# SETTLEMENT PATTERNS AT THE PARSONS SITE

David A. Robertson, Ronald F. Williamson and Bruce M. Welsh

# THE 1989-1990 INVESTIGATIONS

Portions of ten longhouses, the eastern and western segments of their enclosing palisade, and the basal remains of four middens were documented across the breadth of the Parsons site between 1989 and 1990 (Figures 2, 4 and 8). Two hundred and seven subsurface cultural features were recorded, both within and exterior to the house structures. One longhouse (House 5) was almost completely exposed within the excavation area as defined by the right-of-way. Major segments of six houses (Houses 2-4 and 7-10) were documented as were the end portions of two additional structures (Houses 1 and 6).

### Excavation and Recording Techniques

The extent and location of the ASI investigations were determined by the size and path of the planned watermain route. It consisted of a trench measuring 175 m in length and 18 m in width, extending from east to west across the central portion of the site (Figures 2, 4 and 8). An additional trench measuring approximately 50 m in length extended down slope towards the flood plain of Black Creek. As a result of these activities, all of the site area to be impacted by the installation of the watermain was examined.

As the portion of the site lying within the Hydro corridor had been previously disturbed by agricultural activity, a Gradall was employed to remove the plough zone, comprising approximately 30 cm of topsoil, in order to reveal the subsoil throughout the site area. The subsurface settlement features thus exposed were delineated more precisely by shovel shining.

A site datum was tied to the nearby Hydro towers and a five metre grid was established over the entire excavation area, thereby allowing the exact recording of feature and post locations by means of triangulation. Prior to

triangulation, post moulds and features were further defined by trowelling, and square plans were drawn. As conditions warranted, and as the soil dried out during exposure to sun and wind, water was used to increase the visibility of features.

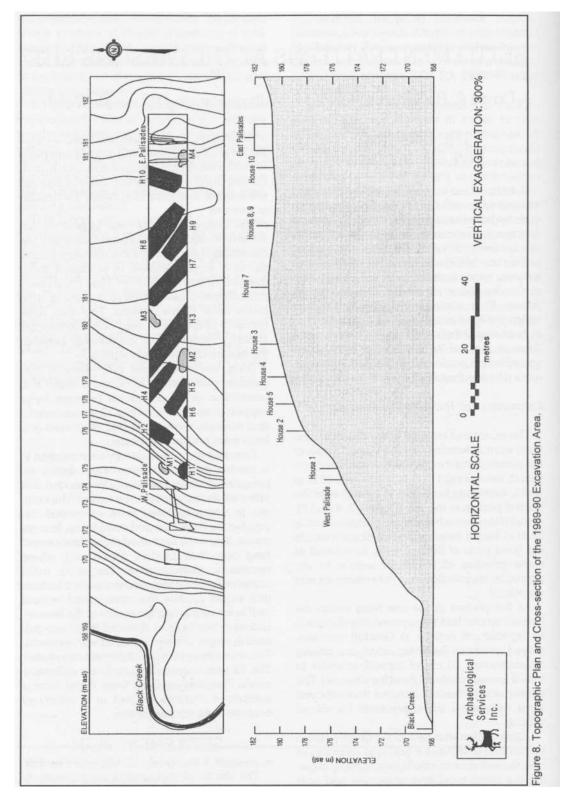
The location and diameter of post moulds were recorded on pre-printed forms with the exception of post moulds located during excavation of large features, in particular those interpreted as sweat lodges. These posts were most often recorded on the plan drawing of the basal layer of the feature. This was done because of the importance of accurately describing the locational relationship between the feature and the post moulds.

Posts were sectioned only when it was deemed useful either to obtain a depth and orientation or to distinguish between large support posts and small pits. Comments on fill and contents were made and recovered artifacts were bagged separately.

Features were recorded by triangulation to a centre point and were then drawn on preprinted forms. Locational information and other attributes were also recorded. The manner in which features were excavated depended on their size and complexity. In most cases, they were sectioned along their central long axis, their profiles drawn and, where necessary, photographed. Larger or more complex features were excavated in a fashion that would provide the most useful vertical profile for evaluating the nature of the feature. Unless a feature was deemed to be non-cultural in origin, the remaining fill was removed. Features were excavated by trowel and shovel. The fill was screened through six millimetre mesh. Flotation samples were taken from a number of features located in a variety of contexts from across the site.

# SETTLEMENT PLAN

The site is located on a broad promontory overlooking Black Creek. The occupation area



is currently estimated to extend over an area of 2.4 - 3.2 ha, being bounded on the north, west and south by the steep bluffs of the Black Creek ravine, and on the east by the more gradually sloping banks of a seasonal streamcourse.

The comparatively small area exposed during the 1989-1990 excavations precludes any definitive characterization of the overall layout of houses within the village. Within the excavation area, however, the centrally-located longhouses (Houses 3, 4, 5, 7, 8, and 9) share a similar northwest-southeast orientation (Figure 8), forming a single aligned cluster. On the other hand, the long axes of those structures located beyond the eastern and western extremes of this cluster (Houses 1, 2, 10 and possibly 6) are oriented from north to south, roughly parallel to the palisades.

In the absence of further excavation, it is impossible to determine whether the houses located within the entire central area of the village shared a similar northwest-southeast orientation, in order to make most efficient use of space or whether there existed several clusters with different alignments that may have represented individual groups of related lineages, sub-clans or clans, the distinct identities of which were, in part, maintained and expressed within the wider context of the village (Warrick 1984:46-48, Ramsden 1990b:374).

The contrasting alignments of those structures located immediately adjacent and parallel to the palisades may represent a defensive consideration, providing additional protection for the core of the village by constraining and funnelling the movements of potential attackers should they breach the perimeter defences (e.g., Pearce and Smith 1980; Finlayson 1985:407). There is, however, little evidence to suggest that the large scale military actions implied by such a defensive strategy were typical of the majority of Iroquoian warfare (Warrick 1984:33; Ramsden 1990a:172). Rather, it seems more likely that hostilities were played out through "disorganized ritual battles, small raiding parties, surprise attack... [and] capturing or killing isolated individuals outside settlements" (Warrick 1984:33). Traditionally, wars were not fought for territorial conquest or booty (Trigger 1969:42), and thus there was little need to risk excessive casualties by attempting to capture a fortified village. It is therefore more likely that, in general, such contrasting house

alignments reflect the desire to maximize use of space within the village defences. The orientations of Houses 1 and 2 at the east end of the village may also reflect the constraints imposed by topography.

# HOUSE DESCRIPTIONS

Both general observations and detailed descriptions, including metric attributes, are reported for each house, proceeding from west to east across the site. The definitions for structural characteristics, such as "central corridors" or "taper ends," were adopted from Dodd (1984:238-249). No attempt has been made to provide population estimates for the houses, on the basis of extant hearths, due to the limited exposure of the individual structures.

Interior domestic activity areas-centred upon hearths or otherwise-have been identified on the basis of the clustering of features and posts. While it is possible that many of these activity areas represent the existence of familial "apartments" along each side of the central corridor, possibly separated from one another by partition walls (Kapches 1993:150-152, 1994), there is little conclusive evidence in the archaeological record of the Parsons longhouses to support this hypothesis. In the absence of clearly defined lines of post moulds extending laterally from the house walls which have been documented only on rare occasions (Kapches 1993:150) - it must be assumed that any such features formed part of the house's superstructure rather than its substructure (i.e., those elements that are identifiable as post moulds, post pits, and "slash pits"). Thus the assertion that such partition walls did exist to define spatially discrete apartments within Iroquoian longhouses, while certainly plausible, remains conjectural rather than demonstrable. In the present study, therefore, the concept of the apartment has not been utilized for either descriptive or interpretive purposes.

Tables 2 to 5 provide summary statistics for the dimensions of the longhouses, house wall post diameters, interior house post diameters and palisade post diameters respectively. Tables 6 to 26, located at the end of the chapter provide descriptive data for all settlement features. 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19 

Standard Deviation

Range (cm)

statistics.

Denot	Length	Width	Orientation	no		House No.	Mean Post Diam.
No.	(m)	(m)	E of N	1		1	6.9
-	(+) 2	7.2	0			2 (overall)	8.5
2	(+) 10	7.2	100			2 (wall trench)	9.1
3	(+) 30	7.4	310			2 (non-wall trench)	7.5
4	(+) 21	2.0	304			3 (overall)	8 8
2	18	7.3	301			2 (well tropph)	8.4
9	n/a	n/a	n/a			S (wall uelich)	1 0
7	(+) 27	7.5	315			3 (non-wall trench)	9.7
8	(+) 26	7.6	307			4 (overall)	6.4
6	(+) 16	7.5	302			5 (overall)	7.1
10	(+) 17	7.4	8			5 (end walls)	6.3
1000						5 (west wall)	7.3
						5 (wall trench)	7.6
Table 4.	Table 4. Interior Posts: Summary Statistics	s: Summa	rry Statistics			5 (east wall)	8.1
House	Mean Post Diam (cm)		Rande(cm)	Standard Deviation	eviation	6 (north end wall)	8.0
1	87		5-16	3.68		7 (overall)	0.7
	0		4.30	5.43		(east wall trench)	B. 0
1 65	7.7		4-44	4.56		7 (west wall trench)	
	7.6		4.32	3.81		/ (east wall non-trench)	
- 10	7.9		4-22	3.92		/ (west wall non-trench	
	7.1		2.0	137		( (north end waii)	0.7
1	8.1		4-28	3.71		8 (overall)	1.7
. 0	7.00		90 7	A 23		8 (east wall)	6.7
0 0	ο ν		4.30	3 90		8 (west wall)	7.7
0 7	1.0		100	0000		8 (south end walls)	6.5
0	0.7		17-4	7.35		9 (overall)	8.0
						9 (north end walls)	6.3
Table 5.	Table 5. Palisade Posts: Summary Statistics	sts: Sumn	nary Statistic	cs.		9 (west wall)	4.8
Palisade	Mean	Mean Post Diam (cm)		Range (cm) Sta	Standard Deviation	40 (overall)	οα
West		7.4		5-16	1.82	10 (west wall)	68
East (overall	rall)	6.4	4	4-20	2.38	10 (east wall)	8.0
East (Row 1	v1)	7.4	2	5-20	3.00	10 (south end wall)	6.3
East (Row 2	v2)	6.9	4	4-15	2.19		
East (Row 3)	v 3)	6.5	4	4-15	2.35		
East (Row 4)	v 4)	6.2	4	4-20	2.19		
East (Row 5)	v5)	6.4	4	4-18	2.56		
East (Row 6)	v 6)	6.1	4	4-15	2.10		
1	i	0		0	00 +		

Much of the scattered human bone recovered from the site, which is summarized in the subsequent house descriptions, was briefly examined by Dr. Susan Pfeiffer of the School of Human Biology, University of Guelph. A few items were examined by Stephen Cox Thomas. Table 27 provides a summary of the distribution of this material across the site. A more detailed analysis of two crania recovered from the east palisade area of the site is provided by Dupras and Pratte (this volume).

### House 1 (Figures 8 and 9)

The extreme north end of House 1 was encountered at the southwest edge of the excavation area. Although only five metres of the house end were uncovered, this structure appears to have been laid on a north-south axis with a width of approximately 7.2 m. The rounded end wall was formed by both paired and irregularly clustered groups of posts. These posts, the mean density of which was 4.3 posts per metre, had a mean diameter of 6.9 cm, a range of 4 to 10 cm, and a standard deviation of 1.47.

No interior house features were encountered within the excavated portion of the house interior, but 15 interior house posts were uncovered. These posts ranged from 5 to 16 cm in diameter, with a mean of 8.7 cm and a standard deviation of 3.68. A number of the interior posts may represent a partition on the east side of the house or they may have related to a linear series of posts situated to the east of the house.

The structure was located on markedly sloping ground at the edge of the plateau overlooking Black Creek (Figure 8). In fact, the west wall lay approximately two metres below the east wall in elevation, suggesting that the structure may have had a nonresidential function.

House 2 (Figures 8 and 9)

An approximately ten metre long segment of House 2, including its rounded south end wall, was encountered to the northeast of House 1. This structure, which was oriented 18 degrees east of north, was approximately 7.3 m wide.

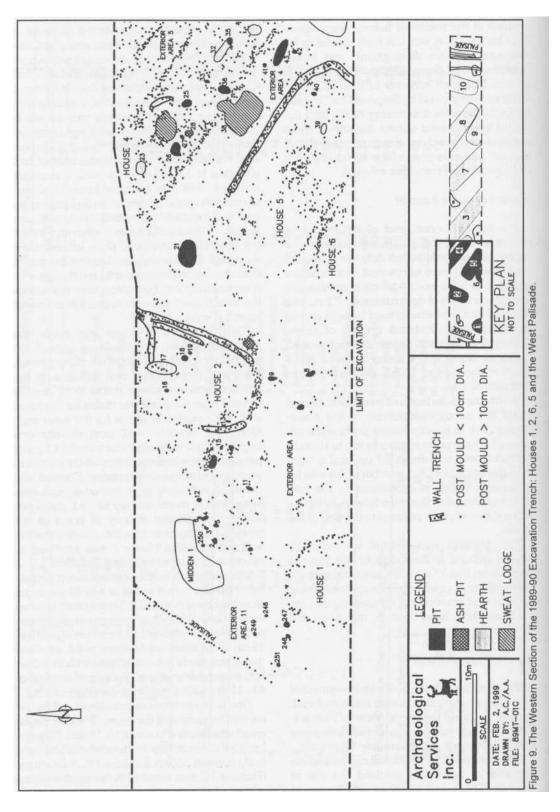
Construction of the southwest corner and the east wall of the house involved the use of trenches. These wall trenches, which ranged between 40 and 70 cm in width and 5 to 13 cm

in depth, were likely excavated in order to facilitate the placement of the wall posts (see Kapches 1980). Once these posts had been put in place, the trench was back-filled with soil, charcoal, ash and artifactual debris. The east side of the house consisted of a double wall, suggesting that the structure was rebuilt or substantially altered on at least one occasion. Furthermore, a short trench adjoining the inner east wall extended into the house interior, as if intended to form the house end. It appears, however, that this possible house end was abandoned prior to completion (in favour of the end wall located approximately eight metres further to the south) since neither the trench nor any other associated posts extend to the west wall. It is equally possible that the trench demarcates an internal partition although such a feature may only have been temporary since the trench itself appears to predate a central hearth (Feature 17).

The placement of house wall posts was generally variable, with single row, paired and irregularly clustered patterns all apparent. Wall post density was also variable. In the eastern wall trenches, mean post density ranged from 3.7 posts per metre for the inner wall to 5.7 posts per metre for the outer wall. Along the western wall, post density was slightly higher within the wall trench (4.3 posts per metre) than in those areas where no trench was present (4.0 posts per metre). The end wall differs significantly from the other wall sections, with a mean density of 13.1 posts per metre. The greater density of posts at the house end, together with the eastern double wall indicate that House 2 was modified or reconstructed on at least one occasion.

The wall posts had an overall mean diameter of 8.5 cm, with a range of 4 to 19 cm and a standard deviation of 2.6. Those posts located within the wall trenches were generally larger, with a mean diameter of 9.1 cm, a range of 5 to 19 cm and a standard deviation of 2.6, whereas those wall posts not associated with trenches had a mean diameter of 7.5 cm, and a range of 4 to 15 cm with a standard deviation of 2.36.

Five features were encountered within the excavated portion of the house (Table 6). Three small sterile pits (Features 16, 18 and 19) were located immediately to the south of the centrally aligned hearth (Feature 17). A fourth pit (Feature 13) was situated in the southwestern corner of the structure in an area that may



have served as a vestibule or a small storage cubicle.

Over 70 posts were distributed throughout the interior of the house. With the exception of a possible partition wall at the southern extreme of the structure, no real patterning in the distribution of the interior posts may be discerned. These posts ranged from 4 to 30 cm in diameter, with a mean of 8.9 cm and a standard deviation of 5.43.

#### House 6 (Figures 8 and 9)

Less than three metres of the extreme north end of House 6 was located within the excavation area. The orientation of this structure cannot be determined conclusively on the basis of the limited area exposed, however, it would appear to have been laid out along a north-south axis (perhaps parallel to House 2) rather than on a northwest-southeast alignment. The end wall of the house almost abutted the south side wall of House 5. The posts in the end wall generally occurred in pairs, although in greater number then in some other house ends (e.g. House 5). The mean diameter of these posts was 8 cm, with a range of 5 to 19 cm and a standard deviation of 2.27. Nine interior posts were documented within the limited area exposed. These had a mean diameter of 7.1 cm, a range of 5 to 9 cm and a standard deviation of 1.37.

### House 5 (Figures 8 and 9)

House 5, a flat-ended structure that was oriented 301 degrees east of north and measured approximately 18.0 m in length and 7.3 m in width, was almost completely exposed during the course of the investigations. Only the southwestern corner of the house, extended beyond the excavation area.

Construction of the majority of the east wall and at least half of the south end wall involved the use of trenches that ranged from 25 to 58 cm in width and to a maximum of 17 cm in depth. Wall post density was greatest within the wall trenches, averaging 8.3 posts per metre. It is probable that this portion of the house underwent considerable reconstruction. The remaining walls were dominated by single row or paired placement of posts. The west wall had a mean post density of 5.1 posts per metre, while the north end wall had a density of 4.8 posts per metre. A 1.2 m wide gap at the

northwest corner of the structure may indicate an entrance to the house.

Overall, the posts forming the walls of the house had a mean diameter of 7.1 cm, a range of 4 to 19 cm and a standard deviation of 2.37. Those posts located within the wall trenches of the east side wall and southern end wall had a mean diameter of 7.6 cm and a range of 4 to 19 cm. The remaining east wall posts had a mean diameter of 8.1 cm, and a more limited range of 5 to 11 cm. The posts comprising the north end wall had a mean diameter of 6.3 cm and a range of 4 to 8 cm, while those making up the west side wall had a mean diameter of 7.3 cm and a range of 4 to 12 cm.

Only three features were recorded within the structure, all of which were located in the south half of the structure (Table 7). These include a small centrally-aligned hearth (Feature 39) and two small pits (Features 37 and 40).

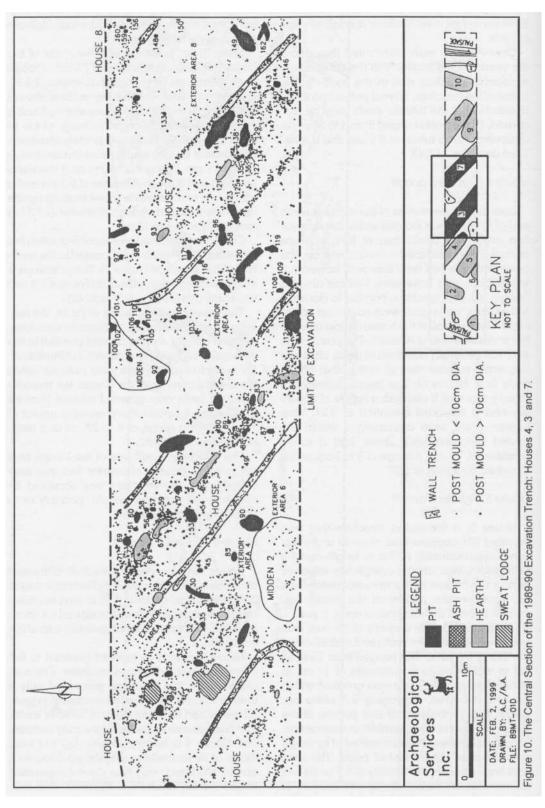
The presence of two rows of posts, the majority of which were over 10 cm in diameter, situated about 1.4 m inside and parallel to the side walls, suggests the presence of bunklines. Several clusters of posts were present within the central corridor of the House, the majority of which were concentrated around Feature 37. The interior posts had a mean diameter of 7.9 cm, with a range of 4 to 22 cm and standard deviation of 3.92.

The relatively small size of the house, and the general paucity of interior features may suggest that the structure was occupied by only a small group of people, possibly on a limited or seasonal basis.

### House 4 (Figures 8 and 10)

House 4 was located immediately to the east of House 5, with its longitudinal axis oriented to 304 degree east of north. A 21 m long segment of this structure, including its rounded southern end wall, was exposed during the course of the excavations.

House 4 stands in marked contrast to the other documented houses by virtue of its narrowness, for this structure measured only 5 metres in width, whereas the remaining houses all measured between 7.2 and 7.6 m in width. The narrowness of the structure may indicate that House 4 is somewhat later in date than either of its immediate neighbours (Houses 3 and 5). Moreover, only four metres separated House 4 from House 5 to the west, and little more than two metres separated House 4 from



House 3 to the east, whereas Houses 5, 3, 7 and 8 were all separated by distances of approximately 8.5 to 12 m. House 4 may, therefore, have been proportioned to fit within the limited space available between the larger and earlier Houses 3 and 5.

Regardless of the temporal relationship that may have existed between House 4 and its immediate neighbours, the history of this structure appears to have been complex. In the first place, it would appear that the construction of the house occurred over at least two phases, involving a transition from two separate structures to a single one that incorporated architectural elements of the earlier structures. The existence of a small structure, in the area of the extreme southern end of House 4, is suggested by the fact that both side walls appear to consist of two rows of single line posts, and by a marked discontinuity in the alignment of the east side wall related to the later phase of occupation. It is this latter discontinuity that suggests that House 4 evolved from two smaller structures, to a single larger house. While the northern end wall of the original small southern structure is poorly defined, it would appear that the building measured between eight and ten metres in length, possibly being somewhat open-ended and incorporating a sheltered activity area or vestibule.

The original end of the more northerly house is attested to by the presence of a short section of wall trench adjacent (but at an angle to the final east side wall joining the two structures) and by a group of 10 posts forming two short lines at a right angle to the final west side wall. There was, therefore, originally an open area between the two structures that extended from Feature 25 on the north to Feature 33 on the south.

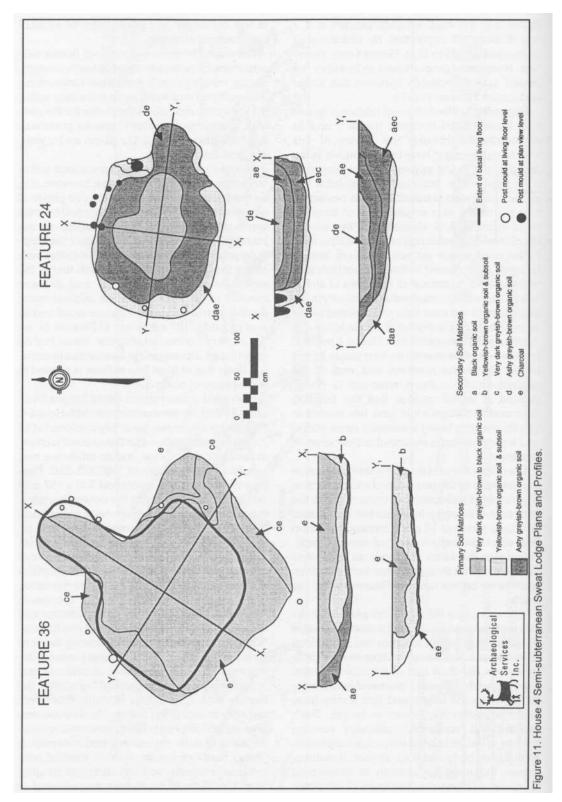
The wall posts related to all phases of the occupation of the house had a mean diameter of 6.4 cm, a range of 4 to 18 cm and a standard deviation of 1.74. This mean diameter is significantly smaller than that of the other houses, suggesting that smaller diameter posts were sufficient for the house and that it may have been proportionally lower in height. Such architectural variability, although running counter to the archetypal Iroquoian longhouse, should not be surprising. Rather it demonstrates the need for caution in developing formulaic or normative analyses of construction techniques, or in searching for symmetry

in the character and disposition of internal architectural elements.

Although the overall density of house wall posts was 7.5 posts per metre, it varied considerably, ranging from 5.9 posts per metre along the south end wall to 6.5 posts per metre within the east wall and 9 posts per metre for the west wall. The mean diameter of interior posts was 7.6 cm, with a range of 4 to 32 cm and a standard deviation of 3.81.

Fourteen features were encountered within the house (Table 8). Few of these, however, can be confidently related to a particular phase of occupation. Three comparatively small hearths were situated along the centreline of the house. Feature 23, within the area of the original northern structure, maybe associated with either the initial occupation or with that of the expanded house. Features 31 and 32 were located within the area of the original small southern structure. An additional small hearth was placed to the southwest of Feature 31, on the edge of the central corridor. Given that no more than 1.5 m separates these latter hearths, it is likely that at least one of them is related to each phase of occupation.

Two semi-subterranean sweat lodges (Features 24 and 38) were associated with House 4. Both these structures generally conform to the characteristics defined for this class of feature, in terms of plan shape, metric attributes and nature of fill (MacDonald 1992:323-324). Feature 24 (Figure 11a) measured 238 x 157 x 39 cm. It was situated within the central corridor, but rather than being oriented with its long axis parallel to that of the house as is typical for position (MacDonald structures in this 1988:19-21, 1992:323), it was oriented diagonally across the corridor on an east-west axis. In light of the narrow interior of House 4, the unusual position of Feature 24 may indicate that the sweat lodge was originally placed in the extreme end of the northernmost of the original two houses. Whether it remained in use following the construction of the expanded house cannot be determined. A large number of artifacts and faunal remains were recovered from within the feature including a deer mandible, ceramic rim sherds and chert flakes. The feature was layered with deposits of ash mixed with varying amounts of dark organic soil and charcoal. A "living floor" of brown subsoil, mottled with ash, black organic soil and charcoal, ranging from 7 to 22 cm in depth, was encountered at the base of the feature. Seven posts related to



the superstructure of the feature were identified around the perimeter of the living floor, ranging from 4 to 6 cm in diameter, with a mean diameter of 4.7 cm.

Feature 38 (Figure 11 b), measuring 306 x 267 x 29 cm, was situated in a manner such that the body of the structure lay outside of the house while its ramped entrance extended through the west wall of the house. The body of the sweat lodge was laid out with its long axis parallel rather than perpendicular to the wall of the house, perhaps in an effort to maintain the flow of traffic through the narrow space between Houses 4 and 5. A large number of artifacts were recovered from this feature, including ceramic sherds and carbonized plant remains. This feature was also layered with deposits of brown organic soils mottled with subsoil, ash and charcoal. A layer of ash with black organic soil and charcoal, ranging from 4 to 15 cm in depth, formed a living floor at the base of the feature. Ten posts, ranging from 4 to 10 cm in diameter with a mean diameter of 5.9 cm, were identified around the perimeter of the pit beneath this basal layer.

Seven additional features were documented within the house. Two pits (Features 26 and 27) and an ash pit (Feature 28) were located along the western margin of the central corridor within the area of the northernmost pre-expansion house. An additional pit (Feature 25) lay on the centreline in an area potentially traversed by the end wall of the earlier northern structure. Although this pit predates a single post, it is impossible to determine whether this post is associated with the end wall itself, or whether it is simply an isolated interior post. Three pits were in the area of the original southern structure. Two of these (Features 33) and 36) were located in the area of the north end wall of the small structure, while the third (Feature 35) post-dated one of the central hearths (Feature 32). Finally, a trench-like pit at the southeast corner of the structure(s) (Feature 30), predates the house wall(s). This feature appears to relate to exterior activity in the area that was carried out prior to the construction of the small southernmost structure.

### House 3 (Figures 8 and 10)

An approximately 30 m long section of House 3 was uncovered, extending across the entire excavation area. House 3 may correspond with one of the house structures re-

corded by Emerson in 1953, assuming that the mapping of the various excavation areas presented in Williamson, Cooper and Robertson (this volume, Figure 4) is at least somewhat accurate. The exposed portion of the house may include a poorly defined southern end wall, located approximately four metres from the southern limits of the excavation trench, which may represent a contraction of the structure. The house measured 7.5 m in width and was oriented 310 degrees east of north.

Major segments of the east and west side walls consisted of wall trenching, which ranged between 30 and 70 cm in width and aver-aged 10 cm in depth. The trench fill included artifactual debris, charcoal, and ash, as well as a single distal phalanx and a fragment from a right femur. Slight evidence of arthritis on the phalanx suggest that it was derived from a robust individual of between 30 and 50 years of age (Susan Pfieffer, personal communication 1993). No cut marks or other indications of trauma were noted on either element.

No consistent pattern of post placement may be discerned for the walls of the house, suggesting that any original regularities were obscured by later reconstruction and/or repairs. The overall density of wall posts was 8.3 posts per metre: a somewhat higher value than for the overall wall post densities of the other houses. Those sections of the wall comprised of trenches generally had higher post densities, ranging from 7 posts per metre in the northern trench segment of the east wall, 8.4 posts per metre within the west wall trench to 13 posts per metre in the southern trench segment of the east wall. In comparison, non-wall trench post density ranged from 5.5 posts per metre along the east wall to 6.2 posts per metre along the west wall. The lower density along the east wall is partially attributable to the presence of a number of gaps in the wall that may represent entrances to the house. generally higher density of wall posts may to substantial reconstruction renovation of the house walls, suggesting that the structure was occupied for a consider-able length of time. As discussed below, such an inference is further substantiated by the density of interior features and posts.

The posts forming the walls of the house had an overall mean diameter of 8.25 cm, a range of 4 to 31 cm and a standard deviation of 3.24. As with House 2, those posts within the wall trenches were generally larger, having a mean

diameter of 8.35 cm (range: 4-31 cm), whereas the remaining posts had a mean of only 7.8 cm (range: 4-19 cm).

Interior posts were largely concentrated within the central corridor in the areas of hearth activity. These posts had a mean diameter of 7.7 cm, with a range of 4 to 44 cm and a standard deviation of 5.43. The distribution of many of the larger support posts, ranging from 27 to 44 cm in diameter and from 33 to over 50 cm in depth, together with a general absence of features adjacent to the house walls, suggests the presence of bunklines measuring approximately two metres in width.

Twenty-seven features appear to be directly associated with the occupation of the house (Table 9). Five centrally aligned but unevenly spaced hearths (Features 66, 67, 75, 83, and 84) served as the foci of domestic activity. Features 66 and 67 were located within one metre of one another, while Feature 75 was four metres southeast of Feature 67. Six metres separated Features 75 from 83, while Feature 84 lay two metres to the south of Feature 83. Given the proximity of Feature 66 to Feature 67 it is possible that this pair of hearths represents the lateral movement of a single domestic area over the course of the house's occupation.

Features 83 and 84 may represent a similar shift in the location of a single hearth area over time. Since Feature 83 appears to predate an end wall (suggesting that the structure was contracted rather than expanded) it is most likely that both of these features relate to the earlier, pre-contraction phase of the house occupation.

The majority of the remaining features that may be directly associated with the occupation of the house form diffuse clusters surrounding the central hearths. Ten pits (Features 56-61, 69, 71 and 72) were located adjacent to the northernmost pair of hearths (Features 66 and 67), between the hearths themselves and the bunkline.

Three pits (Features 53, 54 and 74) lay midway between the northern hearth area and that represented by Feature 75. Feature 53, located at the eastern edge of the central corridor, contained a near complete Huron Incised type vessel.

Four pits (Features 80, 82, 88 and 89) together with a discrete cluster of over 200 posts were situated between the hearth areas represented by Feature 75 to the north and Features

83 and 84 to the south. Two additional pits (Features 49 and 87) were found to the west of this cluster, at the edge of the central *corridor*. Feature 49, a small shallow pit contained a notable artifact assemblage, consisting of an incomplete projectile point, two bifaces, a uniface and 19 flakes, all of Onondaga chert, together with a copper-stained bone bipoint. A fifth pit (Feature 81) lay to the northeast of this cluster, immediately adjacent to the house wall and facing a possible entrance. This feature post-dates a single post that may be associated with the contraction period end wall. This concentration of features and posts may indicate that an additional hearth was present in this area. Despite good soil conditions, however, no evidence for such a feature was found. If a hearth was present in this area it would, in all likelihood, have been related to the earlier pre-contraction period of the house's occupa-

A portion of an apparent cluster of features was documented at the southern limits of the excavated portion of the house. Two small pits (Features 111 and 112), a third large pit (Feature 113) and a number of associated posts were situated to the east of the centreline of the house, extending into the bunkline area. It should be noted that the excavated portion of Feature 113 yielded a carbonized wheat seed (Triticum aestivium/compactum). A similar find from a pit located between Houses 8 and 10 produced a radiocarbon date that calibrated to the mid-seventeenth century A.D. (see Robertson, Monckton and Williamson (this volume).

Feature 113 also contained a somewhat worn, deciduous maxillary molar, probably derived from an individual three to eight years old. The molar's roots are complete, indicating that the tooth was deliberately pulled, or that it fell out of a skull. If the tooth had been pulled, however, some damage to the roots would have been expected (Susan Pfieffer, personal communication 1993). A second permanent first molar lacking its mesiobuccal root and other root tips was also found in the pit.

Three additional features (Features 29, 79, and 257) were documented within the house; however, it is unlikely that they are contemporary with the structure. Descriptions of these features are therefore provided below in the discussions of Exterior Activity Areas 5 and 7.

House 7 (Figures 8 and 10)

An approximately 27 m long section of the northern end of House 7 was exposed to the east of House 3. The structure measured 7.5 m in width and was oriented 315 degrees east of north. The presence of two well-defined end walls, the more southerly of which predated a hearth (Feature 93), indicates that following its initial construction, the northern end of the house was extended by 7.5 m. Both end walls were rounded to tapering in form.

Wall trenching was preserved along roughly half of the exposed portion of the east side wall. This trench measured from 35 to 56 cm in width and 10 to 13 cm in depth. A wall trench was also present along the west wall of the house extension, ranging from 35 to 70 cm in width, with a maximum of 4 cm in depth. The fill of both trenches was comparable to that documented for the other houses on the site. The east wall trench also contained a proximal phalanx from a young adult, as well as a permanent second maxillary molar. This tooth exhibited very little crown wear, but its roots were complete, suggesting that it was derived from a young adult. The fact that the root tips were complete, indicate that the tooth was deliberately pulled, or that it fell out of a skull. The lack of any damage to the roots, however, suggests the latter origin (Susan Pfieffer, personal communication 1993).

With the exception of the extension, which generally consisted of a single row of posts, there does not appear to have been any particular pattern or consistent spacing of posts in the house walls. While the overall density of the wall posts was 7.17 per metre, density varied widely from one area to the next. The west and east side walls of the structure had mean densities of 12.3 (11.6 in the wall trench and 13.3 beyond the trench) and 8.6 posts per metre, respectively. The primary end wall had a density of 6.6 posts per metre, while the east and west walls of the extended north end had densities of 4.5 and 3.6 posts per metre, respectively. Two gaps in the east wall of the house extension, each measuring approximately 1.5 metres in width, provide the clearest indications of entrances to the structure, although a small gap in the southern end of the west wall may also represent an end.

The wall posts had an overall mean diameter of 7.6 cm, a range of 4 to 15 cm and a standard deviation of 2.13. On the whole, the

posts used in the construction of the house extension were smaller, with a mean diameter of 6.6 cm, a range of 4 to 10 cm and a standard deviation of 1.84.

The higher post density along the main sections of the side walls, together with the absence of any consistent patterning to their placement, may be attributed to renovation or reconstruction over the entire period during which the house remained in use. By contrast, the lower post density of the house extension, and the more consistent patterning of the posts, suggests it represents a single episode of construction, although there is some indication of subsequent repair or alteration along the northwest corner.

The majority of the interior posts were situated along the central corridor, and were generally clustered in the hearth areas. These posts had an overall mean diameter of 8.1 cm, with a range of 4 to 28 cm and standard deviation of 3.71. A potential partition wall, delineating a storage cubicle or vestibule may be discerned approximately 5.5 m to the south of the original house end. At least one similar partition may have been present at the end of the extended house as well. The paucity of features adjacent to the house walls, and the overall distribution of the interior posts suggests the existence of discontinuous bunklines measuring approximately one metre in width.

Twenty-one features that were likely associated with the occupation of the structure were documented (Table 10). Two of these clearly represent centrally aligned hearths (Features 93, 121), while two others may represent the vestiges of such features (Features 134, 147). These hearth areas were separated by distances of between three and seven metres. As mentioned above, Feature 93 was associated with occupation occurring after the extension of the north end of the house, as it clearly post-dated several wall posts.

The majority of the remaining features that were probably directly related to the occupation of the structure were located within the central corridor, adjacent to the largest of the central hearths (Feature 121). Six small pits (Features 125, 127, 129, 135, 136 and 138) and a much larger, deep pit (Feature 128) were located to the immediate south of Feature 121, accompanied by Feature 134, the possible remnant hearth, and numerous interior posts that may be attributable to both structural elements and the remains of household equip-

ment. Four pits (Features 142, 143, 144 and 146) together with an ash pit (Feature 140), and over 100 interior posts lay approximately 6.5 m further to the south of the Feature 121/134 hearth area, forming a discrete cluster along the eastern half of the central corridor.

A large feature (Feature 141) was situated adjacent to the east side wall of the house, opposite the Feature 121/134 hearth area. While this feature had been severely disturbed by root and/or rodent activity, its general size (470 x 178 x 43 cm), its position and the large quantities of artifacts and fire-cracked rock recovered from its fill, suggest that it may represent the remains of a semi-subterranean sweat lodge. Despite careful scrutiny, however, no subsurface structural posts, or traces of a basal living floor were discovered. A single maxillary premolar, lacking much of its crown enamel was recovered from the fill of the feature.

Four pits (Features 94, 97, 98 and 117) were located within the house interior to the north of the original end wall. Feature 117 was adjacent to the extended west wall, while the remainder lay in the area of the potential storage cubicles of the later structure. It is unclear whether or not these features are contemporary with the house itself, as such house end storage areas are generally devoid of features. Although it is hardly compelling evidence, it should be noted that Feature 94 predates an isolated post that may be related to the occupation of the structure.

Three additional pits located in the interior or west wall areas of the house (Features 96, 123 and 258) more clearly represent exterior activity post-dating the occupation of the structure. Descriptions of these features are provided in the discussion of Exterior Area 7 below.

#### House 9 (Figures 8 and 12)

House 9 was represented by an excavated segment measuring approximately 16 m in length that included a north end wall. A minimum distance of approximately two metres separated House 9 from House 7, its immediate neighbour to the west, while the east wall of the structure almost abutted the southwest corner of House 8 to the east. It is possible, therefore, that construction of House 9 occurred later than that of the neighbouring residences.

The house measured 7.5 m in width and was oriented 302 degree east of north. The northern extreme of the structure displayed rounded corners leading to a flat end wall. A probable entrance, measuring 1.2 m in width, may be discerned in the end wall.

Construction of both side walls appears to have included the use of shallow wall trenches that survived only as discontinuous segments that seldom exceeded two centimetres in depth. One section of this wall trench yielded a cranial fragment from a mature adult.

The walls generally consisted of paired posts, the overall density of which was 4.5 posts per metre along both the side walls, and 4.2 posts per metre along the end wall. The consistency of post placement, and their similar, relatively low, densities suggest that this end of the house represents a single episode of construction, and saw little subsequent repair or modification.

Overall, the posts used in the construction of the house had a mean diameter of 8 cm, a range of 4 to 17 cm and a standard deviation of 2.37. The posts making up the west wall had a mean diameter of 8.4 cm, a range of 5 to 13 cm while those of the east wall had a mean diameter of 8.3 cm and a range of 4 to 17 cm. The posts forming the end wall, on the other hand, had a mean of only 6.3 cm and a range of 5 to 11 cm.

Seven small features (Table 11) and over 150 interior posts were present within the excavated portion of the house. The interior posts had a mean diameter of 7.8 cm, a range of 4 to 30 cm and standard deviation of 3.9.

Four pits (Features 170, 171, 174 and 177) were distributed throughout the central corridor area. Feature 177, located on the centreline of the house, was associated with an annular formation of posts measuring approximately two metres in diameter, at the focus of which were located several additional posts. Similar, if generally less discrete or well-defined, post formations may be noted in the excavated segments of several of the other houses (most notably House 8). Some such clusters of posts may represent the remains of 1972; baths (Tyyska 1985:409-41; MacDonald 1988:19). No hearth that may have been associated with this possible sweat bath was documented within the excavated portion of the longhouse.

Three additional small pits (Features 166, 168 and 173), along with several posts, were

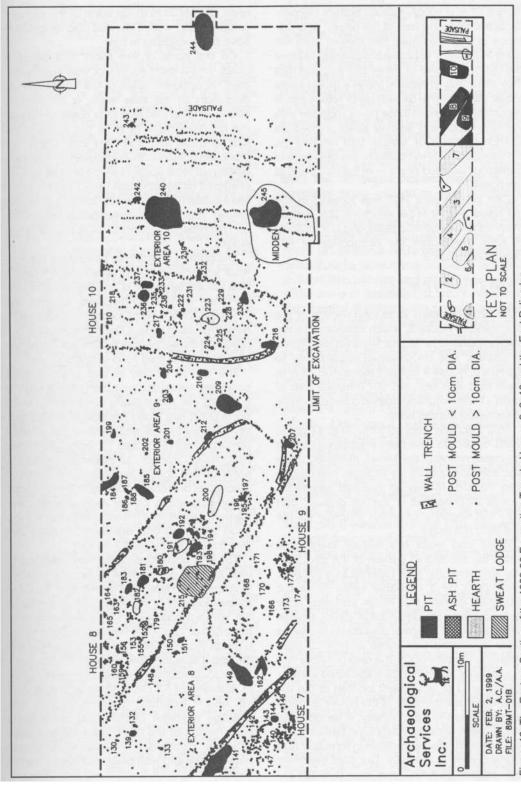


Figure 12. The Eastern Section of the 1989-90 Excavation Trench: Houses 9, 8, 10 and the East Palisades

arranged in a roughly linear pattern perpendicular to the long axis of the house, at a distance of approximately five metres from the north end wall. The profile shapes and relative depths of all three of these pits suggest that they were dug to receive large support posts rather than to serve as storage or refuse pits. It is possible that these large posts, together with the accompanying smaller posts formed an interior partition or screen that defined an activity area — as indicated by the presence of numerous isolated posts — at the north end of the house.

One pit (Feature 162) was located at the northwest corner of the structure. This feature overlaid three end wall posts and is thus likely to have post-dated the occupation of this portion of House 9.

### House 8 (Figures 8 and 12)

An approximately 26 m long section of the south end of House 8, which appears to have been expanded or contracted on at least three occasions, was documented immediately to the east of House 9. House 8 measured 7.6 m in width and was oriented 307 degrees east of north. This structure contained a large quantity of scattered human bone.

Wall trenches, varying from 20 to 47 cm in width, appear to have been extensively used in the construction of the house, however, these features were extremely shallow, resulting in their survival merely as isolated segments. Trench fill consisted of various organic and ashy soil deposits, charcoal, ceramic sherds and lithic debitage.

Three end walls are readily identifiable within the excavated portion of the structure. The southernmost wall tapered to a flat end, interrupted by a probable entrance at the southwest corner. This house end may have incorporated a storage cubicle, defined by the presence of two irregular alignments of interior posts traversing the house interior at right angles to the side walls. It is also possible that this end was appended by a sheltered exterior activity area or windbreak located at the extreme southwest corner of the house immediately adjacent to the doorway. A second end wall, located approximately 5.5 m further north, was somewhat more rounded in form and had a broad central opening. The third relatively well defined end wall was only partially exposed at the northern edge of the excavation

area, almost 25 m to the north of the extreme southern end wall. This wall also appears to have been rounded in form.

On the basis of two short alignments of posts, and a short section of wall trench situated on opposite sides of the house, and at diagonals to the side walls, a fourth, very poorly-defined end wall may have been present approximately 14 m to the north of the southernmost end wall. This wall, if genuine, has been considerably obscured by domestic activity, at least some of which is likely to have predated its construction (e.g., Feature 215, a semi-subterranean sweat lodge described below). This would suggest that this particular end represents a contraction in overall house length.

The pattern of wall post placement is somewhat variable, a characteristic that together with the evidence for a number of house expansions and/or contractions, is probably indicative of a lengthy period of occupation. Nevertheless, it seems likely that construction of each of the successive walls entailed the use of a single or paired rows of posts.

The overall density of wall posts was 7.1 posts per metre, varying from an average of 6.7 posts per metre along the east wall to 7.5 posts per metre along the west wall. The density of posts for the well-defined, most southerly, end wall measured 7.1 posts per metre. Post density appears to increase toward the north of the house, perhaps as a result of renovation or reconstruction occurring with the house extensions and/or contractions. Near the northern edge of the excavation area there is an indication of a double wall associated with the northernmost house end.

The wall posts forming the structure had an overall mean diameter of 7.7 cm, a range of 4 to 20 cm and a standard deviation of 2.38. The mean diameter of the east wall posts was 7.9 cm, with a range of 4 to 15 cm and a standard deviation of 2.38, while the west wall posts had a mean diameter of 7.7 cm, a range of 4 to 20 cm and a standard deviation of 2.86. The posts of the southernmost end wall averaged 6.5 cm in diameter of 6.5 cm, with a range of 4 to 11 cm and a standard deviation of 1.46. The average diameter of the posts used in the construction of the other potential end walls was not calculated because of confusion between the end wall posts and interior house posts.

Over 200 posts — with a mean diameter of 7.8 cm, a range of 4 to 26 cm and a standard deviation of 4.23 — were present in the house interior. The majority of the larger posts occurred along the edge of the central corridor. This distribution, combined with an overall lack of features or posts adjacent to the house walls, suggests the presence of 1.5 m wide bunklines along both sides of the house.

Twenty-seven features were documented within the excavated portion of House 8 (Table 12). Four of these were centrally aligned hearths (Features 180, 182, 191 and 200), separated from one another by distances of two to three metres.

Feature 182, the northernmost hearth in the excavated area, appears to have served as the focus of considerable domestic activity, being surrounded by numerous posts, an ash pit (Feature 152), and as many as nine pits (Features 153, 155, 163, 164, 179, 181, 183, 260 and 261). Several of these pits intersect one another (Features 183, 260 and 261; Features 163 and 265), indicating that relatively intense or long-term use of this hearth area resulted in the successive re-excavation of features in specific locations.

To the south of Feature 182, the smallest of the hearths (Feature 180), was associated with approximately 30 posts. Given the proximity of this hearth to a probable semi-subterranean sweat lodge (Feature 215) located adjacent to the west wall of the house, it is tempting to suggest that these two features were functionally related.

Feature 215 measured 238 x 157 x 39 cm. Several house wall posts intruded into the fill of the feature along its western edge, as did several posts tentatively identified as an end wall. While the end wall posts likely postdate the feature, the west wall posts may be contemporaneous. It is likely, that as with many interior sweat lodges, Feature 215 was excavated very close to the wall and that some slumping occurred around the wall posts. When the feature was subsequently filled in, the wall posts were re-packed with earth thereby incorporating the wall within the feature. Thus, while it may appear that the wall is intrusive, in fact the feature may have assimilated the wall. The predominant matrix of the feature consisted of subsoil mottled with dark organic soil and charcoal. No living floor was apparent at the base of the feature, yet six posts ranging from 4 to 8 cm in diameter were

identified around the perimeter of the feature. Additional posts may have been present, however, soil conditions were poor.

A large number of artifacts, including several bone beads, ceramic vessel rim sherds, chert flakes, and ceramic pipe fragments were recovered from Feature 215. A large quantity of human bone was scattered throughout the several fill layers in the northwestern quadrant of the feature. This material included the central portion of a frontal bone with the left supraorbital process; an occipital fragment from the left supraoccipital region; a right maxillary molar with crown and buccodistal root; the major portion of a thoracic vertebra; two lumbar vertebrae; a right ilium with much of the acetabulum; numerous proximal and distal rib sections, including the second left and fifth right; an entire right radius, both a left and a right navicular; and an entire left cuboid. While some of this material, which represents the remains of at least one gracile individual, displays traces of carnivore gnawing, none bears any obvious signs of cut marks, damage or trauma (Susan Pfieffer, personal communication 1993). The presence of human remains within semi-subterranean sweat lodges has been documented on several other Iroquoian sites in southern Ontario (Dudar et al. 1996: 185-187; MacDonald 1992:324; Ramsden et al. 1998:52-75; Spence 1994:13; Wright and Anderson 1969:22-23).

A third hearth (Feature 191) was located less than three metres to the east of Feature 215, with which it may have been associated. The hearth was flanked by a pair of moderate-sized pits (Features 192 and 193). Two small, but very deep pits (Features 194 and 198) that were also located in this area were probably the remains of support posts.

Feature 194 contained four pieces of human bone: a right scapula, right clavicle, right metacarpal and the distal section of a rib, possibly all from a single gracile, but mature individual. The skeletal material from Feature 198 consists of two complete fingers (the proximal middle and distal phalanges) derived from the same hand (index and middle?) of a mature individual, one fourth or fifth lumbar vertebra, one upper column thoracic vertebra (T1-T8 inclusive), and a left ilium with its auricular surface. The fusion of the ephipyses of the phalanges, the sizes of the vertebral bodies, and a lack of any indications of arthritis all suggest derivation from a small, young adult.

The ilium is also representative of a small mature individual. It has a flat sacro-iliac articulation, which is generally a female trait, however, the pubis exhibits all three Phenice criteria for a male. The latter provide a more reliable basis for estimation of sex. With respect to the age of the individual, the pubic symphisis conforms to Todd's Stage 6 (30-35 years) and Stage 7 (35-40 years). Similarly, the auricular surface suggests an individual under 40 years of age. There are slight traces of arthritic lipping on the acetabulum (Susan Pfieffer, personal communication 1993).

It would appear that either the support posts had been removed and these remains subsequently deposited in the pits, or that these bones were actually used as 'wedges' for the posts. The relationship between these remains and those found in Feature 215 a few metres to the west is difficult to ascertain, but it is possible that they all derive from the same individual. Whether or not the human remains from Features 182, 194, 198 and 215 are derived from a single individual, they do not appear to have constituted a formal burial.

An annular formation comprised of six clusters of posts located to the immediate south of Feature 191 may represent a sweat bath measuring approximately two metres in diameter. As this concentration of posts lies equidistant from both Feature 191 and Feature 200, the most southerly hearth in the house, it may be associated with either feature. The latter hearth lacks any other associated features in close proximity, although a cluster of three small pits (Features 195-197) lies roughly 2.5 m to the southwest. These pits may be temporally related to the end wall that is immediately adjacent, lying as they do just inside the doorway.

Three small pits (Features 156, 159, 160) were found in a very similar position against the northernmost end wall. Several small clusters of posts were also present in this area. Finally, a pit of undetermined form or size (Feature 165) was partially exposed at the edge of the excavation area, located largely in isolation from any of the other documented features.

House 10 (Figures 8 and 12)

A 17 m long section of House 10, which measured 7.5 m in width and was oriented roughly parallel to the palisades at eight de

grees east of north, was identified to the east of House 8. The excavated portion of the structure includes a somewhat asymmetrical flat end

Segments of wall trenches were preserved along the southern half of the exposed western house wall and in a small area of the east wall near the northern edge of the excavation trench. These trenches ranged from 20 to 35 cm in width, achieving a maximum depth of only four centimetres. At the time of excavation, however, it was apparent that the trenches were far more extensive. Immediately following the mechanical removal of topsoil, a dark outline was visible along most of the walls. At this time only the south end wall lacked any indication of trenches. Upon shovel shining, however, the majority of the trenching proved to have survived only as surface staining in the subsoil.

Wall construction was predominantly characterized by irregular clusters of posts, although short sections of paired, staggered and single line placement may also be discerned. The alignment of the west house wall was rather inconsistent, giving the structure, as a whole, a somewhat asymmetrical appearance. This was particularly noticeable at the house end, where the west wall tapered to meet the flat end wall more gradually than did the more consistently straight east wall. Two possible entrances may be identified in the excavated portions of the house: one in the east wall, and one at the extreme southwest corner of the structure.

The overall density of the posts making up the walls of the house was 5.4 posts per metre, varying from 5.2 posts per metre along the east wall, to 5.3 posts per metre along the west wall, and 6.2 posts per metre in the end wall.

The house wall posts had an overall mean diameter of 8.1 cm, a range of 4 to 20 cm and a standard deviation of 3.62. The west wall posts had the largest mean diameter at 8.9 cm, with a range of 4 to 20 cm and a standard deviation 2.9. The east wall posts ranged from 4 to 18 cm in diameter, with a mean of 8.0 cm and a standard deviation of 3.32. The posts of the south end wall were smaller, with a mean diameter of 6.3 cm, a range of 4 to 9 cm and a standard deviation of 1.41.

Over 150 posts, which had a mean diameter of 7.0 cm, a range of 4 to 27 cm and standard deviation of 2.99, were distributed throughout the house interior. There is little indication for

the presence of bunk lines, or any other formal internal features such as partition walls or storage cubicles.

Twenty-one features were encountered in the interior of the house (Table 13). Feature 223 was a centrally aligned hearth, which served as the focus of a diffuse cluster of four small pits (Features 224, 225, 228 and 229) and several isolated posts.

A second diffuse cluster of features was situated 3.0 to 6.5 m to the north of Feature 223. Eleven pits (Features 217, 222, 231, 233, 235-238, 259, 262 and 263) were distributed in a roughly circular pattern throughout this area. Several dense post clusters and numerous other isolated posts were also present. The fact that a number of the pits were recut on several occasions (Features 235/264, 231/259, and 217/262/263) suggests that the area was extensively used. This may indicate that a hearth was formerly present in this area, although no trace of any such feature was documented during the investigations. one of the pits (Feature 236) yielded two matching pieces of a human parietal.

Four other pits were distributed throughout the exposed area of the house interior. Two small features (Features 210 and 218) were located on opposite sides of the central corridor near the northern edge of excavation. Both these features, in all likelihood, relate to facilitating the placement of support posts rather than storage or refuse pits. A large pit (Feature 230) was located adjacent to the east wall of the house, immediately to the south of the probable entrance to the structure. Another large pit (Feature 252) was located near the possible entrance at the extreme southwest corner of the structure. Although this feature pre-dated several wall posts, it would seem that it was coeval with the wall trench.

# THE PALISADES

Portions of a palisade defining the limits of the village were encountered in both the west and east ends of the excavation area (Figures 8, 9 and 12). The western palisade consisted of a single row of posts, lying approximately 15 m down slope from the top of the bank, and involving a drop of some three to four metres in elevation. The eastern palisade, on the other hand, was formed by as many as seven rows of posts situated in an area of generally flat

topography leading to the gently sloping banks of a seasonal streamcourse.

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The single row western palisade was situated approximately 5.5 m to the west of the west wall of House 1 and 14 to 16 m from the west wall of House 2. Given the substantial difference in elevation between the palisade and the main village occupation area, the village occupants would have been able to see over the top of the palisade unless this structure was well over five metres in height. The commanding views available along this side of the promontory, together with the steepness of the ravine bluffs, may explain why only one row of palisade was considered necessary for this segment of the village. It should be noted, however, that Emerson's 1952 excavations uncovered short segments of multiple-row palisades to both the north and south of the 1989-1990 excavation area (Williamson, Cooper and Robertson, this volume, Figure 3: Areas A and H). It would therefore appear that the construction of the western defences was variable.

The portion of the western palisade documented in 1989-1990 consisted of 52 posts, forming 1.5 to 2.5 m long segments of single posts placed at approximately 20 to 30 cm intervals. These posts ranged from 5 to 16 cm in diameter, with a mean of 7.4 cm, and a standard deviation of 1.82. The fills of 34 of the posts contained charcoal while those of another nine contained both charcoal and ash.

The seven rows of posts comprising the east palisade span an area over ten metres wide. The two interior rows were the only ones that appear to have maintained an integrity of alignment throughout the entire width of the excavated trench. For the purposes of description, these rows have been numbered 1 through 7, proceeding from west to east.

The westernmost row (Row 1) was located five metres east of the east wall of House 10. Row 2 lay a further 1.0 to 1.5 m to the east of and parallel to Row 1. Both Rows 1 and 2 were formed by 2.5 to 3.5 m long sections of single posts placed at 10 to 40 centimetre intervals. An open area measuring 4.0 to 4.5 m in width was situated between Rows 2 and 3. A distance of approximately 4.5 m comprised the entire width of the area covered by Rows 3 to 7. Post placement and spacing was less consistent throughout the outer palisades. Moreover, towards the southern edge of the excavation area, Rows 3 to 6, and possibly 7, converge

from five rows to three, at a point at which a number of posts appear to form a diagonal alignment across the four westernmost walls of the outer palisade.

In general, the posts used in the construction of the palisades decreased in size from the inner to the outer rows. The posts forming Row 1 had a mean diameter of 7.4 cm, with a range of 5 to 20 cm and a standard deviation of 3.0. The posts of Rows 2, 3, 4 and 5 had mean diameters of 6.9, 6.5, 6.2 and 6.4 cm respectively. The posts of Rows 6 and 7 had the smallest mean diameters of 6.1 and 5.8 cm respectively.

Although the multiple rows of palisade along the eastern edge of the village may reflect an effort to establish heavier defences in an area of topography that provided little strategic advantage, it is also possible that these seven rows are not all contemporary. The inner two walls, for instance, may represent the palisade erected around the core area of the village, while the outer five rows may have been added to surround the occupation area at its maximum extent. Unfortunately, however, the settlement pattern data recovered during the course of the investigations are insufficient to determine the character of any possible village expansions or contractions.

#### THE MIDDENS

The basal remnants of four heavily disturbed middens were encountered within the settlement area bounded by the palisades. These middens, which survived as shallow and discontinuous deposits exhibiting only minor layering and lensing, were excavated in one metre square units.

Midden 1 was situated approximately eight metres to the north of the north end of House 1 and ten metres to the west of the south end of House 2 (Figures 8 and 9). Lying at the break-in-slope, it is likely that the midden had suffered considerably from erosion. The surviving refuse deposits extended over an area of approximately 20 m², achieving a maximum depth of 23 cm. Among the material recovered from this deposit was a small, possibly human, juvenile skull fragment.

Midden 2 was located immediately adjacent to the south end of House 4, roughly six metres to the east of the southern end of House 5 and six metres to the southwest of House 3 (Figures

8 and 10). Although this midden extended beyond the southern limits of the excavation area, it covered an area of at least 55  $m^2$ . Midden soils reached a maximum depth of 15 cm. Over 40 posts were scattered throughout the area of the midden, although little patterning can be discerned in their distribution.

Midden 3 was situated at the northwest corner of House 7 (Figures 8 and 10). While this midden also extended beyond the excavated trench, it covered an area of at least 35 m². Within the excavated portion, the midden soils measured a maximum of 25 cm in depth. Several features (Features 91, 92, 100-102) were documented at the base of the midden (Table 13). As all of these features were rather shallow, however, it is likely that they simply represent undulations of the basal level of the midden rather than deliberately excavated pits.

Midden 4 was situated approximately five metres east of the south end of House 10, within the area of the inner palisades (Figures 8 and 12). Extending over an area of approximately 50 m<sup>2</sup>, this midden was the best preserved of those documented during the excavations. Nevertheless, it too had undergone considerable disturbance from agricultural activity and previous excavations. Several of the one-metre square units yielded twentieth century artifacts such as beer bottles and a number of broken garden trowels and shovel blades. Based on the mapping of previous work on the site, Midden 4 would appear to correspond most closely to John Morrison's Midden 3 (Williamson, Cooper and Robertson, this volume, Figure 3).

The best preserved portion of this refuse deposit, measuring 41 cm in depth, was in the form of a large refuse-filled natural depression (Feature 245) at the base of the midden in which a layer of organic soil mottled with charcoal and subsoil overlaid a layer of organic soil mottled with charcoal and ash (Table 14). At the very base of this depression two human crania had been deposited in upright positions. The first of these represents a male, probably over 50 years in age, while the second is that of a younger female. As the on this spheno-occipital synchrondrosis specimen was probably fused, and the roots of third maxillary molars were fully formed, it is probable that this woman was in her midtwenties. Neither skull bears evidence of cut marks or other traumas (Susan Pfieffer, personal cornmunication 1993). The results of a craniometric analysis of these two skulls, in an effort to identify their potential ethnic affiliation(s), is presented by Tosha Dupras and David Pratte (this volume).

The refuse deposits overlying the depression contained the spheno-occipital synchrondrosis and the petrus portion of the temporal bone from the male cranium. An unprovenienced mandible, recovered from the backdirt during the initial plough zone stripping in this portion of the site, may also match the male cranium. Both mandibular condyles had been broken off. Such alterations are typical results of defleshing (Susan Pfieffer, personal communication 1993).

' It is difficult to establish conclusively the temporal relationship(s) that may have existed between Midden 4 and the inner palisade. It is most likely however, that the midden accumulated as refuse was discarded between the palisade walls. These mounded deposits would then have washed down between the extant posts, accounting for the spread of thin layers of organic soil beyond the palisade walls themselves.

### EXTERIOR FEATURE S

Although caution must be employed when interpreting activity outside of houses, the significant presence of exterior house features, when considered in conjunction with other lines of evidence, can be a useful indicator of seasonality of occupation. The identification of well-defined activity areas can also lead to a better understanding of the types of tasks that were completed out-of-doors.

In order to evaluate the degree and types of activities that occurred outside of houses, there are several kinds of evidence that need to be examined. For example, a cluster of features in association with a small fence is suggestive of a well-defined area that may have been used for specific purposes. The precise nature of the activities conducted in such an area is more difficult to discern, although comprehensive analysis of feature attributes and detailed analyses of the plant, faunal and artifactual contents of the features may be instructive. Such analyses are further complicated if the area in question was used over a long period of time. There are also many examples of features that are not as easily classified as

activity areas, except in a limited sense. These include features that are frequently classified as natural depressions, some of which are found to contain a variety of cultural material. Basal remnants of natural depressions encountered during the investigation of a site can be indistinguishable from deliberately excavated pits. Such naturally occurring depressions, caused by tree falls or rock pulls, for example, may have been intentionally used for refuse disposal, although it is also possible that considerable quantities of debris could accumulate in such areas incidentally. Nevertheless, there is no reason to assume that activities were not intentionally carried out in the vicinity of a refuse area where the disposal of debris would be easily facilitated, and where there was access to a wealth of raw material such as bone.

Some activity areas can be defined on the basis of the spatial clustering of features and posts. Other activity areas are no doubt represented by single features, post clusters, or indeed, a single post. Obviously, some are more amenable to description and explanation than others.

Of the 207 subsurface cultural features documented within the excavation area, 83 (40 percent) occurred outside of the house structures. Twelve general exterior areas were defined for the purposes of data organization and presentation. The definition of these broad areas was facilitated by the formalized and relatively compact layout of the village, for the houses themselves would have served to define specific locations where associated exterior activities would have been more likely to occur on a regular basis.

Although there appears to be a direct relationship between the spatial constraints imposed by the presence of the houses, and the distribution of exterior features, it should be noted that the validity of some of the areas so defined remains uncertain. In the first place, the limited extent of the excavations has inhibited the identification of any exterior areas in their entirety or as spatially discrete zones within the overall context of the settlement. Secondly, it is clear that not all of the exterior features identified during the course of the investigations are contemporary with the houses with which they may appear to be associated. The fact that certain individual features clearly pre- or post-date their "associated" house structures suggests that occupation of this portion of the site was far more dynamic and complex than might be suggested simply by the generally uniform layout of the longhouses themselves.

With these considerations in mind, the basic descriptions of the large exterior areas and any significant clusters of features and posts they contain are presented below.

# Area 1 (Figure 9)

Area 1 was a large open area located between the north end of House 1 and the south end of House 2. It was further demarcated on the west by the heavily disturbed and eroded remains of Midden 1. Within this large open space, two relatively discrete clusters of features (Table 15) may be discerned.

The first of these, located immediately to the west of the southwest corner of House 2, consisted of two pits (Features 10 and 14), together with the basal remnants of a possible third pit (Feature 15), and a cluster of 44 associated posts, four of which measured over 10 cm in diameter. No artifacts were recovered from any of the features; however, the relative density of both pits and posts in this area suggests that it functioned as the locus of relatively intensive or long term activity.

The second cluster, consisting of five pits (Features 2, 3, 4, 12 and 250), an ash pit (Feature 5), an additional possible remnant feature (Feature 6), and numerous isolated posts was located at the eastern edge of Midden 1. Three of these features produced small quantities of ceramics, but no specific activity related to this cluster can be defined.

Two other isolated pits (Features 1 and 11) were located to the south of the feature clusters. Neither yielded any artifactual material.

# Area 2 (Figure 9)

Area 2 was immediately to the south of the south end of House 2, centrally located within a broad open area between Houses 1, 2, 5 and 6. Two pits (Features 7 and 8) as well as a third possible pit that had been heavily disturbed (Feature 9), formed a diffuse cluster of features, bounded on the south by numerous isolated posts (Table 16). No cultural remains were recovered from any of these features which could assist in interpreting their function.

Area 3 (Figure 9)

Two features, an ash pit (Feature 20) and a large pit (Feature 21), were located in the open area between the east side wall of House 2 and the northeast end of House 5 (Table 17). Feature 20 was located less than a metre from the southeast corner of House 2, within a small semicircular area demarcated by a short line of posts. These posts, possibly representing a small windbreak or supports for a light roof, suggest that some form of shelter was provided for the activities associated with the feature, which were probably contemporary with the occupation of House 2. The fill of the feature, consisting of topsoil mottled with ash and charcoal, produced 3 ceramic sherds, as well as a small quantity of plant remains, including cultigens, fleshy fruits and greens/ grains. This suggests that at least limited food processing took place in this area.

Feature 21 was a large, deep pit located between the east wall of House 2 and the northwest end of House 5. Four posts may also be associated with the feature. The fill of this pit consisted of organic soil mottled with subsoil and charcoal overlying a basal charcoal lens. The size of the feature suggests it may have functioned as a refuse disposal area, but only relatively small quantities of ceramic and chert debitage were recovered. A very small, slightly burned, cranial fragment, possibly from an adult human, was also present in the feature fill.

### Area 4 (Figures 9 and 10)

Area 4 was delimited on the west by the east side wall of House 5, on the east by the west wall of House 4, on the north by the body of the semi-subterranean sweat lodge protruding from the west wall of House 4 (Feature 38) and on the south by Midden 2. Three features were recorded in this exterior area, together with 14 associated posts (Table 18). Two of these features were small pits (Features 41 and 42), one of which contained a small quantity of ceramics and fire cracked rock. The third pit (Feature 43) was a sterile feature 1.3 m in length and 0.70 m in width, with its longitudinal axis oriented parallel to that of the house structures. The overall paucity of artifacts recovered from these features prevents any interpretation of the activities carried out in this area. Given the apparent complexity of the

occupational history of House 4, however, it is unclear whether or not these features are directly associated with that house.

#### Area 5 (Figure 10)

Exterior Area 5 was located between the parallel side walls of Houses 3 and 4. While the parallel alignment of these houses may indicate some degree of contemporaneity, it is possible that many of the activities carried out in this area took place independently of their occupation, in both spatial and temporal terms. A long trench-like pit (Feature 30), containing 17 ceramic sherds, predated the construction of the original small southern structure that was ultimately incorporated into House 4 (Table 19). Its location, adjacent to a gap in the side wall of House 3 and an associated 1.3 m long line of posts set in a wall trench parallel to the house wall, raises the possibility that the pit was in some way associated with the occupation of House 3.

Feature 29, on the other hand, was an external hearth which clearly postdated the west wall of House 3. Two additional sterile pits (Features 44 and 45), cannot be placed within the sequence of activity in this area. It seems probable, however, that the concentration of features in this area is the result of at least two separate episodes of activity in this portion of the site, rather than the result of a single period of more intensive use. The exact character of the activities performed here remains unknown, but the presence of the hearth suggests that it may have served as an outdoor cooking place during warm weather, after House 3 fell out of use.

#### Area 6 (Figure 10)

Area 6 may be defined by the presence of a pit (Feature 85) containing a few small ceramic sherds and fire cracked rock and a large, but very poorly defined sterile feature, perhaps representing the basal remnants of a pit (Feature 90). These features (Table 20) were located in an open area between the south end of House 4, the west wall of House 3 and the northeastern edge of Midden 2. Feature 90 may be associated with a short curving alignment of five posts, however, there is no further evidence on which to base functional interpretations of the features, or their associations with either of the longhouses or the midden.

Area 7 (Figure 10)

Exterior Activity Area 7 consisted of 18 pits located throughout the broad open area between Houses 3 and 7, primarily to the south of Midden 3 (Table 21). Within this open space, only two focussed clusters of features and posts stand out from the overall distribution pattern. As was the case for Area 5, it is likely that the area was used for a variety of purposes over a relatively long period of time.

A major cluster of features and posts occurred roughly equidistant from both house structures. This group consisted of three large pits (Features 114, 119, 120) and 57 posts. Both Feature 119 and 120 contained fire-cracked rock. In addition Feature 120, a long trench-like pit, produced a small quantity of ceramics.

A second well-defined concentration of four pits (Features 105, 106, 107 and 110), together with 16 posts, was located adjacent to the northwest corner of House 7. These features, together with those documented at the base of Midden 3 (Features 91, 92, 100, 102, and perhaps 101), were in all likelihood associated with the midden. Features 105, 106 and 110 all produced small quantities of ceramics, while Features 106 and 107 both contained small quantities of chert debitage. Feature 107 also contained a weathered human frontal bone, probably from an adolescent, that had been shaped by chipping to form a pentagonal or hexagonal disk (see Thomas [Worked Bone and Antler, this volume.

Among the more isolated features in this area, several are indicative of a complex sequence of use. Feature 257, a small pit containing some fire cracked rock, was subsequently replaced by a much larger, irregularly-shaped pit (Feature 79), the fill of which included a number of ash lenses and charcoal layers. Both of these features, however, predate a number of House 3 wall posts, suggesting that these features were in use prior to the construction of House 3.

Two associated pits (Features 96 and 258) located at the intersection point of the original House 7 end wall and its later extension, similarly predated several pre-extension wall posts. On the other hand, Feature 123, a sterile pit located slightly to the south of Feature 96, post-dated the erection of the original shorter structure, while another sterile pit (Feature 116) appears to have post-dated the house extension.

Six additional pits (Features 77, 103, 104, 108, 109 and 115) were dispersed throughout the open area. Only Feature 109 yielded any cultural remains, producing small quantities of chert and ceramics. The overall low frequency of artifacts recovered from the exterior features makes it difficult to determine the specific nature of activities carried out in this area.

#### Area 8 (Figures 10 and 12)

Nine pits were scattered throughout Area 8, located between the side walls of Houses 7 and 8, to the north of the House 9 end wall (Table 22). Three feature clusters were apparent in the open space between these houses. " The first of these was a pair of very large irregular pits (Features 149, 162), which were likely associated with the occupation of House 9, since they were located adjacent to the north end of the structure, slightly to the west of a probable entrance in the end wall. Feature 149 contained a pipe mouthpiece, over 150 ceramic 11 sherds. lithics, a complete deciduous maxillary canine, a possible human rib fragment, and fire-cracked rock and was associated with five posts. Feature 162 was a heavily disturbed pit that post-dated four House 9 wall posts and contained 15 ceramic sherds. A diffuse cluster of 13 posts slightly to the south of Feature 162 may also have been related to this pit.

The second area of concentrated activity in Area 8 consisted of three small pits (Features 148, 150, and 151) adjacent to and aligned with the side wall of House 8. Feature 151 failed to produce any cultural remains. Feature 149 contained the medial section of a juvenile right rib and a deciduous canine, while Feature 150, which was also the focus of a cluster of eight posts, contained a pipe stem fragment. The paucity of recovered material from this group of pits prevents any interpretation of their function, nevertheless, their position relative to the longhouse wall suggests that they may have been related to the occupation of the structure.

Two small pits Feature 130, which contained a few ceramic sherds, and the sterile Feature 132 together with a larger pit (Feature 139) that contained a small quantity of ceramics, and at least five posts form a third area of focussed activity in Area 8. Both the association and function(s) of this group of features remains unclear; however, its location

suggests that it too may have been related to the occupation of House 8. Feature 139 contained three fragmentary human elements: the medial section of a burnt long bone; a portion of an occipital; and possibly a portion of a sphenoid. All three elements are those of one or more immature individual(s).

In addition to these three discrete activity foci, Area 8 also contained a small, isolated pit (Feature 133) with a single associated post, located roughly 3.5 m from the east wall of House 7. No contents were recovered from this feature which could aid in its interpretation.

### Area 9 (Figure 12)

A total of 13 pits was recorded in Area 9, a triangular-shaped open space formed by the east side wall of House 8 and the west side wall of House 10 (Table 23). The distribution of these features throughout Area 9 suggests that numerous activities were carried out in this open space over a relatively long period of time. This impression is reinforced by the large number of posts located in the area, although no definite patterns can be discerned in their distribution.

Two relatively well-defined foci of activity may be distinguished in Area 9. A cluster of five pits (Features 184, 185, 186, 187 and 188) was located east of the east side wall of House 8. These pits varied considerably in size, however, all contained substantial amounts of cultural debris. Feature 184 was a large, deep, irregularly shaped pit containing over 70 ceramic sherds, lithic debris and fire-cracked rock. Feature 185 was a large, irregularly shaped pit which contained 81 ceramic sherds, and 53 lithics — including a partial projectile point — and the medial section of a human fibula of indeterminable side from a late adolescent to young adult. Features 186, 187 and 188 were all small pits which contained small quantities of ceramics and/or lithics.

The large quantity of chert recovered from Feature 185 suggests that this activity area served as a focus of lithic tool manufacture or refurbishment. However, it is equally likely that preparation of summer and early autumn foodstuffs, both wild and domesticated, was also carried out in this area since Feature 185 also produced large quantities of maize and bramble, together with smaller amounts of sunflower, strawberry, plum, pincherry, elder-

berry, black nightshade seeds, and a single bean (Monckton, this volume).

Feature 199, an isolated pit to the northeast of this major activity area probably also served as a warm weather food processing place, primarily focused upon the preparation of bramble berries.

A second, more diffusely clustered group of three features was located between the south ends of Houses 8 and 10. The central focus of this activity area appears to have been a large, deep pit (Feature 209), the fill of which consisted of eight layers and lenses of organic soil, subsoil, ash and fired soil. Although only very small quantities of ceramic, chert and floral remains were recovered from this feature, the complex nature of its fill suggests that it may have been associated with the periodic cleaning out of the interior hearths from either or both of the adjacent houses.

Two smaller pits were located in the same general area as Feature 209. Feature 212 appears to have predated the wall trench at the southernmost end of House 8; however, it contained no cultural remains. Feature 216 was located adjacent to the side wall of House 10.

Four additional small pits (Features 201, 202, 203 and 204) were scattered throughout the central section of Area 9. None of these features produced significant quantities of artifacts that could aid in their interpretation, although a single carbonized wheat seed was recovered from Feature 201. This specimen of a European domesticate was radiocarbon dated to the mid-seventeenth century A.D. (Robertson, Monckton and Williamson, this volume).

### *Area 10 (Figure 12)*

Area 10 was an open space varying between roughly four and six metres in width. It was demarcated by the east side wall of House 10, and by the westernmost row of palisade posts on the eastern edge of the site. The southern extent of this open area may have been defined by the presence of Midden 4. Several discontinuous lines of posts were located in Area 10. These possibly formed part of the palisade complex, but they may also indicate that the area was divided up into smaller sections by a network of light fences. Two small pits (Features 232 and 239) were recorded in this area (Table 24). Feature 232 may

relate to activity that preceded construction of House 10, while Feature 239 may have been related to a large refuse pit (Feature 240) located slightly to the east and associated with the palisade.

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### Area 11 (Figure 9)

Exterior Area 11 was a concentration of four pits (Features 247-249 and 251) and a single ash pit (Feature 246) located between the north end of House 1 and the western palisade (Table 25). The activities carried out here were most likely associated with House 1, but the overall lack of cultural material recovered from these pits prevents a more complete under-standing of their exact character.

### East Palisade Area (Figure 12)

Three features were located beyond the inner palisade lines, at the eastern extreme of the site (Table 26). Feature 242 was a severely root-disturbed pit that may have predated the second innermost line of palisade posts. A single piece of quartzite was recovered from its fill. This pit may have been associated with a substantial feature (Feature 240) best interpreted as a refuse-filled depression located approximately a metre to the south.

Feature 240 measured approximately 3.4 m in length, and 3.1 m in width. Its irregular profile reached a maximum depth of 60 cm. Ten layers or lenses of organic soil, ash and charcoal containing considerable quantities of chert, ceramic vessel and smoking pipe fragments, fire-cracked rock, shell and faunal bone were documented within the feature's fill. The feature also contained a significant quantity of human bone. A female mandible may be from the same individual represented by the female cranium in Feature 245 in Midden 4 a short distance to the south. The third molar root is complete, suggesting an age in the mid-twenties. If this element is not from the same individual, then it represents a person of the same general size and age (Susan Pfeiffer, personal communication 1993).

The basal portion of a right ilium, lacking the crest, appears to be derived from a male. The auricular surface is too badly damaged to allow for an age estimate, but it is probable that the individual was fully adult. The distal portion of a right humerus, probably from an adult, and a possible fragment of a cervical

vertebra were also recovered. The humerus exhibits a slight ossified ligament along the medial side of the shaft, just distal to the delt-oid tuberosity. This is a developmental anomaly, although it is not pathological (Susan Pfieffer, personal communication 1993).

The precise relationship between refuse-filled depression and two innermost palisade rows remains uncertain. Several palisade posts, which were visible in the feature's profile, clearly post-dated its fill. Nevertheless, these posts are relatively isolated in comparison to those making up the adjacent sections of the palisades. It would thus seem that the inner palisades did not traverse this depression in a continuous manner. One possible scenario explaining this break in the palisades is that Feature 240 represents a large tree pull. Should the palisades have incorporated conveniently situated trees in their construction, such gaps would not be unexpected. If such a tree was subsequently uprooted and at roughly the same time that the outer palisades were constructed, the resulting depression may have served as a convenient midden, regardless of whether or not the inner palisades remained in use.

Feature 243 possibly represents the heavily disturbed remains of a pit located roughly 1.5 m inside the easternmost palisade line. Finally, Feature 244 may have been a small midden located on the west slope of a seasonal creek bed, approximately seven metres beyond the village's eastern palisades. Few traces of this deposit remained, as it had been severely affected by erosion and ploughing, and artifactual remains were limited.

# SUMMARY DISCUSSION

Interpretations of the settlement patterns uncovered during the 1989-1990 excavations are hindered by the fact that the area of investigation accounts for a mere ten percent of the estimated extent of the village and by the fact that only one structure (House 5) was exposed close to its entirety. Nevertheless, this work suggests that the village was laid out in a well-planned manner, а finding contradicts the impression gained Kapches' (1982) synthesis of the surviving documentation from earlier (Williamson, Cooper and Robertson, this volume, Figure 3). The excavations have also demonstrated that many of the

individual houses had complex structural histories and that, in all probability, not all of them were strictly contemporaneous.

The seemingly complex and dynamic character of the community is most apparent among those structures forming the central aligned cluster within the excavation area. On the basis of the data provided in the house and exterior area descriptions, it maybe suggested that the initial construction of the regularlyspaced Houses 5, 3, 7 and 8 was more or less a single event. This period of occupation would also appear to have involved some use of the open space between Houses 3 and 5 for outdoor tasks (it should also be noted that at least some of this exterior activity may predate the construction of House 3). Given that there is some evidence for House 10 post-dating exterior activity to the east of House 8, it may be that House 10 was erected somewhat later. In the absence of further excavation, the temporal relationship between House 10 and the various rows of the eastern palisades cannot be resolved. Likewise, the chronology of the western palisade along with Houses 1, 2, and 6 remains unknown.

This proposed phase of initial construction may then have been followed by a period of infilling, with the addition of House 4 (in one or another of its primary smaller forms) between Houses 3 and 5, and with the building of House 9 between Houses 7 and 8.

That these two suggested phases of construction represent a comparatively lengthy period of time is indicated by the apparent frequency with which many of the houses were modified: House 4 appears to represent the coalescence of two small, irregular structures; House 3 seems to have experienced one contraction; House 7 may have been extended once; and House 8 was extended or contracted on as many as three occasions. Similarly, the length of House 2 was altered at least once.

The relationships between Houses 3, 7 and 9 and numerous exterior features all suggest that the site continued to be occupied following the abandonment of these residences. The timing of this exterior activity remains unclear, however, it is probable that much of it occurred within a reasonably short period of time, and was associated with the occupation of structures lying beyond the limits of the excavations.

# Table 6. Summary: House 2 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm)	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
13	Pit	Ovate	Irregular	32	7	9	Mottled	Organic Soil	Subsoil, Charcoal
16	Pit	Circular	Deep Basin	26	26	15	Mottled	Organic Soil	Subsoil, Fired Soil, Charcoal
17	Hearth	Irregular	Shallow Basin	250	95	4	Mottled	Fired Soil	Organic Soil, Subsoil, Charcoal
18	Possible Feature	Ovate	Surface Stain	55	43	4	Mottled	Organic Soil	Subsoil, Charcoal
19	Pit	Ovate	Deep Basin	30	26	18	Mottled	Organic Soil	Subsoil, Charcoal
n=5			·					-	

# Table 7. Summary: House 5 Features.

Feat.	Feature	Plan	Profile	Dime	ensions	s (cm)	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
37	Pit	Circular	Deep Basin	24	24	17	Mottled	Organic Soil	Charcoal
39	Hearth	Ovate	Shallow Basin	89	59	5	Mottled	Fired Soil	Subsoil
40	Pit	Ovate	Shallow Basin	38	21	10	Mottled	Organic Soil	Charcoal
n=3								•	

Table 8. Summary: House 4 Features.

Feat.	Feature	Plan	Profile	Dimer	nsions	(cm)	Fill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
22	Pit	Rectangular	Deep Basin	54	21	24	Mottled	Organic Soil	Subsoil, Charcoal
23	Hearth	Ovate	Surface Stain	105	76		Mottled	Organic Soil	Subsoil, Fired Soil
24	Sweat Lodge	Key Hole	Flat Bottomed 2	238	157	39	Layered	Ash	Organic Soil, Subsoil, Charcoal
25	Pit	Ovate	Shallow Basin 7	74	58	13	Lensed	Ash	Organic Soil, Subsoil, Charcoal
26	Pit	Irregular	Shallow Basin 1	103	70	18	Mottled	Organic Soil	Subsoil, Ash, Charcoal
27	Pit	Ovate	Deep Basin	40	14	21	Mottled	Organic Soil	Subsoil, Charcoal
28	Ash Pit	Ovate	Shallow Basin	71	48	18	Layered	Ash	Subsoil, Charcoal
31	Hearth	Ovate	Irregular	83	68	11	Mottled	Organic Soil	Subsoil, Fired Soil, Charcoal
32	Hearth	Ovate	Irregular 2	220	60	7	Lensed	Fired Soil	Subsoil
33	Pit	Ovate	Shallow Basin	38	18	12	Mottled	Organic Soil	Subsoil
34	Hearth	Irregular	Shallow Basin 1	104	80	6	Lensed	Organic Soil	Subsoil, Fired Soil, Charcoal
35	Pit	Ovate	Shallow Basin	90	70	7	Mottled	Organic Soil	Subsoil, Fired Soil, Charcoal
36	Pit	Ovate	Shallow Basin 1	100	65	21	Mottled	Organic Soil	Subsoil, Charcoal
38	Sweat Lodge	Key Hole	Flat Bottomed 3	306	267	29	Layered Lensed	Organic Soil	Subsoil, Ash, Charcoal
n=14									

Table 9. Summary: House 3 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm)	Fill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid	dep	Туре	Matrix	Matrices
49	Pit	Circular	Deep Basin	23	23	19	Mottled	Organic Soil	Charcoal, Subsoil
53	Pit	Irregular	Shallow Basin	137	100	22	Mottled	Organic Soil	Subsoil, Charcoal
54	Pit	Circular	Shallow Basin	20	20	9	Mottled	Organic Soil	Subsoil, Charcoal
56	Pit	Circular	Shallow Basin	59	59	12	Mottled	Organic Soil	Subsoil, Charcoal
57	Pit	Ovate	Shallow Basin	55	40	14	Mottled	Organic Soil	Charcoal
58	Pit	Ovate	Deep Basin	38	30	31	Mottled	Organic Soil	Subsoil, Ash, Charcoal
59	Pit	Ovate	Shallow Basin	50	30	13	Mottled	Organic Soil	Subsoil, Charcoal
60	Pit	Irregular	Shallow Basin	99	53	8	Mottled	Organic Soil	Subsoil, Charcoal
61	Pit	Ovate	Deep Basin	47	30	27	Mottled	Organic Soil	Subsoil
66	Hearth	Irregular	Irregular	286	135	15	Lensed	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
67	Hearth	Irregular	Irregular	223	76	9	Lensed	Fired Soil	Organic Soil, Ash, Charcoal
69	Pit	Ovate	Shallow Basin	90	73	8	Mottled	Organic Soil	Subsoil, Fired Soil, Charcoal
71	Pit	Circular	Deep Basin	24	24	12	Mottled	Charcoal	Organic Soil, Subsoil
72	Ash Pit	Circular	Deep Basin	20	20	16	Mottled	Ash	Organic Soil, Fired Sol, Charcoal
74	Pit	Rectangular	Shallow Basin	70	42	23	Mottled	Subsoil	Organic Soil, Ash, Charcoal
75	Hearth	Irregular	Surface Stain	390	66		Mottled	Subsoil	Organic Soil, Fired Soil, Charcoal
80	Pit	Circular	Deep Basin	33	33	18	Mottled	Organic Soil	Subsoil, Charcoal
81	Pit	Ovate Acuminate	Shallow Basin 1	141	90	24	Mottled	Organic Soil	Subsoil
82	Pit	Irregular	Shallow Basin	116	49	8	Mottled	Organic Soil	Subsoil
83	Hearth	Ovate	Irregular	134	74	7	Lensed	Subsoil	Organic Soil, Ash, Fired Soil
84	Hearth	Irregular	Skewed	225	92	23	Mottled	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
87	Pit	Ovate	Shallow Basin	85	40	13	Mottled	Organic Soil	Subsoil
88	Pit	Irregular	Shallow Basin	67	44	18	Mottled	Charcoal	Organic Soil, Subsoil
89	Pit	Circular	Shallow Basin	38	38	9	Mottled	Organic Soil	Subsoil
111	Pit	Ovate	Shallow Basin	34	31	16	Mottled	Organic Soil	Subsoil, Ash, Charcoal
112	Pit	Ovate Acuminate	Shallow Basin	53	39	5	Mottled	Organic Soil	Subsoil, Ash, Charcoal
113	Pit	Irregular	Irregular	249	131	29	Mottled	Organic Soil	Subsoil, Ash, Charcoal
n=27		-	-					-	

Table 10. Summary: House 7 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm) F	Fill	Primary	Secondary
No.	Type	Shave	Shave	len	wid	dep	Type	Matrix	Matrices
93	Hearth	Ovate Acuminate	Shallow Basin 1	72	74	5	Lensed	Subsoil	Organic Soil, Fired Soil, Charcoal
94	Possible Feature	Irregular	Shallow Basin 2	203	48	12	Mottled	Organic Soil	Subsoil
97	Pit	Ovate Acuminate	Shallow Basin 5	3	46	7	Mottled	Subsoil	Charcoal
98	Pit	Ovate	Shallow Basin	117	50	11	Mottled	Organic Soil	Subsoil, Charcoal
117	Pit	Irregular	Shallow Basin	83	44	12	Mottled	Organic Soil	Subsoil
121	Hearth	Irregular	Surface Stain	280	55		Mottled	Fired Soil	Organic Soil, Subsoil
125	Pit	Ovate	Shallow Basin	38	25	14	Mottled	Organic Soil	Subsoil
127	Pit	Circular	Deep Basin	27	27	22	Mottled	Organic Soil	Ash, Fired Soil, Charcoal
128	Pit	Irregular	Irregular	220	108	54	Mottled	Organic Soil	Charcoal
129	Pit	Circular	Shallow Basin	26	26	18	Mottled	Organic Soil	Ash Charcoal
134	Hearth	Ovate	Surface Stain	80	38		Mottled	Fired Soil	Organic Soil
135	Pit	Ovate	Skewed	71	46	28	Mottled	Organic Soil	Subsoil, Charcoal
136	Pit	Circular	Conical	31	31	22	Mottled	Charcoal	Organic Soil
138	Pit	Circular	Deep Basin	28	28	18	Mottled	Organic Soil	Charcoal, Ash
140	Ash Pit	Ovate	Shallow Basin	34	26	13	Lensed	Ash	Charcoal
141	Pit	Irregular	Irregular	470	178	43	Lensed	Organic Soil	Subsoil, Charcoal
142	Pit	Ovate	Shallow Basin	36	33	10	Mottled	Organic Soil	Charcoal
143	Pit	Ovate	Flat Bottomed	39	21	30	Lensed	Organic Soil	Subsoil, Charcoal
144	Pit	Ovate	Irregular	74	58	54	Mottled	Organic Soil	Subsoil, Charcoal
146	Pit	Circular	Shallow Basin	18	18	12	Mottled	Organic Soil	Subsoil, Charcoal
147	Hearth	Circular	Surface Stain	13	13		Mottled	Fired Soil	Subsoil
n=21									

Table 11. Summary: House 9 Features.

Feat.	Feature	Plan	Profile	Dime	ension	s (cm)	Fill	Primary	Secondary
No.	Type	Shave	Shave	len	wid	den	Type	Matrix	Matrices
166	Pit	Ovate	Flat Bottomed	24	10	30	Mottled	Organic Soil	Subsoil, Charcoal
168	Pit	Ovate	Conical	28	20	40	Mottled	Organic Soil	Subsoil, Charcoal
170	Pit	Ovate	Shallow Basin	34	30	13	Lensed	Subsoil	Organic Soil, Ash, Fired Soil,
									Charcoal
171	Pit	Circular	Conical	21	21	21	Mottled	Organic Soil	Subsoil, Charcoal
173	Pit	Ovate	Bell	25	19	18	Mottled	Subsoil	Organic Soil, Charcoal
174	Pit	Circular	Flat Bottomed	21	21	24	Lensed	Organic Soil	Subsoil, Charcoal
177	Pit	Ovate	Shallow Basin	48	41	10	Layered	Organic Soil	Subsoil, Ash, Charcoal
n=7								-	

Table 12. Summary: House 8 Features.

Feat.	Feature	Plan	Profile	Dime	nsion	s (cm)	Fill	Primary	Secondary
No.	Type	Shave	Shave	len	wid	den	Туре	Matrix	Matrices
152	Ash Pit	Ovate	Shallow Basin	57	37	13	Lensed	Ash	Organic Soil, Charcoal
153	Pit	Circular	Flat Bottomed	31	31	43	Mottled	Organic Soil	Charcoal
155	Pit	Circular	Flat Bottomed	20	20	29	Mottled	Organic Soil	Ash, Charcoal
156	Pit	Ovate Acuminate	Flat Bottomed	41	32	15	Mottled	Organic Soil	Subsoil, Charcoal
159	Pit	Ovate	Deep Basin	35	25	37	Layered	Organic Soil	Subsoil, Charcoal
160	Pit	Ovate	Flat Bottomed	36	28	46	Mottled	Organic Soil	Subsoil, Fired Soil, Charcoal
163	Pit	Ovate	Flat Bottomed	20		42	Layered	Organic Soil	Ash, Charcoal
164	Pit	Ovate	Conical	28	21	31	Mottled	Organic Soil	Subsoil, Charcoal
165	Pit	Ovate	Deep Basin	33	21	50	Lensed	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
179	Pit	Ovate	Deep Basin	28	23	40	Mottled	Organic Soil	Subsoil, Charcoal
180	Hearth	Irregular	Shallow Basin	119	68	5	Lensed	Subsoil	Organic Soil, Ash, Fired Soil, Charcoal
181	Pit	Ovate	Irregular	128	74	44	Mottled	Subsoil	Organic Soil, Charcoal
182	Hearth	Irregular	Shallow Basin	120	64	8	Lensed	Subsoil	Organic Soil, Ash, Fired Soil, Charcoal
183	Pit	Circular	Flat Bottomed	21	21	32	Mottled	Organic Soil	Subsoil, Charcoal
191	Hearth	Ovate Acuminate	Shallow Basin 1	82	92	8	Lensed	Subsoil	Organic Soil, Ash, Fired Soil Charcoal
192	Pit	Ovate	Flat Bottomed	117	82	34	Lensed	Subsoil	Organic Soil, Ash, Charcoal
193	Pit	Rectangular	Irregular	120	73	24	Mottled	Organic Soil	Subsoil, Charcoal
194	Pit	Circular	Flat Bottomed	23	23	48	Mottled	Organic Soil	Charcoal
195	Pit	Ovate Acuminate	Flat Bottomed	29	21	40	Mottled	Organic Soil	Subsoil, Charcoal
196	Pit	Rectangular	Shallow Basin	83	39	16	Mottled	Organic Soil	Subsoil, Charcoal
197	Pit	Rectangular	Flat Bottomed	35	21	25	Mottled	Organic Soil	Subsoil, Ash, Charcoal
198	Pit	Ovate	Conical	24	20	34	Mottled	Organic Soil	Charcoal, Subsoil
200	Hearth	Irregular	Shallow Basin	327	104	12	Lensed	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
215	Sweat Lodge	Irregular	Irregular	385	290	50	Layered, Lensed	Organic Soil	Subsoil, Ash, Charcoal
260	Pit	Irregular	Irregular	89	50	15	Lensed	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
261	Pit	Irregular	Conical	42	20	31	Mottled	Subsoil	Organic Soil, Charcoal
265 n=27	Pit	Ovate	Flat Bottomed	35	23	23	Mottled	Organic Soil	Subsoil, Ash, Charcoal

Table 13. Summary: House 10 Features.

Feat.	Feature	Plan	Profile	Dimen	sions	(cm) F	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	de <sup>p</sup>	Ty <sup>p</sup> e	Matrix	Matrices
210	Pit	Circular	Flat Bottomed	14	14	32	Mottled	Organic Soil	Subsoil, Charcoal
217	Pit	Irregular	Irregular	73	32	9	Mottled	Organic Soil	Subsoil
218	Pit	Circular	Flat Bottomed	20	20	55	Layered	Organic Soil	Subsoil, Ash, Charcoal
222	Pit	Circular	Shallow Basin	33	33	8	Mottled	Organic Soil	Subsoil, Charcoal
223	Hearth	Irregular	Shallow Basin	177	111	4	Lensed	Organic Soil	Subsoil, Fired Soil, Charcoal
224	Pit	Circular	Flat Bottomed	27	27	51	Mottled	Organic Soil	Subsoil, Charcoal
225	Pit	Circular	Conical	17	17	11	Mottled	Organic Soil	Subsoil, Charcoal
228	Pit	Ovate	Conical	39	28	29	Mottled	Organic Soil	Subsoil, Charcoal
229	Pit	Irregular	Conical	27	16	40	Mottled	Organic Soil	Subsoil, Charcoal
230	Pit	Ovate Acuminate S	Skewed	118	78	25	Mottled	Organic Soil	Subsoil, Charcoal
231	Pit	Ovate	Flat Bottomed	27	18	46	Mottled	Organic Soil	Subsoil, Charcoal
233	Pit	Ovate	Skewed	25	18	10	Mottled	Organic Soil	Subsoil, Charcoal
235	Pit	Ovate	Shallow Basin	29	18	7	Mottled	Organic Soil	Subsoil, Charcoal
236	Pit	Circular	Flat Bottomed	107	102	29	Mottled	Subsoil	Organic Soil, Charcoal
237	Pit	Rectangular	Irregular	118	75	32	Mottled	Subsoil	Organic Soil, Charcoal
238	Pit	Circular	Deep Basin	14	14	10	Mottled	Organic Soil	Subsoil, Charcoal
252	Pit	Irregular	Shallow Basin	145	74	11	Mottled	Organic Soil	Subsoil, Ash, Charcoal
259	Pit	Ovate	Conical	25	21	13	Mottled	Organic Soil	Subsoil, Charcoal
262	Pit	Irregular	Deep Basin	40	45	20	Mottled	Organic Soil	Subsoil, Charcoal
263	Pit	Irregular	Conical	47	38	24	Mottled	Organic Soil	Subsoil, Charcoal
264	Pit	Circular	Flat Bottomed	18	18	18	Mottled	Organic Soil	Subsoil, Charcoal
n=21									

Table 14. Summary: Midden Features.

Feat.	Feature	Plan	Profile	Dime	nsion	s (cm)	Fill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid	dep	Tvpe	Matrix	Matrices
91 (M3)	Pit	Ovate	Shallow Basin	72	40	15	Mottled	Organic Soil	Subsoil
92 (M3)	Pit	Irregular	Shallow Basin	169	89	19	Mottled	Organic Soil	Subsoil
100 (M3	) Pit	Circular	Shallow Basin	26	26	11	Mottled	Organic Soil	Charcoal
101 (M3	) Pit	Ovate	Shallow Basin	22	18	12	Mottled	Organic Soil	Charcoal
102 (M3	) Possible Feature	Irregular	Shallow Basin	66	92	18	Mottled	Organic Soil	Subsoil, Charcoal
<b>245</b> (M4	Refuse-filled De- pression	Ovate	Flat Bottomed	310	270	41	Layered	Organic Soil	Ash, Subsoil, Charcoal
n=6									

Table 15. Summary: Exterior Activity Area 1 Features.

Feat.	Feature	Plan	Profile	Dimen	sions	(cm)	Fill	Primary	Secondary
No.	Tv <sup>p</sup> e	Shape	Shape	len	wid	dep	Tvpe	Matrix	Matrices
1	Pit	Rectangular	Shallow Basin	41	38	8	Mottled	Organic Soil	Subsoil, Charcoal
2	Pit	Ovate	Deep Basin	37	33	21	Mottled	Organic Soil	Subsoil, Charcoal
3	Pit	Irregular	Shallow Basin	37	27	5	Mottled	Organic Soil	Subsoil, Charcoal
4	Pit	Irregular	Skewed	47	21	7	Mottled	Organic Soil	Subsoil, Charcoal
5	Ash Pit	Ovate	Shallow Basin	42	31	12	Mottled	Ash	Organic Soil, Subsoil, Charcoal
6	Possible Feature	Ovate	Surface Stain	42	12	1	Mottled	Organic Soil	Subsoil, Ash
10	Pit	Ovate	Irregular	106	44	12	Mottled	Organic Soil	Subsoil, Charcoal
11	Pit	Irregular	Shallow Basin	52	26	8	Mottled	Organic Soil	Subsoil, Charcoal
12	Pit	Circular	Shallow Basin	28	28	3	Mottled	Organic Soil	Subsoil, Charcoal
14	Pit	Ovate	Deep Basin	50	33	27	Mottled	Organic Soil	Subsoil, Charcoal
15	Possible Feature	Ovate	Shallow Basin	32	19	3	Mottled	Organic Soil	Subsoil
250 n=12	Pit	Circular	Shallow Basin	30	30	6	Mottled	Organic Soil	Charcoal

Table 16. Summary: Exterior Activity Area 2 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm)	Fill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid	dep	Туре	Matrix	Matrices
7	Pit	Irregular	Shallow Basin	56	40	4	Mottled	Organic Soil	Subsoil
8	Pit	Irregular	Shallow Basin	71	35	7	Mottled	Organic Soil	Subsoil
9	Possible Feature	Irregular	Irregular	69	34	17	Mottled	Organic Soil	Subsoil, Charcoal
n=3		•	•					•	

Table 17. Summary: Exterior Activity Area 3 Features.

Feat.	Feature	Plan	Profile	Dimens	ions (cm) F	ill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid dep	Tvpe	Matrix	Matrices
20	Ash Pit	Irregular	Shallow Basin	91	86 16	Lensed	Organic Soil	Ash, Charcoal
21	Pit	Ovate	Deep Basin	232	141 38	Lensed	Subsoil	Organic Soil, Charcoal
n=2								

Table 18. Summary: Exterior Activity Area 4 Features.

Feat.	Feature	Plan	Profile	Dime	ensions	(cm)	Fill	Primary	Secondary
No.	Tvpe	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
41	Pit	Circular	Shallow Basin	30	30	6	Mottled	Organic Soil	Charcoal
42	Pit	Ovate	Shallow Basin	40	30	16	Mottled	Organic Soil	Subsoil, Charcoal
43	Pit	Ovate	Shallow Basin 1	130	70	24	Mottled	Organic Soil	Subsoil, Charcoal
n-3								· ·	

Table 19. Summary: Exterior Activity Area 5 Features.

Feat.	Feature	Plan	Profile	Dimen	sions	(cm) F	ill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Ty <sup>p</sup> e	Matrix	Matrices
29	Hearth	Ovate	Shallow Basin	124	89	8	Lensed	Organic Soil	Subsoil, Fired Soil, Charcoal
30	Pit	Irregular	Shallow Basin	270	60	26	Layered	Organic Soil	Subsoil, Charcoal
44	Pit	Circular	Shallow Basin	55	55	17	Homogenous	Organic Soil	
45	Pit	Ovate	Shallow Basin	30	25	12	Homogenous	Organic Soil	
n=4							•	•	

Table 20. Summary: Exterior Activity Area 6 Features.

	Feat.	Feature	Plan	Profile	Dimens	sions (cm) F	Fill	Primary	Secondary
	No.	Type	Shape	Shape	len	wid dep	Tvpe	Matrix	Matrices
_	85	Pit	Irregular	Skewed	94	60 30	Mottled	Organic Soil	Subsoil
	90	Possible Feature	Ovate	Surface Stain	224	160	Mottled	Subsoil	Organic Soil
	n=2								

Table 21. Summary: Exterior Activity Area 7 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm)	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Tvpe	Matrix	Matrices
77	Pit	Ovate	Shallow Basin	95	90	6	Mottled	Organic Soil	Ash, Charcoal
79	Pit	Irregular	Shallow Basin	376	142	27	Layered	Organic Soil	Subsoil, Ash, Charcoal
96	Pit	Irregular	Deep Basin	202	66	33	Layered,	Organic Soil	Ash, Charcoal
							Lensed		
103	Pit	Circular	Shallow Basin	38	36	6	Mottled	Organic Soil	Subsoil
104	Pit	Ovate	Shallow Basin	142	24	20	Mottled	Organic Soil	Subsoil
105	Pit	Circular	Shallow Basin	27	27	5	Mottled	Organic Soil	Subsoil, Ash, Charcoal
106	Pit	Irregular	Shallow Basin	54	45	14	Mottled	Organic Soil	Subsoil, Ash, Charcoal
107	Pit	Irregular	Irregular	90	41	18	Mottled	Organic Soil	Subsoil, Ash, Charcoal
108	Pit	Ovate	Shallow Basin	54	34	15	Mottled	Organic Soil	Charcoal
109	Pit	Irregular	Irregular	155	60	25	Mottled	Organic Soil	Subsoil, Charcoal
110	Pit	Circular	Conical	27	26	15	Mottled	Organic Soil	Subsoil, Charcoal
114	Pit	Irregular	Deep Basin	132	58	34	Mottled	Organic Soil	Subsoil
115	Pit	Irregular	Irregular	118	41	20	Mottled	Organic Soil	Subsoil
116	Pit	Ovate Acum	inate Shallow Basin	59	31	6	Mottled	Organic Soil	Subsoil
119	Pit	Ovate Acum	inate Shallow Basin '	143	58	16	Mottled	Organic Soil	Subsoil, Charcoal
120	Pit	Irregular	Shallow Basin	307	132	20	Mottled	Organic Soil	Subsoil, Charcoal
123	Pit	Irregular	Deep Basin	203	61	34	Mottled	Organic Soil	Subsoil
257	Pit	Ovate Acum	inate Irregular	65	54	18	Mottled	Organic Soil	Subsoil, Charcoal
258	Pit	Circular	Skewed	71	68	33	Layered	Organic Soil	Subsoil
n=19									

Table 22. Summary: Exterior Activity Area 8 Features.

Feat.	Feature	Plan	Profile	Dimer	nsions	(cm) I	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Tvpe	Matrix	Matrices
130	Pit	Ovate	Conical	32	24	33	Mottled	Organic Soil	Charcoal
132	Pit	Ovate	Shallow Basin	33	27	6	Mottled	Organic Soil	Subsoil, Charcoal
133	Pit	Ovate Acuminate	Shallow Basin	34	24	22	Mottled	Organic Soil	Subsoil
139	Pit	Ovate	Shallow Basin	62	49	11	Mottled	Organic Soil	Subsoil, Charcoal
148	Pit	Circular	Shallow Basin	31	31	5	Mottled	Organic Soil	Subsoil
149	Pit	Irregular	Irregular	300	134	20	Mottled	Organic Soil	Subsoil, Ash, Charcoal
150	Pit	Ovate	Shallow Basin	36	29	12	Mottled	Organic Soil	SoilSubsoil
151	Pit	Ovate Acuminate	Skewed	78	36	16	Mottled	Organic Soil	Subsoil
162	Pit	Irregular	Skewed	199	90	25	Mottled	Organic Soil	Subsoil, Charcoal
n=9		-						-	

# Table 23. Summary: Exterior Activity Area 9 Features.

Feat.	Feature	Plan	Profile	Dime	nsions	(cm)	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Tvpe	Matrix	Matrices
184	Pit	Irregular	Irregular	180	62	42	Mottled	Organic Soil	Subsoil, Charcoal
185	Pit	Irregular	Irregular	185	71	25	Mottled	Organic Soil	Subsoil, Charcoal
186	Pit	Ovate	Conical	38	23	20	Mottled	Organic Soil	Subsoil
187	Pit	Ovate	Irregular	56	18	8	Mottled	Organic Soil	Subsoil, Charcoal
188	Pit	Ovate	Conical	19	16	11	Mottled	Organic Soil	Subsoil
199	Pit	Ovate Acuminate	Shallow Basin	89	55	10	Mottled	Organic Soil	Ash, Charcoal
201	Pit	Irregular	Shallow Basin	63	35	10	Mottled	Organic Soil	Subsoil
202	Pit	Ovate	Conical	26	22	22	Mottled	Organic Soil	Subsoil, Charcoal
203	Pit	Irregular	Irregular	82	29	19	Mottled	Organic Soil	Subsoil, Charcoal
204	Pit	Irregular	Skewed	94	49	20	Mottled	Organic Soil	Subsoil, Charcoal
207	Possible Feature	Irregular	Shallow Basin	120	113	19	Mottled	Organic Soil	Subsoil, Charcoal
209	Pit	Irregular	Deep Basin	240	174	59	Lensed, Lay-	Organic Soil	Subsoil, Ash, Fired Soil, Charcoal
		•	•				ered	•	
212	Pit	Ovate	Irregular	117	45	20	Mottled	Subsoil	Organic Soil
216	Pit	Irregular	Skewed	109	54	9	Mottled	Organic Soil	Subsoil, Charcoal
n=14		-						-	

Table 24. Summary: Exterior Activity Area 10 Features.

Feat.	Feature	Plan	Profile	Dimer	sions	(cm)	Fill	Primary	Secondary
go.	Type	Shape	Shape	len	wid	dep	Туре	Matrix	Matrices
232	Pit	Ovate	Skewed	112	35	17	Mottled	Organic Soil	Subsoil
239	Pit	Ovate Acuminate	Shallow Basin	56	41	11	Mottled	Organic Soil	Subsoil, Charcoal
n=2								•	

Table 25. Summary: Exterior Activity Area 11 Features.

Feat.	Feature	Plan	Profile	Dime	nsion	s (cm)	Fill	Primary	Secondary
No.	Type	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
246	Ash Pit	Circular	Cylindrical	25	25	48	Layered	Ash	Organic Soil, Fired Soil, Charcoal
247	Pit	Circular	Skewed	53	50	17	Mottled	Organic Soil	Subsoil, Charcoal
248	Pit	Ovate	Cylindrical	35	24	65	Layered	Organic Soil	Subsoil, Ash, Charcoal
249	Pit	Circular	Shallow Basin	36	36	10	Mottled	Ash	Charcoal
251	Pit	Circular	Shallow Basin	30	31	12	Mottled	Ash	Subsoil, Charcoal
n=5									

Table 26. Summary: East Palisade Area Exterior Features.

Feature	Plan	Profile	Dimens	sions (	cm) F	ill	Primary	Secondary
Type	Shape	Shape	len	wid	dep	Type	Matrix	Matrices
Refuse-filled De-	Irregular	Irregular	334	309	60	Layered,	Organic Soil	Subsoil, Ash, Charcoal
pression						Lensed		
Pit	Irregular	Shallow Basin	77	54	18	Mottled	Organic Soil	Subsoil, Charcoal
Possible Feature	Irregular	Irregular	52	38	20	Mottled	Organic Soil	Subsoil, Wood
Possible Feature	Ovate	Shallow Basin	222	160	8	Mottled	Organic Soil	Subsoil, Charcoal
							-	
	Type Refuse-filled Depression Pit Possible Feature	Type Shape Refuse-filled De- pression Pit Irregular Possible Feature Irregular	Type Shape Shape Refuse-filled De- Irregular pression Pit Irregular Shallow Basin Possible Feature Irregular Irregular	Type         Shape         Ien           Refuse-filled Depression         Irregular         Irregular         334           Pit         Irregular         Shallow Basin 77           Possible Feature         Irregular         Irregular         52	Type         Shape         Shape         len         wid           Refuse-filled Depression         Irregular         Irregular         334         309           Pit         Irregular         Shallow Basin 77         54           Possible Feature         Irregular         Irregular         52         38	Type         Shape         Shape         len         wid dep           Refuse-filled Depression         Irregular         Irregular         334         309         60           Pit         Irregular         Shallow Basin 77         54         18           Possible Feature         Irregular         Irregular         52         38         20	Type         Shape         Shape         len         wid         dep         Type           Refuse-filled Depression         Irregular         1rregular         334         309         60         Layered, Lensed           Pit         Irregular         Shallow Basin 77         54         18         Mottled           Possible Feature         Irregular         Irregular         52         38         20         Mottled	Type         Shape         Shape         len         wid dep         Type         Matrix           Refuse-filled Depression         Irregular         1334         309         60         Layered, Layered, Lensed         Organic Soil           Pit         Irregular         Shallow Basin 77         54         18         Mottled         Organic Soil           Possible Feature         Irregular         12         38         20         Mottled         Organic Soil

Table 27. The Distribution of Human Bone at the Parsons Site.

Area	Prov.	Elements	Comments
Midden 1		1 zygomatic fragment	no trauma (juvenal)
Ext. Area 3		1 cranial fragment	slightly burnt
House 3 House 3		n 1 distal phalanx 8 deciduous maxillary molar permanent maxillary molar	robust individual (30-50 years) roots complete (3-8 years) roots broken
		right femur shaft fragment	no trauma
Ext Area 7	F107	frontal fragment	worked: convex ovate disk shaped by chipping (extremely weathered)
House 7	Wall Trench	n proximal phalanx permanent maxillary molar	no trauma (young adult) roots complete-fallen from skull? (young adult)
	F141	permanent . maxillary premolar	roots complete fallen from skull?
Ext. Area 8	F139	long bone fragment occipital fragment sphenoid fragment	at least one adult represented (longbone ! is burnt)
	F149	deciduous maxillary caninerib fragment	roots complete
House 8	F215	frontal fragment occipital fragment right maxillary molar thoracic vertebra fragment lumbar vertebra fragment lumbar vertebra fragments right illium fragment proximal and distal rib fragments (including proximal sections of 2nd left and 5th right) right radius left navicular right navicular left cuboid	none of the elements exhibit trauma; some bear traces of carnivore gnawing; at least one gracile individual represented
	F194	right scapula right clavicle right metacarpal distal rib fragment	at least one gracile adult represented 1
	F198	2 complete fingers lumbar vertebra thoracic vertebra left illium fragment	no trauma (adult) no trauma (small young adult) no trauma (small young adult) no trauma (small young adult possible )
Ext. Area 9		fibula fragment	no trauma (adolescent to young adult)
House 10 Midden <b>4</b>	F236	parietal fragments spheno-occipital synchrondrosis temporal bone fragment mandible	no trauma no trauma (from F245 ♂ cranium) defleshing trauma (from F245 ♂ cranium?)
Midden 4	F245	ೆ cranium ♀ cranium	no trauma (+50 years) no trauma (adult)
E. Palisade	F240	mandible right illium fragment right humerus fragment cervical vertebra fragment	no trauma (from F245 adult $ \widehat{}$ cranium?) no trauma (adult $ \widehat{}$ ) no trauma (adult) no trauma

David A. Robertson, Ronald F. Williamson and Bruce M. Welsh Archaeological Services Inc. 528 Bathurst Street, Toronto, Ontario M5S 2P9