Chapter 5

ARCHAEOLOGICAL FEATURES AND SITE STRUCTURE

The 2010–2011 investigations at Ayers Town designated 191 possible cultural features evident as soil disturbances intrusive into the subsoil horizon (Figure 5.1, Table 5.1, Appendix A). These intrusions were identified as potential cultural features on the basis of apparent morphology, soil matrices, or content evident upon removal of overlying plowzone or other overburden deposits. Excavation determined that 167 of these features were of cultural origin or contained deposits of cultural origin; the remaining 24 features were determined to be probable natural root molds. Two of the cultural features were rock-filled basins that appear to be hearths or cooking facilities that predate the Federal period Catawba site component; the rest of the features are attributable to the Federal period occupation. These Federal period features comprise relatively few discrete formal and functional classes, including flat-based storage pits (n=22), basin-shaped borrow pits (n=16), smudge pits (n=45), postholes (n=40), graves (n=31), other small pits (n=5), refuse-filled stump holes (n=5), and an erosional gully with refuse deposits. Spatial arrangements of these facilities indicate a regular and readily definable community plan, with discrete clusters of multiple feature types likely representing multifunction domestic residential complexes separated by small buffer zones, and other clusters of single feature types representing specialized activity precincts.

Storage Pits

Twenty-two pit features (Features 3, 4, 5, 27, 33, 55, 69, 74, 75, 106, 107, 108, 116, 123, 140, 141, 155, 158, 162, 163, 170, and 185) are provisionally categorized as storage facilities designed for retention of foodstuffs or caching of goods. These pits are distinguished by generally flat (level or slightly inclined) bases, with distinct inflections that mark base-to-wall junctures (Figure 5.2). These facilities reflect more formalized plan and construction than do basin-shaped borrow pits. Half of these flat-based pits are sub-rectangular or rectangular in plan; others are circular or ovoid. Many flat-based pits exhibit slightly-to-strongly belled walls, with maximum diameters below the pit orifice. Others evince vertical or slightly out-flaring walls (with the exception of Feature 140, which appears more trapezoidal in profile). Flat-based pits range in diameter from 41 cm to 171 cm (\bar{x} = 90.62, s.d.=27.01), with two size modes evident (<70 cm and >70 cm). Observed depths of these pits range from 8 cm to 61 cm (\bar{x} = 32.61, s.d.=15.08), with three distinct modes: <10 cm (n=3), 17–33 cm (n=13), and 43–61 cm (n=5). The shallowest flat-based pits are small (<60 cm) rectangular or subrectangular facilities, which may represent storage for household goods rather than foodstuffs that required more constant temperature and moisture regulation. Significant variation in the depths of these facilities (especially as normalized by depth/orifice diameter ratios) may also reflect differential soil deflation and loss across the site.

The deeper flat-based pits exhibit greater stratigraphic complexity than do basin-shaped pits, with multiple strata indicative of incremental filling processes. In a number of instances,



Feature	Туре	Grid Location	Length	Width	Depth	Plan
1	smudge pit	868.29R208.27	24	21	12	oval
2	posthole	868.41R209.58	29	21	24	oval
3	flat-based storage pit	869.17R208.75	92	77	32	sub-rectangular
4	flat-based storage pit	869.97R208.99	87	87	30	sub-rectangular
5	flat-based storage pit	877.83R160.57	80	79	33	circular
6	smudge pit	877.65R161.24	23	20	5	oval
7	grave	860.93R169.94	208	66	n/d	rectangular
8	posthole	882.11R196.97	26	26	43	circular
9	root mold (non-cultural)	882.35R196.25	18	18	29	circular
10	posthole	879.99R196.15	19	20	17	circular
11	root mold (non-cultural)	880.45R194.82	19	20	23	circular
12	root mold (non-cultural)	880.80R194.66	17	14	19	oval
13	root mold (non-cultural)	880.94R193.90	16	16	36	circular
14	posthole	881.69R194.08	17	16	11	circular
15	root mold (non-cultural)	881.34R193.23	15	14	11	circular
16	root mold (non-cultural)	877.11R197.20	21	17	4	oval
17	root mold (non-cultural)	878.24R199.01	19	18	9	circular
18	posthole	878.85R199.41	16	16	18	circular
19	posthole	881.07R200.19	32	31	32	circular
20	posthole	879.58R189.12	16	16	18	circular
21	root mold (non-cultural)	879.27R188.61	11	12	10	circular
22	smudge pit	872.06R192.19	22	21	6	circular
23	smudge pit	873.76R193.60	17	17	8	circular
24	smudge pit	873.76R193.75	28	23	11	oval
25	smudge pit	873.87R192.18	32	28	5	oval
26	smudge pit	873.75R192.48	28	23	11	oval
27	small pit/basin (storage pit?)	890.03R179.72	59	52	9	sub-rectangular
28	root mold (non-cultural)	871.43R195.40	33	29	30	oval
29	root mold (non-cultural)	870.78R194.91	18	16	29	oval
30	root mold (non-cultural)	870.83R194.52	11	11	25	circular
31	rock-filled pit (hearth)	871.24R191.37	37	30	7	oval
32	root mold (non-cultural)	865.24R189.20	49	45	89	oval
33	flat-based storage pit	871.71R155.12	97	93	48	sub-rectangular
34	root mold (non-cultural)	869.13R193.27	37	34	n/d	oval
35	root mold (non-cultural)	871.76R183.19	30	30	49	circular
36	grave	868.42R165.10	185	73	n/d	rectangular
37	grave	869.71R165.15	195	58	n/d	rectangular
38	grave	870.82R164.95	173	49	n/d	rectangular
39	grave	869.26R164.50	186	75	n/d	rectangular
40	smudge pit	845.43R196.13	33	31	24	circular
41	grave	862.73R190.80	191	50	n/d	rectangular
42	grave	861.69R188.74	152	48	n/d	rectangular
43	grave	861.60R187.72	96	51	n/d	rectangular
44	grave	861.80R187.37	97	52	n/d	rectangular
45	grave	861.80R186.51	97	54	n/d	rectangular
46	grave	861.85R185.45	102	48	n/d	rectangular
47	grave	866.98R180.98	95	54	n/d	rectangular
48	grave	866.51R181.73	99	50	n/d	rectangular
49	grave	866.31R182.62	181	57	n/d	rectangular
50	grave	865.65R183.50	162	54	n/d	rectangular
51	grave	862.37R184.24	185	60	n/d	rectangular
52	grave	863.78R181.01	102	58	n/d	rectangular
53	grave	863.67R182.06	183	58	n/d	rectangular

Table 5.1. Archaeological Features Defined at Ayers Town (38YK534).

Table 5.1 continued.

Feature	Туре	Grid Location	Length	Width	Depth	Plan
54	grave	863.08R183.11	201	78	n/d	rectangular
55	flat-based storage pit	877.09R189.50	171	101	23	rectangular
56	root mold (non-cultural)	872.70R154.90	24	24	n/d	circular
57	smudge pit	845.92R194.35	22	22	5	circular
58	smudge pit	846.00R193.96	49	44	7	oval
59	root mold (non-cultural)	842.83R178.85	25	23	n/d	circular
60	rock-filled pit (hearth)	875.90R187.54	54	61	15	oval
61	basin-shaped borrow pit	874.05R155.46	136	109	26	oval
62	basin-shaped borrow pit	874.03R154.57	54	46	4	irregular
63	root mold (non-cultural)	873.28R154.87	12	11	3	circular
64	root mold (non-cultural)	873.46R155.25	12	11	13	circular
65	smudge pit	846.96R196.88	32	17	8	oval
66	smudge pit	872.81R186.57	19	18	5	circular
67	refuse-filled stump hole	868.55R186.81	87	77	47	irregular
68	basin-shaped pit	866.16R157.16	105	83	29	oval
	smudge pit (within Fea. 68 basin)	866.16R157.16	51	41	22	irregular
69	flat-based storage pit	867.67R156.98	138	122	61	circular
70	root mold (non-cultural)	866.35R156.20	13	13	7	circular
71	root mold (non-cultural)	867.00R157.73	22	17	14	oval
72	basin-shaped borrow pit	884.34R191.55	227	196	18	sub-rectangular
73	basin-shaped borrow pit	885.39R189.04	152	126	15	sub-rectangular
74	small pit/basin (storage pit?)	883.56R190.69	56	50	17	oval
75	small pit/basin (storage pit?)	884 79R192 57	52	44	8	sub-rectangular
76	natural disturbance (?)	884 45R 190 03	41	37	10	oval
77	root mold (non-cultural)	885 14R 190 43	15	15	9	circular
78	natural disturbance	864 00R 165 87	187	96	n/d	irregular
79	smudge pit	882 11R203 76	25	24	8	circular
80	posthole	882 24R202 50	23	23	21	circular
81	posthole	882 56R202 26	20	19	30	circular
82	posthole	884 29R 197 71	21	19	15	oval
83	smudge pit	874 20R209 29	21	17	4	oval
84	small pit/basin	885 91R197 98	42	36	6	oval
85	smudge pit	871 40R209 45	20	18	1	circular
86	posthole	869 57R207 71	15	14	7	circular
87	smudge nit	867.06R207.39	24	22	3	circular
88	smudge nit	866 32R207.01	24	22	5	circular
89	basin-shaped borrow nit	876 68R212 09	220	172	42	oval
90	basin-shaped borrow pit	877 32R210 68	178	104	47	irregular
91	basin-shaped borrow pit	876 67R209 11	190	166	19	oval
92	basin-shaped borrow pit	877 86R 208 60	119	81	1	irregular
93	grave	877 87R 208 01	144	58	n/d	rectangular
94	basin-shaped borrow nit	876 01R 208 33	69	50	7	sub-rectangular
95	refuse-filled stump hole	887 47R 194 86	39	33	44	irregular
96	refuse-filled stump hole	889 90R 191 19	26	20	31	oval
97	small nit/hasin	882 57R 178 92	34	30	10	oval
98	smudge nit	887 41R178 69	17	16	2	circular
90 QQ	smudge pit	880 07R 181 88	17 27	27	2 8	circular
100	posthole	880 00P 180 21	16	16	21	circular
100	small nit/basin	801.97R182.21	57	47	6	oval
101	erosional gully (with cultural	880 10P 156 71	varies	varies	Varies	Oval
102	deposits)	007.17 X 130.21	varies	varies	varies	-
103	smudge pit	885.82R175.24	34	32	10	circular
104	smudge pit	876.79R162.15	26	25	3	circular

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Feature	Туре	Grid Location	Length	Width	Depth	Plan
105	smudge pit	887.07R173.88	28	26	12	circular
106	flat-based storage pit	887.93R173.00	108	90	18	sub-rectangular
107	flat-based storage pit	889.00R174.63	104	94	33	sub-rectangular
108	flat-based storage pit	887.44R175.16	80	71	19	sub-rectangular
109	basin-shaped borrow pit	885.38R168.15	124	104	14	oval
110	small pit/basin	858.83R193.94	60	47	3	oval
111	grave	858.85R187.69	201	51	n/d	rectangular
112	posthole	864.08R176.49	32	28	29	oval
113	posthole	864.30R174.30	47	33	38	oval
114	posthole	866.71R174.85	37	28	36	oval
115	grave	874.42R163.78	116	46	n/d	rectangular
116	small pit/basin (storage pit?)	870.97R157.59	47	45	30	sub-rectangular
	smudge pit (within Fea. 116)	870.97R157.59	23	23 (est)	14	circular
117	grave	869.60R167.41	203	52	n/d	rectangular
118	probable borrow pit	869.40R167.76	101	70 (est)	n/d	oval
119	grave	868.82R163.08	187	72	n/d	rectangular
120	posthole	865.40R174.63	30	28	35	circular
121	smudge pit	863 20R158 27	34	$\frac{1}{32}$	11	circular
122	basin-shaped borrow pit	863 81R152 77	156	108	21	oval
123	flat-based storage pit	868 13R154 34	92	88	58	circular
124	basin-shaped borrow pit	877 83R208 55	208	130	14	sub-rectangular
125	posthole	865 26R 176 60	31	26	29	oval
126	posthole	866 41R176 71	35	33	22	circular
120	smudge nit	866 02R158 95	23	22	19	circular
127	orave	864 32R162 00	107	51	n/d	rectangular
120	grave	862 35R 164 81	183	53	n/d	rectangular
130	posthole	862 63R160 27	26	25	42	circular
131	smudge nit	861 92R174 38	28	25	9	circular
131	grave	859 02R171 78	185	48	n/d	rectangular
132	smudge nit	860 62R175 20	31	20	13	circular
134	smudge pit	860 68R 177 03	30	27	5	circular
134	orave	858 08R 170 93	176 (est)	61	n/d	rectangular
135	grave	857 20R 170 23	189	57	n/d	rectangular
130	grave	856 35R 169 57	198	59	n/d	rectangular
137	grave	850.05R169.07	108	58	n/d	rectangular
130	basin shaped borrow nit	859.95R108.12 860 47P 167 18	126	125	15	oval
139	flat based storage pit	853 03R 173 35	152	123	56	oval
140	small nit/basin (storage nit?)	853 50R187 17	10	124	8	rectangular
141	refuse-filled stump hole	856.01R160.69	111	93	30	oval
142	smudge nit	850.01K100.09	18	17	10	circular
145	smudge pit	855 13R185 /1	15	40	0	oval
144	posthole	855 20P 180 41	10	40	12	oiroular
145	posthole	855 34D 188 84	19	17	13	circular
140	posthole	855 72P 100 27	21	20	20	circular
147	posthole	853.25K190.27 853.56D185.44	21	20	20	circular
140	posthole	855.50K185.44 854 26D 185 11	20	10	26	circular
149	posthole	054.20K105.11	20	12	20	oiroular
150	posthole	034.40K103.23	14	13	14	circular
151	postbole	034./UK191./3 855.05P101.07	15	14	9 20	oircular
152	positione	033.03K191.8/ 052.61D105.77	10	10	20	oircular
133	postbole	0JJ.UIKI0J.// 852 580106 00	12	12	14	oircular
154	flat based storage pit	033.30K100.U8 857 A0D104 65	20 104	10	5/ 12	oiroular
155	nat-based storage pit	0J/.40K194.03	104	101	43 0	circular
130	posuloic	034.70K170.0/	10	10	Õ	circulai

Feature	Туре	Grid Location	Length	Width	Depth	Plan
157	smudge pit	854.63R196.34	22	19	8	circular
158	basin-shaped storage pit	856.15R196.06	79	77	11	circular
159	smudge pit	855.89R196.00	29	26	11	circular
160	smudge pit	856.16R196.35	21	21	9	circular
161	smudge pit	858.65R200.13	32	31	8	circular
162	flat-based storage pit	856.36R198.75	111	108	32	circular
163	flat-based storage pit	857.69R198.15	112	109	25	sub-rectangular
164	small pit/basin	892.59R171.15	88	64	8	oval
165	posthole	851.26R177.78	15	15	10	circular
166	smudge pit	850.62R181.07	40	34	3	oval
167	smudge pit	852.02R182.11	26	22	4	oval
168	posthole	851.86R188.68	20	18	9	circular
169	posthole	852.20R184.53	14	13	6	circular
170	small pit/basin (storage pit?)	852.15R189.89	71	55	20	sub-rectangular
171	posthole	853.14R190.26	15	14	43	circular
172	posthole	853.07R191.84	20	18	37	circular
173	posthole	852.87R192.14	16	14	11	circular
174	smudge pit	854.90R198.94	22	22	7	circular
175	posthole	854.52R199.19	17	16	9	circular
176	smudge pit	849.44R194.91	19	18	3	circular
177	smudge pit	849.09R195.23	20	20	4	circular
178	smudge pit	849.61R195.47	18	17	3	circular
179	smudge pit	847.52R194.93	25	24	18	circular
180	smudge pit	847.64R194.38	37	35	13	circular
181	smudge pit	847.97R194.28	20	19	6	circular
182	smudge pit	848.11R196.03	24	24	8	circular
183	smudge pit	848.22R199.95	25	23	7	circular
184	smudge pit	848.68R202.90	24	23	6	circular
185	small pit/basin (storage pit?)	848.96R204.42	41	32	31	sub-rectangular
186	posthole	849.27R201.69	16	16	6	circular
187	refuse-filled stump hole	850.14R195.90	29	28	42	irregular
188	posthole	850.52R203.04	12	12	6	circular
189	posthole	849.15R203.58	14	13	8	circular
190	basin-shaped borrow pit	853.50R174.03	194 (est)	141	20	oval
191	basin-shaped borrow pit	854.08R174.34	104	61	8	oval

Note: Length, width, and depth measurements are in centimeters; n/d = no data.

stratigraphic contacts are relatively flat, and compaction of strata surfaces indicate tamping or trampling, possibly representing efforts to create new pit floors for continued use after fill episodes. Flat-based pits also contain higher densities of refuse and more diverse artifact assemblages than other feature contexts at the site. For example, presumed storage pits, which accounted for less than 25% of the soil excavated from discrete contexts, yielded 62% (n=4,798) of the Catawba potsherds, 74% (n=130) of English ceramic sherds, 85% of the tobacco pipe fragments, 91% (n=30) of the silver fragments, and 95% (n=1,413) of the glass beads recovered from Ayers Town features. Deposits within flat-based pits also yielded the majority of reconstructable ceramic vessels, an indication of direct, primary disposal of household debris into these facilities.

Multiple lines of evidence indicate that most of the flat-based pits documented at Ayers Town were directly associated with domestic dwellings as substructure storage facilities. The



Figure 5.2. Flat-based storage pit (Feature 3) plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and fill profile with south half excavated (bottom, view to north).

spatial distribution of most flat-based pits as discrete, but roughly equivalent, clusters arrayed at varying intervals around the site perimeter indicates their function as elements of multiple equivalent activity sets. Flat-based pits tend to occur in groups of two to four pits that are spaced 5 cm to 2.5 m apart; these groups also tend to co-occur with small clusters of postholes and charred corncob-filled pits. These clusters of flat-based pits, postholes, and cob-filled pits are spaced at 2.6–15.3 m intervals around the site perimeter. Similar clusters of facilities are documented at the mid-eighteenth-century Catawba village of Nassaw (38YK434), where flatbased pits are clearly situated within post-in-ground architectural patterns (Figure 2.6). These Colonial-era flat-based pits closely resemble the Ayers Town sample in dimensions, morphology, and stratigraphic complexity. In addition, artifact assemblages from flat-based pits at Nassaw resemble those of Ayers Town in composition, with concentrations of small personal items (e.g., glass beads) and reconstructable ceramic vessel sections (indicative of primary disposal of domestic household debris). The apparent absence of post-in-ground architectural patterns around groups of flat-based pits at Ayers Town (with the exception of Features 141 and 170) may reflect a temporal shift to horizontal log architecture. Such architectural change is indicated in the early Federal period Catawba component at Old Town (which is contemporaneous with Ayers Town), which lacks postmold patterns but includes two aligned pairs of rectangular, flat-based pits that probably demarcate two domiciles, as well as other rectangular flat-based pits that occur singly. These rectangular subfloor pit cellars are a hallmark of Federal period log cabin architecture throughout the South (Faulkner 1986; Kimmell 1993; Riggs 1999; Samford 2007). Such rectangular pit cellars are typically situated at hearth fronts

and are centrally aligned with the end chimneys of cabins. By contrast, the subfloor pits documented at Nassaw are situated around building perimeters, and probably surrounded central hearths (which are no longer observable). Pit groupings at Ayers Town probably mirror the Nassaw pattern, and may reference retention of traditional, central hearth arrangements within some horizontal cribbed-log structures. Use of both central hearths and end chimneys at Ayers Town is attested by Henrietta Liston's 1797 journal, which noted both "Wigwhams (the original form of their Houses) [where] the fire is in the middle" and log houses with chimneys.

Two flat-based pits, Features 55 and 140, are distinguished by unique morphologies. Feature 55, a large (171 cm x 100 cm), symmetrical, rectangular pit, resembles subfloor pit cellars documented at Old Town and New Town in form and formality, but is much shallower (23 cm). The surrounding surface does not appear to have been appreciably deflated (as gauged by the depth of nearby cob-filled pits), and the original construction depth of Feature 55 may have been only 40–50 cm below ground surface. This pit was probably too shallow to serve as a viable storage facility in a ground-level, earthen-floored structure, but may have connected to a raised wooden floor of a superstructure with a framed (perhaps earth-embanked) box to create a deeper facility.

Materials associated with Feature 55 indicate that the pit may slightly postdate most other contexts at Ayers Town. Feature 55 yielded the largest sample of English ceramics (n=36) from any pit context at the site, and a mean ceramic date derived from this small sample is 1793.2—five years later than the pooled site MCD (i.e., 1787.9) and 13 years later than the MCD (i.e., 1780.2) derived from feature contexts other than Feature 55. This probable temporal difference may account for the distinct morphology of Feature 55, and the possible superstructure type it represents may be a slightly later form in the evolution of Catawba housing and storage.

The other unique, flat-based pit is Feature 140, a large oval facility with in-sloping sidewalls. This morphology contrasts with other flat-based pits at Ayers Town, most of which are more cylindrical, with pit floors and orifices of roughly equivalent size. Unlike other flat-based pits, Feature 140 intruded earlier pit facilities, and the eastern wall of Feature 140 contained numerous Catawba potsherds and vessel sections and large animal bones, but relatively few small artifacts and only four glass beads. Vessel refits of sherds from Feature 140 deposits indicate probable primary disposal of refuse into the pit, but the scarcity of small artifacts, particularly glass beads, distinguishes the Feature 140 deposits from those in probable subfloor storage pits which received floor storage pits in spatial relationships to other facilities. Whereas most flat-based pits occur in clusters with other flat-based pits, postholes, and cob-filled pits, Feature 140 is relatively isolated from such contexts; it is 4.8 m from the nearest posthole, 6.8 m from the nearest cob-filled pit, and 13.8 m from the nearest flat-based pit.

The morphology, spatial relationships, and deposit characteristics of Feature 140 indicate that this facility is distinct from other flat-based pits—probable substructure storage pits—at the site. Instead, Feature 140 may represent an extramural storage facility set apart from immediate domestic areas. Because this facility is unique (rather than replicated with each domestic unit), it may represent community-based storage rather than household-based storage. Alternatively, deposits within Feature 140 appear to date late in the Ayers Town occupation (pearlwares predominate the associated English ceramics), suggesting that this facility may have been coeval with Feature 55 and associated with the latest Catawba residence at the site.

Borrow Pits

Sixteen basin-shaped pits (Features 61, 62, 72, 73, 89, 90, 91, 92, 94, 109, 118, 122, 124, 139, 190, and 191) arrayed around the periphery of the site are provisionally identified as soil borrow facilities. These round or ovoid features range from 54 cm to 227 cm in diameter (\bar{x} = 143.59, s.d.=53.16) and from 4 cm to 47 cm in depth (\bar{x} = 18.29, s.d.=12.29). They are distinguished by in-sloping walls that form continuous arcs with pit floors (i.e., no obvious inflection points). Most of these basins exhibit slightly irregular floors, consistent with their proposed function as voids created primarily for soil recovery rather than storage (Figure 5.3). The position of many of these features in proximity to clusters of flat-based storage pits (probable dwelling loci) may indicate association with particular constructions that required soils for preparation of daub mixes and other purposes. However, the largest basin-shaped pits (Features 89, 90, 91, and 124) are clustered near the terrace edge at the eastern edge of the site, in a precinct of soil recovery features that may have served the entire community. One other probable borrow pit, Feature 118, was not investigated because it was intruded by and largely occluded by Feature 117, a rectangular grave pit. Similarly, only a portion for Feature 92 was excavated due to intrusion by a grave (Feature 93).

Deposits within basin-shaped pits tend to be massive and relatively undifferentiated. Most of these pits contained single strata, although larger basins (i.e., Features 72, 89, and 139) contained up to four distinct deposits. Suites of artifacts recovered from larger basins indicate both primary and secondary disposal events represented within pit deposits. Other, nearly sterile deposits may represent natural filling events from capture of sheet-washed sediments or pit-wall collapse. In a number of instances, basin-shaped pits along the eastern and northern edges of the site included deposits of small cobbles, natural inclusions which may have been separated from clay removed from the pits at the time of initial excavation or processing of soils.

Postholes

Forty small, cylindrical pits are characterized as probable postholes, excavations for the installation of earthfast wooden posts. These postholes range in size from 10 cm to 47 cm in diameter (\bar{x} = 20.63, s.d.=8.03) and 8 cm to 38 cm in depth (\bar{x} = 20.53, s.d.=11.68), and they are distinguished by very high depth-to-diameter ratios (range=0.38–2.87, \bar{x} = 0.99, s.d.=0.49). Twenty-five postholes evince vertical or nearly vertical sidewalls and flat bases; ten postholes have inward sloping sidewalls that terminate at rounded bases (Figure 5.4).

Postholes are concentrated in three clusters that represent the locations of probable post-inground structures. The northernmost cluster (designated Structure Locality 4) comprises Features 8, 10, 17, 18, 19, 80, 81, and 82 to form a roughly rectangular 4.5 m x 3.4 m pattern. This post cluster is situated adjacent to, but not aligned with, the probable structure indicated by Feature 55. Instead, it is approximately parallel to the probable structure indicated by Features 74 and 75 (Structure Locality 3). No other facilities are situated within this cluster of postholes, and the function of the probable superstructure is not directly indicated, but this slightly amorphous posthole cluster may represent an ancillary outbuilding (e.g., outdoor kitchen, workshed, or ramada) associated with a more substantial cribbed log domicile.

At the southern edge of the site, 16 postholes (Features 145–154, 156, 168, 169, and 171– 173) form an amorphous cluster around two small, flat-based pits, Features 141 and 170



Figure 5.3. Shallow basin-shaped borrow pit (Feature 72) plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), fill profile with north half excavated (middle right, view to south), close-up of fill profile with north half excavated (bottom left, view to south), and excavated feature (bottom right, view to north).

(Structure Locality 10). Six of these postholes (Features 145, 146, 147, 151, 152, and 156) form an east-west alignment roughly parallel to the Feature 141–Feature 170 axis. Temporal association of Features 145 (posthole) and 170 (flat-based pit) is indicated by the presence in each feature of "rosso antico" dry-bodied red stoneware from the same vessel. These postholes probably represent the partial pattern of a post-in-ground building associated with Features 141 and 170 (probable subfloor pits). Such post-in-ground domestic architecture is clearly represented at the Colonial-era Catawba site of Nassaw Town (38YK434), but has not been identified in late pre-Revolutionary War and early post-war contexts at Catawba Old Town. This



Figure 5.4. Posthole (Feature 113) plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and excavated feature with rocks *in situ* (bottom, view to north).

probable post-in-ground building may correspond to the "wigwhams, the original form of their houses" that Liston observed at Ayers Town in 1797 or may represent an ancillary outbuilding associated with Structure Locality 11 (Features 155, 158, 162, and 163) as part of Residential Complex E.

Near the center of the site, six large (30–47 cm diameter) posts (Features 112, 113, 114, 120, 125, and 126) form a regular, rectangular 2.5 m x 2.0 m pattern oriented approximately N18°E. This structure pattern (designated Structure Locality 9) is oriented to, and aligned with, the hypothetical building outline that encloses Features 33, 69, 116, and 123 (Structure Locality 8), situated 17 m west of Structure Locality 9. This alignment may indicate direct association, in which the Structure Locality 9 building is referenced to a primary domicile in Residential Complex D. Alternately, the Structure Locality 9 is surrounded on three sides by Cemeteries 1, 2, and 3, but none of the graves of these precincts are closer than 3.6 m to the Structure Locality 9 building, a pattern which may indicate contemporaneity of the building with the cemeteries.

These three clusters account for 75% of the postholes documented at 38YK534. The remainder are scattered around the site without clear spatial reference to other contexts, and they probably represent isolated post installations for a variety of purposes.



Figure 5.5. Smudge pit (Feature 57) plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and excavated feature (bottom, view to north).

Smudge Pits

Small, charcoal-filled pits are the most abundant cultural facilities documented at Ayers Town and account for 29% of purposely constructed facilities. Forty-five such facilities were designated as archaeological features; two additional fill zones within Features 68 and 116 also represent intrusive charcoal-filled pits. Most of these pits are circular or oval in form, and area relatively small (17–51 cm in diameter; $\bar{x}=26.85$, s.d.=7.73), with vertical or slightly belled sidewalls and flat or slightly basin-shaped bases (Figure 5.5). Observed depths of these facilities range from 1–24 cm ($\bar{x}=8.36$); shallower examples are probably heavily truncated. These contexts typically evince dense deposits of charred plant material (primarily corncobs) that appear to have been burned *in situ* by low intensity fires that smoldered in low oxygen environments, producing charcoal rather than fully combusted ash residues. Most (72%) contain no artifacts, and the majority of associated artifacts appear to have been incidental inclusions. Fewer than half of these pits exhibit fired soils, evidence of low firing temperatures.

Comparable "cob-filled" pits are extensively documented in later prehistoric (post-AD 1000) and historic-era contexts throughout the southeastern United States and its periphery (Binford 1967; Bonhage-Freund 2005; Munsen 1969). As inferred on the basis of pit size, pit morphology, and fill characteristics, as well as ethnographic evidence, these cob-filled pits are typically identified as smudging facilities (i.e., specialized pit hearths designed to produce large volumes of smoke and soot through regulated combustion). Early twentieth-century Creek (Muscogee) informants described such smudging facilities to Swanton (1946:445), who noted,

"...they scooped a hole in the ground, built a fire in it, and put corncobs upon this so that a thick smoke was produced with little flame" for smoking hides. Multiple ethnographic accounts of eastern Cherokee pottery production also note the use of such facilities for smudging the interiors of pottery vessels. E. P. Valentine, who observed Cherokee potters in 1882, wrote:

The pot is then placed in the sun where it is allowed to stay until it becomes dry, after which it is put near the fire and turned about occasionally until it becomes comparatively hard. *Then a hole about the size of the pot is dug and a charcoal fire started in it. Over this fire which is kept at a uniform heat never allowing it to flame up is inverted the pot* [emphasis added]. This being done the pot can without the least uneasiness be used for cooking. [Valentine n.d.]

James Mooney, who visited many of the same Cherokee potters in 1888, observed:

When the vessel was finished and dried in the sun it was heated by the fire for three hours, and then put on the fire and covered with bark and burned for about three-quarters of an hour. When this step of the process was completed the vessel was taken outside the house and inverted over *a small hole in the ground, which was filled with burning corn cobs* [emphasis added]. This fuel was renewed a number of times, and at the end of half an hour the interior of the vessel had acquired a black and glistening surface. [Holmes 1903:56]

Harrington (1909) relates Cherokee potter Iwi Katolsta's rationale for pottery smudging as a method for waterproofing low-fired earthenware vessels:

In order to be good for cooking, these pots should be smoked," she said. "If this is not done the water will soak through." So she dropped a handful of bran in each one while they were still almost redhot, stirred it with her stick, tipped the pots this way and that, and finally, turning out the now blazing bran from each in turn, inverted the vessels upon it. In this way the inside was smoked black and rendered impervious and this without leaving any odor of smoke in the vessels when they became cold. Generally, Iwi told me, corncobs were employed for this purpose, but she always used bran when cobs were not available. [Harrington 1909:226]

Small, cob-filled pits are consistent elements of domestic components in eighteenth and nineteenth century Cherokee archaeological contexts, where the vast majority of ceramic vessels and sherds evince interior smudging (Riggs 1987; Russ and Chapman 1983; Schroedl 1986). These pits presumably correspond to the pottery smudging facilities that Valentine and Mooney observed in the 1880s. The cob-filled pits documented in historic-era Cherokee contexts substantially resemble those documented at Ayers Town and the earlier Catawba village of Nassaw Town (c. 1750–1759), settings which also yielded large quantities of ceramic sherds and vessel sections with sooted or smudged interior surfaces.

The smudging of Catawba vessel interiors is indicated by Harrington (1908), Jones (1815), Mooney (1888, in Holmes 1903) and Palmer (in Holmes [1903]), but none cite the use of cobfilled pits as smudging facilities. Instead, Harrington, Mooney, and Palmer all observed that interior smudging of Catawba vessels was affected by inverting pots over piles of broken bark during the primary firing process. This may represent streamlining in Catawba production practice during the nineteenth century, when cottage production of vessels for commercial markets accelerated. Such change in production practice is consistent with the total absence of cob-filled pits at the New Town site, an extensively excavated Catawba village that dates c. 1790–1820 (Davis and Riggs 2004; Shebalin 2011).

Smudging facilities are located throughout the Ayers Town village area, with small clusters of cob-filled pits around each domestic area (as defined by the presence of presumed subfloor storage facilities). The largest concentration of cob-filled pits is located at the southeastern



Figure 5.6. Grave pit (Feature 111) plan view drawing and photograph at top of subsoil (view to north).

perimeter of the village area and consists of 13 smudge pits that would have been situated at the leeward edge of the domestic occupation (assuming predominant westerly winds). This large cluster of cob-filled pits may constitute a discrete activity precinct that was positioned to spare the village from the dense smoke produced by smudge fires.

Graves

Investigations at Ayers Town identified 31 probable graves, contexts that were distinguished by their rectangular morphology, size (0.95 m to 2.08 m in length), and distinctive matrices of mixed soils (Figure 5.6). The appearance of mixed soils at the exposed surfaces of these features, particularly highly weathered clays that normally occur at depths more than 75 cm below the present surface, was the principal defining attribute. Such heterogeneous mixed soils typically denote contexts that were excavated through discrete soil strata, and then backfilled in short order with the mixed spoil. This sequence is typical for primary inhumations.

Because contexts that exhibited rectangular morphology and mixed matrices were determined *a priori* to represent probable grave pits associated with historic-era Catawba interments, all were photo-documented, mapped, and managed in a manner consistent with the memorandum of agreement and approved treatment plan between the South Carolina Department of Transportation and the Catawba Indian Nation.

All of these presumed grave pits are distinctly rectangular or trapezoidal, with remarkably straight edges and well-defined corners that probably connote spade-cut graves. It is inferred that this grave form was adopted from Anglo-American practice. Similar rectangular grave pits are documented at the nearby Old Town site (c. 1762–1800), a contemporaneous Catawba settlement. Earlier graves documented at the Nassaw Town site (c. 1750–1759) are ovoid in form and probably represent traditional flexed burials.

The grave pits at Ayers Town range from 0.95 m to 2.08 m in length (\bar{x} =158.69; s.d.=41.67); it is assumed that variation in grave length reflects the height of the individual interred. Assuming that these rectangular graves represent fully extended interments, it is inferred that grave pits less than 1.5 m (4.92 ft) (n=10) long reflect subadult burials. Grave width is less variable, ranging from 46 cm to 78 cm (\bar{x} =56.74; s.d.=8.39). The more standardized width of graves may have been a function of the physical constraints of grave pit construction (to allow pit entry for initial excavation), or may reflect uniformity in coffin construction. The use of wooden coffins is inferred from evidence of subsidence of rectangular moulds and post-event filling with unmixed organic topsoils or with other homogeneous soils from the site surface. In other instances, subsidence of fill dirt apparently did not occur or occurred in irregular patterns; these graves may represent either coffin or shroud interments.

The grave pits are concentrated in three clustered cemeteries situated in the southern half of the site, between Residential Complexes D and E (see Figure 5.11). Cemeteries 1 and 2 contain ordered groupings of graves with uniform orientations, alignments, and spacing. Spatial relationships of graves within these cemeteries indicate long-term marking and maintenance of grave plots, or interments of multiple individuals in close succession. For example, groupings of seven (70%) of the probable subadult burials in Cemetery 1 may reflect disease event specific mortality.

The third cemetery (Cemetery 3) appears less carefully planned, with multiple graves that slightly intrude each other (Features 36–39) and no clear arrangement other than relative orientations. The slight overlap of these graves may reflect a sequence of interments placed over a considerable timespan. This irregular, nine-grave cemetery may represent family plots associated with Residential Complex D during the village occupation. A similar arrangement is documented at the contemporaneous Old Town site.

These cemeteries constitute a discrete mortuary precinct that occupies the southwestern quadrant of the site, yet is situated in close proximity to domestic spaces. None of the graves in these cemeteries actually encroach on houseseats, and only two graves intrude other types of archaeological contexts. Conversely, no other contexts (i.e., contexts other than graves) intrude upon graves, a pattern of exclusivity that indicates that these graves were well known and maintained during the village occupation or that many of the graves may have been installed after domestic activity at the site ceased (c. 1800), and thereby were not subject to disturbance by domestic activities. Such continued use of abandoned Catawba village sites as cemeteries is attested by Speck's (1939) informants, who indicated that the New Town site (c. 1790–1820) was used as a cemetery by the Catawba community until 1855, even though mourners had to transport bodies across the Catawba River for interment.

The cemeteries surround a unique post-in-ground structure pattern (Structure Locality 9) represented by six large postholes (Features 112–114, 120, and 125–126) that constitute a 2.2 m x 2.6 m rectangular array. Association of this structure pattern with the cemeteries is inferred

based upon proximity to all three cemeteries and relative distance from defined domestic areas. A 3.6–7.4 m buffer separates the graves from the post pattern on three sides—spacing that suggests planned allocation of respective space to the structure and surrounding cemeteries.

Graves documented both at Ayers Town and at Locus 1 at Old Town (see Chapter 2) reveal several aspects of Federal period Catawba mortuary practice. Rectangular, spade-cut grave pits indicate adoption of Anglo-American conventions in grave construction, but highly varied grave orientations belie adoption of expressly Christian practice. Grave subsidence and refill features indicate use of constructed rectangular coffins, another adopted practice, as does the organization of graves in formal cemeteries outside, and exclusive of, domestic space. These patterns contrast with mid-eighteenth century Catawba mortuary behaviors documented at the Nassaw Town site, where ovoid graves (presumably containing flexed inhumations) are located within or adjacent to dwellings.

Speck (1939) presents an outline of other nineteenth-century Catawba mortuary practices as related from the personal memories and oral traditions of individuals born c. 1840–1860:

For three days after a death in the house the name of the deceased should not be mentioned. The corn-crib should not be opened to take out corn from it for the same period, nor should ashes be cleaned out from the fire-place for the same length of time.

The body of the deceased was left for three days in the bed where death took place. A bucket or a pot of water was also left at the head of the death bed for three days and watched by some of the relatives. On the third day at the instant corresponding to that when demise had taken place the action of the water was observed. If it was seen to quiver they know that the spirit was satisfied and had gone on to the first heaven; another instance of Catawba bowl and water divination (lecanomancy). Thereupon they buried the corpse in the floor of the house beneath where the person lay at the time of death. Some further discussion of this feature will shortly follow. With the body a quantity of "cold embers", or coals from the house fire which had been allowed to grow cold, was placed around the head of the body. The Catawba termed these *j' pa yatcu' ya'məre*, "fire-ashes sleeping," an appropriate symbol of decease. The symbolism of life and fire, death and ashes, is carried out in these observances. It was customary for the women (generally not the relatives of the deceased) to dig the grave, called *ya' suk*, "corpse house." In later times (after 1855) the tribe has had a grave yard on the reservation, *ya suk be'*, "corpse house eternal, immovable." In the old Catawba settlement of New Town or Indian Town on the east side of the river a mile north of the present reservation a burial ground was located and in use until about 1855. We may regard the custom of floor burial to have been abandoned prior to this date.

The name of a "dead person," *yę' pawarit*, could not be spoken for a year, according to Mrs. Owl. Billy Harris used to bite his tongue "so the dead would not come back and bother us." No further explanation was forthcoming from Billy, who has been dead for some years, but his superstition had something to do with fostering deeper thought and avoiding mention of the dead as a measure of safeguarding health and welfare.

The idea of the three-day taboos was to do nothing to hinder the soul from departing peaceably. And we gather that the spirits of the deceased were believed liable to cause more sickness and death. In a previous paper I have reported some beliefs in reference to the causes of disease emanating from the dead. Among them is to be noted that evil spirits entering the body cause sickness; that ghosts are sources of disease, according to Sally Brown, "It is the shadow of a dead person or ghost, coming at night, that brings sickness which may result in death unless medicine is prepared and taken for recovery."

...the following practices were described by Chief Blue in connection with the event of death. They have to do with attending the departure of the soul.... When a person is nearing death the friends and relatives are summoned to assemble at the home of the dying person to attend the demise. The women present stay at the bedside of the sick one, offering what aid is possible to make him comfortable. The men assemble outside the house and build a ritual fire around which they stay all night to render what service they may in bringing water and render aid when called upon. The fire in question is made in the

approved ceremonial manner among practically all the tribes of the southeastern culture area, by placing four large logs pointing radially in the cardinal directions with their inner ends coming together at the point where the fire in kindled; in the form of the "starshaped" fire. The logs were 8-10 feet long and 12-14 inches in diameter. The old Indians used to say that "the people were waiting for them to die" when the "sitting-up fires" were built and maintained, whence the native designation for the occasion *i'pi* ye waha'tcare, "fire person die-watching" (or "causing": -tc- causative element). The fire of the sort described is known as yap patki' i'pi', "tree big fire". One of the best remembered occasions attended by Chief Sam Blue, was a number of years ago when Fannie Harris, wife of Chief Jim Harris (circa 1860-72), was sick and dying. The solemnity was carried out as described, lasting all night. At the time the men did not engage in games or pastimes.... He [Sam Blue] related: "Sometime during the year following burial, the family of the deceased occasionally gathered at the grave and cried. Sometimes only the bereaved widow or widower or the mother of the deceased did it alone. Crying at the grave is likely to be kept up until the memory and grief of death was dulled a little by time, say for a year. Istcu'na' kyebmosa're wehatcu're, 'Mother-mine grave (pit) to went, cried much'." The description does not indicate a particularly formalized or imperative custom.... Using again the words of Sally Brown (1925) we have a short narrative of burial customs, graphic and definite. "The ancient Indians, when anyone died, they dug a grave in the ground underneath the corner of the house and put him in the ground. They buried him in the ground near where he died. Three days after he was buried it was thought that his spirit would come back and drink water. If his spirit drinks the water will ripple. Before they buried him in the ground, all the people would keep awake. For three nights they would keep the fire and lights. They could not eat for three days while they were awake (watching). After a while they could eat. In the pot they put corn bread and put embers all around the pot. The children threw ashes out of the door. It is said that they would take ashes in their hands and blow them on the dead person so that his spirit wouldn't bother them. We run away right now!"

The taboos laid upon the action of widows were noteworthy. They could not, without disapproval, speak to persons outside the family for a year. And, of course, marriage within this time was impossible. Nor would a widow cut her hair for a year. The widow is called va' va be'' (or va va pi') "woman (of the) road immovable", the term having reference to the narrow and restricted social lane in which custom obliged her to confine herself for a year. We may devote a few lines of consideration to the custom of burial beneath the door of the living-house, a practice formerly characteristic of the Muskhogean Creeks as well as the Yuchi and the Catawba. Sally Brown gave a reason for the practice, namely, the desire that "the dead folks would be with the family all together". In both the practice referred to and the reason assigned it an aspect toward the deceased is indicated which is quite at variance with the views of other groups in eastern North America among whom an avoidance of proximity to the corpse is characteristic. We have no means at the present time of distinguishing fixed attitudes toward the dead as being friendly or unfriendly. Despite the Catawba sentiment of amity toward departed spirits and the desire to cherish their presence and memories, there is evidence of fear toward them as inculcators of disease among the living. There may be less inconsistency in this situation than appears at first to our understanding. Manifestations of regard for the dead in the manner described are thought to be influential in annulling baneful possibilities of infliction of disease by them. [Speck 1939:42-46]

The archaeological data suggest that some of these practices, such as house floor burial, were already obsolete by the Federal period, but other customs and attitudes described by Speck likely apply to Ayers Town. For instance, although the Ayers Town cemeteries are discrete and nominally separated from domestic areas, their proximity to dwellings and activity areas may have fulfilled "the desire that 'the dead folks would be with the family all together." The concept of the grave as *ya' suk*, or corpse house, and the graveyard as *ya suk be'*, or eternal, immovable corpse house, implies an association of the dead with their own dwellings [and perhaps villages]—an association that may extend to the six-post structure in the middle of the mortuary precinct. The planning and maintenance of the cemeteries at Ayers Town, as evidenced by the spacing and alignments of graves, and the addition of soils to subsided graves, may reflect "the Catawba sentiment of amity toward departed spirits and the desire to cherish



Figure 5.7. Small pit/basin (Feature 110) plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and fill profile with east half excavated (bottom, view to north).

their presence and memories" and manifestations of regard for the dead "...thought to be influential in annulling baneful possibilities of infliction of disease by them" (Speck 1939:46).

Small Pits

Five other small, shallow pits or basins (Features 84, 97, 101, 110, and 164) represent other types of facilities not clearly referable to storage, soil borrowing, post emplacement, or smudging. Feature 101, a small (57 cm by 47 cm) oval basin located at the northern edge of the site, exhibited evidence of *in situ* burning, and may represent an exterior hearth associated with Structure Locality 6. While the inhabitants of Ayers Town undoubtedly built surface fires throughout the community space for multiple purposes, direct evidence of managed fire is largely limited to smudge pits. The probable function of Feature 101 as a "hearth pit" is unclear.

Features 110 and 164 are shallow, oval, flat-based pits that contained quantities of unfired potter's clay, and they resemble presumed clay processing pits documented at the nearby Old Town site (Figure 5.7). At Old Town, shallow pits situated at the ends of houses yielded deposits of prepared and sorted pale gray and yellow clays identical to unfired vessel fragments recovered from pit cellars. Although the function of these deposits is not directly indicated, it is hypothesized that Catawba potters engaging new types of clay required for production of temperless "colonoware" pottery may have resorted to aging gleyed clays to improve their workability, a process documented worldwide (Glick 1936; Rice 1987; Rye 1981). As late as the



Figure 5.8. Rock-filled basins (Features 31 and 60) at top of subsoil (view to north).

early 1970s, Catawba potters aged similar clays for months in backyard pits before potting (Steven Baker, personal communication 2003). As is the case at Old Town, probable clay processing pits at Ayers Town are located adjacent to clusters of flat-based storage pits that indicate dwelling seats. Positioning of these facilities may indicate that the contents were considered personal property and access was monitored.

Features 84 and 97 are small (<45 cm), shallow pits that contained relatively dark, organic matrices and are presumably associated with the Federal period Catawba occupation. Feature 84 is spatially associated with Structure Locality 4, and Feature 97 may be associated with Structure Localities 5 or 6. Neither the sizes, morphology, condition, content, nor spatial relationships of these pits provide clues to their probable function.

Rock-Filled Basins

Two rock-filled basins, Features 31 and 60, appear to be heating or cooking facilities associated with Archaic or Woodland period occupations of the site (Figure 5.8). These basins are relatively small (37 cm x 30 cm and 61 cm x 54 cm, respectively) and shallow, with dense concentrations of hand-sized stones in heavily weathered matrices. No organic discoloration of the soil matrices was noted, and the pit margins were discerned solely on the basis of subtle differences in soil texture and compaction. This degree of weathering was not evident in any of the historic-era Catawba contexts and probably indicates considerable antiquity. Neither of these facilities yielded materials attributable to the historic-era Catawba village component. Feature 31 contained no associated artifacts, and Feature 60 yielded 12 lithic flakes and small flecks of charcoal.

Although these facilities exhibited no obvious evidence of *in situ* burning, the structure and content of these rock-filled basins is consistent with "rock oven" cooking facilities that are widely documented in the ethnographic record (e.g., Smith 2000; Thoms 2008; Wandsnider 1997). Such facilities are typically hearth pits or basins that employ stones as heat sinks for



Figure 5.9. Tree disturbance (Feature 67) plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and excavated feature (bottom, view to north).

thermal mass for cooking without exposing foods or other materials to direct flame. This can be accomplished either by *in situ* heating of the stones by burning fuel above or below the rocks, or by transfer of heated rocks from an exterior fire to the cooking pit. In the case of Features 31 and 60, dense, compact beds of rock probably represent preparation for *in situ* firings. The relatively small size of these rock-filled basins may reflect dry-heat, direct cooking of small packages of food, presumably high-value resources such as meats.

Archaeological evidence for such "rock oven" cooking facilities is well documented in Archaic and Woodland period contexts throughout the Southeast, and similar facilities are widely distributed across North America wherever suitable stones are available (Petraglia 2002; Wandsnider 1997).

Refuse-Filled Stump Holes or Rootmolds

Five naturally occurring stump holes or root molds (Features 67, 95, 96, 142, and 187) yielded substantial quantities of refuse attributable to the early Federal period Catawba occupation (Figure 5.9). These disturbances are distinguished by irregular profiles, often with multiple tapered protrusions indicative of root proliferation, and probably represent casts opened by decaying tree trunks, stumps, and roots. Feature 142, a basin-shaped disturbance with a deeper central extension, may represent a void left by an uprooted tree root mass and taproot.

The upper matrices of these disturbances yielded a considerable array of materials, including Catawba potsherds, English potsherds, lead, silver and brass fragments, animal bone, ash, and raw potter's clay. The high density and diversity of materials recovered from these contexts indicate intentional filling of these voids with primary or secondary refuse. While such natural cavities probably afforded excellent receptacles for opportunistic trash disposal, they probably also presented hazards to pedestrian or horse traffic onsite, and refuse disposal into these voids likely served a dual purpose for maintenance and management of the site surface.

Erosional Gully

Feature 102 was a large, natural erosional gully at the northwest edge of the site that likely formed either prior to the Catawba occupation of the site or during the early stages of this occupation (Figure 5.10). Excavations exposed a 10-meter long segment of the gully from its head between Structure Localities 5 and 7 to the northern edge of the machine stripped exposure. This segment revealed increasing depth from 33 cm at the gully head to 125 cm (including 80 cm of overburden deposits) at the edge of the exposure. These deposits yielded small fragments of Catawba pottery throughout. Excavation of a 0.5 m by 2.0 m exploratory trench across the gully itself revealed distinct sediment zones that contained small Catawba potsherds and bone fragments, but lacked dense primary refuse deposits from the village, an indication that the filling of this feature probably postdates the village occupation.

The gully, and the deposits within and above this erosional feature, illustrates the transformations of the site surface during and after the Catawba village occupation. Trampling and denuding of the site surface during the village occupation likely introduced an erosional regime to a previously stable, wooded terrace surface. Erosion processes appear to have accelerated after the village occupation, with deflation and sheet erosion as well as development of downcutting gullies. The head of the Feature 102 gully corresponds with the position of a hypothesized road that crosscut the site during and after the village occupation, and the gully may have formed in relation to the roadbed. The gully itself appears to have downcut rapidly, then filled with organically enriched topsoil from the site surface. These sediments were then smothered with a dense mantle of finer-grained sediments that reflect mass wasting of the site and adjacent surfaces. These sediments appear to reflect multiple episodes of sheet wash deposition, a process that may relate to poor farming practices during expansion of agricultural production—particularly cotton farming—in the early-to-mid nineteenth century. The surface appears to have stabilized after plowing ceased in the early twentieth century, when the site was probably consigned to pasture.

The erosional history of the site after abandonment of the Catawba village suggests substantial modification of the former occupation surface and probably accounts for relatively thin (10–20 cm) deposits over much of the site surface, in contrast to the thick (>50 cm) horizons of redeposited soils along the northwest, downslope margin of the site. The incidence of Catawba sherds in these thicker soils documented by survey shovel tests and one-meter test units corresponds to debris recovered from the gully and overburden, and does not reflect buried occupation surfaces.



Figure 5.10. Erosional gully (Feature 102) plan view and profile drawings, and excavation photographs: Profile 1 (middle left, view to south), Profile 2 (middle right, view to northwest), Profile 2 after excavation of exploratory trench (bottom left, view to northwest), and recording Profile 2 (bottom right, view to west).



Figure 5.11. Plan of Ayers Town illustrating feature contexts associated with the Federal period Catawba component and the reconstructed community plan.

Site Structure and Community Pattern

Spatial configurations of facilities and other discrete contexts associated with the Federal period Catawba occupation of site 38YK534 reveal coherent patterns indicative of community planning and community evolution of Ayers Town. Federal period Catawba facilities are arrayed in a roughly rectangular plan that extends 56 m NW–SE x 46 m NE–SW, oriented parallel to the front slope of the terrace (~N65°W) (Figure 5.11). Larger pit contexts are situated around the perimeter of this rectangle, with clusters of flat-based storage pits (presumed structure locations) interspersed with basin-shaped borrow pits. With few exceptions, cob-filled smudge pits and postholes are also distributed along the perimeter of the rectangular plan. Within this perimeter border of storage facilities and borrow pits are three cemeteries that comprise 30 graves; an additional grave is situated apart from these cemetery clusters. These cemeteries are situated in the southwestern half of the central area defined by the ring of storage pits and borrow pits. The cemeteries surround Structure Locality 9, a 2.5 m x 2.0 m rectangle of six large postholes which is the only coherent post-in-ground architectural pattern evident at the site.

The rectangular site plan is divided by a six-meter wide, linear corridor generally devoid of cultural features (Figure 5.11). This corridor, which is oriented approximately N64°W, occupies the flattest portion of the landform. Almost half of the graves identified at the site (all of Cemetery 2 [Features 7, 132, and 135–138] and Cemetery 1, Group B [Features 47–54]) are





oriented either parallel to, or perpendicular to, this corridor. No other cultural features share this orientation, but Feature 102, an erosional gully, originates along the edge of this corridor and roughly parallels the corridor orientation. This linear corridor may correspond to a wagon road beside the western Catawba settlement depicted by Drayton (Figure 5.12). This road connected McClenahan's Ferry (Mills 1825) below Ferry Branch (2300 m [1.4 mi] south of Ayers Town) to the York–Camden Road. Lady Henrietta Liston, who visited Ayers Town in 1797, apparently crossed the Catawba River at McClenahan's Ferry (established 1795) and approached Ayers Town with her four-horse carriage via this wagon road. The closer crossing at Twelvemile Creek (Smyth 1784) almost certainly linked to the Camden Road via this wagon road as well.

The paucity of clear-cut post-in-ground structure patterns at Ayers Town implies the predominance of above-ground (presumably horizontal cribbed log) architecture at the site. The locations of dwellings at Ayers Town are not indicated by explicit architectural evidence, but may be inferred by the positions of vertical-walled, flat-based pits. These facilities closely resemble subfloor storage pits documented within vertical post structures at the antecedent site of Nassaw Town, and clusters of such pits at Ayers Town approximate the groupings of subfloor pits at Nassaw. The distribution of flat-based storage pits at Ayers Town probably represents 10 to 12 buildings that comprise five residential complexes arranged in two "neighborhoods" divided by the presumed road (Figure 5.11). The northeastern neighborhood consists of six probable buildings that constitute three probable residential complexes.

Residential Complex A

Structure Locality 1, at the eastern end of the site adjacent to the probable wagon road corridor, is represented by Features 3 and 4, adjacent flat-based storage pits that are spatially associated with two postholes and four cob-filled smudge pits (Figure 5.13). Six meters north of Structure Locality 1 is a cluster of borrow pits (Features 89–92 and 124); superimposed in this



Figure 5.13. Detailed plan of Residential Complex A at Ayers Town.

complex of borrow features is a single grave (Feature 93). These facilities may be associated with the Structure Locality 1 as elements of the larger Residential Complex A.

Residential Complex B

Residential Complex B comprises Structure Localities 2, 3, and 4 (Figure 5.14). Structure Locality 2 is defined as the area immediately surrounding Feature 55, a rectangular cellar pit located on the northeast side of the presumed wagon road, 21 m northwest of Structure Locality 1. This shallow cellar may reflect a superstructure with an elevated floor through which the cellar was accessed via a boxed enclosure, a unique building mode at Ayers Town. Associated English ceramic wares yielded a mean ceramic date of 1793; all other site contexts yielded a pooled MCD of 1788, indicating that Structure Locality 2 may have been occupied somewhat later than the remainder of the site. Three postholes and five cob-filled pits are situated within six meters of Feature 55, and are probably associated with the Residential Complex B.

Structure Locality 3, incorporates Features 74 and 75, small flat-based pits located six to seven meters north of Feature 55. The space between these pits is occluded by Feature 72, a



Figure 5.14. Detailed plan of Residential Complex B at Ayers Town.

basin-shaped borrow pit that intrudes Feature 74 and clearly postdates Structure Locality 3. Another borrow pit, Feature 73, may be associated with the Locality 3 household, but its contemporaneity is unclear. A cluster of nine postholes located east of Features 74 and 75 may represent a post-in-ground shed or ramada, and is designated Structure Locality 4. The elements of Structure Localities 3 and 4 may have been associated with Structure Locality 2 as facilities of the Residential Complex 2.

Residential Complex C

Residential Complex C subsumes Structure Localities 5 and 6 and the surrounding facilities (Figure 5.15). Structure Locality 5 centers on three flat-based storage pits (Features 106–108) located at the northwestern corner of the site, approximately 16.5 m northwest of Structure Locality 2. These pits are spaced equidistant and arranged at right angles to define a rectangle oriented N30°W. Axes extended from this rectangle intersect Feature 109, a borrow pit situated 5.5 m southwest of Feature 106, and Feature 164, a probable clay processing pit located 4.5 m northwest of Feature 106. These alignments may indicate planning and placement relative to the Structure Locality 5 building, a probable domicile. Features 27 and 101 are also aligned with the Structure Locality 5 pits, and represent elements of Residential Complex C. Feature 27, a small,



Figure 5.15. Detailed plan of Residential Complex C at Ayers Town.

square, flat-based pit located 4.5 m northeast of the Structure Locality 5 pit cluster, probably represents a separate building location (Structure Locality 6). This pit is oriented N18°W and presumably mirrors the orientation of the superstructure. A cob-filled pit located two meters to the southeast and a probable hearth (Feature 101) located 3.8 m northeast of Feature 27 may be associated with Structure Locality 6 as part of Residential Complex C.

Residential Complex D

The southwestern neighborhood comprises Residential Complex D (Structure Localities 7 and 8, and possibly 9) and Residential Complex E (Structure Localities 10, 11, and 12), as well as Cemeteries 1, 2, and 3 (Figure 5.16). Residential Complex D includes Structure Locality 7, the area surrounding Feature 5, a flat-based storage pit located at the western edge of the site adjacent to the probable wagon road corridor. Two smudge pits and one grave (Feature 115) are located within 4.5 m of Feature 5 and may be associated as elements of Structure Locality 7.

Structure Locality 8 is defined by a cluster of four flat-based pits (Features 33, 69, 116, and 123) located 9.5 m southwest of Feature 5. Although these pits are not situated at right angles (as is the case in Structure Locality 5), they form a symmetrical parallelogram, with axial alignments of N77°W between Features 69 and 123, and N75°W between Features 33 and 116. Distances between the pits in each pair are approximately equal (2.5–2.6 m). These four pits



Figure 5.16. Detailed plan of Residential Complex D at Ayers Town.

define a minimum building footprint of 4.4 m x 4.8 m (21.12 m² or 227.33 ft²), similar to ethnographic descriptions of early nineteenth-century Catawba cabins as 16 feet (4.88m) square (Speck 1939), but smaller than mid-eighteenth-century Catawba houses documented at Nassaw. Pit alignments suggest a structure with an eastern wall oriented N18°E. Borrow pits located north (Feature 61) and south (Feature 122) of the Structure Locality 8 cabin seat are probably associated with this residential complex, as are three cob-filled pits (Features 68, 121, and 127) and one posthole. Cemetery 3 is located 4.5–9.5 m east of Structure Locality 8, and the majority of the graves in this mortuary are oriented parallel to the presumed Locality 8 structure. This is in contrast to the graves of Cemeteries 1 and 2, which appear aligned relative to the probable road corridor. The spatial association of these graves with the Structure Locality 8 (as part of Residential Complex D) household is comparable to a Federal period household cemetery documented at the nearby site of Old Town.

Structure Locality 9 designates a 2.5 m x 2.0 m rectangular post-in-ground building pattern located 17 m east of Structure Locality 8 and 6.5 m east of Cemetery 3. This post pattern is aligned and oriented with reference to the Structure Locality 8 pattern and appears to be associated as a component of Residential Complex D.



Figure 5.17. Detailed plan of Residential Complex E at Ayers Town.

Residential Complex E

Residential Complex E consists of Structure Localities 10, 11, and 12, and the surrounding facilities (Figure 5.17). The principal domicile of this group, Structure Locality 11, is defined by three flat-based pits (Features 155, 162, and 163) and one shallow basin (Feature 158) located south of the road corridor on the eastern end of the site. These pits probably represent subfloor storage facilities beneath a cribbed-log structure (as inferred by the absence of surrounding postholes) that measured a minimum of 4.7 m x 3.4 m and was oriented approximately N116°W.

Cob-filled pits intrude Features 158 and 162, indicating reuse of this surface after abandonment of the pits and, presumably, after abandonment of the superstructure. Two other cob-filled pits, one posthole, and one possible clay-processing facility are located adjacent to this pit cluster and probably represent facilities associated with the Locality 11 residence.

Structure Locality 10 consists of two small, flat-based pits (Features 141 and 170) within a cluster of 16 postholes at the southern edge of the site, three meters southwest of Structure Locality 11. Three cob-filled smudge pits are located on the margins of this cluster. Although the postholes present no coherent structural pattern, the incidence of 40% of the site's postholes within a 3.5 m radius around Features 141 and 170 probably indicates a former post-in-ground structure in which only the deepest postholes survived plowing and surface deflation. This

pattern contrasts with other structure localities, and may represent a particularly early or anachronistic element of the community. An earlier (c. 1781–1790) date for Structure Locality 10 contexts is indicated by the presence of creamware, tin-enameled, slip-decorated, and "rosso antico" sherds, and the absence of pearlware sherds.

Feature 185, a small, flat-based pit located at the edge of the excavation 10 m southeast of Structure Locality 11, may represent a subfloor storage facility, and is the anchor for a provisional Structure Locality 12. Three postholes and two cob-filled pits situated within 4.5 m of Feature 185 may also be elements of Residential Complex E.

Structures with small (i.e., <60 cm in diameter), flat-based subfloor pits (i.e., Structure Localities 3, 6, 10, and 12) may have been functionally distinct from those defined around clusters of larger, flat-based storage pits. These posited structures are all situated in "back row" positions, 9–10 m from the road corridor, whereas groups of larger subfloor pits are positioned adjacent to this corridor (with the exception of Structure Locality 8). With one exception (Feature 116), small flat-based pits do not occur in clusters with larger flat-based facilities, and these smaller facilities (except Features 170 and 185) tend to contain much lower densities of household refuse than their larger counterparts. Differentiation of these flat-based pits in terms of size, morphology, content, and spatial arrangement suggests that the respective superstructures may not have been functionally equivalent, but their proximities may indicate complementary relationships in which structures with smaller flat-based pits are paired with structures (presumed primary domiciles) with larger flat-based pits. If this is the case, then Structure Localities 2 and 3 would be paired as buildings associated with the same residence, as would Structure Localities 5 and 6 and Structure Localities 10, 11, and 12.

Non-Residential Activity Areas

Other facilities are less clearly referable to particular residential complexes. Three borrow pits (Features 139, 190, 191) are located between Structure Localities 8 and 10, but are not demonstrably associated with either. Feature 140, a large flat-based pit that intrudes Feature 190, differs from other large flat-based pits in wall/orifice morphology (with out-flaring rather than vertical walls and a substantially larger orifice than base) and content, and does not appear to have been a substructure pit within a domicile. A cluster of 11 cob-filled pits flanked by Structure Localities 10, 11, and 12 may relate to Residential Complex E activities, but the high density of these facilities at the margin of the site may reflect its use as a special activity precinct accessible to the entire community. Spatial segregation of these smoke-producing facilities at the leeward edge of the village may reflect efforts to control the effects of activities with potential to annoy the entire community. The spatial segregation of clusters of cob-filled pits is also observed at the mid-eighteenth-century site of Nassaw.

Cemeteries

The three cemeteries documented at Ayers Town may also represent community-scaled precincts (Figure 5.18). In the southern "neighborhood," the areas of domestic space (Residential Complexes D and E) are located 28–38 m apart. The intervening space, bounded by the presumed road to the north, and Residential Complexes D and E on the west and east (respectively) contains Cemeteries 1, 2, and 3, and Structure Locality 9. Cemetery 1 is situated



Figure 5.18. Detailed plan of Cemeteries 1, 2, and 3 at Ayers Town.

adjacent to the posited road corridor, and 9 of the 15 graves in this cemetery (Group B, containing Features 41 and 47–54) are oriented with respect to the probable road. Another cluster within Cemetery 1 (Group A) is aligned approximately north–south and includes Features 42–46 and 111. Cemetery 2, situated equidistant between Structure Localities 8 and 10, consists of six graves (Features 7, 132, and 135–138), all of which appear to be oriented with respect to the presumed roadway. Cemetery 3 includes nine graves (Features 36–39, 115, 117, 119, 128, and 129) and is located 4.25 m east of Structure Locality 8. The orientation and alignment of these graves appear to reference Structure Locality 8 rather than the roadway, and this cemetery may represent a family plot associated with Residential Complex D. One grave, Feature 93, is disjunct from these cemetery clusters, and is likely associated with the Residential Complex A household.

These cemeteries undoubtedly originated during and grew episodically throughout the Federal period occupation of Ayers Town. These plots may also have continued in active use after residential use of the site ended (c. 1800). The continued use of cemeteries in abandoned Catawba village sites is attested by Catawba informants, who told Speck (1939) that New Town (abandoned c. 1820) cemeteries were used through the mid-nineteenth century. The total number of graves (n=31) identified in the investigations at Ayers Town approaches the probable site population (as gauged by five residential areas), and probably reflects extended use of the cemetery plots.

Summary

To summarize, investigations at Ayers Town defined Federal period contexts and facilities organized as five spatially discrete residential complexes arrayed along a central road corridor with ancillary community spaces devoted to mortuary activities and production activities. These residential complexes, which are probably referable to individual Catawba households, vary considerably in composition, but each is defined as including one or more large, flat-based pits interpreted as subfloor storage facilities beneath cribbed-log domiciles. Clusters of such pits indicate probable dwellings up to 4.8 m in dimension. Four probable domiciles are flanked by secondary structures defined either by posthole clusters or by the incidence of smaller (<60 cm diameter), flat-based storage pits. Four residential complexes include shallow, basin-shaped borrow pits; all include cob-filled smudge pits indicative of pottery production and maintenance. The extent of residential complexes also varies considerably, ranging from 90 m² (Residential Complex A) up to 165 m² (Residential Complex B).

It is unclear whether all five residential complexes at Ayers Town were simultaneously occupied. Artifacts associated with Residential Complex B indicate a slightly later date for deposition (and presumed abandonment) within Feature 55 than for other subfloor facilities, and it can be inferred that Residential Complex B represents the latest active Federal period Catawba occupation of the site.

The five probable households likely constitute the core of the larger Ayers Town settlement observed by Henrietta Liston in 1797. Liston is not explicit about the size of Ayers Town, but notes that it was "one of their Towns...for they are settled in three Towns," among which a population of 300 was distributed. She also noted seeing two log houses and "several of the Wigwhams", and recorded Ayers' apology "for the smallness of their numbers," because "the young Men had not yet come in from hunting." Reconnaissance of the area surrounding the site identified another Federal period Catawba residential area approximately 80 m northwest of Structure Locality 5; this may represent another household seated along the former roadway. Extensive soil borrowing from areas northwest and southeast of 38YK534 may have obliterated many other outlying residential area associated with Ayers Town.