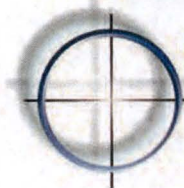
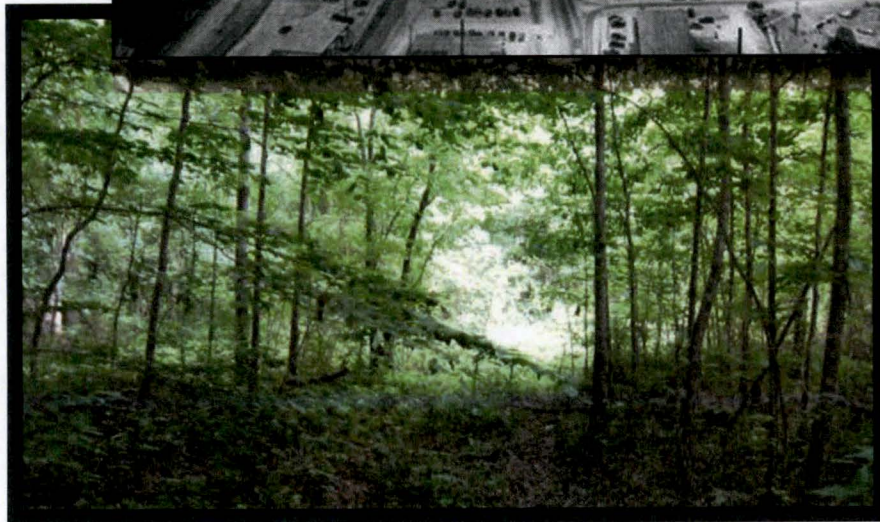


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ARCHAEOLOGICAL SURVEY AND TESTING OF
**THE HAPPY VALLEY
WORKER CAMP**

Roane County, Tennessee



NEW SOUTH ASSOCIATES

PROVIDING PERSPECTIVES ON THE PAST

Archaeological Survey and Testing of the Happy Valley Worker Camp

Roane County, Tennessee

Report submitted to:

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ABSTRACT

Happy Valley was a temporary worker housing area occupied from 1943 to 1947 during the construction of the K-25 Oak Ridge Gaseous Diffusion Plant. New South Associates conducted archaeological survey and testing in the area where the Happy Valley once stood at the U.S. Department of Energy's Oak Ridge Reservation in Roane County, Tennessee. This work was completed to evaluate the eligibility of the Happy Valley for listing on the National Register of Historic Places (NRHP), and the results will be used in the preparation of an Environmental Assessment under the National Environmental Policy Act (NEPA).

The 241-acre survey was conducted in three parts between January 2008 and July 2010. The objective of the surveys was to identify and assess for National Register of Historic Places (NRHP) eligibility any archaeological remains on the property. Archaeological Phase II Testing was conducted after the survey was completed in order to assess the integrity of Happy Valley deposits and to provide a recommendation on the NRHP eligibility of the site. Historical information on Happy Valley was also gathered to aid the identification and evaluation of this site.

Archaeological remains of Happy Valley were identified by this survey. The remains for Happy Valley fall within two site areas: 40RE577 and 40RE233. During the two surveys, a total of 21 artifact concentrations, 13 isolated finds, and 98 above ground features were located. Due to the Happy Valley's strong association with the Manhattan Project, both sites are recommended eligible for listing on the NRHP under Criteria A, C, and D. The survey also identified the location of a previously recorded cemetery, 40RE219, the African American Wheat Community Burial Ground. Depressions noted outside the fenced area of the cemetery suggest the potential for unmarked graves outside the cemetery's fencing, and further survey is recommended if disturbance is proposed for the area of the cemetery.

TABLE OF CONTENTS

ABSTRACT	i
TABLE OF CONTENTS	iii
LIST OF FIGURES	vii
LIST OF TABLES	ix
 I. INTRODUCTION	 1
II. ENVIRONMENTAL CONTEXT	5
III. PREVIOUSLY IDENTIFIED RESOURCES AND CULTURAL CONTEXT	7
PREVIOUSLY IDENTIFIED RESOURCES	7
40RE125	7
40RE126	7
40RE135	7
40RE136	9
40RE138	9
40RE139	9
40RE202	9
40RE219	9
40RE222	10
40RE223	10
40RE224	10
40RE232	10
40RE233	11
40RE492	11
40RE501	11
40RE575	11
PREHISTORIC OVERVIEW	12
Paleoindian Period	12
Archaic Period	12
Woodland Period	13
Mississippian Period	13
Historic Cherokee	14
Historic Overview	14
IV. HAPPY VALLEY HISTORY	17
INTRODUCTION	17
THE MANHATTAN PROJECT	17
CLINTON ENGINEER WORKS (OAK RIDGE)	18
PRODUCTION FACILITIES AND HOUSING AT CEW, 1943-1945	19
THE K-25 GASEOUS DIFFUSION PLANT AND HAPPY VALLEY	22
HOUSING AT HAPPY VALLEY	22
RECREATION	29
MEMORIES OF HAPPY VALLEY	29
CLOSURE AND DEMOLITION	30
V. METHODS	31
ARCHAEOLOGICAL SURVEY	31
ARCHAEOLOGICAL TESTING	32
LABORATORY METHODS	32
NATIONAL REGISTER OF HISTORIC PLACES (NRHP) EVALUATION	32

VI. ARCHAEOLOGICAL SURVEY RESULTS	35
PREVIOUSLY RECORDED SITES: 40RE219 AND 40RE233	35
HAPPY VALLEY ARTIFACT CONCENTRATIONS	35
Locus 1	55
Locus 2	55
Locus 3	55
Locus 4	59
Locus 5	59
Locus 6	59
Locus 7	62
Locus 8	62
Locus 9	66
Locus 10	66
Locus 11	69
Locus 12	69
Locus 13	69
Locus 14	72
Locus 15	72
Locus 16	76
Locus 17	76
Locus 18	79
Locus 19	79
Locus 20	79
Locus 21	82
HAPPY VALLEY ISOLATED FINDS	82
HAPPY VALLEY FEATURES	85
Sewer Features	89
Lavatories	89
Water Stations	93
Fire Hydrants	93
Feature 5 – Recreation Hall, H-38	97
Feature 9–Utility Pipe	97
Feature 10 – Living Room No. 2	97
Feature 12 – Coney Island, S-2	97
Feature 13 – Bridge Remains	100
Features 19 and 43 – Theater, S-17	100
Feature 30 – Possible Community House, S-51	100
Features 48 and 49 – Barracks, S-57 and S-5	106
Feature 53 – Stone Wall	106
Feature 54 – Possible Flood Control Structure	106
Feature 77 – Mess Hall and Boiler House, 900	109
Feature 79 – Dormitory, 903	109
Feature 80 – Recreation Area, Living Room One	109
Features 81 and 92 – Pipe Features	109
Feature 95 – Boiler Room	113
VII. ARCHAEOLOGICAL TESTING RESULTS	115
UNIT EXCAVATION, SITE 40RE233–HUTMENTS	116
Unit 1 – Locus 16	116
Unit 2 – Locus 20	118
Unit 3 – Locus 17	120
Unit 4 – Feature 95	120
UNIT EXCAVATION, SITE 40RE577–DORMITORIES	122
Unit 5 – Feature 77	122
Unit 6 – Dormitories	125
UNIT EXCAVATION, SITE 40RE577–VICTORY HOMES	127
Unit 7 – Victory Homes	127
Unit 8 – Victory Homes	132

Unit 9 – Victory Homes	134
Unit 10 – Feature 30, Victory Homes	135
UNIT EXCAVATION, SITE 40RE577–TRAILERS	138
Unit 11 – Trailers	139
Unit 12 – Trailers	139
Unit 13 – Trailers	142
Unit 14 – Trailers	144
UNIT EXCAVATION, SITE 40RE577–BARRACKS	144
Unit 15 – Barracks	146
Unit 16 – Barracks	146
UNIT EXCAVATION, SITE 40RE577–HUTMENTS	149
Unit 17 – Hutments	149
Unit 18 – Hutments	151
Unit 19 – Hutments	151
Unit 20 – Hutments	154
UNIT EXCAVATION, SITE 40RE577–LOCUS 9	154
Unit 21 – Locus 9	154
Unit 22 – Locus 9	157
Unit 23 – Locus 9	157
UNIT EXCAVATION, SITE 40RE577–LOCUS 13	160
Unit 24 – Locus 13	160
Unit 25 – Locus 13	160
Unit 26 – Locus 13	162
PHASE II ARTIFACT ANALYSIS	162
PHASE II TESTING CONCLUSIONS	169
VIII. RECOMMENDATIONS AND CONCLUSIONS	171
REFERENCES CITED	177
APPENDIX A. SPECIMEN CATALOG	
APPENDIX B. RESUME OF PRINCIPAL INVESTIGATOR	

LIST OF FIGURES

Figure 1.	Location of Survey Areas	2
Figure 2.	Project Area Projected over General Layout of K-25 Construction Camp Area (1944)	3
Figure 3.	Views of the Project Area	6
Figure 4.	Previously Recorded Sites	8
Figure 5.	Clinton Engineer Works Map Depicting Layout of Oak Ridge Complex.....	20
Figure 6.	1943 Photographs of the K-25 Plant Construction.....	23
Figure 7.	Happy Valley Hutments and Trailers.....	25
Figure 8.	1945-46 Aerial View of Happy Valley Facing Northeast.....	26
Figure 9.	1945-46 Aerial View of the K-25 Gaseous Diffusion Plant Facing Northwest	27
Figure 10.	1945-46 Aerial View of the K-25 Area and Happy Valley Facing North, to the Left is the African American Section, the Dormitories are in the Center, and the Main Area of Happy Valley is to the Right.....	28
Figure 11.	Map of 40RE233 and 40RE577 Showing Loci and Isolated Finds	37
Figure 12.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (1 of 8).....	39
Figure 13.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (2 of 8).....	41
Figure 14.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (3 of 8).....	43
Figure 15.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (4 of 8).....	45
Figure 16.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (5 of 8).....	47
Figure 17.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (6 of 8).....	49
Figure 18.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (7 of 8).....	51
Figure 19.	Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (8 of 8).....	53
Figure 20.	Locus 1, Map and Photograph	56
Figure 21.	Locus 2, Map and Photograph	57
Figure 22.	Locus 3, Map and Photograph	58
Figure 23.	Locus 4, Map and Photograph	60
Figure 24.	Locus 5, Map and Photograph	61
Figure 25.	Locus 6, Map and Photograph	63
Figure 26.	Locus 7, Map and Photograph	64
Figure 27.	Locus 8, Map and Photograph	65
Figure 28.	Locus 9, Map and Photograph	67
Figure 29.	Locus 10, Map and Photograph.....	68
Figure 30.	Locus 11, Map and Photograph.....	70
Figure 31.	Locus 12, Map and Photograph.....	71
Figure 32.	Locus 13, Map and Photograph.....	73
Figure 33.	Locus 14, Map and Photograph.....	74
Figure 34.	Locus 15, Map and Photograph.....	75
Figure 35.	Locus 16, Map and Photograph.....	77
Figure 36.	Locus 17, Map and Photograph.....	78
Figure 37.	Locus 18, Map and Photograph.....	80
Figure 38.	Locus 19, Map and Photograph.....	81
Figure 39.	Locus 20, Map and Photograph.....	83
Figure 40.	Locus 21, Map and Photograph.....	84
Figure 41.	Sewer Feature 8.....	90
Figure 42.	Sewer Features 6 and 7	91
Figure 43.	Lavatory Feature 55, Map and Photograph.....	92
Figure 44.	Ford, Bacon, and Davis Hutment Lavatory Plans.....	94
Figure 45.	Water Station, Map and Photograph.....	95
Figure 46.	Hydrant Features 3 and 47	96
Figure 47.	Feature 5, Map and Photograph	98
Figure 48.	Features 9 and 10, Map and Photographs	99
Figure 49.	Feature 12, Map and Photograph	101
Figure 50.	Feature 13, View West	102

Figure 51. Feature 19, Map and Photograph	103
Figure 52. Feature 43, Map and Photograph	104
Figure 53. Feature 30, Map and Photograph	105
Figure 54. Feature 49, Map and Photograph	107
Figure 55. Features 53 and 54	108
Figure 56. Feature 77, Map and Photograph	110
Figure 57. Features 79 and 80	111
Figure 58. Features 81 and 92	112
Figure 59. Feature 95, Map and Photographs	114
Figure 60. Unit 1, Profile and Photograph	117
Figure 61. Unit 2, Profile and Photograph	119
Figure 62. Unit 3, Profile and Photograph	121
Figure 63. Unit 4, Profile and Photograph	123
Figure 64. Unit 5, Profile and Photograph	124
Figure 65. Unit 6, Profile and Photograph	126
Figure 66. Aerial and Photograph Showing the E.W. Arnold House	128
Figure 67. Unit 7, Profile and Photograph	130
Figure 68. Unit 7, Feature 98, Plan View Map and Photograph	131
Figure 69. Unit 8, Profile Map and Photograph	133
Figure 70. Unit 9, Profile and Photograph	136
Figure 71. Unit 10, Profile and Photograph	137
Figure 72. Unit 11, Profile and Photograph	140
Figure 73. Unit 12, Profile and Photograph	141
Figure 74. Unit 13, Profile and Photograph	143
Figure 75. Unit 14, Profile and Photograph	145
Figure 76. Unit 15, Profile and Photograph	147
Figure 77. Unit 16, Profile and Photograph	148
Figure 78. Unit 17, Profile and Photograph	150
Figure 79. Unit 18, Profile and Photograph	152
Figure 80. Unit 19, Profile and Photograph	153
Figure 81. Unit 20, Profile and Photograph	155
Figure 82. Unit 21, Profile and Photograph	156
Figure 83. Unit 22, Profile and Photograph	158
Figure 84. Unit 23, Profile and Photograph	159
Figure 85. Unit 24, Profile and Photograph	161
Figure 86. Unit 25, Profile and Photograph	163
Figure 87. Unit 26, Profile and Photograph	164

LIST OF TABLES

Table 1.	Loci Identified in Parcel ED-3	36
Table 2.	Isolated Finds in Parcel ED-3	83
Table 3.	Features Located in During the Survey and Testing of the Former Happy Valley Housing Area	85
Table 4.	Unit Placement in Happy Valley Housing Area	115
Table 5.	Unit 1 Artifact Frequencies by Levels	116
Table 6.	Unit 2 Artifact Frequencies by Levels	118
Table 7.	Unit 3 Artifact Frequencies by Levels	120
Table 8.	Unit 5 Artifact Frequencies by Levels	125
Table 9.	Unit 6 Artifact Frequencies by Levels	127
Table 10.	Unit 7 Artifact Frequencies by Levels	129
Table 11.	Unit 8 Artifact Frequencies by Levels	132
Table 12.	Unit 9 Artifact Frequencies by Levels	134
Table 13.	Unit 10 Artifact Frequencies by Levels	138
Table 14.	Unit 11 Artifact Frequencies by Levels	139
Table 15.	Unit 12 Artifact Frequencies by Levels	141
Table 16.	Unit 13 Artifact Frequencies by Levels	142
Table 17.	Unit 14 Artifact Frequencies by Levels	144
Table 18.	Unit 15 Artifact Frequencies by Levels	146
Table 19.	Unit 17 Artifact Frequencies by Levels	149
Table 20.	Unit 18 Artifact Frequencies by Levels	151
Table 21.	Unit 20 Artifact Frequencies by Levels	154
Table 22.	Unit 22 Artifact Frequencies by Levels	157
Table 23.	Unit 23 Artifact Frequencies by Levels	157
Table 24.	Unit 24 Artifact Frequencies by Levels	160
Table 25.	Unit 26 Artifact Frequencies by Levels	162
Table 26.	Historic Artifacts from the Happy Valley Housing Area	165
Table 27.	Artifact Group Comparisons	168

I. INTRODUCTION

New South Associates conducted a Phase I Archaeological Survey and Phase II Archaeological Testing of the former Happy Valley housing area at the U.S. Department of Energy's Oak Ridge Reservation in Roane County, Tennessee (Figure 1). The project was carried out under subcontract to SAIC and for the Department of Energy and the results will be used in the preparation of an Environmental Assessment under the National Environmental Policy Act (NEPA). The Phase I survey and Phase II Archaeological Testing were carried out in order to determine the extent of the Happy Valley remains and whether they are eligible for the National Register of Historic Places (NRHP). Additionally, the survey would look for archaeological remains from other site types/occupations in this area and, if such were found, would assess whether they could be considered eligible for nomination to the NRHP. Historical research was also conducted to gather information about Happy Valley that would aid in the NRHP eligibility assessment. Fieldwork for the project was carried out over three seasons, between January 7 and 15, 2008; May 20 and 28, 2009; and July 12 and July 29, 2010.

"Happy Valley" was a temporary workers housing area occupied from 1943-1947 during the construction of the K-25 Oak Ridge Gaseous Diffusion Plant. The K-25 plant, located on the southwestern end of the Oak Ridge Reservation, used gaseous diffusion – an isotope separation method – to separate uranium-235 from uranium-238 for use in the atomic bomb program. The housing area's population ranged from 9,000 to almost 15,000. It not only contained hutments, barracks, and trailers but also a school, commercial center, theater, and recreation halls (Hewlett and Anderson, Jr. 1990). Although Happy Valley only existed for a very short time, it was a vital part of the Manhattan Project and the nation's quest to develop an atomic bomb during World War II. Oak Ridge and Hanford were production centers for the project and both had workers' camps that were cloaked in secrecy at the time. Due to the intense secrecy of the Manhattan Project, little is known about the day-to-day lives of those living at the construction camps. Information about Happy Valley exists in detailed mapping of the community, photographs, archival records, and interviews as recorded in the oral history of Oak Ridge (Overholt 1987). The archaeological survey and testing assessed the ability of archaeology to contribute to the history of Happy Valley.

The present investigation involved background research that focused on the project vicinity and included a review of previous archaeological studies to determine whether the project area and surrounding land contained previously recorded archaeological sites (Figure 2). The archaeological survey involved systematic shovel testing in undisturbed areas and surface examination in areas with surface visibility. Following the completion of the survey, 26 test units were excavated to evaluate the integrity and extent of the Happy Valley remains.

Chapter I contains an introduction to the project. Chapter II discusses the environment of the survey area. Chapter III contains information about the prehistoric and historic cultural development of East Tennessee. Previously recorded sites located near the project area are also discussed in Chapter III. The history of Happy Valley is discussed in Chapter IV. Chapter V presents the methods utilized during the archaeological survey and testing. The Phase I results are discussed in Chapter VI and the Phase II results are discussed in Chapter VII. The final chapter (VIII) provides the conclusions and recommendations. The artifact catalog, a brief resume of the Principal Investigator, and the site forms for the Happy Valley sites (40RE233 and 40RE577) are included as appendices to this report.

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**Figure 1.
Location of Survey Areas**

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Figure 2. Project Area Projected over General Layout of K-25 Construction Camp Area (1944).

The Principal Investigator for the project was Mary Beth Reed. Diana Valk acted as project archaeologist and co-authored this report with David Price, Historian. Rachel Black, Brad Botwick, Elizabeth Farkas, Jamie McCabe, Tracey Morgan, Scott Morris, Leslie Nash, Sarah Smith, and Jay Stevens assisted with the fieldwork. Scott Morris and Justin Byrnes conducted the artifact analysis. J.W. Joseph served as Project Manager and contributed to the recommendations and Conclusions. Diana Valk and Tom Quinn prepared the graphics for this report.

II. ENVIRONMENTAL CONTEXT

The project area falls within the Ridge and Valley Physiographic Province, which is characterized by alternating long narrow ridges and valleys. Differences in erosion are the most important factor in the shaping of the landscape. Tough, resistant rocks, such as sandstone and siltstone, form the ridges and more easily eroded rocks, such as shales and limestones, form the valleys. Over time, erosion has formed valleys and ridges that run in a southwest-northeast direction. Most rivers and drainages flow along the valleys when they enter this province (Fenneman 1938).

The varying elevations in the Ridge and Valley Province result in a variety of environmental conditions. The lower valley areas can have hot, humid summers, whereas the ridges will have cooler summer temperatures. The environmental conditions make this province home to a wide variety of species. The original forests in the area would have been made up of oaks and chestnuts (Braun 1950). The project area has been highly altered from its original state through farming and the more recent construction of the Happy Valley workers' camp. The current vegetation is predominantly small hardwoods and pines with dense low growing privet in highly disturbed areas.

[Exempted from Disclosure by Statute] Elevation in the project area ranges from approximately 238 meters above sea level along the northern edge to 262 meters above sea level on the southern edge. Low hills cut across the valley with small, intermittent drainages located between them. [Exempted from Disclosure by Statute]

] Figure 3 provides views of the project area environment.

The most recent soil survey of Roane County lists the current project area as unsurveyed because access to the property was denied (Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture 2008). A previous archaeological survey in the area by DuVall & Associates references an older soil survey published by Swann in 1942 (DuVall and Spice 2005). The soils in the area are described as silt loams, cherty silt loams, or clay loams and most of the soils examined are considered severely eroded. The soils encountered during the current survey are consistent with the soils discussed in the DuVall & Associates report.

Figure 3.
Views of the Project Area



A. [Exempted from Disclosure by Statute], View Northeast



B. East End of Parcel, View South



C. Sewer Remains in North Central Area of Parcel,
View South

III. PREVIOUSLY IDENTIFIED RESOURCES AND CULTURAL CONTEXT

The following section discusses the previous research conducted in the vicinity of the project area. The prehistoric and historic development of the Roane County area follows this overview.

PREVIOUSLY IDENTIFIED RESOURCES

The Tennessee State Site Files were consulted in order to obtain information on previously recorded sites. Site File data show that 16 previously recorded sites have been identified within a half-mile radius of the project area (Figure 4). Two of these sites (40RE219 and 40RE233) are located in the project area.

40RE125

Site 40RE125 is a small prehistoric site[

Exempted from Disclosure by Statute

] The artifact assemblage was composed of flakes, a core scraper, three sherds of limestone-tempered cord-marked pottery, and mussel shells. George Fielder recorded the site during an archaeological survey of Oak Ridge Reservation (Fielder 1974). No further work on the site was recommended.

40RE126

Site 40RE126 is a prehistoric lithic scatter [

Exempted from Disclosure by Statute

] George Fielder recorded the site during the Archaeological Survey of Oak Ridge Reservation (Fielder 1974). Over 200 artifacts were collected from the ground surface. These artifacts were predominately projectile points, chipped stone tools, and ground stone tools. Paleoindian, Early and Late Archaic, Middle and Late Woodland, and Mississippian components were present. No further work on the site was recommended.

40RE135

Site 40RE135 is [

Exempted from Disclosure by Statute

] The artifact was a non-diagnostic asymmetrical stemmed knife. George Fielder recorded the site during the Archaeological Survey of Oak Ridge Reservation (Fielder 1974). No further work on the site was recommended.

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Figure 4. Previously Recorded Sites

40RE136

Site 40RE136 is a historic structure foundation [

Exempted from Disclosure by Statute

] The University of Tennessee discovered the site in 1974 during an archaeological survey of the Oak Ridge Reservation. The site consists of the foundation of a log barn dating from the mid-nineteenth century. At the time of the survey, it was recommended that further work be conducted on the site (Fielder 1974).

40RE138

Site 40RE138 is a large multicomponent prehistoric habitation site, [

Exempted from Disclosure by Statute

] The site was situated [] . Paleoindian, Archaic, Woodland, and Mississippian artifacts were collected. The University of Tennessee discovered the site in 1974 during an archaeological survey of the Oak Ridge Reservation. Further testing on adjacent terraces was recommended (Fielder 1974).

40RE139

Site 40RE139 is a prehistoric chipping station composed of eight distinct concentrations of lithic debris. [

Exempted from Disclosure by Statute

] The artifacts were not diagnostic, but it was speculated that the site was Archaic or Woodland in origin. The University of Tennessee discovered the site in 1974 during an archaeological survey of the Oak Ridge Reservation. No further work was recommended for the site (Fielder 1974).

40RE202

Site 40RE202 is a small prehistoric lithic scatter, [

Exempted from Disclosure by Statute

] The site [

Exempted from Disclosure by Statute

] was discovered during a reconnaissance for the [] . At the time of the survey, the site had been cleared of vegetation and topsoil. Surface investigation and shovel testing only uncovered two pieces of debitage. No further work on the site was recommended (Bentz 1993).

Exempted from Disclosure by Statute

40RE219

Site 40RE219 is the Wheat Community African Burial Ground located [

Exempted from Disclosure by Statute

] . The cemetery was recorded during an archaeological reconnaissance in 1995 (Jacobs Environmental Restoration Team 1995). It was described as measuring approximately 41x40 meters. It contained approximately 90 graves oriented in an east-west direction. Half the graves were marked with fieldstones and the remaining burials were unmarked. During the 1995 survey, an old barbed wire fence marked the boundary of the cemetery.

In 2000, after a more extensive mapping survey, the cemetery boundary was expanded to include additional gravesites. The new boundary was designated with a wrought iron fence and a granite monument was placed in the southwest corner giving the history of slavery in the area. A larger black marble monument was placed west of the cemetery dedicated to slaves that worked and died in the area (Department of Energy 2000).

40RE222

Site 40RE222 is the historic Gallaher Cemetery [Exempted from Disclosure by Statute]. The site is [Exempted from Disclosure by Statute]. The cemetery was recorded during an archaeological reconnaissance in 1995 (Jacobs Environmental Restoration Team 1995). It contained a walled area of burials measuring 23x23 meters and a fenced area of graves measuring 17x20 meters. There are 38 marked burials in the cemetery. The burials are from the Gallaher, Browder, and Burdette families and date between 1853 and 1978. It was recommended that an adequate buffer be observed if any construction were to take place near the cemetery.

40RE223

Site 40RE223 is the historic Welcker Cemetery recorded during an archaeological reconnaissance in 1995 (Jacobs Environmental Restoration Team 1995). It is located in the [Exempted from Disclosure by Statute]. The cemetery was located in a 9x9-meter fenced area about 10 meters south of 40RE222. At least seven burials were located within the fenced area. The burials were oriented east-west. The oldest burial belonged to Elizabeth Welcker and was dated December 24, 1840. It was recommended that an adequate buffer be observed if any construction were to take place near the cemetery.

40RE224

Site 40RE224 is the site of the historic Wheat Community [Exempted from Disclosure by Statute]. The community was occupied from the mid-nineteenth century until 1942 when the federal government purchased the area. The site measures 1,390 meters by 805 meters and includes several historic structures and a cemetery. Members of the Jacobs Environmental Restoration Team surveyed the site area for the Oak Ridge K-25 site in 1994. Many of the structures in the site were disturbed from logging activity in the area, but some intact wells and cisterns remained. Further work was recommended because of the potential for recovering historic materials from the Wheat community (Jacobs Environmental Restoration Team 1995).

40RE232

Site 40RE232 is the location [Exempted from Disclosure by Statute] that served the K-25 area in the mid-late 1940s. [Exempted from Disclosure by Statute]

] The site was investigated during the archaeological survey of modifications to SR 58/95 (Pace 1995). In 1944, an existing farmhouse that stood in the area was converted to a fire hall and was used in that capacity until 1951. Additionally, waste oil and

various waste solvents were burned in an unlined pit on the site until 1951. A pedestrian survey was conducted in the area, but no building remains were located. Due to the possibility of hazardous waste existing in the area, shovel testing was not carried out. No NRHP recommendations have been made concerning this site.

40RE233

Site 40RE233 is the location of the southern extremity of the historic J.A. Jones Construction Camp. The site is located[
Exempted from Disclosure by Statute] within the current survey area. A portion of the site was first assessed during the archaeological survey of modifications to SR 58/95 (Pace 1995). Eight small building foundations were located within the site. These foundations were small and contained plumbing fixtures indicating that the buildings were used as washhouses and not as habitations. In addition to the foundations, the survey crew also located several surface artifact scatters containing household refuse including cans and condiment bottles. Nine shovel tests were excavated along the ridge tops within the proposed right-of-way (ROW) and all were negative. The site area measured approximately 380 meters north-south by 80 meters east-west. It was recommended potentially eligible because of its association with the development of the Manhattan Project's Oak Ridge operations. Through examination of the 1947 Carbide and Carbon Chemicals Corporation Map of the area, New South Associates has inferred that 40RE233 is the remains of the construction camp that housed African Americans. Further work was conducted on this site during the current survey and testing project.

40RE492

Site 40RE492 is a 100x25-meter prehistoric campsite [Exempted from Disclosure by Statute] It was encountered during a pedestrian survey of Tennessee Valley Authority Lands on the Watts Bar Reservoir. The scatter included lithic debitage and fire cracked rock (FCR). No temporally diagnostic artifacts were recovered. The site was recommended potentially eligible to the NRHP (Ahlman et al. 2000).

40RE501

Site 40RE501 is the remains of a Late Archaic habitation [Exempted from Disclosure by Statute]. The site measures approximately 100x15 meters [Exempted from Disclosure by Statute]. It was identified during the 1998 archaeological reconnaissance of Tennessee Valley Authority Lands on the Watts Bar Reservoir. Artifacts were collected from the surface and included lithic material and prehistoric pottery. A feature was visible eroding out of the cut bank. The site was recommended potentially eligible to the NRHP (Ahlman et al. 2000).

40RE575

Site 40RE575 is a late nineteenth-early twentieth-century house site, [Exempted from Disclosure by Statute] [Exempted from Disclosure by Statute] The site was [Exempted from Disclosure by Statute] during the Phase I Cultural Resources Survey for [Exempted from Disclosure by Statute]. A stacked stone chimney and a small collection of artifacts were all that remained of the site. Because of the low number of associated artifacts, it was speculated that the building was not intensively occupied during its use (Karpynec and McKee 2006).

PREHISTORIC OVERVIEW

PALEOINDIAN PERIOD

The earliest confirmed prehistoric occupation of Tennessee is the Paleoindian period, generally dated as 10,000-8000 B.C. The period is marked by the presence of fluted projectile points. The earliest and most recognized of these points are the Clovis and the Folsom types named for a mammoth kill sites and a bison kill site respectively. According to Chapman (1985:34), the Cumberland fluted type projectile point is an eastern variant of the Folsom type and is found in Tennessee.

Paleoindian peoples probably practiced a hunting and gathering subsistence pattern relying on the collection of wild plant foods and small game as well as the hunting of Pleistocene megafauna such as mammoth, mastodon, and bison. According to Mason (1962), settlement strategies were focused on base camps situated in ridge top barrens close to bottomland swamps and prairies. Excavations by Breitburg and Broster (1995) have discovered the remains of a partially butchered mastodon eroding out of a ravine in Williamson County. Artifacts collected include a bone projectile point imbedded in the remains, as well as numerous associated tools and resharpening flakes.

ARCHAIC PERIOD

The Archaic period is dated from 8000-900 B.C. and is generally divided into three sub-periods: the Early, Middle, and Late Archaic. The Early Archaic appears to be a modification of the preceding Paleoindian period with a shift to the hunting of more modern large game and a social organization of egalitarian bands that hunted and gathered seasonally available resources within limited geographic areas (Griffin 1952). Notched and stemmed triangular projectile points, some with serrated edges, characterize the Early Archaic. These points include Kirk corner notched, LeCroy bifurcated stem, Kanawha stemmed, and St. Albans side notched (Chapman 1985; Bass 1977).

The Middle Archaic period saw the introduction of notched river cobble net sinkers, as well as Kirk and Morrow Mountain stemmed and Sykes-White Springs projectile points. At this time, slate and quartz began to be used for tool manufacture in addition to chert. Atlatl weights were first found in association with Kirk Stemmed projectile points (Chapman 1985).

The Late Archaic saw the beginning of deliberate fostering of plant food resources, as well as the origins of ceramics. Cultigens varied, but among the most common are squash and gourds (Chapman 1985). At Bacon Bend, a Late Archaic site, squash and maygrass were identified as domesticated plants while hickory nuts, walnuts, and acorns were also utilized, though not cultivated (Chapman 1981). Late Archaic sites are marked by rock lined fire pits and diagnostic artifacts such as Appalachian stemmed, Savannah River, and Iddins type projectile points. Fishing, in some locations, may also have been an important food resource in this period. At the Iddins Site, a large number of notched stone cobbles have been identified as net sinkers associated with fishing, although their exact function has been debated (Chapman 1985, 1981).

WOODLAND PERIOD

The change from the Archaic period to the Woodland is marked by the increased appearance of ceramics, the beginnings of agriculture, and the construction of burial mounds. Like the Archaic, the Woodland is divided into Early, Middle, and Late sub-periods. The Early Woodland, dating from 900 B.C.-A.D. 200, is marked by quartz tempered and fabric or cord impressed ceramics. Projectile point preferences shifted from stemmed points to triangular unstemmed points (Chapman 1985). These points include Motley, Otarre, Swannanoa Stemmed, and Plot Short Stemmed (Bass 1977).

The Middle Woodland, A.D. 200-600, is characterized by projectile points including Camp Creek, Greenville, Bradley Spike, Nolichucky, and Pigeon Side Notched, as well as Pigeon, Connestee, Swift Creek, and limestone tempered ceramics (Bass 1977). Some contact with Hopewellian groups in the Midwest is noted at the Icehouse Bottom site where artifacts such as Ohio chert blades and Hopewellian pottery sherds were recovered during excavations. Evidence for the beginnings of corn agriculture was also located at the Icehouse Bottom site. However, it appears the economy still relied predominantly on wild plants and animals. The excavation of postholes suggests that at least semi-permanent structures were utilized (Chapman 1985:71-72).

The Late Woodland, A.D. 600-900, is not well documented and Bass (1977) stated that there are no Late Woodland phases identified in the Appalachian Summit area. However, in the lower Little Tennessee River Valley, it appears that burial mounds began to occur in the Middle to Late Woodland times. These mounds were apparently constructed to inter the remains of important individuals. Artifacts were often included with the human remains. Mounds in the valley tend to measure 6-15 meters in diameter and stand 1.2-2.4 meters high (Chapman 1985).

MISSISSIPPIAN PERIOD

The Mississippian period, A.D. 900-1600, is identified by earthen platform mounds arranged around central plazas, increased stable populations, heightened warfare, increased ceremonialism, a dependence on corn agriculture, and new ceramic styles (Chapman 1985).

The hallmarks of Mississippian culture emerged in the Early Mississippian period, A.D. 900-1200. Maize agriculture, shell tempered pottery, and simple chiefdoms were becoming prevalent. In the Tennessee Valley, maize was adopted more gradually than in other areas. The Tennessee Valley possessed some of the earliest dates for maize presence in the Southeast, but full-scale maize agriculture did not grab hold of the area until the end of the Early Mississippian (Bense 1994).

During the Middle Mississippian period, A.D. 1200-1400, complex chiefdoms formed and the Southeastern Ceremonial Complex spread throughout many areas of the Southeast. Artifacts in the Middle Mississippian were similar to the early period. Shell tempering became more prevalent and is used as a marker for many middle Mississippian artifact assemblages (Bense 1994).

The Late Mississippian period, A.D. 1400-1600, is marked by its increase in political turmoil and population relocations (Bense 1994). In the Tennessee River Valley, the Dallas Culture is identified. The Citico, Toqua, and Bussel Island were dominant Dallas Culture villages in the valley (Chapman 1985). Excavations at the Toqua site recovered a massive amount of data including 100,000 lithic artifacts, 500,000 ceramic artifacts, 200,000 bones, and 60,000 shell fragments (Polhemus 1987). Toqua was revealed to have a complex social organization and distinctive material

culture. Within the village, there were two earthen mounds, one larger and more centrally located than the other. Between the mounds was a pebble-surfaced plaza and lining the plaza were individual wattle and daub homes (Chapman 1985).

Ceramics identified at the site include a variety of forms and decorations. Shell, grit, limestone, quartz, and sand tempered ceramics were noted in shapes such as beakers, wide mouthed bottles, long necked bottles, simple bowls, compound bowls, effigy bottles, and hooded bottles. Decorations include cord and fabric impressing, check stamping, complicated stamping, red filming, and painting (Polhemus 1987). Personal adornment artifacts were also identified and included shell ear pins, shell and bone beads, carved gorgets of marine conch shell, bone hair pins, and rattles made of turtle shell (Chapman 1985).

HISTORIC CHEROKEE

The Historic Cherokee occupation has been extensively studied. A number of large scale excavations at Cherokee sites such as Tomotley, Mialoquo, and Chota-Tanasee have been conducted. These excavations, together with ethnographic-historic accounts of the groups, give a picture of Cherokee village life in the eighteenth century after contact with western influences.

In these sites, Cherokee village life was focused on the plaza, the townhouse, and the summer pavilion. The townhouse has been described in ethnographic accounts as a large wooden earth-covered structure capable of holding 500 people where public affairs were conducted. The summer pavilion was an open-roofed less substantial structure. The plaza was lined with domestic structures that were of four types, although the most common has been called a winter house (Chapman 1985). Two townhouses were identified at Chota-Tanasee, including an earlier smaller structure with four roof supports and a later, larger townhouse supported by eight posts. Both structures contained a central hearth and bench furniture (Schroedl et al. 1986).

Ceramic types associated with historic Cherokee occupations include Qualla simple stamped, Overhill check stamped, Overhill plain, Overhill complicated stamped, and Overhill cob roughened (Chapman 1985). At both Tomotley, and Mialoquo, ceramics were identified from both the Cherokee period and the preceding Mississippian period. Lithics were also identified as being of Mississippian period types, although at Tomotly, Archaic period lithics were noted (Baden 1983; Russ and Chapman 1983).

HISTORIC OVERVIEW

In the late eighteenth century, the valley between the Great Smoky and Cumberland Mountains was occupied by settlers thinking themselves under the jurisdiction of Virginia, but too far from its populated centers to expect regulation and protection. For their own governance, the settlers met and formed an association to rule their settlement. This 1772 agreement was known as the "Articles of the Watauga Association." When the correct latitude of the area was made known, it showed that the Watauga Association settlements lay within the borders of North Carolina. In 1776, the residents petitioned the North Carolina assembly to come under that government's protection (Williams 1924).

Once the Revolutionary War began, delegates met in Halifax in 1776 to draw up a constitution for the independent state of North Carolina. This constitution included the state's claim on the territory that would become Tennessee. The Cherokee living in the area who decided to support England were advised by Indian Agent John Stuart to work with Loyalists or directly with British troops. The Cherokee called for peace when Revolutionary forces overcame them. In 1777, Cherokee leaders met with representatives of Virginia and North Carolina, ceding large tracts of former Cherokee territory to both states (Corlew 1981).

Following the cessation of fighting in 1781 and the official end of the war with the Treaty of Paris in 1783, the national government asked the states with western territories to cede them to the United States. North Carolina initially complied but later repealed the cession in 1784. During the same period, the residents of Washington, Green, and Sullivan counties felt it would be in their best interests to form a separate state, which they called Franklin. Franklin was short lived and came to an end some time after 1786. North Carolina ratified the federal Constitution in 1789 and again ceded future Tennessee lands to the United States. Congress then created from these lands the Territory of the United States South of the River Ohio in 1790. The cession provided that all land claimed under North Carolina law was still valid and also stated that one or more states would eventually be made from the Territory. The Territory was governed under the Northwest Ordinance of 1787, with the exception that slavery was to be allowed. The Northwest Ordinance held that statehood could be achieved when a free population of 60,000 was reached or if it was shown to be in the general interest of the central government. William Blount, the governor of the territory, called the territorial legislature into special session in 1795 to discuss the proposition of statehood. After some debate and political opposition from Congress, Tennessee became the 16th state in 1796 (Corlew 1981).

Roane County, one of Tennessee's counties, lies at the juncture of the Tennessee, Clinch, and Emory rivers. White settlers gained control of the area through three treaties with the Cherokees. In 1801, the county was officially established and named after Archibald Roane, the second governor of Tennessee. Kingston was selected as the county seat and in 1807 became the capital of Tennessee for a day. The Tellico Treaty of 1805 required that Kingston would become the state capital in exchange for thousands of acres of Indian land. Kingston was made capital, but only for a few hours on September 21, 1807. The capital was then returned to Knoxville (Hall and Parker 2002).

Location and railroads made Eastern Tennessee a desirable target for both Union and Confederate armies during the Civil War (Cotham 2002). It was during the war that the commercial potential of local mineral deposits in the Roane County area was realized. Union Colonel John Wilder organized the Roane Iron Company and in 1868 established the town of Rockwood (Hall and Parker 2002). Recovery from the Civil War was initially slow in many areas of Tennessee, but slowly, the population grew and cities like Knoxville became important both regionally and nationally.

Growth slowed again by the 1930s, but work and interest were brought to the area with the establishment of the Great Smokey Mountains National Park and the Tennessee Valley Authority (TVA). The TVA located its headquarters in Knoxville. It brought tremendous benefits to the economically depressed area, but it also had removed approximately 72,000 people from their land. Further growth of the area took place during World War II with the construction of the facilities in Oak Ridge. By 1945, Oak Ridge was employing approximately 80,000 workers (Wheeler 2002). Chapter IV will discuss Oak Ridge and Happy Valley in more depth.

IV. HAPPY VALLEY HISTORY

INTRODUCTION

Happy Valley was a temporary housing settlement for the 15,000 construction workers who built the K-25 Gaseous Diffusion Plant between 1943-1946 at the Clinton Engineer Works (CEW), renamed Oak Ridge in 1948. The settlement was one of several "trailer camps" that were constructed to meet the massive demand for housing in East Tennessee's "secret city." Happy Valley was located

[
Exempted from Disclosure by Statute] on the western end of the Oak Ridge reservation,
Exempted from Disclosure by Statute.] It consisted of a mixture of several different housing types that were common in Oak Ridge, including crude plywood "hutments," military-style barracks, dormitories, trailers, and so-called "Victory Homes" for families. Located on the [Exempted from Disclosure by Statute]

] and far from the atomic village of Oak Ridge to the east, Happy Valley developed its own identity and community institutions including schools, recreation, and shopping. Like the area's other labor camps, Happy Valley was a temporary settlement to provide a minimum standard of shelter and services to the citizens who facilitated Oak Ridge's primary mission: uranium enrichment.

The Happy Valley site is significant for its association with the CEW and the Manhattan Project during World War II, one of the most significant scientific and engineering feats of the twentieth century. The Manhattan Project took atomic energy from theory to practice in two and a half years, and helped end the war. The significance of Oak Ridge is recognized in the NRHP, with the Historic Resources of Oak Ridge, Multiple Property Submission, which includes properties located throughout the reservation. The historic village of Oak Ridge is also listed as a National Register Historic District under the areas of Community Planning and Development, Architecture, and Military History. To date, no historic property documentations of Oak Ridge have included any archaeological or historic resources associated with temporary construction camps such as Happy Valley, nor have any scholarly studies concentrated specifically on the Oak Ridge construction camps.

THE MANHATTAN PROJECT

The events that lead to the creation of Oak Ridge began with the early U.S response to reports that German scientists were experimenting with uranium and nuclear fission to create extremely powerful bombs with unprecedented explosive force. In 1939, émigré physicists Albert Einstein and Leo Szilard drafted a letter that detailed this threat to president Franklin D. Roosevelt and urged him to support scientific research to create an atomic bomb before the Germans. After initially disregarding the scientists' warnings, Roosevelt created a committee of American and British nuclear scientists to study uranium, fission, and the feasibility of developing a nuclear weapon. Despite the vast theoretical and practical problems involved in harnessing nuclear energy into an atomic bomb, Roosevelt's administration determined by 1942 that it was possible to develop such a weapon and immediately began a full-scale research and development program (Gosling 1999:vii; Johnson and Jackson 1981:xvii-xix).

The urgency of the U.S. atomic program was elevated after the Japanese bombing of Pearl Harbor in 1941 and America's official entry into World War II. The Manhattan Engineer District (MED) was subsequently created within the U.S. Army Corps of Engineers to develop multiple research facilities. The MED was later turned over to the Army. Also known as the Manhattan Project, the research team headed by Colonel Leslie R. Groves was charged with the Herculean task to design, build, operate, and develop whatever facilities were needed to build an atomic bomb. This remarkable challenge was made more so by the fact that the Manhattan Project not only had to wrestle with previously unknown nuclear theory, but it also had to do so as quickly as possible in complete secrecy (Gosling 1999:19).

One of the Manhattan Project's largest challenges was its quest to find a suitably fissionable element that existed in enough quantity to power a large bomb. Promising initial research pointed to the uranium isotope U-235, but it was a rare metal that was difficult to separate from its ore and the more predominant U-238. The other avenue of research suggested converting uranium U-238 into a new and equally fissionable element known as plutonium. The problems with isotope separation led project scientists to conclude that their work required multiple research centers all working on the theoretical and design challenges simultaneously (Johnson and Jackson 1981:xvii).

The Manhattan Project initially considered four techniques for uranium isotope separation. The first technique was the electromagnetic method, which used a magnetic field to separate U-235 from U-238 atomic particles and then collect them in different receivers. The second method was gaseous diffusion, which converted uranium from its natural solid state into a gas and then forced it through a porous barrier to separate U-235 from U-238. The third and fourth techniques were the centrifuge process and thermal diffusion, but they were discontinued due to cost, complexity, and other mitigating factors (Jones 1985:9-11; Johnson and Jackson 1981:xx).

In 1942, the Manhattan Project selected three isolated top-secret research and development sites. The site in East Tennessee was code named *Site X* and located on 59,000 acres of rural agricultural land in the ridges west of Knoxville. Officially known by the unassuming name Clinton Engineer Works (named after the nearby town of Clinton), and later Oak Ridge, this site primarily hosted research in the gaseous diffusion and electromagnetic separation techniques. The historic significance of Oak Ridge in uranium enrichment is well documented and "ultimately, material produced in Tennessee became the base for the world's first use of atomic energy as a military weapon – the August 6, 1945 strike on the city of Hiroshima" (Johnson and Jackson 1981:xx). Another location was *Site W* at Hanford, Washington, which became the primary source of plutonium that was used in the "Fat Man" bomb dropped on the Japanese city of Nagasaki in 1945. The third was an ultra-modern physics laboratory in Los Alamos, New Mexico, which concentrated on the actual design of bombs that would carry explosive payloads from the other two Manhattan Project locations (Johnson and Jackson 1981:xix).

CLINTON ENGINEER WORKS (OAK RIDGE)

Army representatives arrived in East Tennessee in the summer of 1942 to examine prospective locations for a U-235 production plant. After three days of investigations, the Oak Ridge location was deemed the most suitable thanks to several characteristics: it was in an isolated inland location that prevented an enemy air attack; the Clinch River provided an abundance of water for cooling, processing, construction, and operating requirements; the TVA could provide a large amount of continuous electricity; and the site had adequate rail and road transportation. The site's topography, too, was perfect as its river and ridges created natural barriers that provided security

and separated individual plant sites in case of explosion. At the same time, the ridges of the site were gentle enough for large-scale construction and were underlain with solid bedrock for foundations (Jones 1985:68-69).

Though the Manhattan Project representatives preferred to see the location as raw wilderness ready for the taking, in 1942, the 59,000-acre area was actually home to about 4,000 people. Most of them were farming families who lived in the vicinity of several small crossroads villages such as Wheat, Scarboro, Elza, and Robertsville. Many of these people lived and worked on land that had been in their families since their emigration from eastern states in the nineteenth century. Though the soil was in many places poor, eroded, and marginally suited for agriculture, it was nonetheless their home. The Federal government had a history of disrupting the lives of people in this part of the state, most notably during the Civil War and in the 1930s with the TVA's dam-building projects that displaced thousands of people. The distrust and ill-will of the local people toward the government was further cemented when land acquisition began in the fall of 1942 and eviction and government buy-out notices began appearing at people's homes. By late 1943, the eviction process was complete and the planning and construction process was cleared to begin (Johnson and Jackson 1981:39-43; Johnson 1998a:699-700).

At the end of World War II, Oak Ridge was the fifth largest town in Tennessee with a population of 61,000, with another 14,000 residing in four trailer camps throughout the reservation. According to one account, the entire reservation consumed one-seventh of all electric power produced in the nation at that time (Gosling 1999:20; Jones 1985:439).

The scientists, engineers, laborers, and support crew were employed in three production facilities, each located in separate valleys away from Oak Ridge (Figure 5). The Y-12 electromagnetic plant was closest to the town, located one ridge to the south. The second facility, X-10, was located in a valley further to the south and west of Y-12. It contained the Graphite Reactor, "the world's first powerful nuclear reactor, which transformed uranium-238 into plutonium-239" (Johnson 1998b:1088). Listed as a National Historic Landmark in 1966, X-10 is the oldest nuclear reactor in the world. The third facility, the K-25 Gaseous Diffusion Plant and its adjunct construction workers' camp known as Happy Valley, was 11 miles away[

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.] This end of the reservation was also home to the S-50 Liquid Thermal Diffusion Process that operated from March 1944 through September 1945 (Jones 1985).

PRODUCTION FACILITIES AND HOUSING AT CEW, 1943-1945

As soon as the area's families were moved out in late 1942, the Manhattan Project began construction of the top-secret East Tennessee production facility. The site was given the inconspicuous name Clinton Engineer Works to ward off outside attention, and after World War II, the area was renamed Oak Ridge. Construction of the reservation involved a complex set of tasks to provide transportation, communications, utilities, and a general plan to guide the location of production plants and an adjacent town for personnel (Jones 1985, 434). Army officials decided that the best location for the village of Oak Ridge was the northeast corner of the reservation on the south side of Black Oak Ridge, where Highway 61 and rail lines were located and topography suited development (Gosling 1999:19-20).

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 5. Clinton Engineer Works Map Depicting Layout of Oak Ridge Complex

The Army favored expediency as the guiding principle of village development and hoped to provide minimum standards of comfort and livability for its population of atomic workers. The reservation's need for ever-increasing numbers of workers were immediately confronted with the realities of wartime shortages on construction materials, ensuring that the quality and supply of housing and other community needs never met demand. Moreover, the military mission of Oak Ridge was always of paramount importance to the reservation's planners. This made it unlikely that the village would provide more than basic comforts and services (Jones 1985:432).

Original town plans called for small family homes such as the original "cemestoes" (bonded cement and asbestos) found in Oak Ridge, but as worker numbers exploded, planners quickly added a number of temporary housing types, including prefabricated plywood flat top houses and "Victory Homes," dormitories, barracks, trailers, and hutments. Pre-existing farmhouses left over from the reservation's original inhabitants were also used whenever possible, but they often lacked electricity and running water. These temporary housing types, always in demand despite their limited livability, sprang up along the outskirts of Oak Ridge and later became the model for the quick and temporary housing used in the reservation's trailer camps such as Happy Valley.

The first phase of Oak Ridge village construction took place between 1942-1943. Originally planned by the firm of Stone and Webster, which also provided blueprints for the adjacent Y-12 electromagnetic plant, the town site work was shifted to the well-known architectural firm Skidmore, Owings and Merrill of Chicago. Initial plans for a village of 5,000 workers quickly grew to 13,000, forcing planners to adapt. According to historian Vincent C. Jones, material shortages demanded the use of prefabricated materials such as "fiber or gypsum board instead of wood for walls and cement blocks instead of poured concrete for foundations. Building designs emphasized standardization and simplicity of construction" (Jones 1985:436). The result during the first phase of village construction was approximately 3,000 homes, fourteen dormitories and three apartment buildings, in addition to almost 1,000 plywood hutments and an equal number of trailers (Johnson and Jackson 1981:25).

The second major construction phase between 1944-1945 added thousands more flat-top prefabricated homes, dorms, and barracks. Jones added, "when experience demonstrated that trailers and prefabricated hutments, both in reasonably good supply, would suffice as homes for most plant workers, town designers substituted them in later expansions" (Jones 1985:436). Indeed, hutments and trailers were used extensively in later expansions as the Oak Ridge population quickly ballooned from an estimated 13,000 in 1942 to 42,000 in 1944. By 1945, the population of the reservation grew to a high of 66,000 outstripping all previous estimates and mandating continued construction of housing (Jones 1985:439).

In addition to the more permanent housing needs of its production plant workers, the Manhattan Project made other provisions for its temporary force of construction workers. Jones wrote, "as the construction workers would have only a temporary connection with the project, the Army initially planned for them to live off the atomic reservation and to commute to their jobs. But both District officials and construction contractors recognized early that the local economy, already strained with an influx of workers for other nearby war plants, would not be able to absorb the new wave of Manhattan workers" (Jones 1985:440). Added to this were the awful condition of local roads and distance to towns where housing was available, which forced the Army to develop other housing options for its construction workers. The answer to this problem was written into the building contracts, which stipulated that contractors must furnish temporary housing for their workers in on-site construction camps such as Happy Valley.

THE K-25 GASEOUS DIFFUSION PLANT AND HAPPY VALLEY

The K-25 Gaseous Diffusion Plant was authorized in late 1942 and construction began in June of 1943 (Figure 6). K-25 was composed of 54 four-story buildings arranged in a U-shape that enclosed two million square feet and was powered by an enormous steam electric plant adjacent to the Clinch River. The plant was originally intended to produce fully enriched U-235 but engineering difficulty with a functioning gas barrier forced the Manhattan Project to downgrade it in late summer 1943. Instead of a fully enriched product, K-25 would provide fifty percent enriched uranium as feed material for the Y-12 plant (Gosling 1999:25-26).

From the beginning, the plant's operating company, Union Carbide, feared that it would not be able to provide timely housing for plant construction workers and operating staff. Three factors sparked this fear. K-25 had a later startup construction date than Y-12 and X-10, which added demand for housing to the ongoing shortages already experienced in other parts of Oak Ridge. Second, the plant was located farther from employment centers in Knoxville and Clinton, which made it even less likely that workers could commute from off reservation. Finally, the K-25 workforce exploded from an October 1943 estimate of 500 to 6,000 six months later. Union Carbide insisted that Oak Ridge administrators move forward with the construction of K-25 worker housing or face the unacceptable threat of high staff turnover and project instability (Johnson and Jackson 1981:79).

Union Carbide finally got what it asked for, and the result was Happy Valley, a temporary community that ultimately housed 15,000 people in a variety of hutments, dorms, barracks, trailers, and Victory Homes. Located about 11 miles from the main village of Oak Ridge, Happy Valley incorporated a variety of community services including a school, town hall, theater, bowling alley, recreation halls, mess halls, an ice house, bakery, store, and service station. Built as a temporary wartime community, Happy Valley was torn down after 1946.

Despite its ephemeral nature, the history of Happy Valley reflects the social and labor history of the people who built the uranium and plutonium production facilities of Oak Ridge. The site also sheds light on military planning of temporary communities during the war. The residents of Happy Valley, in what can only be described as barely livable temporary quarters, played an essential and often overlooked role in America's historic race for the bomb.

HOUSING AT HAPPY VALLEY

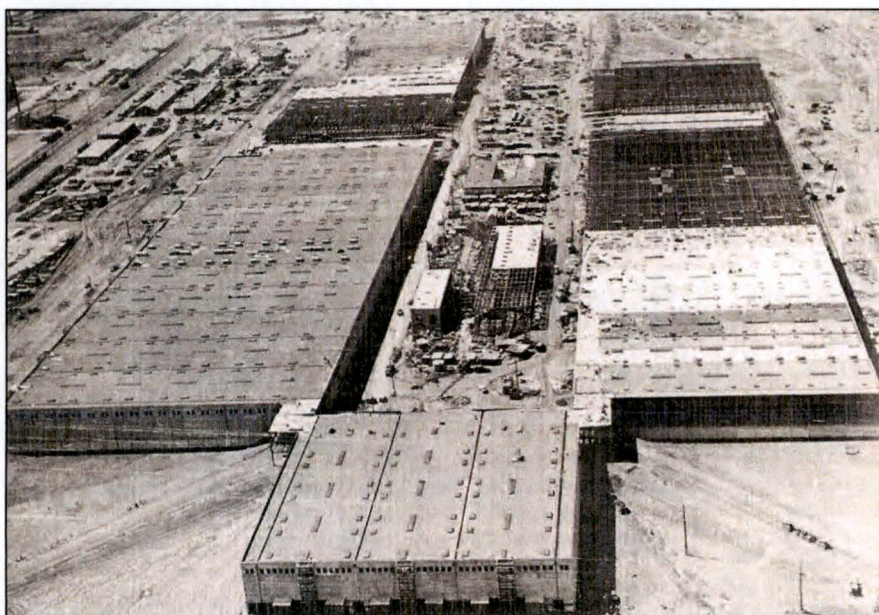
The first housing at Happy Valley was a group of 450 hutments erected in early June 1943 for the construction of the K-25 Powerhouse. The hutments and entire Happy Valley site were planned and erected by the J.A. Jones Construction Company, Union Carbide's primary contractor on the site. The original 16x16-foot plywood hutments housed five men each (Prince 2003:2). More housing soon followed as construction commenced on the actual K-25 Gaseous Diffusion Plant. The Jones Company produced plans for utilities throughout the camp and the drawings also showed locations and footprints for various housing types and community buildings. Housing included eight military-style barracks that housed men and women in separate wings, four dormitories that housed over 1,200 people, more hutments for a total of 2,500 men, as well as 900 trailers and 100 "Victory Homes" for families.

Figure 6.
1943 Photographs of the K-25 Plant Construction



A. The K-25 Plant Steel Frame Under Construction by
Residents of Happy Valley

(Source: Jones 1985)



B. The K-25 Plant Under Construction

(Source: Jones 1985)

As was the case in much of Oak Ridge, living conditions at Happy Valley were cramped and presented daily challenges to its occupants. By the fall of 1943, housing space across the reservation was in such short supply that former single-occupancy dorm rooms were stacked with two to four individuals. Privacy further eroded as the Roane-Anderson Company, the company that administered all civil and housing matters in the Oak Ridge reservation, tightened housing eligibility restrictions and enforced regulations against gambling, liquor possession, cooking indoors, and visitation in rooms by members of the opposite sex. Women's dorms were especially subject to the paternalistic eye of Roane-Anderson administrators (Johnson and Jackson 1981:82-83).

Residents of the military-style barracks had even less privacy than those in dorms. According to historians of Oak Ridge, Charles W. Johnson and Charles O. Jackson, the barracks "were Spartan in appearance, minimally furnished, and made no provision even for semi-privacy; theft of residents' personal property was epidemic. Those forced to reside in the barracks did so reluctantly and had little positive to say about them" (Johnson and Jackson 1981:87).

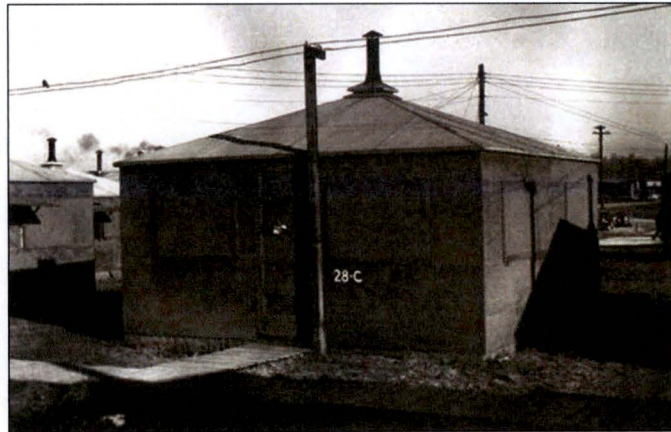
Where dorms and barracks typically housed single men and women, about 1,000 Happy Valley families lived in the area's trailers and Victory Homes. Brought in to provide cheap and fast housing, the trailers were difficult and sometimes dangerous places to live (Figure 7). "The trailers had no running water and sinks drained into buckets which had to be emptied, not always promptly, by a Roane-Anderson crew. An oil stove provided the sole heat and cooking facilities. Boards beneath the stoves soon became soaked with fuel oil and had a wicked propensity to catch fire, turning a trailer to ashes before the fire department could arrive" (Johnson and Jackson 1981:85).

Despite their name, the Victory Homes and prefabricated "flat tops" were little better than the trailers. In other parts of the reservation, Victory Homes (also called Victory Cottages) were very poor quality plywood duplexes with roll roofing that held two one-family units. The units featured a single bedroom and a combination kitchen-living room. At Happy Valley, however, historic utility maps show that the homes had the same square footprints as the hutments, indicating that they were single-family versions of the type. All Oak Ridge housing was designed to have a brief life span, and the Victory Homes were not expected to last over three years. Johnson and Jackson described them as "the least desirable of the family units" (Johnson and Jackson 1981:28).

At the absolute bottom of the housing hierarchy were the hutments, which were often reserved for the least skilled and most transient of construction and service workers (Figure 7). Almost all African American workers in Oak Ridge lived in segregated hutment communities and were largely prevented from visiting their white counterparts. Each hutment held four to six beds, a pot-bellied stove in the middle as the single source of heat, and footlockers for personal belongings. The windows had no glass, only wood shutters to keep out elements and pests. J.A. Jones Company incorporated a sewer system in its plans for the camp, but only those housed in the barracks, dorms, and Victory Homes had indoor plumbing. The hutments and trailers, which housed the majority of residents, were organized into groups of about 20 around common toilets and lavatories. Water for cooking and washing had to be brought into these shelters with buckets and then taken back out again.

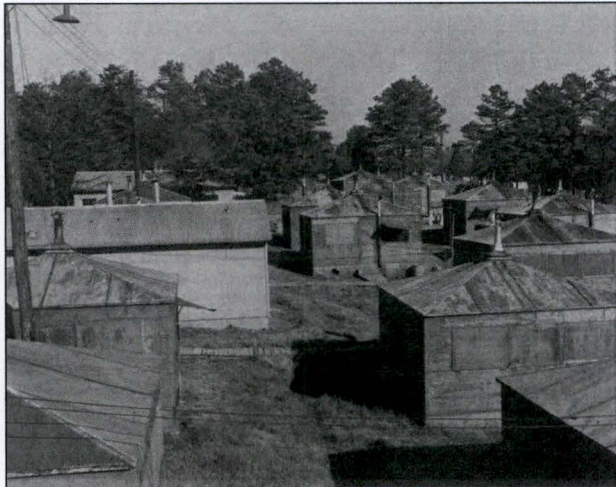
Aerial photographs of Happy Valley taken around 1944 show that, in addition to austere housing conditions, environmental factors likely added additional discomfort to residents (Figures 8, 9, and 10). As was the case throughout the reservation, the camp's network of dirt roads was dusty in the summer and muddy in the winter. Mud, in particular, was a constant problem in all of Oak Ridge,

Figure 7.
Happy Valley Hutments and Trailers



A. Hutment Exterior

Source: Department of Energy



B. Group of Hutments

Source: Department of Energy



C. Trailers

Source: Department of Energy

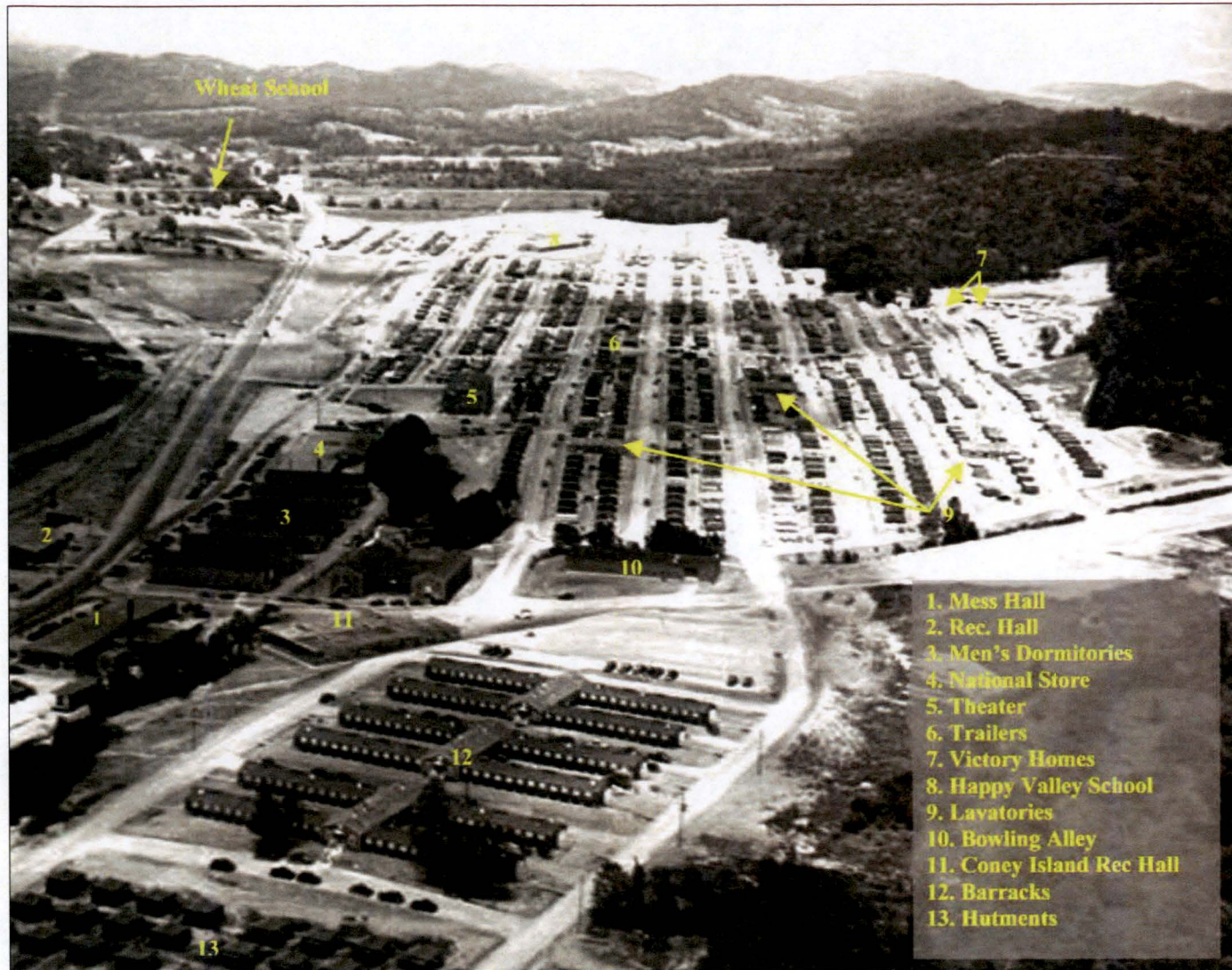


Figure 8.
1945-46 Aerial View of Happy Valley Facing Northeast

Source: Department of Energy

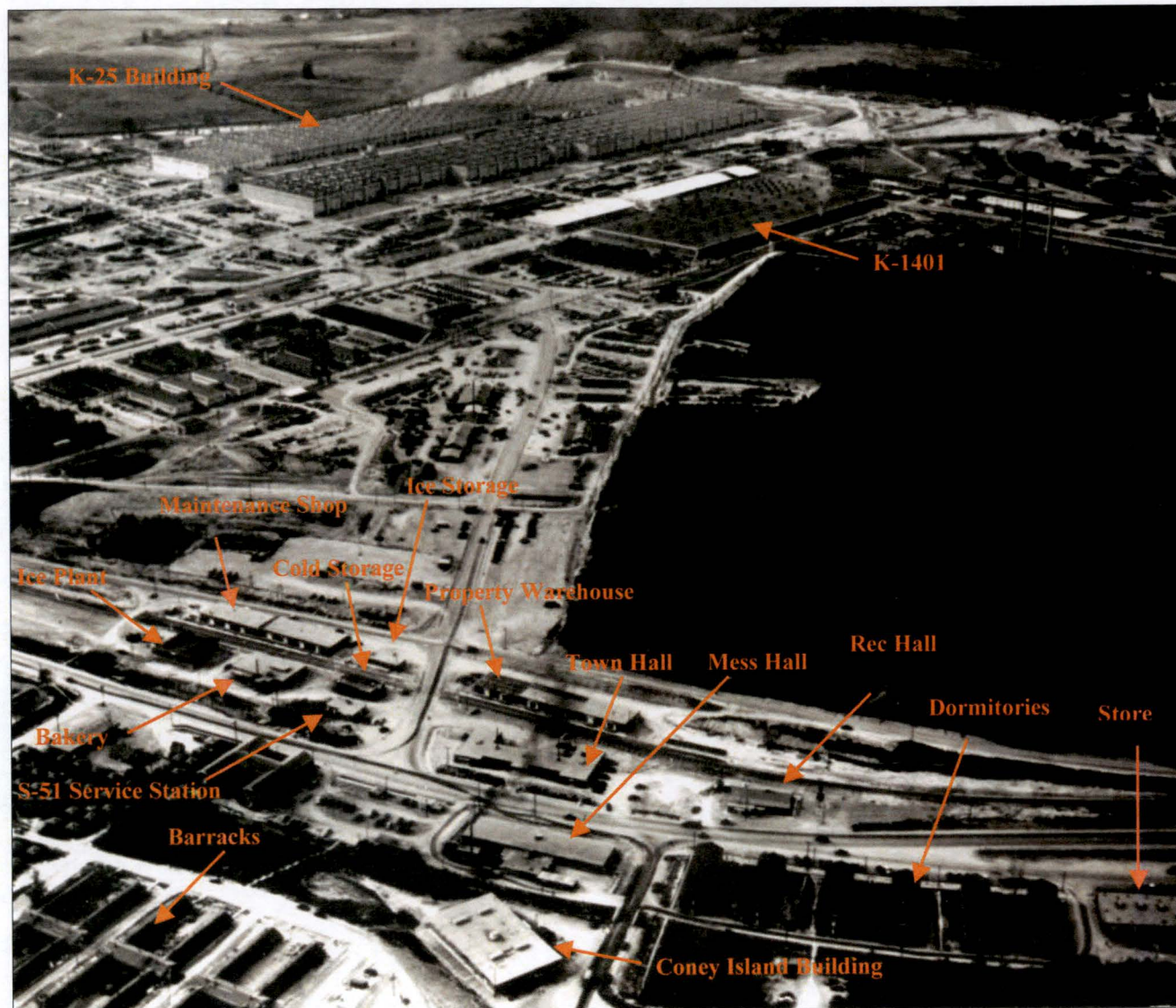


Figure 9.
1945-46 Aerial View of the K-25 Gaseous Diffusion Plant Facing Northwest

Source: Department of Energy

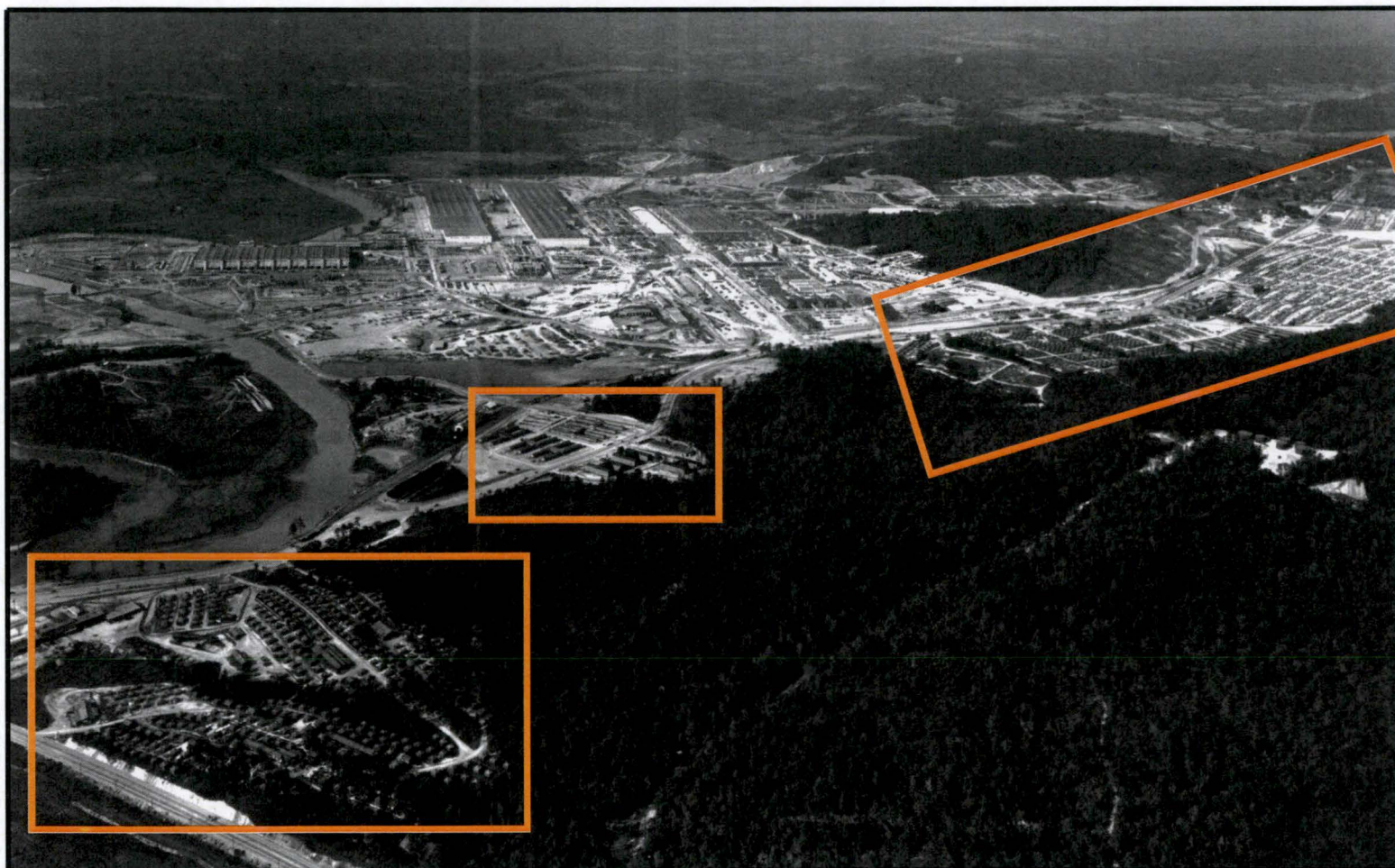


Figure 10.
1945-46 Aerial View of the K-25 Area and Happy Valley Facing North, to the Left is the African American Section, the Dormitories are in the Center, and the Main Area of Happy Valley is to the Right

as building contractors had conducted large-scale grading that destroyed ground cover and caused serious erosion. Many reservation roads and sidewalks remained unpaved for the duration of the war, and everyone from lowly construction worker to high-level engineer constantly battled with mud caked on their shoes and trousers. Standard etiquette at Oak Ridge dictated that people remove or change their shoes before entering a house or community event (Johnson and Jackson 1981:17).

Photographs also reveal that the extensive grading and site preparation at Happy Valley removed all vestiges of the area's natural surroundings, including trees and shrubs. The J.A. Jones Company, in its apparent effort to create a blank slate for the construction of its trailer camp, removed all the trees that might have provided shade in the summer and windbreaks in the winter. Though its ironic name suggested otherwise, Happy Valley was in many ways a bleak environment in which to live and work.

RECREATION

According to historians of Oak Ridge, by 1943, the Army recognized that it had to provide avenues of recreation to residents. This was in reaction to the understanding that "violations of the law, such as drunkenness, disorderly conduct, gambling, and illicit sexual activity, are often expressions of misused leisure time" (Johnson and Jackson 1981:121). The result was a massive effort to build theaters, recreation halls, bowling alleys, tennis courts, a swimming pool, ballparks, taverns, and a library in Oak Ridge. Other activities included sports leagues, a music society, concerts, and talent shows.

In an effort to alleviate the harsh living conditions and control the ways in which Happy Valley residents spent their free time, the J. A. Jones Company provided a minimum number of recreational opportunities. Happy Valley featured the Coney Island arcade, a bowling alley, and a movie theater. It did not, however, have any outdoor amenities such as ballparks, tennis courts, or swimming pools. Those facilities were located in Oak Ridge and presumably reserved for the permanent staff.

MEMORIES OF HAPPY VALLEY

Despite the challenges of Happy Valley's living arrangements, at least one former resident recalled her days living and working there with fondness. In the book, *These Are Our Voices: The Story of Oak Ridge, 1942-1970*, Helen C. Jernigan described her experience as an 18-year-old college student who worked a summer job at Happy Valley and later in the K-25 plant. She first worked in what was called the "Coney Island" building, an amusement center with a bowling alley and arcade. Jernigan's story is perhaps the only published record of a resident's experience in Happy Valley and sheds additional light on what it was like to live there.

Jernigan remembered that Happy Valley was busy with "anthills of visible human activity and huge, ever-moving construction machinery. It was hot, dusty, and noisy. Loudspeakers attached to power poles blared music all day. Sugar Blues, Josephine and some Sinatra and Crosby numbers were favorites. There was no night: bright streetlights and spotlights illuminated the area as people worked shifts around the clock" (Overholt 1987:95). Playing the latest popular music hits of the day was perhaps a manifestation of plant managers' effort to soften the rough conditions of living in a 24-hour construction camp and provide a minimum standard of normalcy.

In addition to the noise and activity, secrecy was one of the operating hallmarks of Oak Ridge, and Jernigan's story reveals how it shaped her time in Happy Valley. After her freshman year of college at Tennessee Wesleyan, Jernigan met a group of old high school friends whom convinced her to follow them for summer jobs "in Clinton, where there's some kind of war plant." Jernigan knew in a vague sense that she was contributing to the war effort, but precisely how was never known to her: "At the summer's end, I returned to school – a different world indeed. Only then did I learn that I had been in Oak Ridge, for we didn't know that name, and our mailing address had been a post office box in Knoxville" (Overholt 1987:97-98). Manhattan Project planners went to great lengths to maintain secrecy among their employees, and in Jernigan's case, they succeeded.

Jernigan also provides details on dorm and trailer life in Happy Valley. After reporting for work, she was assigned a room in one of the H-shaped barracks in the camp, where men and women were in separate wings. Jernigan remembers her short stint in dorm life with fewer problems than were reported elsewhere in the reservation, "there were no locks on the doors but during the time I lived there I never heard of any thefts or violence in the building." As for life in the trailers, however, Jernigan conceded that it was difficult. For families with several people crowded into a single trailer, "beds were available for everyone only because some people worked night shifts. 'We had to put up the beds in the daytime so there was room...,'" recalled a friend of hers. "Toilets were in a central building; at night human waste was collected in 'slopjars' for transferring in the morning. There were no telephones, except at a central location, and the names of people receiving phone calls were 'blasted out' over the loudspeakers" (Overholt 1987:96-97).

Recreation in Happy Valley was centered on the Coney Island building, where Jernigan "kept the books, did the payroll, received and paid for supplies, and hired and supervised the pinboys at the [bowling] alleys." In addition to the bowling alley, the building contained an amusement arcade with air rifles, darts, basketballs, baseballs, and other games. With round-the-clock construction in Happy Valley, Coney Island did not close until two o'clock a.m., after which Jernigan and her friends found other activities to amuse themselves (Overholt 1987:97).

Jernigan's story reveals that people adapted to the hardships of living in a construction camp and tried to maintain at least some comfort and normalcy. She and others like her knew their time in Happy Valley was temporary and contributed to the war effort, which was worth the dust, noise, and close quarters. Only after the war did they learn they had played a part in an essential component of America's race for the bomb and the end of World War II.

CLOSURE AND DEMOLITION

After the K-25 plant was completed in 1945, the residents of Happy Valley began leaving their temporary settlement. No official records of Happy Valley's closure were found for this report, but previous studies indicate that most residents left between the spring and fall of 1945. Happy Valley was abandoned by 1947 and its electric utilities demolished (Prince 2003:4-5). Documents indicate that the buildings, although unoccupied, were still standing in December 1946, but by 1951, all had been demolished except the S-16 store and S-6 mess hall. During demolition of Happy Valley, material that could be reused was generally salvaged and unusable material was bulldozed or burned in place. Many concrete building foundations and infrastructure elements (roads and sanitary water and sewer lines) were left intact (Energy Systems Architecture and Planning et al. 1997).

V. METHODS

The current project involved the Phase I Archaeological Survey of the approximately 241 acres [Exempted from Disclosure by Statute] where the Happy Valley housing area once stood. This land included [Exempted from Disclosure by Statute]. The project's boundaries were drawn to include all of the area known as the location of Happy Valley. Following the survey work, Phase II Archaeological Testing was carried out in several different areas of the former housing area. This chapter presents the methods used during the survey and testing.

ARCHAEOLOGICAL SURVEY

Fieldwork for the project consisted of an archaeological survey to identify unrecorded cultural resources. As per the Scope of Work, field methodologies followed those set forth in the guidelines of the Tennessee Historical Commission/Tennessee Division of Archaeology (THC/TDOA). As the location of a known resource, the project area was treated as a high probability area and surveyed at a 30-meter interval. Areas excluded from shovel testing or detailed examination exhibited poor drainage, slopes greater than 10 percent, marked utility lines, or substantial disturbance. Shovel tests measured 30 centimeters in diameter and were excavated by hand to depths of at least 80 centimeters or until impenetrable substrate, known sterile subsoil, or the water table was encountered. Shovel tests received unique field designations. Excavated soils were screened through 0.25-inch mesh hardware cloth for systematic artifact recovery and artifacts were bagged separately by unique provenience. Soils encountered in shovel tests were described using standard terminology for color and texture and shovel test locations were plotted on project maps that also show the locations of roads, water sources, disturbed areas, and other pertinent information. All members of the crew maintained notes during the course of the fieldwork.

Recovered artifacts could be associated with the remains of Happy Valley or could represent materials from a previous occupation of the land. Artifact concentrations that could be associated with Happy Valley were referred to as loci within the Happy Valley site. When archaeological materials were found within a shovel test, additional shovel tests were excavated to determine site or loci boundaries, as well as to assess the site or loci integrity and the types and quantities of artifacts present. This process involved close interval (10-meter) shovel testing in cardinal directions from the initial positive test until two consecutive negative shovel tests were completed in each direction. Although two negative tests were generally used to demarcate the boundaries of loci, features such as streams, natural contours, or disturbance were also used to delineate loci boundaries. Once the boundaries of a site or loci were determined, the area was photographed and mapped. When historic structural remains were located during the survey, the remains were mapped and photographed. All loci, isolated finds, and structure locations were recorded with a GPS.

An isolated find is defined as any locus where single artifacts up to a cluster of four prehistoric or historic artifacts within an area of 60x60 meters are present. These artifacts can include both surface and subsurface material. Areas around potential isolated finds were carefully examined to assure that other artifacts were not present. Five or more artifacts within a 60x60-meter area are considered a site. If a site was located, it was photographed, mapped, and logged with a GPS.

ARCHAEOLOGICAL TESTING

After the Phase I Survey was completed, Phase II testing was carried out to collect further information needed to make an NRHP determination of eligibility for Happy Valley. This testing was accomplished through the excavation of formal test units in various areas of the site to assess site preservation, the presence/absence of cultural features, artifact occurrence/frequency, and content. The units measured 1x1-meter in dimensions and were dug to subsoil, or a depth of approximately 40 centimeters. A total of 26 units were excavated.

Units were excavated in 10-centimeter levels using flat-edge shovels and trowels. Unit coordinates were recorded with a sub-meter accurate Trimble GeoXT GPS. All soil from unit excavation was screened through 0.25-inch mesh hardware cloth for artifact recovery and artifacts were bagged separately by provenience. Standardized forms were kept for each unit, noting the soils, artifacts, and features encountered. Following the completion of a unit, soil profile maps were drawn to scale. Additional profile maps and plan-view maps were completed if features or soil anomalies were encountered. All units were photographed.

LABORATORY METHODS

At the completion of fieldwork, all artifacts, notes, maps, and photographs were taken to New South's Stone Mountain Laboratory for processing. The focus of the analysis was to determine the occupation span, likely function, and degree of artifact preservation at each recorded site or loci. Historic artifacts were identified and assigned dates through comparison with published artifact descriptions (e.g., Miller et al. 1991). They were analyzed based on South's (1977) artifact patterning scheme. The artifacts were divided into functional groups including activities (including artifacts of various functions such as agriculture, etc.), architecture (construction materials), arms (gun parts/ammunition), clothing (any part of clothing as well as sewing items), furniture (furniture hardware/parts), kitchen (items used in the kitchen and food remains), miscellaneous (unidentifiable artifacts), personal (small items belong to a person), and tobacco (items used to smoke tobacco). This typology allows data to be organized for analytic and comparable purposes.

Prehistoric lithics were sorted according to raw material type, function, and possible manufacturing technique. All evidence of utilization was noted. Likely site functions were evaluated in terms of the density and types of artifacts present, the physiographic characteristics of the site, the site size, and the presence and nature of any identified archaeological features.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP) EVALUATION

Archaeological sites are evaluated based on criteria for NRHP eligibility specified in the Department of Interior Regulations 36 CFR Part 60: National Register of Historic Places. Cultural resources are National Register eligible if they meet one or more of the following criteria for evaluation and exhibit the aspects of integrity:

- A) are associated with events that made a significant contribution to the broad pattern of history;
- B) are associated with the lives of persons significant in the past;

- C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,
- D) have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the criteria, a property must be able to convey its significance by possessing integrity of location, design, setting, materials, workmanship, feeling, and association.

Criteria A, B, and C are usually applied to architectural resources while archaeological sites are generally evaluated under Criterion D. The National Park Service (National Park Service [NPS] 1995:21) defines two requirements for archaeological sites to be eligible under Criterion D: the site must have, or have had, information to contribute to our understanding of human history or prehistory, and the information must be considered important. Furthermore, the site must have "been used as a source of data and contains more, as yet unretrieved, data" (NPS 1995:46).

Four points must be addressed in order to evaluate the NRHP eligibility of an archaeological site:

Degree of Integrity. Does the site contain intact remains, allowing for component (cultural and functional) separation and analysis, or is it highly mixed and disturbed?

Degree of Preservation. Does the site contain preserved cultural deposits, features, floral materials, faunal remains, or human skeletal remains suited to in depth research and or absolute dating?

Uniqueness. Is the information contained in the site redundant to that available from other, similar sites, or do such remains provide a unique or insightful perspective on research concerns or regional importance?

Relevance to Current and Future Research. In consideration of current research themes and directions, could the excavation of the site fulfill basic research needs? Would preservation of the site provide valuable data for future studies? While this aspect is partially the sum of aspects listed above, it also recognizes that a site may be able to contribute to ongoing research regardless of its integrity, preservation, or uniqueness.

VI. ARCHAEOLOGICAL SURVEY RESULTS

New South Associates conducted the Phase I Archaeological Survey of 241 acres of the former Happy Valley housing area in three stages. Between January 7 and 15, 2008, a survey of 110 acres ^{Exempted from Disclosure by Statute} was completed. A survey of 71 additional acres ^{Exempted from Disclosure by Statute} was carried out between May 20 and 28, 2009. A final survey of 60 acres ^{Exempted from Disclosure by Statute} was conducted between July 12 and 28, 2010. During the surveys, archaeological remains of Happy Valley and a previously identified cemetery site were located but no new sites were encountered (Figure 11). Remains of Happy Valley existed as artifact concentrations, isolated finds, structural features, and old roadways. Results of the 241-acre survey are presented below.

PREVIOUSLY RECORDED SITES: 40RE219 AND 40RE233

Two previously recorded sites fall within the survey area: 40RE219 and 40RE233. Site 40RE219, the Wheat Community African burial ground, was located within the survey area ^{Exempted from Disclosure by Statute}. The cemetery is demarcated by an iron fence and contains unmarked and field stone marked burials. No shovel tests were excavated within the fenced cemetery. During the survey, approximately nine adult-sized cigar shaped depressions were encountered outside of the fenced cemetery. These depressions were approximately 30 meters southwest of the fenced cemetery boundary. No grave markers were visible in the area, but the depressions were oriented roughly E-W and lay in rows. Remains of an old barbed wire fence were visible near the depressions. It was beyond the scope of work to delineate the cemetery, but the location of the possible burials was recorded with a sub-meter accurate Trimble Geo-XT. It is recommended that further delineation of Site 40RE219 be carried out if ground-disturbing activities are planned for the area, and that this site be avoided and preserved.

Research at the Tennessee State Site Files indicated that portions of the area north of ^{Exempted from Disclosure by Statute} had been surveyed in the past. A 1995 survey conducted in preparation for modifications to SR 58/95 identified building foundations and historic artifact scatters from ^{Exempted from Disclosure by Statute} of the Happy Valley (Pace 1995). Nine judgmental shovel tests were excavated, but the area was not systematically surveyed at that time. These remains were designated Site 40RE233 and were located ^{Exempted from Disclosure by Statute} where the African American hutment area stood. During the current survey, a systematic survey of land in and around Site 40RE233 was carried out resulting in the identification of several artifact concentrations (locations where Happy Valley era refuse, including bottles and cans, was visible on the surface) and building foundations. Sites 40RE233 and 40RE577 are both remains of Happy Valley and their features and artifact concentrations are discussed together in the rest of this chapter.

HAPPY VALLEY ARTIFACT CONCENTRATIONS

Glass and building materials made up the majority of the artifacts collected. Artifacts were generally located on the surface or 0-20 centimeters below the surface (cmbs). Modern bottles and debris were also found on the ground surface throughout the parcel. Twenty-one artifact concentrations (loci) were located within the survey area (Figure 11). Figures 12-19 project these

locations on historic maps of Happy Valley. The majority of these loci are refuse, primarily bottle, dumps associated with Happy Valley residences; many of the loci contained intact bottles with markings dating the bottles to the mid-twentieth century. A list of the loci can be found in Table 1 with a detailed discussion of each of the loci following the table.

Table 1. Loci Identified in [Exempted from Disclosure by Statute]

Locus Number	Dimensions in meters (feet)	Composition	Location	Site Number
1	20x10	Nail, tile	10–15 cmbs	40RE577
2	40x10	Glass, metal fragments	Surface, 0–10 cmbs	40RE577
3	30x10	Metal hardware, nail, glass	Surface, 15–20 cmbs	40RE577
4	30x10	Brick fragments, whiteware, bottles	Surface, 0–25 cmbs	40RE577
5	10x10	Bottle dump	Surface, 0–25 cmbs	40RE577
6	50x30	Glass, metal, housewares. Area disturbed	Surface	40RE577
7	25x10	10–20 bottles/jars	Surface	40RE577
8	20x15	10–20 bottles/jars	Surface	40RE577
9	75x50	~100 bottles/jars, a shoe, ~5 cans	Surface, 0–10 cmbs	40RE577
10	20x10	Remains of cars, ~10 bottles	Surface	40RE577
11	60x15	30–10 bottles/ jars, electrical outlet, can	Surface	40RE577
12	15x15	Toilet fragments, 20–30 bottles/jars	Surface	40RE577
13	40x40	Glass fragments, whiteware sherd, ~5 glass bottles/jars, coal	Surface, 0–20 cmbs	40RE577
14	120x40	~50 artifacts associated with the mess hall (e.g. cafeteria tray, plate fragments, coffee cups)	Surface	40RE577
15	60x30	20–30 bottles/jars, electrical outlet	Surface	40RE233
16	80x80	10–20 coal, glass, jar, hardware	Surface and 0–24 cmbs	40RE233
17	80x60	~100 bottles/jars, housewares	Surface and 0–20 cmbs	40RE233
18	50x40	50 bottles, nails, glass, coal	Surface and 0–20 cmbs	40RE233
19	20x10	5–10 glass fragments	0–20 cmbs	40RE233
20	50x30	~50 bottles/jars	Surface and 0–20 cmbs	40RE233
21	20x20	5–10 glass, brick, terra-cotta pipe fragment	0–20 cmbs	40RE577

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Figure 11. Map of 40RE233 and 40RE577 Showing Loci and Isolated Finds

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Figure 12. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (1 of 8)

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 13. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (2 of 8)

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Figure 14. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (3 of 8)

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 15. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (4 of 8)

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Figure 16. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (5 of 8)

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Figure 17. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (6 of 8)

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 18. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (7 of 8)

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 19. Large Features, Loci, Isolates, and Units Plotted on J.A. Jones Construction Map (8 of 8)

LOCUS 1

Locus 1[
Exempted from Disclosure by Statute]was encountered when a fragment of non-diagnostic clear glass was collected from a shovel test. 10 shovel tests were excavated in order to determine the locus boundaries. In addition to the initial positive shovel test, one other positive shovel test was located. The second positive shovel test contained a fragment of asbestos siding. Both artifacts were found at depths of 10-15 cmbs. Shovel tests consisted of approximately 15 centimeters of gravelly dark brown (10YR 3/3) silty clay loam atop dark reddish brown (5YR 3/3) compact clay. The locus measured 20 meters east-west by 10 meters north-south (Figure 20).

The area surrounding the locus was disturbed and the vegetation consisted of small hardwoods, pines, and briars. The artifacts provide little information on the origin of the locus. Based on the proximity of the locus to a dirt road that is believed to be [Exempted from Disclosure by Statute], it appears that Locus 1 could mark the site of Mess Hall H-37 (Figure 14).

LOCUS 2

Locus 2[
Exempted from Disclosure by Statute]was first noted when a clear machine-made bottle was spotted on the surface. Several glass fragments were also found within a shovel test. Twenty-one shovel tests were excavated in order to determine the locus boundaries. In addition to the initial positive shovel test, one other positive shovel test was found. The second positive shovel test contained amber and clear glass fragments and a corroded metal toilet paper holder. All buried artifacts were found at depths of 0-10 cmbs. Shovel tests contained approximately 20 centimeters of dark brown (7.5YR 3/3) silty clay loam atop mottled strong brown (7.5YR 4/6) and olive yellow (10YR 6/6) clay. The locus measured 40 meters north-south by 10 meters east-west (Figure 21).

The surrounding vegetation consisted of hardwoods and pines. An overgrown dirt road ran through the locus area in a northeast-southwest direction and was projected to be 33rd Street South. The artifacts were a mixture of lavatory and household items. Based on the proximity of the locus to the main gravel road (32nd Street) and the overgrown dirt road, it appears that Locus 2 consists of refuse from trailers and lavatories located between [Exempted from Disclosure by Statute] (Figure 13).

LOCUS 3

Locus 3 was located in the northern portion of the survey area. The locus was identified when a metal hinge was found on the ground surface. 10 shovel tests were excavated in order to determine the locus boundaries. In addition to the initial positive shovel test, one other positive shovel test was excavated. The second positive shovel test contained clear glass fragments and a wire nail. All buried artifacts were collected from depths of 15-20 cmbs. A thick layer of road gravel covered the surface of the site at several shovel test locations. Shovel test profiles consisted of approximately 15 centimeters of dark brown (7.5YR 3/3) silty clay loam atop gravelly olive yellow (10YR 6/6) clay. The locus measured 30 meters east-west by 10 meters north-south (Figure 22).

The area surrounding the locus contained hardwoods and pines. Disturbed ground overgrown by privet was located northeast of Locus 3. An overgrown dirt road ran through the site in a northeast-southwest direction. This road was speculated to be [Exempted from Disclosure by Statute]. A second

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Figure 20. Locus 1, Map and Photograph

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Figure 21. Locus 2, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 22. Locus 3, Map and Photograph

overgrown dirt road running in the same direction was located just south of the locus and appeared to be [Exempted from Disclosure by Statute]. All the artifacts consisted of household items. Based on the proximity of the locus to the two overgrown gravel roads and a large lavatory feature (Feature 26), it seems likely that Locus 3 contains refuse from trailers located [Exempted from Disclosure by Statute], south of Lavatory H-44 (Figure 12).

LOCUS 4

Locus 4 was situated 50 meters south of Locus 3. The locus was first noted when whiteware and brick fragments were found within a shovel test. 10 shovel tests were excavated in order to determine the locus boundaries. One additional positive shovel test was identified. The second positive shovel test produced amber bottle glass fragments from the surface and asbestos siding from within the test. All buried artifacts were located 0-25 cmbs. Shovel test profiles consisted of approximately 25 centimeters of brown (7.5YR 4/3) silty clay loam atop strong brown (7.5YR 5/6) clay. The locus measured 30 meters north-south by 10 meters east-west (Figure 23).

The surrounding vegetation consisted of hardwoods and pines. The locus area sloped up to the south and an overgrown dirt road ran through the site in a northeast-southwest direction. The artifact assemblage consisted of building materials and household items. Based on the proximity of the locus to the overgrown gravel road and a large lavatory feature (Feature 26), it appears that Locus 4 contains refuse associated with trailers and "Victory Homes" located along [Exempted from Disclosure by Statute] (Figure 13).

LOCUS 5

Locus 5 was in the north central portion of the survey area, south of Locus 2. The locus was identified when bottles were spotted on the ground surface. A shovel test in this location produced nails, a stoneware fragment, and a corroded metal fragment. In total, nine shovel tests were excavated in order to determine the locus boundaries, but only the initial test was positive. All buried artifacts were located 0-25 cmbs. Soil profiles consisted of approximately 35 centimeters of brown (7.5YR 4/3) silty clay loam atop strong brown (7.5YR 5/6) clay. The locus measured 10 meters in diameter (Figure 24).

The immediate area surrounding the locus appeared disturbed and was covered in privet. The locus was situated on a landform that sloped down to the north and east. An overgrown dirt road was found north of the site and ran in a northeast-southwest direction. This road was speculated to be the former 34th Street South. The artifacts collected consisted of building materials and household items. Feature 25, a water station, was directly southwest of the locus. Based on the proximity of the locus to the overgrown gravel road and Feature 25, it appears that Locus 5 represents refuse from trailers located between the [Exempted from Disclosure by Statute] (Figure 13).

LOCUS 6

Locus 6 was found in the north central part of the survey area, [Exempted from Disclosure by Statute]. The locus was first noted when historic artifacts were seen scattered on the ground surface. Artifacts included asbestos siding, an ornamental dish fragment, and green machine made bottle glass. The area was uneven and disturbed and modern artifacts were also

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Figure 23. Locus 4, Map and Photograph

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Figure 24. Locus 5, Map and Photograph

present on the surface. Shovel tests excavated in the surrounding area produced no artifacts. Strong brown (7.5YR 5/6) clay was visible on the surface in some areas of the locus and a short grassy groundcover blanketed the remaining portions of the locus.

The locus measured 50 meters north-south by 30 meters east-west (Figure 25). A forested slope bordered it to the east and a low, hydric area sat to the west. [Exempted from Disclosure by Statute]

Construction of this sewer and other utility lines in the area could have resulted in the visible disturbance. The artifact assemblage included building materials and household items. Feature 45 (a historic sewer) was situated within the locus, Feature 16 (a water station) was approximately 30 meters east of the locus, and Feature 46 (a hydrant) was 15 meters south of the locus. Based on the proximity of the locus to the gravel road, the surrounding features, and an overgrown road to the west, it is speculated that Locus 6 represents refuse from occupants of the trailers near [Exempted from Disclosure by Statute] (Figure 13).

LOCUS 7

Locus 7 was near the south central edge of the project area [Exempted from Disclosure by Statute]. The locus was encountered when bottles were noted on the ground surface. The immediate area was uneven and covered in push piles. Shovel tests excavated in the area produced no artifacts and soil profiles consisted of 20 centimeters of dark brown (10YR 3/3) silty loam over strong brown (7.5YR 4/6) clay loam.

The locus measured approximately 25 meters east-west by 10 meters north-south (Figure 26). The land south of the locus sloped up towards a ridge and an old road ran along the northern edge of the artifact scatter. Approximately 10-20 bottles and jars were visible on the ground surface. A representative bottle from the locus was collected. This clear machine-made bottle possessed the Owens-Illinois Duraglas trademark indicating it was manufactured between 1940 and 1954. J.A. Jones Construction Company maps of the area indicate that the road north of the locus was most likely [Exempted from Disclosure by Statute]. A group of 20 hutments stood in this area and Locus 7 may represent an informal refuse dump for these hutments (Figure 15).

LOCUS 8

Locus 8 was approximately 85 meters southwest of Locus 7. As with Locus 7, Locus 8 was a surface scatter of bottles and jars. The locus was situated on a slope just south of [Exempted from Disclosure by Statute]. Shovel tests placed in the area were negative. Soil profiles revealed within shovel tests were 10 centimeters of dark brown (10YR 3/3) silty loam, 10 centimeters of yellowish brown (10YR 4/4) silty loam, and a subsoil of strong brown (7.5YR 4/6) clay loam.

Locus 8 measured approximately 20 meters east-west by 15 meters north-south and consisted of 10-20 bottles and jars (Figure 27). The representative artifact collected was a clear, machine-made bottle with the Knox Glass Company trademark, dating the bottle to mid-twentieth century. [Exempted from Disclosure by Statute]

J.A. Jones Construction Company maps of the area indicate that the road was most likely [Exempted from Disclosure by Statute]. The construction maps also indicate that 20 hutments once stood in the area. The locus may be the remains of an unofficial household refuse dump for some of these hutments (Figure 15).

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Figure 25. Locus 6, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 26. Locus 7, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 27. Locus 8, Map and Photograph

LOCUS 9

Locus 9 was situated in a wooded area approximately 160 meters southwest of Locus 8. A small scatter of bottles and jars visible on the surface was the first indication of the locus, but a subsequent shovel test in the area contained a small clear bottle glass fragment from 0-10 cmbs. Six delineation shovel tests were excavated around the shovel test in areas that were not sloped or disturbed. These tests were negative and revealed a soil profile of five centimeters of dark brown (10YR 3/3) loam, 15 centimeters of yellowish brown (10YR 4/4) silty loam, and a subsoil of strong brown (7.5YR 4/6) clay loam.

Surface artifacts and topography were used to determine the extent of the scatter. The locus measured 75 meters east-west by 50 meters north-south and was composed of approximately 100 artifacts (Figure 28). Artifacts included mostly amber and clear machine made bottles, but unlike other loci in the area, additional household items were also represented in the assemblage. These items included a shoe, a light bulb, several rusted cans, a Noxzema jar, and a Chesebrough Mfg. Company jar which would have most likely contained Vaseline. The locus sat on a small terrace bounded by slopes to the northeast and south. A small north-south running drainage cut across the western edge of the locus. The drainage contained a large number of bottles and jars.

A hydrant (Feature 62) was positioned within the locus. Based on J.A. Jones construction maps, this locus appeared to be in an undeveloped area south of the hutment neighborhoods around [Exempted from Disclosure by Statute]. The locus thus appears to consist of the remains of an unofficial dump for those living in the hutments to the north (Figure 16).

LOCUS 10

Locus 10 was in a wooded area[

Exempted from Disclosure by Statute

.] Two historic car frames and a small surface artifact scatter marked the locus. The area immediately surrounding the locus was disturbed, sloped or hydric, so no shovel tests were excavated.

The locus boundaries were based on landscape features and the extent of surface artifacts. Artifacts were visible over an area measuring approximately 20 meters east-west by 10 meters north-south (Figure 29). The locus was situated on a small terrace between a creek and an upward slope. A large pile of broken asphalt sat upslope from the locus. It is unclear whether this asphalt originated from Happy Valley, so it was not included in the locus boundary. The artifact assemblage consisted of the two historic cars and several clear glass bottles. The cars were stripped of many of their parts and only the frames remained. One car was too badly damaged to be identified, but the body style of the second car was consistent with a late 1930s-early 1940s Ford or Chevrolet four-door sedan. As with other loci in the parcel, the bottles at this locus were all machine made, clear glass with markings dating to the mid-twentieth century. Examination of the J.A. Jones Construction maps indicates that Locus 10 is west of [Exempted from Disclosure by Statute]

](Figure 16). The map shows that nothing was built in this area and this location may have been used as a dump for the hutment neighborhoods to the north and east. The reasons why the cars were discarded are unknown.

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Figure 28. Locus 9, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 29. Locus 10, Map and Photograph

LOCUS 11

Locus 11[

]Exempted from Disclosure by Statute

]consisted of a large bottle scatter.

The surrounding area was sloped and disturbed; so only one shovel test was excavated. No subsurface artifacts were uncovered. The soil profile revealed within the shovel test was 10 centimeters of brown (10YR 4/3) silty loam over a strong brown (7.5YR 4/6) clay loam.

Based on the presence of surface artifacts the locus measured 60 meters northwest-southeast by 15 meters northeast-southwest (Figure 30). Approximately, 30-40 artifacts including bottles, jars, cans, and a porcelain electrical outlet were collected from the scatter. The bottles that made up the bulk of the artifact assemblage were predominantly amber machine made bottles with the Obear-Nester Glass Company trademark. This mark indicates that they were manufactured between 1915 and 1980. The locus sat on a hillside with a narrow overgrown road or utility corridor running along its western edge. The J.A. Jones construction maps do not show a road in the vicinity of Locus 11, but they do indicate that a sewer line corridor crossed the area. The map illustrates several hutment neighborhoods to the north and east of Locus 11, but no buildings are pictured in the exact location of the artifact scatter. It is likely that this area was used as an informal dumping ground for the surrounding neighborhoods (Figure 16).

LOCUS 12

Locus 12[

Exempted from Disclosure by Statute

]

is situated on a steep slope and consisted of bottles and toilet fragments. The immediate area was sloped, but shovel tests excavated nearby revealed 10 centimeters of brown (10YR 4/3) silty loam over a strong brown (7.5YR 4/6) clay loam. Artifacts were not located below the surface.

Based on the presence of surface artifacts, the locus measured 15x15 meters (Figure 31). Approximately 20-30 bottles and jars were visible in the area. The bottles were consistent with other bottles found within the parcel and their markings indicate they were manufactured between 1940 and 1954. Several large toilet fragments stamped 1943 were also located. J.A. Jones Construction maps place Locus 12 [Exempted from Disclosure by Statute] in an area where 60 hutments in three rows were located (Figure 16). Lavatories were shown south of the area. The presence of the toilet fragments in the artifact assemblage implies that this refuse might have been left over from demolition of the hutments and lavatories that stood upslope.

LOCUS 13

Locus 13 was[

Exempted from Disclosure by Statute

]first noted when a clear bottle glass fragment was located within a shovel test. Within 60 meters, two additional regular interval shovel tests were also positive. These shovel tests produced two clear glass fragments and a whiteware shard. Surface inspection of the area resulted in the discovery of additional jars and bottles. Sloped conditions, the presence of nearby features, and heavy disturbance from demolition limited the number of delineation shovel tests excavated. Shovel tests revealed soil profiles of 10 centimeters of brown (10YR 4/3) loam, 10 centimeters of dark yellowish brown (10YR 4/4) silty loam, and a subsoil of strong brown (7.5YR 4/6) clay loam. In shovel tests adjacent to the lavatory foundations, coal and coal clinkers were located at depths of 0-20 cmbs.

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Figure 30. Locus 11, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 31. Locus 12, Map and Photograph

Based on surface inspection, excavation of shovel tests, and topography, the locus measured 40x40 meters (Figure 32). The artifacts collected from the shovel tests were non-diagnostic, but consistent with the Happy Valley occupation. The locus was situated on a hilltop with slopes to the west and north and an overgrown gravel road to the east. The remains of two lavatories (Features 64 and 66) and a sewer (Feature 65) stood in the immediate area. The J.A. Jones maps place Locus 13 in a hutment neighborhood [Exempted from Disclosure by Statute] (Figure 16). This locus is probably the remains of household activities in this area.

LOCUS 14

Locus 14 is a surface scatter [Exempted from Disclosure by Statute]. The locus was initially identified because several mugs and a Bolta cafeteria tray (not collected) were visible on the surface. Further surface inspection revealed a large artifact scatter oriented northwest-southeast. The locus sat on a steep wooded slope, which limited the number of shovel tests that could be excavated in the area. Two shovel tests were placed within the scatter boundaries. The soil profile revealed was 15 centimeters of very dark gray (10YR 3/1) clay loam over mottled brown (7.5YR 4/3) and strong brown (7.5YR 4/6) clay. Large amounts of gravel were found throughout both soil layers.

Based on surface inspection and topography, the locus was determined to measure 120x40 meters (Figure 33). Other than some asbestos tile fragments, both shovel tests in the locus were negative. A small sample of diagnostic artifacts was collected from the surface and included a bottle with the Owens-Illinois maker's mark and the Duraglas stamp. These markings indicate the bottle was manufactured between 1929 and 1954. Approximately 20 meters west of the locus was the foundation for a large mess hall (Feature 77) that served a cluster of dormitories [Exempted from Disclosure by Statute] (Figure 17). The artifacts from this locus are consistent with those relating to food service, so they likely resulted from the mess hall either during use and/or demolition. The asbestos tile fragments are indicative of demolition.

LOCUS 15

Locus 15 is a surface scatter [Exempted from Disclosure by Statute] in a heavily wooded area. A surface concentration of bottles was the first indication of the locus. Further surface inspection revealed a large artifact scatter oriented northwest-southeast. The surface assemblage was composed primarily of bottles, but an electrical switch and a metal bucket were also visible. Because the area was steeply sloped, few shovel tests could be excavated in the area. Two judgmental shovel tests were placed in a fairly level area within the scatter boundaries. The soil profile revealed was five centimeters of root mat, 10 centimeters of yellowish brown (10YR 5/4) clay loam, and a subsoil of yellow (10YR 7/6) clay. Both shovel tests were negative for cultural deposits.

Surface inspection revealed the locus to measure 60x30 meters (Figure 34). There were no above ground architectural features in the vicinity. A small sample of diagnostic artifacts was collected from the surface. These artifacts included a Chesebrough Manufacturing Co. bottle (1908-1955) and a porcelain light switch marked Knox and UL (1936-1975). Examination of historic maps indicates that the locus was situated approximately 50 meters north of the southwestern most hutment area (Figure 18). The artifacts could have been the result of informal dumping while the camp was in use and/or may contain materials from the camp's demolition. The presence of the electrical switch suggests that some of these artifacts were deposited when the hutment area was being dismantled.

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Figure 32. Locus 13, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 33. Locus 14, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 34. Locus 15, Map and Photograph

LOCUS 16

Locus 16 is a surface and subsurface scatter[

Exempted from Disclosure by Statute

]in a wooded area. The locus was initially identified when two shovel tests recovered glass fragments and coal. Eighteen shovel tests were excavated in order to fully delineate the locus. These shovel tests generally revealed a soil profile of 5 centimeters of very dark grayish brown (10YR 3/2) loam, 15 centimeters of brown (7.5YR 4/4) clay loam, and subsoil of strong brown (7.5YR 5/6) compact clay. Some shovel tests contained large concentrations of coal within the top 20 centimeters of soil.

Nine positive shovel tests were found in the locus. Shovel test excavation and surface inspection determined that the locus measured 80x80 meters (Figure 35). Two lavatory foundations (Features 90 and 83) sat near the locus. Artifacts collected in the area included milk glass, amber bottle glass, machine made clear bottle glass, green bottle glass, and iron/steel fragments. These items were collected from the surface and within shovel tests at depths of between 0-20 cmbs. The historic maps show that this area was part of the African American hutment area (Figure 18). Approximately 25 hutments stood in the locus boundaries and many more were located in the immediate vicinity. These artifacts are likely the products of informal dumping while the camp was in use, as well as demolition activities during closure of the camp.

LOCUS 17

Locus 17 is an artifact scatter situated in a low wooded area[

Exempted from Disclosure by Statute

] The locus was initially noted when glass fragments were found within a shovel test. In order to determine the locus boundaries, 12 shovel tests were excavated. Shovel tests generally exhibited profiles of 15 centimeters dark brown (10YR 3/3) clay loam over a subsoil of strong brown (7.5YR 4/6) clay. Coal and road gravel were found in the first 15 centimeters of some shovel tests.

The locus contained a total of six positive shovel tests and several concentrations of surface artifacts. It was oriented northwest-southeast and measured 80x60 meters (Figure 36). Subsurface artifacts were found at depths of between 0-20 cmbs. A small sample of diagnostic artifacts was collected from the surface of the locus. Artifacts collected in the area included a clear machine made bottle with the Chesebrough Manufacturing Co. mark (1908-1955), a clear paneled bottle with the Owens Illinois Glass Co. mark (1929-1954), a ceramic button, and several wire nails. A thick layer of roofing material was found on the ground surface. The historic maps show that this area was part of the African American hutment area in the southwestern most portion of the Happy Valley housing area (Figure 19). Two old gravel roads, [

Exempted from Disclosure by Statute

] cut through the locus. Approximately 10 hutments would have stood within the locus boundaries and at least 10 more would have been situated upslope from the locus area. The artifacts are likely the products of informal dumping while the camp was in use, but the presence of the large layer of roofing material also indicates that some materials in this locus were deposited during demolition of the camp.

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Figure 35. Locus 16, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 36. Locus 17, Map and Photograph

LOCUS 18

Locus 18 is a surface and subsurface artifact scatter located on a wooded ridge[

Exempted from Disclosure by Statute

.] Glass fragments and coal were recovered from a shovel test on the ridge. Nine shovel tests were excavated to determine the extent of the locus. Shovel tests generally exhibited profiles of 20 centimeters dark brown (7.5YR 3/2) clay loam over strong brown (7.5YR 5/6) clay subsoil.

The locus consisted of three positive shovel tests and a large surface scatter of artifacts. It was oriented southwest-northeast and measured 50x40 meters (Figure 37). Other than a vertical sewer feature (Feature 94), no other above ground features was visible within the locus. The positive shovel tests were located on the top of the ridge and the surface scatter was concentrated on the sloped ridge flank. Subsurface artifacts were located 0-20 cmbs. Artifacts collected in the area included a nail fragment, one clear bottle glass fragment, and three pieces of coal. The general area was once part of the African American hutment area in the southwestern most portion of Happy Valley. Historic maps indicate that the locus sat in [Exempted from Disclosure by Statute] (Figure 19). Several hutments and a mess hall would have stood in the vicinity. The artifacts could have been the results of informal dumping while the camp was in use or they might have been deposited during demolition.

LOCUS 19

Locus 19 is a small surface and subsurface artifact scatter situated in a low wooded area. The first artifacts recovered from the locus were glass fragments recovered from shovel tests at depths of 0-15 cmbs. Eight shovel tests were excavated to delineate the locus. Shovel tests generally exhibited profiles of 20 centimeters of very dark brown (10YR 2/2) clay loam over strong brown (7.5YR 5/6) clay subsoil.

The locus consisted of two positive shovel tests, each containing glass fragments. A small scatter of bottles was located on the surface. The locus measured approximately 20x10 meters and was oriented in a northeast-southwest direction (Figure 38). A concrete lavatory foundation (Feature 89) sat just southeast of the locus. Artifacts collected in the area included two amber bottle glass fragments, four clear bottle glass fragments, and a piece of slag. The general area was once part of the African American hutment area in the southwestern most portion of Happy Valley. The remains of an old gravel road run [Exempted from Disclosure by Statute]

](Figure 18). A large number of hutments would have lined this road. The artifacts collected are non-diagnostic, but are likely the products of informal dumping while the camp was in use.

LOCUS 20

Locus 20 is a surface and subsurface artifact scatter positioned on a wooded terrace. The locus was first identified when a whiteware sherd was recovered from a shovel test. Six shovel tests were excavated to determine the extent of the locus. The soil profiles revealed within shovel tests generally showed 10 centimeters of very dark brown (10YR 2/2) clay loam over strong brown (7.5YR 5/6) clay subsoil.

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Figure 37. Locus 18, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 38. Locus 19, Map and Photograph

The locus contained four positive shovel tests and several surface concentrations of bottles and jars. Based on shovel testing and surface collection, the locus measured approximately 50x30 meters and was oriented in a northwest-southeast direction (Figure 39). Three concrete lavatory foundations (Features 84, 85, and 86) were within or adjacent to the artifact scatter. Subsurface artifacts were collected between 0-20 cmbs. After a systematic surface collection was conducted over the area, a recovery of diagnostic surface artifacts was completed. Most of the surface artifacts were bottles and jars, but some roofing material was also observed. Diagnostic artifacts collected in the area included a pharmaceutical bottle embossed "Creomulsion for coughs due to colds" with the Hazel-Atlas maker's mark (1920-1964), a clear paneled bottle with the Owens Illinois Glass Co. maker's mark (1929-1954), a Clorox bottle with the Owens Illinois Glass Co. maker's mark (1929-1954), and a clear condiment bottle marked Metro Glass Co. (1935-1949). Other artifacts included an electric junction box, molded tableware, roofing tile, wire nails, asbestos siding, and a milk glass cold cream jar. The locus was situated in the African American hutment area in the southwestern most portion of Happy Valley. Examination of historic utility maps showed that the locus sat in the hutment area [Exempted from Disclosure by Statute] (Figure 18). When the town was in use, there would have been at least 10 hutments standing within the locus boundaries. It is likely that the artifacts resulted from both informal dumping while people lived in the hutments as well demolition activities after people had moved out.

LOCUS 21

Locus 21 is a subsurface artifact scatter found within an overgrown, disturbed area. The first artifact recovered from the locus was a clear bottle base fragment collected at a depth of 0-20 cmbs. In order to determine the extent of the locus, 10 shovel tests were excavated. These tests generally exhibited profiles of 10 centimeters dark grayish brown (10YR 4/2) clay loam, 30 centimeters of brown (10YR 4/3) clay loam, and a strong brown (7.5YR 5/6) clay subsoil. The top 10 centimeters of soil contained a high density of road gravel.

Four positive shovel tests were encountered. The shovel testing determined that the locus measured 40x20 meters and was oriented in a southwest-northeast direction (Figure 40). Subsurface artifacts were collected at depths of 0-32 cmbs. Artifacts collected in the area included a Knox Porcelain Corp. insulator (1936-1975), a sewer tile, an embossed bottle fragment, a clear bottle glass fragment, and three brick fragments. The locus was situated where a cluster of dormitories had once stood (Figure 17). Because of the high density of road gravel found within some of the shovel tests, it is possible that portions of the locus intersected the dormitories' gravel parking lot. It is not clear where the small scatter of artifacts originated, but the presence of the electrical outlet fragment suggests that the artifact scatter may have resulted from the demolition of the dormitories.

HAPPY VALLEY ISOLATED FINDS

Thirteen isolated artifacts were located during the survey (Figures 12-19). Some isolated finds could not be definitely dated but appear to be consistent with the artifacts from the Happy Valley occupation. Most artifacts were located on the surface but some were buried. A list of the isolated finds can be found in the Table 2.

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Figure 39. Locus 20, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 40. Locus 21, Map and Photograph

Table 2. Isolated Finds in [Exempted from
Disclosure by
Statute]

Isolated Find Number	Artifact Type
1	Bottle
2	Wire Nail
3	Spark Plug
4	Nail
5	Clear Machine Made Bottle Glass, Lummi Glass Co. trademark, date range: 1940-55
6	Clear Machine Made Bottle Glass, Lummi Glass Co. trademark, date range: 1940-55
7	Alkaline Glazed Stoneware
8	Tin Can, Modern Crimped Top, Stove Pipe Component (not collected)
9	Clear Bottle Glass Fragments (3)
10	Clear Machine Made Bottle, Clear Bottle Glass Fragment, Amber Bottle Glass Fragment
11	Clear Bottle Glass Fragments (2)
12	Powerline Pole (not collected)
13	Electric Street Lamp (not collected)

HAPPY VALLEY FEATURES

In addition to the loci and isolated finds, 98 above ground features were located during the survey. Two subsurface features were encountered during testing (Feature 98 and Feature 30-A). Feature 98 and Feature 30-A will be addressed in detail in Chapter VII. Lavatories, hydrants, sewer structures, and water stations were the most common feature types. Recreation building foundations, a bridge, a community house foundation, two boiler house foundations, a mess hall foundation, a flood control wall, barrack foundations, and pipes were also located (Figures 12-19).

All but one of the features (Feature 53) appeared to be associated with Happy Valley. Feature 53 is a low stonewall located on [Exempted from Disclosure by Statute]. It is unclear whether the wall predates Happy Valley or was created as part of Happy Valley's construction. No artifacts were found in association with this wall.

A list of the features located and any associated artifacts collected can be found in Table 3. Many features fell into the same categories and are discussed below as feature types. Isolated features that are not of a general type are discussed individually.

Table 3. Features Located During the Survey and Testing of the Former Happy Valley Housing Area

[

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Statute

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SEWER FEATURES

The most common features located in the Happy Valley housing area were sewer features. These features consisted of manholes and drainpipes. They were found throughout the survey area and in the northeastern portion of the parcel, they were commonly found in conjunction with fire hydrants (Figure 41). Twenty-eight of these features were identified. Manholes were constructed of brick and cement and measured approximately 1.1 meters (3.6 feet) in diameter with an interior hole 0.62 meters (2 feet) wide. Metal climbing rungs could be seen within manholes that were missing their covers. Demolition had exposed Feature 7, allowing the normally buried structure to be viewed from the outside (Figure 42). Features 6 and 44 contained horizontal drain structures. These features utilized metal or formed concrete blocks and terra cotta pipes (Figure 42).

LAVATORIES

Twenty-seven possible lavatory foundations were located during the survey. Although many of Happy Valley's structures were ephemeral, it appears that lavatories were built of more permanent materials because they were tied into the water and sewer lines. Most of the lavatories identified appeared to have the same general layout (Figure 43) although the measurements varied slightly depending on types of housing in the area. The maps depict lavatories for the trailers as the largest, but the two lavatory features identified on the ground during the survey (Features 26 and 28) were fully or partially demolished so they could not be accurately measured. The lavatory features in the hutment areas of the main portion of Happy Valley were roughly 9x11 meters (29.5x36.1 feet). Lavatory features in the southernmost hutment neighborhood were the smallest and measured approximately 8x6 meters (26.2x19.7 feet).

All the intact lavatory features possessed a low foundation marking the outline of the structure. The walls were composed of formed concrete containing rounded cobble aggregate. Interior walls branched off of the outside wall and created small rooms (likely toilets) and partitions within the structure. Walls were generally 10 centimeters (3.9 inches) thick unless they included pipes, in which case they were 20 centimeters (7.9 inches) thick. Metal pipes were found protruding vertically from the floor and some interior walls and drains could be seen in the floors of some lavatories. Examination of a Clinton Engineer Works plan for K-25 hutment lavatories shows the

Figure 41.
Sewer Feature 8



A. Feature 8, View East



B. Feature 8, View from Above

Figure 42.
Sewer Features 6 and 7

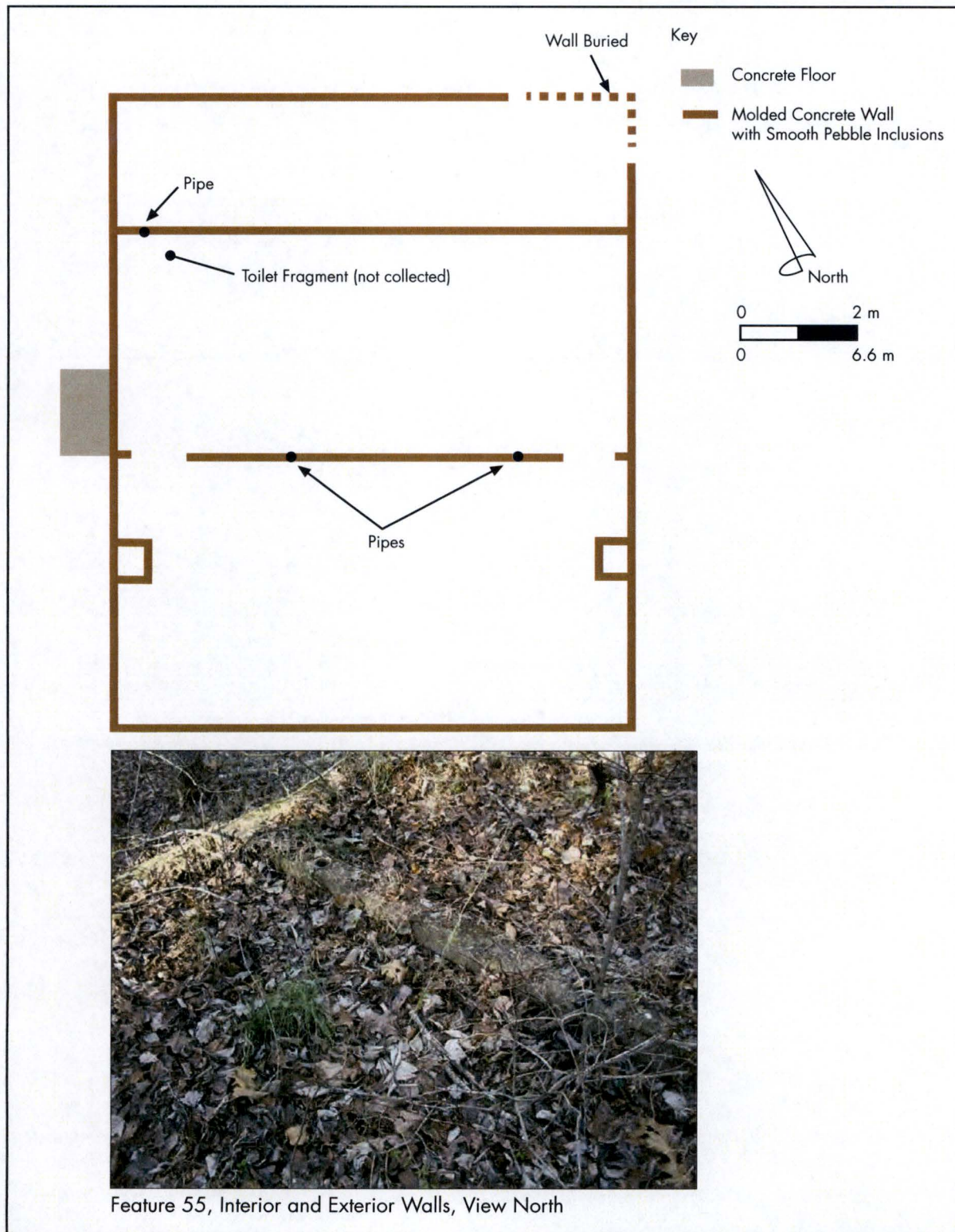


A. Feature 7, View North



B. Feature 6, View North

Figure 43.
Lavatory Feature 55 Map and Photograph



intended layout for the washhouses (Figure 44). Coal powered hot water heaters produced hot water for the showers and this explains why coal and clinkers were found adjacent to Features 64 and 66. Toilet or urinal fragments were located in or near Features 26, 55 and 91. A large sink basin was found near Feature 86. In some African American housing areas, the women's lavatory would contain a large sink for laundry (Johnson and Jackson 1981). Using GPS points and landmarks, the lavatory features noted in the field were identified on the J. A. Jones Sanitary Water and Sewer maps.

WATER STATIONS

The third most common feature type located in the survey area was the water station (Figure 45). These features usually consisted of a concrete pad with a low wall located along one long edge. A post hydrant was erected along the wall edge and a drainpipe was located below the faucet. The concrete pad measured approximately 2x1.5 meters (6.6x4.9 feet) and the corners were notched indicating that the structure might have originally had a roof or walls. Thirteen water stations were identified. In two cases, standing post hydrants without concrete pads were found, but these were exceptions (Features 27 and 37). The water stations were regularly distributed throughout the eastern portion of the parcel where the trailers were located. They appear to correspond to the washhouses pictured on the J. A. Jones Sanitary Water maps. Water stations were not present in the areas of the parcel where the hutments or the dormitories stood. Features 16, 20, 22, and 23 all had associated artifacts that included an amber bottle glass fragment dating from 1940-1954 and a clear glass molded tumbler. These reflect the consumption and collection of water from these stations.

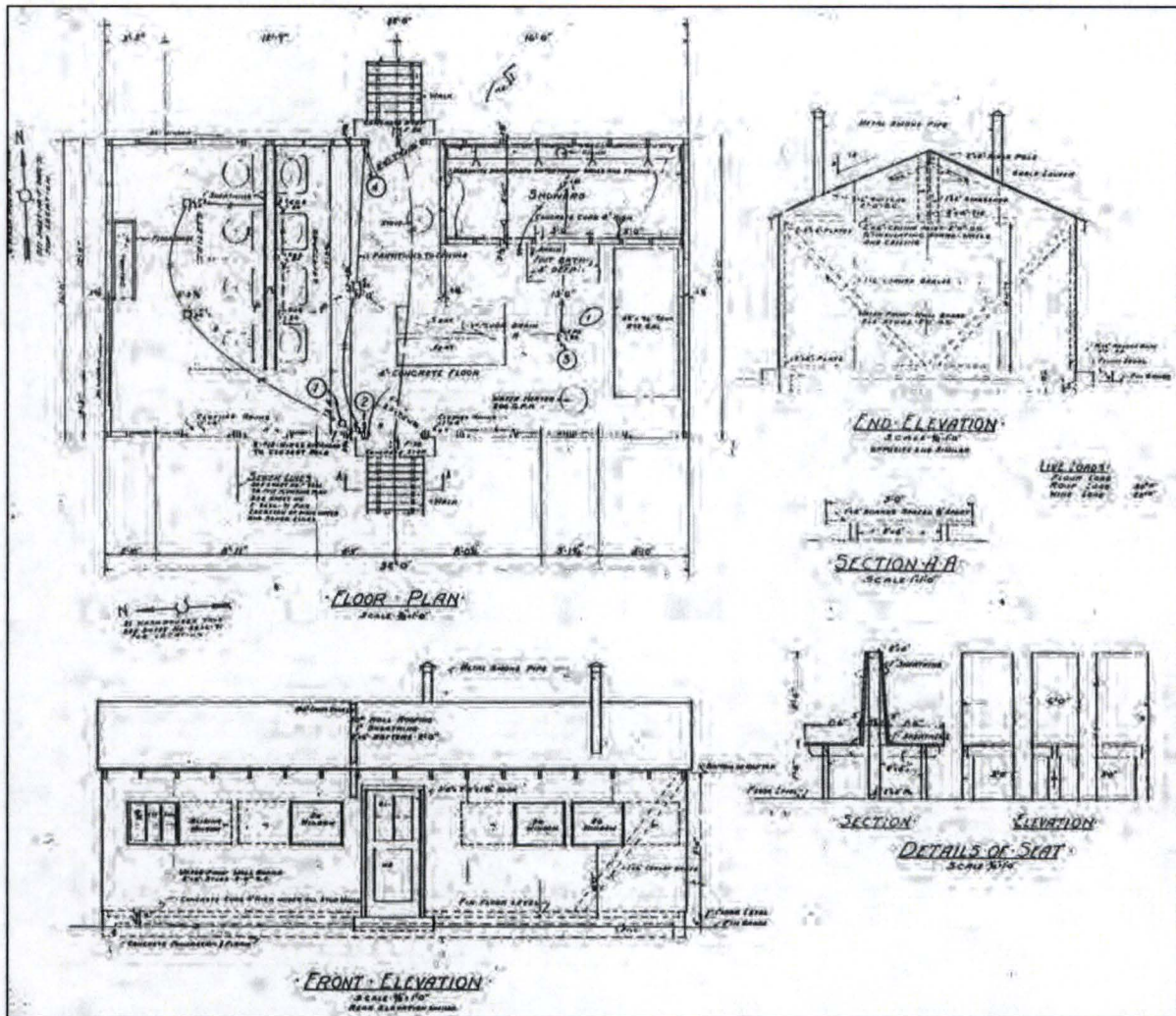
All of the post hydrants were located in concrete pads and marked with the company name "Murdock." Murdock, Inc. has been manufacturing drinking fountains and hydrants since the middle of the nineteenth century. The post hydrants located at Happy Valley are similar to the M75 models that Murdock, Inc. still manufactures today (Murdock-Super Secur 2005).

FIRE HYDRANTS

Thirteen fire hydrants were located during the survey of [Exempted from Disclosure by Statute] (Figure 46). Two were incomplete (Features 2 and 51), but most were intact. Two different styles of fire hydrants were observed. The first fire hydrant style was manufactured by the R.D. Wood Company based in Philadelphia, Pennsylvania. The Wood hydrants appear to be "special" models and are frequently seen in United States World War II era military installations (FireHydrant.org 1995-2001). The M&H Valve & Fitting Company of Anniston, Alabama manufactured the second style of fire hydrant seen on the parcel. The style seen in Happy Valley is the M&H 5 1/4" Model 29. M&H originated in New York City where they produced plumbing materials such as valves and brass cocks. The company relocated to Alabama in the 1920s and it was around that time that they started to produce fire hydrants (FireHydrant.org 1996-2003).

There is no obvious functional difference between the two styles of hydrants. The hydrants were only present in the northeastern and central portions of the project area. There were no hydrants located in the hutment or dormitory neighborhoods that fell within the southern area.

Figure 44.
Ford, Bacon, and Davis Hutment Lavatory Plans



Source: Department of Energy

Figure 45.
Water Station, Map and Photograph

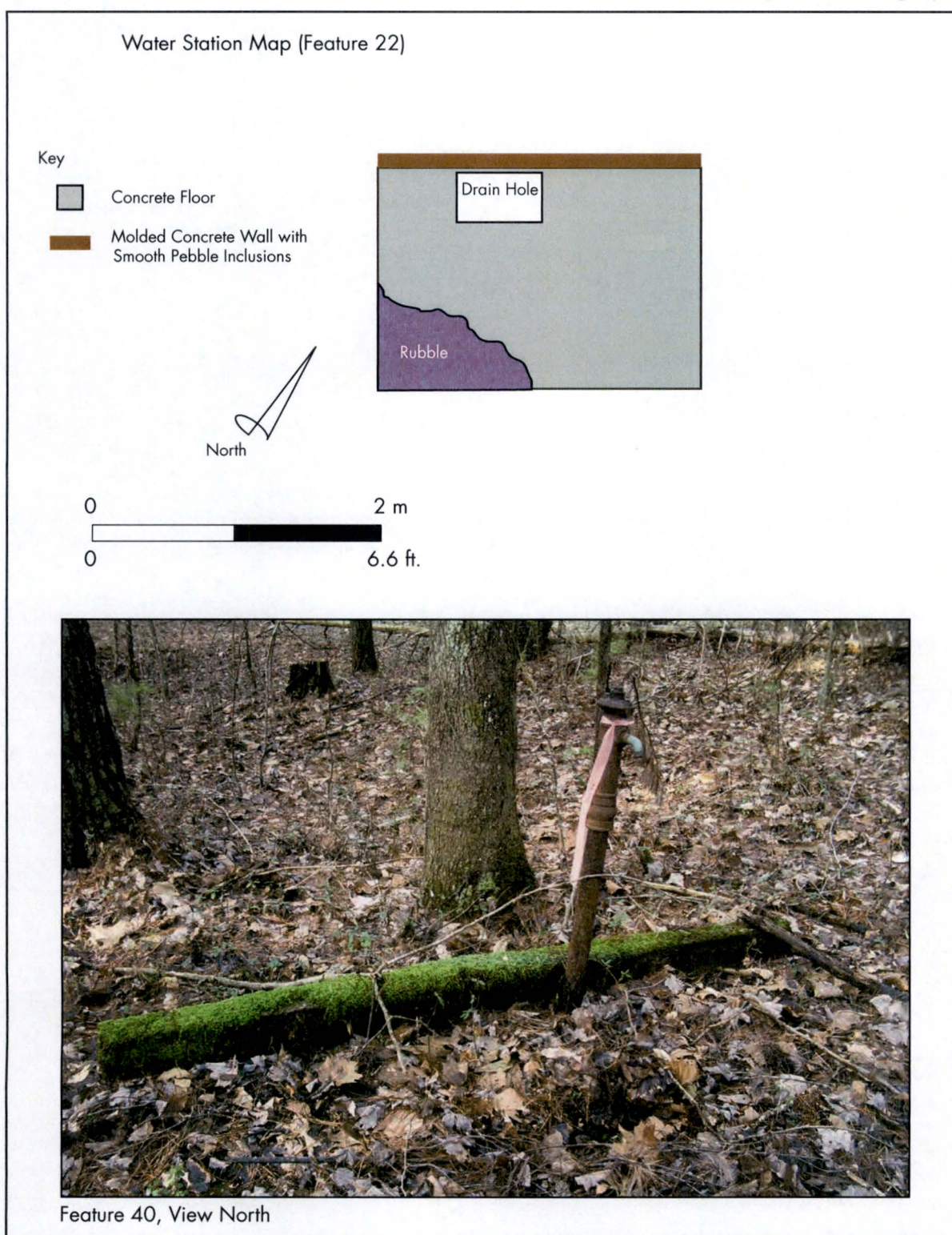


Figure 46.
Hydrant Features 3 and 47



A. Feature 3, and R.D. Wood Hydrant, View West



B. Feature 47, and M&H Hydrant,
View North

FEATURE 5 – RECREATION HALL, H-38

Feature 5 is a building foundation located on the northwest margin of the parcel approximately 10 meters from [Exempted from Disclosure by Statute] (Figure 47). The land surrounding the feature is low lying and contains hardwoods. A steep slope up is located west of the feature. Feature 1, lavatory H-22, is located to the southeast.

The feature consists of a 5x4.5-meter (16.4x14.8 feet) formed concrete foundation. A doorway is located on the north side of the feature and a small landing is located to its south side. A concrete floor was encountered in shovel tests 10 meters (32.8 feet) south and 15 meters (49.2 feet) southeast of Feature 5. The feature was not delineated any further. Based on the feature's placement in the parcel and proximity to Feature 1, it is likely that Feature 5 represents Recreation Hall, H-38. The standing structure associated with Feature 5 could have been an interior room for the building and the concrete encountered in shovel tests could have been the floor for the main recreation room.

FEATURE 9–UTILITY PIPE

Feature 9 is a pipe located 30 meters (98.4 feet) south of Feature 10 (Living Room No. 2) [Exempted from Disclosure by Statute] (Figure 48). A second overgrown road running roughly east–west is located directly south of the feature. Pine trees grow in the surrounding land.

The feature consists of a short cement structure approximately 1.5 meters (4.9 feet) in diameter. Two meters south of the structure, a terra cotta pipe roughly 10 centimeters (3.9 inches) in diameter protrudes from the ground. A small metal pipe threaded on the end is located within the terra cotta pipe. Due to its proximity to Feature 10, it is probable that Feature 9 was associated with it. The J. A. Jones Sanitary Water maps show water lines running south from Feature 10. It is possible that Feature 9 represents these water lines or other utility lines.

FEATURE 10 – LIVING ROOM NO. 2

Feature 10 is a building foundation located in a stand of pine trees [Exempted from Disclosure by Statute] and roughly 10 meters (32.8 feet) [Exempted from Disclosure by Statute] (Figure 48). Feature 9 is located approximately 30 meters (98.4 feet) south of Feature 10. The feature was initially noted when cinder blocks were spotted on the surface just northwest of a shovel test.

The feature consists of a concrete block foundation that measures approximately 17x9 meters (55.8x29.5 feet). A small landing for an exterior stairway is located on the north side of the feature and concrete block stairs leading down towards [Exempted from Disclosure by Statute] are on the west side of the feature. A small pipe was located in the floor of the structure near the east wall. Based on the feature's location and proximity to roads and other features, Feature 10 is probably the foundation for Living Room No. 2, one of the recreation areas in the town. This feature is very close to the barracks and was perhaps used as a recreation facility for those living there.

FEATURE 12 – CONEY ISLAND, S-2

Feature 12 is a concrete floor located just north of the main gravel road that bisects the parcel. A small creek [Exempted from Disclosure by Statute] is located approximately 10 meters north of Feature 12. Grass and low growing shrubs cover the feature, but hardwoods surround it. The

Figure 47.
Feature 5, Map and Photograph

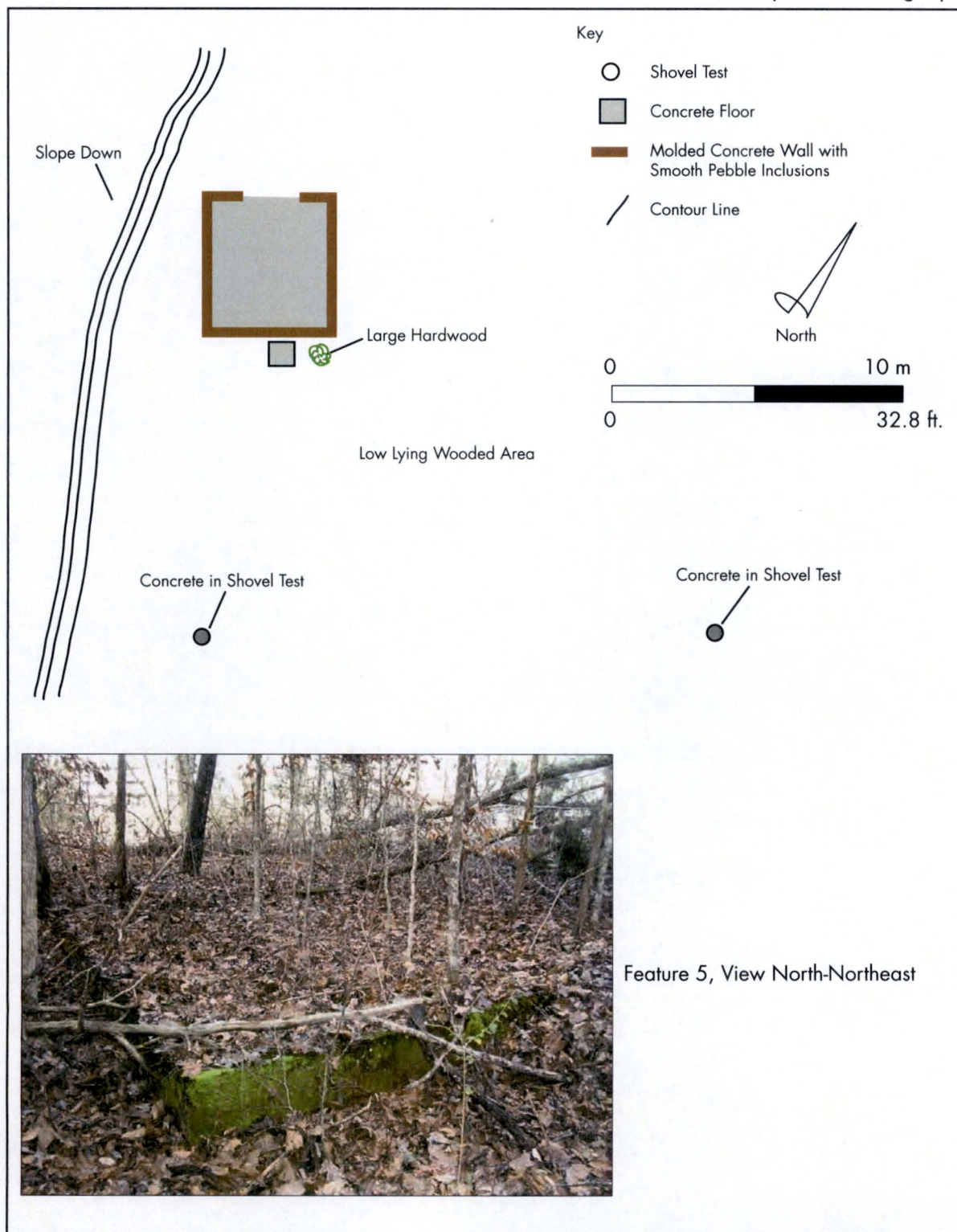


Figure 48.
Features 9 and 10, Map and Photographs

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feature's concrete floor was encountered while attempting to excavate a shovel test. The feature consists of a concrete platform measuring approximately 42x27 meters (137.8x88.6 feet), oriented in a northwest – southeast direction (Figure 49). The platform is split into two levels. A small one-meter square platform protrudes from the north corner of the feature. Based on its orientation and size, this feature corresponds with the Coney Island Recreation Hall, S-2.

FEATURE 13 – BRIDGE REMAINS

Feature 13 is the remains of an old bridge in the [Exempted from Disclosure by Statute] (Figure 50). The area surrounding the feature is forested with hardwoods and an overgrown dirt road is located just south of the feature, leading up to it.

The feature consists of bridge pilings and deck remains. It is not intact and has either decayed over time or was partially taken down when Happy Valley was vacated. Three large, round, vertical wooden pilings stood within the creek. The remnants of wooden planks rested horizontally on two of the pilings parallel to the bridge alignment. Yellow and black striped barriers are located north of the creek in the overgrown dirt roadway leading up to the feature. Based on the placement of the pilings, the bridge was at least 10 meters (32.8 feet) wide.

The feature is located northeast of Feature 12, Coney Island. Its proximity to Feature 12 indicates that this bridge might have been located [Exempted from Disclosure by Statute]. The J.A. Jones construction maps do not indicate that the creek or a bridge existed, however.

FEATURES 19 AND 43 – THEATER, S-17

Features 19 and 43 are the remains of a large building located [Exempted from Disclosure by Statute]. Although 30 meters (98.4 feet) separate the features, they appear to be part of the same large building.

Feature 19 is the eastern portion of the building and Feature 43 is the western portion. The building would have been oriented in a northeast – southwest direction (Figures 51 and 52). The features are located [Exempted from Disclosure by Statute]. The building appears to be 18.5 meters (60.7 feet) wide and at least 55 meters (180.4 feet) long. Two small angular rooms are located in the easternmost corners of the building (Figure 51). A small doorway separates the two rooms. A concrete block wall protrudes east from the southernmost room (Figure 51). The western portion of the building has several interior rooms with pipes in them (Figure 52). A large opening with a sloped walkway is located near the northwestern corner of the building (Figure 52). The placement and size of the structure indicate that these features mark the site of the Happy Valley Theater, S-17.

FEATURE 30 – POSSIBLE COMMUNITY HOUSE, S-51

Feature 30 is a small, square concrete foundation located in [Exempted from Disclosure by Statute]. The area surrounding the feature was covered with vinca. It is approximately 5.4 meters (17.7 feet) on each side (Figure 53) with walls roughly 20 centimeters (7.9 inches) thick. The building foundation extends above ground approximately 60 centimeters (2

Figure 49.
Feature 12, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 50.
Feature 13, View West



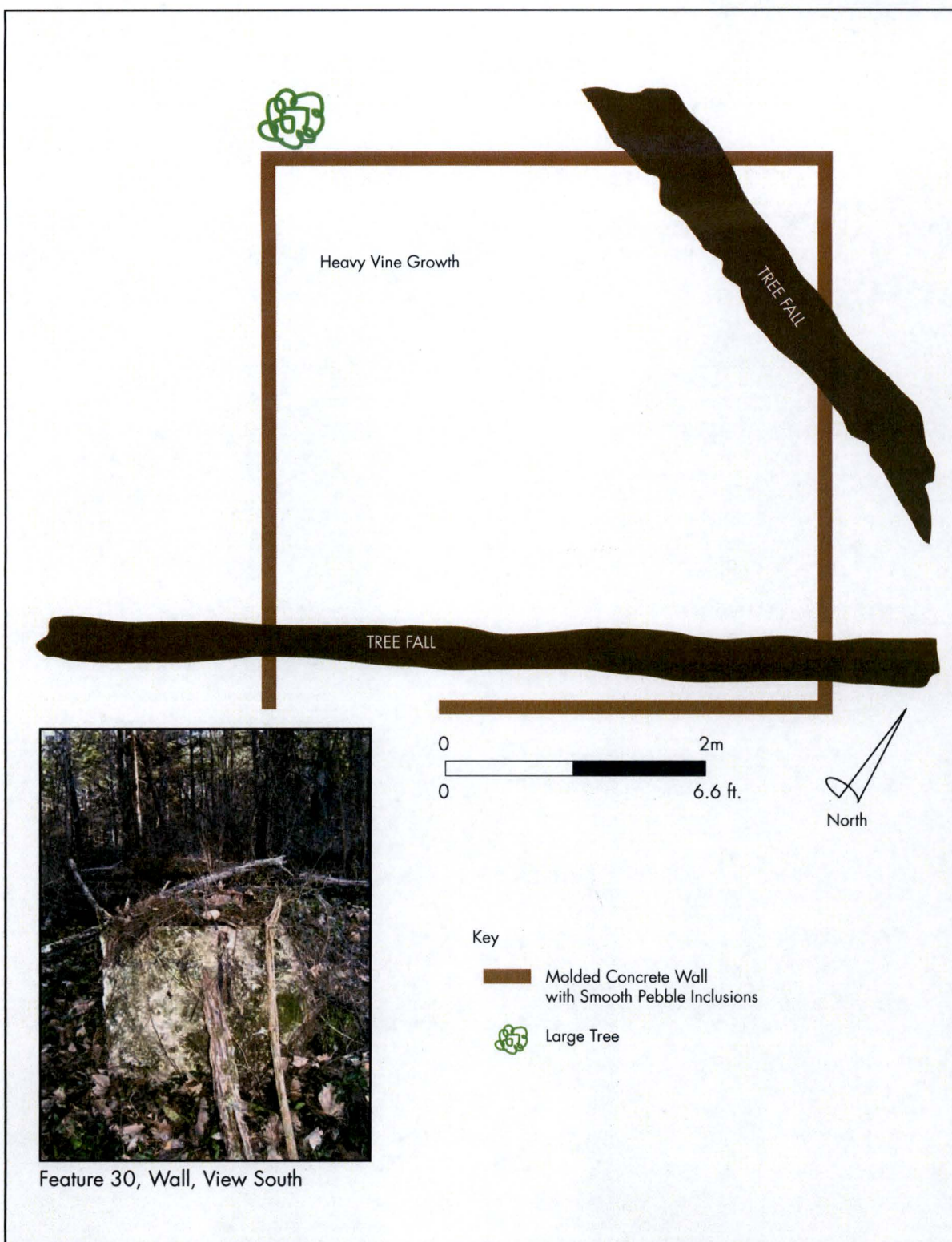
Figure 51.
Feature 19, Map and Photographs

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 52.
Feature 43, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 53.
Feature 30, Map and Photograph



feet). A one-meter (3.3 foot) gap was detected in the southwestern corner of the foundation, but due to heavy undergrowth and tree fall debris, it was difficult to discern what purpose the gap served. Although the foundation is small, its location seems to correspond to that of the Community House in the Victory Homes neighborhood (Figure 12). The Community House was originally a farmhouse occupied by E.W. Arnold. Most of the original farm buildings in the area were demolished when Oak Ridge was developed, but the government reused some for housing or recreation halls (Johnson and Jackson 1981). Feature 30 is composed of foundation material similar to that seen in other foundations in Happy Valley, so it is possible that it could be an addition to the original wood frame farm building. Many of the original farmhouses did not have plumbing or electricity, so renovations might have been required to make the farmhouse suitable for use as a recreation building.

FEATURES 48 AND 49 – BARRACKS, S-57 AND S-5

Features 48 and 49 are barracks ruins [Exempted from Disclosure by Statute]
 (Figure 54). Feature 48 is located [Exempted from Disclosure by Statute]
]. Feature 49 is 10 meters (32.8 feet) south of the main gravel road that bisects the parcel. Pine and hardwoods surround both features.

Feature 48 consists of large concrete blocks and metal water pipes. The feature has been heavily disturbed, but based on its location and the size of the rubble it appears to be the remains of the S-57 Barracks. Feature 49 is more intact. The structure measures 17x10 meters (55.8x32.8 feet) and is oriented in a northeast-southwest direction. Stairways are located on either side of the structure. There are remnants of several interior walls that contain protruding metal pipes and rebar. Based on the location and orientation, this feature can be associated with the S-5 barracks. The plumbing in the structure indicates that those living in the barracks had indoor water and/or lavatory facilities.

FEATURE 53 – STONE WALL

Feature 53 is a stonewall located in the northwest area, [Exempted from Disclosure by Statute]
] (Figure 55). The feature is 30 meters (98.4 feet) east of Feature 54.

Feature 53 measures roughly 60 centimeters (2 feet) high and 30 meters (98.4 feet) long. The wall appears to be constructed of local limestone, though some concrete blocks were located on top of the wall. No artifacts were located around the wall to indicate its age. This feature exhibits a different construction method than other features in Happy Valley. The wall could predate Happy Valley, but no artifacts were found that could be used to date this feature, nor were any sites located in the area identified other than Happy Valley. This may be an erosion control feature associated with Feature 54, which is associated with Happy Valley.

FEATURE 54 – POSSIBLE FLOOD CONTROL STRUCTURE

Feature 54 is a possible flood control feature situated at a bend in the creek that runs along the northern boundary [Exempted from Disclosure by Statute] (Figure 55). Hardwoods and low underbrush surround the feature and Feature 53, a stonewall, is 30 meters (98.4 feet) to the east.

Figure 54.
Feature 49, Map and Photograph

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

Figure 55.
Feature 53 and 54



A. Feature 53, View North-Northwest



B. Feature 54, View Northwest

The feature measures approximately 40 meters (131.2 feet) long and is constructed of 2x1-meter (6.6x3.3 foot) panels that appear to be made of cement. To the south is a steep upward slope and to the west is a low, wet area. Neither the creek nor the feature is pictured on the J.A. Jones construction maps, but the construction method of the feature seems consistent with the mid-twentieth century. The projected location of Feature 54 on the J.A. Jones map is south of Dormitory S-11 and devoid of structures or buildings (Figure 14). Contour lines are not illustrated on the construction map, but this area appears to be the steeply sloped hillside [Exempted from Disclosure by Statute].

FEATURE 77 – MESS HALL AND BOILER HOUSE, 900

Feature 77 consists of two poured concrete foundations. Based on their locations, they appear to correspond to a mess hall and associated boiler house pictured on the J.A. Jones construction maps (Figure 17). The mess hall would have served a cluster of three dormitories and five barracks for single white men and women. Thick underbrush now covers the feature. Feature 80 is located 30 meters northwest and Locus 14 is located 20 meters northeast.

The mess hall foundation was T-shaped and measured approximately 65x28 meters (213x92 feet) (Figure 56). The boiler house foundation was situated 10 meters northeast of the mess hall. It was rectangular shaped and measured approximately 8x5 meters (26.2x16.4 feet). This boiler house would most likely have provided hot water to the mess hall and perhaps other buildings in the immediate area. There were no artifacts found on the feature surface, but Locus 14 contained several artifacts that were related to mess hall activities.

FEATURE 79 – DORMITORY, 903

Feature 79 is a large concrete foundation slab. It was encountered on a slope 50 meters south of Feature 77. The location corresponds to the northeastern corner of Dormitory 903 on the J.A. Jones construction maps (Figure 17). The foundation block measures approximately 1.5x1.5 meters (4.9x4.9 feet) and appears to be hollow in the middle (Figure 57). No associated artifacts were found in the area and no additional dormitory features were located.

FEATURE 80 – RECREATION AREA, LIVING ROOM ONE

Feature 80 is a concrete block wall located just south of the main gravel access road for the parcel and approximately 30 meters northwest of Feature 77 (Figure 57). The J.A. Jones construction maps depict Living Room One in this area (Figure 17). On the construction map, the living room measures 25x10 meters (82x32.8 feet), but during the survey, only one 25-meter (82-foot) long wall was encountered. The rest of the foundation was either buried or removed.

FEATURES 81 AND 92 – PIPE FEATURES

Features 81 and 92 are both metal water pipe features (Figure 58). Feature 81 was encountered in an area where barracks stood. The metal pipe was flush with the ground and marked by a concrete post. Feature 92 was south of the southern-most neighborhood of hutments. The feature consisted of a large metal water pipe with several wheel shut-off valves. It was displaced from its original location, most likely during demolition of the camp.

Figure 56.
Feature 77, Map and Photograph

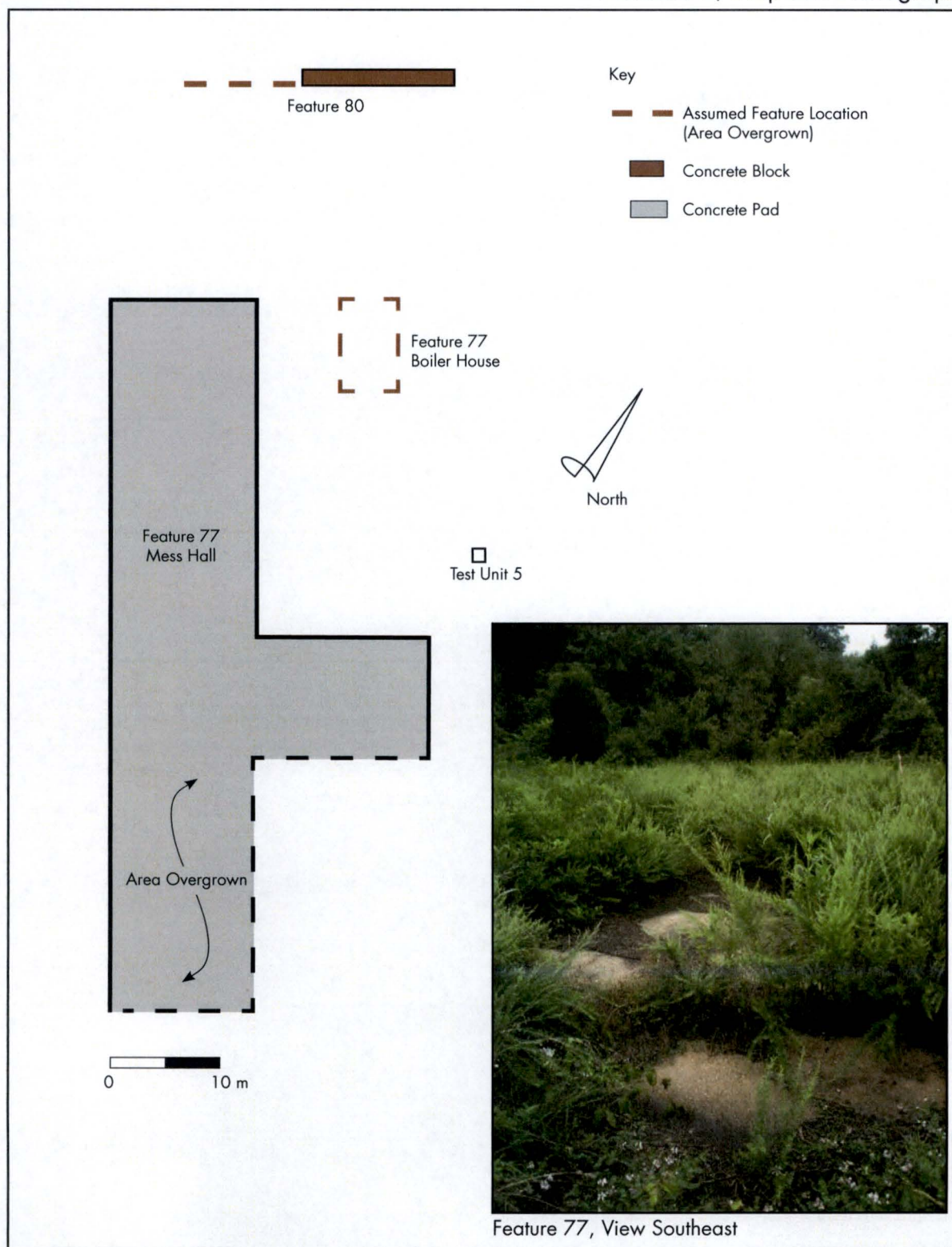


Figure 57.
Features 79 and 80



A. Feature 79, View West



B. Close-up of Feature 80, View Northeast

Figure 58.
Features 81 and 92



A. Feature 81, Concrete Marker, View Northwest



B. Feature 92, View Southeast

FEATURE 95 – BOILER ROOM

Feature 95 is a small concrete foundation with brick walls (Figure 59). The feature was encountered during survey of the southernmost hutment area and is located [

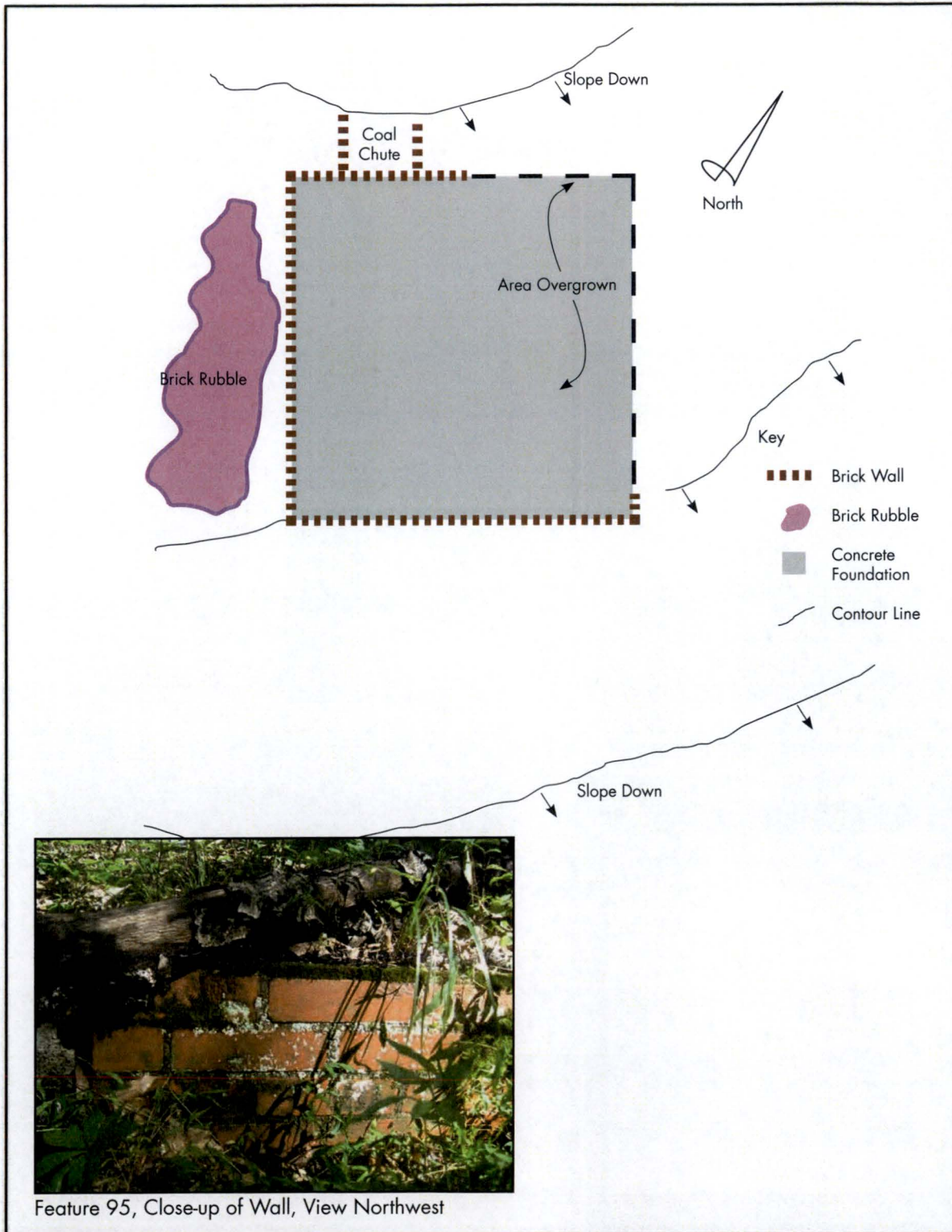
Exempted from Disclosure by Statute

]. The foundation was of poured concrete slab with rounded pebble inclusions and measured roughly 3x3 meters (9.8x9.8 feet).

Large metal bolts protruded from the foundation and were likely used to secure wooden sills; in some areas portions of intact brick wall existed. Jutting off of the northwest side of the feature was a small 55-centimeter square (21.6-inch) brick coal chute. A large concentration of coal was visible inside the chute.

On the J.A. Jones Sanitary Water map, this feature is marked "BR" and most likely represents a boiler room (Figure 19). It is pictured north of the hutment recreation hall and would have supplied the mess halls and other buildings with hot water.

Figure 59.
Feature 95, Map and Photograph



VII. ARCHAEOLOGICAL TESTING RESULTS

Following completion of the survey work, New South Associates conducted Phase II Testing on Happy Valley housing sites 40RE233 and 40RE577 through the excavation of test units. The objectives of the unit excavation were to find out the extent and degree of integrity of the archaeological deposits associated with Happy Valley. Units were also excavated to examine the stratigraphic contexts of the site; to gather larger, controlled, artifact samples; and to search for buried features. A total of 26 units were excavated during the testing portion of the project. Units were used not only to investigate loci containing high artifact densities, but also to examine artifact assemblages in the various housing areas. All of the units examined domestic occupations, where artifacts were present, as non-domestic structural features had been recorded and assessed. Table 4 summarizes the housing types and loci associated with each unit.

Table 4. Unit Placement in Happy Valley Housing Area

Unit Number	Site Number	Associated Locus or Feature	Housing
1	40RE233	Locus 16	Hutments
2	40RE233	Locus 20	Hutments
3	40RE233	Locus 17	Hutments
4	40RE233	Feature 95	Hutments
5	40RE577	Feature 77	Dormitories/Barracks
6	40RE577	None	Dormitories
7	40RE577	None	Victory Homes
8	40RE577	None	Victory Homes
9	40RE577	None	Victory Homes
10	40RE577	Feature 30	Victory Homes
11	40RE577	None	Trailers
12	40RE577	None	Trailers
13	40RE577	None	Trailers
14	40RE577	None	Trailers
15	40RE577	Feature 49	Barracks
16	40RE577	None	Barracks
17	40RE577	None	Hutments
18	40RE577	None	Hutments
19	40RE577	None	Hutments
20	40RE577	None	Hutments
21	40RE577	Locus 9	Hutments
22	40RE577	Locus 9	Hutments
23	40RE577	Locus 9	Hutments
24	40RE577	Locus 13	Hutments (Groups of 3)
25	40RE577	Locus 13	Hutments (Groups of 3)
26	40RE577	Locus 13	Hutments (Groups of 3)

UNIT EXCAVATION, SITE 40RE233 - HUTMENTS

Site 40RE233 is the southernmost hutment area, [Exempted from Disclosure by Statute] These hutments were the earliest housing units constructed for the K-25 construction camp and were eventually used as African American worker housing (Steve Goodpasture, personal communication 2010). There was an organized trash pick up in this housing area, so it was not expected that units would encounter trash pits. However, people conducted many of their daily chores outside. Historic photographs of hutment neighborhoods show activities such as clothes washing and drying taking place between and behind hutments. Therefore, it was anticipated that units could uncover a moderate density of subsurface artifacts and perhaps features. Unit placement in this area was based on survey results and J.A. Jones construction maps. The site area is now heavily wooded with pines and hardwoods.

UNIT 1 – LOCUS 16

Locus 16 contained both surface and subsurface deposits. It was an area where there had been a large number of hutments as well as several lavatories. Most shovel tests produced small quantities of glass and coal. There were no areas that contained significantly more artifacts than others, so Unit 1 was situated in the eastern portion of the locus near several positive shovel tests. Its southwest corner was located at 508N 559E. The datum was established 10 centimeters above the surface (cmas) and the unit was excavated in three arbitrary 10-centimeter levels to a depth of 44 centimeters below datum (cmbd) in all corners.

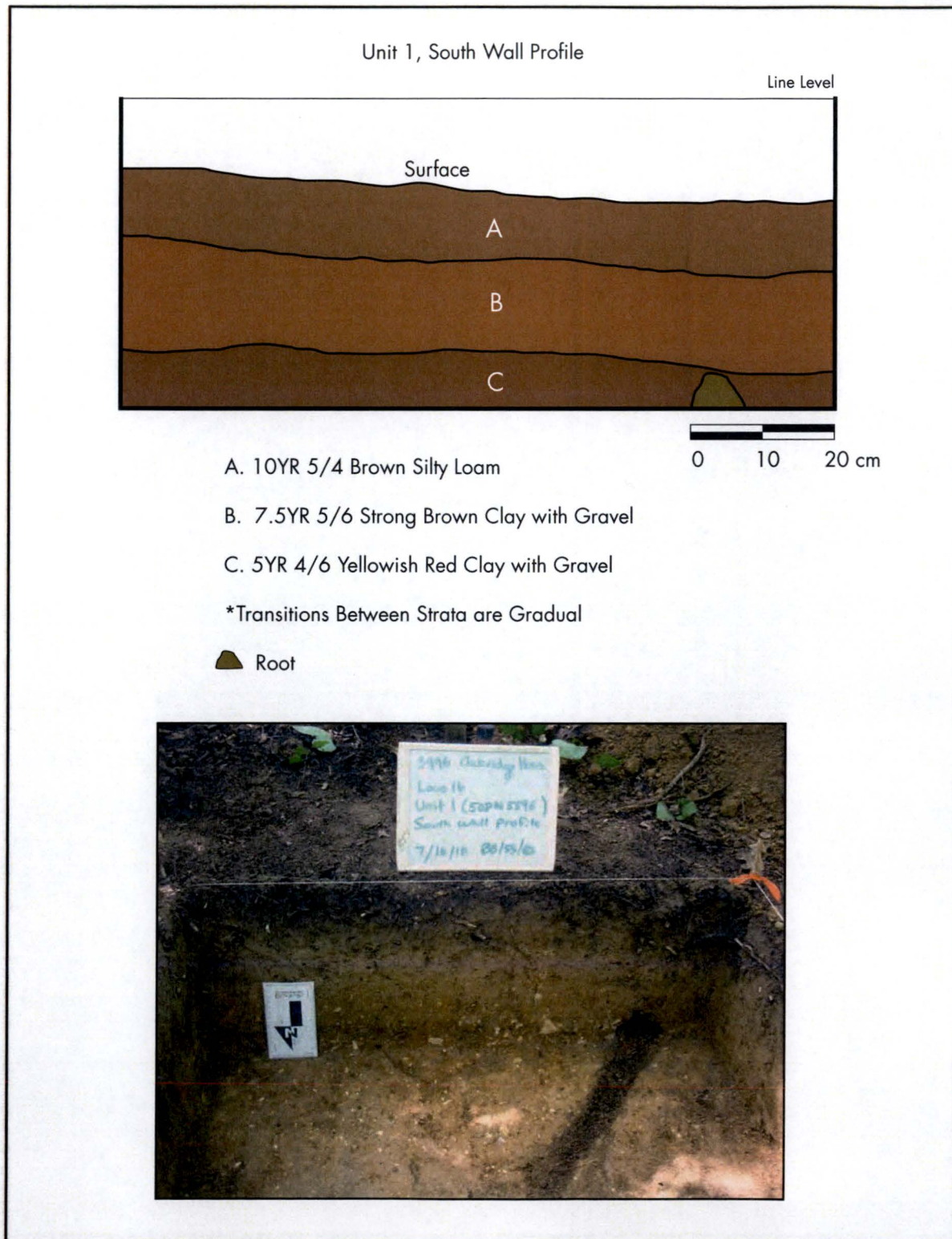
Three soil strata were identified in Unit 1 (Figure 60). Stratum I was 10 centimeters of brown (10YR 5/4) silty loam. Stratum II consisted of 14 centimeters of strong brown (7.5YR 5/6) gravelly clay and Stratum III was composed of 4-8 centimeters of yellowish red (5YR 4/6) gravelly clay.

Artifacts were recovered from Level 1, but Levels 2 and 3 were almost devoid of artifacts. A single chert flake was found within Level 2, but most likely reflected bioturbation in the soil rather than an intact prehistoric deposit. A list of the artifacts from each level can be found in the table below.

Table 5. Unit 1 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	24	34	44
Architecture			
Brick	4	0	0
Glass, Flat	11	0	0
Kitchen			
Bottle Glass, Amber	29	0	0
Bottle Glass, Clear	41	0	0
Prehistoric – Debitage			
Shatter, Chert	0	1	0
Level Totals	85	1	0

Figure 60.
Unit 1, Profile and Photograph



UNIT 2 – LOCUS 20

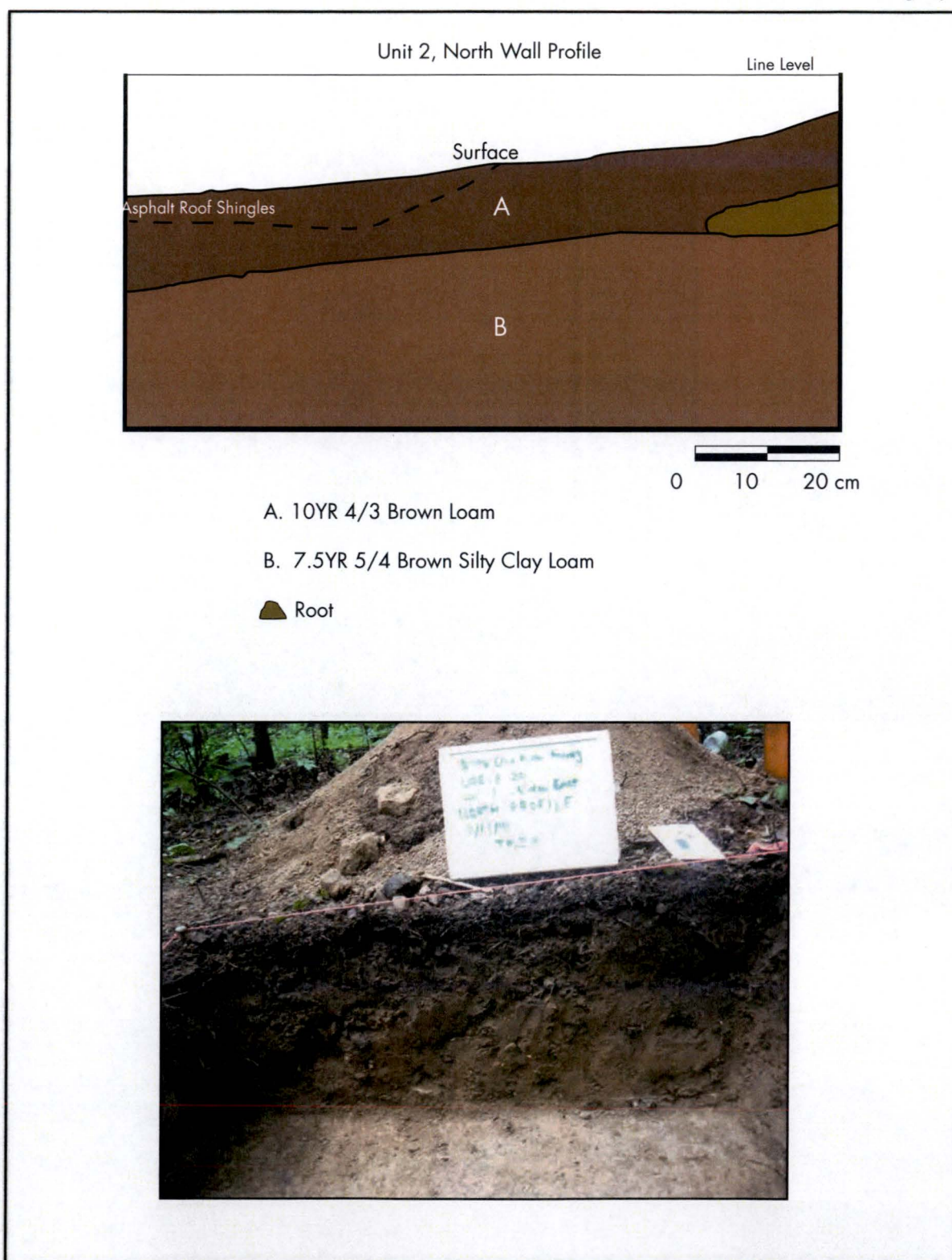
Locus 20 was also in an area where a large number of hutments had stood. Shovel tests in this area revealed shallow subsurface deposits. Numerous bottles and construction materials were visible on the surface. Unit 2 was excavated in the center of the locus, approximately five meters north of a lavatory foundation (Feature 85). The J.A. Jones construction maps indicated that this area should be adjacent to the edge of a hutment. The coordinates of the southwest corner of the unit were 509N 492.5E. The datum was established 10 cmbs, and the unit was excavated in four arbitrary 10-centimeter levels. The final depth of the unit was 50 cmbd.

Two soil strata were encountered within Unit 2 (Figure 61). Stratum I was 15 centimeters of brown (10YR 4/3) loam. Stratum II consisted of 20-30 centimeters of brown (7.5YR 5/4) silty clay loam. A five-centimeter thick layer of asphalt shingles was found in the northeast corner at the top of the unit. The first level contained a high density of artifacts consisting predominately of roofing material, glass, nails, and coal. The artifact numbers quickly dropped off with depth and Levels 3 and 4 were sterile. The only diagnostic artifact collected was a milk glass cosmetic jar with a Hazel-Atlas Glass Company maker's mark. This mark indicates a manufacture date between 1920 and 1964, which is consistent with the Happy Valley occupation (Toulouse 1971). A complete list of the artifacts from each level can be found in Table 8.

Table 6. Unit 2 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	20	30	40	50
Activities				
UNID Plastic	1	0	0	0
Architecture				
Brick	7	2	0	0
Nail, Wire	8	0	0	0
Roofing Tile	90	6	0	0
Kitchen				
Bottle Glass, Amber	2	1	0	0
Bottle Glass, Clear	15	0	0	0
Bottle Glass, Clear Machine Made	0	1	0	0
Miscellaneous				
Coal	101	5	0	0
UNID Iron/Steel	1	0	0	0
UNID Non Iron/Steel	1	0	0	0
Slag	6	0	0	0
Personal				
Cosmetic Jar, Milk Glass	0	1	0	0
Level Totals	232	16	0	0

Figure 61.
Unit 2, Profile and Photograph



UNIT 3 – LOCUS 17

Locus 17 was situated in a low area that had been lined with hutments. Surface and subsurface deposits were present in the area. Unit 3 was placed where a row of hutments had stood east of 2nd Street South. The southwest corner of the unit was 458N 506E. The datum was established 10 cmas and the unit was excavated in two arbitrary 10-centimeter levels. The final depth of the unit was 40 cmbd.

Three soil strata were revealed through excavation (Figure 62). Stratum I consisted of 14 centimeters of dark brown (10YR 3/3) clay loam. Stratum II was 4-8 centimeters of strong brown (7.5YR 4/6) clay and Stratum III was 2-6 centimeters of brown (7.5YR 5/4) clay loam. Artifacts were confined to Stratum I and consisted primarily of bottle glass and nails. A list of the artifacts from each level can be found in the table below.

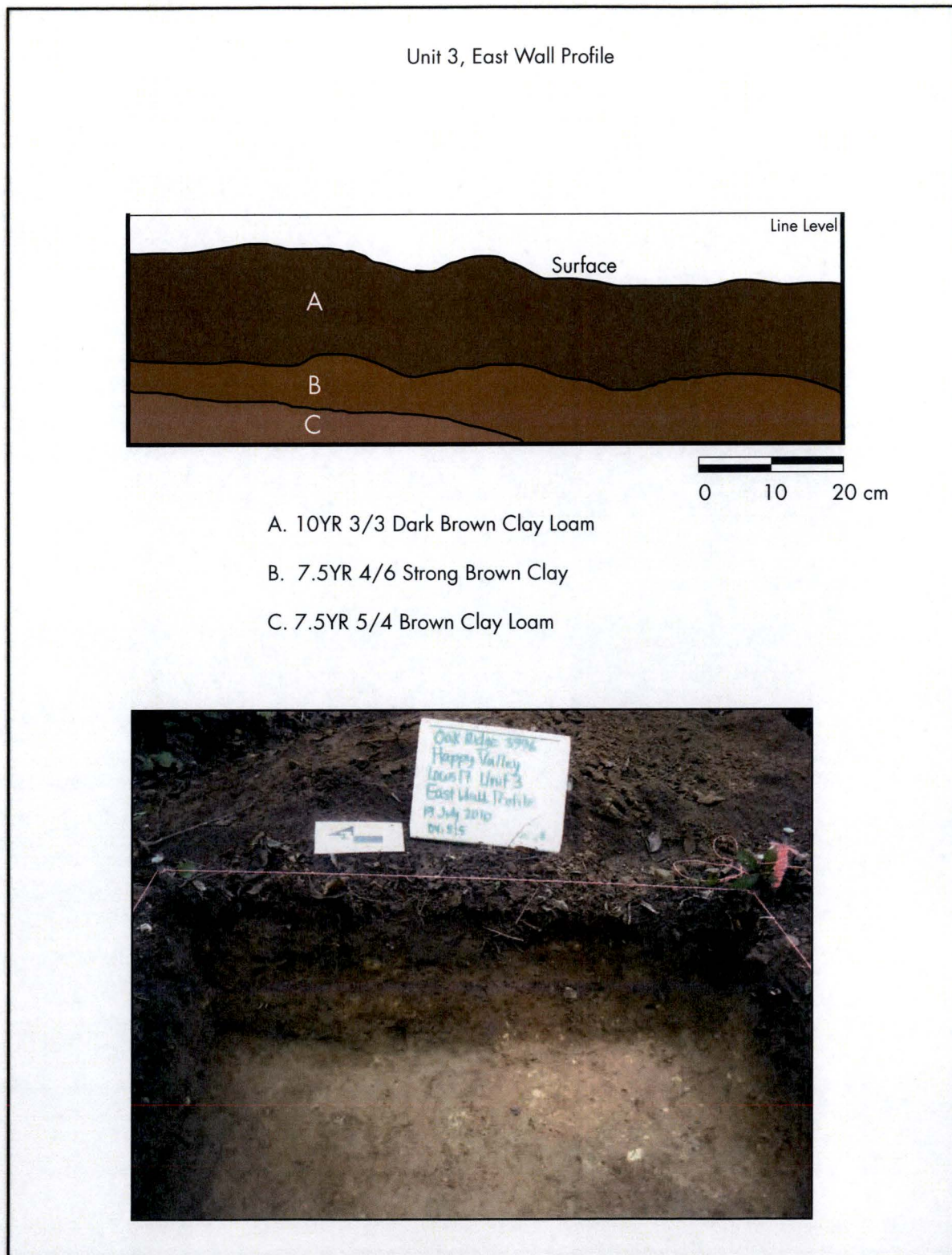
Table 7. Unit 3 Artifact Frequencies by Levels

Level Number	1	2
Maximum cmbd	30	40
Activities		
Bolt	1	0
Marble, Machine Made	1	0
Tin/Foil	2	0
Architecture		
Nail, Wire	1	3
Clothing		
Button, Ceramic	1	0
Kitchen		
Bottle Glass, Amber	1	0
Bottle Glass, Clear	10	4
Miscellaneous		
Coal	1	0
UNID Iron/Steel	5	0
UNID Leather	1	0
Level Totals	24	7

UNIT 4 – FEATURE 95

Unit 4 was placed 14 meters northwest of Feature 95 (the Boiler House). The J.A. Jones construction maps show several hutments and a recreation hall in this area. It was anticipated that deposits from the hutments and the recreation hall might be located within the unit. Because a grid had not been placed over this area, coordinates were not assigned to the unit. The unit's location in the landscape was recorded with a sub-meter accurate Trimble GPS. The datum was established nine cmas and the unit was excavated in two arbitrary 10-centimeter levels to a maximum depth of 31 cmbd.

Figure 62.
Unit 3, Profile and Photograph



Unit excavation uncovered three soil strata (Figure 63). Stratum I was composed of 4-6 centimeters of very dark grayish brown (10YR 3/2) clay loam. Stratum II contained 2-5 centimeters of pea gravel and Stratum III was mottled yellowish brown (10YR 5/6), strong brown (7.5YR 5/6), and light gray (2.5Y 7/2) clay. Artifacts were sparse and confined solely to the top two strata. Only a glass saltshaker and a coal fragment were collected. The unit did not encounter any features associated with the recreation hall.

UNIT EXCAVATION, SITE 40RE577-DORMITORIES

Between the southernmost hutment area and the main Happy Valley housing area sat a cluster of three dormitories and four barracks. White men and women were housed in this area. Test units were expected to contain very little because of the contained nature of the barracks and dormitories. Unlike the trailers and hutments, most activities at the dorms and barracks would probably have taken place indoors. The J.A. Jones construction maps show large parking areas surrounding all the buildings in this area, so outdoor activities were probably not encouraged. Demolition of these buildings most likely had a major impact on any artifact deposits that could have been present. Additionally, [Exempted from Disclosure by Statute] had a significant effect on the area. Shovel tests in this region did not uncover many subsurface artifact deposits, but two units were placed in this area to further investigate it. The site of the dormitories is vegetated with dense, low underbrush, small trees, and grasses.

UNIT 5 – FEATURE 77

Unit 5 was situated between the boiler room and the mess hall foundations (Feature 77). It was hoped that this area would produce artifacts related to mess hall activities, because a large surface scatter of ceramics and glass (Locus 14) was 20 meters east. A grid was not placed over this area so coordinates were not assigned to the unit. The unit's location in the landscape was recorded with a sub-meter accurate Trimble GPS. The datum was established 15 cms and the unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 55 cmbd.

Unit excavation uncovered three soil strata (Figure 64). Stratum I was composed of four centimeters of very dark grayish brown (10YR 3/2) loam with gravel throughout. Stratum II was 14-16 centimeters of brown (10YR 4/3) gravelly clay loam and Stratum III was mottled reddish brown (5YR 4/4), dark reddish brown (5YR 3/4), and brown (10YR 5/3) clay. The dense gravel within the top two strata was likely from the parking area surrounding the mess hall. A small number of artifacts were collected consisting predominately of slag and unidentified metal fragments. These artifacts were confined solely to the top two strata. The artifacts recovered are listed in the table below.

Figure 63.
Unit 4, Profile and Photograph

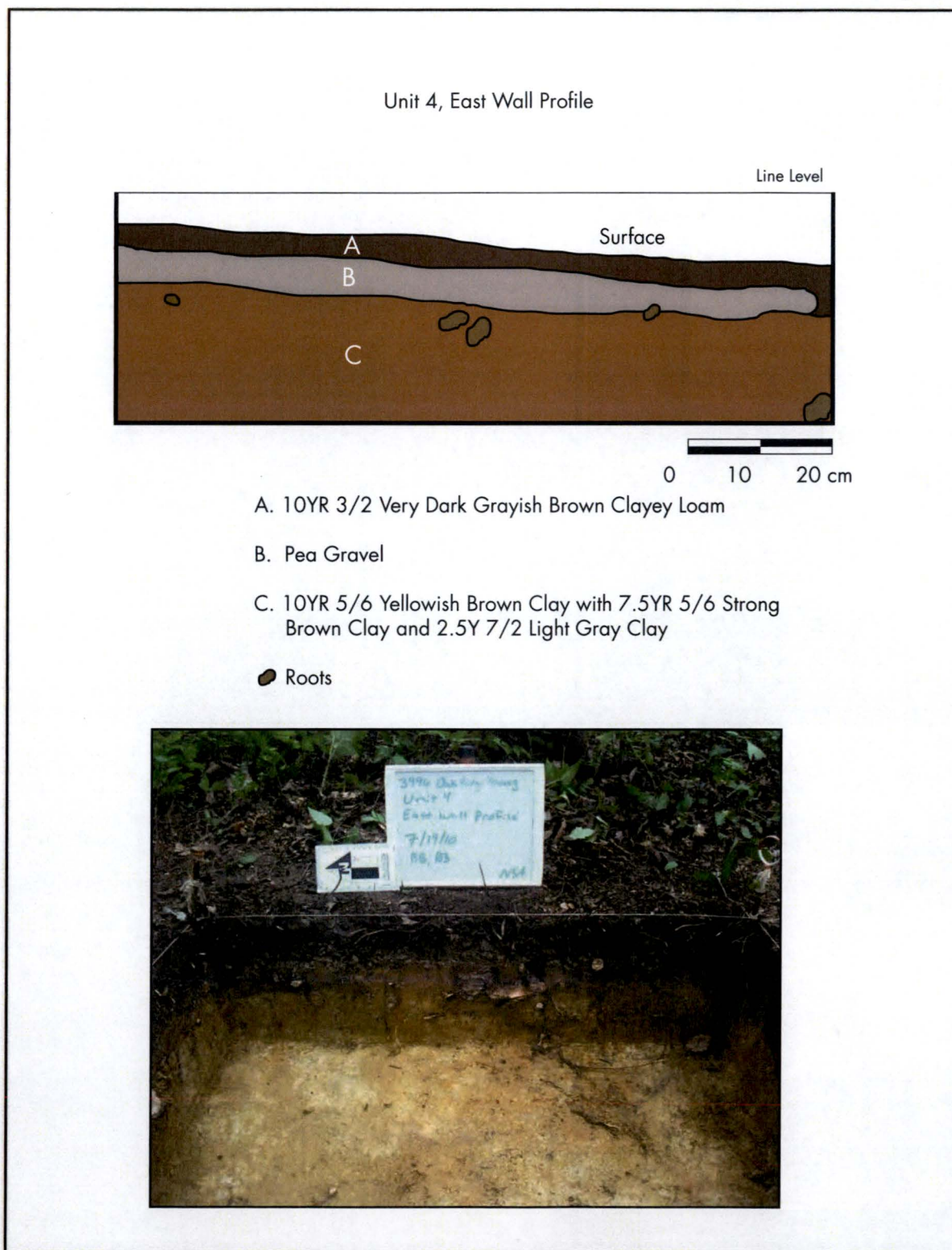


Figure 64.
Unit 5, Profile and Photograph

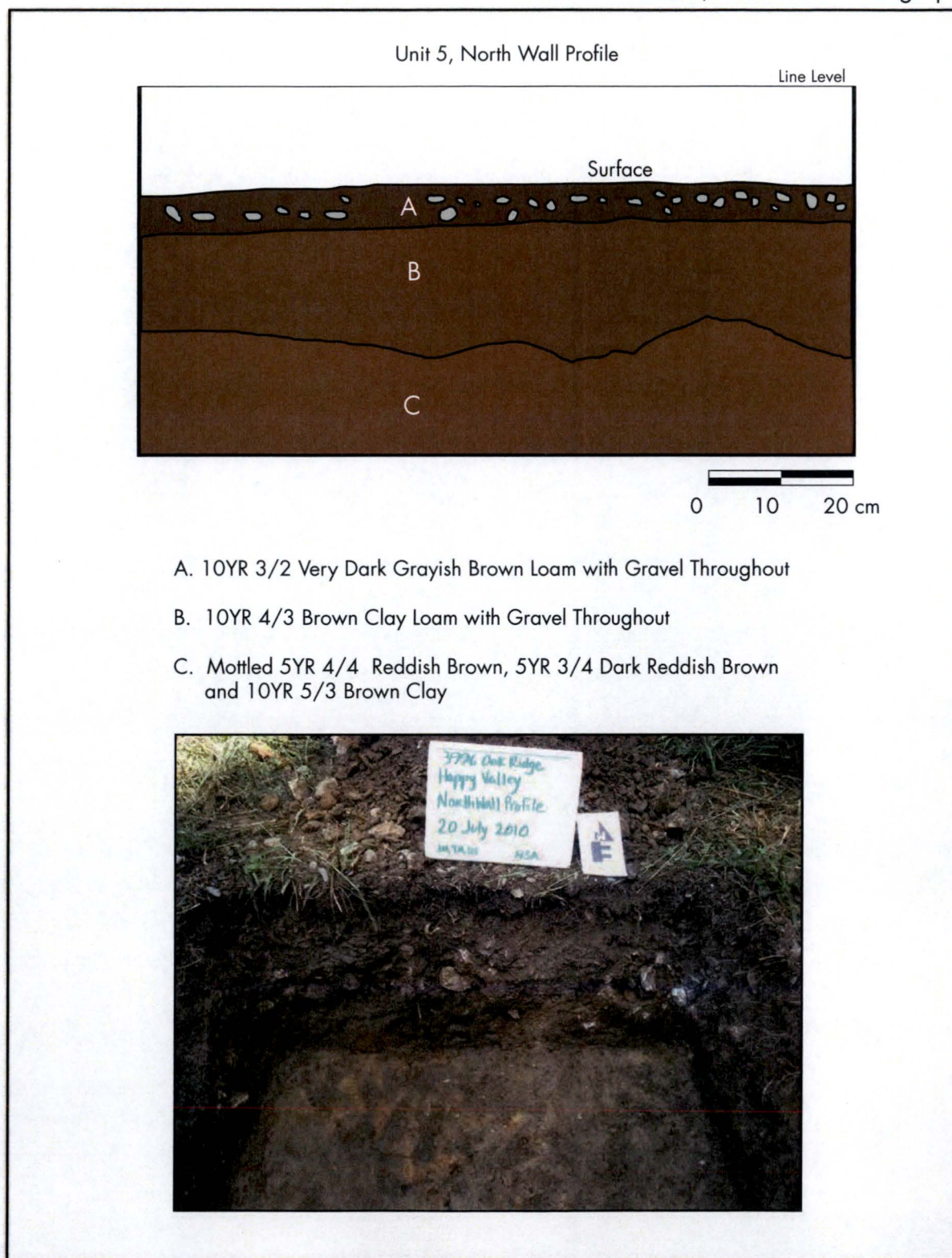


Table 8. Unit 5 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	25	35	45
Activities			
Metal Object, UNID	0	10	0
Architecture			
Nail, Cut	0	1	0
Nail, UNID	1	0	0
Kitchen			
Stoneware, Brown, Salt Glazed	0	1	0
Miscellaneous			
Coal	2	0	0
Rubber	1	0	0
Slag	13	0	0
Levels Total	17	12	0

UNIT 6 – DORMITORIES

Unit 6 was situated 30 meters northeast of Locus 21. This was an area where one of the dormitories had stood. Shovel tests in this area had been negative or produced gravel and a small number of artifacts. A unit was placed in this area to better understand the artifact deposits and soil stratigraphy in the dormitory area. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 17 cms in the northeast corner and the unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 59 cmbd. To ensure the sterility of the soil in the base of the unit a 50x50-centimeter window was excavated in the southeast corner to a depth of 85 cmbd.

Four soil strata were visible within the unit (Figure 65). Stratum I was composed of 16-18 centimeters of dark grayish brown (10YR 3/3) clayey silt with dense gravel throughout. Stratum II was 12-20 centimeters of brown (7.5YR 5/4) clay. Stratum III consisted of dark brown (10YR 3/3) clayey silt and Stratum IV was dark yellowish brown (10YR 4/4) silty clay. Artifacts were only recovered from the top two soil strata and included nails, glass, coal, and brick fragments. The artifacts collected are listed in the Table 11.

Figure 65.
Unit 6, Profile and Photograph

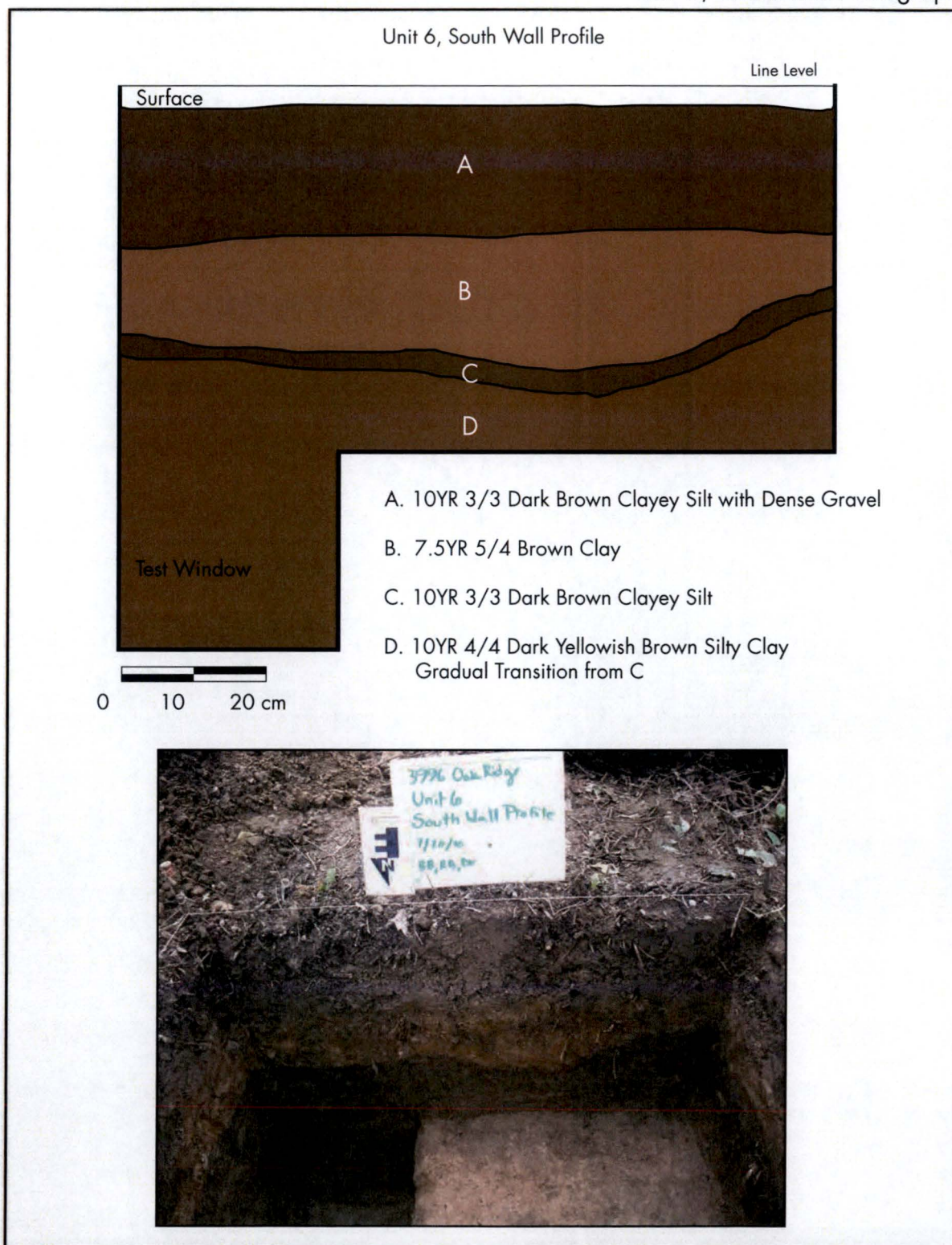


Table 9. Unit 6 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	29	39	49	59
Activity				
Chimney Glass	1	0	0	0
Non-Electrical Wire	1	0	0	0
Architecture				
Nail, UNID	4	1	0	0
Nail, Wire	43	2	1	0
Sewer Tile	1	0	0	0
Kitchen				
Bottle Glass ,Clear	6	1	0	0
Bottle Glass, Amber, Machine Made	1	0	0	0
Bottle Glass, Milk Glass	1	0	0	0
Ironstone, Plain	0	1	0	0
Plastic Screw Cap	0	1	0	0
Whiteware	1	0	0	0
Miscellaneous				
Charcoal	0	1	0	0
Coal	5	4	0	0
Slag	8	0	0	0
Levels Total	72	11	1	0

UNIT EXCAVATION, SITE 40RE577 – VICTORY HOMES

The Victory Homes were situated in the northeastern portion of the main Happy Valley housing area. These single-family homes were slightly more desirable than other housing options at Happy Valley. Unlike trailers and hutments, each Victory Home appeared to have its own sanitary water and sewer lines. There were approximately 100 of these homes and they housed white families. The E.W. Arnold House, a pre-1942 farmhouse, was used as a community house for those living in the Victory Homes (Figure 66). Test units in this area were anticipated to contain a moderate amount of artifacts from the Happy Valley residents. Additionally, it was expected that some pre-Happy Valley assemblages might be encountered because of the presence of the Arnold farmhouse. The former Victory Homes neighborhood is now covered in vinca, privet, and hardwoods.

UNIT 7 – VICTORY HOMES

Unit 7 was placed in an area estimated to be behind a row of Victory Homes [Exempted from Disclosure by Statute]

] The community house would have stood 30 meters southwest of the unit location. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 10 cmas in the southwest corner and the unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 55 cmbd. To further explore a trench feature (Feature 98) encountered in the unit, a 50x50 centimeter window was excavated in the southeast corner to a depth of 85 cmbd.

Figure 66.
Aerial and Photograph Showing E. W. Arnold House
Source: Pellissippi Genealogical and Historical Society (2003)



A. 1942 Aerial Showing E. W. Arnold House Location and Survey Boundary



B. Front of Farmhouse Owned by E. W. Arnold

The southern half of Unit 7 contained four distinct soil strata (Figure 67). Stratum I was 8-11 centimeters of dark brown (7.5YR 3/2) clay loam. Stratum II contained 12 centimeters of mottled strong brown (7.5YR 5/6) and pinkish white (7.5YR 8/2) clay fill. Stratum III was 12-17 centimeters of dark yellowish brown (10YR 4/4) clay loam that appeared to be the pre-Happy Valley surface layer. Stratum IV was composed of 38+ centimeters of strong brown (7.5YR 4/6) sterile clay. Bottle glass and a variety of building materials including nails, bricks, flat glass, and a water pipe were collected from within the upper soil stratum. Stratum II was sterile, but approximately 20 historic artifacts were located in the top of Stratum III. These artifacts included handmade brick fragments and a brass bullet and were possibly associated with the pre-1942 farmers of the area.

A Happy Valley-era sewer trench dominated the northern half of Unit 7. This sewer trench became evident 35 cmbd and was designated Feature 98. It appeared to run in a northeast-southwest direction, parallel to the overgrown [Exempted from Disclosure by Statute]. The complete dimensions of the trench are unknown because it extended outside of the unit, but it appeared roughly rectangular in plan view and was 45 centimeters wide and 100 centimeters long (Figure 68). The trench extended to at least a depth of 87 cmbd. In profile, the trench was composed of 41 centimeters of yellowish red (5YR 5/6) clay atop 25 centimeters of strong brown (7.5YR 5/6) and pinkish white (7.5YR 8/2) clay fill. No artifacts were recovered from the feature other than two fragments of bottle glass found between 45-55 cmbd. A manhole covered with underbrush and located approximately 5 meters northeast of the unit was associated with the trench. The artifacts recovered from Unit 7 are summarized in the table below.

Table 10. Unit 7 Artifact Frequencies by Levels

Level Number	1	2	3	4	Feature 98
Maximum cmbd	25	35	45	55	87
Architecture					
Brick, Handmade	0	0	3	0	0
Brick, UNID	1	0	0	0	0
Glass, Flat	1	0	1	0	0
Nail, UNID	0	0	3	0	0
Nail, Wire	3	0	0	0	0
Pipe, Water	1	0	0	0	0
Arms					
Bullet, Brass	0	0	1	0	0
Kitchen					
Bottle Glass, Aqua	1	0	3	0	1
Bottle Glass, Clear	10	0	6	0	1
Bottle Glass, Embossed	1	0	0	0	0
Bottle Glass, Milk Glass	0	0	2	0	0
Stoneware, Brown Salt Glazed	3	0	1	0	0
Furniture					
Hinge, Flower Motif	1	0	0	0	0
Miscellaneous					
Iron/Steel, UNID	0	0	14	0	0
Levels Total	22	0	34	0	2

Figure 67.
Unit 7, Profile and Photograph

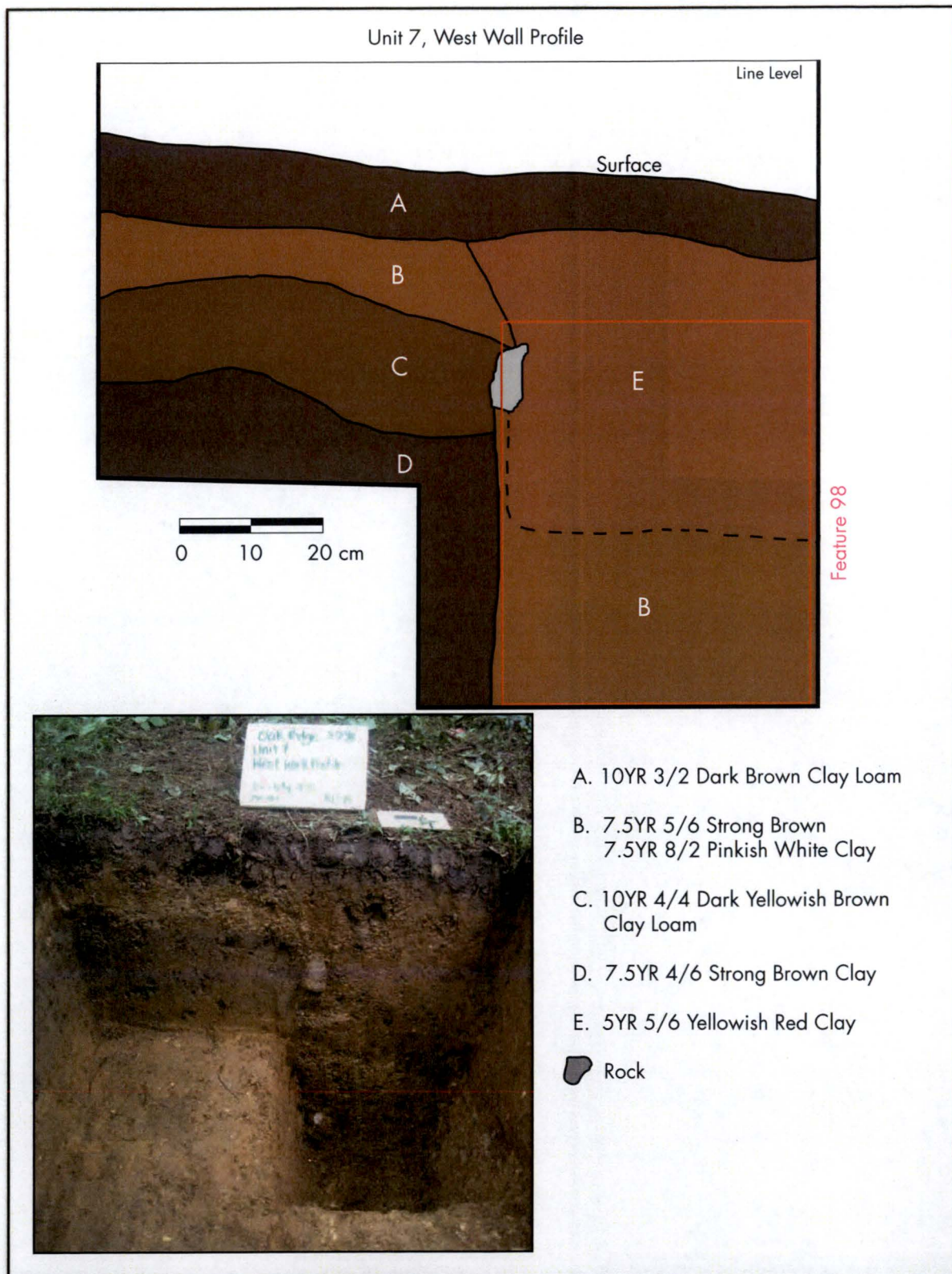
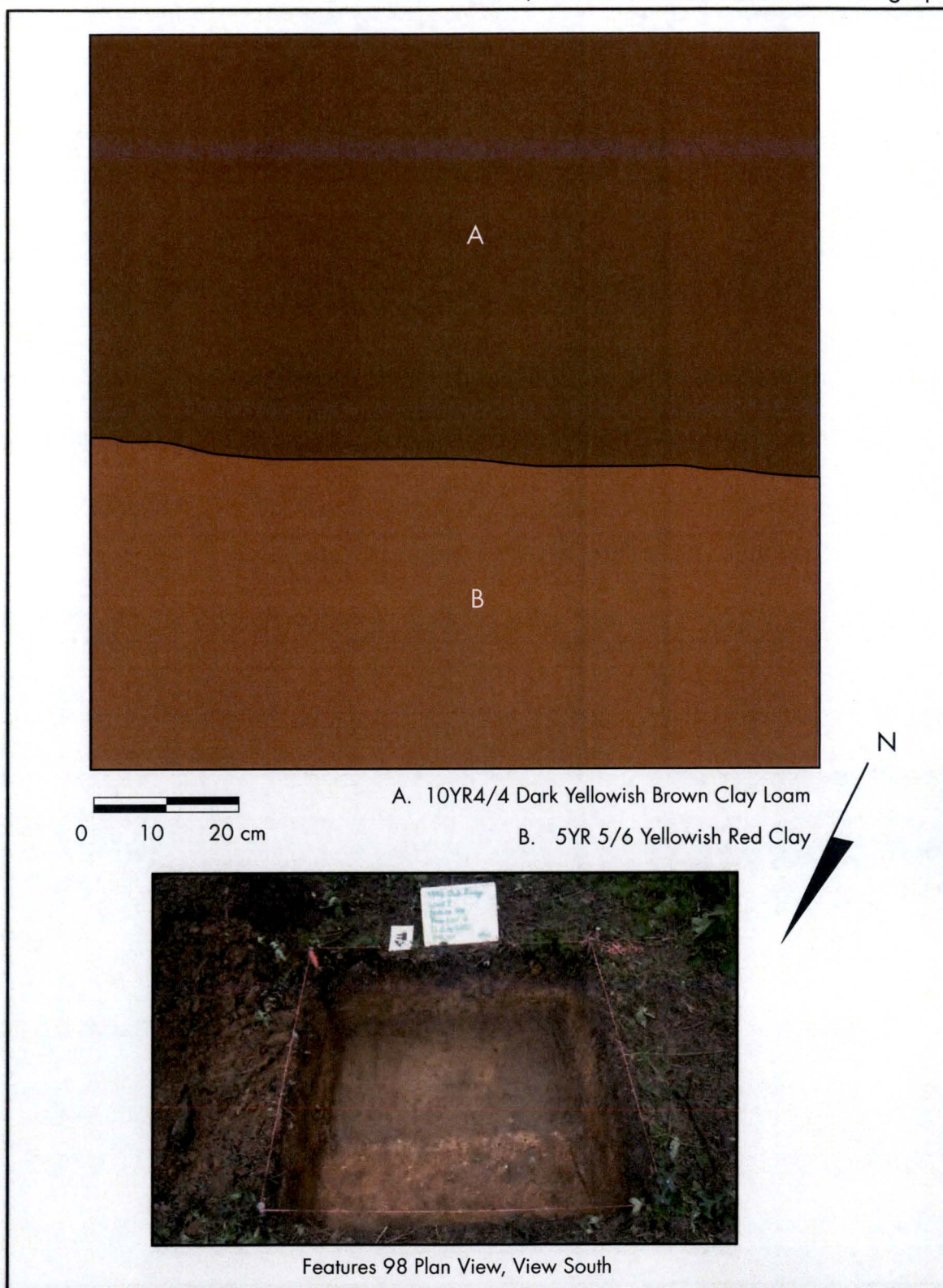


Figure 68.
Unit 7, Feature 98 Plan View and Photograph



UNIT 8 – VICTORY HOMES

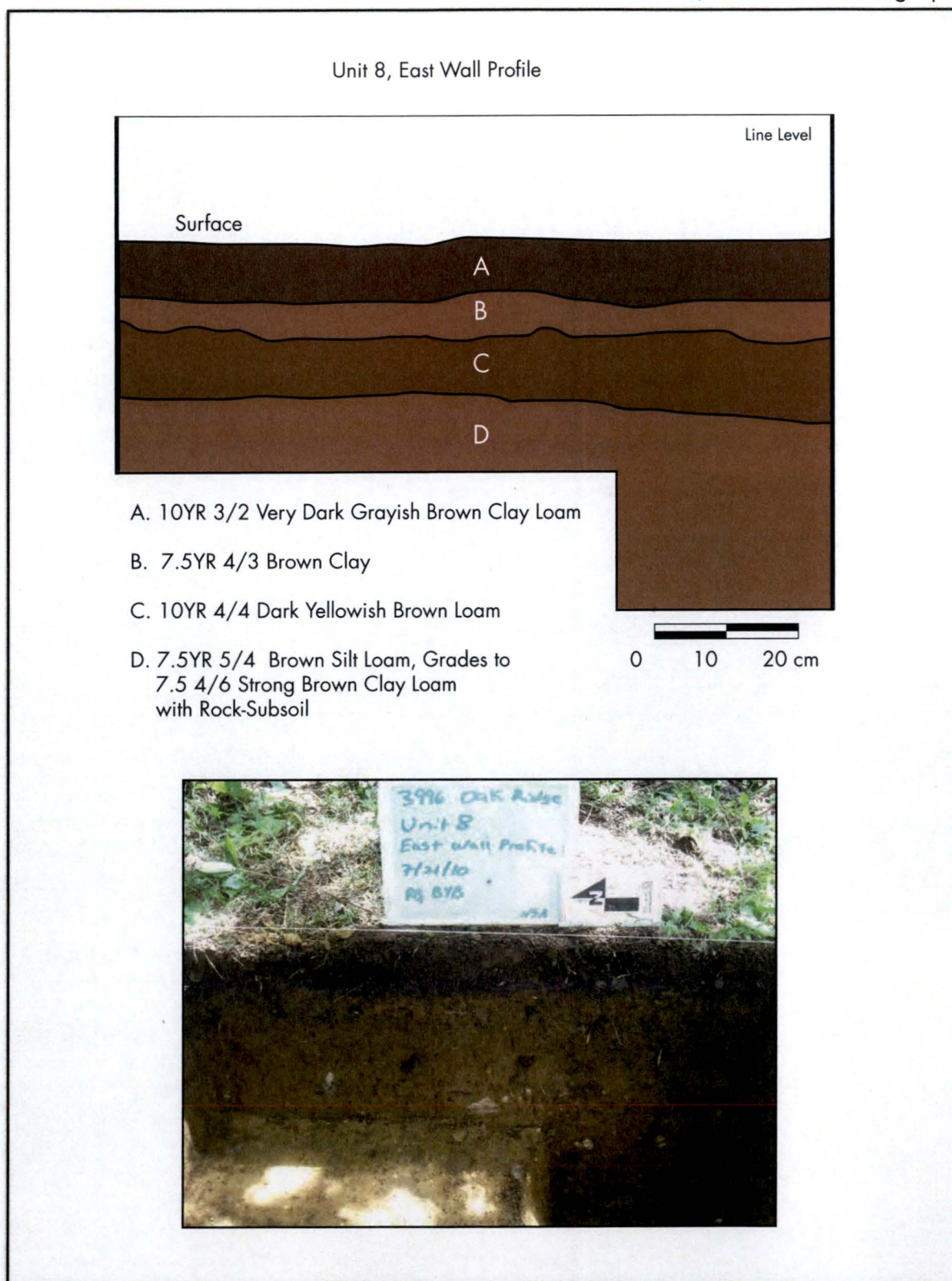
Unit 8 was excavated in an area that was projected to be in the rear yards of Victory Homes along [Exempted from Disclosure by Statute]. The community house would have stood 20 meters south of the unit location. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 12 cms in the northeast corner. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 48 cmbd. A 30x30 centimeter window was excavated to a depth of 68 cmbd in the southeast corner to ensure the sterility of the soil.

Unit 8 contained four soil strata (Figure 69). Stratum I consisted of eight centimeters of very dark grayish brown (10YR 3/2) silty loam. Stratum II was four centimeters of brown (7.5YR 4/3) clay. Stratum III consisted of 10 centimeters of dark yellowish brown (10YR 4/4) loam. Stratum IV was 28 centimeters of brown (7.5YR 5/4) silty loam that gradually changed to strong brown (7.5YR 4/6) rocky clay loam. All artifacts were concentrated within Strata I and II; Strata III and IV were sterile. Artifacts found in Unit 8 included a machine made marble and a plastic toy part. A cut nail was also recovered. This nail could have originated from the pre-Happy Valley farm buildings that once stood in the area. Table 13 summarizes the artifacts collected from Unit 8.

Table 11. Unit 8 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	27	38	48	58
Activities				
Bolts	0	1	0	0
Chimney Glass	0	1	0	0
Marbles, Machine Made	1	0	0	0
Toy Car Parts, Plastic	1	0	0	0
Architecture				
Brick, Unidentified	3	6	0	0
Glass, Flat	3	7	0	0
Nail, Cut	1	0	0	0
Nail, Unidentified	0	4	0	0
Nail, Wire	1	0	0	0
Roofing Tile	2	0	0	0
Kitchen				
Bottle Glass, Aqua	1	5	0	0
Bottle Glass, Clear	10	12	0	0
Bottle Glass, Coca-Cola	1	0	0	0
Bottle Glass, Green	5	0	0	0
Ceramics, UNID	1	0	0	0
Stoneware, Albany Slipped	1	0	0	0
Molded Tableware Glass	0	1	0	0
Whiteware	0	1	0	0
Miscellaneous				
Glass, UNID	0	1	0	0
Iron/Steel, UNID	2	3	0	0
Levels Total	33	42	0	0

Figure 69.
Unit 8, Profile and Photograph



UNIT 9 – VICTORY HOMES

Unit 9 was placed on a terrace in an area [

Exempted from Disclosure by Statute

] of the community house. A small set of stairs and a retaining wall were visible where the vinca-covered terrace dropped off to the overgrown road. Both features were constructed out of naturally occurring stone and it was thought that they might predate the Happy Valley development. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established six cms in the southwest corner. The unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 46 cmbd. To ensure the sterility of the soil, a 30x30 centimeter window was excavated to a depth of 66 cmbd in the northwest corner.

Unit 9 contained four soil strata (Figure 70). Stratum I was made up of four to eight centimeters of dark brown (10YR 3/3) silty loam. Stratum II was 12-40 centimeters of brown (10YR 4/3) clay loam. Stratum III contained 10-20 centimeters of reddish brown (5YR 4/4) clay and Stratum IV was yellowish red (5YR 5/6) clay. Artifacts were collected from the top 30 centimeters of soil with the highest density originating 16-26 cmbd from Stratum II. As was anticipated, Unit 9 produced several diagnostic artifacts that pre-dated Happy Valley. These artifacts included whiteware (1820-present), cut nail fragments (c. 1805-1890) and chimney glass. Though not definitive, these artifacts could indicate a pre-Happy Valley occupation. Happy Valley's inhabitants may also have brought older artifacts with them to Oak Ridge, but due to the transient nature of their work and the lack of space and privacy, it is more likely that these artifacts belonged to earlier occupations, however. The presence of brick within the artifact assemblage indicates that a building with masonry elements might have stood nearby. A full list of artifacts is included in the table below.

Table 12. Unit 9 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	16	26	36	46
Activities				
Chimney Glass	1	4	0	0
Decorative Glass	1	0	0	0
Strap, Iron/Metal	0	1	0	0
Architecture				
Brick, Machine Made	0	1	0	0
Brick, UNID	7	5	0	0
Glass, Misc. Architectural	0	2	0	0
Glass, Flat	18	22	3	0
Nail, Cut	0	1	2	0
Nail, UNID	0	27	1	0
Arms				
Bullet, Lead, 30-Caliber	0	1	0	0
Clothing				
Button, Metal, Snap	0	1	0	0
Kitchen				
Bottle Glass, Aqua	0	1	0	0

Table 12. Unit 9 Artifact Frequencies by Levels

Level Number	1	2	3	4
Bottle Glass, Clear	0	9	3	0
Bottle Glass, Clear, Machine Made	7	0	0	0
Bottle Glass, Embossed	0	2	0	0
Bottle Glass, Green, Machine Made	1	3	0	0
Whiteware, Blue Underglaze Transfer Print	0	0	1	0
Porcelain, UNID	0	2	0	0
Whiteware, Plain	3	5	0	0
Miscellaneous				
Coal	0	1	0	0
Glass, UNID	0	0	1	0
Iron/Steel, UNID	0	19	0	0
Levels Total	38	107	11	0

UNIT 10 – FEATURE 30, VICTORY HOMES

Unit 10 was excavated directly adjacent to the northeast corner of Feature 30. Feature 30 is a small concrete foundation. It appeared in the general location of the community house but was constructed using materials similar to other Happy Valley buildings and was much smaller than the footprint pictured on the J.A. Jones construction maps. Because many of the farmhouses lacked plumbing and electricity, Feature 30 could have been added to the original house in order to make it suitable as a community house. Excavation of the unit would reveal information about the construction of Feature 30 and perhaps contain pre-Happy Valley artifacts. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 15 cm as in the southwest corner. The unit was excavated in four arbitrary levels. Due to the unevenness of the surface, the initial level varied in thickness, but three subsequent levels were 10-centimeters thick. The unit extended to a maximum depth of 75 cmbd.

Unit 10 revealed three soil strata (Figure 71). Stratum I was composed of 8-16 centimeters of very dark grayish brown (10YR 3/2) silty clay. In the southwestern corner of the unit, there was also a 12-centimeter thick deposit of black (10YR 2/1) silt with a dense concentration of mortar and brick fragments. Stratum II was 12-16 centimeters of brown (7.5YR 4/4) silty clay containing coal and slag. Stratum III was sterile and contained 10-12 centimeters of strong brown (7.5YR 4/6) silty clay.

The foundation for Feature 30 extended 54 cmbs and consisted of cement that had been poured into a rough-cut trench. The aboveground foundation appeared to have been poured into a wood frame. A narrow indentation in the concrete formed by the wooden frame during construction was visible at approximately 10 cmbs. A stoneware drainpipe was exposed in the western wall at approximately 25 cmbs. This pipe was designated Feature 30-A. Because it was placed at a slight northeast-southwest angle, its connection to Feature 30 fell outside of the unit. An iron pipe, partially wrapped in wire, extended from outside of the southeast corner of the unit. It appeared to be associated with the corner of Feature 30, but this association was not clearly determined.

Figure 70.
Unit 9, Profile and Photograph

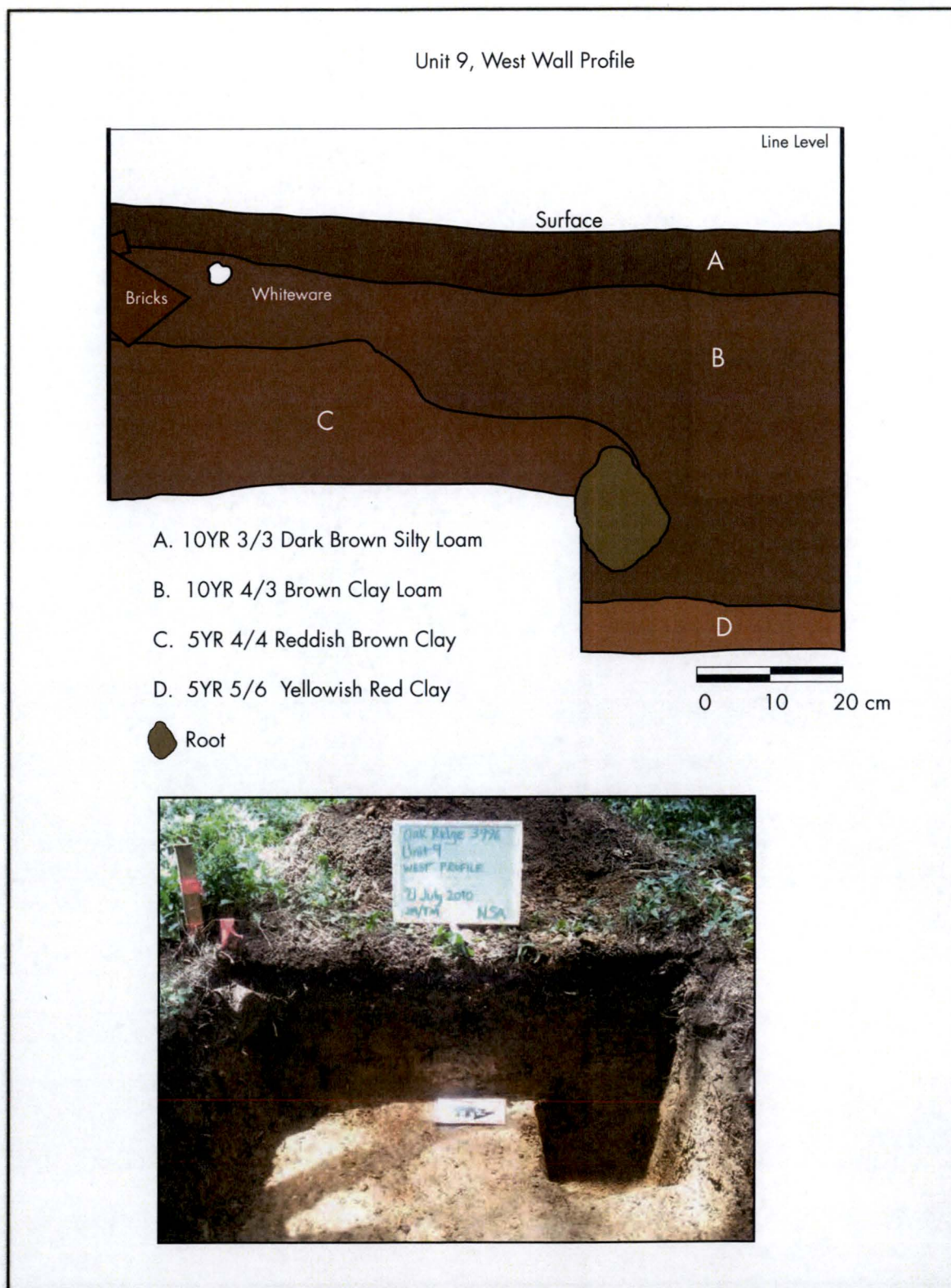
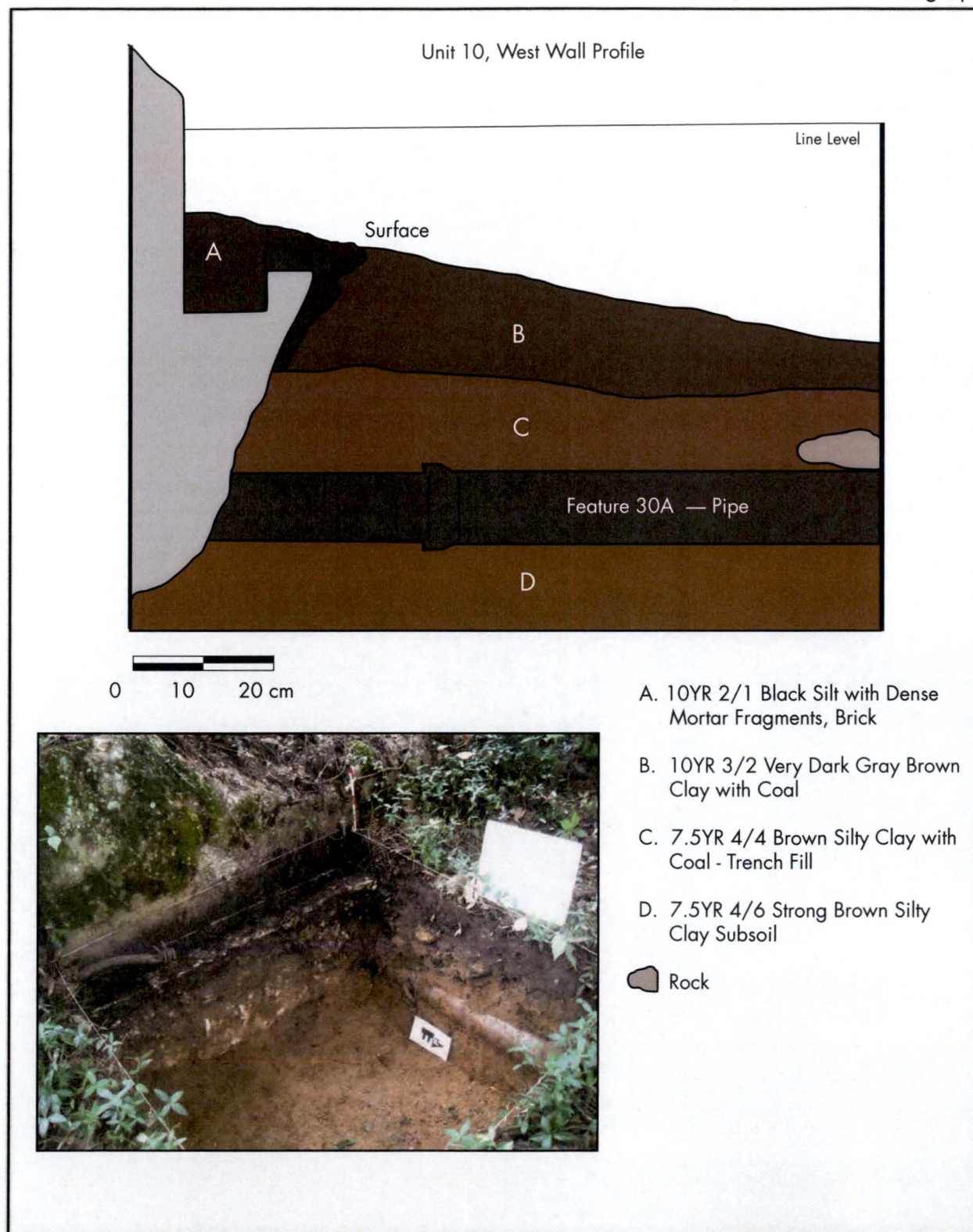


Figure 71.
Unit 10, Profile and Photograph



Overall, there was a low density of artifacts within Unit 10. Most artifacts were concentrated in the top two soil strata and the assemblage consisted of mortar and brick fragments as well as coal. Additional artifacts collected included bottle glass and flat glass. The presence of brick within the artifact assemblage indicates that Feature 30 might have had a brick chimney or superstructure. A list of the artifacts collected is included in the table below.

Table 13. Unit 10 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	42	52	62	75
Activities				
Metal Object, UNID	0	2	0	0
Architecture				
Brick, UNID	2	0	0	0
Glass, Flat	1	0	0	0
Mortar	2	0	0	0
Nail, UNID	1	0	0	0
Kitchen				
Bottle Glass, Amber	1	0	0	0
Bottle Glass, Aqua	0	1	0	0
Bottle Glass, Clear	0	1	0	0
Miscellaneous				
Charcoal	1	0	0	0
Coal	1	0	0	0
Iron/Steel, UNID	1	0	0	0
Slag	0	2	0	0
Levels Total	10	6	0	0

UNIT EXCAVATION, SITE 40RE577 – TRAILERS

Trailers were used to house many of Happy Valley's residents. It is not known exactly what amenities were included in the trailers at Happy Valley, but they likely lacked running water if they were consistent with other Oak Ridge trailers (Johnson and Jackson 1981). The presence of the water stations throughout the Happy Valley trailer area supports this idea. Although some Oak Ridge trailers were placed in picturesque environments, aerial photographs and resident recollections show that most of the Happy Valley trailers were located in barren, muddy surroundings. It was expected that units in the trailer neighborhoods would contain comparable artifact densities to those seen in the hutment areas since residents of both areas conducted some household activities outdoors. An important difference between the trailers and hutments is that trailers housed families, whereas hutments housed single workers. This might be detectable in trailer area archaeological test units through the presence of toys and other child-related items in the artifact assemblages. Four units were excavated in the trailer area. The former trailer area is now vegetated with pines and underbrush.

UNIT 11 – TRAILERS

Unit 11 was situated in a trailer block [

Exempted from Disclosure by Statute

]. The unit was located 30 meters from lavatory Feature 26 and eight meters from a water station foundation. The unit was placed in the projected location of the rear yards of several trailers. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 15 cmas in the southwest corner. The unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 50 cmbd.

Unit 11 revealed three soil strata below a four-centimeter thick root mat (Figure 72). Stratum I contained 8-12 centimeters of strong brown (7.5YR 4/6) and dark yellowish brown (10YR 4/4) compact loam. Stratum II was 5-9 centimeters of dark yellowish brown (10YR 4/4) and yellowish red (5YR 4/6) clay. Stratum III was sterile and consisted of yellowish red (5YR 4/6) clay. Unit 11 contained very few artifacts and all were concentrated in the top two strata. The artifacts are listed in the table below.

Table 14. Unit 11 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	20	30	40	50
Activities				
Chimney Glass	1	2	0	0
Architecture				
Nail, UNID	1	0	0	0
Levels Total	2	2	0	0

UNIT 12 – TRAILERS

Unit 12 was placed in a trailer block [

Exempted from Disclosure by Statute

] of Unit 11. The unit was set up in an area projected to be the rear yards of several trailers. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 15 cmas in the northeast corner. The unit was excavated in four arbitrary 10-centimeter levels to a maximum depth of 56 cmbd.

Unit 12 exposed three soil strata below a two-centimeter thick root mat (Figure 73). Stratum I contained 10-16 centimeters of yellowish brown (10YR 5/4) clayey silt with gray siltstone. Stratum II was 18-20 centimeters of light yellowish brown (10YR 6/4) loamy silt. Stratum III was sterile and consisted of strong brown (7.5YR 5/6) compact silt. A moderate density of artifacts was collected from the unit. Artifacts included bottle glass, wire nails, a glass marble, and a metal tablespoon. The artifacts are listed in the table below.

Figure 72.
Unit 11, Profile and Photograph

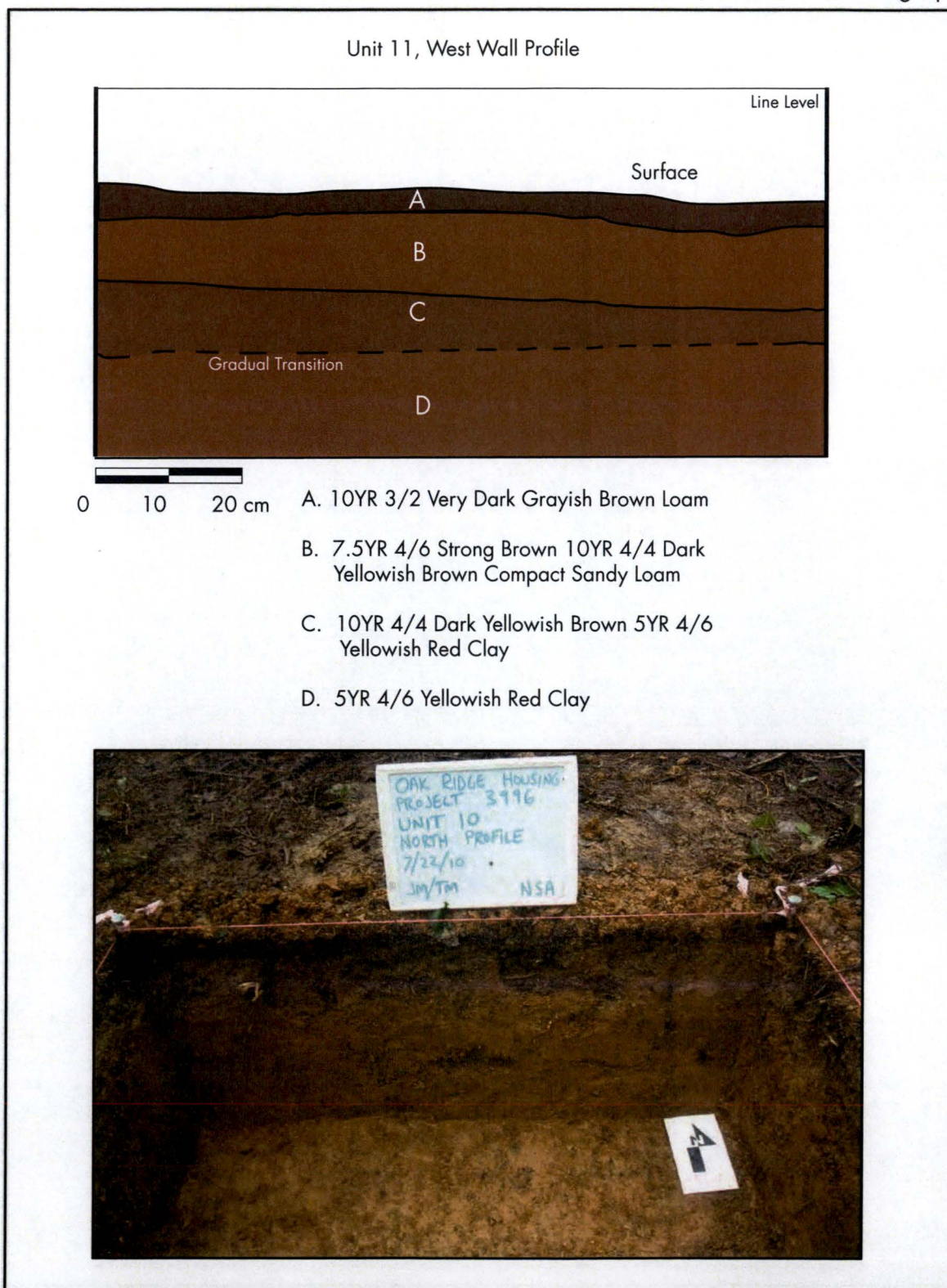


Figure 73.
Unit 12, Profile and Photograph

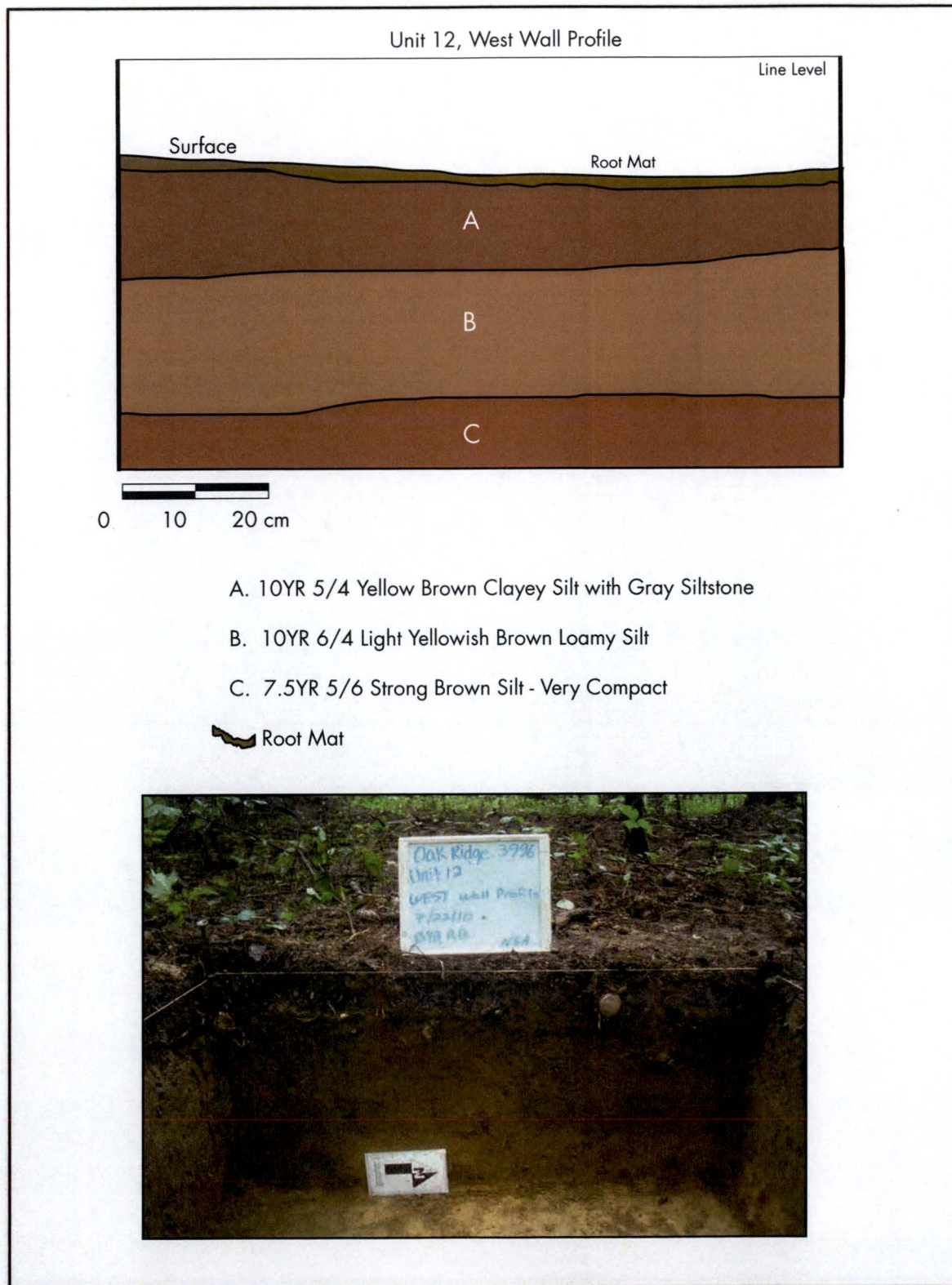


Table 15. Unit 12 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	26	36	46	56
Activities				
Marble, Glass, Handmade	0	1	0	0
Metal Object, UNID	1	0	0	0
Tin Can, Modern Crimped Top	1	0	0	0
Architecture				
Nail, UNID	0	1	0	0
Nail, Wire	11	0	0	0
Kitchen				
Bottle Glass, Amber	13	4	0	0
Bottle Glass, Clear	3	1	0	0
Bottle Glass, Embossed	1	0	0	0
Tablespoon, Metal	0	1	0	0
Levels Total	30	8	0	0

UNIT 13 – TRAILERS

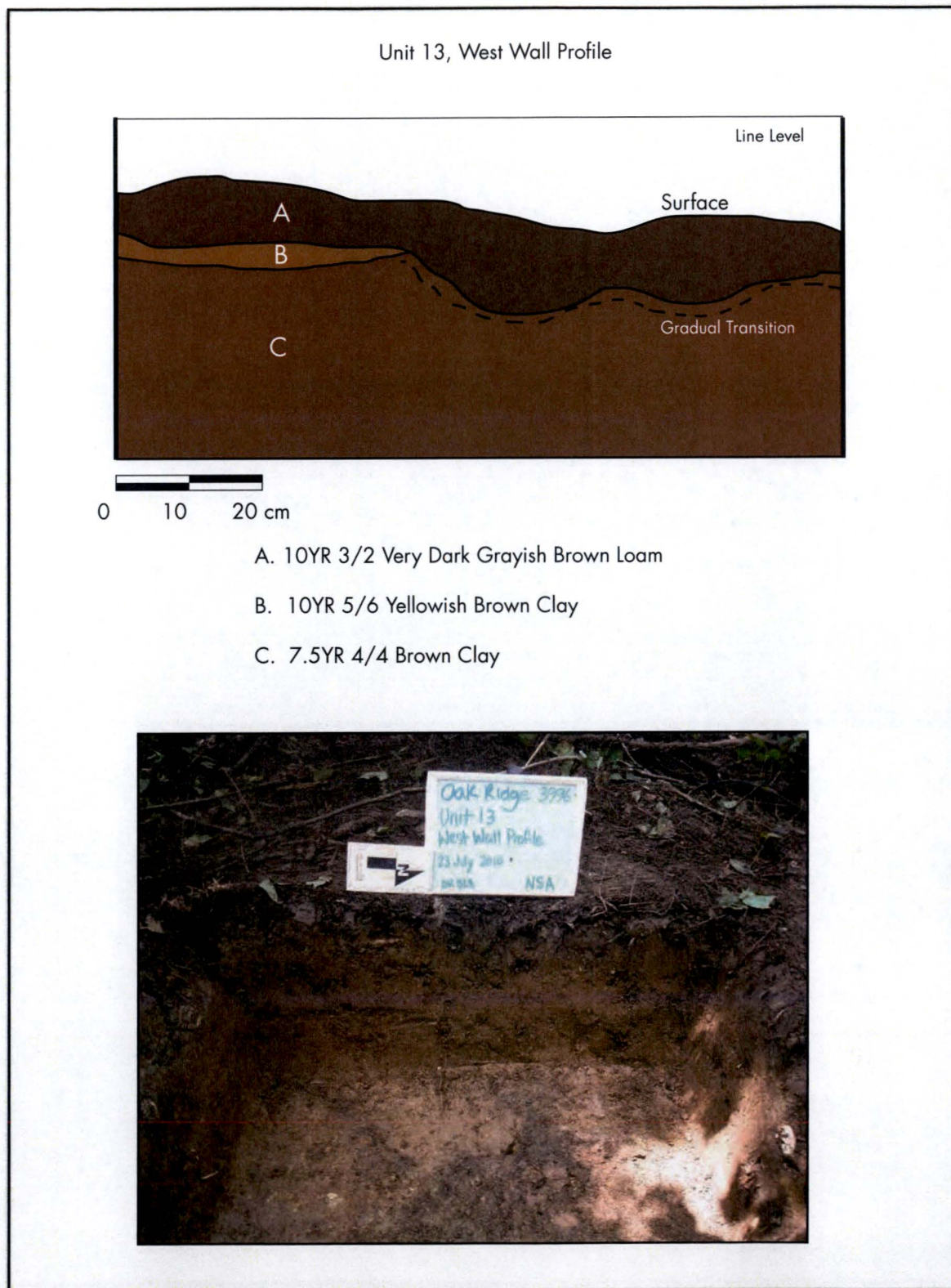
Unit 13 was placed in the projected area between trailers in a block [Exempted from Disclosure by Statute]. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate GPS. The datum was established 10 cm as in the southwest corner. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 45 cmbd.

Unit 13 contained three soil strata (Figure 74). Stratum I consisted of 4-6 centimeters of very dark grayish brown (10YR 3/2) loam. Stratum II was a two-centimeter thick lens of yellowish brown (10YR 5/6) clay and Stratum III was 20-26 centimeters of brown (7.5YR 4/4) clay. Very few artifacts were collected from the unit and all came from the top 25 centimeters of soil. The artifacts are listed in the Table 18.

Table 16. Unit 13 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	25	35	45
Activities			
Chimney Glass	5	1	0
Architecture			
Glass, Flat	1	0	0
Nail, Wire	1	0	0
Kitchen			
Bottle Glass, Clear	3	0	0
Bottle Glass, Clear, Machine Made	1	0	0
Bottle Glass, Cobalt, Machine Made	0	2	0
Coral	1	0	0
Levels Total	12	3	0

Figure 74.
Unit 13, Profile and Photograph



UNIT 14 – TRAILERS

Unit 14 was placed in a former trailer block [Exempted from Disclosure by Statute]. The unit location was approximately 60 meters northeast of Locus 6. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 15 cmas in the northeast corner. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 45 cmbd.

The soil strata revealed within Unit 14 indicated that the area had been graded (Figure 75). Under a two-centimeter root mat, Stratum I was composed of very dark brown (10YR 2/2) silty clay with dense concentrations of slag. Below Stratum I were four vertical strata (Strata II-IV). Stratum II was pale yellow (2.5YR 7/4) and yellowish brown (10YR 5/6) silty clay, Stratum III was composed of reddish brown (2.5YR 4/3) and yellow (10YR 7/6) silty clay, Stratum IV was pale brown (10YR 6/3) and reddish brown (5YR 4/4) silty clay, and Stratum V was dark reddish brown (5YR 3/4) and red (2.5YR 4/8) weathered shale. This stratigraphy suggests that area was graded to create a level surface for the trailers. A small collection of nails, glass, and slag were found within Stratum I, but no artifacts were found in the remaining strata. The artifacts are listed in the table below.

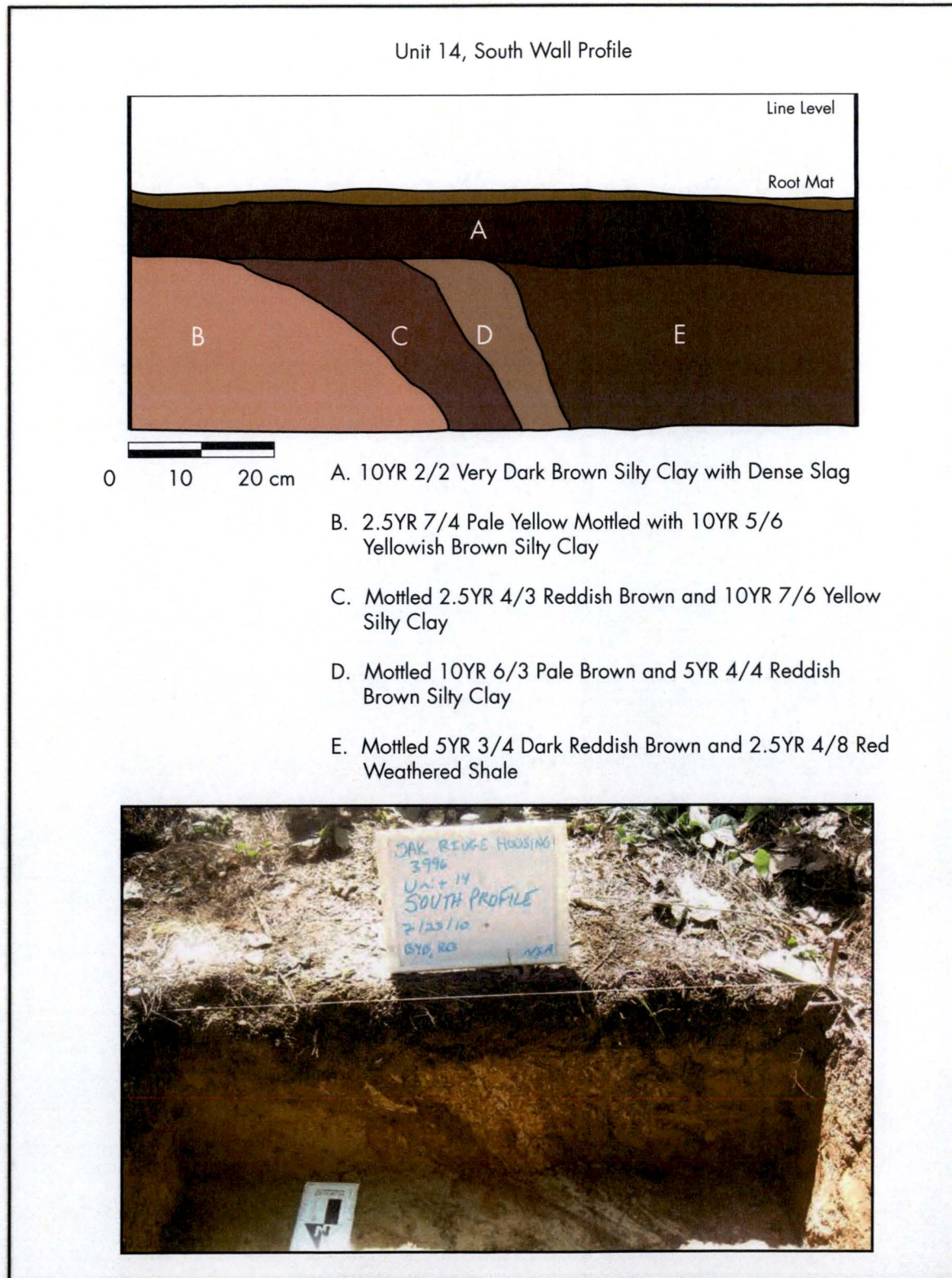
Table 17. Unit 14 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	25	35	45
Architecture			
Nail, UNID	1	0	0
Nail, Wire	4	0	0
Kitchen			
Bottle Glass, Clear	6	0	0
Miscellaneous			
Clay Sample	4	0	0
Coal	1	0	0
Slag	2	0	0
Levels Total	18	0	0

UNIT EXCAVATION, SITE 40RE577 – BARRACKS

Eight barracks were utilized in Happy Valley for worker housing. Although preferable to hutments and trailers because they had indoor plumbing, the barracks had their drawbacks. They were minimally furnished and offered little privacy (Johnson and Jackson 1981). Residents of dormitories were not allowed to cook in their rooms and barracks were likely similar in that respect (Johnson and Jackson 1981; Marrs 2009). The construction maps show that there was little open gathering space around the outside of the barracks. Therefore, eating and leisure activities were probably centered on mess halls and recreation halls. Unlike the hutments and trailers, the barracks were constructed out of concrete, so their demolition required heavy equipment and could have caused ground disturbance. Units in the area were expected to contain very little in the way of material remains since their residents would have conducted fewer household or recreation activities directly outside of the barracks and demolition of the barracks could have severely disturbed the surrounding land. The former barracks area now contains a mix of hardwoods and pines. Two units were excavated where the barracks had stood. The area [Exempted from Disclosure by Statute] suffered visible disturbance from when the barracks were demolished, so both units were placed [Exempted from Disclosure by Statute].

Figure 75.
Unit 14, Profile and Photograph



UNIT 15 – BARRACKS

Unit 15 was placed [Exempted from Disclosure by Statute] of Feature 49 (a portion of the S-5 barracks). The unit location was situated in the projected location of the S-5 south courtyard. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established five cmas in the southwest corner. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 35 cmbd.

Test Unit 15 contained three soil strata under a 4-6-centimeter root mat (Figure 76). Stratum I was composed of 4-12 centimeters of dark yellowish brown (10YR 4/6) loam. A two-centimeter lens of dark red (2.5YR 3/6) loam was located between Strata I and II. Stratum II was 6 centimeters of reddish yellow (7.5YR 6/8) and brownish yellow (10YR 6/6) clay. Stratum III was 10-12 centimeters of yellow (10YR 7/8) and very pale brown (10YR 7/4) clay.

Artifacts were concentrated in the top two strata of soil and consisted predominately of wire nails and unidentified iron fragments. Unlike units in other areas, bottle glass was scarce in Unit 15. Only one fragment of clear glass was recovered. The complete list of artifacts collected from Unit 15 is in Table 20.

Table 18. Unit 15 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	15	25	35
Architecture			
Nail, Tack	1	0	0
Nail, UNID	3	0	0
Nail, Wire	19	8	0
Kitchen			
Bottle Glass, Clear	1	0	0
Miscellaneous			
Clay Sample	2	0	0
Coal	1	0	0
Iron/Steel, UNID	4	0	0
Rubber, UNID	2	1	0
Levels Total	33	9	0

UNIT 16 - BARRACKS

Unit 16 was placed 53 meters southwest of Unit 15 in the vicinity of the former location of the S-4 barracks. A grid had not been placed over this area so coordinates were not assigned to the unit, but the unit's location was recorded with a sub-meter accurate Trimble GPS. The datum was established 11 cmas in the northeast corner. The unit was excavated in two arbitrary 10-centimeter levels to a maximum depth of 30 cmbd.

Test Unit 16 contained two soil strata (Figure 77). Stratum I was composed of 4-8 centimeters of brown (10YR 4/3) gravelly loam and Stratum II consisted of 16 centimeters of yellowish red (5YR 5/6) loamy clay. Both strata were negative for artifacts.

Figure 76.
Unit 15, Profile and Photograph

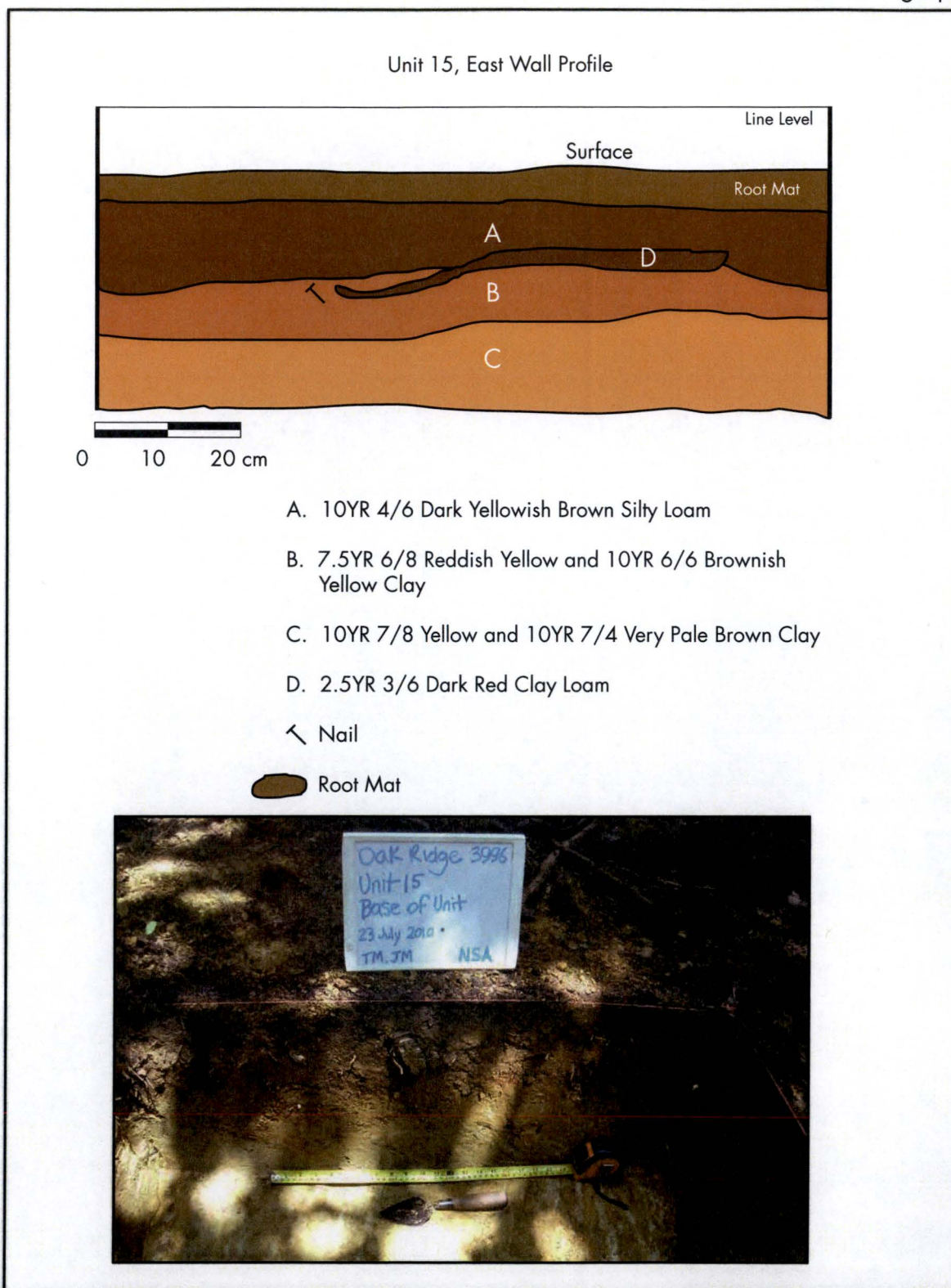
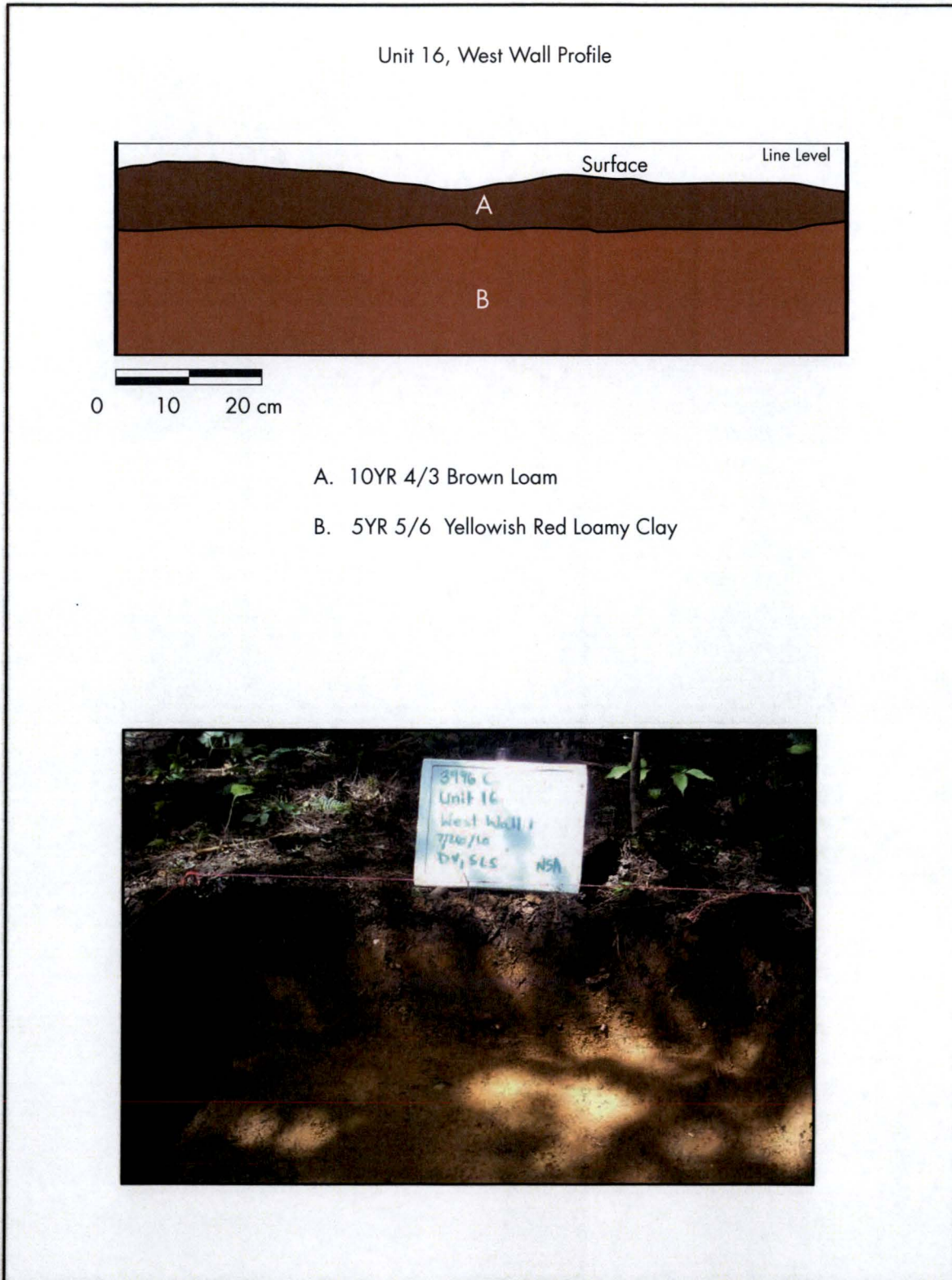


Figure 77.
Unit 16, Profile and Photograph



UNIT EXCAVATION, SITE 40RE577 – HUTMENTS

The hutments in this area of Happy Valley were similar in construction and layout to the African American hutments that stood in the southernmost portion of the survey area. They lacked running water and had very little privacy. The hutments in this portion of the camp housed single white men. Residents in this area might have conducted many of their daily chores outside because the interior of the hutments was so cramped and uncomfortable. It was expected that units would produce a high number of subsurface artifacts and perhaps features. Unit placement in this area was based on survey results and J.A. Jones construction maps. Four units were placed in this area. The land was wooded with hardwoods and pines.

UNIT 17 – HUTMENTS

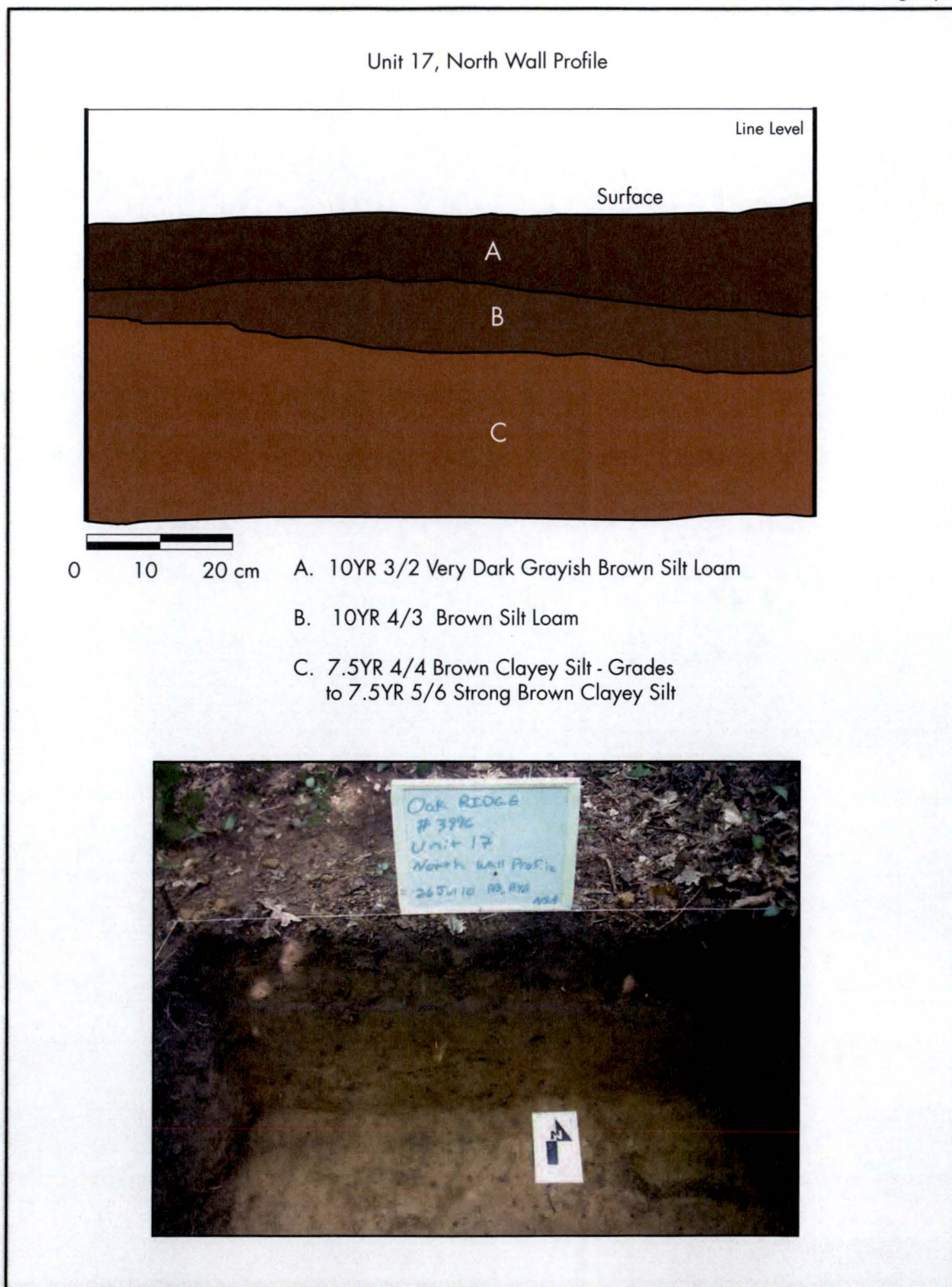
Unit 17 was placed in an area that had formerly contained a block of 20 hutments[Exempted from Disclosure by Statute]. Locus 7, a surface scatter of bottles, was 30 meters south of the unit. This area had not been tested on a grid, so no grid coordinates were assigned to the unit. Its location was recorded with a sub-meter accurate GPS. The datum was placed in the northwest corner 15 cms. The unit was excavated in four arbitrary 10-centimeter levels with a maximum depth of 55 cmbd.

Three soil strata were noted within Unit 17 (Figure 78). Stratum I was 10-14 centimeters of very dark grayish brown (10YR 3/2) silty loam. Stratum II contained 4-6 centimeters of brown (10YR 4/3) silty loam. Stratum III was sterile and consisted of 20-26 centimeters of brown (7.5YR 4/4) silty clay that transitioned gradually to strong brown (7.5YR 5/6) silty clay. Artifacts were most dense in Stratum I. They consisted predominantly of clear bottle glass and wire nails. The only personal item found was a hard rubber comb. Artifact densities dropped off quickly with depth. Artifact distribution is shown in the table below.

Table 19. Unit 17 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	25	35	45	55
Architecture				
Nail, Wire	28	0	0	0
Clothing				
Cloth, UNID	2	0	0	0
Kitchen				
Bottle Glass, Clear	85	16	0	0
Bottle Glass, Coca-Cola	1	0	0	0
Bottle Glass, Clear, Machine Made	8	0	0	0
Bottle Glass, Milk Bottle	1	0	0	0
Stopper, Plastic	1	0	0	0
Miscellaneous				
Charcoal	1	3	0	0
Coal	1	1	0	0
Iron/Steel, UNID	2	0	0	0
Rubber, UNID	1	0	0	0
Personal				
Comb, Hard Rubber	1	0	0	0
Levels Total	132	20	0	0

Figure 78.
Unit 17, Profile and Photograph



UNIT 18 – HUTMENTS

Unit 18 was set up in an area that had formerly contained a block of 20 hutments [Exempted from Disclosure by Statute]. A lavatory foundation (Feature 59) was 10 meters north and Unit 17 was 40 meters northeast. This area had not been tested on a grid, so no grid coordinates were assigned to the unit. Its location was recorded with a sub-meter accurate Trimble GPS. The datum was placed in the southwest corner of the unit, 11 cms. The unit was excavated in four arbitrary 10-centimeter levels with a maximum depth of 50 cmbd.

Unit 18 contained three soil strata below a four-centimeter root mat (Figure 79). Stratum I was 8-10 centimeters of brown (10YR 4/3) silty loam. Stratum II contained 8-10 centimeters of light yellowish brown (10YR 6/4) silty loam. Stratum III consisted of 12-14 centimeters of yellow (10YR 7/6) silty loam. There was a gradual transition between Strata II and III. Very few artifacts were collected from the unit and all were non-diagnostic. Artifact distribution is shown in the table below.

Table 20. Unit 18 Artifact Frequencies by Levels

Level Number	1	2	3	4
Maximum cmbd	20	30	40	50
Activities				
Electrical Item, Plastic, UNID	1	0	0	0
Architecture				
Nail, UNID	0	1	0	0
Miscellaneous				
Iron/Steel, UNID	0	8	0	0
Levels Total	1	9	0	0

UNIT 19 - HUTMENTS

Unit 19 was placed on a ridge in an area where 23 hutments formerly stood. This block was located [Exempted from Disclosure by Statute]. The foundation for the block lavatory was 25 meters west of the unit. The unit datum was in the southwest corner of the unit, 13 cms. The unit was excavated in two arbitrary 10-centimeter levels, reaching a maximum depth of 40 cmbd.

The soil strata within the unit indicated that the area was probably graded to subsoil in the past (Figure 80). Stratum I was 4-6 centimeters of reddish brown (5YR 4/3) silty clay. Strata II-V were all sterile. Stratum II was 8-11 centimeters of dark reddish brown (5YR 3/4) clay and Stratum III was 8-12 centimeters of mottled dark reddish brown (5YR 3/4) and pinkish gray (7.5YR 7/2) clay. Stratum IV was a 13-centimeter pocket of brown (7.5YR 5/4) clay and below it was Stratum V, 4 centimeters of mottled light brownish gray (2.5Y 6/2) silty clay and brown (7.5YR 5/4) clay. The unit contained only one fragment of porcelain and it was recovered from the top of Stratum I.

Figure 79.
Unit 18, Profile and Photograph

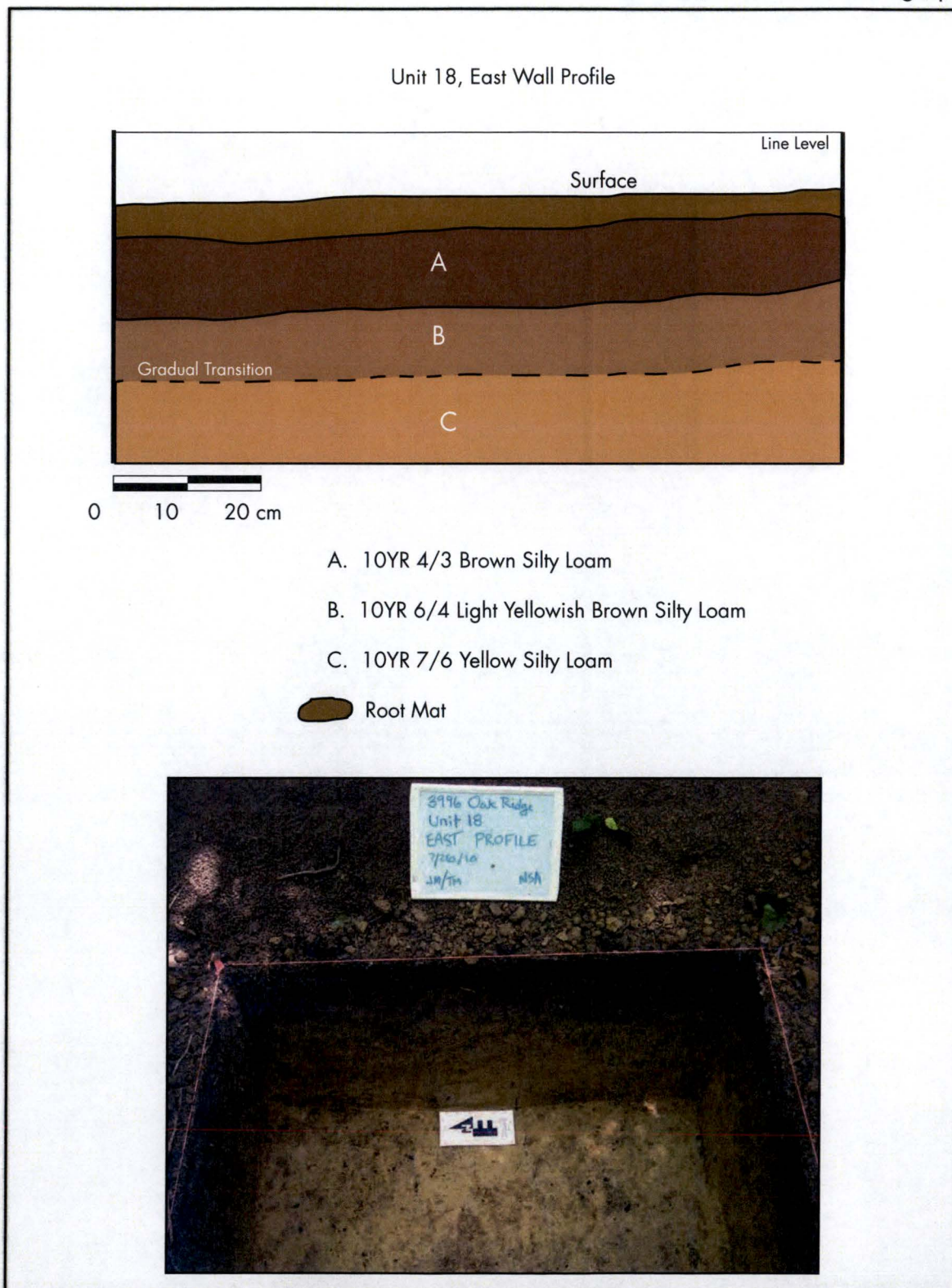
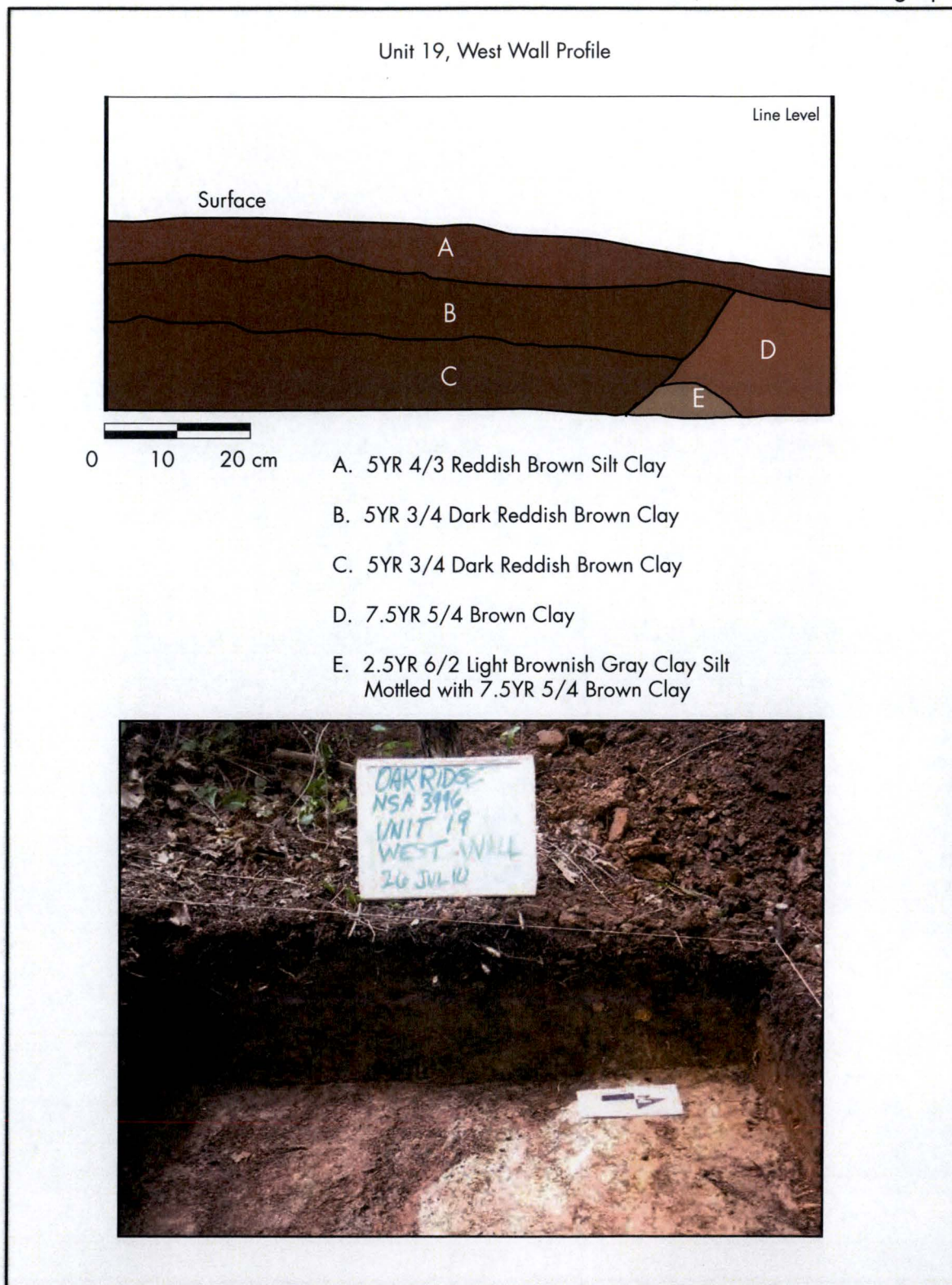


Figure 80.
Unit 19, Profile and Photograph



UNIT 20 – HUTMENTS

Unit 20 was placed [Exempted from Disclosure by Statute] where a block of 40 hutments had stood. This unit was situated slightly outside of the hutment area to see if trash deposits were placed on the periphery of hutment neighborhoods. The datum for the unit was placed 12 cmas in the northeast corner. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 45 cmbd.

The unit revealed two soil strata (Figure 81). Stratum I contained 10-12 centimeters of dark brown (10YR 3/3) silty loam and Stratum II was 30 centimeters of dark yellowish brown (10YR 4/6) silty clay loam. Few artifacts were recovered from the unit and almost all were recovered from Stratum I. The table below is a summary of the artifacts recovered by level.

Table 21. Unit 20 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	25	35	45
Kitchen			
Bottle Glass, Amber, Machine Made	2	0	0
Miscellaneous			
Coal	1	0	0
Iron/Steel, UNID	0	2	0
Levels Total	3	2	0

UNIT EXCAVATION, SITE 40RE577 – LOCUS 9

Locus 9 was an artifact scatter that was projected to be in an undeveloped area south of the hutment neighborhoods [Exempted from Disclosure by Statute]. The assemblage contained bottles and jars, but clothing and household items such as shoe fragments and light bulbs. It was speculated that the locus could be the remains of an unofficial dump for the hutments in the area. In order to explore the locus, three units were excavated.

UNIT 21 – LOCUS 9

Unit 21 was set up near the center of the Locus 9 in an area where a fragment of clear glass had been found in a shovel test. The southwest corner of the unit was at 494 N 498 E. The datum was established 10 cmas in the southwest corner and the unit was excavated in two 10-centimeter levels. The unit was excavated to a maximum depth of 28 cmbd.

The soil profile within Unit 21 consisted of 4 centimeters of root mat, 14-16 centimeters of brown (10YR 6/3) compact silty loam (Stratum I), and 4-6 centimeters of yellow (10YR 7/6) silty clay loam (Stratum II) (Figure 82). No artifacts were recovered from the unit.

Figure 81.
Unit 20, Profile and Photograph

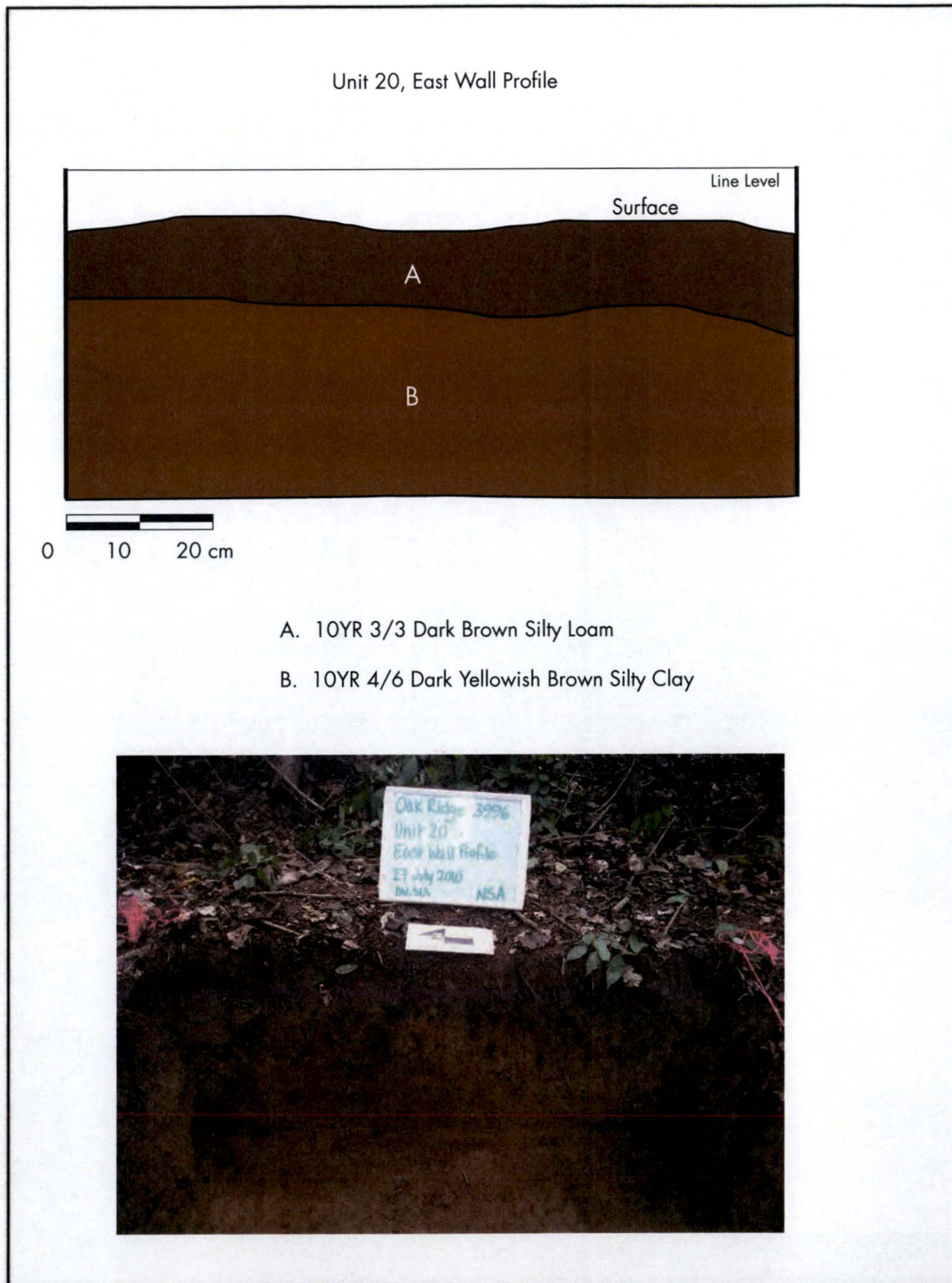
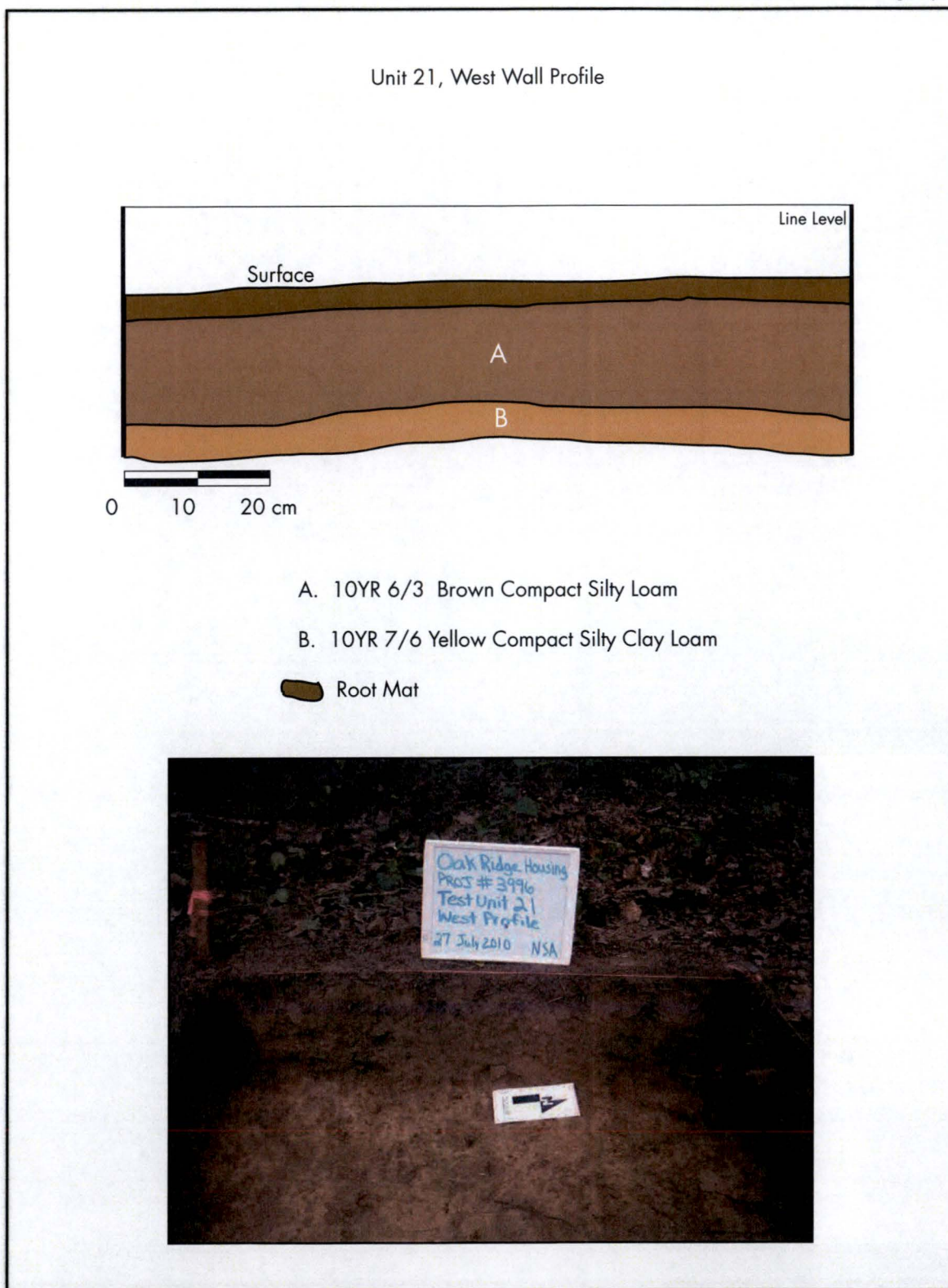


Figure 82.
Unit 21, Profile and Photograph



UNIT 22 – LOCUS 9

Unit 22 was also placed near the center of Locus 9 at coordinates 500N 502E. The datum was placed in the southwest corner 19 cmas. The unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 52 cmbd.

Below a two-centimeter root mat, three principal strata were revealed within the unit (Figure 83). Stratum I was 9-12 centimeters of yellowish brown (10YR 5/4) silty. Stratum II consisted of light yellowish brown (10YR 6/4) silt and Stratum III contained 9-10 centimeters of reddish yellow (7.5YR 6/6) silt. A high density of rocks was encountered within the unit. Coal fragments and a small number of possible prehistoric lithics were found within Stratum I (0-30cmbd), but otherwise the unit was sterile.

Table 22. Unit 22 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	30	40	50
Miscellaneous			
Coal	3	0	0
Prehistoric – Debitage			
Interior Flake, Chert	1	0	0
Interior Flake, Quartz	1	0	0
Shatter, Quartz	1	0	0
Levels Total	6	0	0

UNIT 23 – LOCUS 9

Because Units 21 and 22 were almost devoid of artifacts, Unit 23 was placed 26 meters north of the locus center. The southwest corner of the unit was located at 526 N 488E. The datum for Unit 23 was placed 12 cmas in the southwest corner. The unit was removed in three arbitrary 10-centimeter levels and the final depth was 45 cmbd.

The soil profile revealed within Unit 23 was similar to that found in Unit 22 (Figure 84). Below a two-centimeter root mat, the unit contained three soil strata. Stratum I was 11-12 centimeters of brownish yellow (10YR 6/6) compact rocky loam. Stratum II was made up of 8 centimeters of dark yellowish brown (10YR 4/4) compact rocky loam and Stratum III was composed of 12 centimeters of strong brown (7.5YR 4/6) clay. All three soil strata were very rocky and compact. Stratum I contained five artifacts, while the remaining strata were sterile. The artifacts collected from Unit 23 are summarized in the table below.

Table 23. Unit 23 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	25	35	45
Architecture			
Nail, Wire	1	0	0
Kitchen			
Bottle Glass, Aqua	1	0	0
Bottle Glass, Frosted Clear	3	0	0
Levels Total	5	0	0

Figure 83.
Unit 22, Profile and Photograph

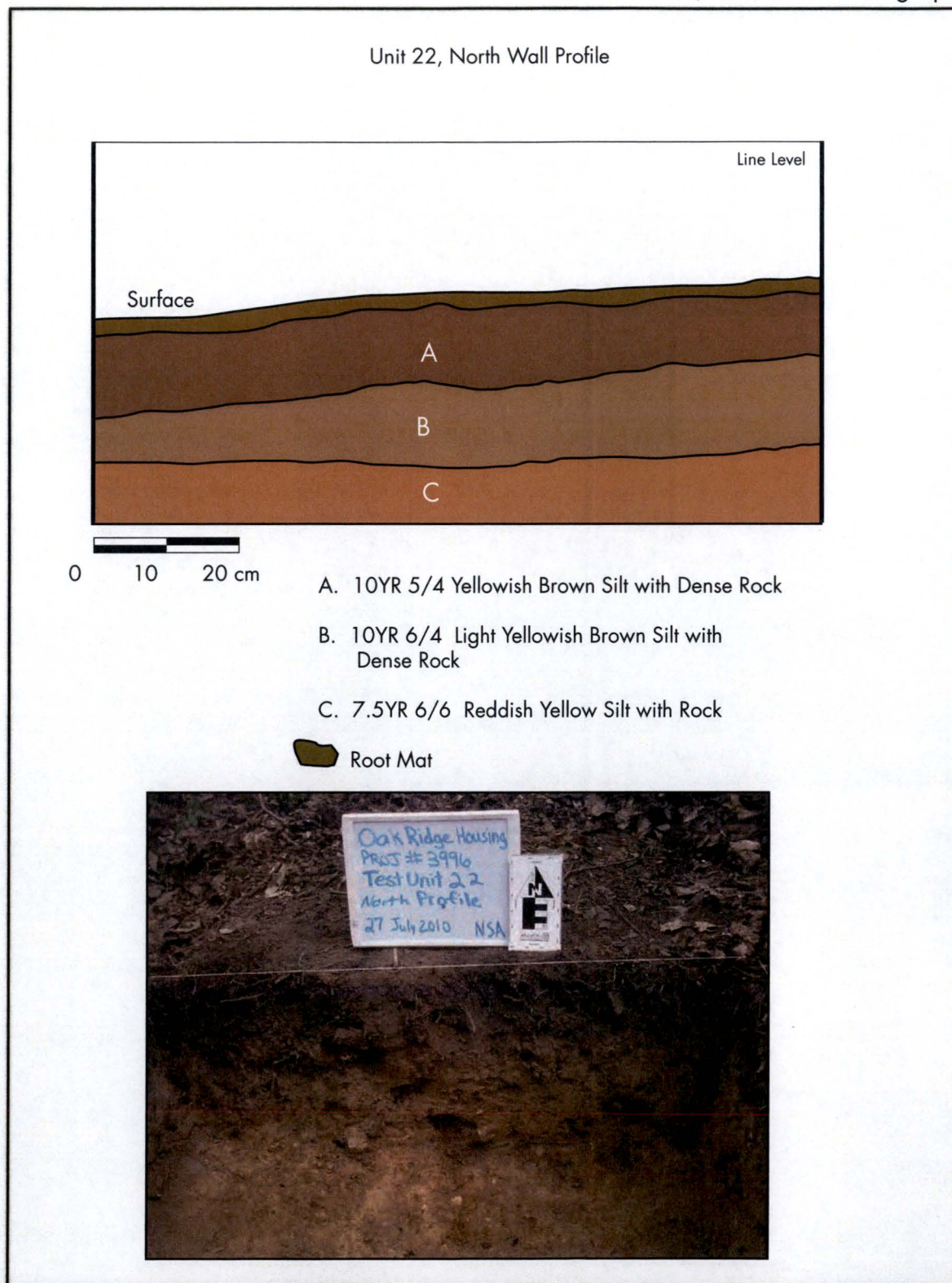
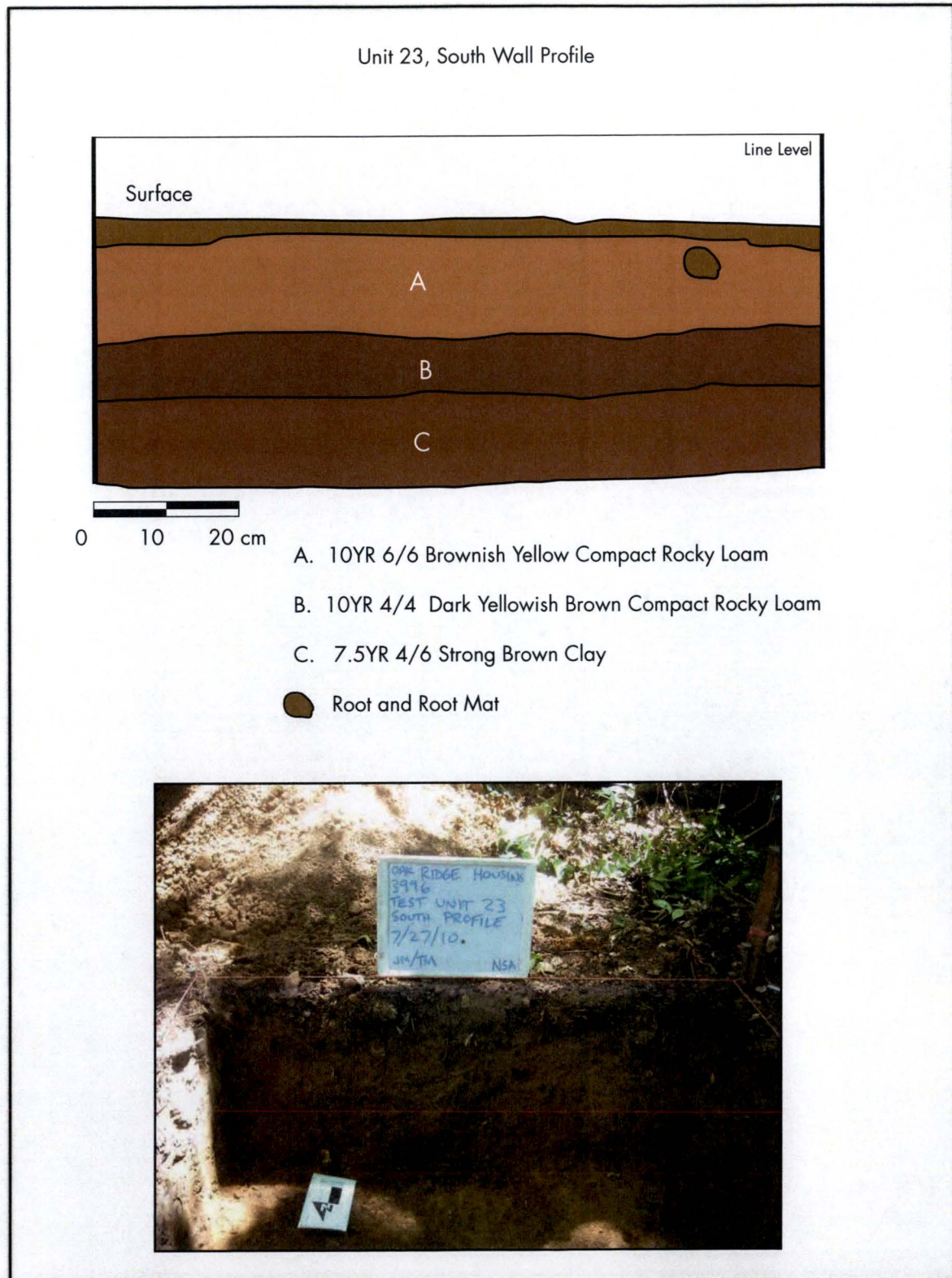


Figure 84.
Unit 23, Profile and Photograph



UNIT EXCAVATION, SITE 40RE577 – LOCUS 13

Locus 13 was identified during the 2009 survey. This locus was situated in an area where hutments in rows of three had stood. Shovel testing in the area had uncovered fragments of coal, glass, and whiteware. Additionally, surface examination resulted in the discovery of several concentrations of bottles and jars. Two lavatory foundations (Features 64 and 66) and two sewer features (Features 65 and 67) stood in close proximity to the locus. Several push piles in the area indicated that the land had been disturbed, perhaps during demolition of the housing area. Because this locus contained a higher incidence of subsurface artifacts than other loci, it was considered important to further investigate the area. Three units were excavated at Locus 13.

UNIT 24 – LOCUS 13

Unit 24 was placed in close proximity to a shovel test that had contained fragment of whiteware. The coordinates of the southwest corner of the unit were 532N 467E. The datum was placed in the southeast corner 11 cmas and the unit was excavated in three arbitrary 10-centimeter levels to a maximum depth of 50 cmbd.

Upon excavation, the unit revealed two soil strata (Figure 85). Stratum I was 9-12 centimeters of dark brown (10YR 3/3) silty loam and Stratum II consisted of 23-26 centimeters of strong brown (7.5YR 4/6) clay. Mineral concretions increased with depth in Stratum II. All artifacts were recovered from the topsoil stratum. Within Level 1 and Stratum I, a large concentration of unused rusted wire nails was encountered. There was no feature associated with nails. Other than the nails, very few artifacts were encountered. The artifacts collected from Unit 24 are summarized in the table below.

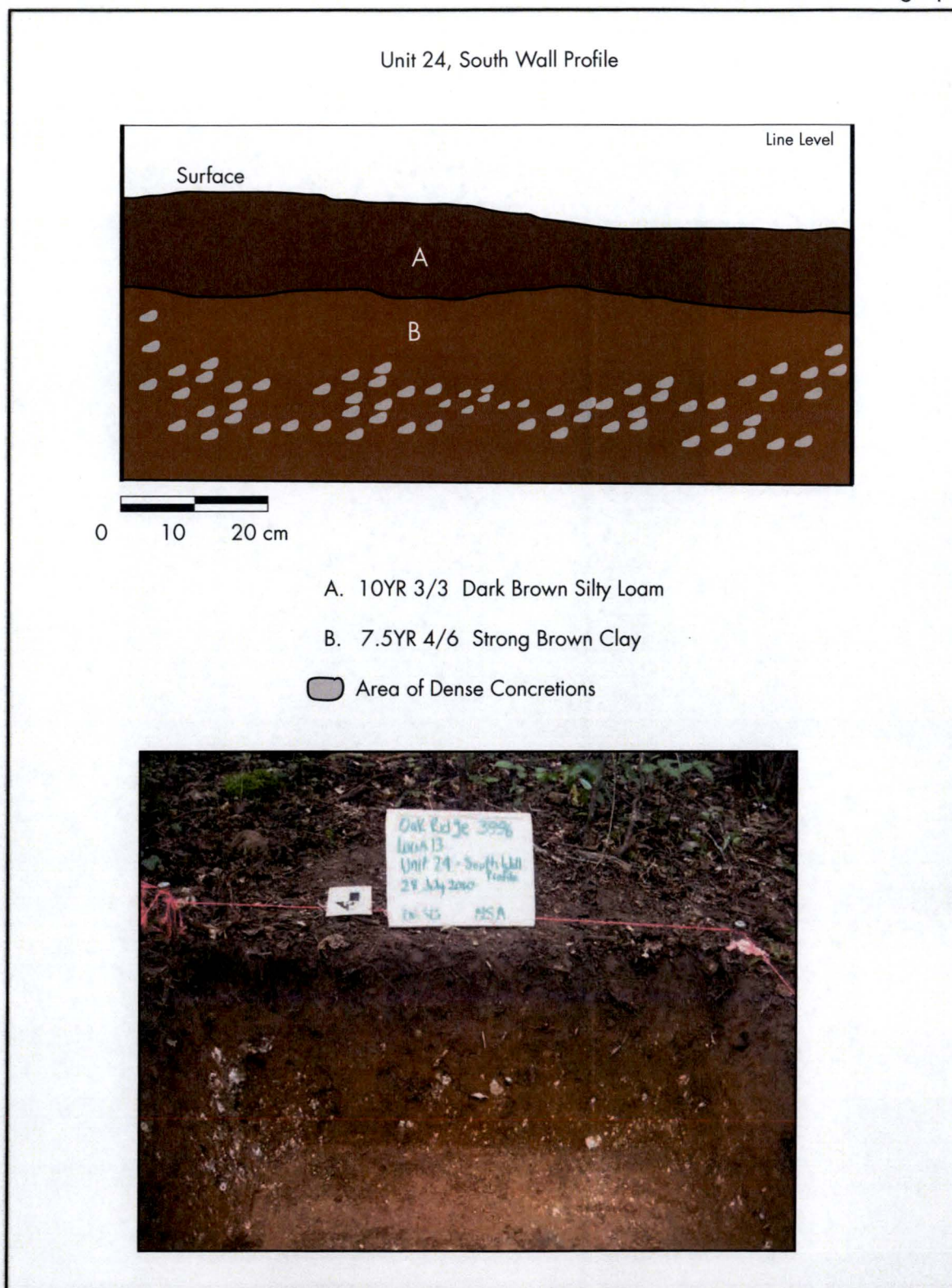
Table 24. Unit 24 Artifact Frequencies by Levels

Level Number	1	2	3
Maximum cmbd	30	40	50
Architecture			
Nail, Wire	93	0	0
Kitchen			
Ceramics, UNID	3	0	0
Miscellaneous			
Clay Sample	1	0	0
Slag	1	0	0
Levels Total	98	0	0

UNIT 25 – LOCUS 13

Unit 25 was placed in the northern portion of Locus 13 with its southwest corner at coordinates 545N 470E. The datum was set up in the southwest corner 15 cmas, and the unit was removed in three arbitrary 10-centimeter levels to a depth of 50 cmbd.

Figure 85.
Unit 24, Profile and Photograph



The unit revealed three soil strata below a one-centimeter root mat (Figure 86). Stratum I was 2-14 centimeters of brown (7.5YR 4/4) silty loam. Stratum II contained 14-24 centimeters of reddish brown (5YR 4/4) silty clay and Stratum III was eight centimeters of mottled light brown (7.5YR 6/4) and yellowish red (5YR 4/6) silty clay. Concretions were encountered throughout Stratum III. Only one fragment of unidentified historic ceramic was recovered from this unit, within the first stratum (0-30 cmbd).

UNIT 26 – LOCUS 13

Unit 26 was situated in the center of the locus in close proximity to a lavatory foundation (Feature 64). Its southwest corner was located at coordinates 505N 485E and the datum was set up 10 cmas in the southeast corner. The unit was excavated in two arbitrary 10-centimeter levels to a depth of 35 cmbd.

Three soil strata were uncovered in Unit 26 (Figure 87). Stratum I was 4 centimeters of light yellowish brown (10YR 6/4) compact loam. Stratum II consisted of 4-8 centimeters of yellowish brown (10YR 5/6) clay loam and Stratum III was 12 centimeters of reddish brown (5YR 4/4) clay. Two ceramic fragments and a glass fragment were recovered from the top of Stratum I, but no other artifacts were encountered. The fragment of blue edgeware dates to the late nineteenth century. The 1942 aerial does not show a farmhouse in this location, so it is possible that the edgeware belonged to a Happy Valley resident and was brought on-site as an heirloom. The artifacts collected in Unit 26 are summarized in Table 27.

Table 25. Unit 26 Artifact Frequencies by Levels

Level Number	1	2
Maximum cmbd	25	35
Kitchen		
Bottle Glass, Clear	1	0
Stoneware, Plain, Salt Glazed	1	0
Whiteware, Edgeware, Blue	1	0
Levels Total	3	0

PHASE II ARTIFACT ANALYSIS

The Phase I survey of the Happy Valley housing area resulted in the collection of 343 mid-twentieth-century historic artifacts. No prehistoric artifacts were found. During the Phase II investigations, a total of 1,179 historic artifacts were collected. Consistent with the Phase I findings, only three prehistoric artifacts were recovered. The prehistoric artifacts consisted of one chert flake, one quartz flake, and one quartz shatter. All three were non-diagnostic.

In order to provide a clearer picture of life at Happy Valley and an idea of the patterns of artifact use and deposition, artifacts were sorted into historic groups based on their function. The groups represented in the assemblage were architecture, activities, clothing, furniture, kitchen, personal, arms, and miscellaneous. Analysis found that architecture (41.9%) made up the largest portion of the assemblage, followed by kitchen (32.9%), and miscellaneous artifacts (20.9%).

Figure 86.
Unit 25, Profile and Photograph

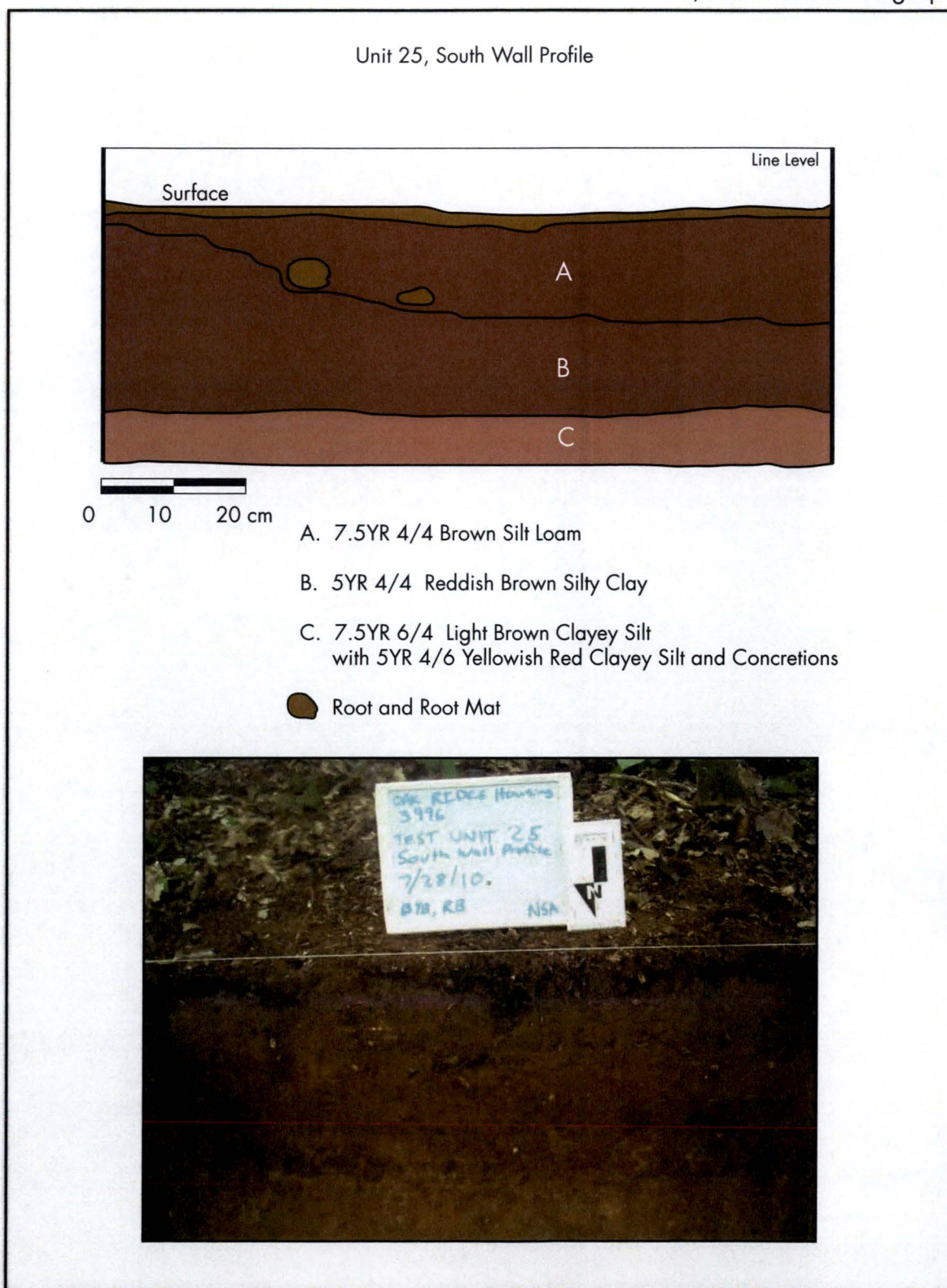


Figure 87.
Unit 26, Profile and Photograph

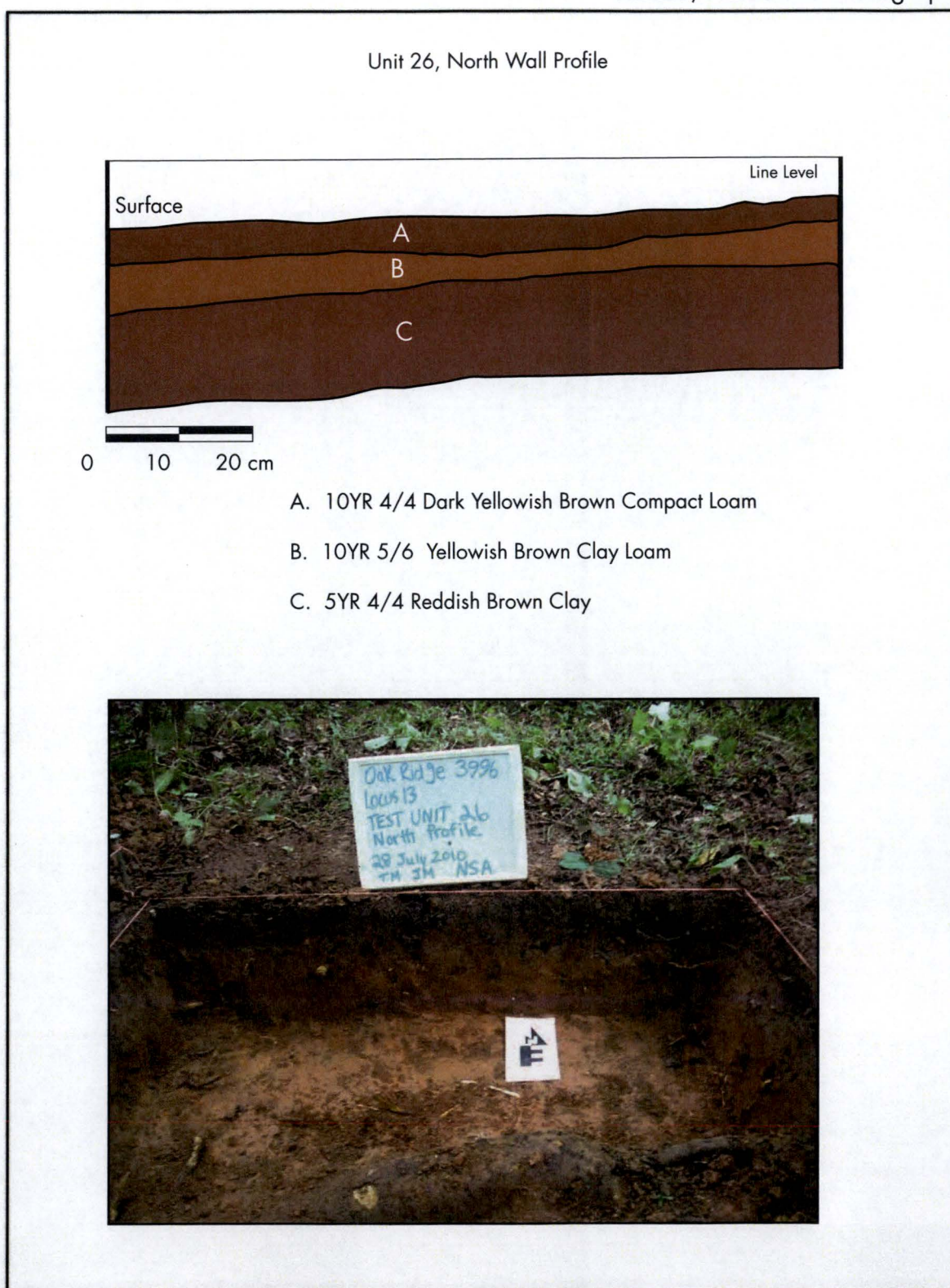


Table 26. Historic Artifacts from the Happy Valley Housing Area

Historic Group	Artifact Description	Total	Group %
Activities	Bolts	2	
	Chimney Glass	16	
	Decorative/Ornamental Glass Item	1	
	Electrical Item, Unidentified	1	
	Handmade, Glass Marble	1	
	Machine Made, Marble	2	
	Unidentified Metal Object	13	
	Non Electrical Wire	1	
	Unidentified Plastic Item	1	
	Strap Iron/Metal	1	
	Tin Can, Modern Crimped Top	1	
	Tin/Aluminum Foil	2	
	Toy Car and Truck Part, Plastic	1	
Activities Total		43	3.6
Architecture	Brick, Handmade	3	
	Brick, Machine Made	1	
	Brick, Unidentified	37	
	Glass, Architectural	2	
	Glass, Flat	68	
	Mortar	2	
	Nail, Cut	5	
	Nail, Tack	1	
	Nail, Unidentified	49	
	Nail, Wire	227	
	Roofing Tile	98	
	Sewer Tile	1	
Architecture Total		494	41.9
Clothing	Button, Ceramic	1	
	Button, Metal	1	
	Cloth, Unidentified	2	
Clothing Total		4	0.3
Kitchen	Bottle Glass, Amber	51	
	Bottle Glass, Aqua	14	
	Bottle Glass, Clear	244	
	Bottle Glass, Coca-Cola	2	
	Bottle Glass, Embossed Letters	4	
	Bottle Glass, Green	5	
	Bottle Glass, Machine Made, Amber	3	
	Bottle Glass, Machine Made, Clear	18	
	Bottle Glass, Machine Made, Cobalt Blue	2	

Table 26. Historic Artifacts from the Happy Valley Housing Area

Historic Group	Artifact Description	Total	Group %
	Bottle Glass, Machine Made, Green	3	
	Bottle Glass, Milk Bottle	1	
	Bottle Glass, Milk Glass	3	
	Bottle Glass, Other	4	
	Ceramics, Unidentified	5	
	Coral	1	
	Ironstone, Plain	1	
	Whiteware	3	
	Plastic Screw Cap	1	
	Porcelain	3	
	Stoneware, Unidentified	5	
	Stoneware, Domestic, Plain Brown Salt Glazed	1	
	Stoneware, Domestic, Albany Slipped	1	
	Stopper, Plastic	1	
	Table Spoon, Metal	1	
	Tableware Glass, Unidentified, Molded	1	
	Whiteware, Plain	8	
	Whiteware, Unscaloped, Unimpressed Rim Edgware	1	
Kitchen Total		388	32.9
Miscellaneous	Charcoal	6	
	Clay Sample	7	
	Coal	129	
	Glass, Unidentified	2	
	Iron/Steel, Unidentified	63	
	Leather, Unidentified	1	
	Non Iron/Steel, Unidentified	1	
	Rubber, Unidentified	5	
	Slag	32	
Misc. Total		246	20.9
Personal	Cosmetic Jar, Milk Glass	1	
	Comb, Hard Rubber	1	
Personal Total		2	0.2
Arms	Bullet	2	
Arms Total		2	0.2
Historic Total		1,179	100

Not surprisingly, the architecture group dominated the artifact assemblage. The area was covered with housing and other buildings, so it was expected that numerous architectural remains would be recovered from the site. Flat glass, bricks, roofing tiles, and nails were the most common architectural elements recovered. Hardware that could be salvaged was probably taken from the site when it was demolished and would not be represented in the artifact assemblage. Therefore, items recovered during the Phase II could not be reused, were left by mistake, or were remnants of

pre-Happy Valley historic occupations. The identifiable nails collected were predominately wire nails (n=227) and they were found throughout the survey area. Wire nails began production around 1860, but became common in the 1880s (Nelson 1968). These nails are not diagnostic of Happy Valley, but the context they were recovered in and their ubiquity in the parcel indicate that they are most likely from the construction camp. The brick fragments denote the presence of masonry elements in the survey area. As was seen at Feature 95, some Happy Valley buildings utilized bricks in their construction. The flat glass indicates that Happy Valley buildings possessed glass windows. The machine-headed, machine-cut nails and three handmade brick fragments were commonly used in the nineteenth century and could be the remains of pre-Happy Valley buildings.

Kitchen artifacts were the second most common artifact type. Bottle glass represented 91% of the kitchen group. Much of the glass was not diagnostic, but some did bear maker's marks indicating a mid-twentieth-century manufacturing date. The most common marks included the "Diamond O-I" mark representing the Owens Illinois Glass Company (1929-1954) and the Duraglas script (1940 – mid 1950s), which signified a process used by the Owens-Illinois Glass Company to produce bottles (Toulouse 1971; Lindsey 2010). A small number of ceramics were collected (n=28). The datable ceramic fragments included Albany Slipped Stoneware (1805-1920). Both Ironstone and Whiteware have long production dates that include the mid-twentieth century. These ceramic fragments could be remains of pre-Happy Valley occupations or they could be fragments from ceramics that Happy Valley residents brought with them. Remaining kitchen artifacts included a plastic stopper, a metal tablespoon, tableware glass, and a plastic screw cap.

The activity, personal, clothing, and arms groups made up a small percentage (4.3%) of the total artifacts collected. A total of 3.6 percent of the entire assemblage was items in the activities group. Chimney glass made up the largest percentage of this group. Other artifacts collected were machine made and handmade glass marbles, a crimped top tin can, a plastic toy part, and a decorative glass fragment. The marbles and the plastic toy part are evidence that children were a part of the Happy Valley community. The decorative glass is a small indication that camp residents might have brought ornamental items with them to personalize their living spaces. Personal items collected included a milk glass cosmetics jar and a rubber comb. The cosmetics jar possessed the "H over A" mark, which represented the Hazel Atlas Glass Company between 1902 and 1964 (Toulouse 1971). Two buttons and two scraps of cloth composed the clothing group. The arms group consisted of two bullets. It is not unexpected that so few personal items were found in the assemblage. Because the workers were transient, they probably brought very little with them and what they did bring of a personal nature they likely took with them when they left.

Few whole bottles were encountered during unit excavation, but quite a few were collected during the Phase I Survey. Some of these bottles possessed not just a maker's mark, but also a brand name indicating what they had contained. Several of the brands represented personal hygiene and health products. One of the most common was the Chesebrough Manufacturing Company. These squat clear or amber bottles contained Vaseline, which was used to aid in healing of cuts and burns, relieve dry skin, and prevent diaper rash (Fike 1987; Vaseline 2010). A Moroline petroleum jelly jar was also identified. This product would have been used in the same manner as Vaseline. Two Fitch's Tonic bottles were collected. Fitch's Ideal Hair Tonic appeared to be marketed towards men and claimed to relieve an itchy scalp and prevent dandruff (Life Magazine 1940). A clear, screw top bottle embossed with the words "Creomulsion for coughs due to colds" would have contained a brand of cough syrup that is still manufactured today (Creomulsion 2010). Small

amber Lysol embossed jars were also found. In the 1940s, Lysol was used not only as a household disinfectant, but also as a feminine hygiene product (Tone 2001).

Several food and kitchen related brands were also encountered. Jars with the Ball Bros. Company mark were collected. Some of these jars were used for preserving fruit and indicate that residents were either preserving their own foods or purchasing preserved foods. One resident of Oak Ridge remembers, "The summers spent looking for fruit. A peach orchard was found near Blair Road K-25 where we got several bushels of peaches, which we canned using Karo syrup and asorbic acid. What a luxury..." (Hibbs 2009:164). Drink bottles collected included a French Broad Dairy milk jar and a Grapette Soda bottle.

Comparing the relative artifact group percentages between the southernmost hutments where African American workers lived and the remaining areas of Happy Valley where European-American workers lived could provide general information regarding the differences and similarities between the two areas. Additionally, artifact group percentages from hutments, trailers, dormitories, barracks, and Victory Homes can be compared to uncover differences between the neighborhoods. It should be noted that although the percentages can provide information on the residents of Happy Valley, they can also reflect post depositional activities at the site and differences in sampling size and strategy during fieldwork.

Table 27. *Artifact Group Comparisons*

Site/Housing Area	Artifact Group						
	Kitchen*	Architecture	Activities	Arms	Clothing	Furniture	Personal
40RE233 (African American Employee Hutments)	43.0	54.1	2.1	0.0	0.4	0.0	0.4
40RE577 (White Employee Housing – All)	41.0	52.6	5.5	0.3	0.4	0.1	0.1
Hutments (White)	49.8	48.6	0.4	0.0	0.8	0.0	0.4
Hutments (Both African American and White)	46.5	51.3	1.2	0.0	0.6	0.0	0.4
Dormitories/Barracks	12.6	76.6	10.8	0.0	0.0	0.0	0.0
Victory Homes	41.3	52.1	5.0	0.8	0.4	0.4	0.0
Trailers	53.0	29.4	17.6	0.0	0.0	0.0	0.0

*Values are percent of the total artifacts, excluding the Miscellaneous category.

There seems to be very little difference between the artifact percentages of the African American employee hutment area and all white employee-housing areas. Both portions of the camp contain mostly architecture artifacts followed by kitchen artifacts and low percentages of arms, clothing, personal, and activity artifacts. When the African American worker hutments are compared to only hutments in the white worker camp, the percentages shift slightly, showing a higher percentage of kitchen artifacts and a lower percentage of architectural artifacts in the white hutment area. This could reflect distinctive lifeways in the two hutment areas. It could also signify different demolition approaches in the two locales that resulted in differing amounts of architectural debris. Another factor to take into account is the gender make up of the two hutment neighborhoods. The white hutments in Happy Valley housed only men. Photographs illustrate that both men and women resided in some African American hutment neighborhoods. It is not known whether this was the case in the hutment area at the J.A. Jones camp, but if it was, this difference could have influenced

the artifact group percentages. More detailed artifact analysis might uncover other variations that are not visible in the artifact group percentages.

Analysis of the artifact group percentages shows more pronounced differences between the housing types. Although many of these variations are partly due to the architecture of the buildings, they also provide information on the way people lived in and around the housing. The hutments, dormitories, and barracks were used to house single workers. The hutments (African American and White combined) show almost a fifty-fifty split between kitchen and architecture artifacts. In contrast, we see that the dormitory and barrack areas contained 76 percent architectural items and only 12 percent kitchen artifacts. There are several explanations for these differences. First, there might have been a more organized clean up in and around the barracks compared to the hutments. Second, outdoor spaces around the hutments might have been more conducive for eating and drinking than those around the barracks and dormitories. Finally, demolition of the barracks and dormitories might have produced more architectural debris than found near the hutments. The activity percentage for the dormitories and barracks appears high, but this is largely due to the presence of several unidentified iron fragments in the assemblage.

Both the Victory Homes and trailers housed families instead of single workers. The Victory Homes show a higher percentage of architectural artifacts compared to kitchen artifacts. This difference seems due to the presence of moderate quantities of flat glass in the units. Flat glass made up approximately 41 percent of the architectural assemblage near the Victory Homes, but was rare around other housing types. Flat glass commonly indicates the presence of windows in a building, so it is likely that the Victory Homes possessed glass windows rather than the open windows common in hutments. This area also contained a farmhouse with outbuildings prior to 1942. The large frame farmhouse and its outbuildings probably contributed to the architectural artifacts in the area. Around the trailers, there is a fairly low percentage of architectural artifacts. The trailers were towed in and out of the housing area and likely left very few remains. The activity artifact percentage is comparatively high for the trailers and could indicate that spaces around the trailers were utilized as an extension of the living space.

PHASE II TESTING CONCLUSIONS

Several conclusions about sites 40RE577 and 40RE233 can be made following the Phase II fieldwork. First, unit excavation supports that the Happy Valley housing area has strong integrity of location. The demolition of the site may have caused subsurface disturbance to some areas, but excavation of Units 7 and 10 uncovered two intact features (Features 30-A and 98), which indicates that subsurface integrity remains. The presence of these subsurface features indicates that the demolition concentrated on above ground architecture and subsurface deposits were likely undisturbed. Likewise, the existence of surface features such as concrete pads and infrastructure elements suggests that demolition was generally systematic and targeted. It was not carried out in a haphazard way that might have disturbed the artifact bearing deposits and assemblages.

The archaeological testing also showed that artifact assemblages were concentrated on the surface or within the first 10 centimeters of soil. Subsurface domestic features, such as trash pits, were not encountered. Photographs indicate that there was an organized trash pick-up for the housing area. Most household trash was probably disposed of through this structured system or in small informal dumps commonly located on the outskirts of the neighborhoods (i.e., Loci 7, 9, 11, and 15). The

artifacts found within the first 10 centimeters of soil were most likely the result of casual discard when the camp was in use. Some larger artifacts visible on the surface, such as ventilation pipes, sinks, toilet fragments, light fixtures, and electrical switches, appear to have been deposited when the camp was demolished.

The units in the former Victory Homes neighborhood revealed profiles that appeared to contain an intact stratigraphy below the construction camp deposits. Soil profiles in units in other areas of the camp indicate that grading was employed to prepare for construction of the housing area. This grading reduces the potential for preserved pre-1942 deposits.

The low density of subsurface artifacts is not unexpected because the camp was only used between 1943 and 1946. This relatively short occupation span would not result in a heavy build up of artifacts within the camp, especially if organized trash collection was utilized. Even so, the artifact analysis shows that differences in housing artifact assemblages were detectable and there is the potential for further comparative research.

VIII. RECOMMENDATIONS AND CONCLUSIONS

Happy Valley is a rare example of a WWII Manhattan Project secure workers camp. Such camps were constructed for the Manhattan Project, which meshed the need for intensive security with the requirements that the massive facilities be quickly built. Other camps existed at Los Alamos, New Mexico, the Trinity Test Site, New Mexico, and Hanford, Washington, making Happy Valley one of only four such facilities in the U.S. It is also one of the largest and best preserved.

The White Rock construction camp at Los Alamos, New Mexico, was a WWII-era workers camp that included hutments, trailers, and a dormitory. Construction workers both lived at Los Alamos and were bused to the site from local communities within a 15-20-mile distance. There were a few African-American workers at Los Alamos; however, Native American Pueblo workers were present and were brought onto the site from the local communities. This workers camp is no longer intact and was destroyed by the construction of the town of Los Alamos, which was built on its location (Martin 2000; Mary Blevin personal communication 2011).

The Trinity Test Site, New Mexico, supported a camp for soldiers and others who were stationed at Trinity during the atomic tests. Established around the McDonald Brothers Ranch, a few miles southwest of Ground Zero, the Trinity base camp was home to military police, soldiers, and others engaged in securing the Trinity Test Site for a period of seven months prior to the testing of the first atomic bomb. Thomas Merlan (2001) presented the history of the Trinity Test Site camp. Merlan's study relied heavily on oral history interviews, while also discussing archaeological and architectural remains of the camp. The Trinity base camp is located within the White Sands Missile Range.

Both the Los Alamos and Trinity camps were small, short-term occupations, which are unlike Happy Valley in scale and complexity. The Hanford Construction Camp in Washington (Site 45BN308) is the only other site directly comparable to Happy Valley. Hanford was also a temporary Manhattan Project construction camp that contained barracks, hutments, and trailers as well as a variety of service and recreation buildings. Remains of the camp included sewer and water lines, roads, and concrete building foundations. The camp has been nominated to the NRHP and is considered eligible under Criteria A and D. A landfill (Site 45BN1437) and burn pits associated with the construction camp have also been recorded and are currently listed on the NRHP (Bevill and Kelly 2009; Harvey and Draper 2005; Washington Closure Hanford 2010).

The Hanford Construction Camp was built on the location of the historic town of Hanford, whose residents has been relocated by the federal government. The Hanford Camp was built by Du Pont in 1943-44 and housed a peak work force of approximately 45,000 by June 1944. At that time, housing included 131 barracks for men, of whom there were 24,892 at that date; 64 barracks for women, of whom there were 4,357; 880 men's Quonset huts; and 3,639 trailer lots. Like Happy Valley, Hanford was also segregated. In addition to the housing, the camp contained (Bevill and Kelly 2009:27):

...65 construction shops, a 24-building administrative area, 8 mess halls, several saloons and stores, a recreation hall and auditorium, a theater, a bowling alley, and a softball field. Additional service facilities included eight schools, a day nursery, five fire stations, and a large infirmary and clinic.... Indoor plumbing was not available in the trailer court; bath houses were constructed for use as bathrooms, laundry facilities, and shower rooms.

The Hanford Construction Camp was laid out in a contiguous grid with high visibility provided in the tree-less level floodplain along the Columbia River. The Hanford work force was predominantly male, as indicated by the population figures given above, and the work force was separated by gender. "[H]ousemothers" were kept in separate barracks that were separated from men's housing by barbed wire fences with guards (Bevill and Kelly 2009:29). Like Happy Valley, the Hanford Camp was a racially segregated facility with separate housing and support buildings for African-American workers.

The Hanford Camp was closed in February 1945. Trailers were shipped to other locations and some of the larger buildings were dismantled and shipped for re-use at other locations. Following the end of WWII, the last buildings on the camp were sold by the government and removed, and the area bulldozed, "leaving only the roadway grid and a few, low-lying foundations that escaped the blades of bulldozers" (Bevill and Kelly 2009:30). Waste collection activities at Hanford resulting in the collection and disposal of much of the domestic waste associated with the Hanford Camp, which was taken to a landfill. This landfill site (45BN1437) was determined eligible for the NRHP by the Keeper of the National Register in 2006 (Wilson 2008:15) for the information it could provide about the life ways of the Hanford workers. Archaeological mitigation excavation is currently in-progress at the Hanford landfill. The research prepared for this mitigation by Wilson (2008) contains research topics that can also be addressed at Happy Valley, and is referenced below.

New South Associates' Phase I Archaeological Survey and Phase II Archaeological Testing of the Happy Valley Workers Camp at the Oak Ridge Reservation in Roane County, Tennessee resulted in the identification of two sites representing Happy Valley: previously recorded site 40RE233 and site 40RE577. Site 40RE219, the previously recorded Wheat Community African Burial Ground, also sits within the survey area. During the current survey, possible burial depressions were encountered 30 meters outside of the fenced cemetery boundary. It is recommended that further cemetery delineation take place if ground disturbance is slated to occur in the vicinity of the cemetery.

The survey identified 21 loci containing concentrations of artifacts from Happy Valley, 13 isolated finds, numerous roads, and 98 surface features. Surface features included building foundations, hydrants, and wastewater management structures. Twenty-six test units were excavated in sites 40RE233 and 40RE577 to better understand the nature of Happy Valley's artifact assemblage. These tests revealed subsurface artifact scatters and infrastructure-related subsurface features. The survey and testing indicated that the landscape of Happy Valley was intact and archaeological feature locations correlated with the historic maps of the community. The archaeological research also identified artifact clusters/loci at a number of locations, which appear to represent different activities associated with different racial and social elements of the community.

Archaeological sites 40RE233 and 40RE577 possess strong integrity of location, as the archaeological features exist where they were constructed and correlate well with historic maps of the community. As archaeological sites, 40RE233 and 40RE577 possess integrity of design as they express the cultural landscape of this planned development. Sites 40RE233 and 40RE577 possess fair integrity of setting as both are still elements of the U.S. DOE's Oak Ridge Reservation, although

their environmental setting has changed with the naturalization of the site. Sites 40RE233 and 40RE577 possess good archaeological integrity of materials as many of the sub-structural elements of the site remain as constructed, although the buildings and structures themselves have been removed. The site possesses strong integrity of workmanship as it expresses the landscape and design of this workers' community, and the remains of streets, utilities, building foundations, and other features. The integrity of feeling is considered poor to fair – Happy Valley is in its original location and streets and other features of the town remain, however, the loss of site architecture has impacted the integrity of feeling. Finally, these sites maintain a very strong integrity of association as the archaeological legacies of a significant event in U.S. history, the Manhattan Project. Therefore, based on the results of the survey and testing of the Happy Valley housing area, we recommend that sites 40RE577 and 40RE233 be considered eligible for the NRHP under Criteria A, C, and D.

Under Criterion A, association with events, Happy Valley was a vital part of the Manhattan Project as it was used to house workers for the K-25 Gaseous Diffusion Plant. The work done at Oak Ridge was critical to uranium enrichment and the development of the atomic bomb, which in turn would contribute to the end of WW II. Security was an important element in safe-guarding atomic research and development, and Happy Valley, represents one of only two such properties in the nation where large-scale secure workers' communities were designed and constructed for the Manhattan Project, a critical event in American history. The other is the Hanford Construction Camp.

Under Criterion C, the Happy Valley archaeological sites express the layout, organization, methods of construction, and use of materials for a Manhattan Project construction camp, which can still be read on the landscape. These elements are distinctive characteristics of a rare property type and thus qualify Happy Valley sites 40RE577 and 40RE233 as eligible for the NRHP under Criterion C.

Under Criterion D, Happy Valley sites 40RE577 and 40RE233 provide the opportunity to address several archaeological and historical research topics. The demolition of Happy Valley did not result in complete destruction of the site. Buildings were torn down but foundations, sewer features, roads, and surface artifact scatters remained largely untouched in most areas. Some modern utility corridors have since been constructed in the area, but they have affected only small portions of the sites. The Phase II Testing indicates that there are intact subsurface artifact deposits and features associated with Happy Valley. Despite the shallow nature of the sites, these artifact concentrations appear well preserved. The presence of the artifact clusters themselves is of interest, as Happy Valley had organized waste collection that did not account for these remains. The undisturbed deposits, coupled with the site's uniqueness, give the site significant research potential.

The mid-twentieth century was a time of tremendous change in the U.S., which was linked in many respects to WWII and the ascension of the U.S. to global prominence as a military, industrial, and economic power. The WWII years, and their aftermath, would also witness changes in racial, social, and gender relations that can all be connected with the war years and the massive mobilization of the American people to meet the demands of a successful military conflict. The significance of American home-life of this era has been expressed in a National Historic Landmarks historic context (Harper 2007), while the archaeological legacy and understanding of the mid-century is recognized by a number of historical archaeologists (Henry 1995, Kelly 2004, Stapp et al. 1995). National Park Service archaeologist Barbara Little (2007) has noted the importance of workers camps, archaeologically, as settings in which issues such as ethnicity, race, gender, wealth, occupational status, and social class can be studied in a single site and in a controlled setting (Wilson 2008:10). Happy Valley seems well suited to address these topics.

There is a strong contingent of construction maps, documents, photographs, and interviews for Happy Valley that can complement and supplement the archaeological record at the sites. However, the archaeological evidence can add to this literature by providing information that Happy Valley's officials and residents did not think to document or did not want to document. Notably, the archaeological study identified 20 artifact concentrations/loci (see Table 1) containing domestic refuse in various locations of the town. These intact artifact concentrations contain potential information relevant to numerous avenues of research. Archaeological research topics that could be addressed by the site include:

1. Those residing at Happy Valley were living under strict rules and regulations. Did residents adhere to these rules? If not, how did they work around camp rules? How effective were regulators at keeping prohibited items out of the camp? What prohibited items are found in the archaeological record? Where are they found?
2. Several artifact clusters were identified in the sites where refuse was not collected by organized waste management efforts. What types of activities are reflected by these deposits? In what settings/locations were they found? Were the locations selected because they were shielded from site surveillance, because they were convenient social hubs, and/or for other factors?
3. Comparisons of domestic artifacts from different housing areas can be used to evaluate differences between the different groups of people living in Happy Valley. Is there a difference between the consumer behavior and material culture of African American worker, single white men, and white families at the sites? Did African American workers on the site use personal products made for the African American community, or did they use the same cosmetics, etc. that their white counterparts used? If African American products were used, were they carried by the Happy Valley store or obtained in Oak Ridge?
4. Does the bottle glass found in various refuse loci reflect food and/or beverages consumed by the residents of Happy Valley? How do food and remains from trailer and hutment loci compare with the remains from the mess halls (such as Locus 1)? Do the food/beverage remains reflect differences by race, gender, and habitation (i.e., trailer, hutment, dormitory)? Do any food remains reflect hunting/fishing/gathering by the site inhabitants, and if so, which and by whom?
5. How does the organization and layout of Happy Valley compare with the plan of the workers camp at Hanford? Are there differences in the design and structure? Do these differences reflect construction in different natural settings? Do these differences reflect social, gender, and/or racial differences in their respective workforces?
6. What construction techniques, building forms, structures, materials, and styles were used in the construction of Happy Valley? How do these compare/contrast with those employed at Hanford? Are differences a product of geographic location, construction contractor, available resources, and/or other factors?

7. There is the potential to contrast the artifacts collected from Happy Valley with those recovered from the Hanford waste site. The Hanford waste site consists of a large landfill of refuse from the construction camp. In 2009, portions of the landfill were excavated and samples of the artifact assemblage were collected (Washington Closure Hanford 2010). Comparative studies between the Hanford artifacts and Happy Valley's could illuminate differences and similarities between the two camps on opposite sides of the country.
8. Did waste collections practices at Oak Ridge differ from those employed at Happy Valley? Was recycling employed, and if so, are its effects seen in the archaeological record?

The research topics listed above offer a preliminary assessment of some of the research issues that can be addressed through archaeology at the site and should not be considered a comprehensive research design.

Should data recovery (Phase III) mitigation be required for future activities at these sites, the current archaeological survey and evaluation has gathered much of the data needed to address research questions 2, 5, and 6. If ground disturbance is slated to occur at the refuse loci identified in Table 1, then surface collection and limited excavation at these loci should be able to collect the information needed to respond to questions 1, 3, 4, 7, and 8. No other excavations are recommended at archaeological sites identified in the worker camp areas. It is also recommended that any mitigation action(s) draw on the significant existing historical information, photographs, and oral histories to compile a history of the community. Additional oral histories may be warranted if the review of existing interviews identifies members of the community – by race, gender, or occupation – who have not been interviewed to date. Additional oral history could also benefit some of the archaeological research topics outlined above, by gaining informants' perspectives on how and why refuse deposits were formed and the activities that occurred there.

Happy Valley is an important place in U.S. history and it is hoped that this documentation, survey, and assessment will aid future efforts to intermesh its various sources of data into a unified history and ethnography of this site.

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APPENDIX A. SPECIMEN CATALOG

Exempted from Disclosure by Statute – Withheld Under 10 CFR 2.390(a)(3)

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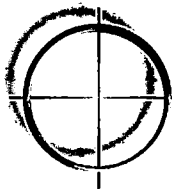
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APPENDIX B. RESUME OF PRINCIPAL INVESTIGATOR



NEW SOUTH ASSOCIATES

PROVIDING PERSPECTIVES ON THE PAST

A WOMEN-OWNED SMALL BUSINESS

MARY BETH REED
PRESIDENT/DIRECTOR OF HISTORY
NEW SOUTH ASSOCIATES, INC.

EDUCATION

M.A., American Civilization, University of Pennsylvania, 1983

B.A., Anthropology, University of Arizona, 1976

SUMMARY OF EXPERIENCE

Ms. Reed serves New South as Principal Investigator for History and has more than 25 years professional experience in the Southeast, Southwest, and Mid-Atlantic. Ms. Reed has worked for various private and governmental clients, including the USACE (USACE) Mobile, Wilmington, Savannah, Mobile, and Fort Worth districts; the National Park Service; the USDA Forest Service; Departments of Transportation; utilities; and various state agencies. Ms. Reed has considerable federal experience throughout the southeastern U.S. and in the Republic of Panama. She has served as Principal Investigator for the Savannah River Site History Project for the Department of Energy, and continues to work with Cold War preservation planning for the Savannah River Site. Ms. Reed's areas of specialization include: management of historic preservation projects, land use history, local history/community studies, architectural, agricultural, and industrial history, urban architecture/history, Cold War history, history of technology, history of granite quarrying, and National Register nominations and survey.

KEY SUPERVISORY EXPERIENCE:

- 2005- Principal Investigator. **SRS Thematic Studies.** As part of an ongoing contract at the Savannah
- 2009 River Site developed six thematic studies including Reactor Processes, Infrastructure, Heavy Water Production, Administration, Safety, and Security, Pilot Plant Facilities, and Fuel and Target Fabrication. Work conducted under contract to Savannah River Nuclear Solutions.
- 2008- Principal Investigator. **Ranch House in Georgia: Guidelines for Section 106 Compliance.**
- 2010 Developed a compliance document for the Ranch House in Georgia to provide preservation professionals with evaluations tools for Section 106 Compliance and NRHP eligibility. Study sponsored by GTC in partnership with GDOT and HPD.
- 2006- Principal Investigator. **Cultural Resource Assessment, NIOSH National Sites and Facilities.**
- 2010 Prepared National Register eligibility assessments for a wide variety of resource types from historic mines to missile sites using appropriate state guidelines.

SUMMARY OF PUBLICATIONS AND PRESENTATIONS

Author or co-author of one-hundred thirty-one (131) cultural resource management reports, one (1) cultural resource management plan, five (5) historic preservation plans, three (3) histories/popular histories, fifteen (15) historic properties/historic architecture documentations, four (4) research designs, (1) professional publication, and six (6) presented papers and symposia.

PROFESSIONAL MEMBERSHIPS AND SERVICE

Member, South Carolina Historical Society

Member, Georgia Historical Society

Member, National Council on Public History

Member, Vernacular Georgia

Member of the De Kalb County Historical Society

**APPENDIX C. 40RE233 AND 40RE577
UPDATED SITE FORMS**

ARCHAEOLOGICAL SITE SURVEY RECORD
Tennessee Department of Environment and Conservation
Division of Archaeology

Cole Building #3
1216 Foster Avenue
Nashville, Tennessee 37243
Phone (615) 741-1588 Fax (615) 741-7329



2010 update: 40RE233
Date Assigned: 8/22/1995

Submittal of an archaeological site survey record constitutes a request for a state number on a new site, or revises information on a previously recorded site. Send by mail to the above address, or as an attached email document to Suzanne.Hoyal@state.tn.us. A copy of the completed record will be returned to the reporter.

Our office does not define a site by an arbitrary number of artifacts or other specific criteria. Request a preliminary review if site status is uncertain or if additional guidance is needed.

The site record can be filled in with pencil or electronically. Double click on check box to access options. If the format is not compatible with your system, please request an alternative method of submittal.

Site name or field number: FN 10 in 1995; expanded in 2010

Cultural Affiliation:

- | | | |
|--|---|--|
| <input type="checkbox"/> 0001 Undetermined Prehistoric | <input type="checkbox"/> 0009 Early Gulf Formational | <input type="checkbox"/> 0017 Early Mississippian |
| <input type="checkbox"/> 0002 Paleoindian | <input type="checkbox"/> 0010 Middle Gulf Formational | <input type="checkbox"/> 0018 Middle Mississippian |
| <input type="checkbox"/> 0003 Transitional Paleo | <input type="checkbox"/> 0011 Late Gulf Formational | <input type="checkbox"/> 0019 Late Mississippian |
| <input type="checkbox"/> 0004 Archaic | <input type="checkbox"/> 0012 Woodland | <input type="checkbox"/> 0020 Protohistoric |
| <input type="checkbox"/> 0005 Early Archaic | <input type="checkbox"/> 0013 Early Woodland | <input type="checkbox"/> 0021 Contact Period Indian |
| <input type="checkbox"/> 0006 Middle Archaic | <input type="checkbox"/> 0014 Middle Woodland | <input type="checkbox"/> 0022 Historic Indian |
| <input type="checkbox"/> 0007 Late Archaic | <input type="checkbox"/> 0015 Late Woodland | <input checked="" type="checkbox"/> 0023 Historic Non-Indian |
| <input type="checkbox"/> 0008 Gulf Formational | <input type="checkbox"/> 0016 Mississippian | <input type="checkbox"/> 0024 Pleistocene Fauna |

This block is for Division use only

[

Exempted from Disclosure by Statute

40RE233 (2010 update and boundary expansion)**Date Range** (historic sites only):

- | | | |
|---------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> 02 Pre-1770 | <input type="checkbox"/> 05 1861-1865 | <input checked="" type="checkbox"/> 08 1933-present |
| <input type="checkbox"/> 03 1770-1819 | <input type="checkbox"/> 06 1866-1900 | |
| <input type="checkbox"/> 04 1820-1860 | <input type="checkbox"/> 07 1901-1932 | |

Human Remains:

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> 00 Unknown | <input type="checkbox"/> 02 Isolated Intact Burial(s) | <input type="checkbox"/> 04 Absent (historic sites only) |
| <input type="checkbox"/> 01 Scattered Surface Remains | <input type="checkbox"/> 03 Cemetery | <input type="checkbox"/> 05 Unknown, but likely |

Ownership:

- | | |
|--|---|
| <input type="checkbox"/> 02 Private Individual/Corporation | <input type="checkbox"/> 04 State of Tennessee |
| <input type="checkbox"/> 03 Local Government | <input checked="" type="checkbox"/> 05 Federal-TVA, COE, etc. |

Site Size (Long and short axis, in meters): **300m x 200m****Basis for Size Estimate:**

- | | | |
|-----------------------------------|---|---|
| <input type="checkbox"/> 01 Taped | <input type="checkbox"/> 03 Guessed | <input checked="" type="checkbox"/> 05 Estimated from map |
| <input type="checkbox"/> 02 Paced | <input type="checkbox"/> 04 Transit/alidade | |

Boundary:

- | | |
|--|---|
| <input type="checkbox"/> Partial (explain in site description) | <input checked="" type="checkbox"/> Inclusive |
|--|---|

Land Use/Ground Cover:

- | | | |
|--|---|---|
| <input type="checkbox"/> 01 Grassland/Pasture | <input type="checkbox"/> 05 Improved Forest/Orchard | <input type="checkbox"/> 09 Roadway |
| <input type="checkbox"/> 02 Cultivation | <input type="checkbox"/> 06 Intermittent Flooding | <input type="checkbox"/> 10 Open and Eroded |
| <input checked="" type="checkbox"/> 03 Secondary Growth | <input type="checkbox"/> 07 Inundated/Shoreline | <input type="checkbox"/> 99 Other (explain in site description) |
| <input checked="" type="checkbox"/> 04 Unimproved Forest | <input type="checkbox"/> 08 Urban | |

Condition/Percent Disturbed:

- | | | |
|---|--|---|
| <input type="checkbox"/> 01 Undisturbed [excellent] | <input checked="" type="checkbox"/> 04 51-75% [fair] | <input type="checkbox"/> 07 Percent Unknown |
| <input type="checkbox"/> 02 <25% [very good] | <input type="checkbox"/> 05 76-99% [poor] | |
| <input type="checkbox"/> 03 26-50% [good] | <input type="checkbox"/> 06 Destroyed | |

Level of Investigation:

- | | | |
|--|---|--|
| <input type="checkbox"/> 01 No Collection | <input type="checkbox"/> 04 Surface Collection + Test Units | <input type="checkbox"/> 06 Excavation Program |
| <input type="checkbox"/> 02 Surface Collection (grab bag) | <input checked="" type="checkbox"/> 05 Extensive Testing Program (Phase II) | <input type="checkbox"/> 07 Total Excavation |
| <input type="checkbox"/> 03 Surface Collection (intensive, may include shovel tests) | | |

Reporter Type:

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> 01 Private Consulting Firm | <input type="checkbox"/> 04 Amateur Society Member | <input type="checkbox"/> 07 Student (volunteered rpt.) |
| <input type="checkbox"/> 02 Agency or Non-educ. Inst. | <input type="checkbox"/> 05 Landowner | <input type="checkbox"/> 08 Professional (volunt'd rpt.) |
| <input type="checkbox"/> 03 Educational Institution | <input type="checkbox"/> 06 Private Individual | |

Last Day of Investigation: Month July Day 28 Year 2010 ☐ New Site ☒ Previously Recorded**In addition to the check box pages, please include:**

- USGS 7.5' topographic map with site boundary and scale (place multiple sites on a single map when possible)
- Descriptive page(s) with the following:
 - field number and/or site name on each page
 - landowner, tenant, or easement holder
 - verbal directions to the site (if appropriate or helpful in rural areas)
 - landform, setting, distance and direction to water
 - surface conditions, level of survey, and explanation for limitations in determining site boundary
 - nature and extent of past and anticipated disturbance
 - cultural affiliation, site type, features, table and summary of observed/collected artifacts, and site map, if available
 - for prehistoric sites cultural affiliation must be supported by presence of temporally sensitive artifact(s)
 - for historic sites a pre-1933 occupation date should be established using features, maps, deeds, informants, etc. (the presence of a scatter with artifacts such as ceramics or bottles that **might have been** manufactured before 1933 is generally inadequate for recording a site **unless also supported by other evidence**)
 - relationship, if any, to nearby sites
 - associated history, persons, buildings
 - photo media and quantity; temporary and permanent repositories for artifacts and documentation
 - location of any additional information such as reports, maps, local informants, etc.
 - title, author, and date of the report in which the site is or will be reported
 - reporter name, affiliation, address, phone, fax, email, and date of submittal

Do not put headings followed by empty space for items that are not applicable. Electronic narrative should be sent as a Word document; maps as JPEG or PDF. Electronic submittals will be edited to reduce space.

40RE233 – 2010 update

Field number: 40RE233

Landowner: Department of Energy

Directions: The site surveyed is located [Exempted from Disclosure by Statute]
in Oak Ridge, Roane Co., Tennessee.

Landform and distance/direction to water: The site surveyed is located [

Exempted from Disclosure by Statute

Survey purpose, methods, and limitations in determining site boundary: A portion of the Happy Valley worker camp stood in the area of the survey between 1943 and 1947. In 1995 this site was discovered during a survey for modification to SR58/95. At that time the site was not fully delineated. Nine judgmental shovel tests were excavated and eight building foundations were recorded. The current 2010 survey and testing was carried out to locate remains of Happy Valley in the area and to assess the integrity and extent of the archaeological remains of the site. Artifact scatters and building foundations relating to Happy Valley were encountered. The site boundaries were extended in all directions. There was little ground surface visibility at the time of investigation, but [Exempted from Disclosure by Statute] helped determine the boundaries of the site. Additionally, surface collection and shovel tests at regular 30-meter intervals determined site content, depth, and limits. Four 1x1 meter test units were excavated throughout the site to determine its integrity. Although separated by 300 meters, this site is related to 40RE577 (the bulk of the K-25 worker camp).

Past and anticipated disturbance: Much of the site was demolished in 1947. Some utility lines have been set up in the site area and [Exempted from Disclosure by Statute] demolished the northwest portion of the site. Development of the parcel is possible in the future.

Cultural affiliation, site type, date range, features, artifact summary: Happy Valley was a worker camp that was established in 1943 to assist in the construction of the K-25 facility in Oak Ridge. The town was demolished in 1947 when the workers were no longer needed. The town is a historic, Manhattan Project Era site. Structure foundations and sewer system remains from Happy Valley were found throughout the site area. During the current survey six artifact concentrations and 15 features [Exempted from Disclosure by Statute] were located within parcel. See attached artifact table.

Location of additional information: J.A. Jones Construction Maps (1944) are located at the DOE. New South possesses copies of some of the construction maps.

Photo media/quantity; repositories: 140 Digital. Temporary repository – New South Associates., Permanent repository - DOE

Report: "Phase I Archaeological Survey, Phase II Archaeological Testing, and Historic Assessment of the Happy Valley Worker Camp", 9/30/10, by Diana Valk and David Price. Prepared by New South Associates for SAIC

Site reporter: Diana Valk, New South Associates, 6150 East Ponce de Leon Ave, Stone Mountain, Georgia 30083, 770-498-1455 x129, Fax: 770-465-1456.

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE233 (2010 update and
boundary expansion)

[

] Exempted from
Disclosure by
Statute

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE233 (2010 update and
boundary expansion)

[

] Exempted from
Disclosure by
Statute

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE233 (2010 update and
boundary expansion)

[

] Exempted from
Disclosure by
Statute

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	4	15		asurf					Surf.	7/14/10	1	Bottle Glass, Machine Made, Amber	Embossed "No Deposit No Return" "Not to be Refilled" Anchor Hocking Maker's Mark (1938-
40RE233	4	15		asurf					Surf.	7/14/10	1	Bottle Glass, Machine Made, Clear	Possible "F" Maker's Mark
40RE233	4	15		asurf					Surf.	7/14/10	1	Bottle Glass, Machine Made, Clear	Chesebrough Manufacturin g Co. Consolidated Maker's Mark (1908-1955); "New York" embossed on base.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	4	15		asurf					Surf.	7/14/10	1	Ceramic Industrial Item, Miscellaneous	Over-the-wall toggle light switch, porcelain; "KNOX" and "UL" (Underwriter' s Laboratories) and "8400" recess- embossed on rear. Knox Porcelain Corp. (1936- 1975).
40RE233	5	20		STP		500	500		0-16cmbs	7/14/10	1	Whiteware, Plain, Molded	
40RE233	6	16		STP		500	500		0-20 cmbs	7/15/10	1	Bottle Glass, Amber	
40RE233	6	16		STP		500	500		0-20 cmbs	7/15/10	2	Coal	
40RE233	7	16		STP		510	500		0-8 cmbs	7/15/10	1	Bottle Glass, Clear	
40RE233	7	16		STP		510	500		0-8 cmbs	7/15/10	1	Tin/ Aluminum Foil	
40RE233	7	16		STP		510	500		0-8 cmbs	7/15/10	3	Coal	
40RE233	8	16		STP		560	500		Surf.	7/15/10	1	Cosmetic Jar, Milk Glass	
40RE233	9	16		STP		530	500		0-19cmbs	7/15/10	1	Bottle Glass, Green	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	9	16		STP		530	500		0-19cmbs	7/15/10	5	Bottle Glass, Clear	
40RE233	9	16		STP		530	500		0-19cmbs	7/15/10	1	Coal	
40RE233	9	16		STP		530	500		0-19cmbs	7/15/10	3	Bottle Glass, Machine Made, Amber	
40RE233	10	16		STP		500	520		0-24cmbs	7/15/10	3	Coal	
40RE233	11	16		STP		500	540		0-13cmbs	7/15/10	1	Bottle Glass, Clear	
40RE233	11	16		STP		500	540		0-13cmbs	7/15/10	1	Coal	
40RE233	12	16		STP		580	500		0-9cmbs	7/15/10	1	Bottle Glass, Clear	
40RE233	13	16		STP		550	500		0-5cmbs	7/15/10	1	Bolts	
40RE233	13	16		STP		550	500		0-5cmbs	7/15/10	1	Washer	
40RE233	14	17		STP		500	500		Surf.	7/15/10	1	Bottle Glass, Machine Made, Amber	No Deposit No Return and "Not to be Refilled" embossed. Ball Bros. Co. Maker's Mark (1888-
40RE233	15	17		STP		500	500		0-12cmbs	7/15/10	1	Bottle Glass, Amber	
40RE233	16	17		STP		500	520		Surf.	7/15/10	1	Bottle Glass, Pressed Glass	Fluted, Ball Bros. Co. Maker's Mark (1888-

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	17	17		STP		500	490		0-15cmbs	7/15/10	1	Bottle Glass, Embossed Letters	Clear
40RE233	17	17		STP		500	490		0-15cmbs	7/15/10	1	Bottle Glass, Amber	
40RE233	17	17		STP		500	490		0-15cmbs	7/15/10	3	Bottle Glass, Clear	
40RE233	18	17		STP		440	500		0-13cmbs	7/15/10	1	Bottle Glass, Clear	
40RE233	19	17		STP		480	500		0-22cmbs	7/15/10	1	Bottle Glass, Amber	Embossed letters "QUAR"
40RE233	20	17		STP		460	500		0-12cmbs	7/15/10	1	Charcoal	
40RE233	20	17		STP		460	500		0-12cmbs	7/15/10	1	Brass Ring	
40RE233	20	17		STP		460	500		0-12cmbs	7/15/10	2	Bottle Glass, Clear	
40RE233	20	17		STP		460	500		0-12cmbs	7/15/10	2	Nail, Wire Common, Unmeasured	
40RE233	21	17		STP		490	500		0-28cmbs	7/15/10	1	Bottle Glass, Clear	
40RE233	22	17		STP		450	500		Surf.	7/15/10	1	Coal	
40RE233	22	17		STP		450	500		Surf.	7/15/10	1	Bottle Glass, Panelled	Clear, Owens Illinois Glass Co. (1929- 1954) Maker's Mark
40RE233	23	19		STP		500	500		0-15cmbs	7/14/10	1	Bottle Glass, Amber	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	23	19		STP		500	500		0-15cmbs	7/14/10	1	Slag	
40RE233	23	19		STP		500	500		0-15cmbs	7/14/10	1	Bottle Glass, Clear	
40RE233	24	17		asurf					Surf.	7/15/10	1	Bottle Glass, Machine Made, Clear	Chesebrough Manufacturin g Co. Consolidated Maker's Mark (1908-1955); "New York" embossed on base.
40RE233	24	17		asurf					Surf.	7/15/10	1	Bottle Glass, Clear	CherO 6 oz. Slug Plate on front. "Knoxville, Tenn." Slug plate on rear. "Royal Crown Bottling Co." on base. (1959-
40RE233	25	18		STP		500	510		0-10cmbs	7/15/10	1	Nail, Unidentified Fragment	
40RE233	25	18		STP		500	510		0-10cmbs	7/15/10	2	Coal	
40RE233	27	18		STP		500	500		0-20 cmbs	7/15/10	1	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	27	18		STP		500	500		0-20 cmbs	7/15/10	1	Coal	
40RE233	28	19		STP		500	490		0-20 cmbs	7/15/10	3	Bottle Glass, Clear	
40RE233	28	19		STP		500	490		0-20 cmbs	7/15/10	1	Bottle Glass, Amber	
40RE233	29	20		STP		530	500		10- 20cmbs	7/14/10	1	Bottle Glass, Amber	
40RE233	30	20		STP		530	500		0-10cmbs	7/14/10	1	Electrical Fuse, Porcelain	
40RE233	30	20		STP		530	500		0-10cmbs	7/14/10	1	Bottle Glass, Milk Glass	
40RE233	30	20		STP		530	500		0-10cmbs	7/14/10	1	Bottle Glass, Green	
40RE233	30	20		STP		530	500		0-10cmbs	7/14/10	1	Bottle Glass, Amber	
40RE233	30	20		STP		530	500		0-10cmbs	7/14/10	16	Bottle Glass, Clear	
40RE233	31	16		STP		500	570		0-17cmbs	7/15/10	4	Coal	
40RE233	32	20		STP		510	500		0-10cmbs	7/15/10	2	Bottle Glass, Clear	
40RE233	33	20		STP		520	500		0-15cmbs	7/15/10	1	Bottle Glass, Machine Made, Clear	
40RE233	33	20		STP		520	500		0-15cmbs	7/15/10	4	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	34	20		STP		530	515		Surf.	7/16/10	1	Bottle Glass, Machine Made, Amber	Not to be refilled and "No Deposit No Return" Embossed. Unidentified Maker's Mark.
40RE233	35	20		STP		470	515		Surf.	7/16/10	1	Bottle Glass, Machine Made, Amber	LYSOL Embossed
40RE233	35	20		STP		470	515		Surf.	7/16/10	9	Bottle Glass, Pharmaceutical with Embossed Letters on Sides	Clear, mend. Complete with screw cap. "Creomulsion /for/coughs due to colds" Embossed. Hazel-Atlas Maker's Mark (1920-1964)
40RE233	36	20		STP		455	515		Surf.	7/16/10	1	Bottle Glass, Clear	Hazel-Atlas Maker's Mark (1920-1964)
40RE233	38	20		STP		515	470		Surf.	7/16/10	2	Sheet of Iron/Steel	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	38	20		STP		515	470		Surf.	7/16/10	1	Bottle Glass, Panelled	Clear. Owens Illinois Glass Co. Maker's Mark (1929- 1954).
40RE233	39	20		STP		545	500		Surf.	7/16/10	1	Bottle Glass, Clear	
40RE233	39	20		STP		545	500		Surf.	7/16/10	1	Bottle Glass, Milk Glass	
40RE233	40	20		STP		500	485		Surf.	7/16/10	1	Bottle Glass, Machine Made, Amber	Clorox Embossed throughout base. Owens Illinois Glass Co. Maker's Mark (1929- 1954)
40RE233	40	20		STP		500	485		Surf.	7/16/10	2	Bottle Glass, Machine Made, Clear	
40RE233	40	20		STP		500	485		Surf.	7/16/10	1	Concrete	
40RE233	40	20		STP		500	485		Surf.	7/16/10	4	Coal	
40RE233	40	20		STP		500	485		Surf.	7/16/10	1	Asbestos Siding	Tile
40RE233	40	20		STP		500	485		Surf.	7/16/10	1	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	41	20		STP		515	485		Surf.	7/16/10	3	Bottle Glass, Machine Made, Amber	Mend. "No Deposit No Return" and "Not to be Refilled" embossed.
40RE233	42	20		STP		530	470		Surf.	7/16/10	1	Bottle Glass, Amber	
40RE233	45	16			Unit 1	508	559	1	0-24cmbd	7/16/10	4	Brick, Unidentified	
40RE233	45	16			Unit 1	508	559	1	0-24cmbd	7/16/10	11	Glass, Unmeasured Flat	
40RE233	47	20		STP		485	455		Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Duraglass embossed along base (1940-). Owens Illinois Glass Co. Maker's Mark (1929- 1954)
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	7	Brick, Unidentified	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	2	Brick, Unidentified	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	1	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	2	Nail, Wire Common 8 Penny, 2.25 to 1.5 in.	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	2	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	3	Nail, Wire Common Fragment	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	90	Roofing Tile	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	6	Roofing Tile	
40RE233	56	16		STP		530	560		0-17cmbs	7/15/10	1	Bottle Glass, Machine Made, Clear	
40RE233	56	16		STP		530	560		0-17cmbs	7/15/10	5	Bottle Glass, Machine Made, Amber	
40RE233	57	16		STP		530	520		0-16cmbs	7/15/10	2	Iron/ Steel, Unidentified/ Corroded	Strap, Metal
40RE233	57	16		STP		530	520		0-16cmbs	7/15/10	2	Coal	
40RE233	57	16		STP		530	520		0-16cmbs	7/15/10	7	Bottle Glass, Machine Made, Clear	
40RE233	57	16		STP		530	520		0-16cmbs	7/15/10	2	Bottle Glass, Machine Made, Amber	
40RE233	57	16		STP		530	520		0-16cmbs	7/15/10	1	Bottle Glass, Milk Glass	
40RE233	58	16		STP		530	510		0-20 cmbs	7/15/10	1	Bottle Glass, Green	
40RE233	58	16		STP		530	510		0-20 cmbs	7/15/10	1	Bottle Glass, Amber	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	58	16		STP		530	510		0-20 cmbs	7/15/10	5	Bottle Glass, Machine Made, Clear	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Nail, Wire Common Fragment	
40RE233	84	17			Unit 3	458	506	2	30- 40cmbd	7/19/10	3	Nail, Wire Common Fragment	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Button, Other Ceramic	.61 inch diameter
40RE233	45	16			Unit 1	508	559	1	0-24cmbd	7/16/10	29	Bottle Glass, Amber	
40RE233	45	16			Unit 1	508	559	1	0-24cmbd	7/16/10	41	Bottle Glass, Clear	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	2	Bottle Glass, Amber	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	1	Bottle Glass, Amber	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	15	Bottle Glass, Clear	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	1	Bottle Glass, Machine Made, Clear	4 ounces embossed on base. Maker's Mark Unidentified.
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Bottle Glass, Amber	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	10	Bottle Glass, Clear	
40RE233	84	17			Unit 3	458	506	2	30- 40cmbd	7/19/10	4	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	50	None			Unit 4			1	0-19cmbd	7/19/10	1	Bottle Glass, Machine Made, Clear	Salt/Pepper shaker, with metal lid
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	101	Coal	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	5	Coal	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	1	Iron/ Steel, Unidentified/ Corroded	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	1	Non Iron/ Steel, Unidentified	
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	6	Slag	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Coal	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	5	Iron/ Steel, Unidentified/ Corroded	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Leather, Unidentified	
40RE233	50	None			Unit 4			1	0-19cmbd	7/19/10	1	Coal	
40RE233	44	20			Unit 2	509	493.5	2	20- 30cmbd	7/16/10	1	Cosmetic Jar, Milk Glass	Complete with screw cap. Hazel- Atlas Glass Co. Maker's Mark (1920- 1964)
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	1	Plastic Item, Unidentified	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Bolts	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	1	Marbles, Machine Made	
40RE233	48	17			Unit 3	458	506	1	0-30cmbd	7/19/10	2	Tin/ Aluminum Foil	
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Clear	
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Green	Round medicine bottle, screw cap; Owens Illinois Bottling Co. Plant 4, Year 4, Mold 8. Plant closed in mid-40's.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Hot sauce bottle; Ball Bros. Glass Company/Bal I Corporation, until 1988
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Condiment Bottle/Jar; Metro Glass Co. manufactured 1935-1949.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Screw top, graduated medicine bottle; Embossed numbers, "Duraglas", "Owens" ... Owens Bottle Co. Plant 18 (Columbus, OH). Made in 1944.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Condiment jar; Owens Illinois, Plant 7 (Altm, IL) Made 1934- present. Patent Pending.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Green	Embossed "Duraglas", Owens Illinois Bottle Co. Plant 4 (Clarksburg, W. VA), Year 4, Mold 4.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Cosmetic Jar, Milk Glass	Cold cream; "11 - Made in USA 3" on base.
40RE233	37	20		asurf					Surf.	7/16/10	1	Ironstone, Plain	white
40RE233	37	20		asurf					Surf.	7/16/10	1	Tableware Glass, Unidentified, Molded	Bowl/dish fragment
40RE233	37	20		asurf					Surf.	7/16/10	1	Cosmetic Jar, Milk Glass	Cold cream; no maker's mark
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Extract/tonic bottle; Glass Containers Corporation 1945- present. Embossed "GC 5 2514 4 FL. OZS"
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Clear	Base fragment; "MC Duraglas" embossed. Owens Illinois Glass Co. Plant 18 (Columbus, OH), Year 2. 1932-1948.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Screw top vaseline jar; Chesebrough Manufacturin g Co. until 1955, when company became Chesebrough- Ponds.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Screw top jar; Owens Illinois Glass Co. Plant 7 (Altm. IL), Year 4, Mold 12. 1930- present.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	mend, Fruit jar; embossed "191-16 4-H Ball"; Ball Company

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	2	Bottle Glass, Machine Made, Clear	Extract bottle; Owens Illinois Glass Co. Plant 7 (Altm. IL) 1930- present. Design Patent 94, 747.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Amber	Screw top jar, with metal cap and petroleum jelly still present. Chesebrough Manufacturin g Co. until 1955 when company became Chesebrough- Ponds.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Milk Bottle	Mend, Embossed "This bottle property of and filled by French Broad Dairy. Not to be Sold. Knoxville, TN. One Pint Liquid." Fairmount Glass Works Company.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Medium condiment Jar; Knox Glass Bottle Co. of Mississippi. Jackson, MS 1932-1953

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Mend, 6 oz. Grapette Soda bottle 1941; Owens Illinois, Plant 9 (Streator, IL). B.T. Fooks Manufacturin g Co. Slogan "Close to Nature" in use 1940- 1943.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Small condiment bottle; Armstrong Cork Company (Glass Division), 1938-1969. Dunkirk, Indiana.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Small medicine bottle; Embossed "2 FL. OZ". Owens Illinois Glass Co. post 1954.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Petroleum Jelly. Chesebrough Manufacturin g Co. New York.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Small, slender extract/medic ine bottle; Mfg. by Owens Illinois Glass Co. in Clarksburg, W. VA in 1935.

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Embossed "Moroline", petroleum Jelly jar; early form of jar; The Plough Company 1931-1991.
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Embossed "Fitch", tonic bottle
40RE233	37	20		asurf					Surf.	7/16/10	1	Tableware Glass, Unidentified, Molded	
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Small medicine bottle with plastic screw cap present; Obear-Nester Glass Co. 1915-1971
40RE233	37	20		asurf					Surf.	7/16/10	1	Cosmetic Jar, Milk Glass	Cold cream jar; Patent Pending, no maker's mark

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE233	37	20		asurf					Surf.	7/16/10	1	Cosmetic Jar, Milk Glass	Cold cream jar, no lid. Anchor Hocking (1920-1964)
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Milk Glass	Partial lid fragment; Embossed "Paris, Tenn. U.S..."
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Milk Glass	jar lid
40RE233	37	20		asurf					Surf.	7/16/10	1	Tableware Glass, Milk Glass	lid
40RE233	37	20		asurf					Surf.	7/16/10	1	Bottle Glass, Machine Made, Clear	Medium syrup or liquor bottle
40RE233	37	20		asurf					Surf.	7/16/10	1	Iron/ Steel, Unidentified/ Corroded	Electric junction box
40RE233	37	20		asurf					Surf.	7/16/10	2	Metal Lids, Other	corroded
40RE233	37	20		asurf					Surf.	7/16/10	1	Screw Cap, Plastic	

40RE233 (2010 update and
boundary expansion)

State Site #	Field Bag #	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level #	Level Depth	Field Date	LCount	LWeight	LDescription	LGeneralMaterial
40RE233	26	18		STP		500	520		0-15cmbs	7/15/10	2	103.9	Unmodified Stone	Limestone
40RE233	38	20		STP		515	470		Surf.	7/16/10	1	69.9	Unmodified Stone	Slate
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	1	2.7	Unmodified Stone	Limestone
40RE233	43	20			Unit 2	509	492.5	1	0-20cmbd	7/16/10	3	7.8	Unmodified Stone	Slate
40RE233	46	16			Unit 1	508	559	2	24-34cmbd	7/16/10	1	0.1	Shatter	Chert
40RE233	50	None			Unit 4			1	0-19cmbd	7/19/10	1	56.2	Unmodified Stone	Limestone
40RE233	58	16		STP		530	510		0-20 cmbs	7/15/10	1	2.7	Unmodified Stone	Quartzite

40RE233
(2010)

40RE233
(1995)

ROANE

NAME/FIELD #: FN-10

CULTURAL AFFILIATION:
HISTORIC NON-INDIAN

HISTORIC DATE:
1933-Present

HUMAN REMAINS: Unknown
OWNERSHIP: Federal Government
PHYSIOGRAPHY: Valley and Ridge
ELEVATION: [REDACTED] Exempted from Disclosure by Statute
[REDACTED] AMSL

USGS QUAD MAP: 130NW ELVERTON

DRAINAGE: 19C

SITE SIZE: Length: 250 Width: 250 Area: 62500
AREA BASIS: Estimated from map Boundaries Uncertain

LAND USE/GROUND COVER: Grassland/Pasture

SITE CONDITION at time of this survey: Less than 25% Disturbed

INVESTIGATION LEVEL: Surface Collection (intensive, may include shovel testing)

FN-10

Exempted from
Disclosure by Statute

TDOA SITE SURVEY FORM--PART C

HISTORIC SITE/COMPONENT

SITE NO.: 40 **RE233**
REPORT DATE: ____/____/____

1. SITE DESCRIPTION/COMMENTS:

Extensive complex of eight or more [

Obtrusive elements consist of

unclear at this time, but is clearly associated with Manhattan project or subsequent AEC/DOE activity.

2. OWNERSHIP:

Name: U.S. Dept. of Energy
Address: Oak Ridge, TN.

Phone:
Tenant:

3. SITE HISTORY: probably constructed late 1942-1946, appears to have been gone by early 1950's. Function unknown at this time. Possibly associated with the Jones Trailer Camp, one of the labor camps used during K-25 construction, early operations, in the 1943-46 period. May also have been cluster of offices or stores for a project subcontractor.

4. PERSONS ASSOCIATED:

5. ASSOCIATED BUILDINGS (EXTANT OR PREVIOUSLY EXISTING):

6. BIBLIOGRAPHIC REFERENCES:

Pace, Robert A.
1995 Archaeological Reconnaissance of Proposed SR58-SR95 Modifications. DuVall and Associates, Inc. for Tennessee Department of Transportation.

7. LOCATION OF ADDITIONAL INFORMATION:

REPORTER: R. A. Pace

TDOA SITE SURVEY FORM--PART E

COLLECTIONS

SITE NO.: 40 RE233

REPORT DATE: 8/20/995

ARTIFACT COLLECTIONS

REPOSITORY: DuVall and Associates, 407 Church St., Franklin, TN.

ACCESSION NUMBERS: Not yet Assigned

COLLECTION SIZE:

COMMENTS:

All artifacts and project records to be turned over to Tennessee Division of Archaeology, 5103 Edmondson Pike, Nashville, for long term curation at conclusion of project.

no artifact collections from this site.

PHOTOGRAPHS

REPOSITORY: As above

ACCESSION NUMBERS:

MEDIA TYPE(S):

QUANTITY:

COMMENTS:

REPORTER: R. A. Pace

ARCHAEOLOGICAL SITE SURVEY RECORD
Tennessee Department of Environment and Conservation
Division of Archaeology

Cole Building #3
1216 Foster Avenue
Nashville, Tennessee 37243
Phone (615) 741-1588 Fax (615) 741-7329



2010 update: 40RE577
Date Assigned: 2/7/2008

Submittal of an archaeological site survey record constitutes a request for a state number on a new site, or revises information on a previously recorded site. Send by mail to the above address, or as an attached email document to Suzanne.Hoyal@state.tn.us. A copy of the completed record will be returned to the reporter.

Our office does not define a site by an arbitrary number of artifacts or other specific criteria. Request a preliminary review if site status is uncertain or if additional guidance is needed.

The site record can be filled in with pencil or electronically. Double click on check box to access options. If the format is not compatible with your system, please request an alternative method of submittal.

Site name or field number: ED 3 in 2008; Happy Valley worker camp - boundary expanded in 2009 and 2010

Cultural Affiliation:

- | | | |
|--|---|--|
| <input type="checkbox"/> 0001 Undetermined Prehistoric | <input type="checkbox"/> 0009 Early Gulf Formational | <input type="checkbox"/> 0017 Early Mississippian |
| <input type="checkbox"/> 0002 Paleoindian | <input type="checkbox"/> 0010 Middle Gulf Formational | <input type="checkbox"/> 0018 Middle Mississippian |
| <input type="checkbox"/> 0003 Transitional Paleo | <input type="checkbox"/> 0011 Late Gulf Formational | <input type="checkbox"/> 0019 Late Mississippian |
| <input type="checkbox"/> 0004 Archaic | <input type="checkbox"/> 0012 Woodland | <input type="checkbox"/> 0020 Protohistoric |
| <input type="checkbox"/> 0005 Early Archaic | <input type="checkbox"/> 0013 Early Woodland | <input type="checkbox"/> 0021 Contact Period Indian |
| <input type="checkbox"/> 0006 Middle Archaic | <input type="checkbox"/> 0014 Middle Woodland | <input type="checkbox"/> 0022 Historic Indian |
| <input type="checkbox"/> 0007 Late Archaic | <input type="checkbox"/> 0015 Late Woodland | <input checked="" type="checkbox"/> 0023 Historic Non-Indian |
| <input type="checkbox"/> 0008 Gulf Formational | <input type="checkbox"/> 0016 Mississippian | <input type="checkbox"/> 0024 Pleistocene Fauna |

This block is for Division use only

Site Type: Historic - military long term encampment - Manhattan Project Era site

County: Roane

Physiographic Div.: Valley and Ridge

Drainage: 19C

Elevation: [] ft. AMSL Exempted from Disclosure by Statute

USGS 7.5' quads: Elverton, Tenn., 130 NW; 1968 photorevised 1990; 20 ft. contour intervals and Bethel Valley, Tenn., 130 NE; 1968 photorevised 1998; 20 ft. contour intervals

[

Exempted from
Disclosure by
Statute

see reporter's maps for scale and expanded site boundary

(2010 update and boundary expansion)

Date Range (historic sites only):		
<input type="checkbox"/> 02 Pre-1770	<input type="checkbox"/> 05 1861-1865	<input checked="" type="checkbox"/> 08 1933-present
<input type="checkbox"/> 03 1770-1819	<input type="checkbox"/> 06 1866-1900	
<input type="checkbox"/> 04 1820-1860	<input type="checkbox"/> 07 1901-1932	
Human Remains:		
<input checked="" type="checkbox"/> 00 Unknown	<input type="checkbox"/> 02 Isolated Intact Burial(s)	<input type="checkbox"/> 04 Absent (historic sites only)
<input type="checkbox"/> 01 Scattered Surface Remains	<input type="checkbox"/> 03 Cemetery	<input type="checkbox"/> 05 Unknown, but likely
Ownership:		
<input type="checkbox"/> 02 Private Individual/Corporation	<input type="checkbox"/> 04 State of Tennessee	
<input type="checkbox"/> 03 Local Government	<input checked="" type="checkbox"/> 05 Federal-TVA, COE, etc.	
Site Size (Long and short axis, in meters): 1700 m x 380 m +		
Basis for Size Estimate:		
<input type="checkbox"/> 01 Taped	<input type="checkbox"/> 03 Guessed	<input checked="" type="checkbox"/> 05 Estimated from map
<input type="checkbox"/> 02 Paced	<input type="checkbox"/> 04 Transit/alidade	
Boundary:		
	<input checked="" type="checkbox"/> Partial (explain in site description)	<input type="checkbox"/> Inclusive
Land Use/Ground Cover:		
<input type="checkbox"/> 01 Grassland/Pasture	<input type="checkbox"/> 05 Improved Forest/Orchard	<input type="checkbox"/> 09 Roadway
<input type="checkbox"/> 02 Cultivation	<input type="checkbox"/> 06 Intermittent Flooding	<input type="checkbox"/> 10 Open and Eroded
<input checked="" type="checkbox"/> 03 Secondary Growth	<input type="checkbox"/> 07 Inundated/Shoreline	<input type="checkbox"/> 99 Other (explain in site description)
<input checked="" type="checkbox"/> 04 Unimproved Forest	<input type="checkbox"/> 08 Urban	
Condition/Percent Disturbed:		
<input type="checkbox"/> 01 Undisturbed [excellent]	<input checked="" type="checkbox"/> 04 51-75% [fair]	<input type="checkbox"/> 07 Percent Unknown
<input type="checkbox"/> 02 <25% [very good]	<input type="checkbox"/> 05 76-99% [poor]	
<input type="checkbox"/> 03 26-50% [good]	<input type="checkbox"/> 06 Destroyed	
Level of Investigation:		
<input type="checkbox"/> 01 No Collection	<input type="checkbox"/> 04 Surface Collection + Test Units	<input type="checkbox"/> 06 Excavation Program
<input type="checkbox"/> 02 Surface Collection (grab bag)	<input checked="" type="checkbox"/> 05 Extensive Testing Program (Phase II)	<input type="checkbox"/> 07 Total Excavation
<input type="checkbox"/> 03 Surface Collection (intensive, may include shovel tests)		
Reporter Type:		
<input checked="" type="checkbox"/> 01 Private Consulting Firm	<input type="checkbox"/> 04 Amateur Society Member	<input type="checkbox"/> 07 Student (volunteered rpt.)
<input type="checkbox"/> 02 Agency or Non-educ. Inst.	<input type="checkbox"/> 05 Landowner	<input type="checkbox"/> 08 Professional (volunt'd rpt.)
<input type="checkbox"/> 03 Educational Institution	<input type="checkbox"/> 06 Private Individual	
Last Day of Investigation: Month July Day 28 Year 2010 <input type="checkbox"/> New Site <input checked="" type="checkbox"/> Previously Recorded		

In addition to the check box pages, please include:

- USGS 7.5' topographic map with site boundary and scale (place multiple sites on a single map when possible)
- Descriptive page(s) with the following:
 - field number and/or site name on each page
 - landowner, tenant, or easement holder
 - verbal directions to the site (if appropriate or helpful in rural areas)
 - landform, setting, distance and direction to water
 - surface conditions, level of survey, and explanation for limitations in determining site boundary
 - nature and extent of past and anticipated disturbance
 - cultural affiliation, site type, features, table and summary of observed/collected artifacts, and site map, if available
 - for prehistoric sites cultural affiliation must be supported by presence of temporally sensitive artifact(s)
 - for historic sites a pre-1933 occupation date should be established using features, maps, deeds, informants, etc. (the presence of a scatter with artifacts such as ceramics or bottles that **might have been** manufactured before 1933 is generally inadequate for recording a site **unless also supported by other evidence**)
 - relationship, if any, to nearby sites
 - associated history, persons, buildings
 - photo media and quantity; temporary and permanent repositories for artifacts and documentation
 - location of any additional information such as reports, maps, local informants, etc.
 - title, author, and date of the report in which the site is or will be reported
 - reporter name, affiliation, address, phone, fax, email, and date of submittal

Do not put headings followed by empty space for items that are not applicable. Electronic narrative should be sent as a Word document; maps as JPEG or PDF. Electronic submittals will be edited to reduce space.

40RE577 (2010 update
and boundary expansion)

Field number: Site ED3

Landowner: Department of Energy

Directions: The site surveyed is located [Exempted from Disclosure by Statute]
in Oak Ridge, Roane Co., Tennessee.

Landform and distance/direction to water: The site surveyed is located on [Exempted from Disclosure by Statute]
[Exempted from Disclosure by Statute] [Exempted from Disclosure by Statute] is also located on
[Exempted from Disclosure by Statute] [Exempted from Disclosure by Statute]
[Exempted from Disclosure by Statute]

Survey purpose, methods, and limitations in determining site boundary: A portion of the Happy Valley worker camp stood in the area of the survey between 1943 and 1947. In 2008 and 2009 Phase I level surveys were carried out to see if any remains of Happy Valley were intact on 181 acres of Parcel ED-3. Remains of Happy Valley were located. The current 2010 survey and testing investigated an additional 60 acres southwest of the previous survey area. This work was carried out to locate further remains of Happy Valley and to assess the integrity and extent of the archaeological remains of the site. More archaeological remains were located and the southwestern boundary of the site was extended. There was little ground surface visibility at the time of investigation. The presence and absence of building and sewer remains helped determine the boundaries of the site. Additionally, surface collection and shovel tests at regular 30-meter intervals determined site content, depth, and limits. Twenty-two 1x1 meter test units were also excavated throughout the site to determine its integrity. Although separated by 300 meters, this site is related to 40RE233 (the southernmost portion of the K-25 worker camp).

Past and anticipated disturbance: Much of the site was demolished in 1947. Some utility lines have been set up within the parcel since the demolition. Development of the parcel is possible in the future.

Cultural affiliation, site type, date range, features, artifact summary: Happy Valley was a worker camp that was established in 1943 to assist in the construction of the K-25 facility in Oak Ridge. The town was demolished in 1947 when the workers were no longer needed. The town is a historic, Manhattan Project Era site. Structure foundations and sewer system remains from Happy Valley were found throughout most of the parcel. During the current survey two artifact concentrations and six features (mess hall foundation, sewer pipes, and concrete walls) were located within parcel. See attached artifact table.

Location of additional information: J.A. Jones Construction Maps (1944) are located at the DOE. New South possesses copies of some of the construction maps.

Photo media/quantity; repositories: 140 Digital. Temporary repository - New South Associates., Permanent repository - DOE

Report: "Phase I Archaeological Survey, Phase II Archaeological Testing, and Historic Assessment of the Happy Valley Worker Camp", 9/30/10, by Diana Valk and David Price. Prepared by New South Associates for SAIC

Site reporter: Diana Valk, New South Associates, 6150 East Ponce de Leon Ave, Stone Mountain, Georgia 30083, 770-498-1455 x129, Fax: 770-465-1456.

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE577
(2010 update and
boundary expansion)

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] Exempted
from
Disclosure
by Statute

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE577
(2010 update and
boundary expansion)

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] Exempted
from
Disclosure by
Statute

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE577
(2010 update and
boundary expansion)

[

] Exempted
from
Disclosure
by Statute

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State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	1	14		STP					Surf.	7/12/10	3	Ironstone, Plain	
40RE577	1	14		STP					Surf.	7/12/10	1	Bottle Glass, Milk Bottle	Embossed "ONDAL"; Maker's Mark Unidentified
40RE577	1	14		STP					Surf.	7/12/10	2	Ironstone, Plain	Coffee Cup
40RE577	1	14		STP					Surf.	7/12/10	2	Bottle Glass, Machine Made, Clear	Embossed "Duraglass" Owens- Illinois Glass Co. Maker's Mark (1929- 1954)
40RE577	1	14		STP					Surf.	7/12/10	1	Bottle Glass, with 'Federal Law Prohibits Reuse...'	Clear; "One Pint"
40RE577	1	14		STP					Surf.	7/12/10	1	Bottle Glass, Machine Made, Clear	
40RE577	2	21		STP		500	500		0-20 cmbs	7/13/10	1	Bottle Glass, Embossed Letters	Embossed letters "Brockur..."

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	3	21		STP		500	470		0-16cmbd	7/13/10	3	Insulator, Porcelain	KNOX recess embossed; Knox Porcelain Corp. (1936- 1975)
40RE577	67	None			Unit 10				1 0-42cmbd	7/21/10	2	Brick, Unidentified	
40RE577	67	None			Unit 10				1 0-42cmbd	7/21/10	1	Glass, Flat, 2.1 to 2.19 mm	
40RE577	67	None			Unit 10				1 0-42cmbd	7/21/10	2	Mortar	sand
40RE577	67	None			Unit 10				1 0-42cmbd	7/21/10	1	Nail, Unidentified Fragment	
40RE577	72	None			Unit 11				1 0-20cmbd	7/22/10	1	Nail, Unidentified Fragment	
40RE577	70	None			Unit 12				26- 2 36cmbd	7/22/10	1	Nail, Unidentified Fragment	
40RE577	69	None			Unit 12				1 0-26cmbd	7/22/10	2	Nail, Wire Common 12 Penny, 3.0 to 3.25 in.	
40RE577	69	None			Unit 12				1 0-26cmbd	7/22/10	4	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	69	None			Unit 12			1	0-26cmbd	7/22/10	3	Nail, Wire Common 8 Penny, 2.25 to 1.5 in.	
40RE577	69	None			Unit 12			1	0-26cmbd	7/22/10	1	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE577	69	None			Unit 12			1	0-26cmbd	7/22/10	1	Nail, Wire Common Fragment	
40RE577	74	None			Unit 13			1	0-25 cmbd	7/22/10	1	Glass, Flat, 1.7 to 1.79 mm	
40RE577	74	None			Unit 13			1	0-25 cmbd	7/22/10	1	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE577	76	None			Unit 14			1	15-25cmbd	7/23/10	1	Nail, Unidentified Fragment	
40RE577	76	None			Unit 14			1	15-25cmbd	7/23/10	1	Nail, Wire Common 12 Penny, 3.0 to 3.25 in.	
40RE577	76	None			Unit 14			1	15-25cmbd	7/23/10	2	Nail, Wire Common Fragment	
40RE577	76	None			Unit 14			1	15-25cmbd	7/23/10	1	Nail, Wire Finish Fragment	
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	1	Nail, Other, Tack	
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	3	Nail, Unidentified Fragment	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	2	Nail, Wire Common 16 Penny, 3.25 to 3.5 in.	
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	2	Nail, Wire Common 30 Penny, 4.0 to 4.5 in.	
40RE577	78	None			Unit 15				15- 2 25cmbd	7/23/10	2	Nail, Wire Common 30 Penny, 4.0 to 4.5 in.	
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	2	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	2	Nail, Wire Common Fragment	
40RE577	78	None			Unit 15				15- 2 25cmbd	7/23/10	1	Nail, Wire Common Fragment	clenched
40RE577	78	None			Unit 15				15- 2 25cmbd	7/23/10	4	Nail, Wire Common Fragment	
40RE577	78	None			Unit 15				15- 2 25cmbd	7/23/10	1	Nail, Wire Common Fragment	bent to 45 degree- angle.
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	3	Nail, Wire Common, Unmeasured	Bent to 45 degree- angle.
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	8	Nail, Wire Common, Unmeasured	clinch

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Nail, Wire Common 16 Penny, 3.25 to 3.5 in.	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	3	Nail, Wire Common 20 Penny, 3.5 to 4.0 in.	
40RE577	49	21		STP		500	490		0-32cmbs	7/16/10	1	Sewer Tile/ Pipe Fragment, Ceramic	
40RE577	49	21		STP		500	490		0-32cmbs	7/16/10	3	Brick, Machine- Made	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	7	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	4	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Nail, Wire Common Fragment	clinched
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	11	Nail, Wire Common Fragment	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Nail, Wire Finish 12 Penny, 3.0 to 3.25 in.	
40RE577	82	None			Unit 18				20- 2 30cmbd	7/26/10	1	Nail, Unidentified Fragment	
40RE577	52	21		STP		490	500		0-10cmbs	7/16/10	1	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	88	9			Unit 23			1	0-25cmbd	7/27/10	1	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	2	Nail, Wire Common 12 Penny, 3.0 to 3.25 in.	
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	9	Nail, Wire Common 6 Penny, 1.75 to 2.0 in.	
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	65	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	17	Nail, Wire Common Fragment	
40RE577	59	None			Unit 5			2	25-35 cmbd	7/20/10	1	Nail, Cut fragment	
40RE577	51	None			Unit 5			1	0-25cmbd	7/19/10	1	Nail, Unidentified Fragment	
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	4	Nail, Unidentified Fragment	
40RE577	61	None			Unit 6			2	29-39cmbd	7/20/10	1	Nail, Unidentified Fragment	
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	7	Nail, Wire Common 2 Penny, 0.0 to 1.0 in.	likely roofing nail

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	60	None			Unit 6				1 0-29cmbd	7/19/10	1	Nail, Wire Common 20 Penny, 3.5 to 4.0 in.	
40RE577	61	None			Unit 6				29- 2 39cmbd	7/20/10	1	Nail, Wire Common 20 Penny, 3.5 to 4.0 in.	
40RE577	62	None			Unit 6				39- 3 49cmbd	7/20/10	1	Nail, Wire Common 7 Penny, 2.0 to 2.25 in.	
40RE577	60	None			Unit 6				1 0-29cmbd	7/19/10	35	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	corroded
40RE577	61	None			Unit 6				29- 2 39cmbd	7/20/10	1	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE577	60	None			Unit 6				1 0-29cmbd	7/19/10	1	Sewer Tile/ Pipe Fragment, Ceramic	
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	3	Brick, Handmade	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	1	Brick, Unidentified	
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	1	Glass, Flat, 2.7 to 2.79 mm	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	1	Glass, Flat, 3.0 to 3.09 mm	
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	3	Nail, Unidentified Fragment	Corroded

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	1	Nail, Wire Common 5 Penny, 1.5 to 1.75 in.	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	2	Nail, Wire Common 9 Penny, 2.5 to 2.75 in.	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	6	Brick, Unidentified	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	3	Brick, Unidentified	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	1	Glass, Flat, 1.5 to 1.59 mm	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	2	Glass, Flat, 1.8 to 1.89 mm	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	3	Glass, Flat, 2.0 to 2.09 mm	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	1	Glass, Flat, 2.1 to 2.19 mm	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	3	Glass, Unmeasured Flat	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	1	Nail, Cut fragment	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	4	Nail, Unidentified Fragment	corroded
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	1	Nail, Wire Common 20 Penny, 3.5 to 4.0 in.	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	2	Roofing Tile	
40RE577	65	None			Unit 9				16- 2 26cmbd	7/21/10	1	Brick, Machine- Made	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	7	Brick, Unidentified	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	5	Brick, Unidentified	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	2	Glass, Architectural, Miscellaneous	mend
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	1	Glass, Flat, 1.6 to 1.69 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	2	Glass, Flat, 1.6 to 1.69 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	3	Glass, Flat, 1.8 to 1.89 mm	
40RE577	66	None			Unit 9			3	26-36cmbd	7/21/10	1	Glass, Flat, 1.8 to 1.89 mm	
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	2	Glass, Flat, 1.9 to 1.99 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	4	Glass, Flat, 2.1 to 2.19 mm	
40RE577	66	None			Unit 9			3	26-36cmbd	7/21/10	2	Glass, Flat, 2.1 to 2.19 mm	
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	5	Glass, Flat, 2.2 to 2.29 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	6	Glass, Flat, 2.2 to 2.29 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	2	Glass, Flat, 2.5 to 2.59 mm	
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	1	Glass, Flat, 2.7 to 2.79 mm	
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	9	Glass, Flat, 2.8 to 2.89 mm	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	5	Glass, Flat, 3.0 to 3.09 mm	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	65	None			Unit 9				16-26cmbd	7/21/10	1	Nail, Cut fragment	
40RE577	66	None			Unit 9				26-36cmbd	7/21/10	2	Nail, Cut fragment	
40RE577	65	None			Unit 9				16-26cmbd	7/21/10	27	Nail, Unidentified Fragment	
40RE577	66	None			Unit 9				26-36cmbd	7/21/10	1	Nail, Unidentified Fragment	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	2	Cloth, Unidentified	
40RE577	65	None			Unit 9				16-26cmbd	7/21/10	1	Button, Other Unidentified Metal	snap, from "LEE" Jeans.
40RE577	67	None			Unit 10				1 0-42cmbd	7/21/10	1	Bottle Glass, Amber	
40RE577	68	None			Unit 10				42-52cmbd	7/21/10	1	Bottle Glass, Aqua	
40RE577	68	None			Unit 10				42-52cmbd	7/21/10	1	Bottle Glass, Clear	
40RE577	69	None			Unit 12				1 0-26cmbd	7/22/10	13	Bottle Glass, Amber	
40RE577	70	None			Unit 12				26-36cmbd	7/22/10	4	Bottle Glass, Amber	
40RE577	69	None			Unit 12				1 0-26cmbd	7/22/10	3	Bottle Glass, Clear	
40RE577	70	None			Unit 12				26-36cmbd	7/22/10	1	Bottle Glass, Clear	
40RE577	69	None			Unit 12				1 0-26cmbd	7/22/10	1	Bottle Glass, Embossed Letters	Amber
40RE577	70	None			Unit 12				26-36cmbd	7/22/10	1	Table Spoon, Metal	corroded
40RE577	74	None			Unit 13				1 0-25cmbd	7/22/10	3	Bottle Glass, Clear	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	74	None			Unit 13				0-25 1 cmbd	7/22/10	1	Bottle Glass, Machine Made, Clear	Cold cream jar; Owens Illinois (1929- 1954) maker's mark on base. Factory 7, Year 4, Mold 5
40RE577	75	None			Unit 13				25-35 2 cmbd	7/23/10	2	Bottle Glass, Machine Made, Cobalt Blue	
40RE577	74	None			Unit 13				0-25 1 cmbd	7/22/10	1	Coral	
40RE577	76	None			Unit 14				15- 1 25cmbd	7/23/10	6	Bottle Glass, Clear	
40RE577	77	None			Unit 15				1 0-15cmbd	7/22/10	1	Bottle Glass, Clear	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	85	Bottle Glass, Clear	
40RE577	80	None			Unit 17				25-35 2 cmbd	7/26/10	16	Bottle Glass, Clear	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Bottle Glass, Coca- Cola	Aqua
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	8	Bottle Glass, Machine Made, Clear	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Bottle Glass, Milk Bottle	
40RE577	79	None			Unit 17				1 0-25cmbd	7/26/10	1	Stopper, Plastic	
40RE577	83	None			Unit 19				1 0-30cmbd	7/26/10	1	Porcelain, Unidentified	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	85	None			Unit 20				0-25 1 cmbd	7/27/10	2	Bottle Glass, Machine Made, Amber	
40RE577	88		9		Unit 23				0-25cmbd	7/27/10	1	Bottle Glass, Aqua	
40RE577	88		9		Unit 23				0-25cmbd	7/27/10	3	Bottle Glass, Other	Frosted, clear
40RE577	89		13		Unit 24				0-30 1 cmbd	7/27/10	3	Ceramics, Unidentifiable	
40RE577	90		13		Unit 25				0-30cmbd	7/27/10	1	Ceramics, Unidentifiable	
40RE577	91		13		Unit 26				0-25cmbd	7/28/10	1	Bottle Glass, Clear	
40RE577	91		13		Unit 26				0-25cmbd	7/28/10	1	Stoneware, Domestic Plain Brown Salt Glazed	
40RE577	91		13		Unit 26				0-25cmbd	7/28/10	1	Whiteware, Unscaloped, Unimpressed Rim Edgware, Blue(Green or Red)	
40RE577	59	None			Unit 5				25-35 2 cmbd	7/20/10	1	Stoneware, Brown Salt Glazed, Unidentified	
40RE577	60	None			Unit 6				0-29cmbd	7/19/10	6	Bottle Glass, Clear	
40RE577	61	None			Unit 6				29- 2 39cmbd	7/20/10	1	Bottle Glass, Clear	
40RE577	60	None			Unit 6				0-29cmbd	7/19/10	1	Bottle Glass, Machine Made, Amber	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	60	None			Unit 6				1 0-29cmbd	7/19/10	1	Bottle Glass, Milk Glass	
40RE577	61	None			Unit 6				29- 2 39cmbd	7/20/10	1	Ironstone, Plain	white
40RE577	61	None			Unit 6				29- 2 39cmbd	7/20/10	1	Plastic Screw Cap for Cosmetic/ Perfume Bottle	
40RE577	60	None			Unit 6				1 0-29cmbd	7/19/10	1	Whiteware, Plain	
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	3	Bottle Glass, Aqua	
40RE577	55	None	98		Unit 7				45- 4 55cmbd	7/22/10	1	Bottle Glass, Aqua	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	1	Bottle Glass, Aqua	Screw top
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	1	Bottle Glass, Clear	Owens Bottle Company Maker's Mark on bottom
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	5	Bottle Glass, Clear	
40RE577	55	None	98		Unit 7				45- 4 55cmbd	7/22/10	1	Bottle Glass, Clear	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	10	Bottle Glass, Clear	
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	1	Bottle Glass, Embossed Letters	Aqua
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	2	Bottle Glass, Milk Glass	
40RE577	54	None			Unit 7				35- 3 45cmbd	7/21/10	1	Stoneware, Brown Salt Glazed, Unidentified	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	53	None			Unit 7				1 0-25cmbd	7/21/10	3	Stoneware, Brown Salt Glazed, Unidentified	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	1	Bottle Glass, Aqua	Embossed letters and numbers, "2"
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	4	Bottle Glass, Aqua	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	1	Bottle Glass, Aqua	
40RE577	63	None			Unit 8				27- 2 38cmbd	7/21/10	12	Bottle Glass, Clear	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	9	Bottle Glass, Clear	
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	1	Bottle Glass, Coca- Cola	Aqua
40RE577	71	None		asurf					Surf.	7/22/10	1	Bottle Glass, Machine Made, Clear	Tonic bottle, "Fitch's" embossed, screw top. F.W. Fitch Company (1892-1950)
40RE577	92				Unit 8				1 0-27cmbd	7/21/10	1	Bottle Glass, Green	Partial "Duraglas" mark. Owens Illinois Glass Co. Maker's Mark (1929- 1954).

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	4	Bottle Glass, Green	
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	1	Bottle Glass, Other	Frosted, clear.
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	1	Ceramics, Unidentifiable	
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	1	Stoneware, Domestic, Albany Slipped	
40RE577	63	None			Unit 8			2	27-38cmbd	7/21/10	1	Tableware Glass, Unidentified, Molded	
40RE577	63	None			Unit 8			2	27-38cmbd	7/21/10	1	Whiteware, Plain	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	1	Bottle Glass, Aqua	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	9	Bottle Glass, Clear	
40RE577	66	None			Unit 9			3	26-36cmbd	7/21/10	3	Bottle Glass, Clear	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	2	Bottle Glass, Embossed Letters	clear
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	7	Bottle Glass, Machine Made, Clear	
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	1	Bottle Glass, Machine Made, Green	
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	3	Bottle Glass, Machine Made, Green	
40RE577	66	None			Unit 9			3	26-36cmbd	7/21/10	1	Pearlware, Blue Underglaze Transfer Print	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	1	Pearlware, Plain	
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	1	Pearlware, Plain	white
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	2	Porcelain, Unidentified	Plain, white
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	3	Whiteware, Plain	
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	1	Whiteware, Plain	
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	2	Whiteware, Plain	
40RE577	67	None			Unit 10			1	0-42cmbd	7/21/10	1	Charcoal	
40RE577	67	None			Unit 10			1	0-42cmbd	7/21/10	1	Coal	
40RE577	67	None			Unit 10			1	0-42cmbd	7/21/10	1	Iron/ Steel, Unidentified/ Corroded	
40RE577	68	None			Unit 10			2	42- 52cmbd	7/21/10	2	Slag	
40RE577	76	None			Unit 14			1	15- 25cmbd	7/23/10	4	Clay Sample	Fired
40RE577	76	None			Unit 14			1	15- 25cmbd	7/23/10	1	Coal	
40RE577	76	None			Unit 14			1	15- 25cmbd	7/23/10	2	Slag	
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	2	Clay Sample	Fired
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	1	Coal	
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	4	Iron/ Steel, Unidentified/ Corroded	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	77	None			Unit 15			1	0-15cmbd	7/22/10	2	Rubber, Unidentified	
40RE577	78	None			Unit 15			2	15- 25cmbd	7/23/10	1	Rubber, Unidentified	
40RE577	79	None			Unit 17			1	0-25cmbd	7/26/10	1	Charcoal	
40RE577	80	None			Unit 17			2	25-35 cmbd	7/26/10	3	Charcoal	
40RE577	79	None			Unit 17			1	0-25cmbd	7/26/10	1	Coal	
40RE577	80	None			Unit 17			2	25-35 cmbd	7/26/10	1	Coal	
40RE577	79	None			Unit 17			1	0-25cmbd	7/26/10	2	Iron/ Steel, Unidentified/ Corroded	
40RE577	79	None			Unit 17			1	0-25cmbd	7/26/10	1	Rubber, Unidentified	
40RE577	82	None			Unit 18			2	20- 30cmbd	7/26/10	8	Iron/ Steel, Unidentified/ Corroded	
40RE577	85	None			Unit 20			1	0-25 cmbd	7/27/10	1	Coal	
40RE577	86	None			Unit 20			2	25-35 cmbd	7/27/10	2	Iron/ Steel, Unidentified/ Corroded	
40RE577	87	9			Unit 22			1	0-30cmbd	7/27/10	3	Coal	
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	1	Clay Sample	Fired
40RE577	89	13			Unit 24			1	0-30 cmbd	7/27/10	1	Slag	
40RE577	51	None			Unit 5			1	0-25cmbd	7/19/10	2	Coal	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	51	None			Unit 5			1	0-25cmbd	7/19/10	1	Rubber, Unidentified	Vulcanized; burned and dried out, mend
40RE577	51	None			Unit 5			1	0-25cmbd	7/19/10	13	Slag	
40RE577	61	None			Unit 6			2	29- 39cmbd	7/20/10	1	Charcoal	
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	5	Coal	
40RE577	61	None			Unit 6			2	29- 39cmbd	7/20/10	4	Coal	
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	8	Slag	concretions
40RE577	54	None			Unit 7			3	35- 45cmbd	7/21/10	14	Iron/ Steel, Unidentified/ Corroded	
40RE577	53	None			Unit 7			1	0-25cmbd	7/21/10	1	Iron/ Steel, Unidentified/ Corroded	Threaded Pipe
40RE577	53	None			Unit 7			1	0-25cmbd	7/21/10	1	Hinge	Hinge, flower motif
40RE577	63	None			Unit 8			2	27- 38cmbd	7/21/10	1	Glass, Unidentified	Blue; Decorative Item
40RE577	63	None			Unit 8			2	27- 38cmbd	7/21/10	3	Iron/ Steel, Unidentified/ Corroded	
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	2	Iron/ Steel, Unidentified/ Corroded	
40RE577	65	None			Unit 9			2	16- 26cmbd	7/21/10	1	Coal	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	66	None			Unit 9				26- 36cmbd	7/21/10	1	Glass, Unidentified	melted
40RE577	65	None			Unit 9				16- 26cmbd	7/21/10	19	Iron/ Steel, Unidentified/ Corroded	
40RE577	79	None			Unit 17				0-25cmbd	7/26/10	1	Comb, Hard Rubber	
40RE577	54	None			Unit 7				35- 45cmbd	7/21/10	1	Bullet	Brass, no casing
40RE577	65	None			Unit 9				16- 26cmbd	7/21/10	1	Bullet	Lead, .30 caliber
40RE577	68	None			Unit 10				42- 52cmbd	7/21/10	2	Metal Object, Unidentified	Corroded, concretion
40RE577	72	None			Unit 11				0-20cmbd	7/22/10	1	Chimney Glass, Plain Top	light bulb/lamp
40RE577	73	None			Unit 11				20- 30cmbd	7/22/10	2	Chimney Glass, Plain Top	light bulb/lamp
40RE577	70	None			Unit 12				26- 36cmbd	7/22/10	1	Marbles, Handmade Glass	
40RE577	69	None			Unit 12				0-26cmbd	7/22/10	1	Metal Object, Unidentified	Ring/fastener
40RE577	69	None			Unit 12				0-26cmbd	7/22/10	1	Tin Can, Modern Crimped Top	mend
40RE577	74	None			Unit 13				0-25 cmbd	7/22/10	5	Chimney Glass, Plain Top	lamp
40RE577	75	None			Unit 13				25-35 cmbd	7/23/10	1	Chimney Glass, Plain Top	lamp
40RE577	81	None			Unit 18				0-20cmbd	7/26/10	1	Electrical Item, Plastic, Unidentified	
40RE577	59	None			Unit 5				25-35 cmbd	7/20/10	10	Metal Object, Unidentified	Corroded concretions
40RE577	60	None			Unit 6				0-29cmbd	7/19/10	1	Chimney Glass, Plain Top	

State Site Num	Field Bag Num	Locus	Feature Num	Shovel Test	Unit	NCoo rd	ECoor d	Level Num	Level Depth	FieldDate	Hist Count	HistArtifactName	HistNotes
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	1	Non-Electrical Wire	corroded
40RE577	63	None			Unit 8			2	27-38cmbd	7/21/10	1	Bolts	corroded
40RE577	63	None			Unit 8			2	27-38cmbd	7/21/10	1	Chimney Glass, Plain Top	lamp
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	1	Marbles, Machine Made	
40RE577	92				Unit 8			1	0-27cmbd	7/21/10	1	Toy Car & Truck Parts, Plastic	wheel
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	1	Chimney Glass, Plain Top	lamp
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	4	Chimney Glass, Plain Top	lamp
40RE577	64	None			Unit 9			1	0-16cmbd	7/21/10	1	Decorative/ Ornamental Item	Glass
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	1	Strap Iron/ Metal	Corroded

State Site #	Field Bag #	Locus	Feature Num	Shovel Test	Unit	NCoord	ECoord	Level #	Level Depth	Field Date	LCount	LWeight	LDescription	LGeneralMaterial
40RE577	49	21		STP		500	490		0-32cmbs	7/16/10	1	106.4		Unidentified Lithic
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	1	22.9	Unmodified Stone	Quartzite
40RE577	60	None			Unit 6			1	0-29cmbd	7/19/10	6	21.1	Unmodified Stone	Limestone
40RE577	63	None			Unit 8			2	27-38cmbd	7/21/10	2	18.8	Unmodified Stone	Sandstone
40RE577	65	None			Unit 9			2	16-26cmbd	7/21/10	13	232.4	Unmodified Stone	Sandstone
40RE577	85	None			Unit 20			1	0-25 cmbd	7/27/10	1	69.8	Unmodified Stone	Quartzite
40RE577	87	9			Unit 22			1	0-30cmbd	7/27/10	1	0.1	Flake-Interior	Chert
40RE577	87	9			Unit 22			1	0-30cmbd	7/27/10	1	0.3	Flake-Interior	Quartz
40RE577	87	9			Unit 22			1	0-30cmbd	7/27/10	1	0.7	Shatter	Quartz

40RE577 – 2009 update and boundary expansion

(2009)

Field number:^E_x

Landowner: Department of Energy

Directions: The site surveyed is located[
]in Oak Ridge, Roane Co., Tennessee.

Landform and distance/direction to water: The site surveyed is located[
] A small, [
] A [
] is also located on
[
]

Survey purpose, methods, and limitations in determining site boundary: A portion of the Happy Valley worker camp stood in the area of the survey between 1943 and 1947. In 2008 a Phase I level survey was carried out to see if any remains of Happy Valley were intact in a 111-acre portion of Parcel ED-3. Remains of Happy Valley were located. The current survey focuses on a 70-acre parcel of land directly west of the 2008 survey area. The area was surveyed to see if it contained remains of Happy Valley or other sites. More remains of Happy Valley were located and the location of these ruins expands the southwestern boundary of the site. There was little ground surface visibility at the time of investigation. The presence and absence of building and sewer remains helped determine the boundaries of the site. Additionally, surface collection and shovel tests at regular 30-meter intervals determined site content, depth, and limits within the 70-acre parcel.

Past and anticipated disturbance: Much of the site was demolished in 1947. Some utility lines have been set up within the parcel since the demolition. Development of the parcel is possible in the future.

Cultural affiliation, site type, date range, features, artifact summary: Happy Valley was a worker camp that was established in 1943 to assist in the construction of the K-25 facility in Oak Ridge. The town was demolished in 1947 when the workers were no longer needed. The town is a historic, Manhattan Project Era site. Structure foundations and sewer system remains from Happy Valley were found throughout most of the parcel. During the current survey seven small artifact concentrations, six isolated artifacts, and 20 features[
]were located within the 70-acre parcel. Most features were located in the northeastern portion of the parcel, but some isolated artifacts and sewer features were located in the western portion of the parcel. See attached artifact table and site plan.

Location of additional information: J.A. Jones Construction Maps (1944) are located at the DOE. New South possess copies of some of the construction maps.

Photo media/quantity; repositories: 63 Digital. Temporary repository – New South Associates., Permanent repository - DOE

Report: "Phase I Archaeological Survey of Parcel ED-3 and Historic Assessment of the Happy Valley Worker Camp, Roane County, Tennessee", 6/30/09, by Diana Valk, David Price, and Jennifer Matternes. Prepared by New South Associates for SAIC.

Site reporter: Diana Valk, New South Associates, 6150 East Ponce de Leon Ave, Stone Mountain, Georgia 30083, 770-498-1455 x129, Fax: 770-465-1456, 6/26/2009.

Specimen Catalog - 40RE577

County: Roane

State: Tennessee

Project: Parcel Ed 3 Extension (2009)

State Site #	Field Bag #	Excavation Unit	Horizontal Location	Vertical Location	Count/ Weight	Artifact Description	Field Date
40RE577	1	Transect 3, STP 1	Locus 7	Surface	1 (225.5g)	Bottle Glass, Machine Made, Clear, 'Owen's-Illinois Duraglas' trademark	5/21/2009
40RE577	2	Transect 7, STP 5	Locus 8	Surface	1 (357.3g)	Bottle Glass, Machine Made, Clear, Knox Glass Co. trademark. (Toulouse 1971)	5/21/2009
40RE577	3	Transect 12, STP 6	Locus 9, N500 E500	0-10cmbs	1 (0.8g)	Bottle Glass, Clear	5/22/2009
40RE577	4	Transect 12, STP 6	Locus 9, N500 E510	Surface	3 (51.6g)	Shoe Parts, Leather	5/22/2009
40RE577	5	Transect 12, STP 6	Locus 9	Surface	1 (0.6g)	Bottle Glass, Clear	5/22/2009
40RE577	5	Transect 12, STP 6	Locus 9	Surface	1 (81.9g)	Bottle Glass, Pharmaceutical, Clear, 'Owen's Illinois Duraglas' trademark (Toulouse 1971)	5/22/2009
40RE577	5	Transect 12, STP 6	Locus 9	Surface	1 (49.1g)	Bottle Glass, Pharmaceutical, Cobalt, 'Noxzema' brand start date 1914 (http://www.noxzema.com)	5/22/2009
40RE577	5	Transect 12, STP 6	Locus 9	Surface	1 (30.5g)	Light Bulb, Machine Made	5/22/2009
40RE577-IF11	6	Transect 13, STP 9	N500 E500		2 (7.5g)	Bottle Glass, Clear	5/22/2009
40RE577	7	Transect 12, STP 7	Locus 9, N470 E500	Surface	1 (315.5g)	Bottle Glass, Machine Made, Amber, Obear-Nester Glass Co. trademark (Toulouse, 1971)	5/22/2009
40RE00-IF10	8	Transect 9, STP 5	N500 E500	0-20cmbs	1 (0.8g)	Bottle Glass, Amber	5/21/2009
40RE00-IF10	8	Transect 9, STP 5	N500 E500	0-20cmbs	1 (0.6g)	Bottle Glass, Clear	5/21/2009
40RE00-IF10	9	Transect 9, STP 5	N500 E500	Surface	1 (31.8g)	Bottle Glass, Machine Made, Clear	5/21/2009
40RE00-IF9	10	Transect 5, STP 1	N500 E500	0-35cmbs	3 (23.7g)	Bottle Glass, Clear	5/21/2009
40RE00-IF8	11	Transect 15, STP 4		Surface	1 (15.7g)	Tin Can, Modern Crimped Top	5/21/2009
40RE577	12	Transect 18, STP 7	Locus 11	Surface	1 (498.9g)	Ceramic Industrial Item, Miscellaneous, Porcelain Electrical Outlet	5/26/2009

40RE577 - 2009 update and boundary expansion

Specimen Catalog - 40RE577

County: Roane

State: Tennessee

Project: Parcel Ed 3 Extension (2009)

State Site #	Field Bag #	Excavation Unit	Horizontal Location	Vertical Location	Count/Weight	Artifact Description	Field Date
40RE577	13	Transect 18, STP 4	Locus 13, N530 E470	0-20cmbs	1 (0.9g)	Bottle Glass, Clear	5/26/2009
40RE577	13	Transect 18, STP 4	Locus 13, N530 E470	0-20cmbs	1 (0.7g)	Whiteware, Plain	5/26/2009
40RE577	14	Transect 17, STP 7	Locus 13, N500 E500		1	Bottle Glass, Clear	5/26/2009
40RE577	15	Transect 17, STP 6	Locus 13, N530 E500	0-10cmbs	1	Bottle Glass, Clear	5/26/2009
40RE577	15	Transect 17, STP 6	Locus 13, N530 E500	0-10cmbs	1 (28.6g)	Charcoal	5/26/2009
40RE577	15	Transect 17, STP 6	Locus 13, N530 E500	0-10cmbs	1 (21g)	Slag	5/26/2009

40RE577 – 2009 update and boundary expansion

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE577 – 2009 update and boundary expansion

[Exempted from
Disclosure by
Statute]

Figure 1.
Location of Surveyed Parcels and 40RE577

Site 40RE577

(2008)

Field number: [Exempted from Disclosure by Statute]

Landowner: Department of Energy

Directions: The portion of the site surveyed is located[

Exempted from Disclosure by Statute
]Oak Ridge,

Roane Co., Tennessee.

Landform and distance/direction to water: The portion of the site surveyed is located[

Exempted from Disclosure by Statute

] A [

Exempted from Disclosure by Statute

]

[Exempted from Disclosure by Statute]

Survey purpose, methods, and limitations in determining site boundary: A portion of the Happy Valley worker camp stood in the parcel between 1943 and 1947. The Phase I level survey was carried out to see if any remains of Happy Valley were intact and if any other archaeological sites existed in the parcel. The site is in a wooded parcel. There was little ground surface visibility at the time of investigation. Surface collection and shovel tests at regular 30 meter intervals determined cultural material content, depth, and limits within the 108 acre parcel. Happy Valley extended outside of the limits of the west side of the current parcel, so a complete site boundary could not be determined.

Past and anticipated disturbance: Much of the site was demolished in 1947. Some utility lines have been set up within the parcel since the demolition. Development of the parcel is possible in the future.

Cultural affiliation, site type, date range, features, artifact summary: Happy Valley was a worker camp that was established in 1943 to assist in the construction of the K-25 facility in Oak Ridge. The town was demolished in 1947 when the workers were no longer needed. The town is a historic, Manhattan Project Era site. Structure foundations and sewer system remains from Happy Valley were found throughout most of the parcel. Six small artifact concentrations and 55 features (concrete floors, building foundations, manholes, fire hydrants, etc.) were located throughout the parcel to the west of a north-south running haul road. See attached artifact table and site plan.

Location of additional information: J.A. Jones Construction Maps (1944) are located at the DOE. New South possesses copies of some of the construction maps.

Photo media/quantity; repositories: 154 Digital. Temporary repository – New South Associates., Permanent repository - DOE

Report: "Phase I Archaeological Survey of Parcel ED-3 and Historic Assessment of the Happy Valley Worker Camp, Roane County, Tennessee", 2/8/08, by Diana Valk, David Price, and Jennifer Matternes. Prepared by New South Associates for SAIC.

Site reporter: Diana Valk, New South Associates, 6150 East Ponce de Leon Ave, Stone Mountain, Georgia 30083, 770-498-4155 x 129, Fax: 770-465-1456, 2/8/08.

Exempted from Disclosure by Statute - Withheld Under 10 CFR 2.390(a)(3)

40RE577 – 2009 update and boundary expansion

[

] Exempted from
Disclosure by Statute

Figure 2
Surveyed Areas Projected Over General Layout of K-25 Construction Camp Area (1944)

40RE577

Field Site #	Field Bag #	Prov Bag #	Excavation Unit	Vertical Location	Field Date	Count/Weight	Hist Name	Hist Notes	Hist Diag Notes
ED3	1	1	Zone LOCUS 1, Transect 7, STP 7	Level 10-11	1/7/08	1 (3.8g)	Bottle Glass, Clear Nail, Unidentified		
ED3	2	2	Zone IF 2, Transect 1, STP 1	Level 0-15	1/7/08	1 (4.6g)	Wire		
ED3	4	4	Zone LOCUS 1, Transect 7, STP 7+5M E	Level 0-12	1/8/08	1 (3.2g)	Asbestos Siding		
ED3	5	5	Zone IF 4, Transect 20, STP 10	Level 0-10	1/8/08	1 (482.7g)	Bottle Glass, With "Federal Law Prohibits Reuse..." Nail, Unidentified, Unmeasured		Anchor-Hocking trademark, 1938-present (Toulouse, 1971)
ED3	5	5	Zone IF 4, Transect 20, STP 10	Level 0-10	1/8/08	1 (6.9g)			
ED3	6	6	Transect 16, STP 5	Level 5-20	1/8/08	5 (74.5g)	Stone, Non-Cultural	unidentified, possibly from gravel road.	
ED3	7	7	Zone LOCUS 2, Transect 27, STP 3	Level surface	1/9/08	1 (136.6g)	Bottle Glass, Machine Made, Clear		poss. Armstrong Cork Co. trademark, date range 1938-69. (Toulouse, 1971)
ED3	8	8	Zone LOCUS 2, Transect 27, STP 4	Level 0-10	1/9/08	1 (0.4g)	Bottle Glass, Amber		
ED3	8	8	Zone LOCUS 2, Transect 27, STP 4	Level 0-10	1/9/08	1 (0.4g)	Bottle Glass, Clear		
ED3	8	8	Zone LOCUS 2, Transect 27, STP 4	Level 0-10	1/9/08	1 (0.2g)	Bottle Glass, Machine Made, Clear		
ED3	8	8	Zone LOCUS 2, Transect 27, STP 4	Level 0-10	1/9/08	1 (81.6g)	Metal Object, Unidentified	toilet paper holder possibly decorative fixture	
ED3	8	8	Zone LOCUS 2, Transect 27, STP 4	Level 0-10	1/9/08	1 (0.9g)	Plastic Item, Miscellaneous		
ED3	9	9	Zone LOCUS 2, Transect 27, STP 3	Level 5-10	1/9/08	3 (1.4g)	Bottle Glass, Clear		
ED3	9	9	Zone LOCUS 2, Transect 27, STP 3	Level 5-10	1/9/08	6 (44.9g)	Bottle Glass, Machine Made, Amber		

40RE577 (2008 site record)

40RE577

ED3	10	Zone LOCUS 5, Transect 30, 10 STP 4	Level surfa	1/9/08 1 (260.4g)	Bottle Glass, Machine Made, Amber	Owens-Illinois 'Duraglass' trademark. date range: 1940-54. (Toulouse, 1971)
ED3	10	Zone LOCUS 5, Transect 30, 10 STP 4	Level surfa	1/9/08 1 (426g)	Bottle Glass, Machine Made, Clear	Cartel Vidriera Monterrey (Mexico) trademark (Toulouse, 1971)
ED3	10	Zone LOCUS 5, Transect 30, 10 STP 4	Level surfa	1/9/08 1 (223.3g)	Bottle Glass, Machine Made, Green	
ED3	10	Zone LOCUS 5, Transect 30, 10 STP 4	Level surfa	1/9/08 1 (188.8g)	Canning Jar Glass, Mason Screw Cap	Chattanooga Bottle and Glass Co. trademark, date range: 1927-present. (Toulouse, 1971).
ED3	10	Zone LOCUS 5, Transect 30, 10 STP 4	Level surfa	1/9/08 1 (200.8g)	Canning Jar Glass, Mason Screw Cap	
ED3	11	Zone LOCUS 5, Transect 30, 11 STP 4	Level 0-35i	1/9/08 4 (5.9g)	Iron/ Steel, Unidentified/ Corroded Nail,	
ED3	11	Zone LOCUS 5, Transect 30, 11 STP 4	Level 0-35i	1/9/08 1 (6.6g)	Unidentified, Unmeasured	
ED3	11	Zone LOCUS 5, Transect 30, 11 STP 4	Level 0-35i	1/9/08 1 (34.5g)	Stoneware, Alkaline Glazed	
ED3	12	Zone IF 7, Transect 30, STP 12 6	Level 0-20i	1/9/08 1 (55.6g)	Stoneware, Alkaline Glazed	
ED3	13	13 Transect 29, Feature 38	Level surfa	1/11/08 1 (160.4g)	Bottle Glass, Machine Made, Aqua	
ED3	14	Zone LOCUS 3, Transect 36, 14 STP 10	Level surfa	1/9/08 1 (299.1g)	Iron/ Steel, Unidentified/ Corroded	

40RE577

ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 5 (3.4g)	Asphalt Roofing Bottle Glass, Machine Made, Clear	
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 2 (1.2g)	Brick, Unidentified	
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 2 (23.2g)	Coal	
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 1 (1.2g)	Concrete Glass, Unmeasured Flat	
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 1 (153.6g)	Whiteware, Plain	
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 1 (1g)		
ED3	15	15	Zone LOCUS 4, Transect 36, STP 12	Level 10-2i	1/9/08 1 (3.6g)		
ED3	16	16	Zone IF 3, Transect 27, STP 1	Level surfa	1/11/08 1 (45.4g)	Spark Plug Bottle Glass, Machine Made, Clear	
ED3	17	17	Zone LOCUS 3, Transect 36, STP 10 +20M W	Level 15-2i	1/11/08 1 (12.6g)	Nail, Unidentified Wire	
ED3	17	17	Zone LOCUS 3, Transect 36, STP 10 +20M W	Level 15-2i	1/11/08 1 (22.2g)	Bottle Glass, Machine Made, Amber	'Lysol' brand disinfectant
ED3	18	18	Zone LOCUS 2, Transect 27, STP 4+20M E	Level surfa	1/11/08 1 (94.4g)		
ED3	19	19	Zone IF 5, Transect 37, STP 6	Level surfa	1/11/08 1 (434.7g)	Bottle Glass, Machine Made, Clear	Owens- Illinois/Duraglass trademark, date range: 1940-54.
ED3	20	20	Zone LOCUS 4, Transect 36, STP 12+20M S	Level 0-25i	1/11/08 2 (44.9g)	Asbestos Siding	
ED3	21	21	Zone LOCUS 4, Transect 36, STP 12+20M S	Level surfa	1/11/08 2 (537.1g)	Bottle Glass, Machine Made, Amber	Owen's- Illinois/Duraglass trademark, date range: 1940-54 (Toulouse, 1971).
ED3	21	21	Zone LOCUS 4, Transect 36, STP 12+20M S	Level surfa	1/11/08 1 (523.5g)	Sewer Tile/ Pipe Fragment, Ceramic	

40RE577

ED3	22	Transect 26, STP 2, Feature 22, 23	Level surfa	1/11/08 1 (194.7g)	Tableware Glass, Molded Tumbler	Hazel Atlas trademark, date range: 1920-64. (Toulouse, 1971)
ED3	23	Transect 35, STP 7, Feature 23, 26	Level surfa	1/11/08 1 (218.5g)	Bathroom Fixture, Ceramic	
ED3	24	Zone IF 6, Transect 6, STP 24 2 +10ME	Level surfa	1/11/08 1 (464.6g)	Bottle Glass, Machine Made, Clear	Lummi's Glass Co., trademark, date range: 1940-55 (Toulouse, 1971)
ED3	25	Transect 26, Feature 20	Level surfa	1/11/08 1 (339.1g)	Bottle Glass, Machine Made, Amber	Owen's-Illinois 'DuraGlass' trademark, date range: 1940-54. (Toulouse, 1971)
ED3	26	Feature 22	Level surfa	1/11/08 1 (180.6g)	Bottle Glass, Machine Made, Clear	screw top, with handle
ED3	27	Feature 16	Level surfa	1/11/08 1 (9.5g)	Bottle Glass, Pepsi-Cola	
ED3	28	Zone LOCUS 6, Transect 21	Level surfa	1/15/08 1 (26.2g)	Asbestos Siding	
ED3	28	Zone LOCUS 6, Transect 21	Level surfa	1/15/08 28 (255g)	Bottle Glass, Machine Made, Green	Owen's-Illinois trademark, date range: 1929-54. (Toulouse, 1971).
ED3	28	Zone LOCUS 6, Transect 21	Level surfa	1/15/08 1 (50.9g)	Canning Seal, Milk Glass	with attached metal lid
ED3	28	Zone LOCUS 6, Transect 21	Level surfa	1/15/08 1 (150.1g)	Decorative/ Ornamental Item	amethyst-color candy dish
ED3	28	Zone LOCUS 6, Transect 21	Level surfa	1/15/08 1 (97.4g)	Inkwell, Glass	Anchor-Hocking trademark, date range: 1938-present. (Toulouse, 1971).

40RE577 (2008 site record)