22	-	
6B	10706	-	-	SP-C3	-	0-23	-	-	Midden	Mshell	Echinoderm sp.	-	1.4	
6C	10706	-	-	SP-C3	-	0-23	-	-	Midden	Mshell	Cellana sp.	-	2.1	
6D	10706	-	-	SP-C3	-	0-23	-	-	Midden	Mshell	Cypraea sp.	-	16.1	
6E	10706	-	-	SP-C3	-	0-23	-	-	Midden	Mshell	Unknown	-	0.4	
6F	10706	-	-	SP-C3	-	0-23	-	-	Midden	Charcoal		-	10.4	
7A	10706	-	-	SP-C4	-	0-22	-	-	Traditional	Flake	Vglass	72	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
7B	10706	-	-	SP-C4	-	0-22	-	-	Midden	Bone	Fish	2	0.2	
7C	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Cypraea sp.	-	7.2	
7D	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Echinoderm sp.	-	1.2	
7E	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Nerita picea	-	0.3	
7F	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Nerita polita	-	0.3	
7G	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Drupa sp.	-	0.6	
7H	10706	-	-	SP-C4	-	0-22	-	-	Midden	Mshell	Malleus regula	-	1.3	
7I	10706	-	-	SP-C4	-	0-22	-	-	Midden	Charcoal		-	1.3	
8	10706	-	-	SP-C5	-	0-10	-	-	Traditional	Flake	Vglass	2	-	
9	10706	-	-	SP-C6	-	-	-	-	Traditional	Flake	Vglass	1	-	
10A	10706	-	-	SP-D2	-	-	-	-	Traditional	Flake	Vglass	10	-	
10B	10706	-	-	SP-D2	-	-	-	-	Traditional	Core	Vglass	1	-	
10C	10706	-	-	SP-D2	-	-	-	-	Midden	Bone	Fish	-	0.4	
10D	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Echinoderm sp.	-	7.6	
10E	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Cellana sp.	-	2.7	
10F	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Isognomon sp.	-	1.5	
10G	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Nerita picea	-	0.1	
10H	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Cypraea sp.	-	29.4	
10I	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Littorina Pintado	-	<0.1	
10J	10706	-	-	SP-D2	-	-	-	-	Midden	Coral		-	15.9	
10K	10706	-	-	SP-D2	-	-	-	-	Midden	Mshell	Unknown	-	1.5	
10K	10706	-	-	SP-D2	-	-	-	-	Midden	Coral		-	27.9	
11A	10706	-	-	SP-D3	-	-	-	-	Midden	Mshell	Echinoderm sp.	-	5.8	
11B	10706	-	-	SP-D3	-	-	-	-	Midden	Mshell	Nerita picea	-	0.3	
11C	10706	-	-	SP-D3	-	-	-	-	Midden	Mshell	Cellana sp.	-	0.1	
11D	10706	-	-	SP-D3	-	-	-	-	Midden	Mshell	Drupa sp.	-	0.6	
11E	10706	-	-	SP-D3	-	-	-	-	Midden	Mshell	Cypraea sp.	-	20.9	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
11F	10706	-	-	SP-D3	-	-	-	-	Midden	Bone	Fish	-	0.5	
11G	10706	-	-	SP-D3	-	-	-	-	Midden	Bone	Bird	-	<0.1	
11H	10706	-	-	SP-D3	-	-	-	-	Traditional	Flake	Vglass	13	-	
11I	10706	-	-	SP-D3	-	-	-	-	Midden	Charcoal		-	28.6	
12A	10706	-	-	SP-D4	-	-	-	-	Traditional	Flake	Vglass	50	-	
12B	10706	-	-	SP-D4	-	-	-	-	Midden	Charcoal		-	0.3	
12C	10706	-	-	SP-D4	-	-	-	-	Midden	Bone	Fish	-	<0.1	
12D	10706	-	-	SP-D4	-	-	-	-	Midden	Mshell	Unknown	-	0.3	
12E	10706	-	-	SP-D4	-	-	-	-	Midden	Coral		-	2.5	
13	10706	-	-	SP-D5	-	-	-	-	Midden	Mshell	Cypraea sp.	-	0.5	
14A	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Traditional	Flake	Vglass	31	-	Block A
14B	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Charcoal		-	10.1	Block A/ Fragmentary, with 2 large pieces weighing around 1 gram
14C	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Mshell	Cypraea sp.	-	10.4	Block A
14D	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Mshell	Echinoderm sp.	-	0.6	Block A
14E	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Mshell	Nerita picea	-	0.3	Block A
14F	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Mshell	Drupa sp.	-	0.3	Block A
14G	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Mshell	unknown	-	0.5	Block A
14H	10706	1	-	EU-2	II/1	5/15-8/31	-	-	Midden	Bone	Fish	-	<0.1	Block A
15A	10706	1	-	EU-2	II/1	4/10-5/13	-	-	Traditional	Flake	Vglass	31	-	Block B

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
15B	10706	1	-	EU-2	II/1	4/10-5/13	-	-	Midden	Mshell	Cypraea sp.	-	3.1	Block B
16	10706	1	-	EU-3	I/1	0-4	-	-	Traditional	Flake	Vglass	3	-	Block A
17A	10706	1	-	EU-3	II/1	4-15	-	-	Traditional	Flake	Vglass	8	-	Block A
17B	10706	1	-	EU-3	II/1	4-15	-	-	Traditional	Flake	basalt	1	-	Block A/ Polished Flake
17C	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Charcoal		-	16.7	Block A/ one large, high quality piece, weighing 1.3 g, may be identifiable for specie. Also, two other pieces weighing about 0.5 g
17D	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Cypraea sp.	-	5.3	Block A
17E	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Nerita polita	-	0.6	Block A
17F	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Drupa sp.	-	2.6	Block A
17G	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	Block A
17H	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Cellana sp.	-	<0.1	Block A
18A	10706	1	-	EU-3	III/1	15-26	-	-	Traditional	Flake	Vglass	13	-	Block A
18B	10706	1	-	EU-3	III/1	15-26	-	-	Midden	Charcoal		-	144.4	Block A/ several large pieces, weighing up to 2.6 g. Possibly identifiable for specie. The remainder fragmentary.
18C	10706	1	-	EU-3	III/1	15-26	-	-	Midden	Mshell	Cypraea sp.	-	5.8	Block A
18D	10706	1	-	EU-3	III/1	15-26	-	-	Midden	Mshell	Cellana sp.	-	1.6	Block A

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
18E	10706	1	-	EU-3	III/1	15-26	-	-	Midden	Mshell	Cypraea sp.	-	1.5	Block A
18F	10706	1	-	EU-3	III/1	15-26	-	-	Midden	Mshell	Nerita polita	-	1.3	Block A
19A	10706	1	-	EU-3	III/2	24-28	-	-	Traditional	Flake	Vglass	2	-	Block A
19B	10706	1	-	EU-3	III/2	24-28	-	-	Midden	Charcoal		-	26.6	Block A/ Mostly small fragments, with largest pieces just under 1.0 g
19C	10706	1	-	EU-3	III/2	24-28	-	-	Midden	Mshell	Cypraea sp.	-	0.6	Block A
19D	10706	1	-	EU-3	III/2	24-28	-	-	Midden	Coral	-	-	1	Block A
20	10706	1	-	EU-3	I/1	0-5	-	-	Traditional	Flake	Vglass	2	-	Block B
21A	10706	1	-	EU-3	II/1	4-15	-	-	Traditional	Flake	Vglass	16	-	Block B
21B	10706	1	-	EU-3	II/1	4-15	-	-	Traditional	hammer stone	basalt	1	-	Block B/ possible tool?
21C	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Cypraea sp.	-	8	Block B
21D	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Mshell	Echinoderm sp.	-	0.2	Block B
21E	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Coral		-	0.7	Block B
21F	10706	1	-	EU-3	II/1	4-15	-	-	Midden	Charcoal		-	2.1	Block B/ small, fragmented specimen
22A	10706	1	-	EU-3	III/1	9-20	-	-	Traditional	Flake	Vglass	16	-	Block B
22B	10706	1	-	EU-3	III/1	9-20	-	-	Midden	Charcoal		-	92.4	Block B/ most of the fragments of this sample are weigh around 0.5 g, with the largest pieces over 1.0 g
22C	10706	1	-	EU-3	III/1	9-20	-	-	Midden	Mshell	Cypraea sp.	-	9	Block B
22D	10706	1	-	EU-3	III/1	9-20	-	-	Midden	Mshell	Isognomon sp.	-	0.4	Block B
22E	10706	1	-	EU-3	III/1	9-20	-	-	Midden	Mshell	Echinoderm	-	0.1	Block B

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
											sp.			
23A	10706	1	-	EU-3	III/2	20-42	-	-	Traditional	Flake	Vglass	2	-	Block B
23B	10706	1	-	EU-3	III/2	20-42	-	-	Midden	Charcoal		-	16.9	Block B/ most pieces weigh between 0.5 and 1.3 g
23C	10706	1	-	EU-3	III/2	20-42	-	-	Midden	Mshell	Echinoderm sp.	-	0.4	Block B
23D	10706	1	-	EU-3	III/2	20-42	-	-	Midden	Mshell	Cypraea sp.	-	4.6	Block B
24	10706	1	-	EU-4	II/A		22	52 NW, 26W	Traditional	adze	basalt	1	-	
25A	10706	1	-	EU-4	I/1	0-10	-	-	Traditional	Flake	Vglass	2	-	
25B	10706	1	-	EU-4	I/1	0-10	-	-	Midden	Charcoal		-	1.8	
25C	10706	1	-	EU-4	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	1.2	
26A	10706	1	-	EU-4	II/1	8-21	-	-	Traditional	Flake	Vglass	14	-	
26B	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Charcoal		-	21.6	Several large pieces, up to 1.7 g, probably identifiable for specie.
26C	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Mshell	Cypraea sp.	-	7.9	
26D	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Mshell	Echinoderm sp.	-	1.3	
26E	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Mshell	Nerita picea	-	0.4	
26F	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Mshell	Drupa sp.	-	2.1	
26G	10706	1	-	EU-4	II/1	8-21	-	-	Midden	Bone		-	<0.1	
27A	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Charcoal		-	12.5	
27B	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Mshell	Cypraea sp.	-	13	
27C	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Mshell	Drupa sp.	-	2.5	
27D	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Mshell	Echinoderm sp.	-	2.1	
27E	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Bone	Fish	-	<0.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
27F	10706	1	-	EU-4	II/A	10-34	-	-	Midden	Bone		-	0.3	
28	10706	1	-	EU-4	II		33	30 SW	Traditional	abrader	Coral	1	-	along south wall, possible abrader, scraper or blade
29	10706	1	-	EU-4	II		36	13W, 16S	Traditional	hammer stone		1	-	possible?
30A	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	Cypraea sp.	-	14.9	
30B	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	Echinoderm sp.	-	8.5	
30C	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	Cellana sp.	-	0.9	
30D	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	Isognomon sp.	-	0.3	
30E	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	conus sp.	-	0.5	
30F	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Mshell	Drupa sp.	-	1.2	
30G	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Bone	fish	-	45.3	
30H	10706	1	-	EU-4	II/2	21-32	-	-	Traditional	Flake	Vglass	2	-	
30I	10706	1	-	EU-4	II/2	21-32	-	-	Midden	Charcoal	-	-	14.5	Most pieces 0.2 to 0.4 g, charcoal is slightly damp.
31A	10706	1	-	EU-4	II/3	30-42	-	-	Traditional	Flake	Vglass	8	-	
31B	10706	1	-	EU-4	II/3	30-42	-	-	Traditional	Debitage	Basalt	1	-	
31C	10706	1	-	EU-4	II/3	30-42	-	-	Traditional	abrader	Coral	1	-	
31D	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Bone	mammal	-	6.7	
31E	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Bone	fish	-	2.2	
31F	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Isognomon sp.	-	0.5	
31G	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Cellana sp.	-	5.3	
31H	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Nerita picea	-	1	
31I	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	conus sp.	-	1.9	
31J	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Drupa sp.	-	0.3	
31K	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Cypraea sp.	-	18.2	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
31L	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Mshell	Echinoderm sp.	-	34.9	
31M	10706	1	-	EU-4	II/3	30-42	-	-	Midden	Charcoal		-	34.5	most pieces small, but largest are up to 1.5 g, possibly identifiable for specie
32A	10706	1	-	EU-4	III	30-57	-	-	Midden	Mshell	Echinoderm sp.	-	22	
32B	10706	1	-	EU-4	III	30-57	-	-	Midden	Mshell	Cypraea sp.	-	12.9	
32C	10706	1	-	EU-4	III	30-57	-	-	Midden	Mshell	Crustacean	-	0.3	
32D	10706	1	-	EU-4	III	30-57	-	-	Midden	Bone	mammal	-	0.7	
32E	10706	1	-	EU-4	III	30-57	-	-	Midden	Bone	fish	-	0.1	
32F	10706	1	-	EU-4	III	30-57	-	-	Midden	Bone	bird	-	0.2	?
32G	10706	1	-	EU-4	III	30-57	-	-	Midden	Mshell	Nerita sp.	-	<0.1	
32H	10706	1	-	EU-4	III	30-57	-	-	Midden	Mshell	cellana sp.	-	0.3	
32I	10706	1	-	EU-4	III	30-57	-	-	Midden	charcoal		-	13.9	most pieces range from 0.3 to 0.7 g
33	10706	1	-	EU-1	II/1	9-20	-	-	Traditional	Flake	Vglass	6	-	
34A	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Mshell	Cypraea sp.	-	2.4	
34B	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Mshell	Drupa sp.	-	1.0	
34C	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Mshell	Nerita sp.	-	0.2	
34D	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
34E	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Mshell	conus sp.	-	1.2	
35A	10706	1	-	EU-1	II/1	9-20	-	-	Midden	Charcoal	-	-	4.4	A few larger pieces up to 0.5g
35B	10706	1	-	EU-1	II/1	9-20	-	-	Traditional	Flake	Vglass	1	-	
36	10706	1	-	EU-1	II/2	20-29	-	-	Midden	Charcoal	-	-	0.4	
37	10706	1	-	EU-5B	I/1	0-11	-	-	Midden	Mshell	Cypraea sp.	-	1.3	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
38A	10706	1	-	EU-5B	I/1	0-10	-	-	Traditional	Flake	Vglass	5	-	
38B	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	0.9	
38C	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	0.3	
38D	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Mshell	Drupa sp.	-	0.7	
38E	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Mshell	Isognomon sp.	-	<0.1	
38F	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Charcoal	-	-	1.3	
38G	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Bone	fish	1	0.4	
39	10706	1	-	EU-5B	I/1	0-10	-	-	Midden	Charcoal	-	-	0.4	
40A	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Cypraea sp.	-	60.4	
40B	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Nerita picea	-	0.7	
40C	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Echinoderm sp.	-	0.9	
40D	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Drupa sp.	-	2.4	
40E	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Cellana sandwichensis	-	4.5	
40F	10706	1	-	EU-5A	II/1	11-23	-	-	Traditional	Flake	Vglass	11	-	
41A	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Charcoal	-	-	0.3	
41B	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Echinoderm sp.	-	0.2	
41C	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Mshell	Cypraea sp.	-	0.2	
41D	10706	1	-	EU-5A	II/1	11-23	-	-	Traditional	Flake	Vglass	1	-	
42A	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Mshell	Echinoderm sp.	-	5.5	
42B	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Mshell	Isognomon sp.	-	2.3	
42C	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Mshell	Nerita picea	-	0.4	
42D	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Mshell	Cypraea sp.	-	35.2	
42E	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Mshell	conus sp.	-	5.5	
42F	10706	1	-	EU-5B	II/1	11-22	-	-	Traditional	Flake	Vglass	14	-	
42G	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Bone	fish	1	0.7	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
43	10706	1	-	EU-5A	II/1	11-23	-	-	Traditional	Branch Coral	-	1	10.8	
44	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Charcoal	-	-	10.1	
45	10706	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID		VOID	Non-artifactual rock
46	10706	1	-	EU-5A	II/1	11-23	-	-	Midden	Charcoal	-	-	10.1	larger pieces up to 0.7g
47	10706	1	-	EU-5B	II/1	11-22	-	-	Midden	Charcoal	-	-	7.6	on closer examination this sample looks like badly burnt bone and marine shell, the larges piece weighing 3.1g
48A	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Mshell	Cypraea sp.	-	15.9	
48B	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Mshell	Cellana sp.	-	15.9	
48C	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Mshell	Echinoderm sp.	-	0.3	
48D	10706	1	-	EU-5B	II/2	20-31	-	-	Traditional	Flake	Vglass	2	-	
48E	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Mshell	Drupa sp.	-	1.0	
48F	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Mshell	non diagnostic	-	1.5	
48G	10706	1	-	EU-5B	II/2	20-31	-	-	Midden	Bone	Bird	2	3.1	MNI=1
49A	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	conus sp.	-	7.7	
49B	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Echinoderm sp.	-	4.4	
49C	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Nerita polita	-	1.2	
49D	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Nerita picea	-	0.3	
49E	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Drupa sp.	-	4.6	
49F	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Cypraea sp.	-	18.5	
49G	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Mshell	Tellina sp.	-	2.0	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
49H	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Bone	mammal	12	5.1	MNI=1
49I	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Bone	Fish	14	1.9	MNI=1
49J	10706	1	-	EU-5A	II/2	20-32	-	-	Traditional	Flake	Vglass	5	-	
49K	10706	1	-	EU-5A	II/2	20-32	-	-	Traditional	Abrader	Echinoderm sp.	1	0.5	
49L	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Charcoal	-	-	0.2	
50	10706	1	-	EU-5A	II/2	20-32	-	-	Midden	Charcoal	-	-	6.1	A few larger pieces up to 0.9g
51A	10706	1	-	EU-5B	III	31-41	-	-	Midden	Mshell	Cypraea sp.	-	1.8	
51B	10706	1	-	EU-5B	III	31-41	-	-	Midden	Mshell	Drupa sp.	-	0.5	
51C	10706	1	-	EU-5B	III	31-41	-	-	Midden	Mshell	Cellana sandwichensis	-	<0.1	
51D	10706	1	-	EU-5B	III	31-41	-	-	Midden	Bone	Fish	1	1.6	
51E	10706	1	-	EU-5B	III	31-41	-	-	Midden	Bone	mammal	1	0.7	
52	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Charcoal	-	-	12.2	larger pieces up to 1.2g
53	10706	1	-	EU-5B	III	31-41	-	-	Midden	Charcoal	-	-	2.8	
54A	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Mshell	Cypraea sp.	-	16.2	
54B	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Mshell	Echinoderm sp.	-	1.7	
54C	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Mshell	Cellana sp.	-	0.6	
54D	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Mshell	Isognomon sp.	-	0.1	
54E	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Mshell	Drupa sp.	-	4.3	
54F	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Coral	-	-	5.9	
54G	10706	1	-	EU-5A	III/1	31-42	-	-	Midden	Bone	Sus scrofa	50	28.4	juvenile
54H	10706	1	-	EU-5A	III/1	31-42	-	-	Traditional	Flake	Vglass	4	-	
55	10706	1	-	EU-5A	III/2	38-55	-	-	Midden	Charcoal	-	-	6.7	most pieces range from 0.2-0.6 g
56A	10706	1	-	EU-5A	III/2	35-55	-	-	Midden	Mshell	Cypraea sp.	-	14.5	
56B	10706	1	-	EU-5A	III/2	35-55	-	-	Midden	Mshell	Echinoderm	-	0.3	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
											sp.			
56C	10706	1	-	EU-5A	III/2	35-55	-	-	Midden	Mshell	conus sp.	-	0.5	
56D	10706	1	-	EU-5A	III/2	35-55	-	-	Midden	Bone	Fish	5	0.8	MNI=1
56E	10706	1	-	EU-5A	III/2	35-55	-	-	Midden	Bone	mammal	1	1.6	
56F	10706	1	-	EU-5A	III/2	35-55	-	-	Traditional	Flake	Vglass	1	-	
57A	10706	1	-	EU-2A	I	0-8	-	-	Traditional	Flake	Vglass	20		
57B	10706	1	-	EU-2A	I	0-8	-	-	Midden	Mshell	Cypraea sp.	-	3.6	
57C	10706	1	-	EU-2A	I	0-8	-	-	Midden	Mshell	Drupa sp.	-	1.5	
57D	10706	1	-	EU-2A	I	0-8	-	-	Midden	Mshell	conus sp.	-	0.5	
57E	10706	1	-	EU-2A	I	0-8	-	-	Midden	Coral	-	-	0.4	
58A	10706	1	-	EU-2B	I	0-5	-	-	Traditional	Flake	Vglass	41	-	
58B	10706	1	-	EU-2B	I	0-5	-	-	Midden	Mshell	Cypraea sp.	-	4.1	
59A	10706	1	-	EU-2A	II	8-31	-	-	Traditional	Flake	Vglass	63	-	
59B	10706	1	-	EU-2A	II	8-31	-	-	Midden	Mshell	Cypraea sp.	-	8.5	
59C	10706	1	-	EU-2A	II	8-31	-	-	Midden	Mshell	Echinoderm sp.	-	0.3	
59D	10706	1	-	EU-2A	II	8-31	-	-	Midden	Mshell	conus sp.	-	0.7	
59E	10706	1	-	EU-2A	II	8-31	-	-	Midden	Mshell	Nerita picea	-	0.1	
59F	10706	1	-	EU-2A	II	8-31	-	-	Midden	Coral	-	-	1.7	
59G	10706	1	-	EU-2A	II	8-31	-	-	Midden	Mshell	non diagnostic	-	0.3	
59H	10706	1	-	EU-2A	II	8-31	-	-	Midden	Charcoal	-	-	2.5	
60A	10706	1	-	EU-1	I	0-10	-	-	Midden	Mshell	Cypraea sp.	-	4.8	
60B	10706	1	-	EU-1	I	0-10	-	-	Midden	Mshell	Drupa sp.	-	-	
61	10706	1	-	EU-1	I	0-10	-	-	Traditional	Flake	Vglass	5	-	
62	10706	-	-	SP-E3	I	-	-	-	Traditional	Flake	Vglass	1	-	
1	10718	-	-	Surface	-	-	-	-	Midden	Charcoal	-	-	13.1	Cave floor, Bag C1
2	10718	-	-	Surface	-	-	-	-	Midden	Charcoal	-	-	27.6	Cave floor, Bag C2
3	10718	-	-	Surface	-	-	-	-	Midden	Kukui	-	2	6	non-burnt, Cave floor, Bag C3

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
4	10718	-	-	Surface	-	-	-	-	Midden	Charcoal	-	-	6	Cave floor, Bag C4
5	10718	-	-	Surface	-	-	-	-	Midden	Kukui	-	-	0.1	burnt, but seriously crushed, possibly dirt?? Cave floor, Bag C5
6	10718	-	-	Surface	-	-	-	-	Midden	Charcoal	-	-	2	Cave floor, Bag C6
7	10718	-	-	Surface	-	-	-	-	Midden	Charcoal	-	-	1.7	Cave floor, Bag C7
8	10718	-	-	Surface	-	-	-	-	Midden	Kukui	-	4	21.9	non-burnt, Cave floor, Bag C8
1A	10734	1	-	EU-1A	I/1	0-10	17-32	-	Traditional	Flake	Vglass	52	-	
1B	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	Cypraea sp.	-	4.4	
1C	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	Echinoderm sp.	-	2.1	
1D	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	Isognomon sp.	-	0.5	
1E	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	conus sp.	-	0.2	
1F	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	Nerita picea	-	<0.1	
1G	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	Drupa sp.	-	0.8	
1H	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Mshell	non diagnostic	-	0.5	
1I	10734	1	-	EU-1A	I/1	0-10	17-32	-	Midden	Charcoal	-	-	0.9	
2A	10734	1	-	EU-1A	I/2	-	27-36	-	Traditional	Flake	Vglass	15	-	
2B	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Cypraea sp.	-	4.8	
2C	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Isognomon sp.	-	0.3	
2D	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Echinoderm sp.	-	0.6	
2E	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Trochus sp.	-	<0.1	
2F	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Nerita picea	-	0.3	
2G	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	Nerita sp.	-	0.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
2H	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Mshell	non diagnostic	-	0.8	
2I	10734	1	-	EU-1A	I/2	-	27-36	-	Midden	Charcoal	-	-	2.1	
3A	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Mshell	Cypraea sp.	-	5.9	
3B	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Mshell	Drupa sp.	-	2.1	
3C	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Mshell	Echinoderm sp.	-	0.1	
3D	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Mshell	Nerita polita	-	0.4	
3E	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Coral	-	-	1.5	
3F	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Bone	mammal	1	1.9	
3G	10734	1	-	EU-1A	II/1	-	29-49	-	Traditional	Flake	Vglass	16	-	
3H	10734	1	-	EU-1A	II/1	-	29-49	-	Traditional	Core	Vglass	1	-	
3I	10734	1	-	EU-1A	II/1	-	29-49	-	Midden	Charcoal	-	-	2.1	Pieces are small, largest being 0.3g
4A	10734	1	-	EU-1A	II/2	-	45-56	-	Midden	Charcoal	-	-	0.8	
4B	10734	1	-	EU-1A	II/2	-	45-56	-	Midden	Mshell	Cypraea sp.	-	0.9	
5	10734	1	-	EU-1A	II/3	56	-	-	Traditional	Flake	Vglass	1	-	
6A	10734	1	-	EU-1B	I/1	0-10	-	-	Traditional	Flake	Vglass	59	-	
6B	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	1.9	
6C	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	1.9	
6D	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Isognomon sp.	-	0.9	
6E	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Nerita polita	-	0.2	
6F	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Nerita picea	-	0.4	
6G	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	Drupa sp.	-	0.2	
6H	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	conus sp.	-	0.4	
6I	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Mshell	non diagnostic	-	0.8	
6J	10734	1	-	EU-1B	I/1	0-10	-	-	Traditional	Abrader	Coral	1	2.3	
6K	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Bone	Sus scrofa	1	0.2	
6L	10734	1	-	EU-1B	I/1	0-10	-	-	Midden	Charcoal	-	-	1.7	
7A	10734	1	-	EU-1B	I/2	-	25-32	-	Traditional	Flake	Vglass	4	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
7B	10734	1	-	EU-1B	I/2	-	25-32	-	Midden	Mshell	Isognomon sp.	-	0.1	
7C	10734	1	-	EU-1B	I/2	-	25-32	-	Midden	Mshell	Echinoderm sp.	-	0.1	
7D	10734	1	-	EU-1B	I/2	-	25-32	-	Midden	Charcoal	-	-	0.2	
8A	10734	1	-	EU-1B	II/1	-	27-42	-	Traditional	Flake	Vglass	18	-	
8B	10734	1	-	EU-1B	II/1	-	27-42	-	Midden	Mshell	Cypraea sp.	-	0.8	
8C	10734	1	-	EU-1B	II/1	-	27-42	-	Midden	Mshell	non diagnostic	-	0.1	
8D	10734	1	-	EU-1B	II/1	-	27-42	-	Midden	Charcoal	-	-	0.2	
9A	10734	1	-	EU-1B	II/2	-	39-42	-	Midden	Mshell	Cypraea sp.	-	1.6	
9B	10734	1	-	EU-1B	II/2	-	39-42	-	Traditional	Flake	Vglass	12	-	
10	10734	1	-	EU-1B	I	-	33	36-50 NW, 5 SE from E corner	Midden	Bone	Large Mammal	1	35.1	Artifact #1
11	10734	1	-	EU-3	II	1	34-43	-	Traditional	Flake	Vglass	1	-	
12	10734	1	-	EU-4	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	0.7	
13	10734	2	-	EU-2A	I/1	0-14	-	-	Midden	Mshell	Drupa sp.	-	2	
14	10734	2	-	EU-2A	I/1	0-14	-	-	Traditional	Flake	Vglass	1	-	
15	10734	2	-	EU-2A	II/1	16	-	-	Traditional	Ornament	Coral	-		Possible Coral onament, small hole drilled in one side
16	10734	2	-	EU-2A	II/1	12-20	-	-	Traditional	Flake	Basalt	1	-	
17A	10734	2	-	EU-2A	II/1	12-23	-	-	Midden	Charcoal	-	-	0.9	largest piece 0.3g
17B	10734	2	-	EU-2A	II/1	12-23	-	-	Midden	Charcoal	-	-	0.9	very small pieces
17C	10734	2	-	EU-2A	II/1	12-23	-	-	Midden	Charcoal	-	-	0.8	largest piece 0.3g
18	10734	2	-	EU-2A	II/1	18-31	-	-	Traditional	Flake	Vglass	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
19	10734	2	-	EU-2B	I/1	0-14	-	-	Midden	Charcoal	-	-	0.1	
20	10734	2	-	EU-2B	II/1	12-23	-	-	Midden	Charcoal	-	-	0.4	
21	10734	2	2.1	EU-2B	-	15-23	-	-	Midden	Charcoal	-	-	2.6	Largest piece 0.6g
22	10734	2	2.1	EU-2A and -2B	-	23-48	-	-	Midden	Charcoal	-	-	7.4	most pieces are under 0.2g, but there is one piece weighing 0.9g
1A	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Mshell	Cypraea sp.	-	2.8	
1B	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Mshell	conus sp.	-	0.6	
1C	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Mshell	Echinoderm sp.	-	0.4	
1D	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Mshell	Drupa sp.	-	1.4	
1E	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Mshell	Isognomon sp.	-	0.5	
1F	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Coral	-	-	0.7	
1G	10735	2	-	EU-1A	I/1	-	112-132	-	Midden	Charcoal	-	-	6	
1H	10735	2	-	EU-1A	I/1	-	112-132	-	Traditional	Flake	Vglass	3	-	
2A	10735	2	-	EU-1B	I/1	-	110-135	-	Midden	Mshell	Cypraea sp.	-	9.3	
2B	10735	2	-	EU-1B	I/1	-	110-135	-	Midden	Charcoal	-	-	1.1	
3A	10735	2	-	EU-1B	II/1	-	124-??	-	Midden	Mshell	Cypraea sp.	-	11.8	
3B	10735	2	-	EU-1B	II/2	-	124-??	-	Midden	Mshell	Isognomon sp.	-	5.2	
3C	10735	2	-	EU-1B	II/3	-	124-??	-	Midden	Mshell	conus sp.	-	0.7	
3D	10735	2	-	EU-1B	II/4	-	124-??	-	Midden	Mshell	Echinoderm	-	0.8	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
											sp.			
3E	10735	2	-	EU-1B	II/5	-	124-??	-	Midden	Mshell	Drupa sp.	-	1	
3F	10735	2	-	EU-1B	II/6	-	124-??	-	Midden	Mshell	non diagnostic	-	0.2	
3G	10735	2	-	EU-1B	II/7	-	124-??	-	Midden	Charcoal	-	-	10.7	All pieces are small, under 0.3g
4	10735	1	-	EU-2	I/2	-	137-147	-	Midden	Charcoal	-	-	2.6	
5A	10735	4	-	TR-2	I	-	-	-	Midden	Mshell	Cypraea sp.	-	6.7	
5B	10735	4	-	TR-2	I	-	-	-	Midden	Mshell	Echinoderm sp.	-	0.6	
5C	10735	4	-	TR-2	I	-	-	-	Midden	Mshell	Drupa sp.	-	1.6	
5D	10735	4	-	TR-3	I	-	-	-	Midden	Charcoal	-	-	81.3	A lot of small pieces, with a few chunks over 1.0g, the largest being 1.5g; possibly identifiable for specie
6A	10735	5	-	EU-3	I	0-59	-	-	Midden	Bone	Fish	2	0.2	MNI=1
6B	10735	5	-	EU-4	I	0-59	-	-	Midden	Mshell	Isognomon sp.	-	0.5	
6C	10735	5	-	EU-5	I	0-59	-	-	Midden	Mshell	non diagnostic	-	0.6	
6D	10735	5	-	EU-6	I	0-59	-	-	Midden	Charcoal	-	-	9.9	
7	10735	3	-	TR-1	I/1	11-44	-	-	Midden	Charcoal	-	-	12.4	
8	10735	3	-	TR-1	I/2	27-56	-	-	Midden	Charcoal	-	-	6.7	
9	10735	3	-	TR-1	I/2	27-57	-	-	Midden	Mshell	Cypraea sp.	-	0.3	
10	10735	3	-	TR-1	II	38-82	-	-	Midden	Charcoal	-	-	16.3	Largest piece 1.2g, possibly identifiable for specie

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
11	10735	3	-	TR-1	II	80-82	-	-	Midden	Charcoal	-	-	56.6	A lot of very large pieces 3.0-5.0g each. Identifiable for specie
12A	10735	4	-	TR-2 ext	I	-	55-74	-	Midden	Mshell	Cypraea sp.	-	27.2	
12B	10735	4	-	TR-2 ext	I	-	55-75	-	Midden	Mshell	Echinoderm sp.	-	2	
12C	10735	4	-	TR-2 ext	I	-	55-76	-	Midden	Mshell	conus sp.	-	1	
12D	10735	4	-	TR-2 ext	I	-	55-77	-	Midden	Mshell	Trochus sp.	-	0.4	
12E	10735	4	-	TR-2 ext	I	-	55-78	-	Midden	Mshell	Nerita polita	-	1.6	
12F	10735	4	-	TR-2 ext	I	-	55-79	-	Midden	Mshell	non diagnostic	-	1.3	
12G	10735	4	-	TR-2 ext	I	-	55-80	-	Traditional	Flake	Vglass	4	-	
12H	10735	4	-	TR-2 ext	I	-	55-81	-	Traditional	Flake	Basalt	1	-	
12I	10735	4	-	TR-2 ext	I	-	55-82	-	Midden	Charcoal	-	-	131.8	
1	10737	-	-	SP-A3	II	29-46	-	-	Midden	Charcoal	-	-	0.7	
2A	10737	3	-	SP-B4	I	0-16	-	-	Historic	Ceramic	-	2	-	
2B	10737	3	-	SP-B4	II	17-30	-	-	Historic	Ceramic	-	8	-	
3	10737	3	-	SP-B5	II	11-23	-	-	Historic	Ceramic	-	2	-	
4	10737	3	-	SP-B3	II	12-38	-	-	Midden	Charcoal	-	-	1.4	small, fragmentary pieces, up to 0.3 g

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
5	10737	3	-	SP-E6	I	0-10	-	-	Midden	Mshell	Drupa sp.	-	0.2	
6	10737	3	-	SP-E6	I	10-18	-	-	Midden	Mshell	Cypraea sp.	-	1.4	
7	10737	-	-	SP-E8	I	19	-	-	Midden	Charcoal	-	-	<0.1	
8	10737	3	-	SP-D2	I	0-70	-	-	Midden	Charcoal	-	-	4.2	
9	10737	3	-	SP-2	II	21-40	-	-	Midden	Charcoal	-	-	0.1	
10	10737	3	-	SP-1	II	12-31	-	-	Midden	Charcoal	-	-	9.6	sample stored in a film canister--not a good C14 sample
11	10737	3	-	EU-2	I	-	32	32	Historic	Ceramic	-	1	-	
12	10737	3	-	EU-2	I	0-21	-	-	Historic	Ceramic	-	1	-	
13	10737	3	-	EU-2	II	33-60	-	-	Historic	Ceramic	-	1	-	
14	10737	3	-	EU-2	II/1	22-32	-	-	Historic	Ceramic	-	2	-	
15	10737	-	-	EU-1	I/2	10-20	-	-	Midden	Charcoal	-	-	9.4	Sample stored in hard plastic--not good for C14 sample. Largest piece weighs 2.3 g
16	VOID	VOID	-	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID	VOID	
17	10737	-	-	EU-1	I/1	0-10	-	-	Midden	Charcoal	-	-	3.2	Sample stored in hard plastic--not good for C14 sample. Largest piece weighs 1.2 g
18	10737	-	-	EU-1	I/2	10-24	-	-	Midden	Charcoal	-	-	4.2	Sample stored in film canister. Largest piece weighs 1.23 g.

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
19	10737	-	-	EU-1	I/3	20-24	-	-	Midden	Charcoal	-	-	2.4	Sample stored in hard plastic--not good for C14 sample. Largest pieces weigh between 0.2 and 0.5 g
20	10737	2/3	-	-	-	Surface	-	-	Historic	Ceramic	-	5	-	
21A	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Drupa sp.	-	34.8	
21B	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Cypraea sp.	-	3.5	
22	10737	2/3	-	-	-	Surface	-	-	Historic	Ceramic	-	5	-	
23	10737	2/3	-	-	-	Surface	-	-	Historic	Metal Frag	Ferrous	1	-	
24	10737	2/3	-	-	-	Surface	-	-	Historic	Ceramic	-	2		
25	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Drupa sp.	-	14.4	
26	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Drupa sp.	-	5.2	
27A	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Drupa sp.	-	18.9	
27B	10737	2/3	-	-	-	Surface	-	-	Midden	Mshell	Cypraea sp.	-	1.8	
28	10737	3	-	-	-	Surface	-	-	Historic	Metal Frag	-	1	-	
29	10737	3	-	-	-	Surface	-	-	Historic	Metal Frag	-	2	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
30	10737	4	-	-	-	Surface	-	-	Historic	Metal Frag	-	1	-	
31	10737	-	-	-	-	Surface	-	-	Historic	Metal Frag	-	2	-	Collected from rock pile near EU-2
32	10737	-	-	-	-	Surface	-	-	Historic	Ceramic	-	7	-	
33	10737	-	-	-	-	Surface	-	-	Historic	Ceramic	Porcelain	2	-	
34	10737	-	-	-	-	Surface	-	-	Midden	Mshell	Cypraea sp.	-	45.4	
35	10737	3	-	EU-3	I	90-130	-	-	Midden	Charcoal	-	-	8.1	
36A	10737	3	-	EU-4	I	0-40	-	-	Historic	Metal Frag	-	75	-	
36B	10737	3	-	EU-4	I	0-40	-	-	Midden	Mshell	Conus sp.	-	55.1	
36C	10737	3	-	EU-4	I	0-40	-	-	Midden	Mshell	Cypraea sp.	-	11	
1	10742	2	-	TR-1	I	-	126-134	-	Midden	Mshell	Brachiodontes Crebristriatus	-	0.1	
2A	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Cypraea sp.	-	23.7	
2B	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.5	
2C	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Echinoderm sp.	-	3.2	
2D	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Isognomon sp.	-	0.5	
2E	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Nerita polita	-	1.4	
2F	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Conus sp.	-	0.3	
2G	10742	2	-	TU-1	II	-	110-125	-	Midden	Mshell	Drupa sp.	-	3.1	
2H	10742	2	-	TU-1	II	-	110-	-	Midden	Mshell	non diagnostic	-	0.6	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
							125							
2I	10742	2	-	TU-1	II	-	110-125	-	Midden	Bone	Fish	3	0.3	MNI=1
2J	10742	2	-	TU-1	II	-	110-125	-	Midden	Charcoal	-			
3	10742	2	SSF-1	TR-1	-	-	115-130	-	Midden	Bulk Sample	-	-	-	
4A	10742	2	-	EU-1	I	-	102-122	-	Midden	Mshell	Echinoderm sp.	-	1	
4B	10742	2	-	EU-1	I	-	102-122	-	Midden	Mshell	Cypraea sp.	-	0.9	
4C	10742	2	-	EU-1	I	-	102-122	-	Midden	Mshell	Isognomon sp.	-	0.3	
4D	10742	2	-	EU-1	I	-	102-122	-	Midden	Macro-botanical	Seed	1	-	
4E	10742	2	-	EU-1	I	-	102-122	-	Midden	Charcoal	-	-	3.3	
5	10742	2	-	EU-1	II/1	-	-	-	Midden	Charcoal	-	-	8.4	
6A	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Echinoderm sp.	-	1.9	
6B	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Brachiodontes crebristriatus	-	2.3	
6C	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Nerita picea	-	<0.1	
6D	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Conus sp.	-	0.5	
6E	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Drupa sp.	-	0.8	
6F	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	Cypraea sp.	-	11.8	
6G	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Mshell	non diagnostic	-	1.3	
6H	10742	2	SSF-	EU-1	-	-	116-	-	Midden	Bone	Fish	3	0.4	MNI=1

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
			1				136							
6I	10742	2	SSF-1	EU-1	-	-	116-136	-	Midden	Charcoal	-	-	77	A lot of pieces over 0.5g, up to 1.5g. Appears to be more than one kind of wood, and kukui mixed in
7A	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Echinoderm sp.	-	18.2	
7B	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	4.0	
7C	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Cypraea sp.	-	3.0	
7D	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Drupa sp.	-	3.7	
7E	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Cellana sandwichensis	-	1	
7F	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Conus sp.	-	3.1	
7G	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Nerita picea	-	0.6	
7H	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Nerita polita	-	0.7	MNI=1
7I	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	Isognomon sp.	-	0.1	MNI=1, dentition
7J	10742	2	-	EU-1	II	-	-	-	Midden	Mshell	non diagnostic	-	0.2	MNI=1
7K	10742	2	-	EU-1	II	-	-	-	Midden	Bone	Fish	23	4.2	
7L	10742	2	-	EU-1	II	-	-	-	Midden	Bone	Sus scrofa	1	0.9	
7M	10742	2	-	EU-1	II	-	-	-	Midden	Bone	Rattus sp.	3	0.2	
7N	10742	2	-	EU-1	II	-	-	-	Traditional	Flake	Vglass	1	-	
7"O"	10742	2	-	EU-1	II	-	-	-	Midden	Charcoal	-	-	85.6	A few larger pieces up to 2.2g, possibly identifiable for specie

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
8A	10742	2	-	-	-	Surface	-	-	Midden	Charcoal	-	-	0.9	
8B	10742	2	-	-	-	Surface	-	-	Midden	Mshell	Cypraea sp.	-	1.5	
8C	10742	2	-	-	-	Surface	-	-	Midden	Mshell	Echinoderm sp.	-	0.6	
8D	10742	2	-	-	-	Surface	-	-	Midden	Bone	Fish	1	<0.1	
8E	10742	2	-	-	-	Surface	-	-	Midden	Bone	Bird	4	1.8	
8F	10742	2	-	-	-	Surface	-	-	Midden	Mshell	Cellana sandwichensis	-	31.2	
9	10742	2	-	EU-2	IA/1	-	92-116	-	Midden	Charcoal	-	-	6.1	
10	10742	2	-	EU-2	II/1	-	115-137	-	Midden	Charcoal	-	-	16.2	Highly fragmentary, pieces range from 0.4-1.0g
11A	10742	2	-	-	-	Surface	-	-	Midden	Charcoal	-	-		Surface Collection 2
11B	10742	2	-	-	-	Surface	-	-	Midden	Mshell	non diagnostic		0.2	Surface Collection 2
11C	10742	2	-	-	-	Surface	-	-	Midden	Mshell	Nerita picea		0.1	Surface Collection 2
11D	10742	2	-	-	-	Surface	-	-	Midden	Mshell	Drupa sp.		6.8	Surface Collection 2
11E	10742	2	-	-	-	Surface	-	-	Traditional	Flake	Vglass	1		Surface Collection 2
11F	10742	2	-	-	-	Surface	-	-	Midden	Charcoal	-	-	15.2	Surface Collection 3
1A	10758	2	-	-	-	Surface	-	-	Midden	Mshell	Chama sp.	-	91.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
1B	10758	2	-	-	-	Surface	-	-	Midden	Mshell	Cypraea sp.	-	9.6	
1C	10758	2	-	-	-	Surface	-	-	Midden	Mshell	Echinoderm sp.	-	6.5	
1D	10758	2	-	-	-	Surface	-	-	Traditional	Abrader	Echinoderm sp.	1	-	
2A	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	12.4	
2B	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Drupa sp.	-	1.1	
2C	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Isognomon sp.	-	0.6	
2D	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Trochus sp.	-	0.3	
2E	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.1	
2F	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Cellana sandwichensis	-	3.5	
2G	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	21.3	
2H	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Chama sp.	-	9.4	
2I	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Bone	Bird	3	0.8	MNI=2
2J	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Bone	Fish	1	0.1	
2K	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Mshell	Clamys irregularis	-	4.8	
2L	10758	2	-	TR-1	I/1	0-10	-	-	Traditional	Flake	Vglass	16	-	
2M	10758	2	-	TR-1	I/1	0-10	-	-	Traditional	Core	Vglass	1	-	
2N	10758	2	-	TR-1	I/1	0-10	-	-	Midden	Charcoal	-	-	15.2	
3A	10758	2	-	EU-1	I/1	0-1	-	-	Midden	Mshell	Malleus regula	-	0.4	
3B	10758	2	-	EU-1	I/1	0-1	-	-	Midden	Mshell	Cypraea sp.	-	2.1	
3C	10758	2	-	EU-1	I/1	0-1	-	-	Midden	Charcoal	-	-	28.3	
3D	10758	2	-	EU-1	I/1	0-1	-	-	Traditional	Flake	Vglass	4	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
1	10764	2	-	TR-2	-	Surface	-	-	Historic	Cement/ Construction Material	-	1	-	
2A	10764	2	-	ST-2	I	20-42	-	-	Midden	Mshell	Hipponix imbricatus	-	0.3	
2B	10764	2	-	ST-2	I	20-42	-	-	Midden	Bone	Rattus sp.	5	0.1	MNI=1
2C	10764	2	-	ST-2	I	20-42	-	-	Midden	Bone	small mammal	8	2.2	MNI=3
2D	10764	2	-	ST-2	I	20-42	-	-	Midden	Bone	Bird	7	1.8	MNI=1
3A	10764	2	-	TR-2	I	20-42	-	-	Historic	Metal Frag	Ferrous	1	-	Possible ferrous binding/strap
3B	10764	2	-	TR-2	I	20-42	-	-	Historic	Stove Lid	Ferrous	1	-	Possible stove lid/cover for stove burner on a wood cook stove OR a ferrous emblem. Embossed: "RIVAL, MANHATTAN"
3C	10764	2	-	TR-2	I	20-42	-	-	Historic	Glass Sherd	Glass	1	-	colorless, irridescent surface
4	10764	2	-	ST-2	I	20-42	-	-	Historic	Metal Frag	Ferrous	200+	-	
5	10764	2	-	ST-2	I	25-42	-	-	Midden	Mshell	Hipponix imbricatus	-	0.6	
-	10764	17	-	ST-1	II	-	-	-	Historic	Glass Sherd	Glass	1	-	Olive green, brandy finish sherd, applied lip, single piece mold. Artifact manufactured 1840–1920 (based on

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
														applied lip).
1A	10768	4	-	EU-1	I/2	10-20	-	-	Midden	Mshell	Cypraea sp.	-	3.7	
1B	10768	4	-	EU-1	I/2	10-20	-	-	Midden	Charcoal	-	-	0.8	
2A	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Mshell	Cypraea sp.	-	8.4	
2B	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Mshell	Drupa sp.	-	2.5	
2C	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Mshell	Nerita picea	-	0.3	
2D	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Coral	-	-	0.2	
2E	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Bone	Fish	1	0.2	
2F	10768	4	-	EU-1	II/1	20-30	-	-	Midden	Seed Husk	-	1	-	
3A	10768	4	-	EU-1	II/2	30-40	-	-	Midden	Mshell	Cypraea sp.	-	9.8	
3B	10768	4	-	EU-1	II/2	30-40	-	-	Midden	Mshell	Nerita sp.	-	0.5	
3C	10768	4	-	EU-1	II/2	30-40	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	<0.1	
3D	10768	4	-	EU-1	II/2	30-40	-	-	Midden	Bone	Sus scrofa	1	0.5	dentition, MNI=1
3E	10768	4	-	EU-1	II/2	30-40	-	-	Midden	Charcoal	-	-	0.2	
4A	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Cypraea sp.	-	13.7	
4B	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Conus sp.	-	2.6	
4C	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Drupa sp.	-	0.4	
4D	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Nerita picea	-	0.2	
4E	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Cellana sandwichensis	-	0.4	
4F	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	<0.1	
4G	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Coral	-	-	8.4	
4H	10768	4	-	EU-1	II/3	40-45	-	-	Midden	Charcoal	-	-	1.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
5A	10768	4	-	EU-1	III/1	45-50	-	-	Midden	Mshell	Trochus sp.	-	1	
5B	10768	4	-	EU-1	III/1	45-50	-	-	Midden	Mshell	Conus sp.	-	2.3	
5C	10768	4	-	EU-1	III/1	45-50	-	-	Midden	Charcoal	-	-	0.7	
6A	10768	1	-	TR-1	I	26-45	-	-	Midden	Mshell	Drupa sp.	-	1.7	
6B	10768	1	-	TR-1	I	26-45	-	-			Cypraea sp.	-	0.4	
6C	10768	1	-	TR-1	I	26-45	-	-	Historic	Hard Plastic object	Plastic	1	-	
6D	10768	1	-	TR-1	I	26-45	-	-	Traditional	Flake	Vglass	2	-	
6E	10768	1	-	TR-1	I	26-45	-	-	Midden	Charcoal	-	-	0.9	
7	10768	4	-	EU-1	II	50-60	-	-	Midden	Bulk Sample	-	-	-	
8A	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	13.1	
8B	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.3	
8C	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Conus sp.	-	4.1	
8D	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	0.9	
8E	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Nerita picea	-	0.3	
8F	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Mshell	Conus sp.	-	0.8	
8G	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Coral	-	-	0.5	
8H	10768	2	-	EU-3	I/1	0-10	-	-	Traditional	Flake	Vglass	3	-	
8I	10768	2	-	EU-3	I/1	0-10	-	-	Midden	Charcoal	-	-	27.7	
9A	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Echinoderm sp.	-	3.2	
9B	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Cypraea sp.	-	28	
9C	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Drupa sp.	-	2.4	
9D	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Trochus sp.	-	1	
9E	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Conus sp.	-	7.9	
9F	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.4	
9G	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Bone	Sus scrofa	2	2.5	dentition,

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
														MNI=1
9H	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Isognomon sp.	-	0.9	
9I	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Malleus regula	-	0.2	
9J	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Nerita picea	-	2	
9K	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Nerita polita	-	0.1	
9L	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Mshell	Tellina palatam	-	1	
9M	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Coral	-	-	1.7	
9N	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Bone	Fish	7	0.7	MNI=1
9-O	10768	2	-	EU-3	II/1	10-20	-	-	Midden	Charcoal	-	-	41.3	several larger pieces up to 1.1g. Highly fragmentary. Specie?
9P	10768	2	-	EU-3	II/1	10-20	-	-	Traditional	Flake	Vglass	16	-	
9Q	10768	2	-	EU-3	II/1	10-20	-	-	Traditional	Core	Vglass	1	-	
10A	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Cypraea sp.	-	19.9	
10B	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Drupa sp.	-	4.3	
10C	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.7	
10D	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Nerita picea	-	3.6	
10E	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Echinoderm sp.	-	3.2	
10F	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Cellana sandwichensis	-	0.8	
10G	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Malleus regula	-	<0.1	
10H	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Isognomon sp.	-	0.4	
10I	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Nerita polita	-	1.1	
10J	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	Conus sp.	-	0.9	
10K	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	non diagnostic	-	1.4	
10L	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Mshell	unknown bivalve	-	2.8	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
10M	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Coral	-	-	2	
10N	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Bone	Fish	13	0.3	MNI=1
10-O	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Bone	small mammal	1	1.2	
10P	10768	2	-	EU-3	II/2	20-30	-	-	Midden	Charcoal	-	-	51.7	Highly fragmentary, 0.1-0.4g
10Q	10768	2	-	EU-3	II/2	20-30	-	-	Traditional	Flake	Vglass	42	-	
10R	10768	2	-	EU-3	II/2	20-30	-	-	Traditional	Core	Vglass	2	-	
11A	10768	2	-	TR-2A	I/1	0-10	-	-	Midden	Mshell	Drupa sp.	-	1.8	
11B	10768	2	-	TR-2A	I/1	0-10	-	-	Midden	Mshell	Cellana sandwichensis	-	11.6	
12A	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Drupa sp.	-	27.4	
12B	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Cellana sp.	-	2.9	
12C	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Conus sp.	-	1	
12D	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Drupa sp.	-	4.5	
12E	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.1	
12F	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Tellina palatam	-	0.2	
12G	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Echinoderm sp.	-	0.2	
12H	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Mshell	Nerita picea	-	0.2	
12I	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Coral	-	-	9	
12J	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Bone	Sus scrofa	1	0.5	MNI=1
12K	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Bone	Fishscale	2	<0.1	
12L	10768	2	-	TR-2A	I/4	31-37	-	-	Traditional	Flake	Vglass	4	-	
12M	10768	2	-	TR-2A	I/4	31-37	-	-	Traditional	Abrader	Echinoderm sp.	1	-	
12N	10768	2	-	TR-2A	I/4	31-37	-	-	Midden	Charcoal	-	-	14.2	highly fragmentary, range 0.1-0.3g
13A	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Drupa sp.	-	4.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
13B	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Trochus sp.	-	0.2	
13C	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Nerita sp.	-	1.3	
13D	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.1	
13E	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Echinoderm sp.	-	3.3	
13F	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Nerita picea	-	2.1	
13G	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Cypraea sp.	-	46.9	
13H	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Mshell	Tellina palatam	-	0.2	
13I	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Coral	-	-	0.5	
13J	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Bone	Mammal	2	4.4	MNI=1
13K	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Bone	Sus scrofa	2	2.1	Dentition; MNI=1
13L	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Bone	Bird	2	0.3	MNI=1
13M	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Bone	Fish	12	1.6	MNI=1
13N	10768	2	-	TR-2A	II/1	38-48	-	-	Traditional	Flake	Vglass	4	-	
13O	10768	2	-	TR-2A	II/1	38-48	-	-	Traditional	Flake	Basalt	3	-	
13P	10768	2	-	TR-2A	II/1	38-48	-	-	Historic	Button	Shell	1	-	
13Q	10768	2	-	TR-2A	II/1	38-48	-	-	Midden	Charcoal	-	-	36	Highly fragmentary, largest pieces 0.5-1.0g
14A	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Cypraea sp.	-	24.1	
14B	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Trochus sp.	-	1.2	
14C	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Nerita picea	-	1.5	
14D	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Drupa sp.	-	0.6	
14E	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Conus sp.	-	11.2	
14F	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Echinoderm sp.	-	6.1	
14G	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Littorina pintado	-	<0.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
14H	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Isognomon sp.	-	0.5	
14I	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Tellina palatam	-	0.3	
14J	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.9	
14K	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Coral	-	-	0.8	
14L	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Bone	Fish	20	1.8	MNI=1
14M	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Bone	Rattus sp.	3	0.2	MNI=1
14N	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Bone	Sus scrofa	4	3.1	MNI=1
14O	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Bone	small mammal	4	1.4	MNI=1
14P	10768	2	-	TR-2A	II/2	49-58	-	-	Traditional	Flake	Basalt	1	-	
14Q	10768	2	-	TR-2A	II/2	49-58	-	-	Traditional	Flake	Vglass	3	-	
14R	10768	2	-	TR-2A	II/2	49-58	-	-	Historic	Hard Plastic object	Plastic	1	-	
14S	10768	2	-	TR-2A	II/2	49-58	-	-	Midden	Charcoal	-	-	57.1	most pieces are small, with largest up to 0.5g
15A	10768	2	-	TR-2B	I/4	31-40	-	-	Midden	Mshell	Conus sp.	-	10.1	
15B	10768	2	-	TR-2B	I/4	31-40	-	-	Midden	Mshell	Nerita picea	-	0.4	
15C	10768	2	-	TR-2B	I/4	31-40	-	-	Midden	Charcoal	-	-	1.6	
16A	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Cypraea sp.	-	20.5	
16B	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Nerita picea	-	4.5	
16C	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Nerita sp.	-	0.3	
16D	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Drupa sp.	-	1.6	
16E	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Isognomon sp.	-	0.5	
16F	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.2	
16G	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
16H	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Mshell	Tellina palatam	-	0.3	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
16I	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Bone	Fishscale	3	<0.1	MNI=1
16J	10768	2	-	TR-2B	II/1	41-50	-	-	Traditional	Flake	Vglass	2	-	
16K	10768	2	-	TR-2B	II/1	41-50	-	-	Historic	Sherd	Porcelain	1	-	Hand-painted blue and white
16L	10768	2	-	TR-2B	II/1	41-50	-	-	Historic	Biface	Chert	2	-	
16M	10768	2	-	TR-2B	II/1	41-50	-	-	Midden	Charcoal	-	-	28.6	1.4g piece among the other highly fragmentary pieces
17A	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Cypraea sp.	-	21.4	
17B	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Nerita picea	-	3.4	
17C	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	2	
17D	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Isognomon sp.	-	<0.1	
17E	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Echinoderm sp.	-	7.1	
17F	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Drupa sp.	-	1	
17G	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Nerita polita	-	0.5	
17H	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Mshell	Isognomon sp.	-	3	
17I	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Bone	small mammal	5	1.4	MNI=1
17J	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Bone	Sus scrofa	2	0.3	MNI=1
17K	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Bone	Bird	1	<0.1	
17L	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Bone	Fish	34	1.1	MNI=1
17M	10768	2	-	TR-2B	II/2	51-60	-	-	Midden	Charcoal	-	-	38.4	a lot of pieces over 0.5g, with the largest 2.8g. Possibly identifiable for specie
17N	10768	2	-	TR-2B	II/2	51-60	-	-	Traditional	Flake	Vglass	2	-	
17-O	10768	2	-	TR-2B	II/2	51-60	-	-	Historic	Flake	Chert	2	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
18A	10768	2	-	TR-2C	I/1	0-10	-	-	Midden	Mshell	Cellana sandwichensis	-	5.9	
18B	10768	2	-	TR-2C	I/1	0-10	-	-	Midden	Mshell	Nerita picea	-	0.4	
18C	10768	2	-	TR-2C	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
18D	10768	2	-	TR-2C	I/1	0-10	-	-	Midden	Coral	-	-	0.2	
18E	10768	2	-	TR-2C	I/1	0-10	-	-	Midden	Charcoal	-	-	3.9	
18F	10768	2	-	TR-2C	I/1	0-10	-	-	Traditional	Flake	Vglass	1	-	
19A	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Cypraea sp.	-	31	
19B	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Nerita picea	-	5.1	
19C	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Cellana sandwichensis	-	5.4	
19D	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Echinoderm sp.	-	2	
19E	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Drupa sp.	-	5.4	
19F	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Isognomon sp.	-	0.9	
19G	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Nerita polita	-	1.5	
19H	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Tellina palatam	-	1.2	
19I	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.5	
19J	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Coral	-	-	9.5	
19K	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Bone	Mammal	2	2.2	MNI=1
19L	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Bone	Sus scrofa	1	1.8	
19M	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Bone	Fish	4	1	MNI=1
19N	10768	2	-	TR-2C	I/2	11-20	-	-	Traditional	Flake	Vglass	5	-	
19-O	10768	2	-	TR-2C	I/2	11-20	-	-	Historic	Square Nail	Ferrous	1	-	
19P	10768	2	-	TR-2C	I/2	11-20	-	-	Historic	Sherd	Porcelain	2	-	Hand-painted blue and white
19Q	10768	2	-	TR-2C	I/2	11-20	-	-	Midden	Charcoal	-	-	24.4	
20A	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Cypraea sp.	-	39.3	
20B	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Nerita picea	-	4.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
20C	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Echinoderm sp.	-	4.4	
20D	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Cellana sandwichensis	-	1.5	
20E	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Conus sp.	-	6.4	
20F	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Tellina palatam	-	0.8	
20G	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Drupa sp.	-	5.9	
20H	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.6	
20I	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Mshell	Isognomon sp.	-	0.2	
20J	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Coral	-	-	4.5	
20K	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Charcoal	-	-	43.4	
20L	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Bone	Sus scrofa	2	2.9	
20M	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Bone	Bird	3	1.4	
20N	10768	2	-	TR-2C	II/1	32-41	-	-	Midden	Bone	Fish	4	0.9	
21A	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Cypraea sp.	-	6.9	
21B	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Nerita picea	-	1.6	
21C	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Nerita polita	-	0.3	
21D	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.6	
21E	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Echinoderm sp.	-	2.8	
21F	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Drupa sp.	-	2.6	
21G	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Mshell	Crustacean	-	<0.1	
21H	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Bone	Bird	1	0.3	MNI=1
21I	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Bone	Mammal	1	1.6	MNI=1
21J	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Charcoal	-	-	32.4	
21K	10768	2	-	TR-2C	II/2	42-50	-	-	Midden	Bone	Fish	12	0.5	MNI=1
21L	10768	2	-	TR-2C	II/2	42-50	-	-	Historic	Sherd	Porcelain	1	-	Hand-painted blue and white
21M	10768	2	-	TR-2C	II/2	42-50	-	-	Traditional	Flake	Basalt	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
21N	10768	2	-	TR-2C	II/2	42-50	-	-	Traditional	Flake	Vglass	1	-	
21-O	10768	2	-	TR-2C	II/2	42-50	-	-	Historic	Hard Plastic object	Plastic	1	-	
22A	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Mshell	Cypraea sp.	-	20.5	
22B	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Mshell	Conus sp.	-	14.3	
22C	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Mshell	Echinoderm sp.	-	0.7	
22D	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Mshell	Nerita picea	-	0.8	
22E	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Mshell	Isognomon sp.	-	2.2	
22F	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Coral	-	-	0.6	
22G	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Bone	Fish	5	0.8	MNI=1
22H	10768	2	-	TR-2D	I/2	11-70	-	-	Midden	Charcoal	-	-	80.5	
22I	10768	2	-	TR-2D	I/2	11-70	-	-	Traditional	Flake	Basalt	2	-	
22J	10768	2	-	TR-2D	I/2	11-70	-	-	Traditional	Flake	Vglass	1	-	
23A	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Conus sp.	-	7.7	
23B	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Echinoderm sp.	-	2.1	
23C	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Cellana sandwichensis	-	2.9	
23D	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Nerita picea	-	0.8	
23E	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Cypraea sp.	-	7.2	
23F	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Nerita polita	-	0.7	
23G	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.7	
23H	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Coral	-	-	13.2	
12I	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Bone	Sus scrofa	1	1	MNI=1
23J	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Bone	Mammal	1	0.4	MNI=1
23K	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Bone	Fish	4	0.4	MNI=1

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
23L	10768	2	-	TR-2D	II/1	29-38	-	-	Midden	Charcoal	-	-	41.6	Few pieces over 0.5g,. Largest weighs 1.8g. Possibly more than one specie of wood in sample?
24A	10768	2	-	TR-2D	II/2	39-48	-	-	Midden	Mshell	Cypraea sp.	-	11.8	
24B	10768	2	-	TR-2D	II/2	39-48	-	-	Midden	Mshell	Conus sp.	-	3.7	
24C	10768	2	-	TR-2D	II/2	39-48	-	-	Midden	Mshell	Echinoderm sp.	-	1.7	
24D	10768	2	-	TR-2D	II/2	39-48	-	-	Midden	Charcoal	-	-	7.7	
24E	10768	2	-	TR-2D	II/2	39-48	-	-	Traditional	Flake	Vglass	2	-	
24F	10768	2	-	TR-2D	II/2	39-48	-	-	Historic	Sherd	Porcelain	1	-	Hand-painted blue and white
25A	10768	2	-	TR-2E	I/1	0-10	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	3.7	
25B	10768	2	-	TR-2E	I/1	0-10	-	-	Midden	Mshell	Malleus regula	-	0.2	
25C	10768	2	-	TR-2E	I/1	0-10	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
25D	10768	2	-	TR-2E	I/1	0-10	-	-	Midden	Charcoal	-	-	3.6	
25E	10768	2	-	TR-2E	I/1	0-10	-	-	Traditional	Flake	Vglass	-	1	
26A	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	3	
26B	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Mshell	Drupa sp.	-	0.4	
26C	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Mshell	Cypraea sp.	-	4	
26D	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Mshell	Echinoderm sp.	-	0.5	
26E	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Coral	-	-	2.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
26F	10768	2	-	TR-2E	I/3	21-29	-	-	Midden	Charcoal	-	-	34.1	A lot of fragment 0.6-1.0g, one very large piece weighing 6.1g, probably diagnostic for specie
26G	10768	2	-	TR-2E	I/3	21-29	-	-	Traditional	Flake	Vglass	1	-	
27A	10768	2	-	TR-2E	I/2	11-20	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	34.3	
27B	10768	2	-	TR-2E	I/2	11-20	-	-	Midden	Mshell	Echinoderm sp.	-	0.2	
27C	10768	2	-	TR-2E	I/2	11-20	-	-	Midden	Mshell	Cypraea sp.	-	0.2	
27D	10768	2	-	TR-2E	I/2	11-20	-	-	Midden	Mshell	Nerita picea	-	0.6	
27E	10768	2	-	TR-2E	I/2	11-20	-	-	Midden	Charcoal	-	-	4.1	
28A	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	76.5	
28B	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Cypraea sp.	-	15.2	
28C	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Echinoderm sp.	-	2.3	
28D	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Nerita picea	-	1.3	
28E	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Conus sp.	-	3.4	
28F	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Drupa sp.	-	0.4	
28G	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Mshell	Terebra sp.	-	0.8	
28H	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Bone	Bird	1	0.8	MNI=1
28I	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Bone	Fish	3	0.1	MNI=1
28J	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Coral	-	-	5.8	
28K	10768	2	-	TR-2E	II/1	30-40	-	-	Traditional	Flake	Vglass	2	-	
28L	10768	2	-	TR-2E	II/1	30-40	-	-	Midden	Charcoal	-	-	77.1	A lot of large pieces 1.0-3.5g

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
29A	10768	2	-	TR-2E	II/2	41-47	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	2.7	
29B	10768	2	-	TR-2E	II/2	41-47	-	-	Midden	Mshell	Cypraea sp.	-	2.1	
29C	10768	2	-	TR-2E	II/2	41-47	-	-	Midden	Mshell	Nerita picea	-	0.3	
29D	10768	2	-	TR-2E	II/2	41-47	-	-	Midden	Charcoal	-	-	3.6	largest pieces 1.5 and 2.6g, probably diagnostic for specie
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Gastropoda	-	1.4	non-diagnostic
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Cellana sp.	-	1.0	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Cellana talcosa	-	13.4	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Nerita picea	-	1.2	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Cypraea sp.	-	11.6	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Cypraea maculifera	-	9.6	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Conus sp.	-	1.5	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Lshell	Euglandina rosea	-	0.1	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.3	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Tellina palatam	-	4.5	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Invertebrate	Decopoda	-	0.5	non-diagnostic
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Mshell	Echinoderm sp.	-	6.3	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Bone	Fish	-	0.2	non-diagnostic
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Bone	Sus scrofa	-	13.3	Sub-adult; MNI=1
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Bone	small mammal	-	0.5	Dog-size; MNI=1
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Coral	-	8	118.3	Non-worked

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
61	10768	2	-	TR-4	I	0-45	-	-	Traditional	-	Basalt	1	2	Waterworn-type pebbles; manuport
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Charcoal	-	-	37.0	
61	10768	2	-	TR-4	I	0-45	-	-	Midden	Kukui	-	-	0.5	
61	10768	2	-	TR-4	I	0-45	-	-	Traditional	Debitage	Vglass	16	-	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Nerita picea	-	0.8	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Nerita polita	-	2	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Cypraea sp.	-	3.2	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Cypraea maculifera	-	7.4	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Conus sp.	-	0.5	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Hominoea galba	-	0.1	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.2	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Mshell	Echinoderm sp.	-	13.5	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Bone	Fish	-	0.1	non-diagnostic
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Bone	Scaridae	-	0.5	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Bone	Diodontidae	-	0.1	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Bone	small mammal	-	1.6	Dog-size; MNI=1
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Charcoal	-	-	25.5	
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Kukui	-	-	1.8	Burnt
60	10768	2	-	TR-4	II	46-89	-	-	Midden	Coral	-	1	11.8	Non-worked
60	10768	2	-	TR-4	II	46-89	-	-	Traditional	Edge Altered Flake	Vglass	1	-	Bifacial, worked edge is 0.8 cm long
60	10768	2	-	TR-4	II	46-89	-	-	Traditional	Debitage	Vglass	14	-	-
30	10768	a5	-	EU-2	-	0-80	-	-	Midden	Mshell	Cypraea sp.	-	1.3	Architecture

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
														Layer
31	10768	5	-	EU-2	-	118	-	60N, 15W	Midden	Charcoal	-	-	2.1	Architecture Layer
32	10768	5	-	EU-2	-	80-84	-	-	Midden	Charcoal	-	-	0.3	Architecture Layer
33	10768	5	-	TR-3A	I/1	18-26	-	-	Midden	Mshell	Cypraea sp.	-	2.1	
34A	10768	5	-	TR-3C	I/1	21-26	-	-	Midden	Mshell	Isognomon sp.	-	1.2	
34B	10768	5	-	TR-3C	I/1	21-26	-	-	Midden	Mshell	Nerita picea	-	0.2	
35	10768	5	-	TR-3A	I/1	24	-	-	Midden	Coral	-	-	4.1	
36A	10768	5	-	TR-3B	I/2	26-39	-	-	Midden	Mshell	Isognomon sp.	-	3.9	
36B	10768	5	-	TR-3B	I/2	26-39	-	-	Midden	Mshell	Cypraea sp.	-	5.5	
36C	10768	5	-	TR-3B	I/2	26-39	-	-	Midden	Mshell	Crustacean	-	<0.1	
37	10768	5	-	TR-3A	I/2	33	-	-	Traditional	Adze	Basalt	1	-	Southwest corner of TR-3A; Fragment
38	10768	5	-	TR-3C	I/2	26-35	-	-	Midden	Charcoal	-	-	0.3	
39	10768	5	-	TR-3B	I/2	26-39	-	-	Midden	Charcoal	-	-	1.2	
40	10768	5	-	TR-3A	I/2	26-37	-	-	Midden	Charcoal	-	-	1.3	
41	10768	5	-	TR-3C	I/2	26-35	-	-	Midden	Mshell	Cypraea sp.	-	1.6	
42A	10768	5	-	TR-3B	I/3	35-48	-	-	Midden	Mshell	Isognomon sp.	-	2.1	
42B	10768	5	-	TR-3B	I/3	35-48	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
42C	10768	5	-	TR-3B	I/3	35-48	-	-	Midden	Mshell	Cypraea sp.	-	4.3	
43	10768	5	-	TR-3C	I/3	35-47	-	-	Midden	Mshell	Cypraea sp.	-	1.1	
44	10768	5	-	TR-3C	I/3	35-47	-	-	Midden	Charcoal	-	-	2.8	
45	10768	5	-	TR-3A	I/3	35-50	-	-	Midden	Charcoal	-	-	0.3	
46	10768	5	-	TR-3B	I/3	35-48	-	-	Midden	Charcoal	-	-	1	
47	10768	5	-	TR-3B	I/3	35-48	-	-	Midden	Coral	-	-	0.3	
48A	10768	2	-	EU-4	I/1	41-71	-	-	Midden	Coral	-	-	15.4	
48B	10768	2	-	EU-4	I/1	41-71	-	-		Mshell	Cypraea sp.	-	11.2	
48C	10768	2	-	EU-4	I/1	41-71	-	-			Echinoderm	-	<0.1	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
											sp.			
48D	10768	2	-	EU-4	I/1	41-71	-	-			Nerita picea	-	0.4	
48E	10768	2	-	EU-4	I/1	41-71	-	-	Traditional	Flake	Vglass	4	-	
49A	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Cypraea sp.	-	30.7	
49B	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Echinoderm sp.	-	3.2	
49C	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Nerita picea	-	0.8	
49D	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Tellina palatam	-	0.1	
49E	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Cellana sandwichensis	-	1.3	
49F	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Drupa sp.	-	5.6	
49G	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Crustacean	-	0.3	
49H	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Malleus regula	-	0.2	
49I	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	1.5	
49J	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Mshell	non diagnostic	-	1.2	
49K	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Coral	-	-	5.6	
49L	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Bone	Fish	5	2.4	MNI=1
49M	10768	2	-	EU-4	II/1	41-75	-	-	Traditional	Flake	Vglass	7	-	
49N	10768	2	-	EU-4	II/1	41-75	-	-	Midden	Charcoal	-	-	37.2	
50A	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Echinoderm sp.	-	9	
50B	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Nerita picea	-	1.6	
5C	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Cypraea sp.	-	26.9	
50D	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.2	
50E	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Isognomon sp.	-	1.8	
50F	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Mshell	Drupa sp.	-	1	
50G	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Bone	small mammal	4	2	MNI=1
50H	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Bone	Fish	2	0.2	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
50I	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Bone	Rattus sp.	3	0.3	MNI=2
50J	10768	2	-	EU-4	II/2	-	70-107	-	Midden	Charcoal	-	-	22.4	
51A	10768	2	-	EU-5	I/1	-	21-45	-	Midden	Mshell	Cypraea sp.	-	4.8	
51B	10768	2	-	EU-5	I/1	-	21-45	-	Midden	Mshell	Echinoderm sp.	-	0.1	
51C	10768	2	-	EU-5	I/1	-	21-45	-	Midden	Bone	Fish	1	2.5	MNI=1
51D	10768	2	-	EU-5	I/1	-	21-45	-	Midden	Coral	-	-	12.8	
51E	10768	2	-	EU-5	I/1	-	21-45	-	Traditional	Flake	Basalt	1	-	
51F	10768	2	-	EU-5	I/1	-	21-45	-	Midden	Charcoal	-	-	2.7	
52A	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Charonia tritonis	-	3.8	
52B	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Cypraea sp.	-	36.6	
52C	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Nerita picea	-	1.2	
52D	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Nerita polita	-	0.5	
52E	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Echinoderm sp.	-	1.9	
52F	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.5	
52G	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Isognomon sp.	-	1.9	
52H	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Malleus regula	-	0.3	
52I	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Conus sp.	-	16	
52J	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Cellana sandwichensis	-	0.5	
52K	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Tellina palatam	-	1	
52L	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Trochus sp.	-	0.2	
52M	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Mshell	Drupa sp.	-	0.3	
52N	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Coral	-	-	13	
52-O	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Bone	Fish	6	0.9	MNI=1
52P	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Bone	Sus scrofa	1	1.2	MNI=1
52Q	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Bone	mammal	2	0.4	MNI=1

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
52R	10768	2	-	EU-5	I/2	-	32-52	-	Midden	Charcoal	-	-	25.1	
52S	10768	2	-	EU-5	I/2	-	32-52	-	Traditional	Flake	Vglass	12	-	
52T	10768	2	-	EU-5	I/2	-	32-52	-	Historic	Flake	Chert	1	-	
53A	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Cypraea sp.	-	28	
53B	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Nerita picea	-	2.6	
53C	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Brachiodontes crebristriatus	-	2.9	
53D	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Isognomon sp.	-	1.4	
53E	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Tellina palatam	-	1	
53F	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Cellana sandwichensis	-	0.2	
53G	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Drupa sp.	-	5.9	
53H	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Echinoderm sp.	-	9.1	
53I	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Mshell	Nerita polita	-	0.4	
53J	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Bone	Fish	45	3.9	MNI=1
53K	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Bone	Bird	2	0.9	MNI=1
53L	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Bone	mammal	4	3.5	MNI=1
53M	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Bone	Sus scrofa	2	1.5	dentition, MNI=1
53N	10768	2	-	EU-5	II/1	-	47-64	-	Midden	Charcoal	-	-	21.9	pieces are small ranging from 0.3-0.6g
53-O	10768	2	-	EU-5	II/1	-	47-64	-	Traditional	Flake	Vglass	8	-	
54A	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Cypraea sp.	-	11.2	
54B	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Conus sp.	-	0.3	
54C	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Echinoderm sp.	-	7.2	
54D	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Cellana sandwichensis	-	0.2	
54E	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Nerita polita	-	0.2	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
54F	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Isognomon sp.	-	0.1	
54G	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.8	
54H	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Nerita picea	-	1.5	
54I	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Mshell	Drupa sp.	-	0.7	
54J	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Bone	Fish	13	0.7	MNI=1
54K	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Bone	Bird	1	0.5	MNI=1
54L	10768	2	-	EU-5	II/2	-	62-74	-	Traditional	Flake	Vglass	3	-	
54M	10768	2	-	EU-5	II/2	-	62-74	-	Midden	Charcoal	-	-	10	
55A	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Brachiodontes crebristriatus	-	2.9	
55B	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Cellana sandwichensis	-	<0.1	
55C	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Tellina palatam	-	1.7	
55D	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Nerita polita	-	0.4	
55E	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Echinoderm sp.	-	8	
55F	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Nerita picea	-	2.6	
55G	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Mshell	Cypraea sp.	-	2.2	
55H	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Bone	Fish	12	1.2	MNI=1
55I	10768	2	-	EU-5	II/3	-	72-93	-	Midden	Charcoal	-	-	9.1	
55J	10768	2	-	EU-5	II/3	-	72-93	-	Traditional	Flake	Vglass	4	-	
56	10768	2	-	EU-4	I	-	54	44 cm from SE	Traditional	Scaper	Cellana sandwichensis	1	-	44 cm from SE on the south wall
57	10768	-	-	SP-9	I	0-21	-	-	Midden	Mshell	Cypraea sp.	-	3.5	
58A	10768	-	-	SP-40	-	0-14	-	-	Midden	Charcoal	-	-	13.7	
58B	10768	-	-	SP-40	-	0-14	-	-	Midden	Mshell	Cypraea sp.	-	2.1	
59A	10768	-	-	SP-41	-	0-32	-	-	Midden	Mshell	Cypraea sp.	-	5.7	
59B	10768	-	-	SP-41	-	0-32	-	-	Midden	Mshell	Isognomon sp.	-	<0.1	
59C	10768	-	-	SP-41	-	0-32	-	-	Traditional	Flake	Vglass	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
59D	10768	-	-	SP-41	-	0-32	-	-	Midden	Kukui	-	-	0.5	
1	10778	-	-	SP-B8	I	19-30	-	-	Midden	Charcoal	-	-	1.1	
2	10778	-	-	SP-C1	I	0-25	-	-	Traditional	Flake	Vglass	1	-	
3A	10778	-	-	SP-D1	II	22-25	-	-	Traditional	Flake	Vglass	10	-	
3B	10778	-	-	SP-D1	II	22-25	-	-	Midden	Mshell	Conus sp.	-	4	
3C	10778	-	-	SP-D1	II	22-25	-	-	Midden	Mshell	Cypraea sp.	-	0.7	
4	10778	-	-	SP-N4	I	0-25	-	-	Traditional	Flake	Vglass	1	-	
5A	10778	-	-	SP-O5	I	0-30	-	-	Traditional	Flake	Vglass	1	-	
5B	10778	-	-	SP-O5	I	0-30	-	-	Midden	Mshell	Cypraea sp.	-	0.7	
6A	10778	-	-	SP-R5	I	0-25	-	-	Traditional	Flake	Vglass	6	-	
6B	10778	-	-	SP-R5	I	0-25	-	-	Midden	Coral	-	-	1.9	
6C	10778	-	-	SP-R5	I	0-25	-	-	Midden	Mshell	Cypraea sp.	-	7.3	
6D	10778	-	-	SP-R5	I	0-25	-	-	Midden	Mshell	Drupa sp.	-	6.3	
7	10778	-	-	SP-P6	I	10	-	-	Midden	Mshell	Cypraea sp.	-	1.5	From rock fill
8A	10778	-	-	SP-Q2	I	0-20	-	-	Midden	Mshell	Cypraea sp.	-	1	
8B	10778	-	-	SP-Q2	I	0-20	-	-	Traditional	Flake	Vglass	1	-	
9	10778	-	-	SP-Q2	I	0-20	-	-	Midden	Charcoal	-	-	11	
10A	10778	-	-	SP-Q3	I	0-25	-	-	Midden	Coral	-	-	6.9	
10B	10778	-	-	SP-Q3	I	0-25	-	-	Traditional	File/ abrader	Basalt	1	-	
11A	10778	-	-	SP-Q4	II	11-30	-	-	Traditional	Flake	Vglass	19	-	
11B	10778	-	-	SP-Q4	II	11-30	-	-	Traditional	Flake	Basalt	1	-	
12A	10778	-	-	SP-Q5	II	17-42	-	-	Traditional	Flake	Vglass	103	-	
12B	10778	-	-	SP-Q5	II	17-42	-	-	Midden	Mshell	Cypraea sp.	-	11	
12C	10778	-	-	SP-Q5	II	17-42	-	-	Midden	Mshell	Drupa sp.	-	1.2	
12D	10778	-	-	SP-Q5	II	17-42	-	-	Midden	Mshell	Nerita sp.	-	0.1	
13	10778	-	-	SP-Q5	II	17-42	-	-	Midden	Charcoal	-	-	5	Most pieces under 0.2 g, but there is some burnt kukui
14A	10778	-	-	SP-R4	II	13-31	-	-	Midden	Mshell	Cypraea sp.	-	1.3	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
14B	10778	-	-	SP-R4	II	13-31	-	-	Midden	Mshell	Drupa sp.	-	0.6	
14C	10778	-	-	SP-R4	II	13-31	-	-	Midden	Mshell	Nerita sp.	-	0.1	
15A	10778	-	-	SP-R5	I	0-14	-	-	Midden	Coral	-	-	7.2	
15B	10778	-	-	SP-R5	I	0-14	-	-	Midden	Mshell	Cypraea sp.		2.9	
16	10778	-	-	SP-S2	I	0-19	-	-	Traditional	Flake	Vglass	3	-	
17A	10778	-	-	SP-S5	II	11-28	-	-	Midden	Mshell	Isognomon sp.	-	0.1	
17B	10778	-	-	SP-S5	II	11-28	-	-	Midden	Mshell	Conus sp.	-	4.5	
17C	10778	-	-	SP-S5	II	11-28	-	-	Midden	Mshell	Cypraea sp.	-	3.1	
17D	10778	-	-	SP-S5	II	11-28	-	-	Midden	Mshell	Nerita sp.	-	0.8	
17E	10778	-	-	SP-S5	II	11-28	-	-	Midden	Mshell	non diagnostic	-	0.6	
18	10778	-	-	SP-S6	II	12-28	-	-	Midden	Mshell	Cypraea sp.	-	1.9	
19	10778	-	-	SP-S7	I	0-15	-	-	Traditional	Flake	Vglass	1	-	
20	10778	-	-	SP-S8	I	0-24	-	-	Traditional	Flake	Vglass	1	-	
21A	10778	-	-	SP-S1	I	0-35	-	-	Traditional	Flake	Vglass	4	-	
21B	10778	-	-	SP-S1	I	0-35	-	-	Midden	Mshell	Cypraea sp.	-	4.3	
21C	10778	-	-	SP-S1	I	0-35	-	-	Midden	Charcoal	-	-	11.4	
22	10778	-	-	SP-S3	II	17-30	-	-	Traditional	Flake	Vglass	27		
23A	10778	-	-	SP-U1	I	0-38	-	-	Traditional	Flake	Vglass	-	3	
23B	10778	-	-	SP-U1	I	0-38	-	-	Traditional	Flake	Basalt	-	1	
24A	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	Cypraea sp.	-	8.9	
24B	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	Theodoxus cariosus	-	5	
24C	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	Nerita picea	-	0.5	
24D	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	Echinoderm sp.		4.5	
24E	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	Malleus regula		1	
24F	10778	-	-	SP-U1	I	0-30	-	-	Midden	Bone	Fishscale	1		
24G	10778	-	-	SP-U1	I	0-30	-	-	Midden	Coral	-		0.8	
24H	10778	-	-	SP-U1	I	0-30	-	-	Midden	Bone	Fish		0.6	burnt, also poss. Mammal?

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
24I	10778	-	-	SP-U1	I	0-30	-	-	Midden	Mshell	non diagnostic		<0.1	
25	10778	-	-	SP-U1	I	0-38	-	-	Midden	Charcoal	-	-	6.9	
26A	10778	-	-	SP-U1	II	38-56	-	-	Midden	Bone	Fish	-	2.1	
26B	10778	-	-	SP-U1	II	38-56	-	-	Midden	Bone	Fishscale	7	-	
26C	10778	-	-	SP-U1	II	38-56	-	-	Midden	Mshell	non diagnostic	-	<0.1	
26D	10778	-	-	SP-U1	II	38-56	-	-	Midden	Mshell	Echinoderm sp.	-	8.7	
26E	10778	-	-	SP-U1	II	38-56	-	-	Midden	Mshell	Theodoxus cariosus	-	1.7	
26F	10778	-	-	SP-U1	II	38-56	-	-	Midden	Mshell	Cypraea sp.	-	3.1	
26G	10778	-	-	SP-U1	II	38-56	-	-	Midden	Mshell	Drupa sp.	-	0.3	
26H	10778	-	-	SP-U1	II	38-56	-	-	Midden	Bone	Sus scrofa	2	-	dentition, MNI=1
27	10778	-	-	SP-U1	II	38-56	-	-	Midden	Charcoal	-	-	8	Largest piece 1.8 g possibly identifiable for specie, plenty pieces of burnt kukui, also some ashy soil clinging to the exterior of all pieces, possibly associated with some feature.
28A	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Conus sp.	-	0.8	
28B	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Cypraea sp.	-	0.2	
28C	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Nerita picea	-	<0.1	
28D	10778	-	-	SP-U3	I	0-25	-	-	Midden	Coral	-	-	6..1	
28E	10778	-	-	SP-U3	I	0-25	-	-	Traditional	Flake	Vglass	2	-	
29	10778	-	-	SP-U3	I	0-25	-	-	Traditional	Flake	Vglass	17	-	
30A	10778	-	-	SP-U3	I	0-25	-	-	Midden	Coral	-	-	8	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
30B	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Cypraea sp.	-	6	
30C	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Drupa sp.	-	8.7	
30D	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Theodoxus cariosus	-	0.8	
30E	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Cellana sp.	-	0.1	
30F	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Conus sp.	-	0.4	
30G	10778	-	-	SP-U3	I	0-25	-	-	Midden	Mshell	Malleus regula	-	0.1	
31	10778	-	-	SP-U4	I	0-26	-	-	Midden	Charcoal	-	-	1.2	
32	10778	-	-	SP-U4	I	0-26	-	-	Midden	Bone	mammal	4	-	MNI=1
33A	10778	-	-	SP-U4	I	0-26	-	-	Traditional	Flake	Basalt	2	-	
33B	10778	-	-	SP-U4	I	0-26	-	-	Traditional	Flake	Vglass	26	-	
34A	10778	-	-	SP-U4	I	0-26	-	-	Midden	Coral	-	-	2.2	
34B	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Theodoxus cariosus	-	3.4	
34C	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Drupa sp.	-	2.9	
34D	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
34E	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Cypraea sp.	-	13.1	
34F	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Malleus regula	-	1.2	
34G	10778	-	-	SP-U4	I	0-26	-	-	Midden	Mshell	Nerita picea	-	0.8	
35	10778	-	-	SP-U4	II	26-47	-	-	Traditional	Flake	Vglass	10	-	
36A	10778	-	-	SP-U4	II	26-47	-	-	Midden	Bone	Fish	-	0.8	
36B	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Echinoderm sp.	-	1.2	
36C	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Isognomon sp.	-	0.2	
36D	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Drupa sp.	-	1.3	
36E	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Malleus regula	-	0.3	
36F	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Theodoxus cariosus	-	2.5	
36G	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Nerita picea	-	0.9	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
36H	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Cypraea sp.	-	3.2	
36I	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	non diagnostic	-	<0.1	
36J	10778	-	-	SP-U4	II	26-47	-	-	Midden	Mshell	Nerita polita	-	1.7	*All Nerita polita above this point are actually Theodoxus cariosus*
37	10778	-	-	SP-U4	II	26-47	-	-	Midden	Charcoal	-	-	6	Most pieces 0.2 to 0.4 g, possibly identifiable for specie.
38A	10778	-	-	SP-U6	I	0-6	-	-	Traditional	Flake	Vglass	1	-	
38B	10778	-	-	SP-U6	I	0-6	-	-	Midden	Mshell	Cypraea sp.	-	2.4	
39A	10778	-	-	SP-U7	II	22-30	-	-	Midden	Mshell	Cypraea sp.	-	4.5	
39B	10778	-	-	SP-U7	II	22-30	-	-	Midden	Coral	-	-	1	
40	10778	-	-	SP-U7	-	Surface	-	-	Traditional	adze	Basalt	1	-	
41A	10778	-	-	SP-T1	II	23-52	-	-	Midden	Mshell	Cellana sp.	-	1.9	
41B	10778	-	-	SP-T1	II	23-52	-	-	Midden	Mshell	Cypraea sp.	-	8.7	
41C	10778	-	-	SP-T1	II	23-52	-	-	Midden	Mshell	Theodoxus cariosus	-	0.5	
41D	10778	-	-	SP-T1	II	23-52	-	-	Midden	Mshell	Conus sp.	-	0.3	
41E	10778	-	-	SP-T1	II	23-52	-	-	Midden	Mshell	Malleus regula	-	0.1	
41F	10778	-	-	SP-T1	II	23-52	-	-	Midden	Charcoal	-	-	13.5	Charcoal stored in hard plastic--not good for C14 date any more
42A	10778	-	-	SP-T2	II	13-45	-	-	Midden	Mshell	Cypraea sp.	-	3.9	
42B	10778	-	-	SP-T2	II	13-45	-	-	Traditional	Flake	Vglass	6	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
42C	10778	-	-	SP-T2	II	13-45	-	-	Midden	Charcoal	-	-	0.2	Charcoal stored in hard plastic--not good for C14 date any more
43A	10778	-	-	SP-T3	I	0-30	-	-	Midden	Mshell	Cypraea sp.	-	7.7	
43B	10778	-	-	SP-T3	I	0-30	-	-	Midden	Mshell	Malleus regula	-	<0.1	
43C	10778	-	-	SP-T3	I	0-30	-	-	Midden	Mshell	Conus sp.	-	1.3	
43D	10778	-	-	SP-T3	I	0-30	-	-	Midden	Coral	-	-	0.2	
43E	10778	-	-	SP-T3	I	0-30	-	-	Traditional	Flake	Vglass	-	8	
44A	10778	-	-	SP-T5	I	0-40	-	-	Midden	Bone	Fish	-	0.1	
44B	10778	-	-	SP-T5	I	0-40	-	-	Midden	Mshell	Theodoxus cariosus		0.3	
44C	10778	-	-	SP-T5	I	0-40	-	-	Midden	Mshell	Nerita picea	-	0.2	
44D	10778	-	-	SP-T5	I	0-40	-	-	Midden	Mshell	Cypraea sp.	-	0.7	
44E	10778	-	-	SP-T5	I	0-40	-	-	Midden	Charcoal	-	-	1.8	
45A	10778	-	-	SP-T6	I	0-55	-	-	Midden	Mshell	Drupa sp.	-	0.6	
45B	10778	-	-	SP-T6	I	0-55	-	-	Midden	Mshell	Theodoxus cariosus	-	0.3	
45C	10778	-	-	SP-T6	I	0-55	-	-	Midden	Mshell	Cypraea sp.	-	0.9	
45D	10778	-	-	SP-T6	I	0-55	-	-	Midden	Mshell	Nerita picea	-	0.4	
45E	10778	-	-	SP-T6	I	0-55	-	-	Midden	Coral	-	-	0.1	
45f	10778	-	-	SP-T6	I	0-55	-	-	Midden	Charcoal	-	-	5.5	
46A	10778	-	-	TR-2	I	71-103	-	-	Traditional	Hammer stone	Basalt	1	-	
46B	10778	-	-	TR-2	I	71-103	-	-	Traditional	Waterworn	Basalt	1	-	
47	10778	-	-	TR-2	I	75-120	-	-	Midden	Bone	mammal	6	7.1	MNI=1
48A	10778	-	-	TR-2	I	75-120	-	-	Traditional	Flake	Vglass	13	-	
48B	10778	-	-	TR-2	I	75-120	-	-	Traditional	Flake	Basalt	1	-	
48C	10778	-	-	TR-2	I	75-120	-	-	Midden	Coral	-	-	2.6	
48D	10778	-	-	TR-2	I	75-120	-	-	Midden	Mshell	Cypraea sp.	-	1.8	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
48E	10778	-	-	TR-2	I	75-120	-	-	Midden	Mshell	non diagnostic	-	2.8	
49	10778	-	-	TR-2	I	71-103	-	-	Midden	Charcoal	-	-	11.7	Sample contains some pieces over 0.5 g up to 1.0 g
50A	10778	-	-	TR-2	II	75-120	-	-	Traditional	Flake	Vglass	4	-	
50B	10778	-	-	TR-2	II	75-120	-	-	Midden	Mshell	Cypraea sp.		2.4	
50C	10778	-	-	TR-2	II	75-120	-	-	Midden	Charcoal	-		15.5	several pieces over 0.5 g with one weighing 1.5 g
51A	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Nerita picea		8.5	
51B	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Theodoxus cariosus	-	0.2	
51C	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Isognomon sp.	-	0.1	
51D	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Tellina sp.	-	0.6	
51E	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Nerita polita	-	2	
51F	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Echinoderm sp.	-	0.9	
51G	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Cellana sp.	-	1.3	
51H	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Cypraea sp.	-	34.9	
51I	10778	-	-	EU-5	II	6-25	-	-	Midden	Mshell	Drupa sp.	-	12.3	
51J	10778	-	-	EU-5	II	6-25	-	-	Midden	Coral	-	-	9.5	
51K	10778	-	-	EU-5	II	6-25	-	-	Midden	Bone	Sus scrofa	1	1.2	
51L	10778	-	-	EU-5	II	6-25	-	-	Midden	Bone	Bird	1	0.5	
51M	10778	-	-	EU-5	II	6-25	-	-	Midden	Bone	Fish	1	0.3	
52	10778	-	-	EU-5	II	6-25	-	-	Traditional	Flake	Vglass	56	-	
53	10778	-	-	EU-5	II	6-25	-	-	Midden	Charcoal	-	-	31.2	Several large pieces between 0.4 and 0.9 g
54A	10778	-	-	EU-5	II/III	25-27	-	-	Traditional	Flake	Vglass	2	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
54B	10778	-	-	EU-5	II/III	25-27	-	-	Midden	Mshell	Malleus regula	-	0.2	
54C	10778	-	-	EU-5	II/III	25-27	-	-	Midden	Mshell	Cypraea sp.	-	2.5	
54D	10778	-	-	EU-5	II/III	25-27	-	-	Midden	Mshell	Nerita picea	-	1.1	
54E	10778	-	-	EU-5	II/III	25-27	-	-	Midden	Bone	mammal	5	0.8	MNI=1
54F	10778	-	-	EU-5	II/III	25-27	-	-	Midden	Charcoal	-	-	8.1	small sample, with large pieces up to 1.5 g
55A	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	Cypraea sp.	-	8.3	
55B	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	Echinoderm sp.	-	1.8	
55C	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	Theodoxus cariosus	-	4.6	
55D	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	Drupa sp.	-	3.3	
55E	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	Malleus regula	-	<0.1	
55F	10778	-	-	EU-3	I	0-12	-	-	Midden	Coral	-	-	5.9	
55G	10778	-	-	EU-3	I	0-12	-	-	Midden	Mshell	non diagnostic	-	2.5	
55H	10778	-	-	EU-3	I	0-12	-	-	Midden	Bone	Fish	-	0.9	
55I	10778	-	-	EU-3	I	0-12	-	-	Traditional	Flake	Vglass	4	-	
55J	10778	-	-	EU-3	I	0-12	-	-	Midden	Charcoal	-	-	7.1	A few small pieces, up to 0.6 g
56A	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	Malleus regula	-	1.2	
56B	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	Echinoderm sp.	-	3	
56C	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	Theodoxus cariosus	-	6.1	
56D	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	Drupa sp.	-	1.4	
56E	10778	-	-	EU-2	II	7-22	-	-	Midden	Coral	-	-	2.3	
56F	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	Cypraea sp.	-	34.5	
56G	10778	-	-	EU-2	II	7-22	-	-	Midden	Mshell	non diagnostic	-	1.5	
56H	10778	-	-	EU-2	II	7-22	-	-	Midden	Bone	mammal	2	1.1	Poss. Bird?

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
														MNI=1
56I	10778	-	-	EU-2	II	7-22	-	-	Midden	Bone	Fish	2	0.7	
56J	10778	-	-	EU-2	II	7-22	-	-	Traditional	Flake	Vglass	11	-	
56K	10778	-	-	EU-2	II	7-22	-	-	Traditional	Flake	Basalt	4	-	
56L	10778	-	-	EU-2	II	7-22	-	-	Midden	Charcoal	-	-	40.9	Fragmentary, but several pieces weigh between 0.5 and 1.0 g
57A	10778	25A	-	EU-3	II	19	-	-	Midden	Charcoal	-	-	9.5	A lot of very large pieces, 1.0 to 1.6 g, very diagnostic for specie.
57B	10778	25-A	-	EU-3	II	19	-	-	Midden	Mshell	Theodoxus cariosus	-	0.5	
58A	10778	-	-	EU-3	III	20-38	-	-	Midden	Charcoal	-	-	19.6	All large pieces, a few over 1.0 g and, up to 1.6 g, with wood rings visible on some chunks
58B	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Malleus regula	-	1.4	
58C	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Isognomon sp.	-	2.4	
58D	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Conus sp.	-	3.3	
58E	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Nerita picea	-	0.3	
58F	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Theodoxus cariosus	-	8.4	
58G	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Echinoderm sp.	-	11.6	
58H	10778	-	-	EU-3	III	20-38	-	-	Midden	Bone	Fishscale	4	-	
58I	10778	-	-	EU-3	III	20-38	-	-	Midden	Bone	mammal	2	1.8	MNI=1

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
58J	10778	-	-	EU-3	III	20-38	-	-	Midden	Bone	Bird	4	1.3	MNI=1
58K	10778	-	-	EU-3	III	20-38	-	-	Midden	Bone	Rattus mus.	-	8	
58L	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Cypraea sp.	-	28.1	
58M	10778	-	-	EU-3	III	20-38	-	-	Traditional	Flake	Vglass	8	-	
58N	10778	-	-	EU-3	III	20-38	-	-	Traditional	Flake	Basalt	4	-	
59A	10778	-	-	EU-3	III	20-38	-	-	Traditional	Flake	Vglass	1	-	
59B	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Cypraea sp.	-	3.6	
59C	10778	-	-	EU-3	III	20-38	-	-	Midden	Mshell	Echinoderm sp.	-	1.4	
59D	10778	-	-	EU-3	III	20-38	-	-	Midden	Charcoal	-	-	1.5	small, fragmentary sample
60A	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Cypraea sp.	-	7.4	
60B	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Theodoxus cariosus	-	2.1	
60C	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Conus sp.	-	1.2	
60D	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Echinoderm sp.	-	1.4	
60E	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Isognomon sp.	-	0.4	
60F	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Nerita picea	-	0.4	
60G	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Drupa sp.	-	0.7	
60H	10778	-	-	EU-1	I	0-15	-	-	Midden	Mshell	Tellina sp.	-	1	
60I	10778	-	-	EU-1	I	0-15	-	-	Traditional	Flake	Vglass	6	-	
60J	10778	-	-	EU-1	I	0-15	-	-	Midden	Charcoal	-	-	3.6	Some large pieces 0.3-0.9 g
61A	10778	-	-	EU-1	II	16-36	-	-	Midden	Charcoal	-	-	26.8	sample is fragmentary, but several pieces up to 1.0 g present
61B	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Drupa sp.	-	7.7	
61C	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Nerita picea	-	1.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
61D	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Malleus regula	-	3.3	
61E	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Isognomon sp.	-	1	
61F	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Cypraea sp.	-	38.1	
61G	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Echinoderm sp.	-	17.2	
61H	10778	-	-	EU-1	II	16-36	-	-	Midden	Mshell	Theodoxus cariosus	-	12.7	
61I	10778	-	-	EU-1	II	16-36	-	-	Midden	Bone	Fish	-	2	MNI=1
61J	10778	-	-	EU-1	II	16-36	-	-	Midden	Bone	Fishscale	2	-	
61K	10778	-	-	EU-1	II	16-36	-	-	Midden	Bone	Bird	1	1.8	MNI=1
61L	10778	-	-	EU-1	II	16-36	-	-	Midden	Bone	Sus scrofa	1	0.3	MNI=1
61M	10778	-	-	EU-1	II	16-36	-	-	Midden	Coral	-	-	8.9	
61N	10778	-	-	EU-1	II	16-36	-	-	Traditional	Flake	Vglass	9	-	
61O	10778	-	-	EU-1	II	16-36	-	-	Traditional	Flake	Basalt	2	-	
61P	10778	-	-	EU-1	II	16-36	-	-	Traditional	Abrader	Echinoderm sp.	1	-	
62A	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Echinoderm sp.	-	70.2	
62B	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Cypraea sp.	-	53.6	
62C	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Malleus regula	-	6.9	
62D	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Theodoxus cariosus	-	15.9	
62E	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Nerita picea	-	1.3	
62F	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Drupa sp.	-	1.1	
62G	10778	-	-	EU-1	III	37-69	-	-	Midden	Bone	Bird	-	5.7	
62H	10778	-	-	EU-1	III	37-69	-	-	Midden	Bone	Fish	-	9.8	
62I	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Cellana sp.	-	0.4	
62J	10778	-	-	EU-1	III	37-69	-	-	Midden	Bone	Fishscale	5	-	
62K	10778	-	-	EU-1	III	37-69	-	-	Midden	Bone	Canis familiaris	1	0.7	MNI=1
62L	10778	-	-	EU-1	III	37-69	-	-	Midden	Bone	Rattus mus.	-	0.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
62M	10778	-	-	EU-1	III	37-69	-	-	Traditional	Flake	Vglass	7	-	
62N	10778	-	-	EU-1	III	37-69	-	-	Traditional	Flake	Basalt	5	-	
62O	10778	-	-	EU-1	III	37-69	-	-	Traditional	adze	Basalt	1	-	Fragment
62P	10778	-	-	EU-1	III	37-69	-	-	Midden	Charcoal	-	-	40.4	Several pieces over 0.5 g with one weighing 1.7 g
62Q	10778	-	-	EU-1	III	37-69	-	-	Midden	Mshell	Conus sp.	-	1.1	
63A	10778	-	-	EU-2	I	0-17	-	-	Midden	Mshell	Cypraea sp.	-	15.1	
63B	10778	-	-	EU-2	I	0-17	-	-	Midden	Mshell	Nerita picea	-	0.2	
63C	10778	-	-	EU-2	I	0-17	-	-	Midden	Mshell	Echinoderm sp.	-	0.4	
63D	10778	-	-	EU-2	I	0-17	-	-	Midden	Mshell	Theodoxus cariosus	-	0.6	
63E	10778	-	-	EU-2	I	0-17	-	-	Traditional	Flake	Vglass	1	-	
63F	10778	-	-	EU-2	I	0-17	-	-	Traditional	Flake	Basalt	3	-	
63G	10778	-	-	EU-2	I	0-17	-	-	Midden	Charcoal	-	-	1.4	small pieces
64A	10778	25A	-	EU-2	II	18-30	-	-	Midden	Charcoal	-	-	21.6	several large pieces up to 1.3 g
64B	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Echinoderm sp.	-	11.1	
64C	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Drupa sp.	-	10.9	
64D	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Conus sp.	-	5.3	
64E	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Cypraea sp.	-	27.7	
64F	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Tellina sp.	-	0.6	
64G	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Nerita picea	-	0.9	
64H	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Malleus regula	-	1.3	
64I	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Theodoxus cariosus	-	7.2	
64J	10778	25A	-	EU-2	II	18-30	-	-	Midden	Mshell	Cellana sp.	-	1.3	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
64K	10778	25A	-	EU-2	II	18-30	-	-	Midden	Coral	-	-	0.2	
64L	10778	25A	-	EU-2	II	18-30	-	-	Midden	Bone	Sus scrofa	1	0.4	MNI=1
64M	10778	25A	-	EU-2	II	18-30	-	-	Midden	Bone	Canis familiaris	1	1.2	MNI=1
64N	10778	25A	-	EU-2	II	18-30	-	-	Midden	Bone	mammal	1	1.1	MNI=1
64O	10778	25A	-	EU-2	II	18-30	-	-	Midden	Bone	Fish	-	1.2	
64P	10778	25A	-	EU-2	II	18-30	-	-	Traditional	Flake	Basalt	1	-	
64Q	10778	25A	-	EU-2	II	18-30	-	-	Traditional	Flake	Vglass	12	-	
65A	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Echinoderm sp.	-	23.3	
65B	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Cypraea sp.	-	72.2	
65C	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Theodoxus cariosus	-	17.2	
65D	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Malleus regula	-	5.4	
65E	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Drupa sp.	-	1.5	
65F	10778	25A	-	EU-1	III	31-48	-	-	Midden	Mshell	Tellina sp.	-	0.2	
65G	10778	25A	-	EU-1	III	31-48	-	-	Midden	Bone	Fish	-	0.4	
65H	10778	25A	-	EU-1	III	31-48	-	-	Midden	Bone	mammal	-	0.7	
65I	10778	25A	-	EU-1	III	31-48	-	-	Midden	Bone	Rattus mus.	-	1.2	
65J	10778	25A	-	EU-1	III	31-48	-	-	Midden	Bone	Fishscale	1	-	
65K	10778	25A	-	EU-1	III	31-48	-	-	Traditional	Flake	Basalt	2	-	
65L	10778	25A	-	EU-1	III	31-48	-	-	Traditional	Flake	Vglass	3	-	
65M	10778	25A	-	EU-1	III	31-48	-	-	Traditional	Abrader	Coral	1	-	
65N	10778	25A	-	EU-1	III	31-48	-	-	Midden	Charcoal	-	-	47.2	Several pieces over 0.5 g with one weighing 2.0 g
66A	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Tellina sp.	-	0.2	
66B	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Drupa sp.	-	1	
66C	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Cellana sp.	-	0.9	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
66D	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Theodoxus cariosus	-	1.4	
66E	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Cypraea sp.	-	5.3	
66F	10778	25A	-	EU-4	I	0-14	-	-	Midden	Mshell	Echinoderm sp.	-	0.4	
66G	10778	25A	-	EU-4	I	0-14	-	-	Midden	Bone	Bird	2	0.3	MNI=1
66H	10778	25A	-	EU-4	I	0-14	-	-	Traditional	Flake	Vglass	1	-	
66I	10778	25A	-	EU-4	I	0-14	-	-	Traditional	Flake	Basalt	1	-	
66J	10778	25A	-	EU-4	I	0-14	-	-	Midden	Charcoal	-	-	4.8	One large chunch, weighing 0.7
67A	10778	25A	-	EU-4	II	15-23	-	-	Midden	Mshell	Theodoxus cariosus	-	1	
67B	10778	25A	-	EU-4	II	15-23	-	-	Midden	Mshell	Cypraea sp.	-	11.1	
67C	10778	25A	-	EU-4	II	15-23	-	-	Midden	Mshell	Echinoderm sp.	-	4.2	
67D	10778	25A	-	EU-4	II	15-23	-	-	Midden	Mshell	Malleus regula	-	0.6	
67E	10778	25A	-	EU-4	II	15-23	-	-	Midden	Mshell	Drupa sp.	-	4.2	
67F	10778	25A	-	EU-4	II	15-23	-	-	Midden	Bone	mammal	1	0.4	MNI=1
67G	10778	25A	-	EU-4	II	15-23	-	-	Midden	Bone	Sus scrofa	1	0.1	MNI=1
67H	10778	25A	-	EU-4	II	15-23	-	-	Midden	Bone	Fish	2	<0.1	MNI=1
67I	10778	25A	-	EU-4	II	15-23	-	-	Midden	Flake	Basalt	1	-	
67J	10778	25A	-	EU-4	II	15-23	-	-	Midden	Flake	Vglass	2	-	
67K	10778	25A	-	EU-4	II	15-23	-	-	Midden	Charcoal	-	-	6.2	highly fragmentary, probably not diagnostic for specie, largest pieces 0.4 to 0.6 g, with several pieces of burnt kukui.

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
68A	10778	25A	-	EU-4	III	24-30	-	-	Midden	Mshell	Cypraea sp.	-	2.4	
68B	10778	25A	-	EU-4	III	24-30	-	-	Midden	Mshell	Echinoderm sp.	-	5.7	
68C	10778	25A	-	EU-4	III	24-30	-	-	Midden	Mshell	Theodoxus cariosus	-	1.2	
68D	10778	25A	-	EU-4	III	24-30	-	-	Midden	Mshell	Isognomon sp.	-	<0.1	
68E	10778	25A	-	EU-4	III	24-30	-	-	Midden	Bone	Fishscale	5	-	
68F	10778	25A	-	EU-4	III	24-30	-	-	Midden	Bone	Fish	-	0.7	
68G	10778	25A	-	EU-4	III	24-30	-	-	Midden	Charcoal	-	-	7.5	two pieces over 0.5 g
69	10778	25A	-	EU-1	III	37-40	-	-	Midden	Soil Sample	-	-	-	
70	10778	25A	-	EU-1	III	37-40	-	-	Midden	Soil Sample	Ash?	-	-	
71	10778	22	-	TR-1	I	25	-	-	Midden	Coral	-	-	13.6	
72A	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Cypraea sp.	-	120.1	
72B	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Drupa sp.	-	39.2	
72C	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Theodoxus cariosus	-	13.6	
72D	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Nerita picea	-	8.5	
72E	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Cellana sp.	-	20.2	
72F	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Conus sp.	-	5.3	
72G	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Tellina sp.	-	1	
72H	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Strombus sp.	-	0.6	
72I	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Echinoderm sp.	-	8.4	
72J	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Malleus regula	-	3.9	
72K	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Nerita polita	-	6	
72L	10778	-	-	TR-3	II	10-24	-	-	Midden	Mshell	Terebra sp.	-	0.4	
72M	10778	-	-	TR-3	II	10-24	-	-	Midden	Bone	Fish	-	1.6	
72N	10778	-	-	TR-3	II	10-24	-	-	Midden	Bone	mammal	2	0.7	MNI=1
72O	10778	-	-	TR-3	II	10-24	-	-	Midden	Bone	Rattus mus.	-	<0.1	
72P	10778	-	-	TR-3	II	10-24	-	-	Midden	Coral	-	-	50.2	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
72Q	10778	-	-	TR-3	II	10-24	-	-	Traditional	ili'ili	Basalt	1	-	
72R	10778	-	-	TR-3	II	10-24	-	-	Midden	Seed	kiawe (?)	36	-	
72S	10778	-	-	TR-3	II	10-24	-	-	Traditional	adze	Basalt	1	-	
72T	10778	-	-	TR-3	II	10-24	-	-	Traditional	Flake	Vglass	249	-	
72U	10778	-	-	TR-3	II	10-24	-	-	Midden	Charcoal	-	-	10.6	small, fragmentary pieces, up to 0.6 grams
73A	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Theodoxus cariosus	-	2.6	
73B	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Drupa sp.	-	4.3	
73C	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Conus sp.	-	0.9	
73D	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Nerita picea	-	0.4	
73E	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Malleus regula	-	0.2	
73F	10778	-	-	TR-3	I	0-10	-	-	Midden	Mshell	Conus sp.	-	32.9	
73G	10778	-	-	TR-3	I	0-10	-	-	Midden	Coral	-	-	22.2	
73H	10778	-	-	TR-3	I	0-10	-	-	Midden	Seed	kiawe (?)	1	-	
73I	10778	-	-	TR-3	I	0-10	-	-	Traditional	Flake	Vglass	39	-	
74A	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Drupa sp.	-	7.3	
74B	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Nerita polita	-	1.2	
74C	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Theodoxus cariosus	-	3.1	
74D	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Cypraea sp.	-	9.8	
74E	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Nerita picea	-	1.4	
74F	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Isognomon sp.	-	0.6	
74G	10778	19	-	TR-3	III	24-52	-	-	Midden	Mshell	Echinoderm sp.	-	1.1	
74H	10778	19	-	TR-3	III	24-52	-	-	Midden	Coral	-	-	2.2	
74I	10778	19	-	TR-3	III	24-52	-	-	Midden	Bone	Fish	-	0.7	
74J	10778	19	-	TR-3	III	24-52	-	-	Traditional	Flake	Vglass	15	-	
74K	10778	19	-	TR-3	III	24-52	-	-	Midden	Charcoal	-	-	3.2	small,

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
														fragmentary sample
75	10778	21	-	TR-3	I	-	27-35	-	Midden	Soil Sample	Macrobotanical Sample	-	-	
76	10778	21	-	TR-3	II	-	35-49	-	Midden	Soil Sample	Macrobotanical Sample	-	-	
77	10778	21	-	TR-3	III	-	49-60	-	Midden	Soil Sample	Macrobotanical Sample	-	-	
78A	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	Cypraea sp.	-	5.1	
78B	10778	17	-	TR-4	II	-	62-91	-	Midden	Coral	-	-	22.7	
78C	10778	17	-	TR-4	II	-	62-91	-	Midden	Charcoal	-	-	27.0	
79A	10778	17	-	TR-4	II	-	60-94	-	Midden	Charcoal	-	-	4.7	
79B	10778	17	-	TR-4	II	-	60-94	-	Traditional	Flake	Vglass	1	-	
80A	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	Cypraea sp.	-	15.4	
80B	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	Conus sp.	-	4.0	
80C	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	Nerita sp.	-	0.9	
80D	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
80E	10778	17	-	TR-4	II	-	62-91	-	Midden	Mshell	non diagnostic	-	0.7	
80F	10778	17	-	TR-4	II	-	62-91	-	Midden	Coral	-	-	3.3	
80G	10778	17	-	TR-4	II	-	62-91	-	Traditional	Flake	Vglass	8	-	
80H	10778	17	-	TR-4	II	-	62-91	-	Traditional	Flake	Basalt	1	-	
80I	10778	17	-	TR-4	II	-	62-91	-	Midden	Charcoal	-	-	53.3	
81	10778	25	-	EU-6A	II/1	8-20	-	-	Midden	Mshell	Cypraea sp.	-	14.5	
82	10778	25	-	EU-6A	II/1	8-20	-	-	Midden	Charcoal	-	-	0.3	
83	10778	25	-	EU-6A	II/1	8-20	-	-	Traditional	Flake	Basalt	1	-	Flake with Polish
84	10778	25	-	EU-6A	II/1	20	-	58N, 18W	Traditional	Waterworn	Basalt	1	-	
85	10778	25	-	EU-6A	II/2	20-30	-	-	Traditional	Flake	Vglass	1	-	
86A	10778	25	-	EU-6A	II/2	20-30	-	-	Midden	Mshell	Cypraea sp.	-	5.7	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
86B	10778	25	-	EU-6A	II/2	20-30	-	-	Midden	Mshell	Nerita sp.	-	0.2	
86C	10778	25	-	EU-6A	II/2	20-30	-	-	Midden	Mshell	Echinoderm sp.	-	0.4	
87	10778	25	-	EU-6A	II/2	20-30	-	-	Midden	Charcoal	-	-	52.8	
88	10778	25	-	EU-6A	III/1	26-41	-	-	Traditional	Flake	Basalt	1	-	
89A	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	Cypraea sp.	-	1.5	
89B	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	Nerita polita	-	0.6	
89C	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
89D	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	Drupa sp.	-	1.7	
89E	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	Malleus regula	-	0.9	
89F	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Mshell	non diagnostic	-	0.8	
90	10778	25	-	EU-6A	III/1	26-41	-	-	Midden	Charcoal	-	-	49.2	
91A	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Mshell	Cypraea sp.	-	24.2	
91B	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Mshell	Drupa sp.	-	18.0	
91C	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Mshell	Nerita picea	-	0.5	
91D	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Mshell	Nerita polita	-	0.9	
91E	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
92A	10778	25	-	EU-6B	II/1	8-20	-	-	Traditional	Flake	Vglass	6	-	
92B	10778	25	-	EU-6B	II/1	8-20	-	-	Traditional	Core	Vglass	1	-	
93	10778	25	-	EU-6B	II/1	8-20	-	-	Traditional	Flake	Basalt	3		
94	10778	25	-	EU-6B	II/1	8-20	-	-	Midden	Charcoal	-	-	3.4	
95	10778	25	-	EU-6B	III/1	26-41	-	-	Traditional	Flake	Basalt	1	-	
96	10778	25	-	EU-6B	III/1	26-41	-	-	Midden	Mshell	Cypraea sp.	-	0.6	
97	10778	25	-	EU-6B	III/1	26-41	-	-	Midden	Charcoal	-	-	22.8	
98	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Echinoderm sp.	-	2.8	
99A	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Cypraea sp.	-	19.2	
99B	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Cellana sp.	-	1.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
99C	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Drupa sp.	-	0.6	
99D	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Nerita picea	-	0.1	
99E	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
99F	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Mshell	non diagnostic	-	0.1	
100	10778	25	-	EU-6B	II/2	19-30	-	-	Traditional	Flake	Vglass	2		
101	10778	25	-	EU-6B	II/2	19-30	-	-	Traditional	Flake	Basalt	2	-	Flakes with Polish
102	10778	25	-	EU-6B	II/2	19-30	-	-	Midden	Charcoal	-	-	32.4	
103	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Bone	Bird	1	1.2	Burnt, MNI=1
104	10778	25	25.1	EU-6B	-	30-40	-	-	Traditional	Flake	Vglass	1	-	
105A	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Mshell	Cypraea sp.	-	3.4	
105B	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
105C	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Bone	Fish	1	0.2	Burnt, MNI=1
106	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Charcoal	-	-	21.2	
107A	10778	25	25.1	EU-6B	-	35-41	-	-	Midden	Mshell	Cypraea sp.	-	10.8	
107B	10778	25	25.1	EU-6B	-	35-41	-	-	Midden	Mshell	Nerita polita	-	0.6	
107C	10778	25	25.1	EU-6B	-	35-41	-	-	Midden	Mshell	Conus sp.	-	1.5	
107D	10778	25	25.1	EU-6B	-	35-41	-	-	Midden	Mshell	Isognomon sp.	-	0.1	
108A	10778	25	25.1	EU-6B	-	40-56	-	-	Midden	Mshell	non diagnostic	-	0.2	
108B	10778	25	25.1	EU-6B	-	40-56	-	-	Midden	Mshell	Cypraea sp.	-	2.7	
109	10778	25	25.1	EU-6B	-	40-56	-	-	Midden	Charcoal	-	-	23.9	
110	10778	25	25.1	EU-6B	-	35-41	-	-	Midden	Charcoal	-	-	12.7	
111	10778	25	25.1	EU-6B	-	30-40	-	-	Midden	Soil Sample	-	-	-	
112A	10778	31	-	TR-5	I	0-40	-	-	Midden	Charcoal	-	-	6.4	
112B	10778	31	-	TR-5	I	0-40	-	-	Midden	Mshell	Cellana sp.	-	5.8	
112C	10778	31	-	TR-5	I	0-40	-	-	Midden	Mshell	Cypraea sp.	-	17.2	
112D	10778	31	-	TR-5	I	0-40	-	-	Midden	Mshell	Drupa sp.	-	3.8	
112E	10778	31	-	TR-5	I	0-40	-	-	Traditional	Flake	Vglass	12	-	
112F	10778	31	-	TR-5	I	0-40	-	-	Traditional	Core	Vglass	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
112G	10778	31	-	TR-5	I	0-40	-	-	Midden	Mshell	non diagnostic	-	0.3	burnt
113A	10778	31	-	TR-5	II	41-51	-	-	Midden	Charcoal	-	-	68.7	
113B	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	Isognomon sp.	-	1.2	
113C	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	Cellana sp.	-	1.9	
113D	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	Cypraea sp.	-	18.0	
113E	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	Brachiodontes crebristriatus	-	0.3	
113F	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	Nerita sp.	-	0.3	
113G	10778	31	-	TR-5	II	41-51	-	-	Midden	Mshell	non diagnostic	-	1.2	
113H	10778	31	-	TR-5	II	41-51	-	-	Midden	Coral	-	-	22.4	
113I	10778	31	-	TR-5	II	41-51	-	-	Traditional	Flake	Vglass	13	-	
113J	10778	31	-	TR-5	II	41-51	-	-	Traditional	Core	Vglass	1	-	
113K	10778	31	-	TR-5	II	41-51	-	-	Traditional	Lithic	Basalt	1	-	Possible ulu`maika? Worked Basalt
114A	10778	19	-	EU-7	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	11.0	
114B	10778	19	-	EU-7	I/1	0-10	-	-	Midden	Coral	-	-	18.7	
114C	10778	19	-	EU-7	I/1	0-10	-	-	Traditional	Flake	Basalt	1	-	Artifact??
114D	10778	19	-	EU-7	I/1	0-10	-	-	Traditional	Lithic	Basalt	1	-	Artifact??
115A	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Mshell	Cypraea sp.	-	12.2	
115B	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Mshell	Conus sp.	-	2.7	
115C	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Mshell	Drupa sp.	-	4.1	
115D	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Mshell	non diagnostic	-	1.0	
115E	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Coral	-	-	42.5	
115F	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Bone	Fish	-	0.4	
115G	10778	19	-	EU-7	II/1	10-20	-	-	Midden	Branch Coral	-	1	88.7	
115H	10778	19	-	EU-7	II/1	10-20	-	-	Traditional	Flake	Vglass	18	-	
115I	10778	19	-	EU-7	II/1	10-20	-	-	Historic	Lithic	Chert	1	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
116A	10778	19	-	EU-7	II/3	10-20	-	-	Midden	Mshell	Cypraea sp.	-	4.4	
116B	10778	19	-	EU-7	II/3	10-20	-	-	Midden	Mshell	Nerita picea	-	0.1	
116C	10778	19	-	EU-7	II/3	10-20	-	-	Midden	Mshell	Conus sp.	-	8.1	
116D	10778	19	-	EU-7	II/3	10-20	-	-	Midden	Mshell	Kukui	-	0.3	Burnt
116E	10778	19	-	EU-7	II/3	10-20	-	-	Traditional	Flake	Vglass	14	-	
117	10778	19	-	EU-8	I/1	0-10	-	-	Midden	Mshell	Cypraea sp.	-	11.6	
118A	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Mshell	Conus sp.	-	10.0	
118B	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Mshell	Cypraea sp.	-	3.7	
118C	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Mshell	Nerita picea	-	0.2	
118D	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Bone	Fish	2	1.5	MNI=1
118E	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Coral	-	-	16.5	
118F	10778	19	-	EU-8	II/2	8-20	-	-	Midden	Branch Coral	-	1	22.9	
118G	10778	19	-	EU-8	II/2	8-20	-	-	Traditional	Tool	Basalt	1	-	Worked Basalt
118H	10778	19	-	EU-8	II/2	8-20	-	-	Traditional	Flake	Vglass	4	-	
118I	10778	19	-	EU-8	II/2	8-20	-	-	Traditional	Core	Vglass	1	-	
119A	10778	19	-	EU-8	III/3	20-30	-	-	Midden	Mshell	Cypraea sp.	-	46.4	
119B	10778	19	-	EU-8	III/3	20-30	-	-	Midden	Mshell	Drupa sp.	-	1.3	
119C	10778	19	-	EU-8	III/3	20-30	-	-	Midden	Mshell	Cellana sp.	-	4.2	
119D	10778	19	-	EU-8	III/3	20-30	-	-	Midden	Mshell	Nerita polita	-	0.3	
119E	10778	19	-	EU-8	III/3	20-30	-	-	Midden	Coral	-	-	25.6	
119F	10778	19	-	EU-8	III/3	20-30	-	-	Traditional	Flake	Vglass	4	-	
120A	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Charcoal	-	-	-	Stored in paper, not to be used for C14 date
120B	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Cypraea sp.	-	23.8	
120C	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Cellana sp.	-	11.0	
120D	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Echinoderm sp.	-	3.4	
120E	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Conus sp.	-	16.4	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
120F	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Drupa sp.	-	4.8	
120G	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Nerita picea	-	4.0	
120H	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Nerita polita	-	0.5	
120I	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	Malleus regula	-	0.2	
120J	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Coral	-	-	19.8	
120K	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Mshell	non diagnostic	-	0.2	
120L	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Bone	Bird	4	1.4	MNI=1
120M	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Bone	Rattus mus.	1	<0.1	MNI=1
120N	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Bone	Mammal	4	0.6	MNI=1
120-O	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Bone	Fish	57	3.4	
120P	10778	19	-	EU-8	III/4	30-40	-	-	Traditional	Ornament	Cellana sandwichensis	1	-	
120Q	10778	19	-	EU-8	III/4	30-40	-	-	Midden	Charcoal	-	-	1.2	
120R	10778	19	-	EU-8	III/4	30-40	-	-	Traditional	Flake	Basalt	3	-	
120S	10778	19	-	EU-8	III/4	30-40	-	-	Traditional	Flake	Vglass	65	-	
121A	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Charcoal	-	-	-	Stored in paper, not to be used for C14 date
121B	10778	19	-	EU-8	III/5	40-50	-	-	Traditional	Flake	Vglass	282	-	
121C	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Bone	FIsh	48	5.2	
121D	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Bone	small mammal	20	7.5	
121E	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Bone	Bird	6	2.5	
121F	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Bone	Sus scrofa	4	0.9	MNI=1
121G	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Coral	-	-	14.5	
121H	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Charcoal	-	-	0.2	
121I	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Cypraea sp.	-	40.7	
121J	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Drupa sp.	-	9.9	
121K	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Conus sp.	-	12.9	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
121L	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Nerita picea	-	4.9	
121M	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Echinoderm sp.	-	3.9	
121N	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Isognomon sp.	-	3.5	
121-O	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	Nerita polita	-	0.8	
121P	10778	19	-	EU-8	III/5	40-50	-	-	Midden	Mshell	non diagnostic	-	4.4	
122A	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Cypraea sp.	-	34.3	
122B	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Conus sp.	-	10.2	
122C	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Isognomon sp.	-	3.3	
122D	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Nerita picea	-	2.4	
122E	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Nerita polita	-	2.1	
122F	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Drupa sp.	-	7.7	
122G	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Mshell	Echinoderm sp.	-	0.6	
122H	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Coral	-	-	3.2	
122I	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Bone	Mammal	5	2.3	Burnt, MNI=1
122J	10778	19	-	EU-8	III/6	50-60	-	-	Midden	Bone	Fish	9	0.8	MNI=1
122K	10778	19	-	EU-8	III/6	50-60	-	-	Traditional	Flake	Vglass	139	-	
123A	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Cypraea sp.	-	9.5	
123B	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Nerita polita	-	0.9	
123C	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Nerita picea	-	0.7	
123D	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Drupa sp.	-	1.8	
123E	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Conus sp.	-	0.4	
123F	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Echinoderm sp.	-	1.3	
123G	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Isognomon sp.	-	0.2	
123H	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Mshell	Cellana sp.	-	0.1	
123I	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Bone	Fish	3	0.4	MNI=1
123J	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Bone	Mammal	3	0.8	MNI=2

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
123K	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Bone	Rattus mus.	1	<0.1	MNI=1
123L	10778	19	-	EU-8	III/7	60-70	-	-	Midden	Charcoal	-	-	2.2	
123M	10778	19	-	EU-8	III/7	60-70	-	-	Traditional	Flake	Vglass	38	-	
124A	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Mshell	Cypraea sp.	-	10.4	
124B	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Mshell	Isognomon sp.	-	1.1	
124C	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Mshell	Echinoderm sp.	-	0.3	
124D	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Mshell	Nerita picea	-	0.4	
124E	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Mshell	Drupa sp.	-	0.8	
124F	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Bone	Fish	2	0.3	MNI=1
124G	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Bone	Rattus mus.	1	<0.1	MNI=1
124H	10778	19	-	EU-8	IV/7	60-70	-	-	Traditional	Flake	Vglass	18	-	
124I	10778	19	-	EU-8	IV/7	60-70	-	-	Midden	Charcoal	-	-	-	Stored in paper, not to be used for C14 date
125	10778	25	25.1	EU-6A	-	40-57	-	-	Midden	Mshell	Echinoderm sp.	-	0.3	
126A	10778	25	25.1	EU-6B	-	41-61	-	-	Midden	Mshell	Echinoderm sp.	-	0.1	
126B	10778	25	25.1	EU-6B	-	41-61	-	-	Midden	Mshell	Cypraea sp.	-	0.3	
126C	10778	25	25.1	EU-6B	-	41-61	-	-	Midden	Mshell	Isognomon sp.	-	0.9	
126D	10778	25	25.1	EU-6B	-	41-61	-	-	Midden	Mshell	Nerita sp.	-	0.1	
127A	10778	25	-	EU-6A	III/2	40-58	-	-	Midden	Mshell	Cypraea sp.	-	1.6	
127B	10778	25	-	EU-6A	III/2	40-58	-	-	Midden	Mshell	Echinoderm sp.	-	<0.1	
128	10778	25	25.1	EU-6A	-	40-57	-	-	Midden	Charcoal	-	-	4.8	
129	10778	25	25.1	EU-6B	-	45-52	-	-	Midden	Charcoal	-	-	32.1	
130	10778	25	25.1	EU-6B	-	41-61	-	-	Midden	Charcoal	-	-	45.4	
131	10778	25	-	EU-6A	III/2	40-58	-	-	Midden	Charcoal	-	-	10.4	
132	10778	25	-	EU-6A	III/2	40-58	-	-	Traditional	Flake	Basalt	2	-	

SCS 714 Cultural Material Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Art. Type**	**Mat'l/Species**	**ct.**	**wt. (g)**	**Description**
133A	10778	25	-	EU-6A	III/2	40-58	-	-	Midden	Bone	Sus scrofa	1	0.9	Metatarsal, MNI=1
37	10737	3	-	EU-3	I	90-130	-	-	Midden	Mshell	Cypraea sp.	-	0.9	
133B	10778	25	-	EU-6A	III/2	40-58	-	-	Midden	Bone	Fish	2	0.6	MNI=2

APPENDIX B: RADIOCARBON DATING RESULTS

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-22.1:lab. mult=1)

Laboratory number: **Beta-249749**

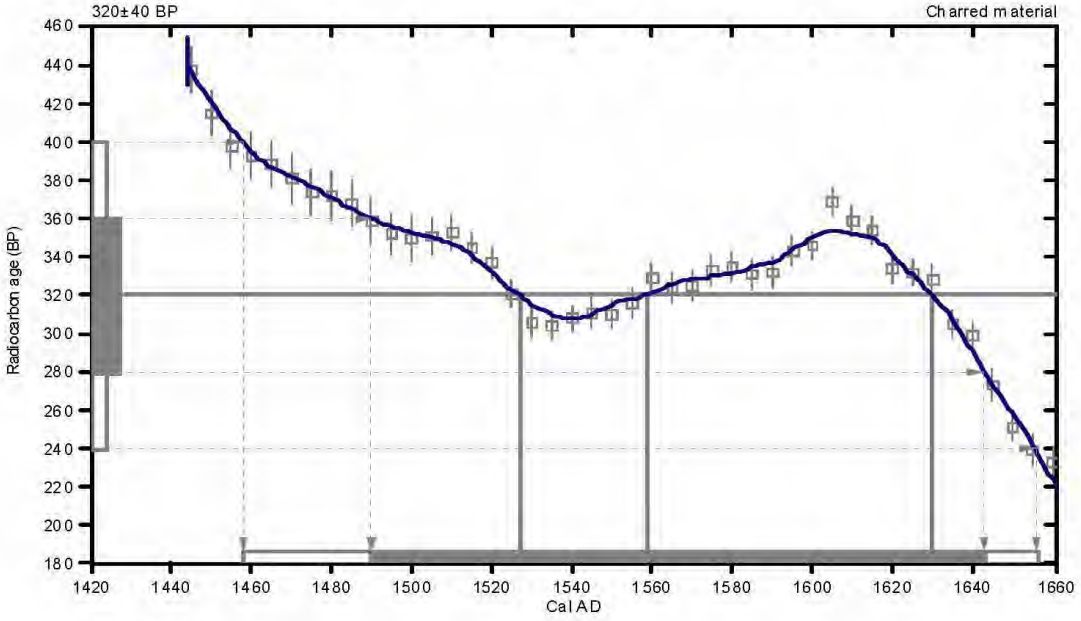
Conventional radiocarbon age: **320±40 BP**

2 Sigma calibrated result: **Cal AD 1460 to 1660 (Cal BP 490 to 290)**
(95% probability)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1530 (Cal BP 420) and
Cal AD 1560 (Cal BP 390) and
Cal AD 1630 (Cal BP 320)

1 Sigma calibrated result: Cal AD 1490 to 1640 (Cal BP 460 to 310)
(68% probability)



References:

Database used

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Calibration Database

INTCAL04 Radiocarbon Age Calibration

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Darden Hood
President

Ronald Hatfield
Christopher Patrick
Deputy Directors

October 24, 2008

Dr. Robert L. Spear
Scientific Consultant Services, Inc.
711 Kapiolani Boulevard
Suite 975
Honolulu, HI 96813
USA

RE: Radiocarbon Dating Results For Samples SCSRC615, SCSRC616, SCSRC617, SCSRC618, SCSRC619, SCSRC620, SCSRC621, SCSRC622, SCSRC623, SCSRC624, SCSRC625, SCSRC626, SCSRC627

Dear Bob:

Enclosed are the radiocarbon dating results for 13 samples recently sent to us. They each provided plenty of carbon for accurate measurements and all the analyses proceeded normally. As usual, the method of analysis is listed on the report with the results and calibration data is provided where applicable.

As always, no students or intern researchers who would necessarily be distracted with other obligations and priorities were used in the analyses. We analyzed them with the combined attention of our entire professional staff.

If you have specific questions about the analyses, please contact us. We are always available to answer your questions.

Our invoice has been sent electronically. As always, if you have any questions or would like to discuss the results, don't hesitate to contact me.

Sincerely,

Darden Hood
Digital signature on file

BETA ANALYTIC INC.
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beta@radiocarbon.com

REPORT OF RADIOCARBON DATING ANALYSES

Dr. Robert L. Spear

Report Date: 10/24/2008

Scientific Consultant Services, Inc.

Material Received: 9/29/2008

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 249737	90 +/- 40 BP	-21.9 o/oo	140 +/- 40 BP
SAMPLE : SCSRC615			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1660 to 1960 (Cal BP 290 to 0)			
Beta - 249738	30 +/- 40 BP	-18.5 o/oo	140 +/- 40 BP
SAMPLE : SCSRC616			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1660 to 1960 (Cal BP 290 to 0)			
Beta - 249739	70 +/- 40 BP	-19.8 o/oo	160 +/- 40 BP
SAMPLE : SCSRC617			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1660 to 1960 (Cal BP 290 to 0)			
Beta - 249740	100.6 +/- 0.5 pMC	-19.5 o/oo	40 +/- 40 BP
SAMPLE : SCSRC618			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1700 to 1720 (Cal BP 260 to 220) AND Cal AD 1820 to 1920 (Cal BP 140 to 30) Cal AD 1950 to beyond 1960 (Cal BP 0 to 0)			
Beta - 249741	40 +/- 40 BP	-22.1 o/oo	90 +/- 40 BP
SAMPLE : SCSRC619			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1680 to 1770 (Cal BP 270 to 180) AND Cal AD 1800 to 1940 (Cal BP 150 to 10) Cal AD 1950 to 1960 (Cal BP 0 to 0)			

Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12C ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

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beta@radiocarbon.com

REPORT OF RADIOCARBON DATING ANALYSES

Dr. Robert L. Spear

Report Date: 10/24/2008

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 249742	390 +/- 40 BP	-19.1 o/oo	490 +/- 40 BP
SAMPLE : SCSRC620			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT :	(charred material): acid/alkali/acid		
2 SIGMA CALIBRATION :	Cal AD 1400 to 1450 (Cal BP 550 to 500)		
Beta - 249743	240 +/- 40 BP	-24.7 o/oo	240 +/- 40 BP
SAMPLE : SCSRC621			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT :	(charred material): acid/alkali/acid		
2 SIGMA CALIBRATION :	Cal AD 1530 to 1560 (Cal BP 420 to 390) AND Cal AD 1630 to 1680 (Cal BP 320 to 270)		
	Cal AD 1740 to 1800 (Cal BP 210 to 150) AND Cal AD 1940 to 1950 (Cal BP 20 to 0)		
Beta - 249744	250 +/- 40 BP	-23.3 o/oo	280 +/- 40 BP
SAMPLE : SCSRC622			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT :	(charred material): acid/alkali/acid		
2 SIGMA CALIBRATION :	Cal AD 1490 to 1670 (Cal BP 460 to 280) AND Cal AD 1780 to 1790 (Cal BP 160 to 160)		
Beta - 249745	510 +/- 40 BP	-25.5 o/oo	500 +/- 40 BP
SAMPLE : SCSRC623			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT :	(charred material): acid/alkali/acid		
2 SIGMA CALIBRATION :	Cal AD 1400 to 1450 (Cal BP 550 to 500)		
Beta - 249746	150 +/- 40 BP	-22.4 o/oo	190 +/- 40 BP
SAMPLE : SCSRC624			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT :	(charred material): acid/alkali/acid		
2 SIGMA CALIBRATION :	Cal AD 1650 to 1700 (Cal BP 300 to 250) AND Cal AD 1720 to 1820 (Cal BP 230 to 130)		
	Cal AD 1840 to 1880 (Cal BP 110 to 70) AND Cal AD 1920 to 1950 (Cal BP 40 to 0)		

Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12C ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

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REPORT OF RADIOCARBON DATING ANALYSES

Dr. Robert L. Spear

Report Date: 10/24/2008

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 249747	150 +/- 40 BP	-23.1 o/oo	180 +/- 40 BP
SAMPLE : SCSRC625			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1650 to 1710 (Cal BP 300 to 240) AND Cal AD 1710 to 1880 (Cal BP 240 to 60) Cal AD 1910 to 1950 (Cal BP 40 to 0)			
Beta - 249748	530 +/- 40 BP	-22.2 o/oo	580 +/- 40 BP
SAMPLE : SCSRC626			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1300 to 1430 (Cal BP 660 to 520)			
Beta - 249749	270 +/- 40 BP	-22.1 o/oo	320 +/- 40 BP
SAMPLE : SCSRC627			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1460 to 1660 (Cal BP 490 to 290)			

Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12C ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-21.9:lab. mult=1)

Laboratory number: **Beta-249737**

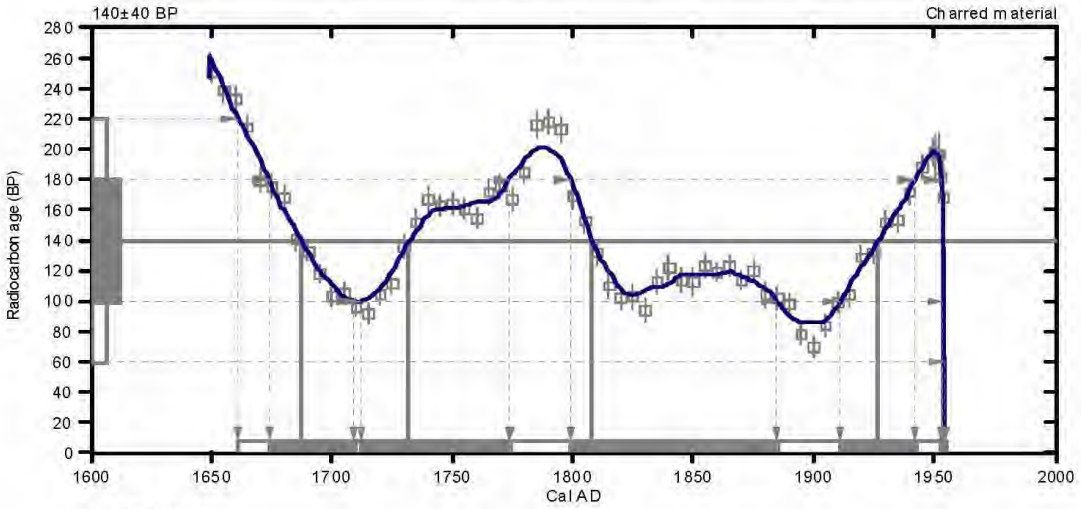
Conventional radiocarbon age: **140±40 BP**

2 Sigma calibrated result: **Cal AD 1660 to 1960 (Cal BP 290 to 0)**
(95% probability)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1690 (Cal BP 260) and
Cal AD 1730 (Cal BP 220) and
Cal AD 1810 (Cal BP 140) and
Cal AD 1930 (Cal BP 20) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: (68% probability) Cal AD 1670 to 1710 (Cal BP 280 to 240) and
Cal AD 1710 to 1770 (Cal BP 240 to 180) and
Cal AD 1800 to 1880 (Cal BP 150 to 60) and
Cal AD 1910 to 1940 (Cal BP 40 to 10) and
Cal AD 1950 to 1950 (Cal BP 0 to 0)



References:

Database used
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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-18.5:lab. mult=1)

Laboratory number: **Beta-249738**

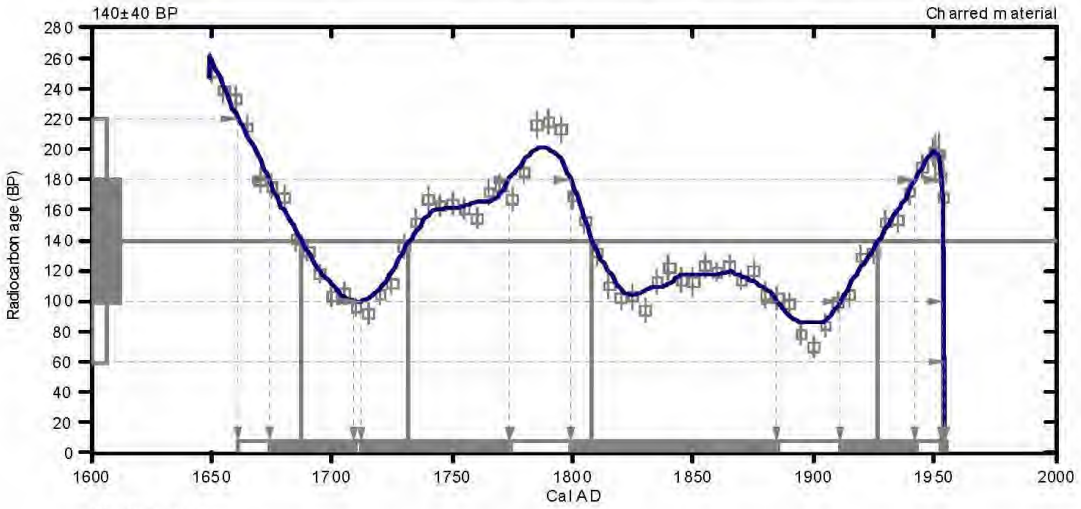
Conventional radiocarbon age: **140±40 BP**

2 Sigma calibrated result: (95% probability) **Cal AD 1660 to 1960 (Cal BP 290 to 0)**

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1690 (Cal BP 260) and
Cal AD 1730 (Cal BP 220) and
Cal AD 1810 (Cal BP 140) and
Cal AD 1930 (Cal BP 20) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: (68% probability) Cal AD 1670 to 1710 (Cal BP 280 to 240) and
Cal AD 1710 to 1770 (Cal BP 240 to 180) and
Cal AD 1800 to 1880 (Cal BP 150 to 60) and
Cal AD 1910 to 1940 (Cal BP 40 to 10) and
Cal AD 1950 to 1950 (Cal BP 0 to 0)



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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.8:lab. mult=1)

Laboratory number: **Beta-249739**

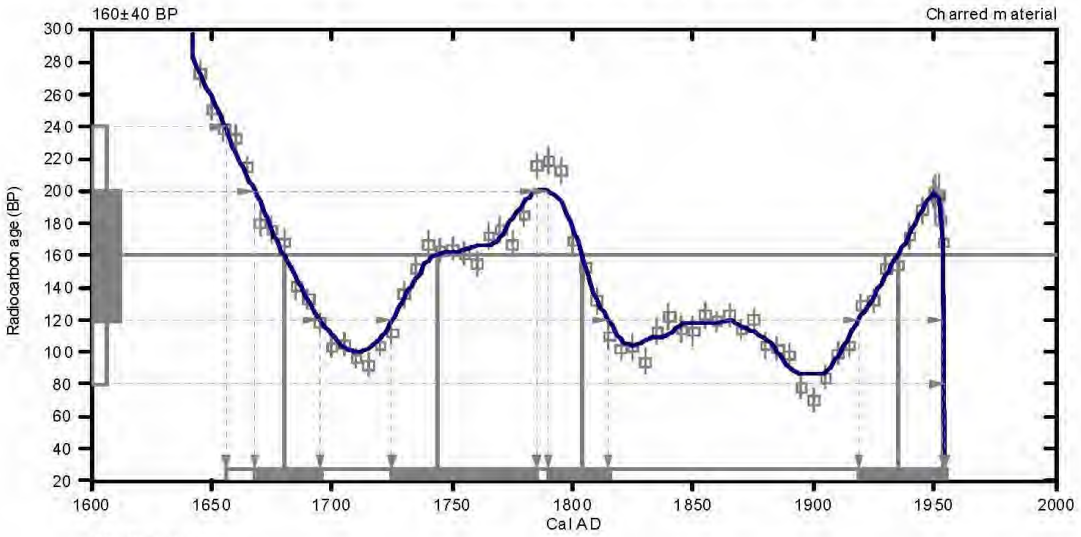
Conventional radiocarbon age: **160±40 BP**

2 Sigma calibrated result: **Cal AD 1660 to 1960 (Cal BP 290 to 0)**
(95% probability)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1680 (Cal BP 270) and
Cal AD 1740 (Cal BP 210) and
Cal AD 1800 (Cal BP 150) and
Cal AD 1940 (Cal BP 20) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: (68% probability) Cal AD 1670 to 1700 (Cal BP 280 to 260) and
Cal AD 1720 to 1780 (Cal BP 220 to 160) and
Cal AD 1790 to 1820 (Cal BP 160 to 140) and
Cal AD 1920 to 1950 (Cal BP 30 to 0)



References:

Database used

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Calibration Database

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.5:lab. mult=1)

Laboratory number: Beta-249740

Conventional radiocarbon age: 40±40 BP

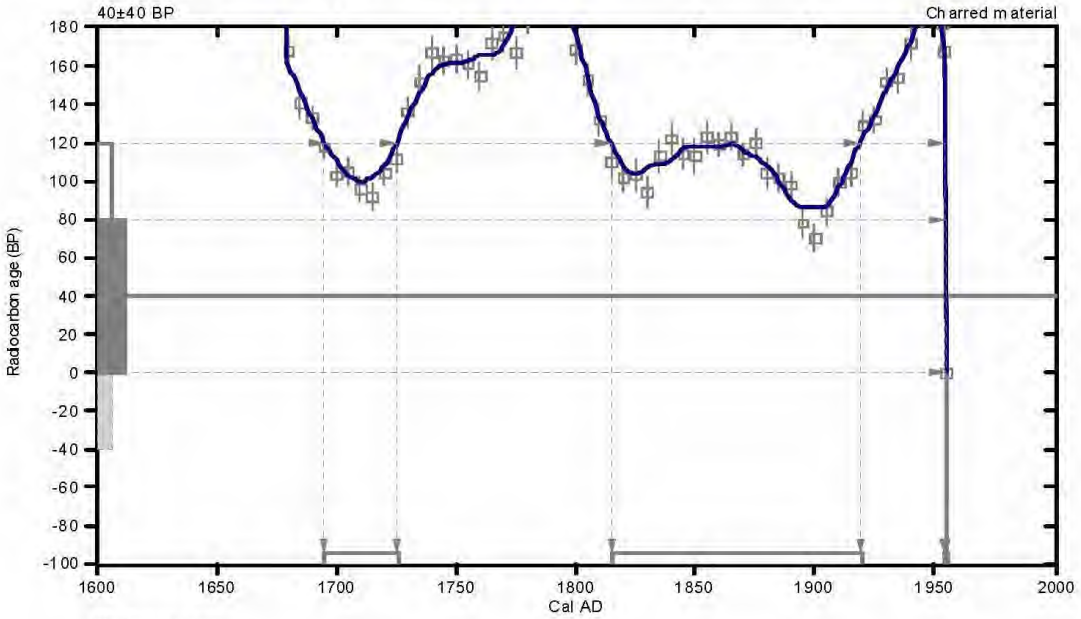
2 Sigma calibrated results[2]: (95% probability)
Cal AD 1700 to 1720 (Cal BP 260 to 220) and
Cal AD 1820 to 1920 (Cal BP 140 to 30) and
Cal AD 1950 to beyond 1960 (Cal BP 0 to 0)

[2] 2 Sigma range being quoted is the maximum antiquity based on the minus 2 Sigma range

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1960 (Cal BP 0)

1 Sigma calibrated result: (68% probability) Cal AD 1960 to 1960 (Cal BP 0 to 0)



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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-22.1:lab. mult=1)

Laboratory number: **Beta-249741**

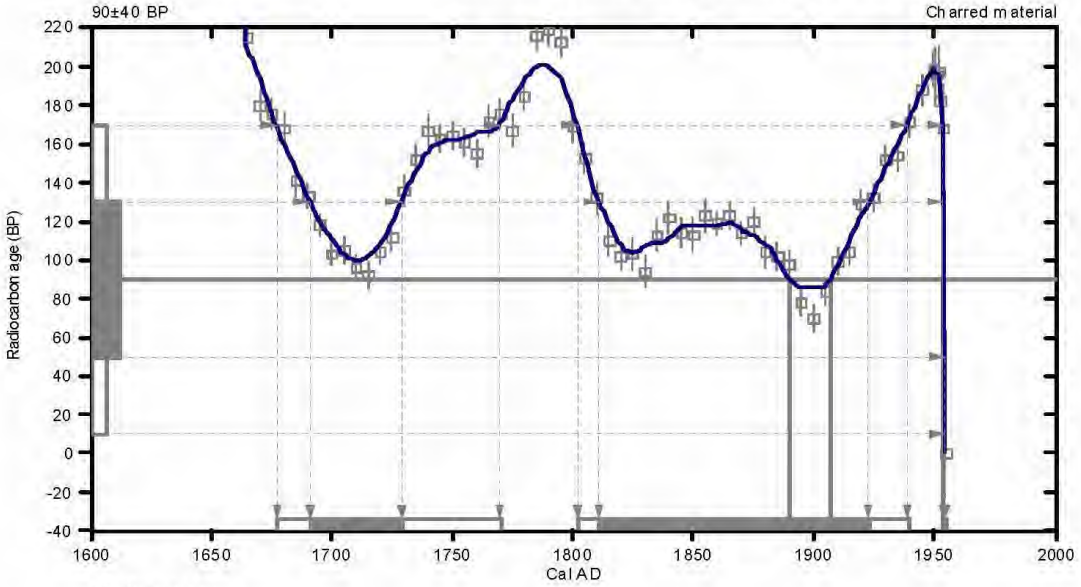
Conventional radiocarbon age: **90±40 BP**

2 Sigma calibrated results: **Cal AD 1680 to 1770 (Cal BP 270 to 180) and**
(95% probability) **Cal AD 1800 to 1940 (Cal BP 150 to 10) and**
Cal AD 1950 to 1960 (Cal BP 0 to 0)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1890 (Cal BP 60) and
Cal AD 1910 (Cal BP 40) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: Cal AD 1690 to 1730 (Cal BP 260 to 220) and
(68% probability) Cal AD 1810 to 1920 (Cal BP 140 to 30) and
Cal AD 1950 to 1960 (Cal BP 0 to 0)



References:

Database used

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Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.1:lab. mult=1)

Laboratory number: **Beta-249742**

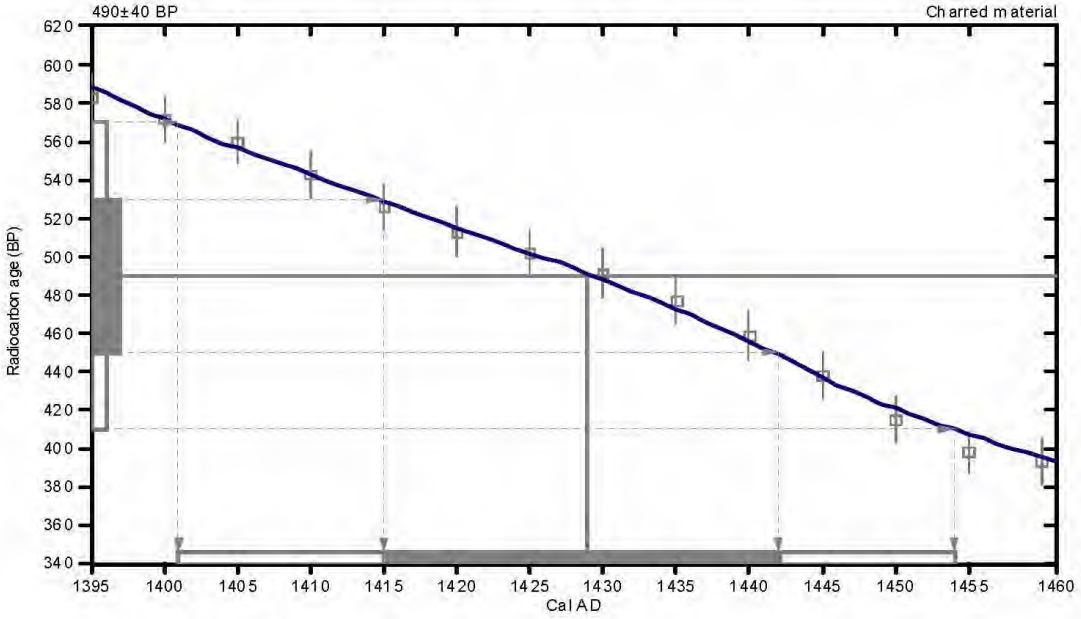
Conventional radiocarbon age: **490±40 BP**

2 Sigma calibrated result: (95% probability) **Cal AD 1400 to 1450 (Cal BP 550 to 500)**

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1430 (Cal BP 520)

1 Sigma calibrated result: (68% probability) Cal AD 1420 to 1440 (Cal BP 540 to 510)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-24.7:lab. mult=1)

Laboratory number: **Beta-249743**

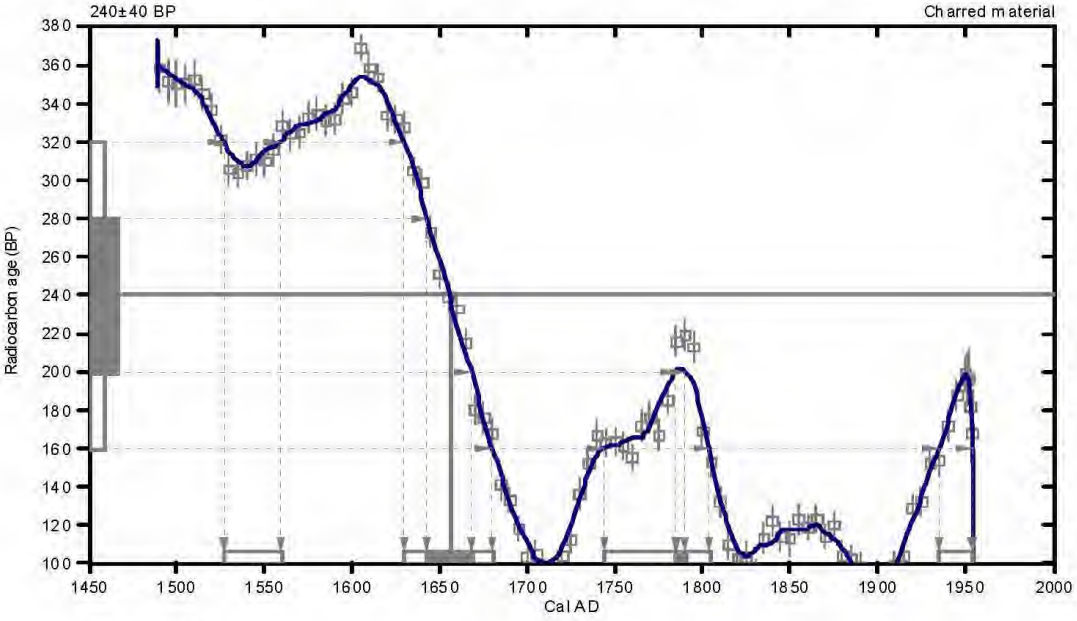
Conventional radiocarbon age: **240±40 BP**

2 Sigma calibrated results: **Cal AD 1530 to 1560 (Cal BP 420 to 390) and**
(95% probability) **Cal AD 1630 to 1680 (Cal BP 320 to 270) and**
Cal AD 1740 to 1800 (Cal BP 210 to 150) and
Cal AD 1940 to 1950 (Cal BP 20 to 0)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1660 (Cal BP 290)

1 Sigma calibrated results: Cal AD 1640 to 1670 (Cal BP 310 to 280) and
(68% probability) Cal AD 1780 to 1790 (Cal BP 160 to 160)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-23.3:lab. mult=1)

Laboratory number: **Beta-249744**

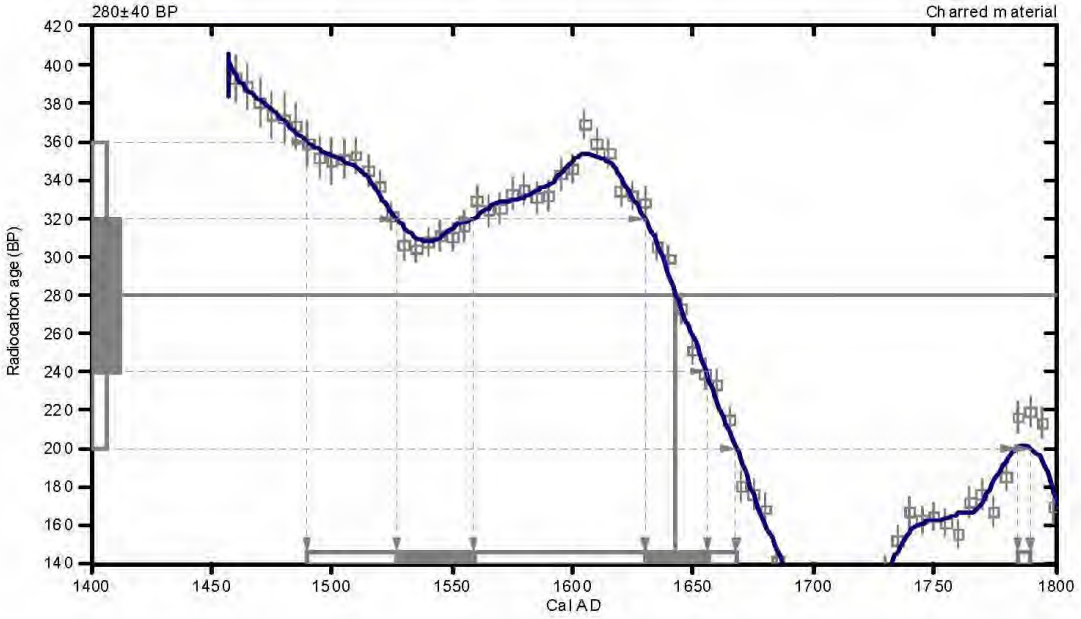
Conventional radiocarbon age: **280±40 BP**

2 Sigma calibrated results: **Cal AD 1490 to 1670 (Cal BP 460 to 280) and**
(95% probability) **Cal AD 1780 to 1790 (Cal BP 160 to 160)**

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1640 (Cal BP 310)

1 Sigma calibrated results: Cal AD 1530 to 1560 (Cal BP 420 to 390) and
(68% probability) Cal AD 1630 to 1660 (Cal BP 320 to 290)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-25.5:lab. mult=1)

Laboratory number: **Beta-249745**

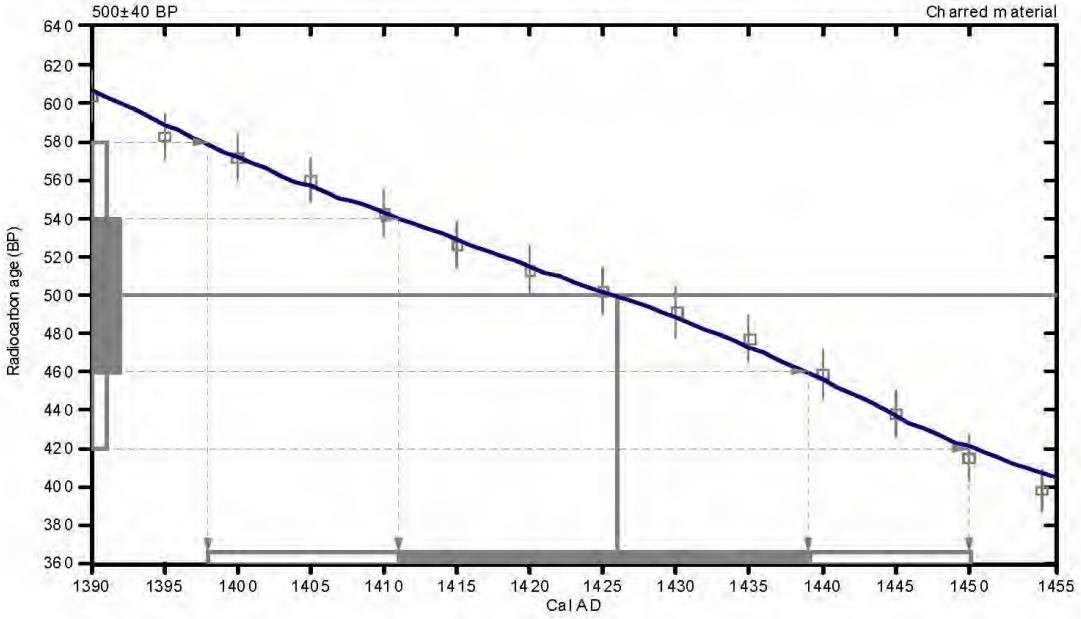
Conventional radiocarbon age: **500±40 BP**

2 Sigma calibrated result: (95% probability) **Cal AD 1400 to 1450 (Cal BP 550 to 500)**

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1430 (Cal BP 520)

1 Sigma calibrated result: (68% probability) Cal AD 1410 to 1440 (Cal BP 540 to 510)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

A Simplified Approach to Calibrating C14 Dates

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-22.4:lab. mult=1)

Laboratory number: **Beta-249746**

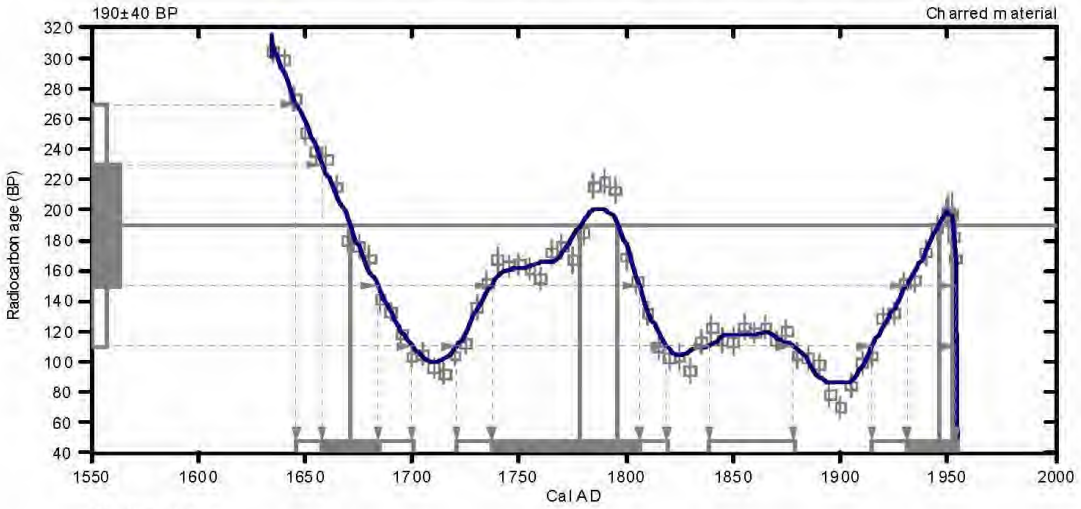
Conventional radiocarbon age: **190±40 BP**

2 Sigma calibrated results: **Cal AD 1650 to 1700 (Cal BP 300 to 250) and**
(95% probability) **Cal AD 1720 to 1820 (Cal BP 230 to 130) and**
Cal AD 1840 to 1880 (Cal BP 110 to 70) and
Cal AD 1920 to 1950 (Cal BP 40 to 0)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1670 (Cal BP 280) and
Cal AD 1780 (Cal BP 170) and
Cal AD 1800 (Cal BP 150) and
Cal AD 1950 (Cal BP 0) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: Cal AD 1660 to 1680 (Cal BP 290 to 270) and
(68% probability) Cal AD 1740 to 1810 (Cal BP 210 to 140) and
Cal AD 1930 to 1950 (Cal BP 20 to 0)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

A Simplified Approach to Calibrating C14 Dates

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-23.1:lab. mult=1)

Laboratory number: **Beta-249747**

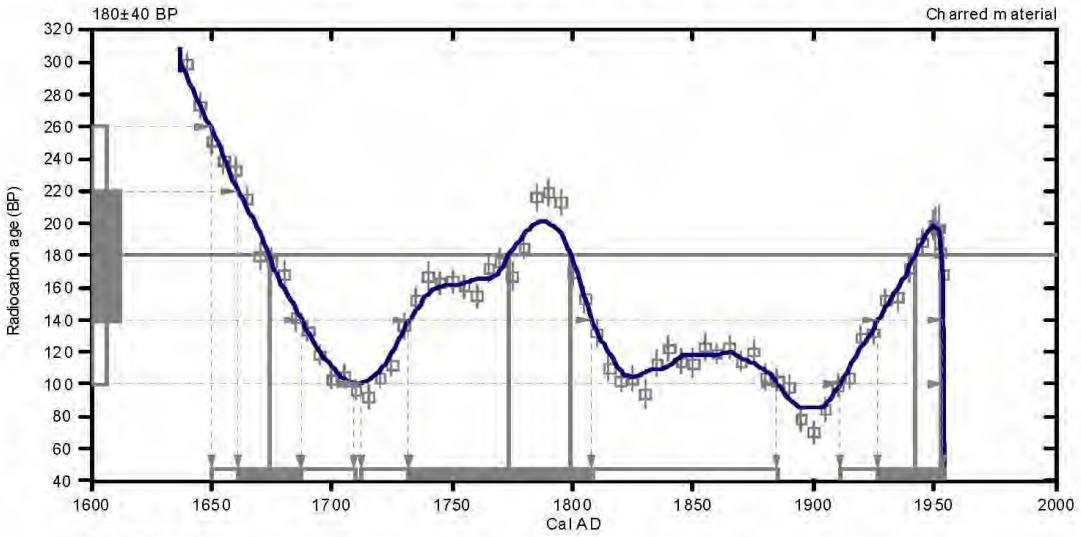
Conventional radiocarbon age: **180±40 BP**

2 Sigma calibrated results: **Cal AD 1650 to 1710 (Cal BP 300 to 240) and**
(95% probability) **Cal AD 1710 to 1880 (Cal BP 240 to 60) and**
Cal AD 1910 to 1950 (Cal BP 40 to 0)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1670 (Cal BP 280) and
Cal AD 1770 (Cal BP 180) and
Cal AD 1800 (Cal BP 150) and
Cal AD 1940 (Cal BP 10) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: Cal AD 1660 to 1690 (Cal BP 290 to 260) and
(68% probability) Cal AD 1730 to 1810 (Cal BP 220 to 140) and
Cal AD 1930 to 1950 (Cal BP 20 to 0)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-22.2:lab. mult=1)

Laboratory number: **Beta-249748**

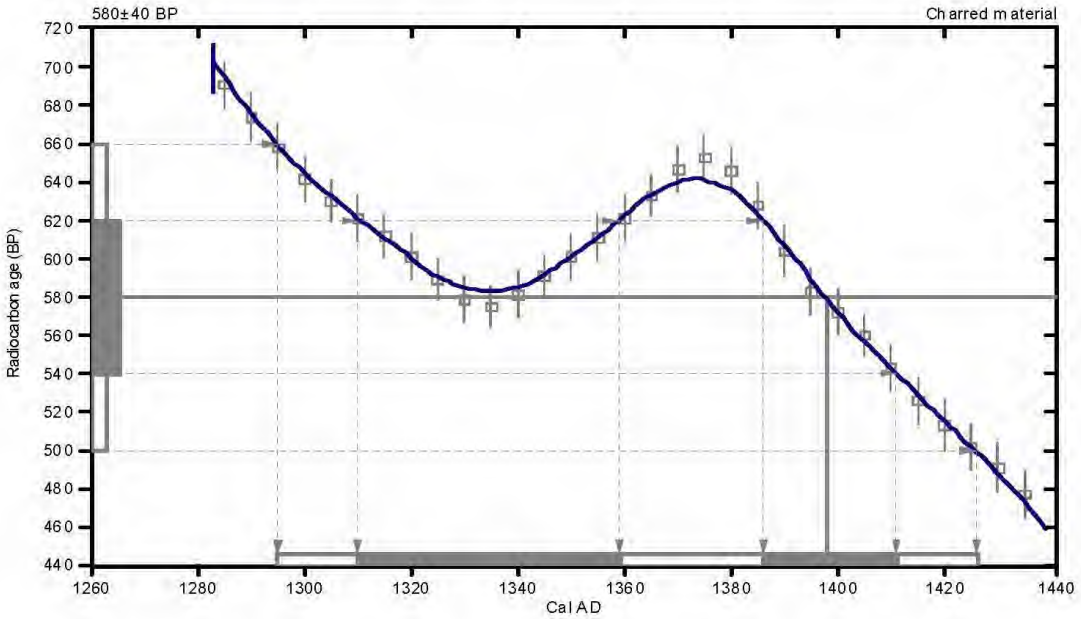
Conventional radiocarbon age: **580±40 BP**

2 Sigma calibrated result: **Cal AD 1300 to 1430 (Cal BP 660 to 520)**
(95% probability)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1400 (Cal BP 550)

1 Sigma calibrated results: Cal AD 1310 to 1360 (Cal BP 640 to 590) and
(68% probability) Cal AD 1390 to 1410 (Cal BP 560 to 540)



References:

Database used

INTCAL04

Calibration Database

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IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

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APPENDIX C: SELECTED ARTIFACT PHOTOGRAPHS

DSC02974: Traditional artifacts: top row (left to right): *Cellana sandwicensis* scraper (Site 10768 Bag 56), *Cellana sandwicensis* ornament (Site 10778 Bag 120P); bottom row (left to right): coral abrader (Site 10706 Bag 28), basalt abrader (Site 10778 Bag 10B), basalt adze (Site 10706 Bag 24).

DSC02982: Historic artifacts: top row (left to right): ceramic sherds (Site 10737 Bag 2B), ceramic sherd (Site 10768 Bag 19P), shell button (Site 10768 Bag 13P); bottom row: iron square nail (Site 10764 Bag 4).

DSC02987: Historic artifact: stove lid (Site 10764 Bag 3B).

SCS Project 714 Selected Artifacts for Photos Table														
Bag	**Site**	**Fe.**	**SSF**	**Unit**	**Lyr./ Lev.**	**Depth (cmbs)**	**Depth (cmbd)**	**In Situ Loc**	**Category**	**Artifact Type**	**Material/ Species**	**ct.**	**wt. (g)**	**Description**
24	10706	1	-	EU-4	II/A		22	52 NW, 26W	Traditional	adze	basalt	1	-	
28	10706	1	-	EU-4	II		33	30 SW	Traditional	abrader	Coral	1	-	along south wall, possible abrader, scraper or blade
2B	10737	3	-	SP-B4	II	17-30	-	-	Historic	Ceramic	-	8	-	
3B	10764	2	-	TR-2	I	20-42	-	-	Historic	Stove Lid	Ferrous	1	-	Possible stove lid/cover for stove burner on a wood cook stove OR a ferrous emblem. Embossed: "RIVAL, MANHATTAN"
4	10764	2	-	ST-2	I	20-42	-	-	Historic	Metal Frag	Ferrous	200+	-	
13P	10768	2	-	TR-2A	II/1	38-48	-	-	Historic	Button	Shell	1	-	
19P	10768	2	-	TR-2C	I/2	11-20	-	-	Historic	Sherd	Porcelain	2	-	Hand-painted blue and white
56	10768	2	-	EU-4	I	-	54	44 cm from SE	Traditional	Scaper	Cellana sandwichensis	1	-	44 cm from SE on the south wall
10B	10778	-	-	SP-Q3	I	0-25	-	-	Traditional	File/ abrader	Basalt	1	-	
120P	10778	19	-	EU-8	III/4	30-40	-	-	Traditional	Ornament	Cellana sandwichensis	1	-	