CHAPTER II

SITE EXCAVATIONS

Introduction

Six of the sites where the Lower Mississippi Survey (LMS) conducted test excavations during the 1963 and 1964 field seasons had components of Plaquemine or Mississippian cultural affiliation. The ceramic collections obtained at these sites are of great importance to the present thesis, forming as they do the basis for the definition of Routh, Fitzhugh, and Transylvania phases (Chapters III-V). For this reason and because test excavations and related investigations provided information on their settlement plan and occupational history, these six sites are given extensive descriptive coverage in the present chapter.

Transylvania (22-L-3)

Site Description

The Transylvania site is located in East Carroll Parish, 1.25 miles west, northwest of the village of Transylvania (Fig. 3). It lies 3.5 miles west of the present Mississippi River channel and immediately south of an 11 stage channel that contains Swan Lake (Fisk 1944: Plate 22, Sheet 10). Because of its location on the natural

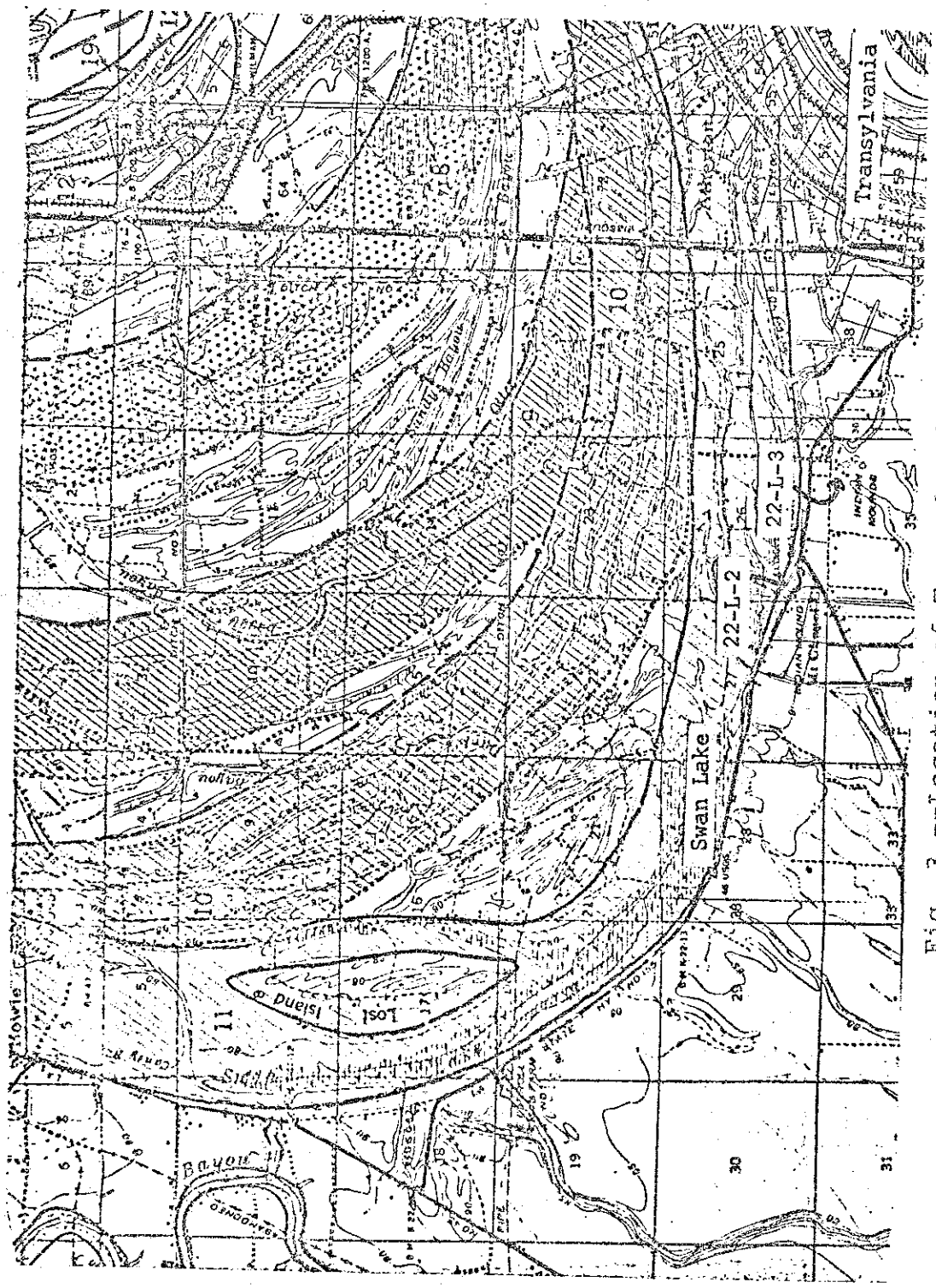

Fig. 3.--Location of Transylvania site

levee of this earlier Mississippi River channel, the site is somewhat higher than surrounding land to the north, west, and south. Clarence B. Moore, in fact, learned during his brief visit to the site in 1917 that it was little affected by flooding. This location on an old levee ridge is also reflected by a difference in ground elevation between the south and north ends of the site. Ground surface in the vicinity of Cuts 3 and 4 is 9.70 MBSD,[1] while at the northern end of the site near Mound I, ground surface is 9.40 MBSD (Fig. 4).

The site itself is bounded by two drainage ditches, one on the west draining south, and one on the east draining north. Both, no doubt, have been modified in recent times. The western ditch cuts across the northwest part of the site, but the possibility that its course south of Mound H reflects an aboriginal palisade and ditch system should not be discounted. No investigation of this ditch and its environs was conducted during the 1963-64 field seasons.

Twelve mounds were identified during LMS investigations at Transylvania (Fig. 4). They are arranged to form two plazas, with the largest mound, Mound A, facing both. The longitudinal axis of the site is roughly north-

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[1]Throughout this report, site evaluations will be abbreviated as MASD (meters above site datum) and MBSD (meters below site datum).

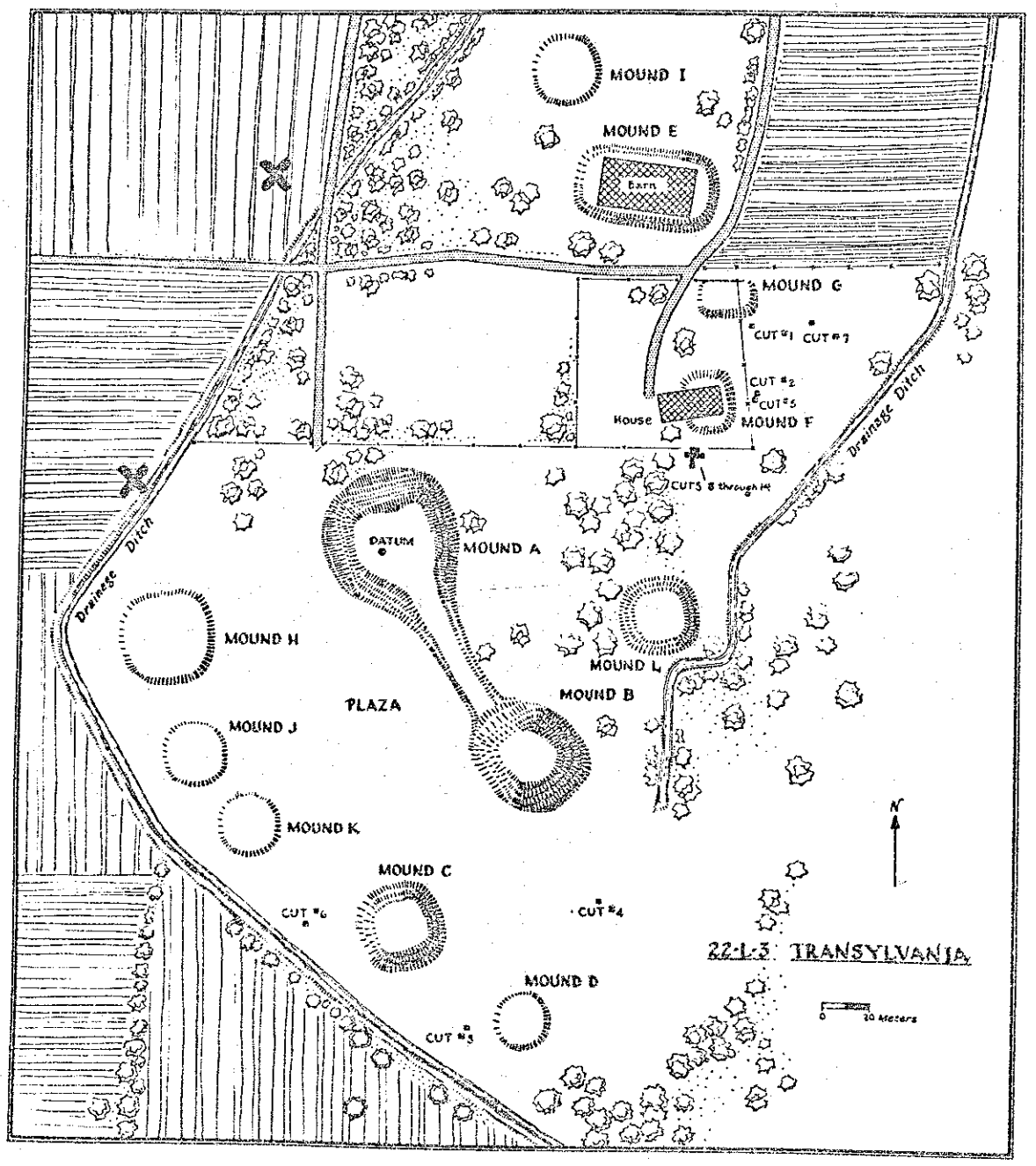


Fig. 4.--Transylvania. LMS site map

south. Both Moore (1918:Fig. 42) and Ford (unpublished field notes) made maps of Transylvania (Figs. 5 and 6). Moore's map agrees closely with the LMS map, but Ford shows two additional mounds not recorded by either Moore or the LMS. Their position is indicated in Fig. 4 by cross marks. The significance of these additional mounds will be discussed in the section on total site analysis.

Mound dimensions recorded by the LMS are presented in Table 1 along with mound designations and elevations published by Moore and elevations contained in the Ford map. Agreement between the first two entries is close except in the case of Mound E (Moore's Mound A). In 1963, this mound was a long, well-formed platform structure surmounted by a barn. It seems likely that subsequent to Moore's visit, the mound was partially leveled to form a lower but larger platform. Ford's elevations for Mounds C, E, and F agree with those obtained by the LMS, but Mound A and Mound B elevations are far too low. The author is at a loss to explain this discrepancy.

Moore (1918:577) reports that the ramp connecting Mounds A and B was built between 1911 and 1917 in order to provide access to the summit of Mound A for livestock in time of major flooding. The summit elevation of the mound was supposedly lowered by almost twenty feet in the earth moving operations. This seems unlikely, however, in view of the structure's present great height relative to basal dimensions.

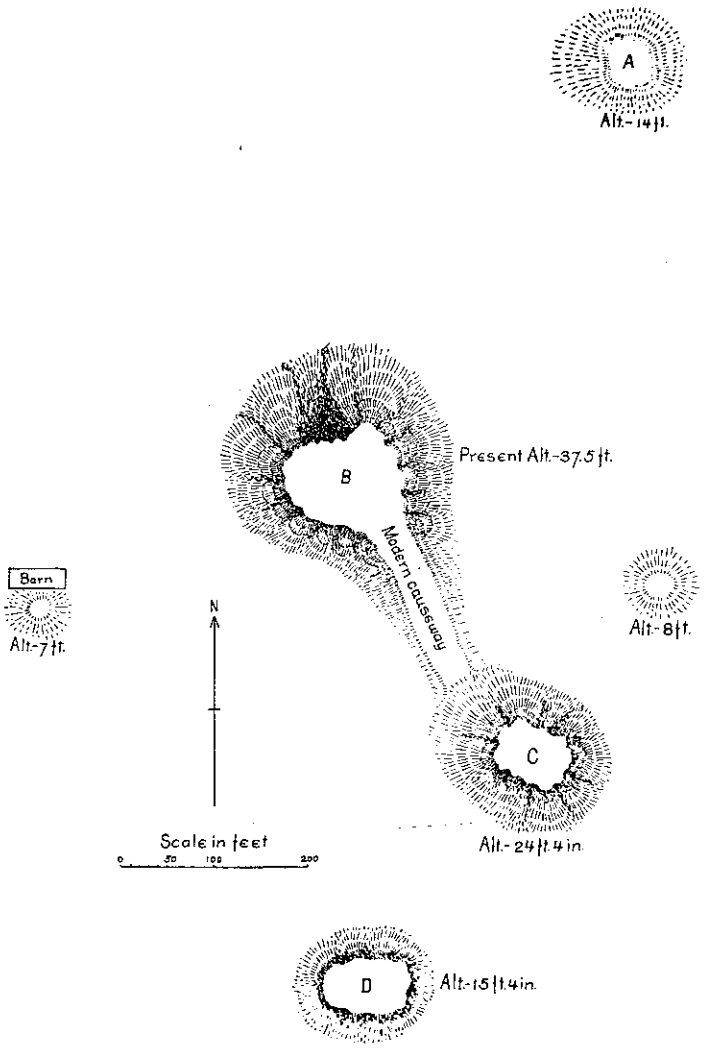


Fig. 5.--Transylvania. Moore site map

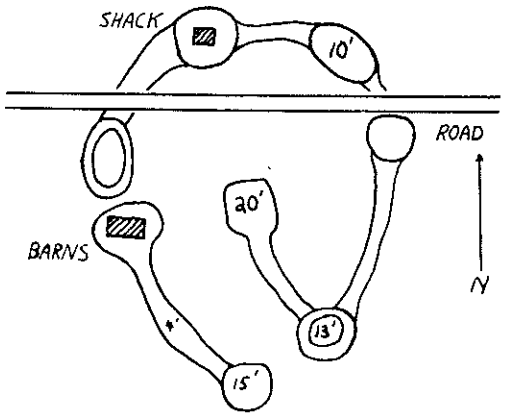


Fig. 6.--Transylvania. Ford site map

TABLE 1

TRANSYLVANIA SITE. MOUND DESIGNATIONS AND DIMENSIONS

LMS Map Feature	LMS Map Elevation	Moore Map Feature	Moore Map Elevation	Ford Map Elevation
Md. A	10.6 m. (34.0 ft.)	Md. B	37 ft.	20 ft.
Md. B	8.3 m. (27.0 ft.)	Md. C	24 ft.	13 ft.
Md. C	4.8 m. (15.5 ft.)	Md. D	15 ft.	15 ft.
Md. D	1.4 m. (4.5 ft.)			
Md. E	2.0 m. (6.5 ft.)	Md. A	14 ft.	10 ft.
Md. F	1.0 m. (3.0 ft.			5 ft.
Md. G	.7 m. (2.0 ft.)			
Md. H	1.7 m. (5.5 ft.)		7 ft.	
Md. I	1.0 m. (3.0 ft.)			
Md. J	.6 m. (2.0 ft.)			
Md. K	.7 m. (2.0 ft.)			
Md. L	2.0 m. (6.5 ft.)		8 ft.	

For the most part, the mounds are not well-preserved. Even in 1917 their condition was such that Moore described them as being "of very irregular outline through trampling of cattle and mules, wash of rain and erosion of the basal parts in periods of flood in earlier times . . ." (Moore 1918:575). Only Mound C has been preserved in relatively good condition with a large flat summit platform and recognizable corners. Mound E, as noted, has been complete modified, and Mound F, according to the tenants in 1963, was also reduced in size at the time the house was constructed over it. Mounds D, G. H, I, J, and K are merely low rises, barely visible in the tall grass. No evidence of ramps has been preserved on any of the mounds. The orientation of Mound A cannot be determined even from Moore's map.

Brief investigations were conducted at the Transylvania site on three separate occasions prior to LMS excavations in 1963 and 1964. Members of Clarence B. Moore's field party visited the site in 1911, and six years later Moore himself came to conduct excavations. In addition to compiling an accurate site map (Fig. 5), he excavated "trial-holes" in Mounds B and C. His efforts paid off only in Mound B where three burials, one flexed and two extended on the back, were found within four feet of the surface. Two vessels (Plate III, c-e) were associated with the flexed burial (Moore 1918:577).

In 1935, James A. Ford visited Transylvania and obtained two small collections of sherds, apparently without excavating. The sketch map reproduced in Fig. 6 was probably made at this time. This data was not used by Ford in his 1936 Analysis of Indian Village Site Collections From Louisiana and Mississippi.

Finally, in 1954, Phillips and Greengo made what they called a "preliminary inspection" of the site and were able to obtain a small sherd collection. On the basis of this collection, Phillips tentatively concluded that the site was closely related to the Deer Creek Phase (unpublished field notes).

As a result of the previous investigations of Ford and Phillips, the LMS placed Transylvania high on its priority list for test excavation in 1963. It was the one site in the Upper Tensas Basin known to have produced shell tempered pottery in strength and therefore could be expected to provide information on the late cultures of the area. The Survey was also committed to investigate more thoroughly each of the several larger sites in the Survey Area. On the basis of size alone, therefore, Transylvania was destined to receive at least one or two test cuts.

Site Investigation

In the summer of 1963, the entire site was covered by field grass and lawn. Surface collecting was therefore

especially poor, and posthole testing had to be relied upon completely for locating midden areas. In the eight days spent working at Transylvania in 1963, numerous exploratory posthole soundings were made, including an east to west traverse of the southern plaza; four 2 x 2 meter cuts were excavated; and the site was mapped with a transit.

Cuts 1 and 2 were located on the eastern out-wash flanks of Mounds G and F respectively where posthole testing had indicated the existence of thick midden deposits. Cuts 3 and 4 were located at the opposite end of the site in the vicinity of Mound D. As a result of these investigations, the late date of site occupation was confirmed and the presence of two components, one Plaquemine and the other Mississippian, was recognized. Unfortunately, in none of the four cuts was cultural stratigraphy clear enough or artifact recovery sufficiently great to permit accurate and detailed component definition.

It was decided, therefore, to reopen investigations during the 1964 field season. Our experience in the previous year indicated that rich midden deposits of any appreciable thickness were scarce at Transylvania. Cut 2 had encountered such, but its stratigraphy was complicated by the presence of three superimposed wall trenches. The second season's excavations were begun, therefore, with Cut 5 being placed adjacent to Cut 2 but located so as to avoid the troublesome wall trenches. Following the

completion of Cut 5, further posthole testing was conducted throughout the site with interest centered more on finding rich midden deposits than stratigraphically superimposed components. The result of this testing was the discovery of two superimposed midden strata immediately south of Mound F. Seven 2 x 2 meter squares were eventually excavated here (Cuts 8-14). Cuts 6 and 7, located in the vicinity of Mound K and east of Mound G respectively, were excavated with the hope of finding undisturbed, single component deposits.

We begin the description of excavations at Transylvania with Cuts 8-14 as these were most important from the standpoint of component definition. Two rich, superimposed midden deposits were encountered in these cuts. Their yield in artifacts was good and the stratification clear enough that excavation levels in the various cuts could be merged to form larger artifact collections for analysis.

Cuts 8-14 (Figs. 8-14)

Seven cuts, six of them measuring 2 x 2 meters and one measuring 2 x 4 meters were excavated on the flank of Mound F during the 1964 season. All cuts were placed abutting their neighbor except Cut 14 which was located 20 cm. to the north of Cuts 9 and 13 (Fig. 7). Local datum

for Cuts 8, 9, 10, 12, and 13 was 9.25 MBSD, while for Cut 11 it was 9.30MBSD and for Cut 14, 9.15 MBSD.

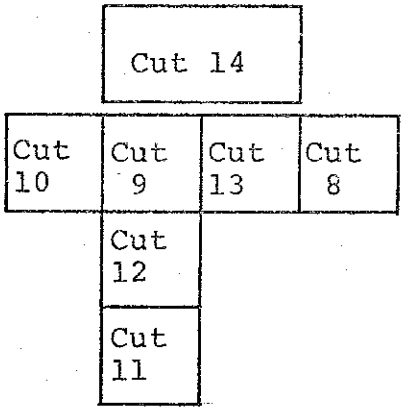


Fig. 7.--Layout of Cuts 8-14.

Stratification in the area was remarkably simple and clear. Above a basal sandy loam occurred two horizontal midden zones separated one from the other by a thin lens of sandy loam. Because of this simplicity, it is possible, and of course, more expedient to describe stratification for all cuts at one time. Twenty centimeters was the usual thickness of excavation levels, although there was frequent variation from this standard. In general, thickness of a level was varied with the intent of making the arbitrary excavation level coincide more closely with stratification. During the excavation of Cut 14, rain at night made it impossible to keep Level C to a 20 cm. thickness. At 80 cm. below datum in Cut 13, a deep pit filled with charcoal, ash, and pottery (Feature A), and a shallow pit with a lens of charcoal, and ash (Feature B) were

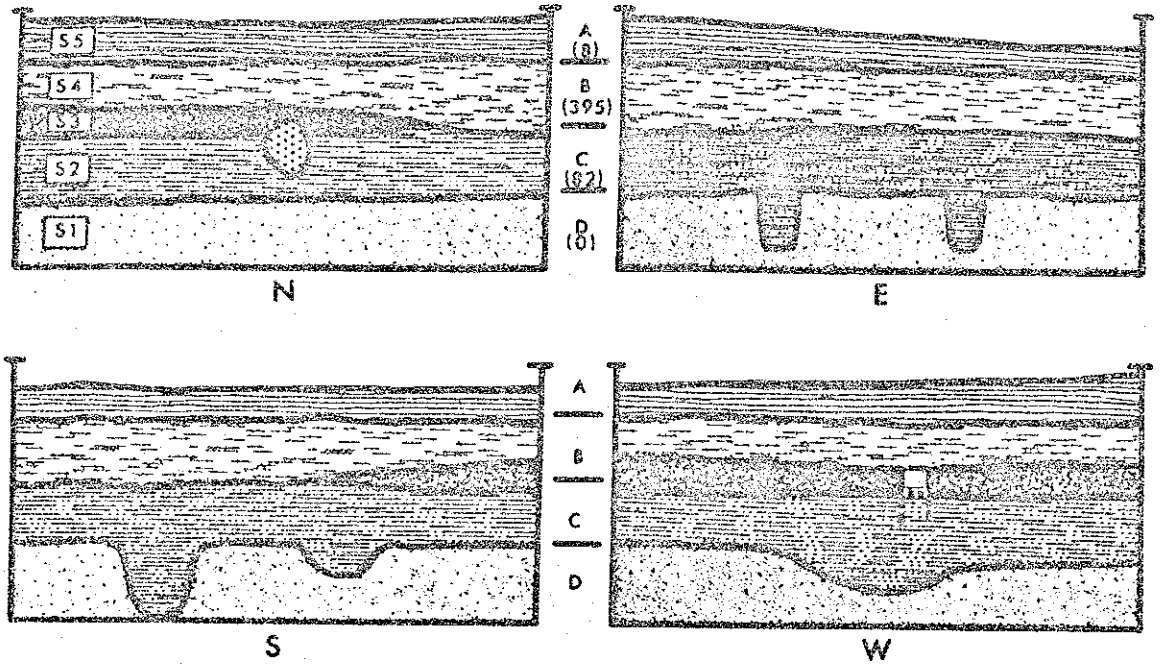


Fig. 8.--Cut 8 profiles

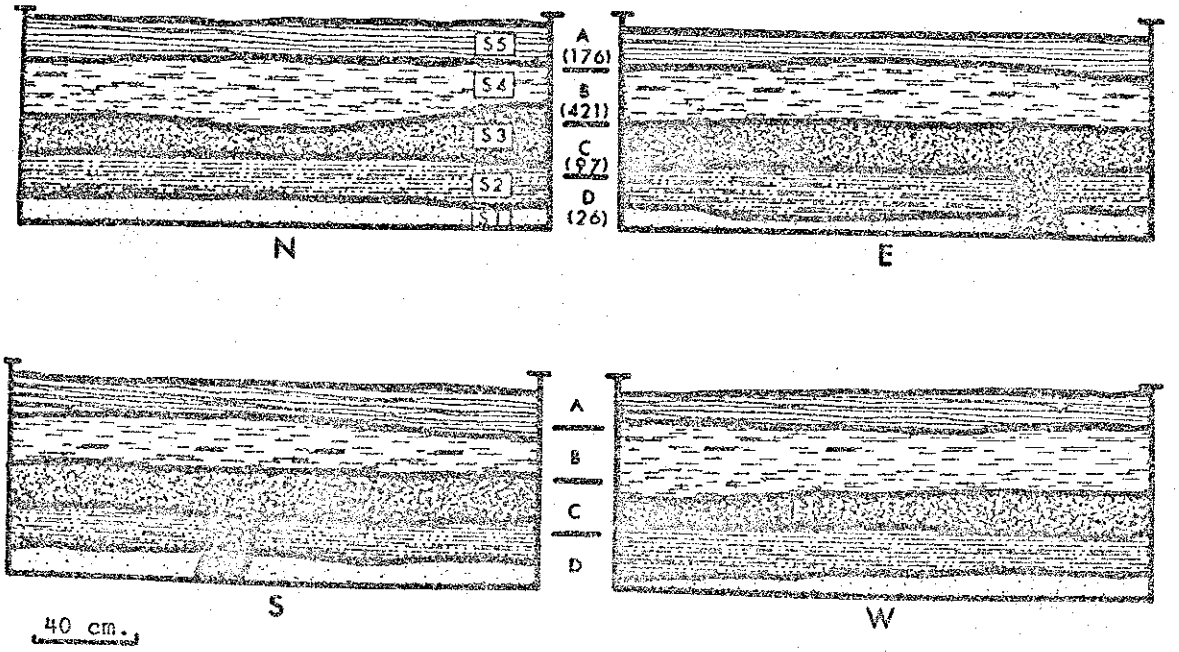


Fig. 9.--Cut 9 profiles

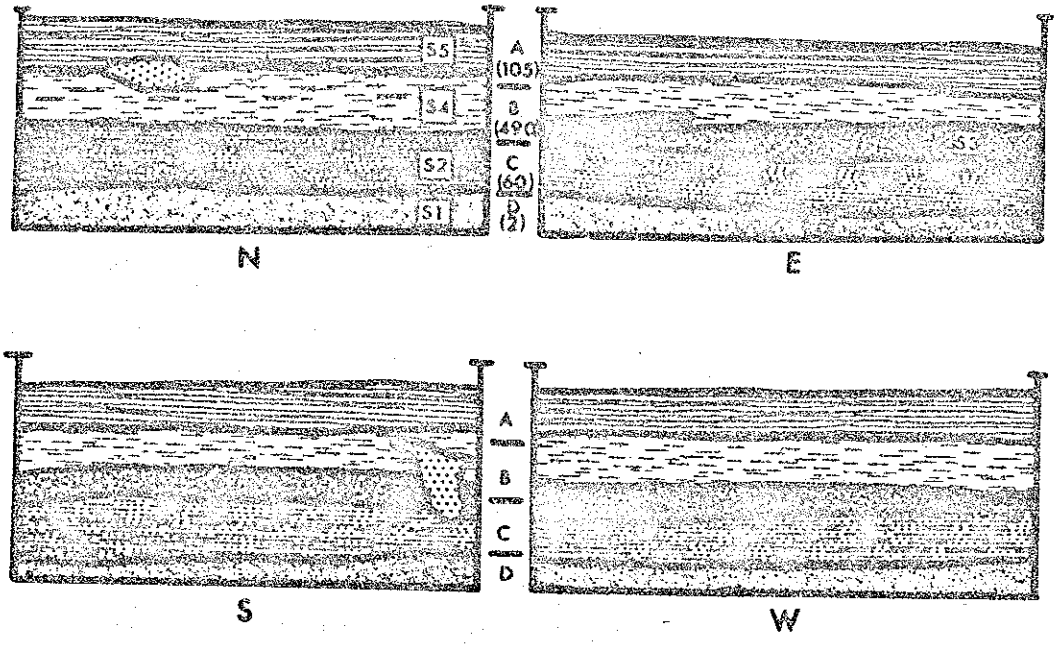


Fig. 10.--Cut 10 profiles

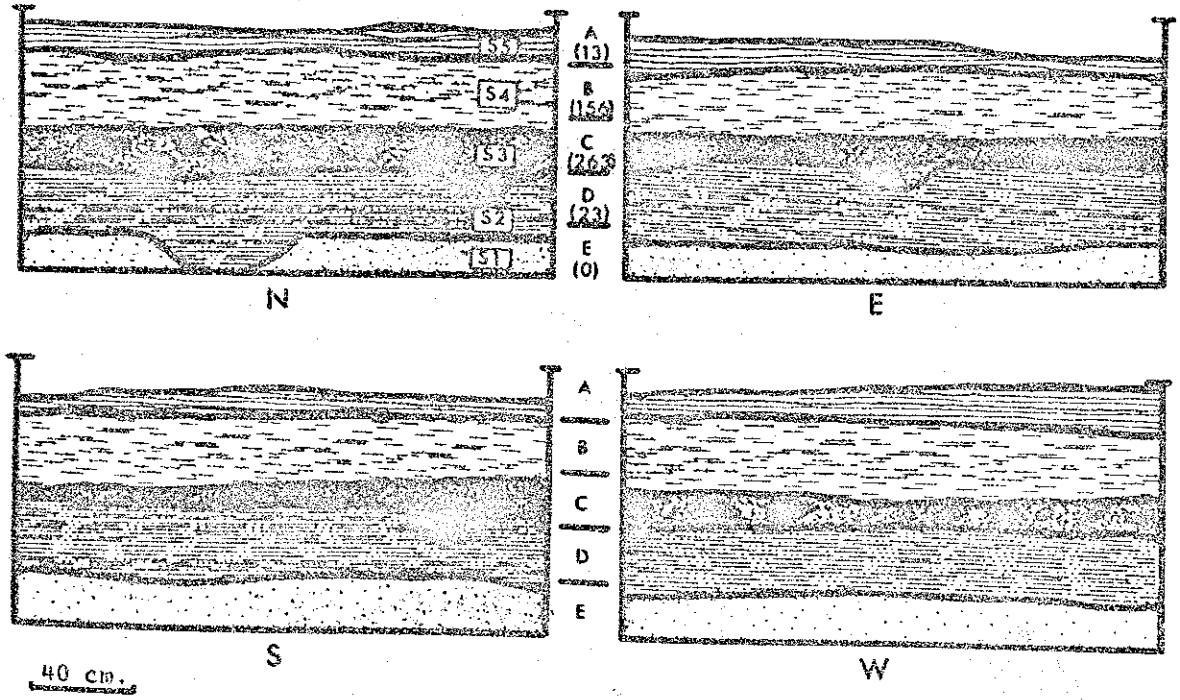
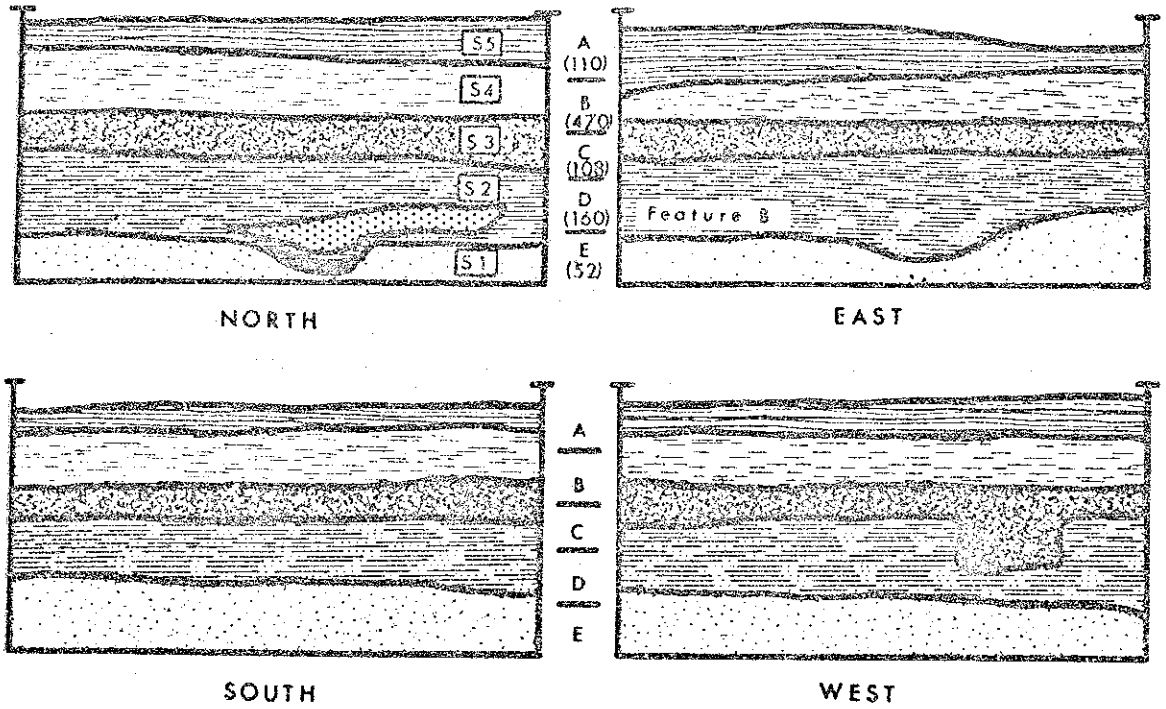


Fig. 11.--Cut 11 profiles



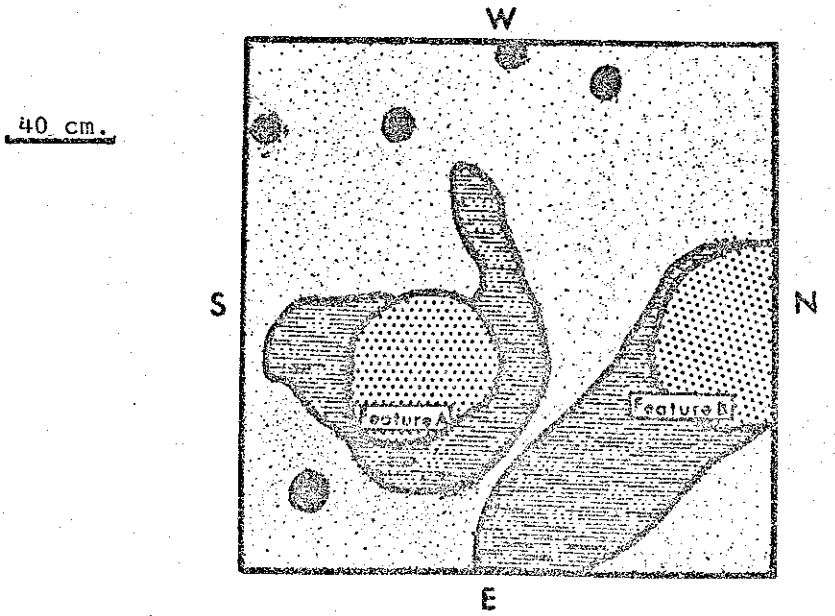


Fig. 12.--Cut 13 profiles and plan

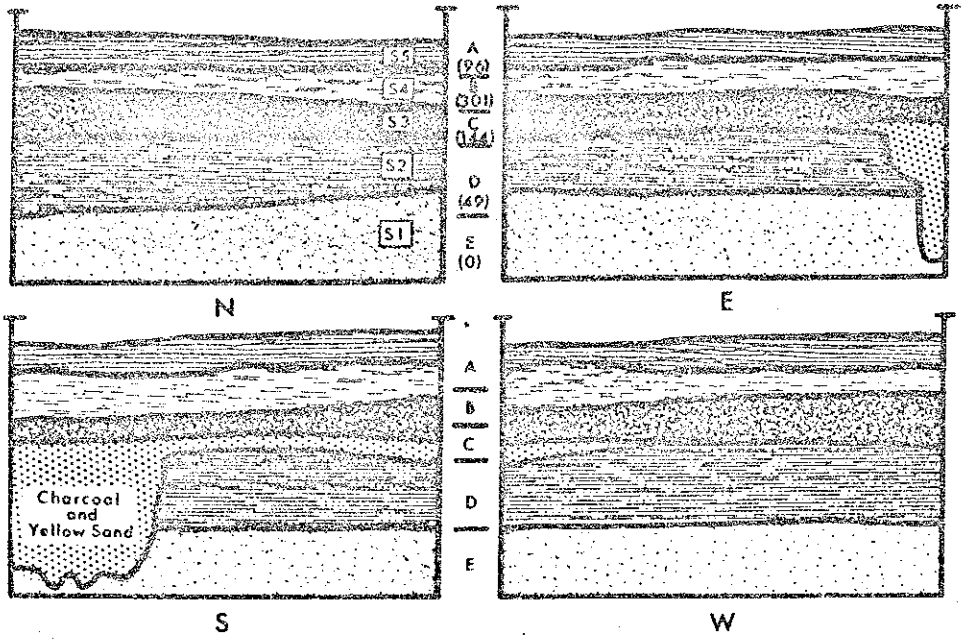


Fig. 13.--Cut 12 profiles

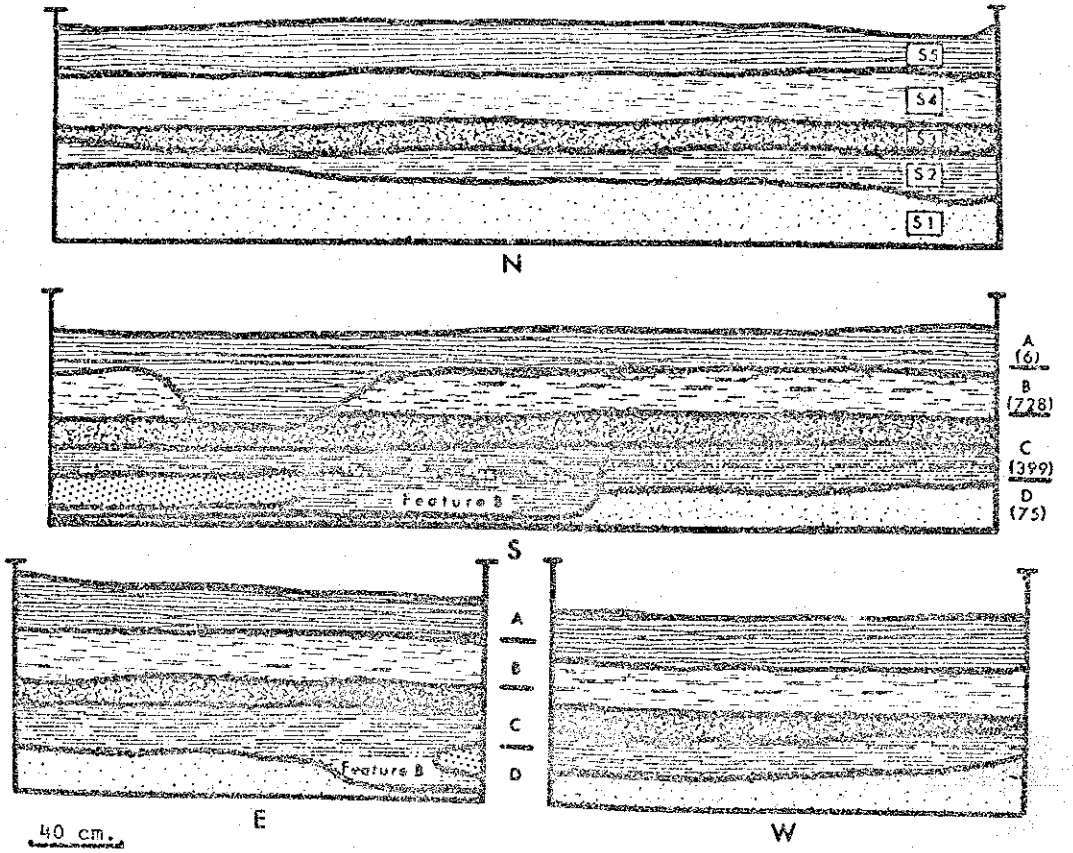


Fig. 14.--Cut 14 profiles

excavated as Level E. The latter pit was encountered in the southeast corner of Cut 14 at 80-95 cm. below datum and was excavated as Level D.

Stratum 1 - Yellow sandy loam

This is sterile subsoil. Its upper surface was observed to occur fairly uniformly at 10.00 MBSD. Leaching of the overlying black midden (Stratum 2), however, has stained the upper portion of this stratum with the result that the boundary between it and Stratum 2 is obscured.

Few postholes were observed in this stratum. In some cases, as in Cut 12, they simply were not to be found. In other cases, no attempt was made to observe and record such features. Two pits, Features A and B, extended into subsoil from the overlying Stratum 2 (Fig. 12, n, plan; Fig. 13, s, e).

Stratum 2 - Black clay midden

Description of this stratum in field notes varies from "quite stiff--almost clay like" to "black greasy clay." Excavation levels lying exclusively within the stratum generally produced small quantities of sherds. Daub, charcoal, bone and other cultural material could be observed in profiles as occurring only near the top of the midden. It thus seems probable that the actual midden stratum constitutes only a fraction of the dark stratum identified as midden during excavation. In Cut 9, a wall

trench penetrated the black midden zone but could not be traced up to the overlying midden stratum (Fig. 9, e, s). In Cuts 11 and 12, a thin layer of fired clay occurred at the top of the stratum, and in Cut 12 a lens of yellow sand and charcoal, associated with a pit-like feature, overlay the stratum (Fig. 13, s).

As mentioned above, few postholes were observed to originate in Stratum 2. During excavation of Feature B, a contrast in soil color, possibly marking the wall of the pit, was noted in the south profile of Cut 14. From this, it appears that the pit originated near the top of Stratum 2. Within Feature B, a lens of ash and charcoal containing abundant pottery sherds was encountered at 75-90 cm. below datum. Feature A, a pit in Cut 13 that extended to a depth of 1.45 cm. below datum, was not discovered until the surface of sterile soil had been reached, with the result that it was not possible to determine from which stratum it had originated. This pit was filled with ash, charcoal, bone, and pottery fragments.

Stratum 3 - Light brown sandy loam

This stratum was entirely unlike the midden deposits above and below it. Although the mode of excavation was not such that definite evidence of sterility could be obtained, observations in the field indicated that this stratum was essentially devoid of cultural material.

As can be seen in Figs. 8, 9, 10, and 12, the stratum lenses out in Cut 8 to the east and in Cut 10 to the northwest. Considerable disturbance of the stratum occurs in Cut 11 where fired clay, probably associated with the midden below, was mixed with the sandy loam.

Stratum 4 - Black midden soil

Occupational debris including pottery was very abundant throughout this stratum, but cultural features such as floors, hearths, postholes, and wall trenches were absent. Soil conditions made the observation of postholes difficult. Cut 11 contained a small lens of fired clay 15 cm. in diameter at 40 cm. below datum. Some modern artifacts were found within the midden, but considering its proximity to present ground surface, this is not surprising.

Stratum 5 - Gray sandy loam

Modern artifacts were fairly common. Only in Cut 14, where the stratum was over 20 cm. thick, was it possible to observe the cultural content of the stratum. It was found to be almost totally devoid of aboriginal artifacts.

Interpretation of Stratification

During excavation of these seven cuts, it was not possible to distinguish accurately the boundary between midden and sterile subsoil. Soil texture, as well as

color, seemed to blend gradually between the two strata. As sherd collections from the various excavation levels accumulated, it became increasingly clear that the boundary line between midden and subsoil was indeed above the depth at which we were locating it in the profiles. Invariably, excavation levels from within what was being identified as the lower midden stratum, produced very small sherd collections, and those straddling the junction of the midden and the overlying Stratum 3 were rich in artifacts.

Stratum 2 is a definite occupation deposit that occurred throughout the area of excavation. Except for the features in Cuts 13 and 14, and the layer of fired earth in Cuts 11 and 12, this deposit is quite uniform in composition and devoid of features. It is interesting to note that these same cuts (11-14) also yielded the largest sherd collections obtained in the stratum. The great majority of sherds in Levels C and D of Cut 14 was derived from Feature B.

The most reasonable explanation of the sandy loam overlying Stratum 2 is that it is intentionally deposited fill. It lenses out to the east and northeast and perhaps also immediately north of Cut 14.

Despite the lack of occupation features, Stratum 4 is classified as a midden on the basis of its rich content of animal bone and pottery. Like the midden deposit below,

this stratum occurs throughout the area of excavation and gives no indication of terminating in the immediate vicinity.

Stratum 5 is doubtless a recent deposit resulting from erosion of Mound F immediately to the north. The deposit lies on the uniformly level surface of stratum 4 at 9.45-50 MBSD. The north-south slope of present ground surface there is due to the varying thickness of this stratum.

Cultural Stratigraphy

The ceramic counts for Cuts 8-14 are presented in Tables 2 and 3.[1] It should be noted that the plain ware categories, Baytown Plain, var. Addis, Bell Plain, var. Holly Bluff and Mississippi Plain, var. Pocahontas, contain body as well as plain rim sherds. Interpretation of this table is made difficult by the small sherd samples obtained in each excavation level. As previously noted, some attempt was made in the field to have excavation levels in Cuts 8-14 conform closely to natural stratification. This was not difficult due to the uniform thickness and depth

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[1]With one exception, pottery types in Tables 2-4 are listed by component. In the case of Mississippi Plain, var. Pocahontas, all sherds are listed under the Transylvania component despite the fact that a certain percentage of them belong to the Fitzhugh phase.

FITZHUGH COMPONENT	CUT 8			CUT 9				CUT 10				CUT 11				CUT 12				CUT 13					CUT 14				
	A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	E	A	B	C	D	E
Baytown Plain, var. Addis		4	25	1	4	7	2	2	3	23	1		15	86	8	2	8	27	21		4	19	30		2	4	72	24	1
"interior strap" bowl rim			1															1									2		
"Delta City" bowl																									1				
"Walnut Bayou" bowl			6		1	2			1	9	1		2	22	3			11	6			5	7	1		1	18	6	2
"Early Tunica" rim						2				1			1	2				8	1		2	3	2	1		1	7		
"Late Tunica" rim														2														2	
"thickened-beveled" rim		1																	1										
"Yazoo" bowl																											3		
small carinated bowl														1															
bottles			1									1							3									5	
var. Addis/shell		3				1		1	1	5				16	5		4	11	3			1	10	6		3	16	13	
"interior strap" bowl rim																		1											
"Walnut Bayou" bowl			2			2				8				3	2			1	4				3	1			6	4	
"early Tunica" rim					1				1					3			1	2	1										
"thickened-beveled" rim										1																			
"Haynes Bluff" rim															1										1				
Evansville Punctated, var. Sharkey										2				5													1	3	
Hollyknowe Ridge Pinched, var. Patmos																			1										
Leland Incised, var. Leland		1	2			1		1								2		1		1		2	1				1		
Maddox Engraved, var. Emerald									1																				
Mazique Incised, var. Manchac					1	5				1			1	3				1	3		2		3			1	4	3	
Parkin Punctated, var. Hollandale			1											6									1			1	1		
var. Transylvania														2				3	1					1			1		
Plaquemine Brushed, var. Plaquemine						1			1	1				8	4		1		1			2	1				3	1	
var. Grace									2	2												1	1						
Winterville Incised, var. Belzoni		2	4		2	6	4	1	8	3			4	9		6	5	6	6	1	3	10	15	1	1	1	39	3	
var. Coleman														1															
Unidentified (clay-tempered)		1					1							2				1				1							

TABLE 2.--TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUTS 8-14, FITZHUGH COMPONENT

TRANSYLVANIA COMPONENT	CUT 8			CUT 9				CUT 10				CUT 11				CUT 12				CUT 13					CUT 14				
	A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	E	A	B	C	D	E
Barton Incised, var. Arcola		1			1				4				2				1				1					1			
var. Atherton	1	6	1	3	13	3		2	14	1						3	3			1	4	1			1	2	3		
var. Stowers		14	1	2	23	6		1	48	2		6	3	1		5	20	1	1	3	20				1	34	7		
var. unspecified		6		1	3	2		1	19				2			3	2	3	1		12	1				11	4		
Bell Plain, var. Holly Bluff		5	1	4	4			2	3			2	8	8		2	11	4	4	2	2	5	1	3	23	3	1		
"Tunica" bowl																													
"Haynes Bluff" rim		1			2				1												3								
Cownide Stamped		8		1									1				1			2									
L'Eau Noire Incised, var. Paine																				2									
Leland Incised, var. Leland		1		4	11				2			1	1		1	1					9				1	7	2		
var. Blanchard		2		2																	1					1			
var. Dabney		5			7			6	13							1				1	5					6			
var. Deep Bayou																				1									
var. Fatherland				1	1											2					2								
var. unspecified		3			1			1									1			2	1		1			1			
Haddox Engraved, var. Silver City		1															1			1	1								
var. unspecified																						1							
Mississippi Plain, var. Pocahontas	7	277	27	136	300	53	12	43	322	22	1	40	98	101	3	57	206	66	20	73	340	56	78	28	17	534	212	23	
"interior strap" bowl rim		1	1										1	2			1										1		
"interior beveled" bowl rim					1		1		4								2												
"Walnut Bayou" bowl rim		6	2		8	3	2	1	9				5	1	1		6	4		1	10	5				20	4		
"early Tunica"										1									2				2			1	3	1	
"late Tunica"		2	2	2	9		1		6	1		1	3	1		1	1				3		2	3		2	2		
"Yazoo" bowl																										1			
"Haynes Bluff" rim				2	3			1	1												1					1			
small carinated bowl		1	1						1										1	1									
jars		14	1	6	5	1		7	7				3			3	3	2		2	4	1	8	5		10	1		
bottles									2																	3	2		
Owens Punctated, var. Menard		2			1			6	2					1		1				1	4					6			
Parkin Punctated, var. unspecified		1		1	1				2			1									2								
Winterville Incised, var. Winterville		15		5	7	1		4	8			2	6	4		4	5	2	2	2	14		1	1		25	6		
var. Ervin		3	3	4	3	1		21	5				3	1		2	10	1		1	6	1	4	7		3			
var. unspecified		1												1				1										3	
Unidentified (shell-tempered)		7		1	8		3	4	9				2	2	1	1	8			12	14				1	18	5	2	

TABLE 3.--TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUTS 8-14, TRANSYLVANIA COMPONENT

of natural strata throughout the excavated area. In each cut, excavation Levels A and B do in fact conform closely to Strata 4 and 5, topsoil and the upper midden. Likewise excavation Levels C, D, and E conform to the limits of Strata 1 through 3, the intermediate sandy loam, the lower midden and sterile subsoil. In each cut, these two groupings of excavation levels consistently produced two relatively pure pottery complexes, that of the Fitzhugh phase and that of the Transylvania phase. It is possible, therefore, to combine the excavation levels for all cuts into two larger units covering the entire excavated area. These will be referred to as Analysis Unit A-B and Analysis Unit C-E, and will form the basis of the discussion that follows. By combining excavation levels, two large pottery samples are produced, and the statistical reliability of conclusions drawn from the sherd distributions is greatly enhanced.

Table 4 presents the ceramic counts for Cuts 8-14 by analysis unit. It can be readily appreciated from this table that between level mixing is slight, and that in almost all cases, decorated types and plain body modes can be assigned with certainty to one component or the other. Granted the phase assignment of a variety such as Maddox Engraved, _var. Emerald_, is questionable because of the few sherds of the type in the collection; nevertheless, there can be little disagreement on how to assign the majority of

TABLE 4

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUTS 8-14 BY ANALYSIS UNIT

Fitzhugh Component	Analysis Unit A-B	Analysis Unit C-D
Baytown Plain, var. Addis	49	346
"interior strap" rim		4
"Delta City" bowl		1
"Walnut Bayou" bowl	5	99
"early Tunica" rim	4	27
"late Tunica" rim		4
"thickened-beveled" rim	1	1
"Yazoo" bowl		3
small carinated bowl		1
bottles	1	9
var. Addis shell	12	87
"interior strap" bowl rim		1
"Walnut Bayou" bowl		36
"early Tunica" rim	3	6
"thickened-beveled" rim		1
"Haynes Bluff" rim	1	1
Evansville Punctated, var. Sharkey		11
Hollyknowe Ridge Pinched, var. Patmos		1
Leland Incised, var. Leland	5	8
Maddox Engraved, var. Emerald	1	
Mazique Incised, var. Manchac	5	23
Parkin Punctated, var. Hollandale	1	9
var. Transylvania		8
Plaquemine Brushed, var. Plaquemine	2	22
var. Grace	2	4
Winterville Incised, var. Belzoni	34	106
var. Coleman		1

Transylvania Component	Analysis Unit A-B	Analysis Unit C-D
Barton Incised, var. Arcola	11	
var. Atherton	53	9
var. Stowers	180	19
var. unspec.	60	11
Bell Plain, var. Holly Bluff	71	27
"Yazoo" bowl	3	
"Haynes Bluff" rim	7	
Cowhide Stamped	13	
L'Eau Noire Incised, var. Paine	2	
Leland Incised, var. Leland	38	3
var. Blanchard	6	
var. Dabney	44	
var. Deep Bayou	1	
var. Fatherland	6	
var. unspecified	10	1
Maddox Engraved, var. Silver City	4	
var. unspecified		1
Mississippi Plain, var. Pocahontas	2450	702
"interior strap" rim	3	4
"interior beveled" rim	7	1
"Walnut Bayou" bowl	66	22
"early Tunica" rim	1	9
"late Tunica" rim	30	12
"Yazoo" bowl	1	
"Haynes Bluff" rim	9	
small carinated bowl	3	1
jars	64	19
bottles	5	2
Owens Punctated, var. Menard	23	1
Parkin Punctated, var. unspecified	8	
Winterville Incised, var. Winterville	97	17
var. Erwin	61	18
var. unspecified	1	5

types. On the basis of sherd distributions, the Analysis Unit C-E pottery complex appears to be characterized by clay-tempered decorated types typical of Plaquemine culture and three shell-tempered types: Winterville Incised, var. Belzoni, and Parkin Punctated, vars. Hollandale and Transylvania. This ceramic complex is identified as Fitzhugh phase. Analysis Unit A-B is characterized by a completely shell-tempered pottery complex which includes several varieties of Barton Incised, Leland Incised, and Winterville Incised. This analysis unit constitutes the type collection for Transylvania phase.

The Analysis Unit C-E sherd sample is unusual in that what would otherwise be regarded as a normal Plaquemine ceramic complex is accompanied by a great number of shell-tempered plain and decorated sherds. There are 693 clay-tempered plain and decorated sherds from these levels and 1011 shell-tempered plain and decorated sherds. The important question is whether the shell-tempered pottery is an integral part of the Fitzhugh phase ceramic complex or whether its presence in Analysis Unit C-E is due to between-level mixing. There are a number of publications dealing with Lower Mississippi Valley archaeology that suggest shell tempering and clay tempering may occur together in a single component. Cotter's stratigraphic work at Emerald and Anna sites (1951) and Neitzel's

investigations at the Fatherland site (1965) have both yielded evidence of small quantities of shell-tempered pottery in association with clay-tempered Plaquemine pottery complexes. Only Brain (1969), however, has been able to document a case (Winterville component at the Winterville site) where the two tempering techniques do occur together in sufficient strength to suggest that both were integral parts of a single indigenous ceramic complex.

At Transylvania, there is considerable evidence in support of the inclusion of shell tempering in the Fitzhugh phase ceramic complex. This evidence is of three types:

1) A considerable portion of the Baytown Plain, var. Addis, pottery and some of the clay-tempered, decorated types have slight admixtures of shell, usually in the form of sparsely occurring flecks. The Plaquemine decorated types are Mazique, var. Manchac (3 sherds), Evansville punctated, var. Sharkey (1 sherd), and Plaquemine Brushed, var. Plaquemine (1 sherd). These sherds are identical in paste, surface finish, design, and, as far as can be told, vessel shape to the clay-tempered representatives of each type.

One hundred and thirty-two of the 693 Addis sherds in Analysis Unit C-E have inclusions of shell. Again, paste and surface finish are identical to that of the

pottery without shell, and more importantly the diagnostic modes, "early Tunica" rim and "Walnut Bayou" bowl, are similar.

2) The second line of evidence involves the three shell-tempered types, Winterville Incised, var. Belzoni and Parkin Punctated, vars. Transylvania and Hollandale. These are more strongly represented in Analysis Unit C-E than in the stratigraphically later Analysis Unit A-B. Admittedly, the latter two types are represented by only small samples and their distribution could conceivably be due to chance. There are, however, 140 sherds of Belzoni with shell tempering in Cuts 8-14, and they are three times more abundant in Analysis Unit C-E than in Analysis Unit A-B. This ratio is the opposite of that for total number of sherds in each Analysis Unit, the sherd sample from Analysis Unit A-B being twice as large as the sample from Analysis Unit C-E. There is good evidence then, that this pottery type belongs to the Fitzhugh component.

It should be pointed out that in comparison with the distribution of other Fitzhugh phase types in Cuts 8-14, the number of Belzoni sherds obtained from Analysis Unit A-B levels is much higher than expected on the basis of chance mixing alone. Actually, this high percentage of Belzoni sherds in the upper levels reflects to a great

extent the problem encountered in sorting sherds, as either Belzoni or Winterville variety of Winterville Incised. When dealing with small sherds, the sole criteria for distinguishing the two varieties is frequently width and depth of incised lines. As Winterville is a development out of Belzoni, there is obviously some overlap in these characteristics, and the decision to sort small sherds into either category may become rather arbitrary. Eight of the eleven Belzoni sherds in Analysis Unit A-B of Cut 12, for example, belong to a vessel that did provide much difficulty in sorting. During the process of firming up Belzoni as a variety, these particular sherds were shifted back and forth several times between the Belzoni and Winterville categories. On the other hand, all nine Belzoni sherds in Levels A and B of Cut 10 are good examples of that variety and hence should be intrusive from below. Two of the sherds, in fact, belong to a vessel represented by several sherds in the Fitzhugh phase levels.

3) In Analysis Unit C-E, certain decorated pottery types and plain ware modes seem to span the temper line. Six sherds of Plaquemine Brushed occur on Mississippi Plain paste. By definition these are Plaquemine Brushed, var. Grace, but in all other respects they resemble their clay-tempered counterpart. Several typical "early Tunica" rim

sherds have Mississippi Plain paste, and their distribution indicates that they belong in the Fitzhugh component. Although information on vessel shape and design layout is lacking, the several sherds in Analysis Unit C-E typed as Parkin Punctated, var. Hollandale, resemble Evansville Punctated, var. Sharkey, closely. It seems likely that at Transylvania they are one and the same. Finally, it should be noted that a number of the sherds classified as Winterville Incised, var. Belzoni, are clay-tempered.

Almost half the pottery types that occur in Cuts 8-14 were represented by at least a few sherds in both analysis units. In several instances, sherds from the same vessel were thus distributed. It is obvious then, that a certain amount of mixture has occurred between the two middens. Considerably more mixing seems to have occurred downward than upward. At the most, only about one-twentieth of the 3400 sherds in Analysis Unit A-B are definitely intrusive from the earlier component. In Analysis Unit C-E, however, as much as one-eighth of the total sherd sample may be intrusive from above. This latter figure is difficult to calculate accurately as it is not possible to determine how many of the 772 sherds of Mississippi Plain, var. Pocahontas, in Analysis Unit C-E belong to that component or are intrusive from above.

An attempt was made during laboratory analysis to determine which cuts, if any, manifested greater mixing in their ceramic counts than others. No conclusive case could be made for excessive mixture up or down in any cut with the exception of Cut 13. Here a pit (Feature A) was noticed at 80 cm. below datum that extended down to a depth of 1.45 cm. below datum, and contained ash, animal bone, and large pottery sherds. This pit lay outside the limits of Feature B, the large, shallow pit in the northeast corner of Cut 13 and the southeast corner of Cut 14. Nevertheless, the two features were excavated together as Level E in Cut 13, and that portion of Feature B that lay in Cut 14 was excavated as Level D.

Only after analysis of the Transylvania site pottery had proceeded along for some time did it become clear that the pottery from Levels D and E in Cut 13 had a sizeable mixture of Transylvania phase sherds: 10 sherds of Winterville Incised, var. Erwin, 2 sherds of Winterville Incised, var. Winterville, 4 "late Tunica" rims, and a disproportionately large amount of Mississippi Plain, var. Pocahontas. All Erwin sherds and 15 to 20 Pocahontas sherds belong to a single large jar (Plate X, d). Most of these sherds are large and it seems likely, therefore, that they were obtained from Feature A where large sherds were noted during excavation. From this

evidence it has been concluded that Feature A was actually a Transylvania phase pit originating from Stratum 4, but not detected by the excavators until yellow subsoil put it into sharp relief. It is possible that the feature was missed in the floors of excavation Levels B and C, especially if the pit was not filled with charcoal and ash to those levels.

To this point in the discussion of cultural stratigraphy in Cuts 8-14, relatively little has been said concerning the pottery collection from Analysis Unit A-B. One of the major conclusions drawn from the sherd distribution data at hand is that the pottery complex of this Analysis Unit is completely shell-tempered. The disproportionate ratio of shell tempering to clay tempering in Analysis Unit A-B indicates that the few clay-tempered sherds present are the result of mixture. The case for mixture is even stronger when it is noted that these 83 sherds are distributed between three types: Mazique Incised, var. Manchac, Plaquemine Brushed, var. Plaquemine, and Baytown Plain, var. Addis. In addition, two Fitzhugh phase plain ware modes are represented in Analysis Unit A-B: "early Tunica" rim and the "thickened-bevelled" rim. It is possible that small amounts of various clay-tempered types were being manufactured in the Transylvania phase, but unlikely. Certainly it is not necessary to evoke

this sort of explanation to account for their occurrence in Analysis Unit A-B.

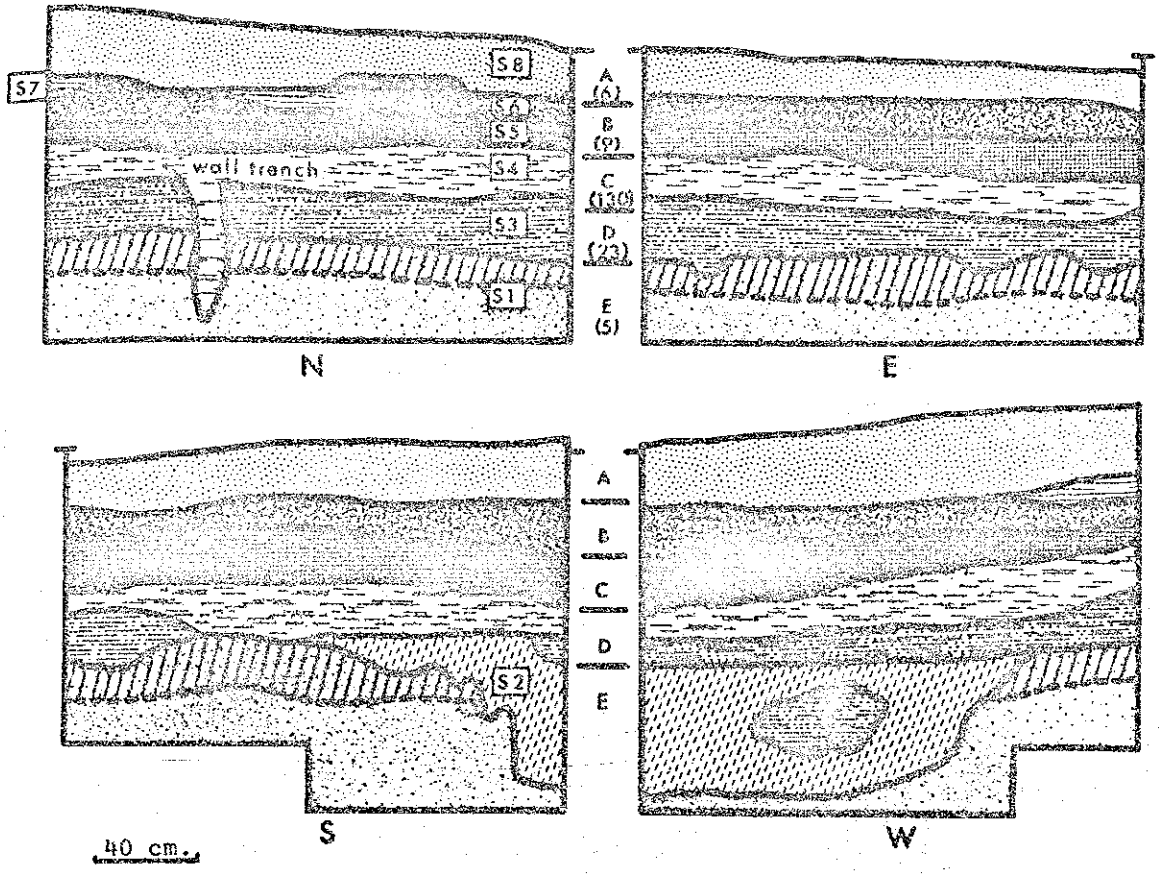
The conclusions that have been derived from the data on sherd distribution and stratification in Cuts 8-14 are as follows: Two superimposed midden deposits, Strata 2 and 4, accumulated during two different periods of site occupation. Neither midden was completely free of pottery intrusive from the other occupation stratum, but mixture was not great enough to hamper analysis of the two components. The earlier occupation has been identified as a component of the Fitzhugh phase, and the latter has served as the type component of the Transylvania phase. The Fitzhugh component is composed of both clay-tempered and shell-tempered pottery, while the Transylvania component contains only shell-tempered pottery.

Cut 1 (Fig. 15)

Cut 1 was located on the southeast flank of the slight rise identified as Mound G. Local datum was 9.33 MBSD. Excavation was by 20 cm. levels except for Level E which included material from postholes and a pit that extended into sterile subsoil.

Stratum 1 - Sterile, sandy loam

The top 10-20 cm. of this subsoil, (the area above the dashed line in the profiles) were stained by leaching



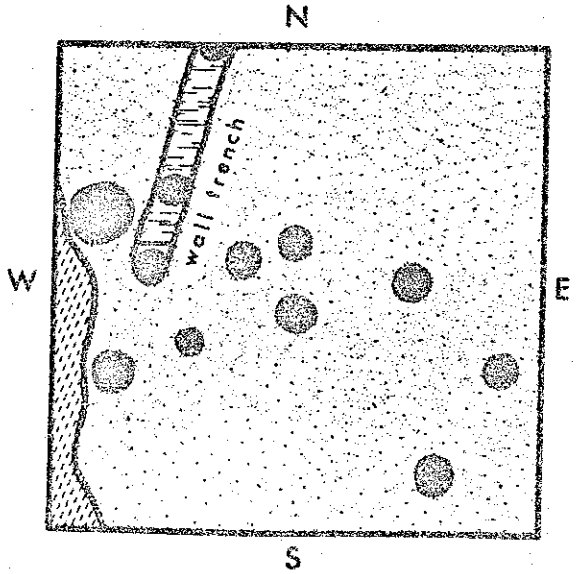


Fig. 15.--Cut 1 profiles and plan

of the black clay midden above. Several postholes, a segment of wall trench, and part of a pit-like feature extended into the sandy loam from overlying strata (Fig. 15, plan).

Stratum 2 - Pit fill

A pit-like feature in the southwest corner of the cut was found to extend 50 cm. into sterile subsoil. It was filled with mixed dark clay and tan sandy loam but apparently was devoid of artifacts.

Stratum 3 - Black clay midden

Artifact recovery was low, and little daub, bone, or charcoal was encountered. No cultural features were noted, although some of the postholes seen at 100 cm. below datum may have originated in this stratum. The deposit partially overlay the pit (Stratum 2) and apparently postdates it.

Stratum 4 - Gray clay midden

Charcoal, daub, animal bone, and pottery were relatively abundant. Postholes and a wall trench originated in this stratum (Fig. 15, n), but there was no indication of habitation floors. The wall trench extended 80 cm. into the cut before terminating. The trench itself extended down to about 98 cm. below datum

while individual posts set within it continued down at least 10 cm. more.

Stratum 5 - Brown clay

This stratum was largely devoid of aboriginal artifacts and had no associated features.

Strata 6 and 8 - Mottled sandy loams

Very few artifacts and no features occurred in these strata. An apparent erosion surface separates them.

Strata 7 - Small lenses of water-laid sand

Interpretation of Stratification

Stratification here is dominated by the location of the cut with respect to Mound G. All strata exhibited to a greater or lesser extent a southeast to northwest gradient. Strata 3 and 4 are probably in situ accumulations of occupation debris. Strata 5, 6, and 8 are probably redeposited mound fill, resulting either from erosion or recent human activity.

Cultural Stratigraphy

Cultural interpretation is difficult in Cut 1 because small sherd samples were obtained in all levels but Level C (Table 5). Most of Level C falls within Stratum 4, the gray clay midden, but small portions of Strata 3 and 5 are also included. Sherds of both Fitzhugh

and Transylvania components occur in Level C: The former is represented by Baytown Plain, var. Addis, and the mode, "early Tunica" rim; the latter is represented by Barton Incised, var. Barton, and Winterville Incised, vars. Erwin, and Winterville.

TABLE 5

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 1

	Excavation Levels				
	A	B	C	D	E
Barton Incised, var. Barton			7		
var. Atherton				1	
var. Stowers		4			
Baytown Plain, var. Addis			11		1
"early Tunica" rim			1		
var. Addis/shell				2	
var. unspecified			18	16	2
Bell Plain, var. Holly Bluff			6		
Leland Incised, var. Dabney			4		
Maddox Engraved, var. Emerald	1		1		
Mississippi Plain,					
var. Pocahontas	3	4	69	3	2
"Walnut Bayou" bowl			3		
"Haynes Bluff" rim	1				
jars	1	1			
Mulberry Creek Cord Marked,					
var. unspecified				1	
Winterville Incised,					
var. Winterville			4		
var. Belzoni			6		
var. Erwin			2		

Level D, conforming closely to Stratum 3, the black clay midden, is dominated by Sundown phase pottery: Baytown Plain, var. unspecified, and Mulberry Creek Cord Marked, var. unspecified.

Given the size of sherd samples and the evidence for mixture in Level C, it is not possible to assign any stratum to a particular component. Three components, Sundown, Fitzhugh, and Transylvania, are present.

Cuts 2 and 5 (Figs. 16-18)

As noted in the introduction to this chapter, the stratification of Cut 2 was very complex due to the presence of three superimposed wall trenches. To avoid encountering this stratigraphic situation again, Cut 5 was laid out immediately to the south of Cut 2, but 1.20 m. to the west (Fig. 18). This should have placed Cut 5 entirely to the west of the wall trenches, but as we were to discover, the latest wall trench headed considerably more in a northeast-southwest direction than anticipated, and thus bisected the new cut.

Because of their essentially similar stratification, both cuts are described together. Datum for Cut 2 was 9.30 MBSD, and for Cut 5, 9.10 MBSD. Excavation was by 20 cm. levels except in Level A of Cut 5 where 30 cm. was removed in order to speed penetration of the upper, modern zone. Also to conserve time, Cut 5 was not

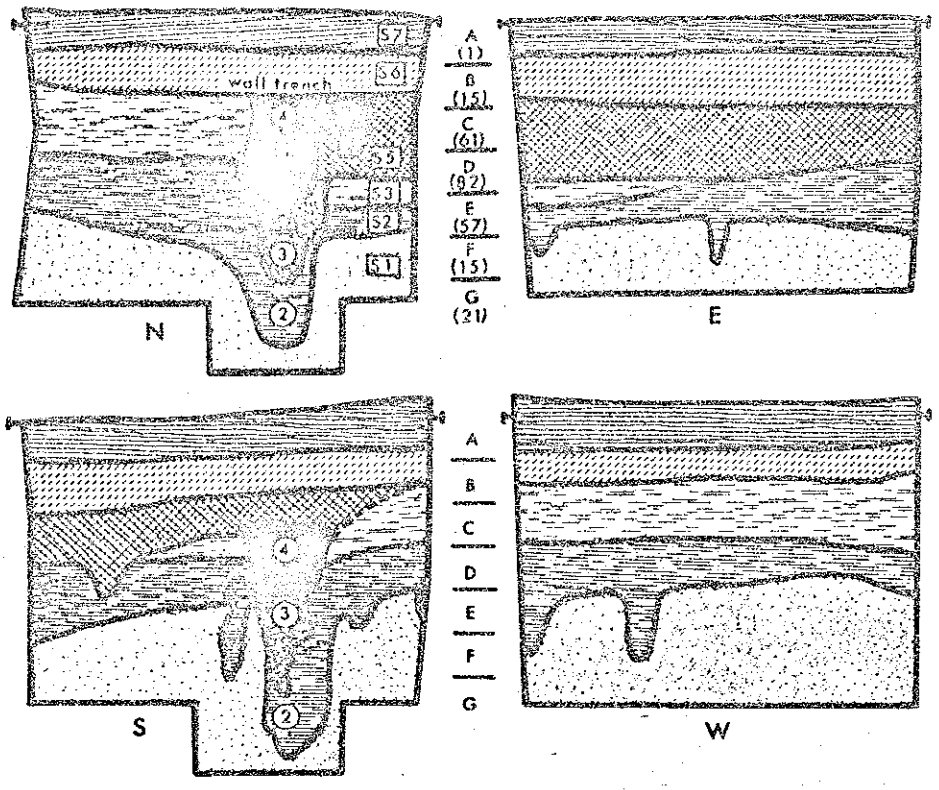


Fig. 16.--Cut 2 profiles

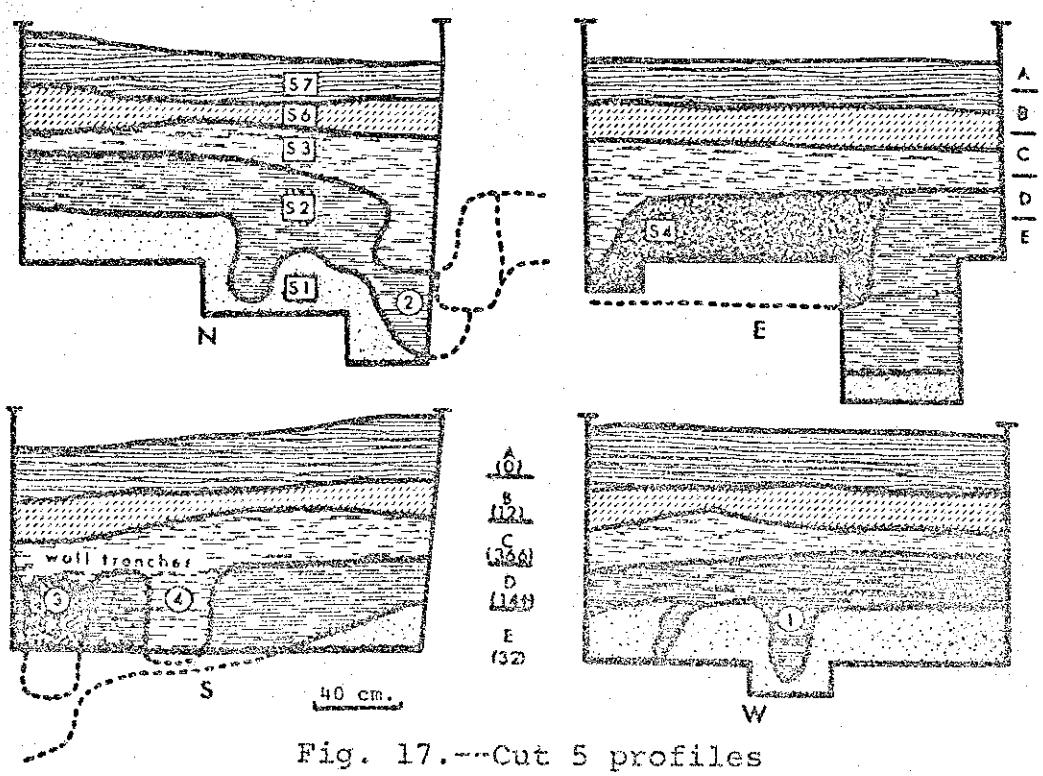


Fig. 17.--Cut 5 profiles

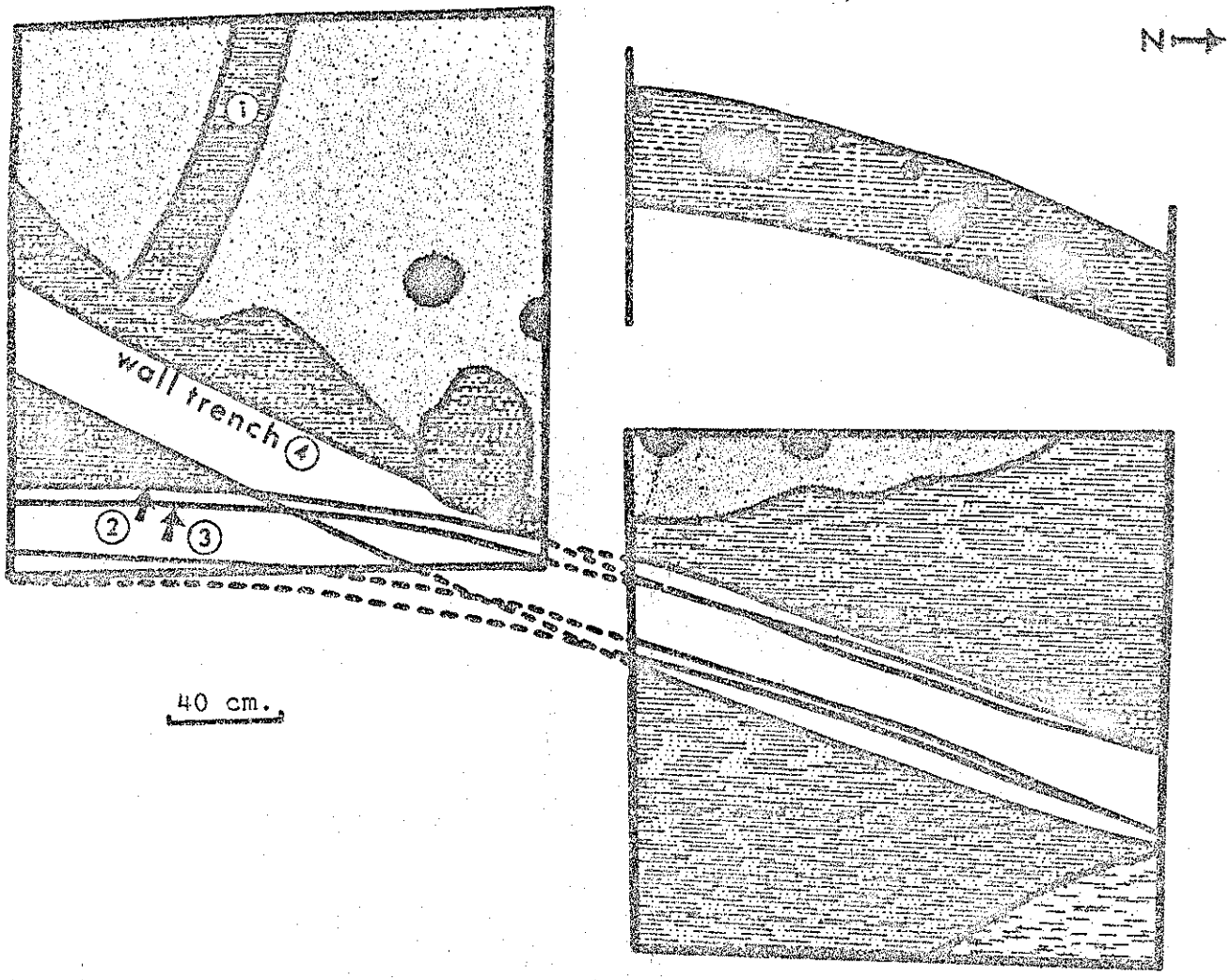


Fig. 18.--Cuts 2 and 5 plans

excavated below the bottom of the lowest occupation stratum (110 cm. below datum). Some portions of the profiles in Cut 5 were cleared to a greater depth for purposes of stratigraphic interpretation, but in large part the profiles of Cut 2 were relied upon for this information.

Stratum 1 - Tan sandy loam

This is sterile subsoil. The top 10-15 cm. were stained a darker color as a result of leaching of the dark midden stratum above. Wall trenches and postholes were intrusive from above. The surface of sterile subsoil, as preserved in these cuts, dropped from 9.95 MBSD in the west profile of Cut 5 to 10.30 MBSD in the east profile of Cut 2.

Stratum 2 - Dark gray clay midden

Charcoal, daub, animal bone, and pottery were abundant. Two wall trenches excavated into sterile subsoil were associated with the deposition of this stratum. The earlier, Trench 1, ran west to east through Cut 5 and was terminated in the east by the second wall trench (Fig. 17, w; Fig. 18). The latter was the first of the three large, superimposed trenches. Individual postholes penetrated as much as 30 cm. below the bottom of Trench 2 (Fig. 18). Both wall trenches were filled with

the same dark gray clay midden material that composed Stratum 2. Single postholes observed in sterile subsoil may have originated from Stratum 2.

Stratum 3 - Light gray silty clay midden

This stratum occurred throughout Cut 5, but was largely confined to the western part of Cut 2. It seems to have accumulated against (to the west of) Trench 3 which was excavated at this time (Fig. 16, n). Thin lenses of a similar material were noted to the east of Trench 3 in Cut 2 and are probably to be equated with the larger deposit. Animal bone, daub, stone, and pottery were relatively abundant, but no postholes were observed emanating from the midden. This may be due to difficulty in seeing them in the underlying dark gray midden. Trench 4, the latest of the superimposed wall trenches, cut through this stratum.

Stratum 4 - Gray sandy loam

This material comprised the fill in Wall Trench 3.

Stratum 5 - Light brown, mottled sandy loam

This stratum occurred only in Cut 2 and here only to the east of the superimposed wall trenches (Fig. 16, n). Fieldnotes indicate that the stratum was almost devoid of cultural material.

Stratum 6 - Dark brown sticky clay

This stratum completely overlay the midden deposits and wall trenches. It was probably completely sterile.

Stratum 7 - Hard, compact, fine sandy loam

Modern artifacts were plentiful while aboriginal material was almost absent.

Interpretation of Stratification

Correct interpretation of the stratification in Cuts 2 and 5 is difficult, if not impossible, with the limited amount of excavation. Basically, two middens, four wall trenches and one probable mound fill deposit comprise the stratigraphic picture in these cuts.

The difference in elevation of sandy loam subsoil from east to west within Cut 2 probably reflects aboriginal construction activities. Initial occupation of the area is represented by Stratum 2. Early in the accumulation of this midden, Wall Trench 1 and probably several of the postholes seen in sterile subsoil were excavated. Subsequently, the north-south running Wall Trench 2 was excavated deep into sterile subsoil. This trench was 30 cm. wide, at least 60 cm. deep, and contained posts of two different sizes (Fig. 18). Running down the center of the trench were unevenly spaced postmolds 20 cm. or so in diameter, while smaller postmolds,

10 cm. in diameter, were located against the sides of the trench. The general size of this trench and its exposed length of nearly five meters, indicate that it was not a simple house wall trench, but rather the foundation of a larger structure, probably a palisade. Support for this interpretation comes from the fact that two wall trenches of similar size were eventually located directly above. Apparently occupation continued after this wall was erected, as there was differential midden accumulation to the east and west of it. After Wall Trench 2 had ceased functioning it was filled with material from Stratum 2. Wall Trench 3 was erected directly over its predecessor. As in Trench 2, this trench was curved, with its convex side to the west. Again, trench size suggests a stockade rather than a house wall. This interpretation is further borne out by the accumulation of a second midden (Stratum 3) to the west of the trench. A thin layer of this midden occurred on the east side also, the result probably of seepage through the stockade.

Before Wall Trench 4 was excavated, ground surface to the east was brought up to the level of midden accumulation, west of the former wall. This was accomplished by the addition of sandy loam (Stratum 5) in the area of Cut 2. To the south, in Cut 5, this filling operation was unnecessary, as the wall trench

there was well within the former stockade and the uniformly deep midden deposit behind it. The gray sandy loam fill in Wall Trench 3 is probably the same material as Stratum 5.

Only in the north profile of Cut 2 was it apparent that the final wall trench, number 4, postdated the second midden layer (Stratum 4). Elsewhere, it could not be traced to the surface of that stratum. Trench 4 cannot be correlated with a midden deposit. Stratum 6, overlying the trench is probably fill eroded from Mound F.

We can speculate that all three superimposed wall trenches were erected to enclose the area of Mound F. The accumulation of midden on the west side of two of the trenches may be debris swept from mound summit.

Cultural Stratigraphy

Sherd counts for Cuts 2 and 5 are presented in Tables 6 and 7. It will be noted that only 16 sherds are listed for Level D in Cut 5. Actually this level was extremely rich, and two artifact bags were required to hold the collection. The larger bag was unfortunately lost somewhere between the site and the lab.

The upper two strata in Cuts 2 and 5 were virtually sterile. Those few sherds recovered from Level B in both cuts, were apparently the result of contact with the underlying gray silty clay midden, Stratum 3. In both

TABLE 6

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 2

	Excavation Levels					
	B	C	D	E	F	G
Barton Incised, var. Barton		1				
var. Atherton		1	2			
var. Stowers		3	2			
Baytown Plain, var. Addis	1	9	11	17	5	2
"Walnut Bayou" bowl			2			
"early Tunica" rim				2		
"late Tunica" rim		1				
"Haynes Bluff" rim var. unspecified			6	4	1	1
Bell Plain, var. Holly Bluff		1	2	1		
small carinated bowl	1	1	4	2		2
Maddox Engraved, var. Silver City			1			
Mississippi Plain, var. Pocahontas	9	38	39	13	5	11
"Interior strap" bowl rim			1			
"Interior beveled" bowl rim			1			
"Walnut Bayou" bowl	2	2	1	1		
Winterville Incised, var. Belzoni	1	1		20		2
var. Coleman			1			
Unidentified	2	3		1	4	

TABLE 7

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 5

	Excavation Levels			
	B	C	D	E
Barton Incised, var. Atherton		5		
var. Stowers	1	29		
Baytown Plain, var. Addis		36	4	3
var. unspecified	1	33		20
Bell Plain, var. Holly Bluff		10		
small carinated bowl		1		1
Leland Incised, var. Leland		2		
var. Dabney		1		
Maddox Engraved, var. Silver City		1		
var. unspecified		2		
Mazique Incised, var. Manchac		1		
Mississippi Plain, var. Pocahontas	9	207	6	6
"Walnut Bayou" bowl		3	1	1
"early Tunica" rim			1	
"late Tunica" rim		4		
jars		2		
Parkin Punctated, var. Transylvania		1		
Plaquemine Brushed, var. Plaquemine		2		
Winterville Incised,				
var. Winterville	1	11	4	1
var. Belzoni		6		
var. Coleman		1		
var. Erwin		1		
Unidentified		7		

cuts, excavation Level C conforms closely to the limits of this midden, and the sherd samples are quite pure considering the amount of aboriginal disturbance. (Mixture should also be expected from the fact that Level C in both cuts does extend into the lower midden, Stratum 2.) Level C in Cut 5 produced an especially fine collection of 366 sherds which is definitely Transylvania phase. Only 46 identifiable Fitzhugh phase sherds are present, and this number is almost equaled by the 33 Baytown plain sherds of Sundown affiliation that are also present. One of the Fitzhugh phase sherds, a small carinated bowl fragment, is part of another sherd obtained in Level E. Level C in Cut 2 produced a considerably smaller sample of 59 sherds. This fact seems to verify the observation made during excavation, that the light brown mottled sandy loam deposit, lying east of Wall Trench 4, was largely devoid of sherds. Again, Transylvania phase types predominate, but greater mixture is evident than in Cut 5. Eleven out of 61 sherds are definitely Fitzhugh phase. Level C in Cut 5, however, provides sufficient evidence to conclude that the gray silty clay midden, and the two associated wall trenches, are Transylvania phase features.

The cultural assignment of the underlying dark gray clay midden, Stratum 2, is hampered by the loss of most of the Level D sherd collection from Cut 5, and by

the fact that Level D in Cut 2 includes large portions of both midden strata. Ceramically, Level D in Cut 2 is predominately Transylvania phase. Only 17 of the 77 sherds in the sample are Fitzhugh phase types. Level E in Cut 2, however, yielded a sherd collection that seems to be pure Fitzhugh phase. Because of the extensive wall trenching, some Transylvania phase material should be present. Some of the Mississippi Plain sherds, in fact, could very well be from this later component; but the proportion of shell-tempered to clay-tempered plain pottery is about what would be expected in an undisturbed Fitzhugh level at the site. The small sherd samples in Levels F and G of Cut 2 were derived from the wall trenches and in the case of Level F, from the bottom of Stratum 2 in the northeast corner of the cut. These samples are inadequate for trustworthy interpretation, but it may be noted that neither contained material that cannot be identified as Fitzhugh phase.

Since Levels E through G in Cut 2 indicate the dark gray clay midden is a Fitzhugh phase deposit, it is surprising that Level D in this cut produced so few Fitzhugh sherds. Most of the level fell within the dark gray clay midden, and this stratum was quite rich in Cut 5 judging from the amount of material recovered from it (and subsequently lost).

Levels D and E in Cut 5 are more or less useless because of sherd sample size. Very little of Stratum 2 fell within Level E, and it is probable that most of the sherds obtained were from the wall trenches that were intrusive from above.

It is unfortunate that the evidence for the cultural identity of Stratum 2 is not stronger. A Fitzhugh phase identification for this stratum would have interesting implications for the problems of continuity of site occupation and ceramic development.

Cut 3 (Figs. 19, 20)

Surface collecting in 1963 in fields lying to the southwest of the site produced cultural material only in the turnrows adjacent to the drainage ditch. With this lead, posthole soundings were made on the northeast side of the ditch in the vicinity of Mounds C and D. It was eventually determined that a fairly limited area of midden existed immediately west of Mound D, and the decision was made to excavate a pit here. Local datum for Cut 3 was 9.64 MBSD. Excavation was by 20 cm. levels except in Level D which was 10 cm. thick.

Stratum 1 - Yellow sandy loam

This was sterile subsoil occurring at 10.64 MBSD.

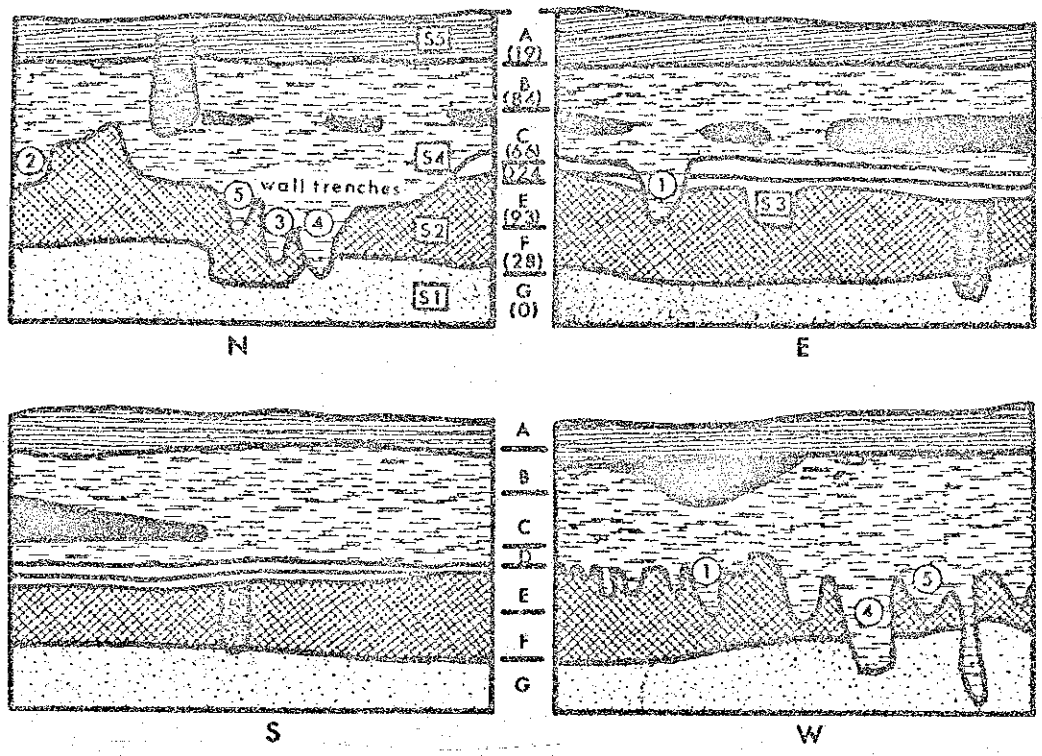
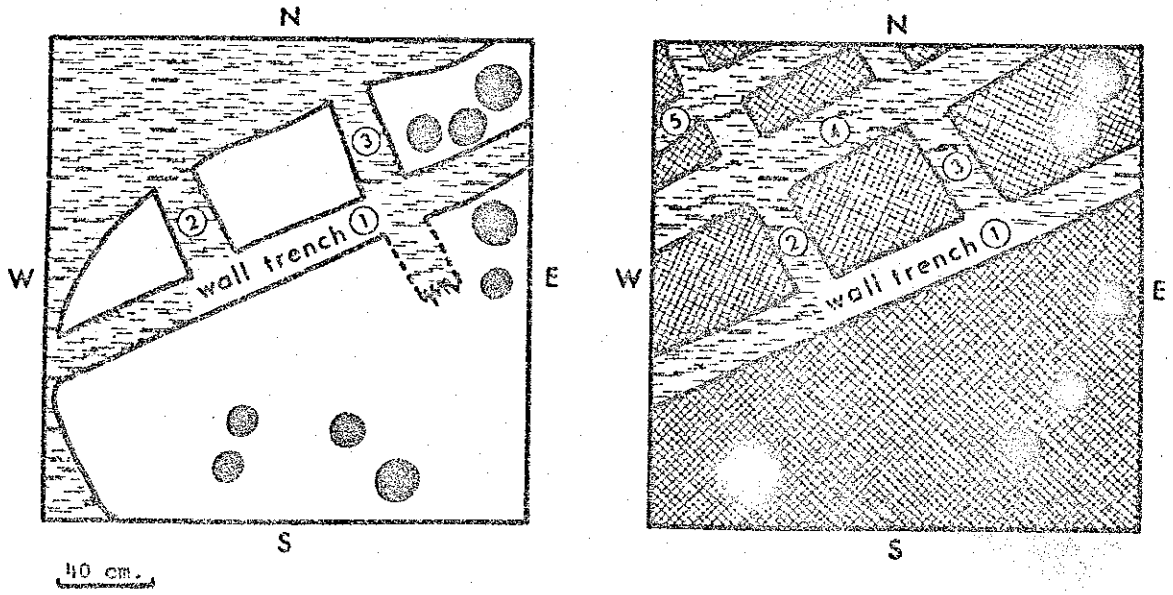


Fig. 19.--Cut 3 profiles



Plan A.--70 cm. below datum

Plan B.--90 cm. below datum

Fig. 20.--Cut 3 plans

Stratum 2 - Dark brown clay

Charcoal and daub were present in small amounts, and, to judge by excavation Level E, sherds were abundant. No occupation features such as postholes and hearths could be definitely associated with this deposit, although one series of postholes originated from the surface of the stratum at 80 cm. below datum. (Fig. 19, e, s) A second series of postholes and wall trenches, originating from 45 cm. below datum, also intruded into the stratum (Fig. 20, b).

Stratum 3 - Yellow and gray sandy loam

Thin lenses of this material occurred in the southeast portion of the cut at between 65 and 80 cm. below datum. Associated with these strata were several postholes, originating within and immediately beneath them (Fig. 19, e, s). No other occupation features were associated with the stratum. Several postholes and wall trenches originating from a stratum of fired earth and charcoal at 45 cm. below datum penetrated the lenses in the southeast corner of the square (Fig. 20, a). The absence of the lenses in the opposite corner of the square is probably due to disturbance by the later construction activity.

Stratum 4 - Light clay midden

Overlying the thin lenses of light colored sandy loam, this stratum extended from 65-70 cm. below datum up to plow zone. At about 45 cm. below datum, a thick bed of fired earth and charcoal occurred in the eastern one-third of the cut, and associated with it were layers of charred thatch and sticks. Fieldnotes indicate a slight color distinction between the clay midden above and below this layer. The distinction was visible in the east and south profiles but absent elsewhere. A heavy concentration of charcoal occurred at 25 cm. below datum in the west wall.

Numerous postholes and wall trenches originated in Stratum 4, and most likely were associated with the layer of fired earth and charcoal (Figs. 19, 20). A total of five wall trench segments were identified by the excavator of this cut. Trench 1 was definitely a wall trench. Its bottom occurred at 92 cm. below datum with individual posts set within it, continuing on below. The existence of wall trenches 2 through 5 was harder to substantiate, especially as correlation of them in the profiles and floor plans was not undertaken in the field. The matching of the numerous floor and profile features must, therefore, be regarded with caution. It is safe to say though, that a great deal of construction activity took place within the immediate area.

Stratum 5 - Plow zone

Interpretation of Stratification

Initial occupation in the area of Cut 3 is represented by Stratum 2. The manner in which this stratum was deposited is difficult to ascertain. It may be midden accumulated in situ, or it may represent fill, deposited to create a low rise. Apparently some activity occurred on top of it as two postholes were associated with its surface. The overlying light colored sandy loam lenses were apparently not water deposited and may represent clean fill added to prepare the surface for further utilization. It is only when we come to Stratum 4 that the term "midden" can be applied with confidence. Some time during the accumulation of this stratum, a wall trench structure was erected and later consumed in fire. Midden continued to accumulate after the structure was destroyed.

Cultural Stratigraphy

Ceramic counts for Cut 3 are to be found in the left-hand portion of Table 8. On the right side of the table, the counts have been combined into two analysis units consisting of Levels A, B, and C, and D, E, and F. It is clear from the latter that Stratum 4, the light clay midden, is a Transylvania phase deposit. There is a slight admixture of Sundown and Fitzhugh phase sherds,

TABLE 8

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 3

	Excavation Levels						Combined Levels	
	A	B	C	D	E	F	A-C	D-E
Barton Incised,								
var. Atherton			2	1			2	1
var. Stowers		1					1	
var. unspecified		2					2	
Baytown Plain, var. Addis		6	7	4	9	4	13	13
"Walnut Bayou" bowl			1	5	2		1	7
"Haynes Bluff" rim				2				2
var. unspecified	2	2	12	3	73	15	16	91
Beldeau Incised, var. Beldeau					1			
Bell Plain, var. Holly Bluff	1	4	5				10	
Coles Creek Incised,								
var. Hunt					1	2		3
var. unspecified			1				1	
Cowhide Stamped			1				1	
Leland Incised,								
var. Deep Bayou		3					3	
Maddox Engraved,								
var. Silver City	1						1	
Mississippi Plain,								
var. Pocahontas	14	54	33	7	2	5	101	14
"late Tunica" rim			1				1	
jars		3	1				4	
bottles		1					1	
Mazique Incised,								
var. Manchac			2	2	2		2	4
Sicily Island Incised,								
var. Early Bayou Cutler						1		1
Winterville Incised,								
var. Winterville		6			2		6	2
Unidentified	1	2			1	1	2	2

but this is to be expected, considering the extensive aboriginal trenching and pitting of the strata below. The counts for Levels D through F indicate that Stratum 2, dark brown clay, is probably a Sundown phase deposit, whether *in situ* or secondary. The sherd sample is predominately of this phase with fairly large amounts of Transylvania and Fitzhugh phase material included. The presence of 20 shell-tempered and Transylvania phase sherds is understandable in light of the intrusions from above. What is not so clear is the significance of the Fitzhugh phase sherd distribution (Table 9). It is evident from their concentration in levels C-E that they derive from deposits below Stratum 4, the Transylvania midden. Whether they represent an actual occupation level in this cut, or just sherds accumulated as a result of Fitzhugh phase activities in the vicinity, cannot be definitely determined. It may be that they are associated with Stratum 3.

TABLE 9

TRANSYLVANIA SITE. DISTRIBUTION OF FITZHUGH PHASE SHERDS IN CUT 3

Levels	A	B	C	D	E	F
Number of Sherds	0	6	10	11	13	14

Cut 4 (Fig. 21)

Cut 4 was located approximately 45 m. southeast of Mound B and approximately 45 m. northeast of the low rise that is Mound D. Datum, the northeast corner of the cut, was 9.68 MBSD. Excavation was by 20 cm. level, with one small probe beyond the northeast corner of the cut between 20 and 40 cm. below datum being labeled Level M.

Stratum 1 - Yellow sandy loam

As elsewhere on the site, this was sterile subsoil. Original ground surface was probably represented in the northwest corner of the cut at 10.20 - 10.30 MBSD.

Stratum 2 - Light gray midden soil

Some animal bone and a small number of sherds were obtained from this stratum, and a few postholes, observed at 80 cm. below datum, may have originated from it. A large depression extended 50 cm. into sterile subsoil, but contained no unusual concentration of bone, sherds or other occupational debris. Transition from light gray midden to yellow sandy loam was gradual with the assignment of a dividing line being somewhat arbitrary.

Stratum 3 - Dark gray midden soil

Animal bone and sherds were relatively abundant. Numerous large sherds from a single jar of Winterville Incised, var. Belzoni, were found concentrated in the

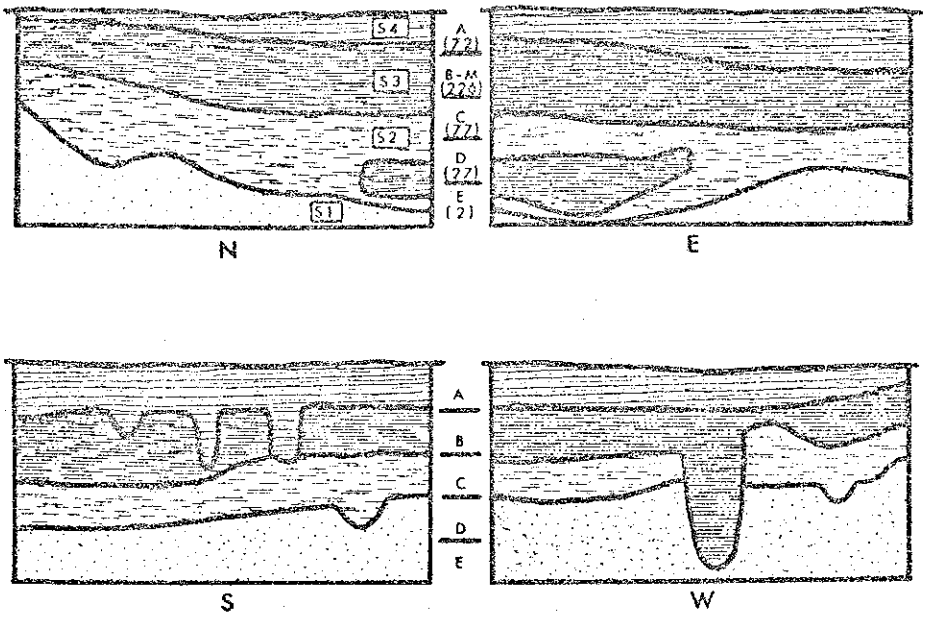


Fig. 21.--Cut 4 profiles

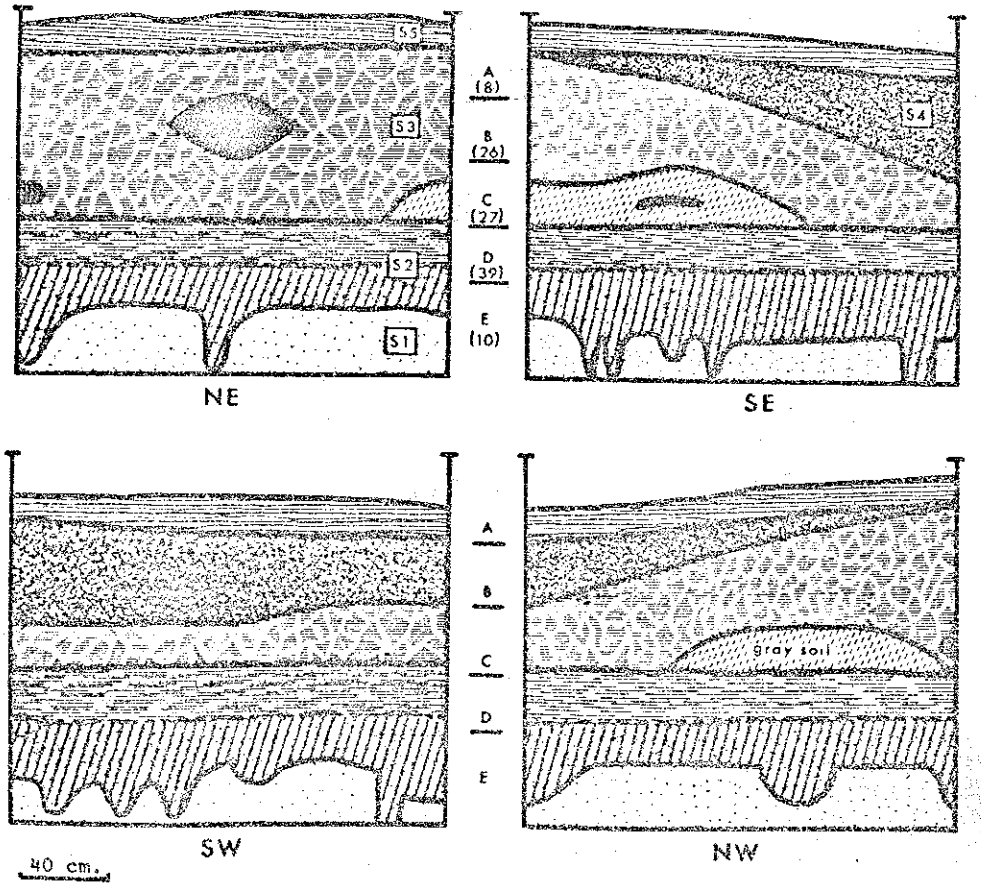


Fig. 22.--Cut 6 profiles

northeast corner of the cut between 20 and 40 cm. below datum. Excavation Level M, represents probing in the wall of the cut at this point for additional fragments of the vessel. One large posthole was noted in the west profile as originating in this stratum.

Stratum 4 - Dark sandy loam

Barber wire and other modern debris were obtained in the top 20 cm. of the cut, but sherd recovery was good. We apparently are not dealing with a plow zone here, as the line of junction between strata 3 and 4 was uneven, varying between 5 and 25 cm. below datum. After excavation of the cut was completed, three postholes were identified in the south profile that seemed to originate from this stratum.

Interpretation of Stratification

Stratification in Cut 4 was relatively simple. Three midden zones were represented overlying sterile subsoil. Stratum 4, the uppermost deposit, has been classed as midden in response to the three postholes emanating from it and because it had a ceramic component different from the one in the dark gray midden stratum below.

Cultural Stratigraphy

Ceramic counts for Cut 4 are presented in Table 10. Fitzhugh is the dominant component represented in this cut. From the counts for Levels B, C, and M, it is clear that the dark gray midden, Stratum 3, is assignable to this phase. The great amount of Mississippi Plain, var. Pocahontas, in Levels B and M represents plain body sherds from the Belzoni jar found there.

Excavation Level A contains a larger proportion of Transylvania phase sherds than Levels B, C, and M, and suggests that Stratum 4 may date to this time.

Sundown phase sherds occurred throughout the cut in small amounts, but predominated only in Level D. It is tempting to assign Stratum 2, the light gray midden, to this component, but the sherd count for Level C, being dominated by Fitzhugh phase types, seems to argue against this. Since Level C does straddle both dark and light gray middens, it is possible to divide the sherd collection between these two strata. This would leave 16 Sundown sherds as coming from that portion of the light gray midden in Level C. Level D produced 20 Sundown sherds and 6 later sherds, while Level E produced only 2 sherds, both late. These late sherds in Levels D and E may have been intruded into the stratum by postholes such as that in the west profile. It is possible then that Stratum 2, or a portion of it, is a Sundown deposit.

TABLE 10

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 4

	Excavation Levels					
	A	B	M	C	D	E
Barton Incised, var. Barton		1				
var. Stowers	2	3	2	1		
Baytown Plain, var. Addis	14	18	14	30	3	1
"Walnut Bayou" bowl			3	3		
"early Tunica" rim	1	2	2			
var. unspecified	16	4	3	14	18	
Bell Plain, var. Holly Bluff			3			
small carinated bowl			1			
Coles Creek Incised, var. Hunt			1	1	2	
Evansville Punctated,						
var. Sharkey		1		1		
Mazique Incised, var. Manchac		2	1			
Mississippi Plain,						
var. Pocahontas	25	16	84	11	2	1
"interior beveled"						
bowl rim		1				
"Walnut Bayou" bowl			4	1		
"late Tunica" rim	2					
jars	2					
Parkin Punctated,						
var. Hollandale	1					
var. Transylvania	2			1		
Plaquemine Brushed,						
var. Plaquemine	1			4	1	
Sicily Island Incised,						
var. Early Bayou Cutler				1		
Winterville Incised,						
var. Belzoni	3	8	48	6		
var. Coleman		1				
Unidentified	3	2	1	3	1	

Cut 6 (Fig. 22)

This cut was located approximately 20 m. west of Mound C and 30 m. southeast of Mound K. Three posthole soundings here had encountered a thick midden deposit at approximately 100 cm. below ground surface. The cut was oriented 50° west of north. Unfortunately, elevation of cut datum relative to site datum was not determined. Excavation levels were in all cases larger than the standard 20 cm. level.

Stratum 1 - Light tan sandy loam

As in other excavations at Transylvania, staining of this subsoil stratum tended to obliterate its surface. Subsoil surface apparently occurred at 120 cm. below datum--where a slight distinction in soil color occurred. Sherd recovery in Level E, 125 - 150 cm. below datum, was very light, further indicating that cultural deposits were restricted to the upper 120 cm. or so of stratification in Cut 6. Staining was heavy enough that postholes intrusive into subsoil could not be traced above 140 cm. below datum.

Stratum 2 - Dark brown midden soil

Sherd recovery was greatest within this deposit, and numerous postholes, detected in Stratum 1 originated here. The deposit itself was of uniform texture, containing no floors, hearths, or other features.

Stratum 3 - Mottled gray and tan soil

This stratum completely overlay the dark brown midden and exhibited a well defined upper surface that sloped downward steeply from northeast to southwest. In the southwest end of the cut, the deposit was 20 cm. thick, while in the northeast end it was 80 cm. thick. Field notes describe the deposit as a tan soil containing pockets of light gray soil and fired earth (black areas in profiles). Although the identification was not made in the field, this deposit appears to be basket-loaded soil.

Stratum 4 - Light gray soil

This deposit overlay Stratum 3 throughout the cut and varied in thickness from 50 cm. to 0 cm. Like Stratum 3 below, it contained little cultural material.

Stratum 5 - Plow zone

Very little cultural material came from this stratum.

Interpretation of Stratification

The succession of events represented by stratification in Cut 6 is best interpreted as follows. Initial occupation of the area was characterized by considerable construction activity involving pole frame structures. Following this period of activity, a great

deal of fill was deposited to the northeast of the cut raising ground level in that area at least 80 cm. It is probable that a low platform mound is represented by this fill, and that it may have been structurally related to Mound C. As can be seen on the site map, however, a whole line of low mounds bordered the plaza northwest of Mound C. Like these mounds, the mound encountered in Cut 6 may have been a separate structure. There was no evidence in Cut 6 of refuse that could have been derived from the summit of the mound.

Stratum 4 would seem to be erosional material derived primarily from Mound C.

Cultural Stratigraphy

The ceramic counts for Cut 6 are presented in Table 11. Unfortunately, sherd collections from each level are so small as to be essentially worthless for component identification.

Excavation Levels A through C correspond with the mound fill deposit, Stratum 3, while Levels D and E correspond with the underlying midden stratum. There is a tendency for Transylvania types and modes (Barton Incised, var. Atherton, Winterville Incised, var. Winterville, "late Tunica" rim) to occur in Levels A and B and Fitzhugh types and modes (Winterville Incised, vars. Belzoni and Coleman, "early Tunica" rim) to occur in

TABLE 11

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 6

	Excavation Levels				
	A	B	C	D	E
Barton Incised, var. Atherton	1	1			
var. Stowers			1	1	
Baytown Plain, var. Addis					
"early Tunica" rim				1	1
var. unspecified	1	3	2		0
Bell Plain, var. Holly Bluff		3		1	
Coles Creek Incised,					
var. unspecified		1			
Maddox Engraved, var. Silver City				2	
var. unspecified				2	
Mississippi Plain, var. Pocahontas	4	13	24	24	
"interior beveled" bowl rim				1	
"Walnut Bayou" bowl				1	
"late Tunica" rim		2			
Plaquemine Brushed, var. Plaquemine		1			
Winterville Incised, var. Winterville		1		5	
var. Belzoni					1
var. Coleman				1	

Levels D and E, but sherds of each component are present in both strata. With the present information it is not possible to make stratum-component identifications.

Cut 7 (Figs. 23-24)

Cut 7 was located on level ground 25 m. east of Mound G and Cut 1. Datum for the cut was 9.35 MBSD. Excavation proceeded in the usual 20 cm. levels except in Levels D through F. Here the northwest two-thirds and the southeast one-third of each level were excavated as separate units, in an attempt to isolate large areas of disturbed soil visible in the troweled floors of Levels C through E (Fig. 24).

Stratum 1 - Sterile mottled gray-brown clay

A posthole test in the bottom of the cut indicated that sterile clay extended down to at least 200 cm. below datum.

Stratum 2 - Black clay midden

Although relatively rich in artifacts and other occupational debris, no floors, postholes, or pits were found associated with this stratum.

Stratum 3 - Yellow sand

Remnants of this stratum can be seen overlying Stratum 2 in the east and south profiles (Fig. 23, e, s). Fieldnotes indicate that it may have been sterile.

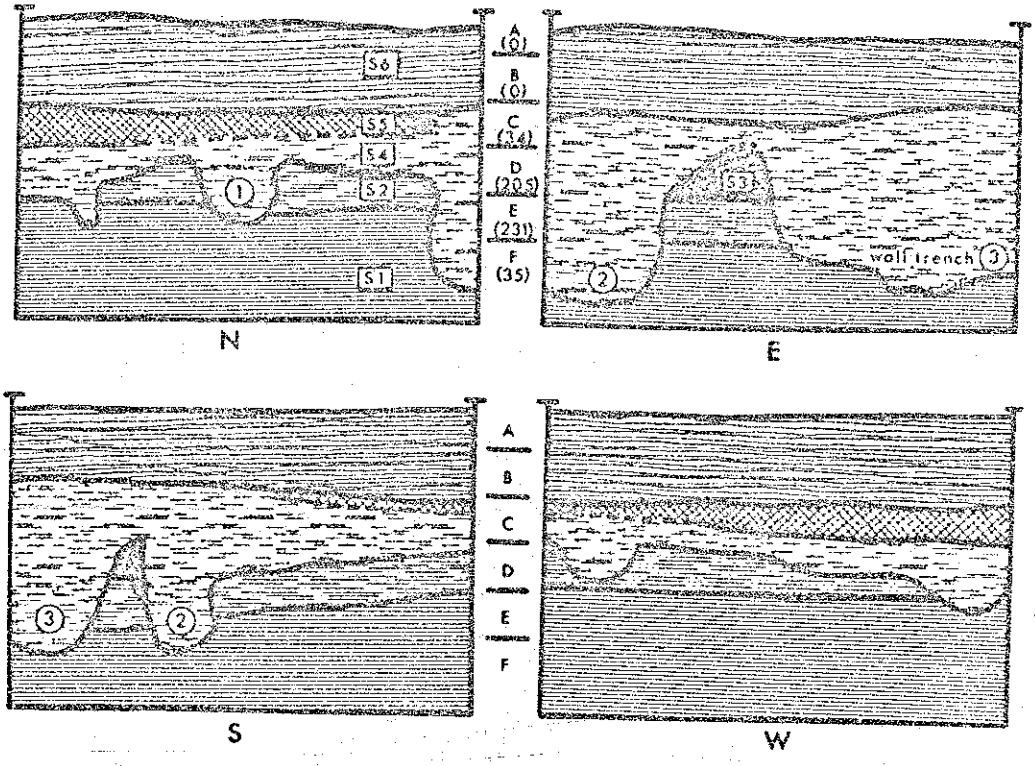
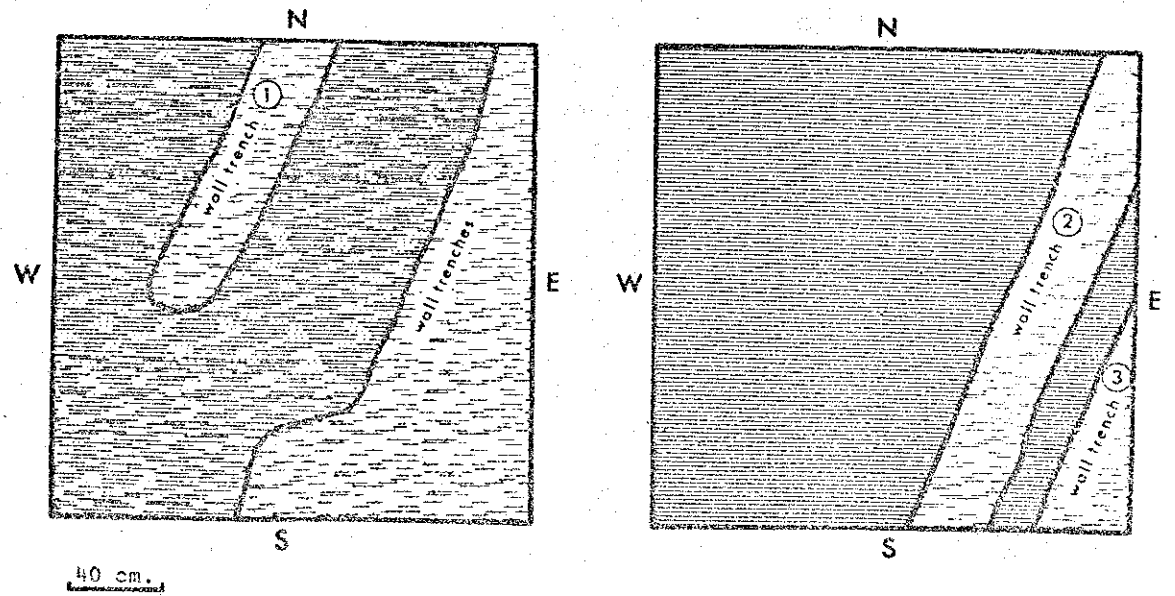


Fig. 23.--Cut 7 profiles



80 cm. below datum

100 cm. below datum

Fig. 24.--Cut 7 plans

Stratum 4 - Mixed gray clay and yellow sand midden

Animal bone, daub fragments, and relatively abundant pottery occurred in this stratum. In addition, three wall trenches, running parallel from northeast to southwest originated here. One trench was relatively shallow and terminated in the middle of the cut (Fig. 24, a). The others crossed the southeast corner of the cut and penetrated deep into sterile soil below. The midden itself was composed primarily of gray clay, but in the northwest portion of the cut there was considerable mixture with yellow sand from Stratum 3.

Stratum 5 - Dark brown clay

This stratum was clearly defined only in the northwest corner of the cut and lost definition toward the south and west where it graded into the mixed gray clay and yellow sand midden.

Stratum 6 - Sterile brown clay

As the profiles show, there is about 40 cm. of this relatively uniform and horizontal deposit. Most important, it is sterile.

Interpretation of Stratification

This is the only cut at Transylvania that had a sterile clay subsoil deposit. Elsewhere, sterile subsoil has been a fine sand or sandy loam. Several posthole

soundings in the vicinity of Cut 7 and between Mound F and the drainage ditch to the east also yielded a clay subsoil. This deposit then covers a relatively large area on the northeast side of the site, and we are faced with the problem of explaining its location in the middle of a levee ridge composed of sandy loam. The author would suggest that subsequent to the abandonment of the 11 stage meander loop, a stream entered the oxbow lake at this point cutting through the levee ridge in much the same way, for example, that Clark Bayou has done at Lake St. Joseph (see Appendix I, pg. 689).. The final remnant of this stream may be represented by the drainage ditch just east of Cut 7. The clay-sized sediments constituting Stratum 1 can be interpreted as soil deposited under the quiet water conditions that would have prevailed within the oxbow lake.

Initial occupation of the Cut 7 area is represented by Stratum 2. Stratum 3 may be intentionally deposited fill preceding the occupation represented by Stratum 4. Construction activities during this later period of occupation have largely obliterated both of the preceding deposits.

Cultural Stratigraphy

If Strata 2 and 4 are of different component affiliation, the disturbance caused by the wall trenches

originating in Stratum 4 would doubtless obscure this fact. In an attempt to obtain unmixed pottery collections from Stratum 2, Levels D, E, and F were each excavated in 2 parts; one part (designated Level D", E" and F") corresponds to the undisturbed portion of the square (Fig. 25). This attempt met with failute (Table 12). All excavation units, except perhaps Level F' were thoroughly mixed. The Level F' collection is of questionable use, however, due to its small size and location within supposedly sterile subsoil.

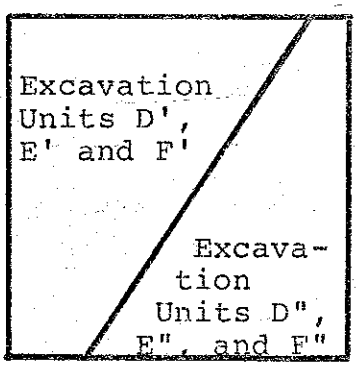


Fig. 25.--Cut 7, excavation units.

If we assume that the two superimposed middens, Strata 2 and 4, were each the product of a different phase, we should expect Level E' to produce a relatively pure Fitzhugh phase artifact collection. This unit, which is restricted to the supposedly undisturbed portion of Stratum 2, yielded instead a mixture of the two late phases in fairly equal proportions.

TABLE 12

TRANSYLVANIA SITE. CERAMIC COUNTS FOR CUT 7

	Excavation Levels						
	C	D^1	D^2	E^1	E^2	F^1	F^2
Barton Incised, var. Arcola		1		1			
var. Atherton					1		1
var. Stowers				5	1		
var. unspec.		3	1				
Baytown Plain, var. Addis	1	7	2	28	7	2	3
"Walnut Bayou" bowl		2		1			
"early Tunica" rim				2			
small carinated bowl						1	
var. unspec.		13	4	30	1	11	
Beldeau Incised, var. unspec.							2
Bell Plain, var. Holly Bluff		14	3	3	1		2
Coles Creek Incised, var. unspec.				1			
Evansville Punctated, var. unspec.				1			
Hollyknowe Ridge Pinched, var. Patmos							1
Leland Incised, var. Leland		1					
var. Dabney				1			
Maddox Engraved, var. Emerald			2				
Mazique Incised, var. Manchac						1	
var. unspec.				1			
Mississippi Plain, var. Pocahontas	30	89	45	78	39		11
"interior beveled" rim		2					
"Walnut Bayou" bowl			2	2			
"early Tunica" rim		1		6	1		
"late Tunica" rim		2	1	3			
jars		1					
Parkin Punctaged, var. unspec.		1					
Winterville Incised, var. Winterville			1	4	1		
var. Belzoni	2	3	1	7		1	
var. Erwin		1					
Unidentified	1		2		1		

The small Level F' collection contains only Fitzhugh types. One wonders where these sherds came from, however, as this excavation unit was supposedly entirely in sterile subsoil. They are probably derived from postholes and other minor disturbances from the lower midden.

Pottery of both the Transylvania and Fitzhugh components is well represented in all excavation levels of Cut 7. The area was probably utilized by both components. It is tempting, therefore, to identify Stratum 2 with the Fitzhugh occupation and Stratum 4 with the Transylvania occupation, but there is no real evidence for this.

Total Site Analysis

Mississippi River Channel Association

One of the more interesting questions that may be asked of the data presented in the preceding pages, concerns the relationship of Transylvania to the ancient Mississippi River channel occupied today by Swan Lake (Fig. 3). Several pieces of information are relevant to a consideration of this question.

1) Fisk (1944:Plate 22, Sheet 11) has identified the channel with Stage 11 in his Mississippi River channel chronology.

2) The site lies on the natural levee formed by this channel and is underlain by an extensive deposit of

sandy loam which doubtless represents the coarse-grained sediments characteristic of natural levees along the Lower Mississippi River. A posthole sounding from the bottom of Cut 1 traced this material to a depth of 12.10 MBSD. It probably continues considerably deeper.

3) North of the site, within the 11 stage channel itself, finer, clay-sized sediments occur (Worthen and Belchen, 1911:Map 22). LMS investigations at Transylvania indicate that a tongue of similar sediments extends southward along the eastern edge of the site.

4) Excavation of Cut 7 indicated that much of this clay soil was deposited prior to the Fitzhugh phase occupation at Transylvania. A posthole sounding from the bottom of Cut 7 encountered clay throughout its length, to a depth of 11.35 MBSD. This means that at least 1.10 m. of the clay soil underlies the cultural deposits in Cut 7.

Why this deposit of clay soil should traverse the levee ridge along the eastern edge of the site is a question that cannot be answered with certainty by the author. It is obvious though that the levee ridge was partially removed, and clay-sized sediments accumulated in the resulting depression. The important point to consider is that such fine sediments would not have been deposited while the 11 stage channel was active. Rather, deposition could have occurred only after the Mississippi

River had shifted to the east, leaving the channel segment north of Transylvania as an oxbow lake. The thickness of this clay deposit suggests that considerable time may have elapsed between channel cut-off and the Fitzhugh phase occupation of Transylvania. Irregardless of how much time was involved, it is likely that Transylvania was situated on the bank of an oxbow lake during the Fitzhugh and Transylvania occupations.

To this point in the discussion, the presence of a sizable sample of Sundown phase sherds in the excavated collections has been ignored. Unfortunately, the contradiction inherent in a Sundown phase site being located on an 11 stage channel cannot be dismissed. Sundown has been tentatively dated at between A.D. 500 and A.D. 700. It is, in any event, early in the Coles Creek continuum and cannot post-date a twelfth century river channel.

TABLE 13

SUNDOWN PHASE POTTERY AT TRANSYLVANIA

Baytown Plain, var. unspecified	597
Beldeau Punctated, var. Aden	1
var. unspecified	2
Coles Creek, var. Hunt	7
var. unspecified	3
Evansville Punctated, var. Evansville	1
var. unspecified	1
Mulberry Creek Cordmarked, var. unspecified	1
Sicily Island, var. Early Bayou Cutler	2

As can be seen in Table 13, a fairly complete assemblage of decorated types is represented in the collection of Sundown sherds. The number of Baytown plain, var. unspecified, sherds is inordinately large in comparison with the few decorated sherds; but this is to be expected, as all clay-tempered sherds not classifiable as Addis were put into this category. A great number of these sherds though have the characteristics of early Baytown plain paste and presumably belong with the Sundown decorated types. It will be recalled, furthermore, that in the description of Cut 3, Stratum 2 was tentatively identified as an actual Sundown occupation deposit. There is then considerable evidence for a Sundown component at Transylvania.[1]

Settlement Pattern

Twelve mounds were identified at Transylvania by the LMS during the 1963 and 1964 field seasons. These are arranged so as to suggest a site plan consisting of

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[1]The Julice site (22-L-2), located on the same 11 stage levee ridge three-quarters of a mile west of Transylvania has yielded, in addition to Plaquemine period pottery, 1 sherd of Larto Red Filmed, var. unspecified, 1 sherd of Marksville Incised, var. unspecified, and several sherds of Baytown Plain, var. unspecified. With only two definitely early sherds known from the site, we need not postulate an actual occupation, but the possibility that Julice has a Marksville period component is worth considering.

two plazas, which are separated by the dominant mound and surrounded by a ring of lesser mounds. A similar site layout is known for Lake George (Phillips 1970:288-9) and Winterville (Brain 1969) sites in the Lower Yazoo Basin.

The southern plaza is well defined by the three large structures, Mounds A, B, and C, and several smaller mounds. The northern plaza, however, is defined by mounds only on its east and northeast sides. Ford's unpublished sketch map (Fig. 6) which was probably made in 1935 is an invaluable document in that it shows two additional mounds located to the west and north of the northern plaza. The approximate location of these structures is indicated on the site map (Fig. 4) by cross marks. If Ford was correct in identifying these two mounds and the author is correct in his interpretation of Ford's map, then there can be little doubt that Transylvania had a double plaza site plan.

Unfortunately the existence of Ford's map was not known until 1967, and as a result there has been no on-the-ground verification of the existence of these mounds. Apparently they had been obliterated by cultivation and excavation of the drainage ditch by the time the LMS arrived at the site in 1963.

Since surface collecting conditions at Transylvania were so poor and test excavations were limited to the southeastern portion of the site, it is not possible to determine

the full spatial distribution of the two late occupations. Midden strata identifiable as Fitzhugh phase deposits were found in the south flank of Mound F in Cuts 8-14, and in Cut 4 on the southeast side of the southern plaza. Transylvania phase midden strata were also identified only in these areas. In addition, sherds of each phase were encountered in at least limited quantity in Cut 1 on the flank of Mound G, Cut 7 east of Mound G, and in Cuts 3 and 6 on the southwest side of the southern plaza. As far as this evidence goes, it appears that the two components had an identical site distribution.

With one exception, it has not been possible to identify the component responsible for the construction of specific mounds at Transylvania. In Cut 6, Stratum 3 is apparently fill for a low mound. Small numbers of Transylvania phase sherds occur in excavation levels from both this fill stratum and underlying midden. It is probable, therefore, that this structure dates to the Transylvania phase occupation.

Posthole soundings were made throughout the site in 1963 and 1964 for the purpose of locating suitable areas in which to excavate and for the purpose of investigating such problems as the distribution of occupation deposits and the nature of the plaza. Evidence derived from these soundings and the test excavations indicate

that the plazas were largely devoid of cultural material while the periphery of the plazas, including low mounds and the areas between mounds, was the scene of much activity, presumably of a domestic nature. One posthole traverse of the south plaza from the foot of the ramp connecting Mounds A and B to Mound J yielded 40-60 cm. of sterile soil overlying sandy loam subsoil within the plaza and a 70 cm. thick midden stratum, containing animal bone, artifacts, charcoal, and daub, in Mound J. Mound D at the south end of this plaza was also found to be composed of midden strata. Posthole testing elsewhere along the southwest edge of the south plaza produced evidence of culture bearing deposits. Cut 3 in this same area encountered the remains of a burned wall trench structure, and on the east side of the plaza, Cut 4 yielded evidence of occupation activity in the form of postholes and a large, broken pottery vessel.

The north plaza itself was not tested, but soundings in Mound I north of it gave evidence of midden strata, as did Cut 7 east of Mound G and Cuts 8-14 south of Mound F.

Surface collecting in the plowed field immediately west of the site was very unproductive. It is possible that midden deposits exist here, but are too deeply buried beneath recent sediments to be disturbed by plow zone. The

occupation strata in Cuts 3 and 4, however, extended into plow zone and presumably would have been evident by surface concentrations of artifacts had the mound area been in cultivation in 1963 or 1964.

It can be concluded from the foregoing evidence that domestic activities at the Transylvania site were restricted to a relatively narrow zone surrounding both plazas.

FITZHUGH SITE (23-L-1)

Site Description

The Fitzhugh site is located on the southwest bank of Walnut Bayou, at a distance of approximately five miles by road from the village of Mound, Madison Parish, Louisiana (Fig. 26). According to Fisk's reconstruction of Mississippi River history (1944:Plate 22, Sheet 11), Fitzhugh is situated on the natural levee of an 11 stage channel (Fig. 26). Today this channel is occupied throughout much of its length by Walnut Bayou, a sluggish body of water some 20 - 30 m. in width.

In 1963, the visible features at Fitzhugh consisted of four large mounds that were positioned to enclose a rectangular Plaza, 240 m. by 120 m. (Fig. 27). The dimensions of these mounds are presented in the left-hand column of Table 14. Mounds A and D were moderately

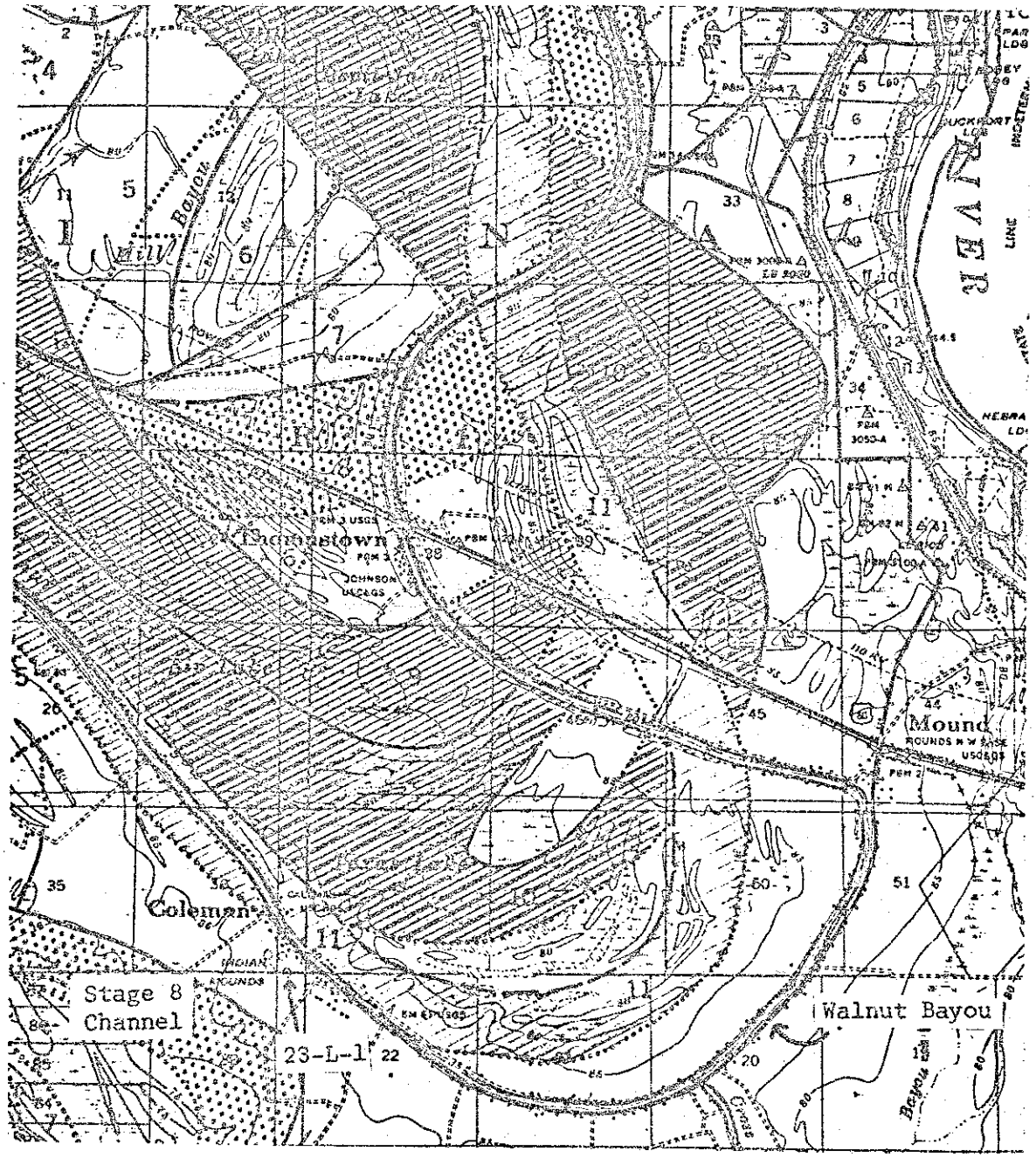

Fig. 26.--Location of Fitzhugh site

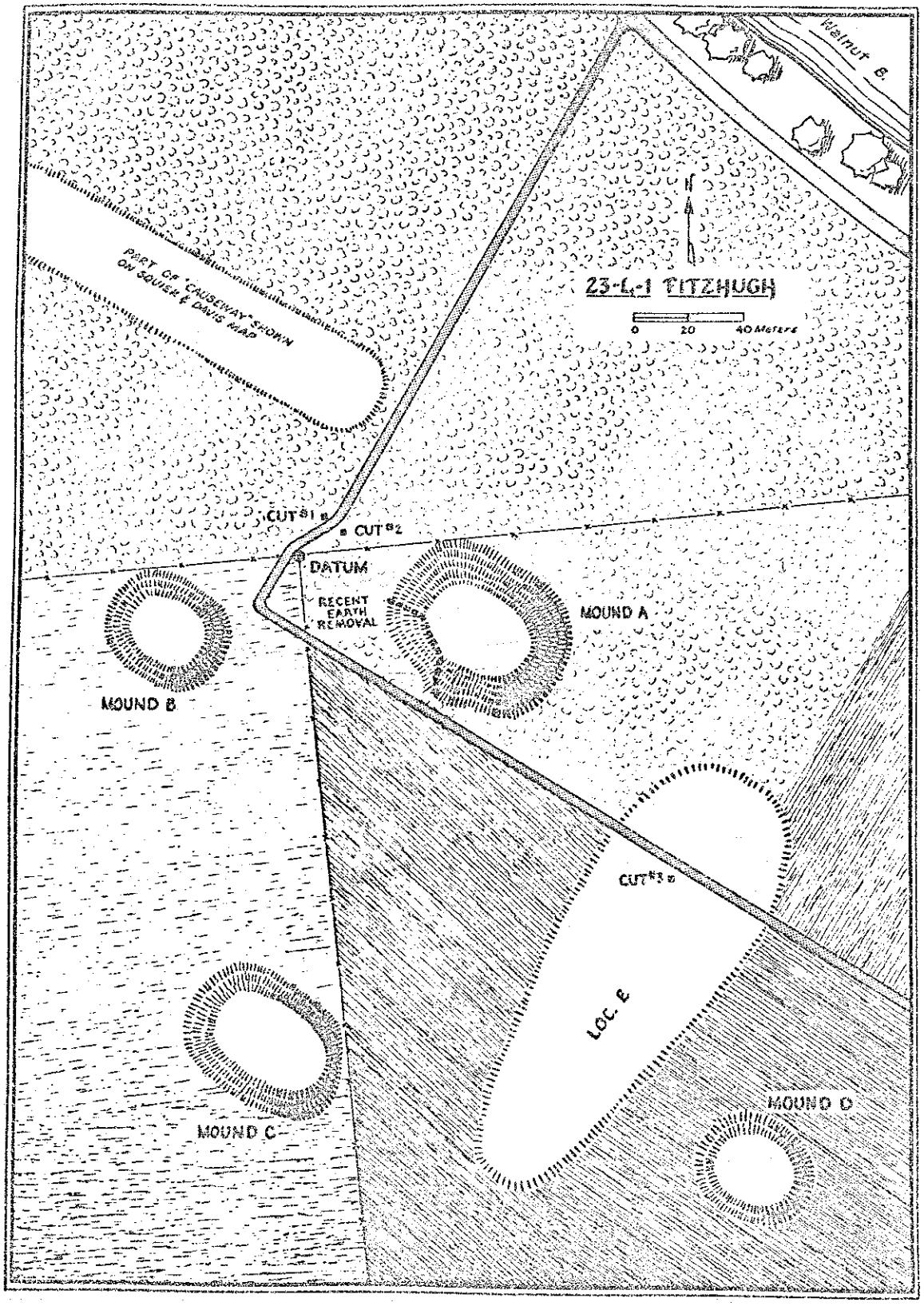

Fig. 27.--Fitzhugh. LMS site map

well-preserved due probably to the great size of the former and the presence of a cemetery on the latter. A clearly defined ramp was still visible on the southwest side of Mound A. Mound B had been partially plowed down on its southwest side. Mound C had suffered the most, having been attacked on both its northeast and southwest sides so that only the two ends of the structure were left standing to near original height.

The earliest investigation of the Fitzhugh site of which there is any record is a map surveyed by James Hough and published in Squire and Davis', Ancient Monuments of the Mississippi Valley (1848:114-117). Hough recorded seven mounds and an "elevated road-way half a mile in length" (Fig. 28). Broken pottery was reportedly found in abundance around the mounds, and areas of burned earth were noted on the mounds themselves in several places. The Squire and Davis account also reported that fragments of decomposed human bones were "observed intermixed with the earth," but the exact meaning of this observation is unknown. Did Hough observe the remains of burials within the mounds or merely bone fragments scattered upon their surfaces?

Almost one hundred years later, James A. Ford visited the site and made surface collections and a sketch map (Phillips:unpublished field notes). In 1954, Phillips

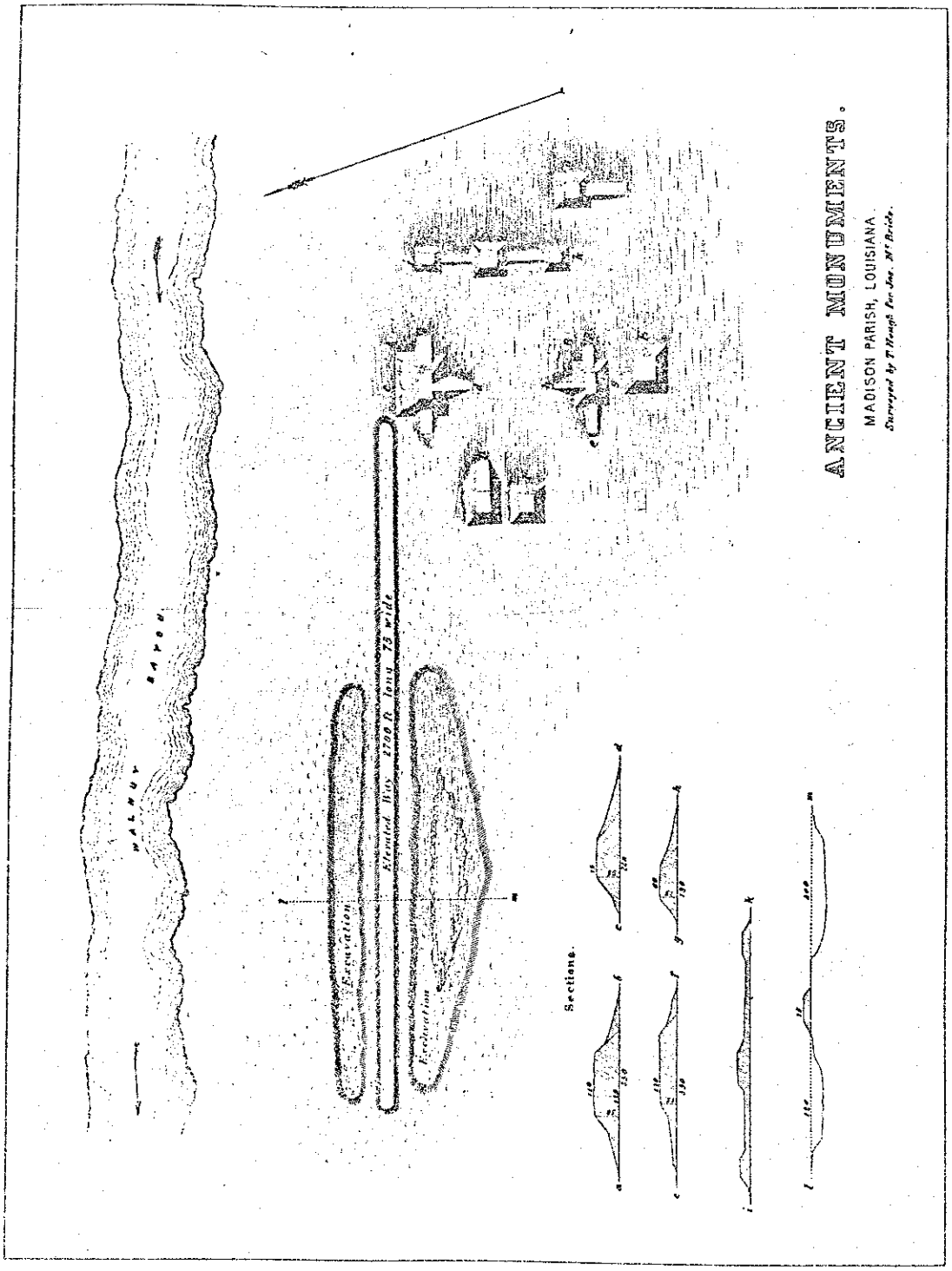

Fig. 28.--Fitzhugh. Hough site map

and Greengo visited the site. At this time, surface collections were obtained, mound heights were measured with an alidade; and horizontal mound dimensions were paced off (Phillips:unpublished field notes). Using these measurements and an aerial photograph, a map was drawn of the remaining mound group. The site map in this report (Fig. 27) is adapted from Phillip's map and a USDA aerial photograph, 1960 edition.

Comparison of the Hough and LMS site maps indicates that the former is quite reliable. On the basis of size and relative position of mounds, the following equation can be made between the two maps.

TABLE 14

FITZHUGH SITE. COMPARISON OF MOUND DESIGNATIONS AND DIMENSIONS FROM HOUGH AND LMS MAPS

LMS Map			Hough Map		
Mound A:	basal	65X52 m.	Mound A:	basal	68X50 m.
	summit	40X25 m.		summit	36X22 m.
	height	9 m.		height	9 m.
Mound B:	basal	25X15 m.	Mound H:	measurements not given	
Mound C:	basal	60X40 m.	Mound B:	basal	54X36 m.
	height	4.2 m.		summit	36X18 m.
				height	4.5 m.
Mound D:	basal	15X25 m.	Mound D:	measurements not given	
	height	2.2 m.			

Of the other earthworks reported by Hough, Mound C, a series of three interconnected mounds near the southeast end of the plaza, is today almost certainly represented by the low rise identified as Location E in Fig. 27. It is difficult to see this feature in the field, but it shows up clearly in the 1960 USDA aerial photograph. Furthermore, a transit traverse of the plaza from west to east in 1963 indicated that ground level at Location E was on the order of .60 meters above ground level in the plaza to the west and beyond the site to the east (Fig. 32, a). Surface collecting was more productive here than anywhere else on the site.

The most spectacular feature at Fitzhugh must have been the great "elevated roadway". Squire and Davis report on it in the following manner:

> There is however another singular structure connected with the group which deserves special notice. It consists of a terrace extending due west from the principal mound above described, parallel to the bayou. It is elevated three feet above the general level of the plain, and is seventy-five feet wide by two thousand seven hundred feet in length. Upon either side of this terrace, and parallel to it, are broad excavations, at present about three feet deep. These excavations are not far from two thousand feet long, by from one hundred and fifty to three hundred feet wide. There are no other perceptible excavations in the vicinity; and it is reasonable to conclude that most, if not all of the material for the construction of the works was taken from these points (ibid:116).

The "roadway" is not visible today from the ground, but can be seen in USDA aerial photographs taken in 1950 and

1960. Its location, orientation, and length appear to be exactly as presented in the Hough Map.

Two mounds illustrated in the 1848 map (Mounds E and F) were not visible in 1954 or in 1963 either on the ground or in aerial photographs. As Hough's map has been verified in respect to other extinct earthworks, though, it seems reasonable to accept the former existence of these structures also.

Site Investigation

Fitzhugh was the first site to receive major attention from the Survey in the 1963 field season. Investigations here commenced with a systematic surface collection of the entire site, the objective of which was to determine the distribution of pottery-bearing areas. The results of this endeavor are presented in Fig. 32, a, and are discussed in the section on total site analysis. One of the immediate returns of the project was the recognition of two areas, Location E, and the space between Mounds A and B, as being very rich in surface artifacts. All excavations at the site were eventually carried out at these locations.

The field around Mound B and to the south was in pasture in 1963, a situation that prohibited surface collecting in the area. In order to gain some insight into the distribution of sherd bearing deposits in the

area, a line of posthole and auger soundings was run from the western end of the plaza, westward between Mounds B and C for a distance of 190 m. (Fig. 32, a, b). Transit readings of ground surface elevation at each of the soundings were made. A line of transit readings on ground surface elevation was also run from within the plaza, eastward over Location E to a point just northeast of Mound D.

Site datum was established between Mounds A and B at the junction of the property lines that divide the site between its three owners. Cuts 1 and 2 were located 17 m. and 19 m. respectively to the northeast of datum. Cut 3 was placed near the north end of Location E.

Prior to 1954, a portion of the southwest corner of Mound A was removed and sold for road fill, and between the 1963 and 1964 field seasons, more earth was removed from the same area. It was decided in 1964 to take advantage of the fresh walls of the cut by mapping visible mound stratigraphy. The exposed face of the mound was approximately 27 m. long by 7 m. in height. In order to trace mound stratigraphy to sterile subsoil, a trench was excavated within the former limits of the mound to a depth of 2.40 m.

Cut 1 (Fig. 29)

Cut 1 was located 44 m. northwest of Mound A and 34 m. northeast of Mound B. Ground level at the northeast corner of the square was taken as local datum, and was found to be 1 cm. below site datum. The cut was excavated in arbitrary 20 cm. levels to a depth of 160 cm. below datum. Stratification below this depth was investigated through two posthole soundings which extended to 260 cm. below datum.

Stratum 1 - Sterile pre-occupation deposits

All soil deposits below 125 cm. below datum are included in this category. As can be seen in the north profile, they presented a complicated stratigraphic picture. Starting at the bottom of the posthole sounding, these deposits were described in field notes as yellow clay, tan sand, brown clay, light sand, red clay, and brown clay. All are apparently sterile. Twenty-two sherds were obtained from a restricted area in the top of the last deposit, but they are probably intrusive from Strata 3 and 4 above.

Stratum 2 - Light colored sandy silt

No evidence of cultural activity was found to indicate that this stratum was deposited by other than natural agencies. Thin horizontal lenses of red clay

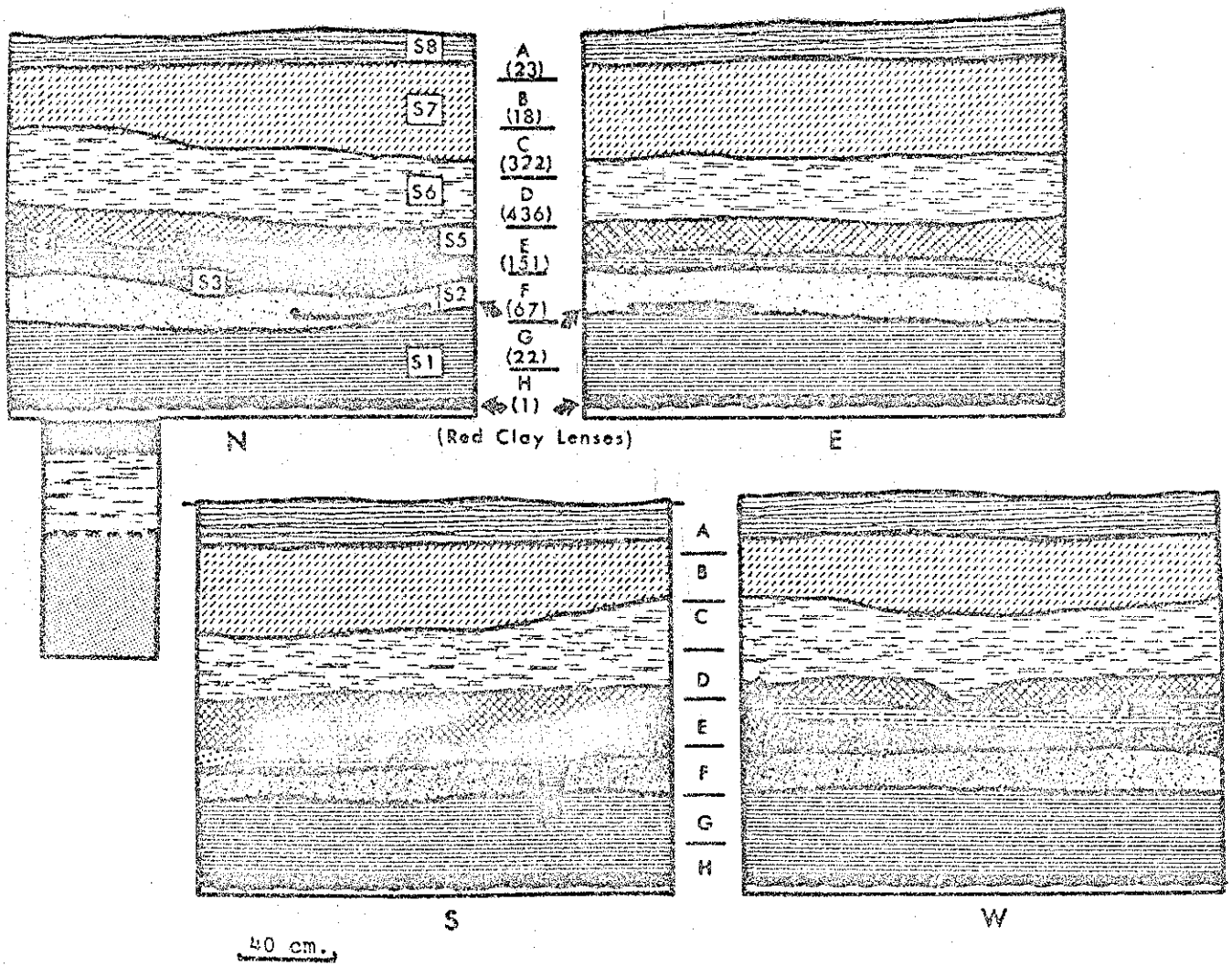

Fig. 29.--Cut 1 profiles

occurred at several points throughout the stratum, but they were probably formed by the segregation of iron under natural weathering conditions. Postholes were intrusive from the midden zone above (Stratum 4). Sixty-seven sherds of pottery were obtained from Level F, but most probably derived from the bottom of Stratum 4.

Stratum 3 - Brown sandy silt

This stratum overlay the light colored sandy silt zone in all but the southeastern portion of the square and was distinctly marked off from that deposit by its darker color. The interesting aspect of Stratum 3 was its greater thickness in the western portion of the square.

Stratum 4 - Dark gray-brown midden

Charcoal was heavily scattered throughout this stratum, but other occupational debris was relatively scarce. A few postholes originated from the stratum (Fig. 29, s), and in the southwest corner of the square, a portion of a shallow, basin-shaped depression filled with ash, suggested a hearth. As a result of the differential thickness of Stratum 3 below, the midden sloped upward to the southwest.

Stratum 5 - Light colored sandy silt

Charcoal flecks were scattered thinly throughout this stratum. Two features, a lens of dark gray-brown

midden soil, and a thin lens of concentrated charcoal, were encountered within the stratum. Soil deposition was greatest in the eastern portion of the square with the result that the stratum presented a level surface at 75 cm. below datum.

Stratum 6 - Dark gray-brown midden

This stratum was especially rich in animal bone, daub, and pottery. Combining excavation Levels C and D together produces a pottery sample of 758 sherds, most of which were derived from the midden deposit. Despite this richness in artifacts, no postholes, hearths, or other habitation features were found associated with the stratum. The midden had a uniform thickness of 30 cm. and presented a horizontal upper surface.

Stratum 7 - Dark brown clay

There was a certain amount of variability within this stratum. Soil color varied from yellow to dark brown and charcoal flecks were relatively common in some areas. Sherd recovery was very low throughout.

Stratum 8 - Plow zone

Sherd recovery was light in this stratum.

Interpretation of Stratification

Little need be added to the above description by way of interpretation. Stratum 2 occurs at the same elevation as the lowest silt deposits in Cut 2 for which there is some evidence that deposition was concurrent with human occupation. It may, therefore, be a cultural deposit also. Stratum 3, by virtue of its configuration, is identified as intentional fill for a low mound, the utilization of which is probably represented by the dark gray-brown midden (Stratum 4).

Whether Stratum 5 is erosional in nature, being derived from nearby earthworks, the result of flood deposition or intentionally deposited fill can not be determined. Occupation of the area did continue during its accumulation, however, as indicated by the lens of charcoal within it. Major re-utilization of the area is represented by Stratum 6, the Dark gray-brown midden. Stratum 7 was interpreted in the field as slope wash from either or both Mounds A and B, subsequent to site abandonment. It could be intentionally deposited mound fill (see p. 121).

Cultural Stratigraphy

The ceramic counts for Cut 1 are presented in Table 15. 1,039 sherds were obtained in the excavation of Cut 1, with the great majority, 760 sherds, coming

FITZHUGH COMPONENT	CUT 1							CUT 2								CUT 3							Loc E SURF.
	A	B	C	D	E	F	G	A	B	C	D	E	F	G	Z	A	B	C	D	E	F	G	
Barton Incised, var. unspecified				1																			1
Baytown Plain, var. Addis	22	17	224	222	105	52	13	16	2	41	19	12	11	5	50	6	112	46	57	39	52	1	4942
"interior strap" bowl rim			2	2	3						3						1		2				30
"interior beveled" bowl rim				2																			3
"Delta City" bowl			3	2		2	2								4		1	1	3	2	1		18
"Preston" bowl					1	2	1					1											1
"Walnut Bayou" bowl			32	34	5	2			2	1	1				1	1	17	9	5	2		1	61
"early Tunica" rim			5	6	1						1					4	2	2	1				59
"late Tunica" rim			3	3				1									2						18
"thickened-beveled" rim			1																				7
"Haynes Bluff" rim			1	1																			3
small carinated bowl				2							1				1								
bottles		1		1	4										3	1	2	2					9
var. Addis/shell										5									6				33
Evansville Punctated, var. Sharkey			1	3	1	1									1		1	4			1		
Hollyknowe Ridge Incised, var. Patmos				3	3												1						8
L'Eau Noire Incised, var. L'Eau Noire			1		1					1										2			4
var. Anna			1	2		1										1					1		9
var. Carter																		1					1
var. unspecified							1																3
Leland Incised, var. Leland			2	2																			28
Maddox Engraved, var. Emerald				2															1				1
var. Silver City			1																				
Mazique Incised, var. Manchac			10	14	1			1		7				2			3	9	1	1	1		114
var. Preston					1													1					4
Mississippi Plain, var. Pocahontas			4	14	5			1		5						2	3	4	7				14
Mound Place Incised, var. unspecified				2	1		1																
Parkin Punctated, var. Hollandale																			1				3
var. unspecified										2													
Plaquemine Brushed, var. Plaquemine			28	55	19	7	3			3	1	1	4	1	8	3	30	10	12				228
var. Grace				1																			
Pouncey Ridge Pinched, var. Pouncey										4	1												
Winterville Incised, var. Belzoni			1														1		1	1			23
var. Coleman	1		1																				4
Unidentified			1	2			1										1						38

TABLE 15--FITZHUGH SITE CERAMIC COUNTS FOR CUTS 1-3 AND SURFACE COLLECTION FROM LOCATION E

from Levels C and D. These levels correspond with the upper midden deposit, Stratum 6. The lower midden was completely excavated in Level E and produced only 151 sherds.

The presence of two midden deposits separated by a stratum indicative of only intermittent human activity suggests the likelihood of multiple occupations. If two components are represented in this cut, the pottery counts for Levels A through D and E through G do not provide conclusive evidence of them. Almost all decorated types and body modes are represented in both samples. The absence of types like Winterville Incised, vars. Belzoni and Coleman, in Levels E through G can be attributed to the small size of that sherd sample. Only two ceramic features indicate that there may indeed be distinct ceramic complexes present. These are the "Tunica" rim, 17 examples of which are present in Levels C and D, while only 1 example occurs in Levels E through G, and Mazique Incised, var. Manchac, with 24 sherds in Levels C through D and 1 sherd in Levels E through G.

Further discussion of cultural stratigraphy in Cut 1 will be found in the section on total site analysis.

Cut 2 (Fig. 30)

Cut 2 was located 6.5 m. southeast of Cut 1 and approximately 26 m. northeast of Mound A. Local datum

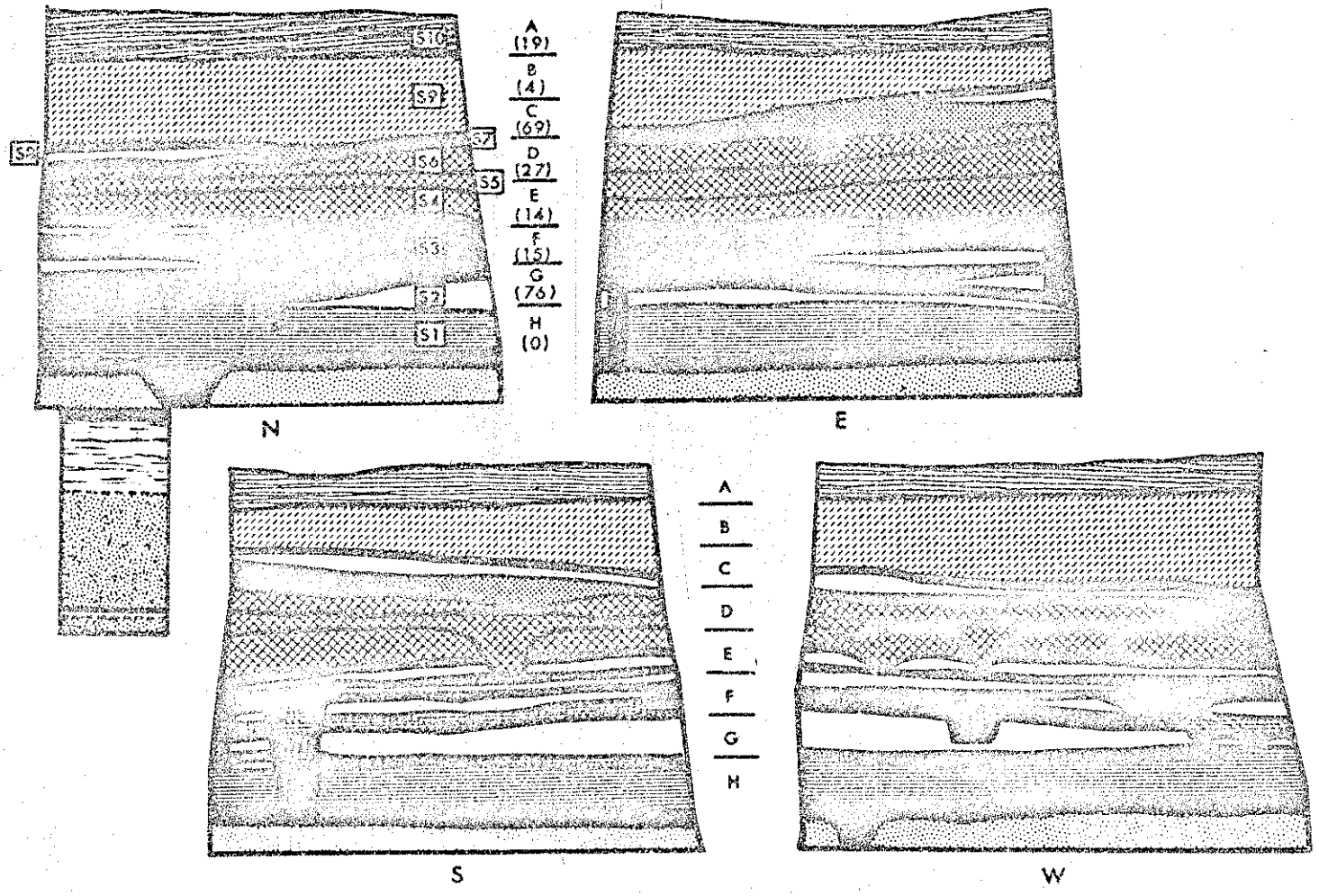

Fig. 30.--Cut 2 profiles

was placed at 0 MBSD. Excavation proceeded by arbitrary 20 cm. levels to a depth of 180 cm. below datum, but at 115 cm. below datum a thin lens of midden soil, rich in fish bone, charcoal, and pottery, was excavated separately as Level Z. From the floor of the cut at 180 cm. below datum, a posthole sounding was made to a depth of 285 cm. below datum for the purpose of investigating pre-occupation deposits.

Stratum 1 - Sterile pre-occupation deposits

All soil deposits underlying the initial occupation stratum at 135 cm. below datum are included in this category. The stratigraphic situation here is basically similar to that in Cut 1. Beginning at the bottom of the posthole sounding we find tan clay, tan sand, red clay, sandy clay, red clay, and brown clay. The posthole-like features extending down from the upper red clay stratum are apparently natural phenomena.

Stratum 2 - Banded, light colored silts

This stratum is comprised of five thin lenses of banded silt that were found interspersed among several lenses of midden between 135 cm. and 75 cm. below datum. The soil was almost white in color with thin bands tinted shades of brown, yellow and red. All lenses seemed to be limited in horizontal extent as none covered the

whole area of the 2 x 2 meter square. Above the initial lens which occurred in the cut's northeast corner, the remaining levels were confined to the southwest portion of the cut. The sequentially second lens was particularly thick (15 cm.), and imparted a slight southwest-northeast gradiant to the overlying interdigitated silt and midden lenses.

Stratum 3 - Thin, dark midden lenses

Six thin lenses of midden were found interspersed with the light-colored silts of Stratum 2 between 135 cm. and 75 cm. below datum. All lenses, except the lowest, sloped gently downward from southwest to northeast. Numerous areas of fired earth and postholes originating from the lenses indicated that they were the result of in situ occupation activity. The presence of a thin lens, rich in charcoal, fish bone, and pottery, at 112 cm. below datum in the northeast corner of the square confirmed this belief. This 5 cm. thick lens was excavated as Level Z.

Strata 4, 5, and 6 - Silts

These three strata, ranging in color from gray to mottled yellow and gray, produced few artifacts and in general did not appear to be midden deposits. However, charcoal flecks occurred in Stratum 5 and some small excavations appeared to originate from it. All strata

were thickest in the southeast corner of the square, so that the upper surface of Stratum 6 sloped upward in that direction.

Stratum 7 - Dark brown midden

Abundant animal and fish bone, pottery, and shell attested to the true nature of this stratum. No postholes or similar features were noted as being associated during excavation, but as can be seen in the profiles, at least two such features originated from it. The midden was thicker in the southeast corner of the square, thus accentuating the slope of strata below. Stratum 8, a thin varved silt lens, bisected the deposit throughout most of the square.

Stratum 8 - Light colored silt

This thin lens was similar to those of Stratum 2, except that it had been stained by the midden above.

Stratum 9 - Light mottled silt

This stratum was almost completely devoid of artifacts.

Stratum 10 - Plow zone

Artifact recovery was greater in this stratum than Stratum 9 below.

Interpretation of Stratification

Cut 2 was essentially similar stratigraphically to Cut 1, a fact that is not surprising in view of their spatial proximity. Similar pre-occupation deposits were present in both cuts, including the red clay lens at 1.55 M8SD. No sherds or other cultural material were obtained from Level H, suggesting that the pottery obtained from the brown clay stratum in Cut 1, was intrusive from overlying deposits.

It seems likely that occupation of the area began immediately after the deposition of the brown clay between 135 and 155 cm. below datum. The lowest banded silt lens in Stratum 2 thickens greatly toward the northeast, suggesting that this deposit is actually fill. This interpretation is supported by the presence of midden lenses above. Eventually 50 cm. of midden and banded silt lenses accumulated with a slope upward to the west. Quite probably the midden lenses represent occupation floors associated with a slight artificial rise to the west while the banded silts are either slope wash or periodically added fill deposits.

Following this, silt Strata 4-6 were deposited. Whether these strata represent slope wash from Mound A is an open question. It seems quite likely, instead, that they represent fill for a low artificial mound

centered to the southeast. The reasoning behind this is twofold. First, these strata are overlain by a midden deposit (Stratum 7) which may well represent refuse from the activities occurring on the mound. Secondly, there is the matter of sherd frequency in plow zone and in the light mottled silt (Stratum 9) below it. Surface collections in the area between Mounds A and B were quite productive with about 500 sherds being obtained. Certainly these sherds did not come from the nearly sterile mottled silt in Cut 2 or the dark brown clay in Cut 1. It is possible that the sherds are from the summit of Mounds A and B. More likely, however, is the possibility that a low mound does exist immediately southeast of Cut 2, and that its original height was such that the midden accumulation on top of it reached into plow zone. If this low mound was a habitation mound, then it is likely there were others in the area, a situation suggested by the fact that ground level in this area is slightly higher than that in the plaza and beyond the site. Flood stage soil deposition and erosion from Mounds A and B over the years, and more recent plowing, may all have contributed to the creation of a uniform surface elevation in the area today.

Cultural Stratigraphy

Sherd recovery was light throughout Cut 2 with a total of only 224 sherds being obtained (Table 15). As in

Cut 1, two midden strata were present and separated by a deposit of non-midden soil. Excavation Levels A through D correspond with the upper midden while Levels E through G contained the lower midden. The pottery samples from these two groups of levels are similar, except in the case of shell-tempered pottery, 13 sherds of which were found in the upper levels, while none were obtained in the deeper levels. The number of sherds obtained from both groups of levels is so small, however, that the distribution of types and modes can not be given much weight in stratigraphic interpretation.

Cut 3 (Fig. 31)

Cut 3 was located near the north end of Location E, the long, low rise that is identifiable as the remains of Hough's Mound C.

The northeast corner of the cut was chosen as local datum and found to be .28 MASD. Excavation proceeded by arbitrary 20 cm. levels to a depth of 140 cm. below datum, at which point two posthole soundings were made to investigate deeper strata.

Stratum 1 - Sterile pre-occupation deposits

All soil deposits underlying the initial occupation stratum at 125 cm. below datum are included in this category. From the bottom of the posthole sounding the

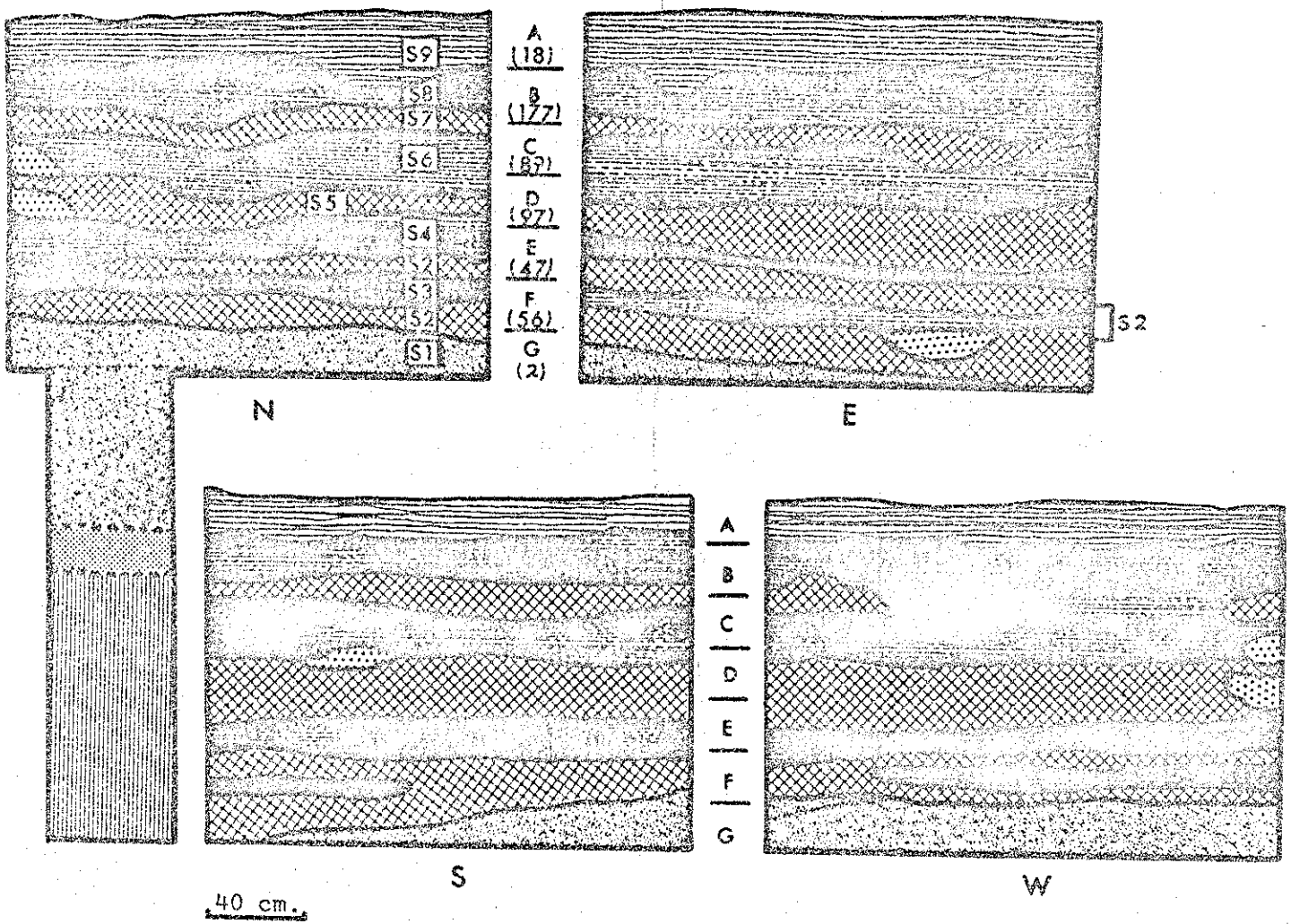

Fig. 31.--Cut 3 profiles

deposits are mottled, red and gray clay, gray sand, and mottled, green and red clay.

Stratum 2 - Mottled red-green clay

This stratum occurred between 125 and 100 cm. below datum. Stratum 3, the deepest midden zone, was located within the deposit at 115-120 cm. below datum.

Stratum 3 - First midden deposit

This is a thin lens of brown soil containing charcoal, daub fragments, animal bone, and pottery. A saucer-shaped pit extended below the midden in the southeast corner of the square. One posthole, detected in the floor of excavation Level F at 120 cm. below datum, may have originated in the midden. Stratum 3 lensed out in the south and west profiles, and the zones of mottled clay above and below it merged at this point.

Stratum 4 - Second midden deposit

This stratum extended throughout the area of Cut 3 and was characterized by concentrations of charcoal and ash. One such concentration, located in the southeast portion of the square at 100 cm. below datum, consisted primarily of ash, but also contained charcoal, fired clay, and a large quantity of fish bone.

Stratum 5 - Mottled green clay

This deposit was similar to Stratum 2 except for the presence of scattered charcoal flecks. A thick lens of ash, charcoal, shell and pottery occurred between 70 and 85 cm. below datum in the southwest corner.

Stratum 6 - Third midden deposit

This midden was similar to the earlier occupation deposits, Strata 3 and 4, although artifacts and food remains were less abundant. Concentrations of charcoal and ash occurred within the stratum, and one lens of fired earth was found in the southwest corner of the cut. One posthole was detected in the floor of Level D at 80 cm. below datum.

Stratum 7 - Light gray clay

This stratum was devoid of cultural material and appeared to be a natural deposit. It was discontinuous on the west wall where excavation undertaken during accumulation of the final midden probably removed it. A thick lens of red clay, identified as fired clay by the excavator, occurred at this location and is probably related to the upper midden also.

Stratum 8 - Fourth midden deposit

The entire stratum was excavated as Level B, and sherd recovery was greater here than in any other level.

Animal bone, daub, and charcoal were also common, the latter occurring in scattered concentrations throughout the area of the cut. Soil conditions did not permit the identification of postholes. Except for the thick lens of red "fired" clay in the west profile, no features were encountered. The upper limit of the stratum could not be determined as it occurred within plow zone.

Stratum 9 - Plow zone

Interpretation of Stratification

Four midden strata have been identified in this cut. The deepest occurred at .80 MBSD, slightly above the elevation of initial occupation deposits in Cuts 1 and 2. The latest midden, on the other hand, lay above .10 MASD and, therefore, was at least 30 cm. higher than the last midden deposit in Cuts 1 and 2. It seems probable that at least this last midden was associated with the earthworks illustrated as Mound C in Squire and Davis. Its elevation furthermore suggests that it was not a sub-mound deposit, but rather was situated somewhere within the mound above ground level. It also seems likely that some of the other three midden strata were incorporated in this mound structure.

Cultural Stratigraphy

As in Cuts 1 and 2, pottery was unevenly distributed among the different midden strata, with the two highest middens yielding over 75 per cent of the 486 sherds recovered in the entire excavation. The ceramic counts (Table 15) for excavation levels B through D, associated with these two middens, indicate no significant difference between them. The lower two middens yielded so few sherds that comparison between them, or with the upper middens, would not yield reliable results. Despite the disproportionate size of pottery samples from the two groups of middens, it is interesting to note that nineteen shell-tempered sherds and eleven "Tunica" rims occurred in the upper two middens while only one shell-tempered sherd and no "Tunica" rims were obtained from the lower middens.

Total Site Analysis

Cultural Stratigraphy of Cuts 1-3

If our knowledge of Fitzhugh site occupational history was derived solely from surface collections of pottery, we would have to conclude that Fitzhugh is a single component site. Almost without exception, pottery types present in collections from the site, are those characteristic of Fitzhugh phase. Yet Fitzhugh is a large site with extensive earthworks, and we could expect a long

time span to be involved in its growth. Stratification in the three cuts reinforces this suspicion, as at least two midden strata occur in each.

The important question is whether multiple components are evident in the pottery collections from Cuts 1 - 3. Some indications of cultural stratigraphy have been noted in the preceding section, but, since pottery collections from each cut are relatively small, nothing conclusive could be made of them. A solution to this problem can be found by combining the collections from all three cuts. If we combine excavation Levels A through D (associated with the upper midden in Cuts 1 and 2 and the upper two middens in Cut 3) in all three cuts to form an analysis unit, and excavation Levels E through H (associated with the lower midden in Cuts 1 and 2 and the lower two middens in Cut 3) in all three cuts to form another analysis unit, the total sherd sample becomes 1749 with 1299 sherds occurring in Analysis Unit A-D and 450 sherds occurring in Analysis Unit E-H.

The distribution of shell-tempered pottery and "Tunica" rims in the combined sample (Table 16) is statistically significant[1], and we can conclude that the

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[1]The frequency distribution of shell-tempered and non-shell-tempered pottery in the two analysis units was subjected to a X^2 test and found to have a X^2 value of

TABLE 16

FITZHUGH SITE. DISTRIBUTION OF SHELL TEMPERING AND "TUNICA" RIMS IN CUTS 1-3

	Shell tempering	"Tunica" rims
Analysis Unit A-D	52[1]	30
Analysis Unit E-H	6	1

two analysis units do differ in at least these two traits. It is possible that shell tempering and "Tunica" rims are not part of the ceramic complex associated with Analysis Unit E-G. Five of the six shell-tempered sherds and the sole "Tunica" rim occurred in Level E of Cut 1. While this level included most of the lower midden stratum, it also intersected a portion of the second midden above. It is quite possible, therefore, that these sherds were all derived from the higher midden. The single remaining shell-tempered sherd, an example of Winterville Incised, var. Belzoni, occurred in Level E of Cut 3, and while

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6.06 with 1 degree of freedom. The probability of observing this distribution was found to be .025, indicating that there is a significant association between frequency of shell tempering and analysis unit. A similar test for the distribution of "Tunica" rims was made utilizing the frequency of this mode and that of all other plain rims. Results here were similar, with a X^2 value of 8.39 and P of less than .005.

[1]This figure includes plain and decorated sherds. It does not include the 11 Addis sherds with shell tempering that occurred in the upper middens.

there was no evidence of mixture in the stratification of this cut, it is nevertheless possible that this sherd was intrusive from above.

One of the striking features of Upper Tensas Basin ceramic history during the Plaquemine and Historic periods is the slow southward spread of the technique of tempering pottery with shell (see Chapter IV). Given some duration to the occupation of Fitzhugh site, the distribution of shell-tempered pottery in Cuts 1-3 probably reflects the fact that the technique first appears at Fitzhugh only after the site had been occupied for some time.

If there is some time depth to the occupation of Fitzhugh site, it is reasonable to investigate the relationship of initial site occupation to Routh phase, the phase preceding Fitzhugh phase in the Upper Tensas Basin. The pottery of Analysis Unit E-H does show some affinities to Routh phase. Several Fitzhugh phase, plain ware modes are absent including "Tunica" and "Haynes Bluff" rims, the "interior beveled" bowl rim and the "thickened-beveled" rim. Two plain ware modes characteristic of Routh phase are present, the "Preston" bowl and the "Delta City" bowl.[1] Other Routh phase types, such as Coles Creek

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[1]The "Delta City" bowl is well represented in Analysis Unit A-D and is apparently part of the Fitzhugh Component. Therefore, despite its higher relative

Incised, var. Hardy, and Harrison Bayou Incised, however, are absent.

With the available ceramic evidence, it is not possible to draw definite conclusions about the phase affiliation of those midden strata comprising Analysis Unit E-H. There are very definite similarities to Routh phase, but there are also differences. Even if there was an adequate pottery sample to work with, phase assignment might still pose a problem. Since Routh and Fitzhugh phases are very definitely related through an unbroken line of ceramic development, we can expect to find components with ceramic collections that are intermediate to them. Analysis Unit E-H, as we know it now, would seem to be of this nature. Even Analysis Unit A-D with abundant "Delta City" bowl sherds, diverges from other Fitzhugh components toward Routh phase.

The author feels that Fitzhugh site cultural stratigraphy can be most accurately interpreted as follows:

1. Site occupation was of some duration, perhaps two centuries or more.
2. Occupation was continuous throughout this period.

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frequency in Analysis Unit E-H, it is not a good diagnostic of Routh phase at this site. (For further discussion of this mode, see Chapter III, pp. 251-255.

3. The entire site occupation is assigned to the Fitzhugh phase, but there is definite evidence of change in the ceramic assemblage through time; Routh phase traits disappear and Fitzhugh phase traits are added.

Settlement Pattern

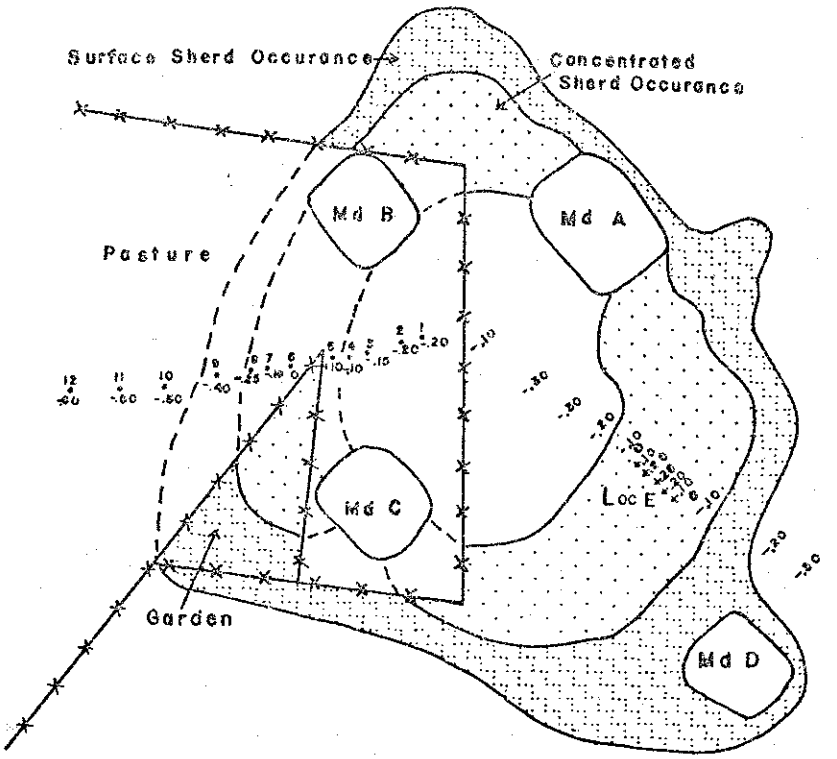
In addition to test excavations, a program of systematic surface collecting and posthole testing was conducted at the Fitzhugh site. Surface collecting showed that areas of sherd concentration describe a ring around the plaza with Mounds A, B, and C, and Location E, occurring at points along its circumference. Location E was the richest area on the site, producing a collection of 2,690 sherds. The plaza, "elevated road way", and the fields beyond Mounds A, B, and C, were almost devoid of artifacts. It can be inferred from this distribution that occupation activities at the site were limited to a relatively narrow zone around the plaza and between the mounds.

Elevation readings with a transit indicate furthermore that ground surface is higher in the area of sherd concentration than in the plaza or beyond the mounds. Specifically, readings between Mounds A, B, and C, and in the middle of Location E are all at the elevation of site datum or above while the plaza averages about .20 MBSD and ground level beyond the mounds is even lower. In Fig.

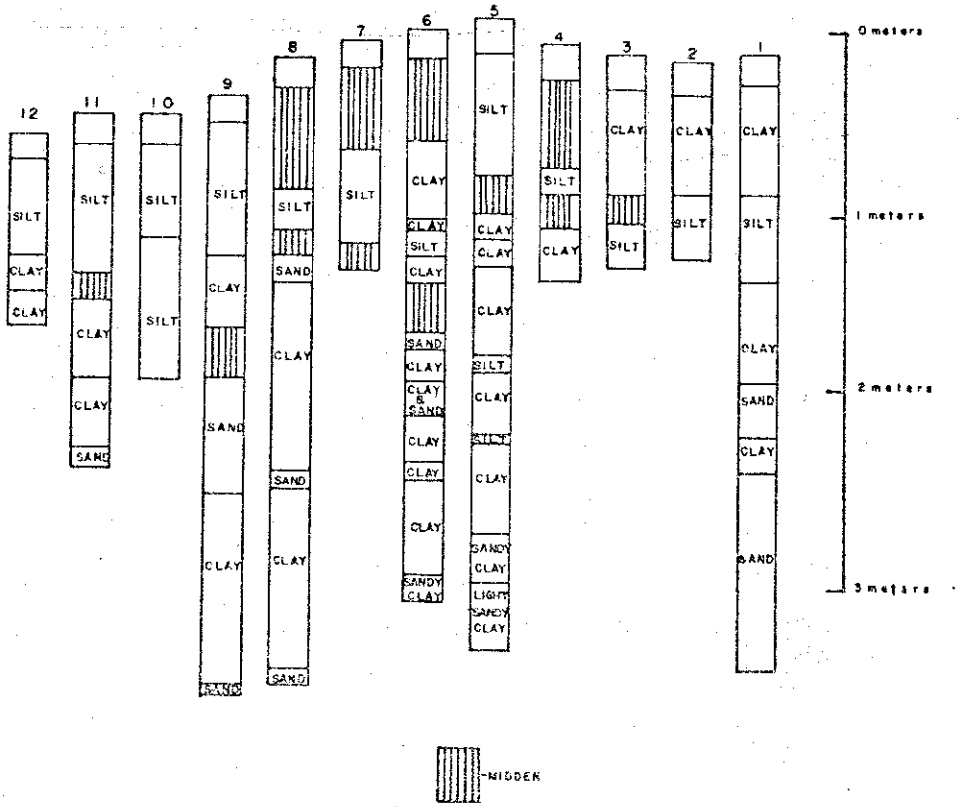
32, a, the distribution of surface pottery is plotted and the two major transit traverses are indicated.

The stratigraphic nature of these elevated, sherd-rich areas may be detailed at those points where data from excavations and posthole testing are available. As described on pg. 121, Cuts 1 and 2, located between Mounds A and B, showed that two successive periods of midden deposition occurred here, with the last probably extending up into plow zone and therefore accounting for the rich sherd collecting conditions of the area. These midden strata have been interpreted as occurring on low artificial mounds, a situation which would account for the greater elevation of ground surface at this point.

There is good evidence that Location E is the remnant of a relatively large and complex mound structure. The nature of this structure is partially revealed by the stratification in Cut 3. Here, the latest extant midden deposit, Stratum 8, occurred at an elevation well above present plaza level and extended up into plow zone. The richness of Location E undoubtedly stems from the destruction of this midden and whatever midden strata, if any, existed above it. Plaza level today averages approximately .20 MBSD and ground surface at Cut 3 was .28 MASD. It is clear then that at least .50 m. of the structure seen by Hough is represented in the stratigraphy



A



B

Fig. 32.--Fitzhugh site. Surface sherd distribution and posthole soundings.

of Cut 3.[1] There is no reason to believe that the upper destroyed portion of Hough's Mound C differed from that portion of the mound represented in Cut 3. The mound would seem, therefore, to have been constructed in several stages, each consisting of a layer of occupation refuse and a layer of "sterile" clay.

The important question here is whether the midden strata in Cut 3 are in situ accumulations of refuse, resulting from activities on the mound, or whether they are deposits derived from elsewhere and represent mound fill.[2] The author favors the former interpretation. The four midden strata are each too uniform in thickness to be mound fill deposits, and the alternation of "sterile" clay and midden is too regular to be the result only of mound construction activities. Furthermore, it is difficult to explain the occurrence of lenses and concentrations of

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[1] Hough estimated the height of the central portion of his Mound C to be 3 m.

[2] Another interpretation is suggested by Brain's recent work at the Winterville Site in the Yazoo Basin. Early maps of that site (Brain 1969:Fig. 4) show series of connected mounds similar to those represented by Location E. Brain's excavation in one of the mounds and a connecting "causeway" indicated that the latter were primarily composed of midden strata. Brain (ibid.:115) concludes that such midden could be debris swept from the neighboring mounds. The relationship of Cut 3 to the mounds and "causeways" depicted for Hough's Mound C is not known.

ash, charcoal, fired earth, and animal bones in these strata except as resulting from in situ habitation activities.

A line of postholes and auger soundings was made from within the plaza westward between Mounds B and C to a point well beyond these mounds (Fig. 32, a, b). While the interpretation of stratification within such soundings is certainly not capable of great accuracy, nevertheless, it is reliable enough for the purpose of the present analysis. It can be concluded from these soundings that in the area south of Mound B there are two zones of midden-like material. One is immediately beneath plow zone and extends down to approximately 1.00 m. below ground surface, and the other one occurs at approximately 1.00 MBSD. Whether the upper zone of midden is the result of in situ midden accumulation or is redeposited material from the former Mound F can not be determined with absolute certainty. As noted earlier, ground surface here occurs at and above the level of site datum. Considering the size of Mound F as it is depicted in the Hough map, this rise may be entirely due to the recent leveling of that mound. The investigator in charge of posthole soundings, however, was satisfied that the upper stratum was indeed midden. In addition, the second zone of midden, by virtue of its depth below ground surface, can not be attributed

to the destruction of Mound F. While not proven, it does seem probable that the strata in question here are the result of occupation in the area.

Surface collecting was very productive in the small garden plot west of Mound C, and in the fields between Mound A and Location E. Neither test excavations nor posthole soundings were conducted in these areas, but it is apparent that occupation occurred here also.

Having recognized a definite pattern in the distribution of artifacts and midden deposits at Fitzhugh, it is worthwhile speculating about its significance. The size of the earthworks at Fitzhugh make it seem unlikely that the relatively restricted midden distribution represents habitation remains of the site's entire supporting population. Rather, it would appear that only part of the population resided at Fitzhugh. Early French accounts of the Taensa and Natchez give us some indication of how many people may have resided at a site such as Fitzhugh, and, furthermore, who they were. The Natchez population was apparently dispersed over a relatively large area (Swanton, 1911:46). Various accounts (ibid.:158, 191) describe the Grand Village as having a temple, a chief's cabin, and between four and eight additional cabins surrounding the square ground. The Tattooed Serpent, brother of the Great Sun, resided in one of these cabins.

The Taensa population was strung out along Lake St. Joseph. At one point along the lake front there was a palisaded enclosure containing the temple, chief's cabin, and seven or eight cabins of "old men" (Swanton, 1911:263). Neitzel (1965:62) conjectures that only high ranking people occupied cabins surrounding the plaza at the Natchez Grand Village. This seems to be the case among the Taensa also, and it is not improbable that a similar pattern is represented by the restricted occupation area at Fitzhugh.

Because the midden strata in Location E are part of a recognizable above-ground mound and the midden strata between Mounds A, B, and C are not, it is tempting to attribute the former to ceremonial activities and the latter to domestic activities. If the author is correct in identifying low mounds in Cuts 1 and 2, however, the only thing distinctive about the midden deposits in Location E is that they occur in a more prominent location along one side of the plaza, and the mound in which they occur was large enough to survive in recognizable form until the 1840's. It is not necessary, in other words, to attribute the various midden deposits to different kinds of activity. All may be occupation refuse. Location E may simply be the residence mound for people of highest rank and most important ritual or political office.

Investigation of Mound A

Sometime prior to 1954, a portion of the southwest corner of Mound A was removed and sold for road fill. Between the 1963 and 1964 field seasons, more earth was removed from this area for a similar purpose. These operations exposed a nearly vertical profile through the southwest corner of the mound, and in 1964, it was decided to map this and excavate a trench to sterile subsoil inside the former limits of the mound. Although the face of the barrow area was nearly 27 m. long, only a 12 m. segment was sufficiently clean to allow accurate observation of mound features. This profile was remarkable for its lack of clearly defined structural features. Mound fill, for the most part, consisted of thick horizontal bands of sandy silt of varying shades of tan and brown. At 4.90 MASD, a 50 cm. thick stratum of light brown silt containing scattered charcoal fragments could be observed, but there was no real evidence that the surface of an early mound stage existed here. Below, at 2.60 MASD, a lens of fired earth, ash, and charcoal could be traced for a horizontal distance of 7 m., and it is probable that this feature does represent a utilized mound surface. The bottom of the exposed mound face occurred at 1.90 MASD, and a narrow, 4 m. long trench was excavated to trace mound stratigraphy below this point. At 1.80 MASD, a thin

ash and charcoal lens occurred, separating sandy silt above from a definitely basket-loaded clay and silt mixture below. The latter overlay a stratum of light-colored banded silt at .90 MASD that may have been deposited by standing water. The bottom of the banded silt stratum at .50 MASD gave evidence of having been burned.

Excavation was terminated when the trench had reached a depth of 2.40 m. with the assurance that sterile subsoil had been reached. It was not until after the close of the 1964 field season, however, that elevation readings for the entire site were coordinated and it was discovered that the trench had actually terminated at .50 MBSD, a good 50 cm. above the lowest midden deposits in Cuts 1 and 2 to the northeast. It is quite probable then that sterile subsoil was not reached in the trench. We do not know, consequently, whether or not Mound A was underlain by an occupation stratum. In the approximately 9 m. of vertical mound profile investigated, only three strata occurred which could be interpreted as indicating the surfaces of mound construction stages. These occurred at 2.60 MASD, 1.80 MASD, and .50 MASD.

Mississippi River Channel Association

Fitzhugh is situated on the outside bend of an 11 stage Mississippi River meander loop (Fig. 26). This meander began expanding in a southeastward direction in

stage 7 and was abandoned when the Mississippi River was diverted from the Walnut Bayou meander belt to its present course in stage 11. According to Fisk's Plate 22, Sheet 11, no Mississippi River channel has ever crossed the locality of the site. An 8 stage channel does lie approximately .25 miles to the south, but the site is probably associated with the later 11 stage channel.

Stratigraphic evidence at Transylvania site and the phase-channel correlation presented in Chapter VI indicate that Fitzhugh phase postdates stage 11 by some period of time, perhaps two to three centuries. It is certain that when Fitzhugh site was first settled, the stage 11 channel had been inactive for some time. The author can not reconstruct what conditions were like along the abandoned channel, but it seems likely that after the 11 stage diversion, the channel served as a distributary for the Mississippi River during flood stage. At other times, the channel probably contained only sluggish bayous or lakes much as it does today.

Non-occupation Deposits

Pre-occupation deposits at Fitzhugh are rather complex. In all three cuts, the deepest occupation deposits occur between 1.15 and 1.30 MBSD and overlie a series of clay and sand strata of unknown thickness. In Cuts 1 and 2, deposits above 1.30 MBSD tend to be

composed of silt-sized material, while in Cut 3, clay-sized material predominates. These clays in Cut 3 probably represent fill brought in during the construction of the mound at Location E. The stratigraphy evident in the series of posthole and auger soundings across the western portion of the site conform in general to that in the excavations. Except in the three soundings furtherest east in the plaza, the last 80 cm. to 100 cm. of deposits were of silty material. In terms of absolute depth, this type of soil almost always occurred above 1.50 MBSD. Below this level, definite clay strata occurred and usually alternated with sandy-clay or sand deposits. Midden strata were definitely encountered in these soundings as deep as 1.50 MBSD and perhaps as deep as 2.00 MBSD. We can expect the soundings to show some variation in depth of cultural deposits, as they may encounter barrow pits or other types of architectural features. Over all, however, there is a tendency for cultural deposits and silty soil to both occur above 1.50 MBSD. It is possible to conclude from this association that hydrologic conditions along the abandoned 11 stage channel changed at about the time Fitz-hugh site was first occupied.

Canebrake (24-J-9)

Site Description

The Canebrake site is located in Madison Parish on the east bank of Bayou Macon, approximately 120 m. west of Louisiana State Highway 610, and 1.2 miles north of the Madison-Franklin parish line (Fig. 33). When visited by the LMS in 1964, Canebrake consisted of two mounds, designated Mounds A and B (Fig. 34). A third mound, Mound C, had been recently leveled so that only a barely perceptible rise marked its former location. The three mounds once enclosed an area measuring approximately 60 m. by 60 m. by 70 m. Two low rises, each 30 cm. high, could be detected adjacent to a fence bordering the site on the northwest. One was situated midway between Mounds A and B, and the other was some 40 m. northeast of Mound B. Both had been partially destroyed by a drainage ditch located just beyond the fence. A small farm pond lay immediately to the east of Mound B, and while it has definitely been improved in recent years, it may have originally been one of three barrow pits observed by Clarence B. Moore in 1913.

The dimensions of Mounds A and B are presented in Table 17. In 1964, the shape of Mound A was rather amorphous, although it did have a broad, relatively flat summit. Its surface was heavily pitted and a small portion of the southwest side of the mound had been recently removed.

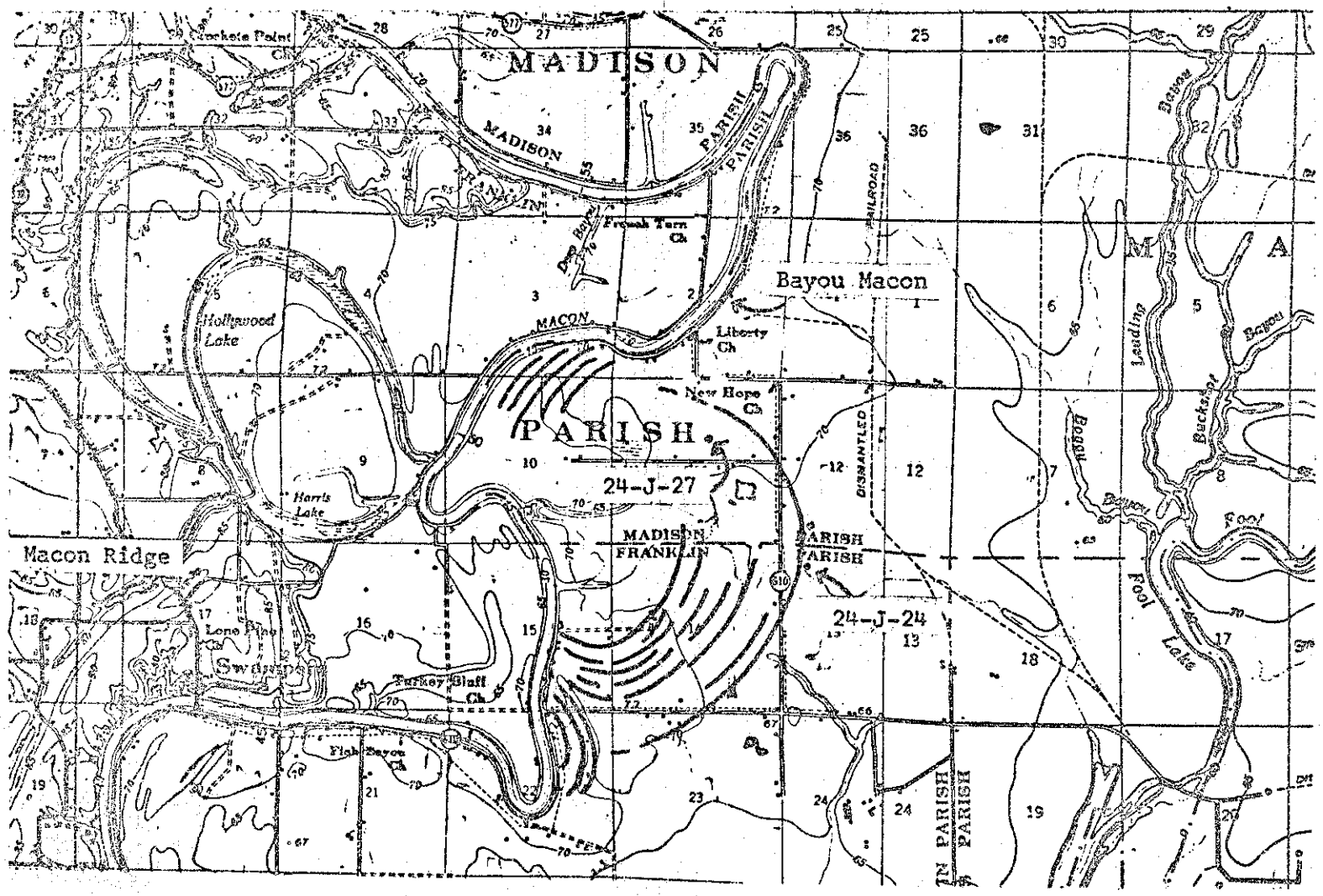

Fig. 33.--Location of Canebrake and Preston sites

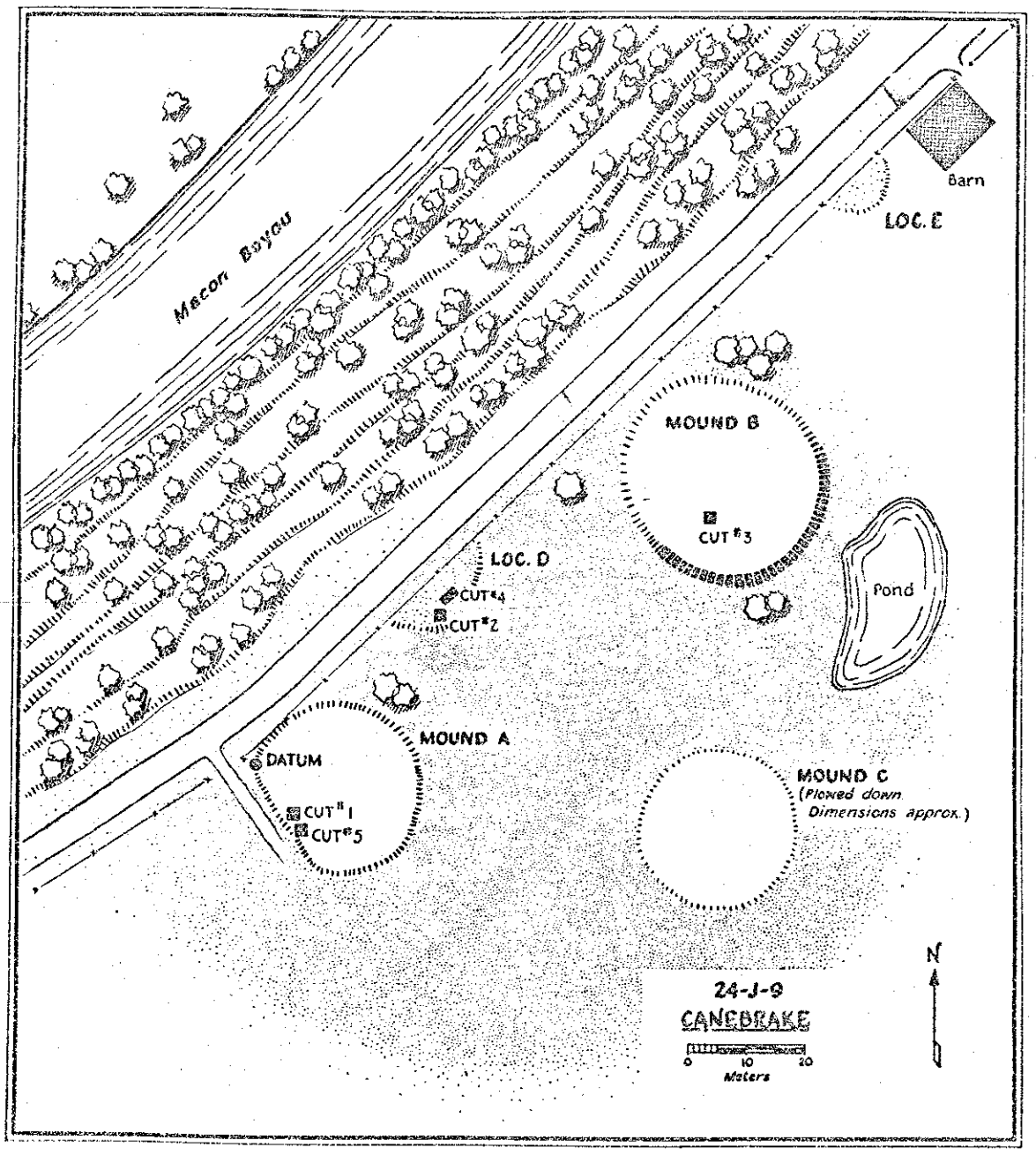

Fig. 34.--Canebrake. LMS site map

Midden soil, rich in shell, animal bone, and sherds, was exposed in the resulting profile. Mound B was circular in shape with a rounded profile. A small shed had recently stood upon it.

TABLE 17

CANEBRAKE SITE. MOUND DIMENSIONS OBTAINED BY MOORE AND THE LMS

		Moore
Mound A	100 x 75 x 4.5 ft.	123 x 113 x 5 ft.
Mound B	95 x 3.5 ft.	97 x 6 ft.
Mound C	85 x 4.5 ft.	

Clarence B. Moore (1913:49-54) visited the Canebrake site in 1913 and excavated extensively in all three mounds. His greatest success occurred in Mound B where seventeen burials with some thirty-four pottery vessels were found within 32 inches of the surface. Mound A yielded him nothing except one disturbed burial, a stone point, and part of a platform pipe. In Mound C, more than twenty flesh and bundle burials were encountered in a stratum overlain by 2 feet of mound fill. These burials were accompanied by only two small celts and a single whetstone.

The dimensions which Moore reports for the three mounds are presented in Table 17. Those for Mounds A and B agree fairly well with the measurements obtained by the LMS. The relative heights of Mounds A and B, however, are

reversed in the two sets of observations. It is difficult to understand how Moore could have observed Mound B to be taller than Mound A. He describes the stratigraphy for Mound A (ibid.:49-50) giving measurements for each strata that conform closely to those obtained by the LMS in Cut 5. The elevation of Mound A does not appear to have been reduced since 1913.

There is absolutely no question that Moore's three mounds have been correctly identified by the LMS. Moore gives distances and compass directions from mound center to mound center that agree with those obtained in 1964. Furthermore, Moore (ibid.:49) states that "Mound A is the first reached by one ascending the river, and as is also the case with Mound B, is less than fifty yards from the water and visible from it....." The proper identification of Moore's three mounds is important because of the nature of his discoveries in each.

Site Investigations

Moore obtained 34 vessels from burials intruded into Mound B (ibid.:51). Specimens that he illustrates and describes include 2 Leland Incised, var. Fatherland, vessels, 1 Hudson Engraved vessel, 1 Winterville Incised, var. unspecified, vessel, and 1 polychrome bottle. Both Mississippian and Caddoan influences are evident in these few specimens. It was the desire to learn more about the

component represented by these vessels that led the LMS to conduct test excavations at Canebrake in 1964.

Surface collecting of the entire site was undertaken first with large collections being obtained from the areas of Mound A and Mound C. Limited posthole testing was undertaken for the purpose of locating areas suitable for excavation. Ultimately five test excavations were made, with two located on Mound A, one located on Mound B, and two located on the low rise between Mounds A and B. The site was mapped with a transit and steel tape (Fig. 33). Site datum was established on the western edge of Mound A.

Cuts 1 and 5 (Figs. 35 and 36)

The decision of where to begin excavations at Canebrake was not difficult in view of Moore's statement that the upper two feet of Mound A was an occupation deposit "in which were fragments of mussel-shell and other debris" (ibid.:50). In 1964, this stratum could be seen clearly in the exposed southwest flank of the mound. The problem, however, was to find an undisturbed area in which to excavate as Moore put "seven large holes" into the mound. The present site owner stated that pits had also been dug recently by vandals. As a result of these excavations, the present surface of the mound was pock-marked with depressions of various sizes. Cut 1 was located near the southwest edge of the mound in an area that appeared to be

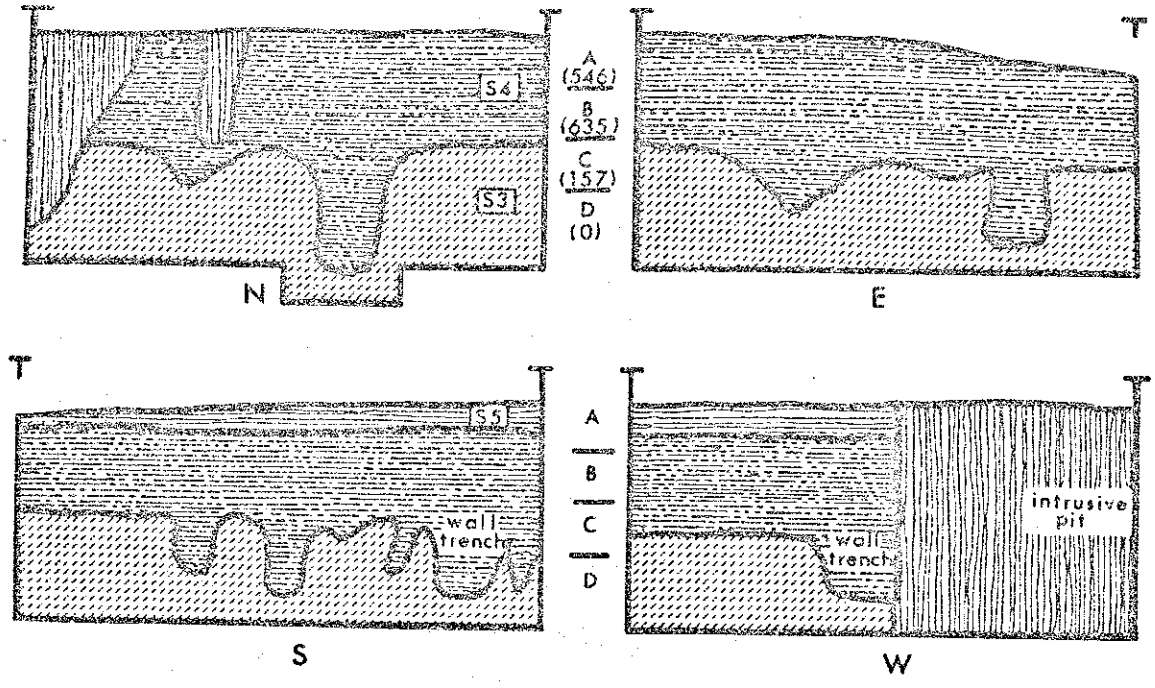

Fig. 35.--Cut 1 profiles

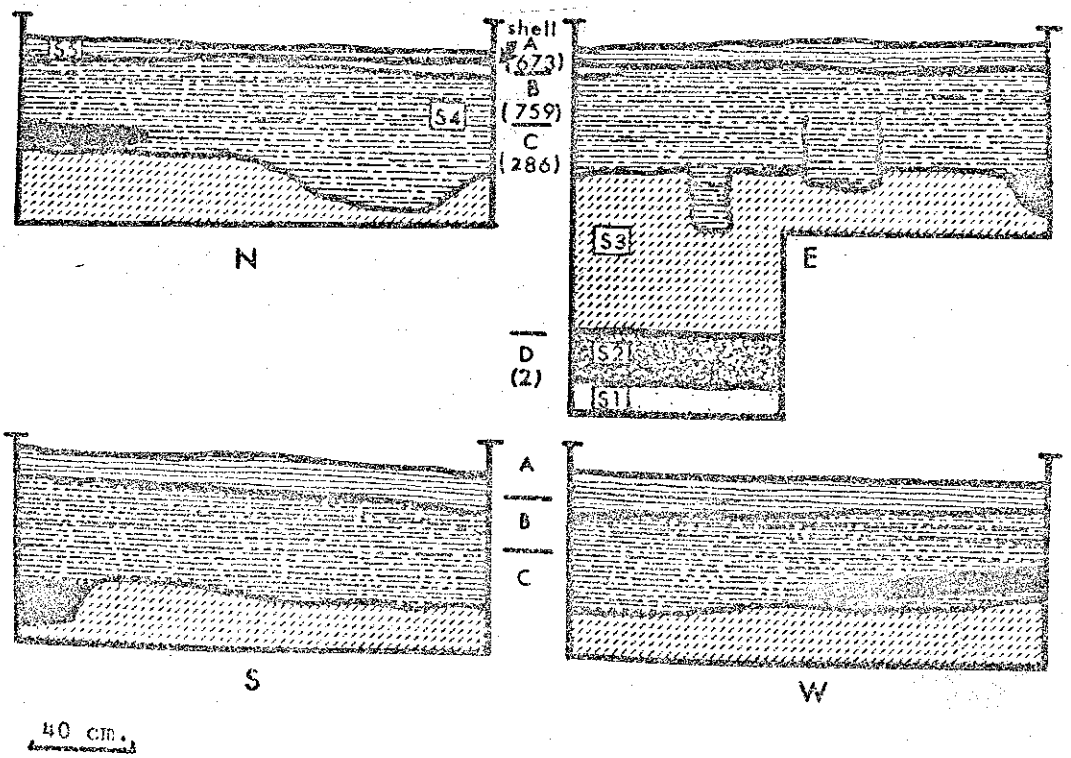

Fig. 36.--Cut 5 profiles

undisturbed. Because this was the most productive test excavation at the site, a second cut, Cut 5, was eventually placed 50 cm. south and slightly to the east of Cut 1. The stratification in both cuts was essentially the same, and they are, therefore, described together.

Local datum for Cut 1 was .57 MASD and for Cut 5 it was .47 MASD. In Cut 1, Level A was 30 cm. thick while Levels B and C were each 20 cm. thick. As the LMS investigation of Canebrake was being conducted for the purpose of uncovering remains of the Mississippian component known through Moore's work, excavation in Cut 1 was terminated at 70 cm. below datum where the midden stratum overlay a tan sandy soil. A trench, however, was dug around the edges of the cut to 100 cm. below datum for the purpose of drawing profiles. A recent disturbance in the northwest corner of the square was detected at 30 cm. below datum and excavated separately thereafter as Level Y. In Cut 5, the entire square was taken down to 60 cm. below datum in 3 levels; and a trench was dug along its walls to 80 cm. below datum for the purpose of profile interpretation. In the northeast corner, a small excavation was made to sterile subsoil at 140 cm. below datum in order to investigate mound stratification. All artifacts obtained in Cut 5 between 40 cm. and 120 cm. below datum were

included in Level C. Artifacts obtained below 120 cm. below datum were retained as Level D.

Stratum 1 - Sterile yellow sandy soil

Sterile subsoil was encountered in the exploratory pit in Cut 5 at 137 cm. below datum or .85 MBSD (Fig. 36, e).

Stratum 2 - Black sandy soil

This stratum, also encountered only in the exploratory pit in Cut 5, immediately overlay sterile subsoil and was 20 cm. thick. One piece of probable bird bone and a few non-diagnostic sherds were recovered from it.

Stratum 3 - Tan sandy soil

Uniform, tan, sandy soil was encountered in Cut 5 between 50 cm. and 120 cm. below datum. A few sherds were obtained from the deposit. Its level surface was disturbed at many points in both Cuts 1 and 5 by postholes and a wall trench.

Stratum 4 - Dark brown sandy midden

Shell, animal bone, and artifacts were abundant in this stratum. In Cut 5, a lens of ash and charcoal occurred in the northwest corner at 40 cm. below datum. In the southeast corner of this square, a shallow pit,

containing charcoal, penetrated Stratum 3 to a depth of 75 cm. below datum. A wall trench observed in Stratum 3 crossed the southwest corner of Cut 1 (Fig. 35, s, w). Numerous postholes intrusive into Stratum 3 in both cuts apparently derived from this midden. No pattern was discernible in their distribution.

A single lens of shell occurred in Cut 5 at 20 cm. below datum, suggesting that this areas had not been disturbed in recent times. In Cut 1, however, there was evidence of disturbance as a pit was clearly discernible in the northwest corner of the square (Fig. 35, n, w). Shell was scattered throughout the stratum, but did not occur in lenses. Finally, portions of a glass bowl were encountered in the center of the cut at 50 cm. below datum. It would appear that the pit excavated as Level Y was not the only disturbance in this cut.

Stratum 5 - Brown sandy soil

Recent artifacts, including bricks, glass, and nails were abundant in this stratum.

Interpretation of Stratification

Moore's description of the stratification of Mound A is of sufficient detail to allow comparison with that encountered in Cut 5:

> Mound A had a base-line about 8 inches thick, no doubt marking the original surface. Beneath this

> line was a yellow-gray mixture of sand and clay, showing no disturbance. Above the base-line was yellow clay about 26 inches in thickness in the central part of the mound. Then above, came slightly more than 2 feet of dark soil, mainly clay discolored by admixture of organic matter. Doubtless the mound had been made of yellow clay and then dwelt upon while the upper layer of 2 feet, in which were fragments of mussel-shell and other debris, was forming (ibid.:49-50).

The sequence of strata and their thickness reported by Moore is exactly similar to that which occurred in Cut 5. The only difference is the terminology used to describe soil consistency; Moore refers to deposits of clay or sandy clay where the excavator of Cut 5 identified all deposits as sandy in texture.

Moore referred to Stratum 2 as an 8 inch thick "base'line", but gave no further details as to its nature. Animal bone and pottery were encountered here in Cut 5, but identification of the stratum as midden, while likely, cannot be certain.

The sequence of occupation and construction activities for Mound A, as revealed in Cuts 1 and 5, is as follows:

1. Stratum 2 may represent a sub-mound occupation level.
2. Stratum 3 represents fill for a low mound with flat summit and elevation of 60 cm.
3. The summit of the low mound was the scene of domestic activities of sufficient intensity

or duration to result in the accumulation of 35 cm. or more of midden soil.

Cultural Stratigraphy

Ceramic counts for Cuts 1 and 5 are presented in Tables 18 and 19.[1] Five phases, Issaquena, Marsden, Balmoral, Routh and Fitzhugh, are represented in these sherd collections.

No diagnostic sherds were obtained from Stratum 2 in Cut 5. A small number of sherds were recovered from Stratum 3, but they were combined in Level C with artifacts from the overlying midden. As a result, it is not possible to determine the component responsible for construction of the lower portion of Mound A.

Stratum 4 yielded pottery of all five components. In spite of the disturbance evident in Cut 1, the pottery counts for Levels A through C in the two cuts do indicate some cultural stratigraphy within the stratum. Shell-tempered plain and decorated pottery is considerably more abundant in Level A than Levels B and C. Most of this pottery, certainly all of the decorated types, belongs to the Fitzhugh occupation. Balmoral types, on the other hand, are somewhat more abundant in Levels B and C.

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[1]Only surface collections from the vicinity of Mound A are tabulated here, and of these only sherds belonging to the Balmoral, Routh, and Fitzhugh components are included.

ISSAQUENA COMPONENT	CUT 1				CUT 2				CUT 3							CUT 4			CUT 5			SURFACE
	A	B	C	Y	A	B	C	D	A	B	C	D	E	F	G	H	A	B	C	A	B	C	
Bruton Textured	1																1						
Catahoula Zoned Red, var. unspecified																			1				
Churupa Punctated, var. Churupa														1						1			
var. unspecified					2																		
Marksville Stamped, var. Marksville																		1					
var. Manny		3											3	1	6		1			2	1	3	
var. Newsome														2						1			
var. Troyville		1				1	1										1				2	4	
Marksville Incised, var. Spanish Fort								1															
var. Steel Bayou				1										2							15	7	
var. Yokena	3	8	1		3	1	1			4					2		3	5		2	11	10	
var. unspecified						1				1					2			1	1	1	1	1	
MARSDEN COMPONENT																							
Alligator Incised, var. Alligator	1						2						1									1	
var. Oxbow						2																	
Coles Creek Incised, var. Hunt	3	4																		3	2		
Larto Red Filmed, var. unspecified		5												1									
Salomon Brushed, var. unspecified															1								
BALMORAL COMPONENT																							
Avoyelles Punctated, var. Kearny																				1			
Baytown Plain, var. Vicksburg																							
"Vicksburg" rim														1						1	3		
var. Valley Park																							
"Crippen Point" bowl													7										
Beldeau Incised, var. unspecified		1	2									1								1		1	
Chevalier Stamped, var. Chevalier																							1
Coles Creek Incised, var. Blakely													1										1
var. Hardy	6	9	1										1							7	7		15
var. Mott		2															2			1	3	2	4
Harrison Bayou Incised, var. unspec.																						1	3
L'Eau Noire Incised, var. Bayou Bourbe													1										
Mazique Incised, var. Preston														1	2								
Sicily Island Incised, var. McNutt																							1

TABLE 18.--CANEBRAKE SITE. CERAMIC COUNTS FOR CUTS 1-5 AND SURFACE COLLECTIONS--ISSAQUENA, MARSDEN AND BALMORAL COMPONENTS

ROUTH COMPONENT	CUT 1 A	CUT 1 B	CUT 1 C	CUT 1 Y	CUT 2 A	CUT 2 B	CUT 2 C	CUT 2 D	CUT 3 A	CUT 3 B	CUT 3 C	CUT 3 D	CUT 3 E	CUT 3 F	CUT 3 G	CUT 3 H	CUT 4 A	CUT 4 B	CUT 4 C	CUT 5 A	CUT 5 B	CUT 5 C	SURFACE
Baytown Plain, var. Addis																							
"Delta City" bowl		1																		1			1
"Preston" bowl		1																			6	2	

FITZHUGH COMPONENT

Barton Incised, var. Arcola																					1		
var. Atherton	2	1																		3			
var. Stowers	1																5						2
var. unspecified																				6	1		
Baytown Plain, var. Addis																							
"interior beveled" bowl rim																							1
"Walnut Bayou" bowl	3	2																		1	14		
"early Tunica" rim																							1
"late Tunica" rim					1																		2
"thickened-beveled" rim																				1			
"Yazoo" bowl				5																			
jars																				2			1
bottles	5																				1		1
Cowhide Stamped	3																			2			3
L'Eau Noire Incised, var. Paine																							1
Mississippi Plain, var. Pocahontas	41	6	2	3	6		1										12	2	1	84	19	1	
"interior beveled" bowl rim	1																			1			
"Walnut Bayou" bowl	4																			1			2
jar	2																			2	1		
Plaquemine Brushed, var. Grace																				1			
Winterville Incised, var. Winterville		1															8	1		2			
var. Belzoni	1				1		1											1		12	3		3
Unidentified (shell-tempered)			2	1			1													5	3		1

INDETERMINATE COMPONENT

Baytown Plain, var. Addis	52	47	7		19	3	2										29	4		181	53	14	335
"interior strap" bowl rim																						1	3
var. Addis/shell		2																					
var. unspecified	377	536	141	14	90	40	30		5	6	9	57	559	251	114	10	132	77	10	297	75	235	1
Evansville Punctated, var. Sharkey	3	1			1															4	3	1	
Hollyknowe Ridge Pinched, var. Patmos																	1			1			1
L'Eau Noire Incised, var. L'Eau Noire																							6
var. Anna	3	2																		6	1		1
var. unspecified					1																1		2
Leland Incised, var. Leland	2						1																3
var. unspecified																							
Maddox Engraved, var. Maddox		1																					13
Mazique Incised, var. Manchac	8	3																		9	2	1	12
var. Preston	3	12	1	1																	4	1	35
Plaquemine Brushed, var. Plaquemine	22	15					1										5	1		23	22	3	
Sanson Incised, var. Sanson		1												2									11
Unidentified (clay-tempered)		1	2		1		1													10	5		

TABLE 19.--CANEBRAKE SITE. CERAMIC COUNTS FOR CUTS 1-5 AND SURFACE COLLECTIONS--ROUTH, FITZHUGH, AND INDETERMINATE COMPONENTS

The Routh phase occupation is more elusive. Most of the clay-tempered Plaquemine decorated types, such as Plaquemine Brushed, var. Plaquemine, and Mazique Incised, var. Manchac, are characteristic of both Fitzhugh and Routh phases and are, therefore, non-diagnostic. They are fairly evenly distributed between Levels A and B. Other Routh types such as Coles Creek Incised, var. Hardy, and Mazique Incised, var. Preston, are also non-diagnostic as they are characteristic of both Routh and Balmoral phases. In this situation, where both Balmoral and Fitzhugh phases are present, only the plain ware modes, "Delta City" bowl and "Preston" bowl, are diagnostic. These are fairly evenly distributed between Levels A and B.

In summary, there is some stratigraphic basis for the recognition of the Balmoral and Fitzhugh components in Cuts 1 and 5. The Routh component, however, can be distinguished on typological grounds alone (see section on total site analysis, pp. 177-178.

Cut 2 (Fig. 37)

Two posthole soundings in the low rise between Mounds A and B indicated the presence of cultural material to a depth of 90 cm. below ground surface. Pottery obtained in the soundings consisted only of Plaquemine culture types, and as a result, the decision was made to excavate a test pit in this location.

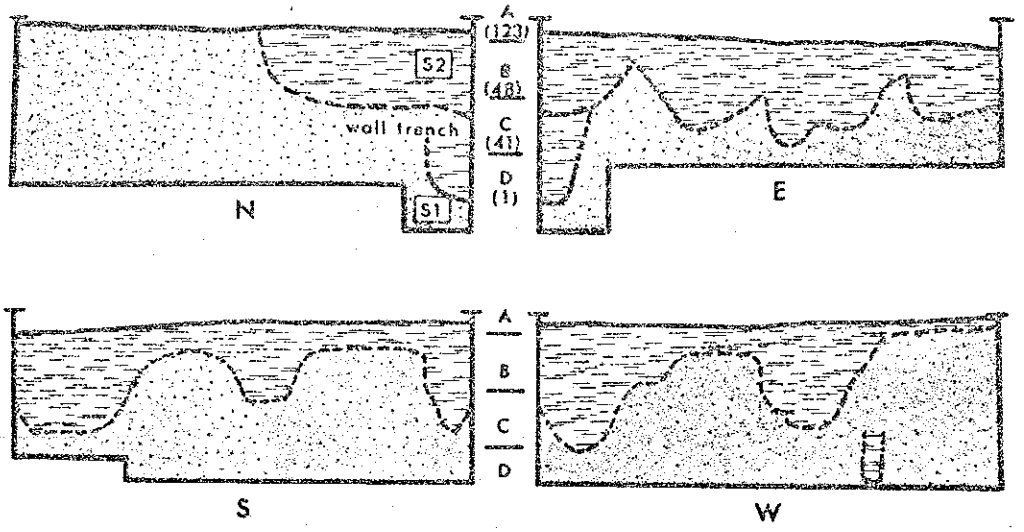

Fig. 37.--Cut 2 profiles

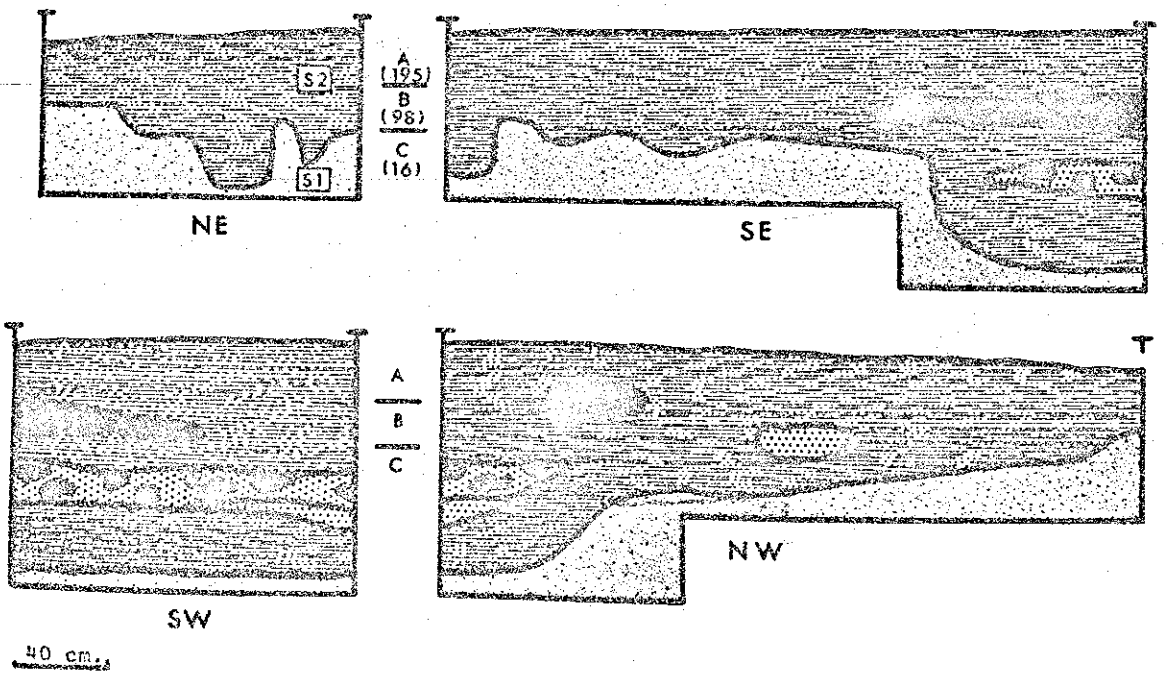

Fig. 38.--Cut 4 profiles

Cut 2 was located on the southeast edge of the low rise and had a local datum of .27 MBSD. Under the assumption that the area was undisturbed by plowing, Level A was excavated to a depth of only 10 cm. for the purpose of removing the sod layer. Levels B and C were each 20 cm. thick, and Level D, 15 cm. thick.

Stratum 1 - Yellow sandy loam

This was sterile subsoil. Heavy rain prior to and during the excavation of the cut, hampered both excavation and profile drawing. Profiles for the cut indicated an undulating boundary line between this stratum and the overlying stratum. In the northwest corner of the cut, yellow sandy loam appeared to extend up to present ground surface. Below 35 cm. below datum, a slight shift in soil color could be detected, but no significance was attributed to it during excavation of the cut.

Stratum 2 - Brown sandy loam

Indications of human occupation were few in this stratum. Artifact recovery was small and only two features were recorded. A small area of concentrated charcoal occurred in the northeast corner of the cut at 35 cm. below datum. A wall trench, detected at 60 cm. below datum, ran part way across the north end of the cut in an east-west direction. It was 20 cm. wide and

contained postholes averaging 10 to 15 cm. in diameter which extended slightly below trench bottom.

Interpretation of Stratification

Stratification in Cut 4, immediately north of Cut 2, indicated that subsoil occurred at 40 cm. below datum, and that it was overlain by at least 30 cm. of occupation deposit. Undoubtedly, stratification in Cut 2 was obscured by the rain that fell almost continually during excavation. It is probable that the color change noted in Stratum 1 at 35 cm. below datum represents the actual boundary between midden and sterile subsoil.

Cultural Stratigraphy

Little can be said in regard to cultural stratigraphy in this excavation as the sherd sample obtained is so small (Tables 18, 19). Issaquena and Marsden types occur throughout the excavation. No diagnostic Balmoral or Routh phase types are represented in the collections, while there are a number of Fitzhugh phase markers, including "Tunica" rim and Winterville Incised, var. Belzoni.

Cut 4 (Fig. 38)

Despite the poor results obtained in Cut 2, it was decided to excavate a second pit in the low rise. Cut 4, 3 m. long and 1.5 m. wide, was located adjacent and

parallel to the fence at the edge of the field. It was hoped that this location would place the cut in a turn-row area and hence avoid plow disturbance of the occupation deposit. Local datum was .25 MBSD. Excavation Levels A and B were standard 20 cm. levels. Level C was carried down to 70 cm. below datum except in the southwest end of the cut where it was extended to a depth of 115 cm. below datum.

Stratum 1 - Yellow sandy loam

This was sterile subsoil. The undisturbed surface of the stratum was probably present in the north corner of the cut at a depth of 40 cm. below datum (.65 MBSD). Elsewhere subsoil had been disturbed by aboriginal excavations.

Stratum 2 - Brown sandy loam

Artifacts, mussel shell, and animal bones were abundant throughout this stratum. Several lenses of charcoal and fired earth were encountered at 30 cm. below datum. Three postholes, forming a north-south line down the middle of the cut, extended from Stratum 2 into subsoil. A large pit, containing lenses of ash and charcoal, also originated from Stratum 2 and penetrated subsoil to a depth of 105 cm. below datum.

Interpretation of Stratification

Little can be said by way of interpretation of stratification in this cut. Postholes, pits, and other features indicate that Stratum 2 is an occupation deposit. Two extensive lenses of fired earth, and two lenses of charcoal occurred at 30 cm. below datum and may mark a floor level. If there were additional indications of such a living surface in the profiles, however, they were not detected by the excavator. Soil dampness made profile interpretation difficult.

Cultural Stratigraphy

Fitzhugh phase pottery predominates in the ceramic collections from Cut 4 (Table 19). The occupation features at 30 cm. below datum may belong to this component. The few decorated sherds obtained from the large pit at the southwest end of Cut 4 were all observed during excavation to be Issaquena phase types. The pit may date to that occupation. There are so few Balmoral and Marsden phase sherds in the collections that they may be considered strays in this area.

Cut 3 (Fig. 39)

Posthole soundings on Mound B indicated the presence of a thick midden deposit approximately one meter below mound surface. As a result, it was decided to

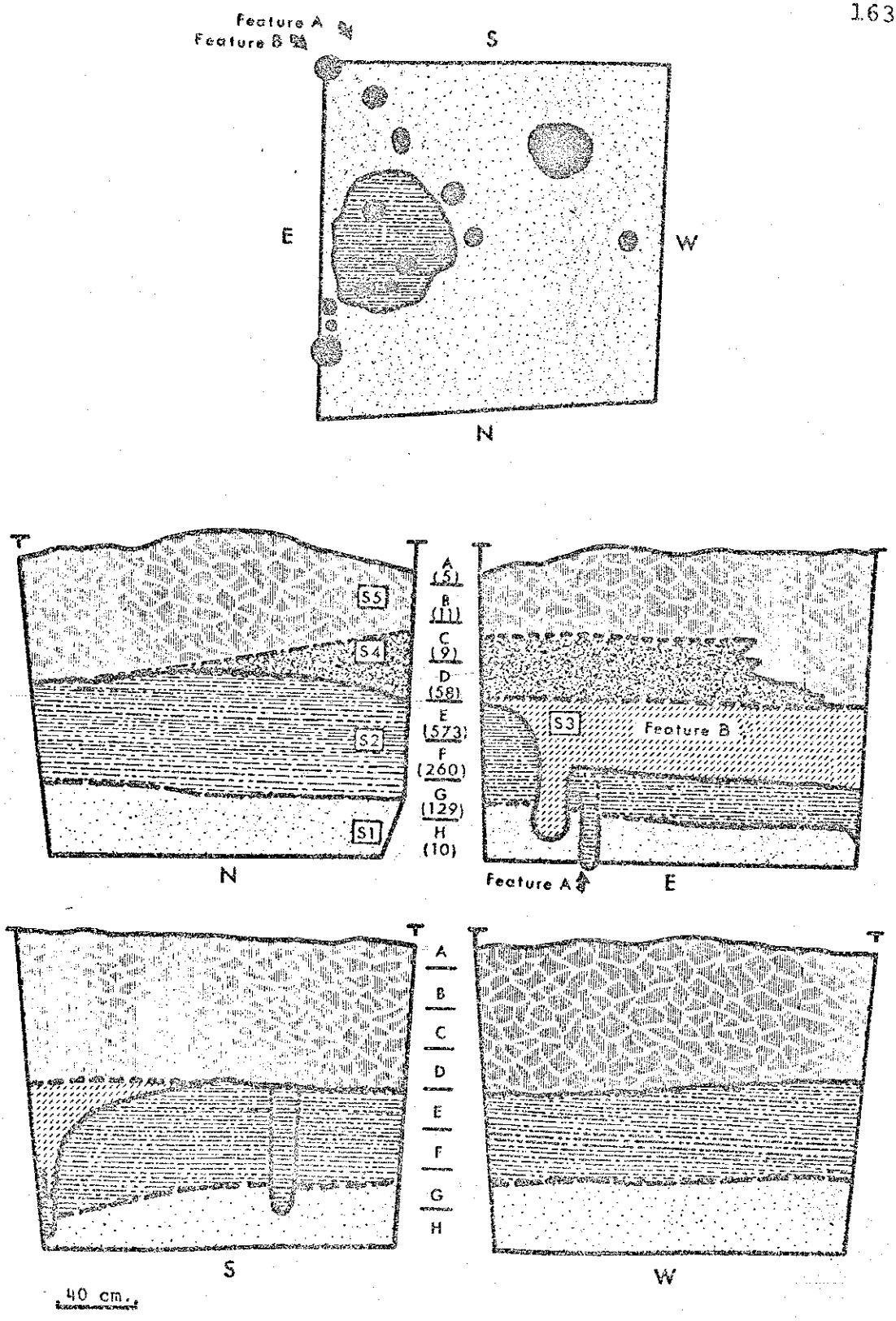

Fig. 39.--Cut 3 profiles and plan

excavate a 2 x 2 meter cut from the mound summit to subsoil. Local datum was established at .70 MASD, and excavation was by arbitrary 20 cm. levels to a depth of 160 cm. below datum. A single posthole sounding was made from the bottom of the excavation to a depth of 210 cm. below datum.

Stratum 1 - Yellow sandy loam

This stratum was sterile and according to the posthole sounding extended to at least a depth of 210 cm. below datum (1.40 MBSD). The upper boundary of the stratum was difficult to define in all profiles except one due to staining by the overlying midden. In the east profile, its surface was clearly marked at 140 cm. below datum (.70 MBSD).

One small pit, filled with gray sandy soil, extended into subsoil to a depth of 185 cm. below datum (Fig. 39, plan). Two lines of postholes (Feature A), lying at right angles to one another and forming a corner near the center of the square were visible in subsoil at 160 cm. below datum. An isolated posthole, 50 cm. in diameter and filled with ash and what appeared to be charred pine needles, penetrated subsoil to a depth of 185 cm. below datum. Charcoal collected from this feature was submitted to Geochron Laboratory, Inc., of Cambridge,

Massachusetts, as sample number GX-488 and produced a date of A.D. 560 ± 115 (Kruger and Weeks 1966).

Stratum 2 - Black midden

Lenses of shell, abundant animal bone, and artifacts occurred in this stratum. The upper surface of the stratum was relatively level at 75-80 cm. below datum. In the east end of the square, however, a large pit, Feature B, had been excavated from above into the midden to a depth of 120 cm. below datum (Fig. 39, e, s). A single posthole flanked this feature on either side in the profiles and extended to a depth of 150 cm. below datum. Presumably the various features observed in subsoil and described above originated from this stratum.

Stratum 3 - Light tan sandy soil

This stratum occurred only within the large pit (Feature B) in the eastern end of the cut. Its upper surface coincided with that of Stratum 2 to the west. In the floor of Excavation Level E at 100 cm. below datum, this deposit showed up as a rectangular area, extending approximately 30 cm. out from the eastern profile, and lying 35 cm. south of the north profile.

Stratum 4 - Dark gray sandy soil

During the excavation of Level C, a dark gray soil was encountered in the northeast corner of the cut, and

it was noted that the surface of the deposit sloped downward to the southwest. When it came time to draw the cut profiles, this deposit could be distinguished clearly only in the north wall, where it immediately overlay Strata 2 and 3 at 70 cm. below datum. Photographs of Cut 4 show the deposit at the northern end of the east profile, but whether it is lensing out toward the south cannot be determined due to the angle from which the photographs were taken.

Stratum 5 - Mottled yellow and gray sandy soil

This stratum overlay Strata 2 and 4 and constituted the bulk of mound fill above 75 cm. below datum. Artifact recovery was light.

Interpretation of Stratification

Moore describes Mound B stratification as follows:

> Mound B was variously composed. Seemingly it had been built upon a dwelling-site of very dark soil containing some mussel-shells. This dark, basal part was reached at different depths. Above this was the later mound, in places made of dark soil, in other parts of a clay lighter in shade.
>
> Burials in this mound cut through no layer, but lay in and under homogeneous material so that it was impossible to distinguish pits.
>
> Fourteen trial-holes, some of which were much enlarged after the discovery of burials, resulted in the finding of seventeen internments, the deepest lying 32 inches from the surface (ibid.:51).

Moore's observations on Mound B stratification agree with those presented above for Cut 3. His dark,

"basal" soil with mussel shell is no doubt Stratum 2. The overlying fill, of two kinds, "dark soil" and "clay light in shade", apparently equate with Strata 4 and 5 respectively. Since all burials were no deeper than 32 inches and cut through no strata, they must have been restricted to Strata 4 and 5. With such good results in these upper strata, Moore would have had little incentive to excavate very much in Stratum 2. Since he does not report the thickness of this stratum, we may conclude that he did not even sink a trial hole to mound base.

Stratum 2 has several features associated with it that are of interest. At first sight, it seems that the two lines of postholes visible in cut bottom (Feature A) are related to Feature B, the large pit with flanking postholes observed in the east profile. Actually the two features are distinct and perhaps unrelated. The evidence for this interpretation may be summarized as follows:

1. The Feature A postholes do not line up with those flanking Feature B in the east and south profiles.
2. The single posthole in the east profile that does line up with Feature A postholes in the bottom of the cut, gave every indication of originating within Stratum 2 below Feature B.

3. The two postholes associated with Feature B do not extend below 155 cm. below datum, whereas the others terminate at approximately 170 cm. below datum.
4. The structure represented by the Feature A postholes extends westward into the cut 95 cm. and is oriented 45 degrees off the compass points. Feature B, as outlined by Stratum 3, extends only some 35 cm. into the cut and is oriented with the cardinal direction.

Feature A obviously preceded the excavation of Feature B and was probably the product of activities taking place as the Stratum 2 midden accumulated. The small pit encountered at 160 cm. below datum is earlier than Feature A as the latter crosses it. The large posthole from which the radiocarbon sample was obtained cannot be definitely associated with either feature. The fact that it was so deep, extending to around 180 cm. below datum, however, suggests that it was contemporaneous with Feature A.

Transit readings indicate that present day ground level around Mounds A and B is approximately .50 MBSD and sterile subsoil under Mounds A and B occurs at around .70 MBSD. The surface of Stratum 2 in Mound B occurs at about .10 MBSD, indicating that the deposit itself constitutes

a mound. The lenses of shell within it indicate that it accumulated as a result of in situ habitation. Feature A, the underlying pit, and the charcoal-filled posthole are probably the products of this habitation.

Feature B may be a burial chamber; it is probably a rectangular pit excavated 40 cm. into Stratum 2 and lined with upright posts. Cut 3 just caught the eastern end of it and encountered no human bones or artifacts that might be interpreted as grave offerings. Pit fill, Stratum 3, is difficult to interpret. If it is soil that filled the pit only after the collapse of the burial chamber roof, there should be stratigraphic indications of this. Instead, its surface is horizontal and level with the top of Stratum 2. It looks like intentionally deposited fill. Strata 4 and 5 doubtless represent mound fill.

In summary, it appears that Mound B began as a low habitation mound. At some point, this was converted into a burial mound with the excavation of one, perhaps several, burial pits into the occupation deposit, and the subsequent addition of 60-80 cm. of fill. Finally, a large number of burials were intruded into this fill.

Cultural Stratigraphy

Only 24 sherds were recovered in the excavation of Levels A, B, and C (Tables 18, 19). Of the 5 diagnostic

sherds in this collection, all were Issaquene phase types.

Level D yielded a slightly greater quantity of sherds, but only one sherd, a specimen of Beldeau Incised, var. Beldeau, was diagnostic. Beldeau is characteristic of the Balmoral phase. Level D intersected the top of Stratum 2, and the larger sherd collection probably reflects this fact.

Stratum 2 was excavated in Levels E, F, and G. This stratum yielded a large artifact collection with sherds representing three phases, Issaquena, Marsden, and Balmoral, present. Cultural stratigraphy within the stratum is virtually non-existent. There is a slight increase in identifiable Issaquena sherds from Level E to Level G and a slight increase in identifiable Marsden and Balmoral sherds from Level G to Level E, but the total number of such identifiable sherds is too small for reliable conclusions.

Feature B is stratigraphically the latest deposit encountered in Levels E through G. Since Balmoral phase is the latest component represented in Cut 3, and sherds of that phase are distributed throughout Levels E through G, it is probable that Feature B dates to this occupation. This means that the Stratum 2 midden probably accumulated during the Issaquena and Marsden occupations. Support for the latter phase-strata correlation comes from the radiocarbon date of A.D. 560 ±, which compares favorably

with assumed dates for Marsden phase in the Upper Tensas Basin (Williams 1964:Fig. 1).

With Feature B identified with the Balmoral component at Canebrake, it is likely that mound fill Strata 4 and 5 also date to that occupation. The burials removed from these 2 strata by Moore, date to the Fitzhugh phase occupation on ceramic grounds, and are, no doubt, intrusive into the Balmoral phase mound.

Total Site Analysis

Settlement Pattern

Moore describes Mound C at Canebrake as follows:

> Mound C was of black soil above a base-line about 6 inches in thickness, in which were mussel shells and other debris. Below the base-line was an undisturbed mixture of sand and clay. Above the black part of the mound was a superficial layer of mixed, yellow clay. Both the upper and lower parts of the mound varied somewhat in depth, and it was evident that the lower part had been made and lived upon and that later the mixed, yellow clay had been placed above it and around it so that the depth of this yellow clay was greatest at the marginal parts of the mound. Measurement taken nearly at the center of the mound showed the upper layer of yellow clay to be about 2 feet thick, and the dark soil beneath it to have a thickness of about 3.5 feet.
>
> Eleven trial-holes, some of which, later, were greatly increased in size, were carried down to and below the base of the mound, reaching first and last, nineteen burials, the deepest 3 feet 8 inches from the surface, and all in the black, lower layer.
>
> All these burials had been made prior to the addition to the mound, inasmuch as there was no

sign of the yellow clay in the graves in the dark soil (Moore 1913:52-53).

Mound C was leveled a few years prior to LMS investigations at Canebrake. Although a slight rise marking the former location of the mound was still evident in 1964, no exploratory excavations were undertaken as this part of the site was planted in cotton. A surface collection from the area produced abundant sherds of four phases: Issaquena, Balmoral, Routh and Fitzhugh. Issaquena phase pottery was in the majority.

According to Moore's description, Mound C seems to have been simialr to Mound B in construction. The lowest stratum was a dark midden containing mussel shell and burials, and it was overlaid by two feet of "mixed yellow clay."[1] Moore states that the burials were not intrusive into the midden from the overlying clay fill, but this does not mean that they were not placed in the midden subsequent to its accumulation. In other words, we may have a situation here like that in Mound B where burials were intruded into an earlier midden, after which mound fill was deposited. With Issaquena and Balmoral pottery present in the surface collection from

---

[1]The fact that the mixed yellow clay stratum was thickest at the margins of the mound could be interpreted to mean that Mound C was of the platform type.

the mound area, it is possible to go further and suggest that Mound C is an Issaquena midden that was converted into a Balmoral burial mound by the addition of burials and mound fill.

Canebrake is a strange site. None of the mounds conform to types that have been previously described in the archaeological literature for the southeast. Mound A, consisting of a sterile mound fill deposit overlain by midden, was probably being used for domestic purposes by the Fitzhugh, Routh, and Balmoral phase site occupants. But was it originally constructed for habitation or for ceremonial purposes?

Mound B, and possibly Mound C, is unique in the author's experience also. Two interpretations of mound stratification can be offered as alternatives to the interpretation presented for Cut 3, but they are rather improbable. Mound B could be entirely a Balmoral phase construction with Stratum 2 being intentionally deposited mound fill, obtained from an Issaquena and Marsden phase midden. The existence of lenses of mussel shell in this stratum, however, indicates that it must be an in situ accumulation.

Both Mounds B and C have certain similarities to Mound A at the Crooks site, 26-H-3 (Ford and Willey, 1940). The midden stratum, and the overlying yellow fill stratum

in Mounds B and C, can be equated with the burial platform and the two mantles respectively in the Crooks mound. No layer of burials occurred on top of the midden-platform in the Canebrake mounds, however, and the platform in the Crooks mound was constructed of sterile fill. The presence of Balmoral phase pottery in the midden stratum of Mound B poses an even more serious problem for this interpretation.

It is evident that Canebrake is not a typical Routh or Fitzhugh phase mound site. The available evidence indicates that none of the mounds were constructed during these occupations. Site use, rather, seems to have been restricted to habitation activities, and, in the case of the Fitzhugh component, burial of the dead. Pre-existing mounds were simply utilized for these purposes. A similar use of pre-existing mounds for burial may be evidenced by Moore's findings at Turkey Point Landing, 24-J-8 (1913: 46-9); Glass, 24-M-2 (1911:381-8); and Oak Bend Landing, 24-M-7 (1911:378-381).

During the Routh and Fitzhugh phase occupations, Canebrake must be classified as an habitation site.

Cultural Stratigraphy

Excavations at Canebrake were disappointing because of the survey party's inability to obtain stratigraphically isolated, single component artifact collections. Five components are represented in the LMS collections from the

site, but the only good instance of cultural stratigraphy occurred in Cut 3. Here, there was no Routh or Fitzhugh phase material, and sherds of the Balmoral component could be assigned with fair reliability to a single stratigraphic unit, Feature B. The major problem encountered in the analysis of the Canebrake material has been component separation. For the most part that task has been accomplished on typological grounds alone.

The Issaquena and Marsden components lie beyond the scope of this thesis and because there is no problem in sorting sherds into these two categories, they require no further comment.

The Balmoral component is represented by a fairly large sherd sample in which there are a number of diagnostic types including Coles Creek Incised, vars. Mott and Blakely; Sicily Island Incised, var. McNutt; Baytown Plain, var. Vicksburg; and the "Vicksburg" rim mode. There is, furthermore, some stratigraphic evidence for the existence of the component. In Cuts 1 and 5, it is most strongly represented in the lower levels (B and C) within Stratum 4; and in Cut 3, it is apparently associated with the pit, Feature B, intrusive into an Issaquena and Marsden phase midden.

There is some evidence that the component is late within the Balmoral phase. This evidence can be summarized as follows:

1. Baytown Plain, var. Vicksburg, and the "Vicksburg" rim mode are poorly represented.
2. The "Crippen Point" bowl, a marker for the Crippen Point phase in the Lower Yazoo Basin, is present.
3. There is no Coles Creek Incised, var. Greenhouse and Campbellsville.
4. Coles Creek Incised, var. Hardy, is relatively common.
5. Coles Creek Incised, var. Mott, is poorly executed and grades into Hardy.
6. Mazique Incised, vars. Mazique and Kings Point, are absent.
7. Beldeau Incised, var. Beldeau, is characterized by either small diamonds with single dot punctation or large diamonds with multiple dots punctation.

These features and their significance are discussed in Chapter III. Here, it need only be noted that many are suggestive of developments in the Crippen Point phase, in the Lower Yazoo Basin. Crippen Point follows Kings Crossing phase in the Lower Yazoo Basin, and the latter is apparently contemporaneous with Balmoral phase in the survey area.

One further ceramic item requires comment at this point--the single sherd of L'Eau Noire Incised, var. Bayou Bourbe, found in Level E of Cut 3 (Plate III, 9). This sherd can be assigned to the Balmoral component on stratigraphic and typological grounds. It has paste similar to Baytown Plain, var. Vicksburg, the shape of the "Vicksburg" rim mode, and fine engraving and excision similar to an unidentified type with curvilineal decoration occurring in Balmoral phase contexts at the Balmotal (24-L-1) and Point Lake (23-L-16) sites.

The Routh component at Canebrake is recognized solely on typological grounds. Excavated and surface collections have yielded 3 specimens of the mode, "Delta City" bowl, and 9 specimens of the mode, "Preston" bowl. These are characteristic of the Routh phase and are not found in late Fitzhugh phase collections. Most of the other types and modes in the Canebrake collections, that are characteristic of Routh phase, carry over into the Fitzhugh and Balmoral phases, and can not, therefore, be definitely assigned to any one component without the aid of stratigraphy. These include Coles Creek Incised, var. Hardy; Mazique Incised, var. Preston; all the clay-tempered Plaquemine decorated types; and many of the Baytown Plain, var. Addis, modes.

The Fitzhugh component is represented in sherd collections from Cuts 1, 2, 4, and 5, and by the burials

Moore excavated from Mound B. Fitzhugh phase endures for several centuries in the southern part of the Survey Area, probably 300 to 400 years. During this time, the ceramic complex undergoes changes that are both qualitative and quantitative in nature. These are described in Chapters IV and V. Here it need only be noted that these changes are manifest in the Fitzhugh component at Canebrake, and that the component is, therefore, probably late within Fitzhugh phase. The specific traits in the Canebrake collections relevant to this question are: abundance of shell-tempered pottery; abundance of the "late Tunica" rim mode; and presence of the types Barton Incised, vars. Atherton and Stowers, Winterville Incised, var. Winterville, and L'eau Noire Incised, var. Paine. Two pottery types occurring at Canebrake, Cowhide Stamped and Hudson Engraved, are found in historic context in the Lower Ouachita Basin and support the contention that the Fitzhugh component is late.

The true proportion of shell-tempered to clay-tempered pottery in the Fitzhugh component is difficult to estimate because of the presence of a Routh phase component. Some of the Baytown Plain, var. Addis, and clay-tempered decorated sherds listed in Table 19 no doubt belong to that phase, but, how many cannot be determined. Most of the plain ware modes diagnostic of Fitzhugh phase ("Walnut Bayou" bowl, "Tunica" rim, "Yazoo" bowl), however,

are clay-tempered, so we are not dealing with an entirely shell-tempered, hence Transylvania phase, component.

The thirty-four vessels that Moore obtained from burials in Mound B would make an important addition to our knowledge of Fitzhugh phase at Canebrake were they available for study. Unfortunately, Moore illustrates only four. These can be classified as follows:

Figure 20 - Fatherland Incised, var. Fatherland.

Figure 22 - Hudson Engraved

Figure 23 - Fatherland Incised, var. Fatherland

Figure 24 - Winterville Incised, var. unspecified

Moore describes a fifth vessel from Mound B as follows:

> A bottle from this mound, which has seen much better days and at one time may have presented a rather striking appearance, still bears traces on upright bands, of cream, black, and red, alternately (ibid.:52).

This description conforms to the characteristics of Avenue Polychrome, var. Avenue (Phillips 1970:41).

In a footnote to the above description, Moore states that he donated the polychrome bottle and "other vessels" to the Louisiana State Museum in New Orleans. The present author visited this museum in November, 1966, and found 13 whole and fragmentary vessels attributable to Moore. The provenience data for these specimens, unfortunately, was either non-existent or unreliable. The museum catalogue and accession files referred to the

collection only as having come from Louisiana and having been donated by Moore. Almost all whole vessels and large fragments bore numbers in ink that ranged from 87 to 165 with most occurring in the 148-159 range. In several cases, two fragments of the same vessel bore different numbers. The author has tried to determine the significance of these numbers through the Museum's record, through Moore's fieldnotes located at the Heye Foundation in New York, and by calculating the order in which artifacts were obtained by Moore in the 1912-13 field season. None of these attempts succeeded.

Two shell-tempered plain bowls were accompanied by cards stating they were from "Canebrake Mounds, Madison Parish," and one vessel of Mazique Incised, var. Manchac, contained a card stating that it came from "Turkey Point Landing" a site two miles south of Canebrake. The storage conditions in which the author found the Moore collection were such that there can be no assurance the cards were with the correct vessels.

The Avenue Polychrome vessel which led the author to the Louisiana State Museum, was never found. The collection of vessels he did find included the following types: 4 small, shell-tempered bowls; 1 shell-tempered bottle with incised, punctate-filled triangles pendant from the throat; 6 Cowhide Stamped jars; 1 Mazique Incised,

var. Manchac, beaker; and 1 Maddox Engraved, var. Emerald, beaker. The most interesting vessels are those classified as Cowhide Stamped.[1] The LMS collections from Canebrake include a few sherds that definitely are of this type. It is possible, therefore, that the 6 Cowhide Stamped vessels in Moore's collection are from Canebrake. The occurrence of this type is of interest because its center of distribution is apparently in the Lower Ouachita Basin.

Preston (24-J-24)

Site Description

The Preston site is located in Franklin Parish, 100 meters south of the Madison Parish line and 100 meters east of Louisiana Highway 610 (Fig. 33). In 1964, land upon which the site is situated was owned by Mr. J. Preston and leased by Mr. D. Temple, both residents of the area. Topography in the vicinity of the Preston site can be attributed primarily to the fluvial activity of ancient Arkansas River channels. According to Fisk (1944:45 and Plate 15, Sheet 3) the Arkansas River flowed along the eastern edge of Macon Ridge for one thousand years or more prior to A.D. 1 and formed what he calls the Bayou Macon meander belt ridge. Bayou Macon, which follows this

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[1] This type is described in Chapter V.

meander belt south from the latitude of Delhi, Louisiana, passes 1.5 miles west of the Preston site today.

The site is situated on the crest of a low, north-south oriented ridge that is approximately one meter in height (Fig. 40). This feature does not appear on the 1958 edition of the Winnsboro, Louisiana, quadrangle map, but is plainly visible on USDA aerial photographs as part of a series of concentric ridges which can be interpreted as the meander scroll of an Arkansas River meander loop (Fig. 33). The ridge upon which Preston is situated apparently represents the natural levee formed on the outside bank of the meandering channel at its point of maximum lateral expansion.

A small "intermittent" stream cuts through the levee ridge immediately south of the site. This stream, draining the flank of the Bayou Macon meander belt ridge, flows eastward and empties into Big Lake, 2.5 miles south of 24-J-24. Similar streams exist to the north and south, and the entire drainage pattern reflects the existence of a large backswamp lying between the Bayou Macon and the Tensas River meander belt ridges.

The Preston site consists of three midden deposits that are ranged along the levee ridge for a distance of over 100 m. These deposits, designated Locations A, B, and C, are actually low mounds with elevations of 30 cm.,

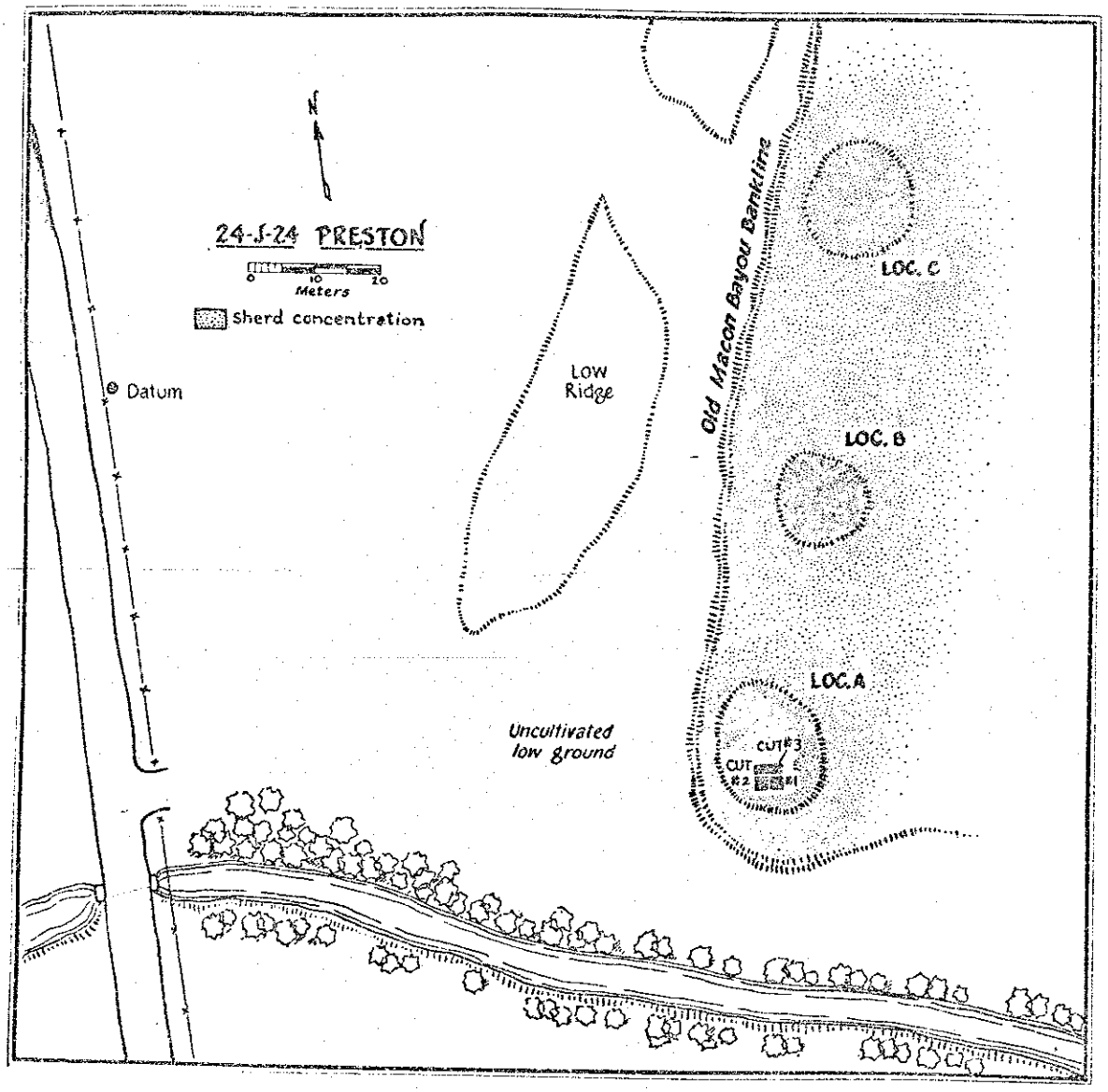

Fig. 40.--Preston. LMS site map

25 cm., and 25 cm. respectively, and diameters of approximately 15 m. Each is further characterized by a darker soil color and a surface concentration of animal refuse and artifacts. Artifacts are, however, found over an area slightly greater than that covered by the three rises, a result no doubt of recent cultivation. These rises can be detected on the USDA aerial photographs as circular areas of slightly darker shade than the surrounding levee ridge soil.

Site Investigation

When the LMS began preliminary surveying in the 24-J (Winnsboro, Louisiana) quadrangle in June, 1964, Mr. Preston informed us of the existence of a "shell midden" on his land which he had noticed the previous year while dredging an adjacent intermittent stream. The advance survey party visited the site and made a large surface collection of artifacts. Preliminary analysis of this collection indicated that there were late Coles Creek and early Plaquemine components at the site, and the decision was made to excavate some trenches late in July.

Site datum, a brass pipe with identification cap, was sunk just east of the road next to a telephone pole. Utilizing this point, the site was mapped with a transit.

At the time of investigation in late July, all but the southern end of rise A was planted in cotton.

Excavation was therefore limited to the uncultivated portions of rise A. A posthole sounding here encountered 35 cm. of heavy clay midden lying immediately below ground surface. Cuts 1 and 2, each 2 meters square, were placed next to this sounding and eventually a third cut, measuring 1 x 4 meters, was placed immediately to the north.

Cuts 1, 2, and 3 (Figs. 41-43)

Cuts 1-3 were located adjacent to one another on the southern portion of rise A. Ten centimeter bulks were left standing between them for the purpose of profile drawing. All cuts utilized the same local datum of 1.08 MASD and all were excavated in 20 cm. levels. Natural stratification was essentially similar for all, and it is therefore possible to describe them as a unit.

Stratum 1 - Yellow clay

Except where this stratum underlay Stratum 2, its upper surface was difficult to determine. Stratum 1 was sterile and Stratum 3 contained cultural material, but otherwise the two deposits graded imperceptibly into one another. No sounding was made from the bottom of the cut and as a result it is known only that Stratum 1 continues to a depth of at least 80 cm. below datum.

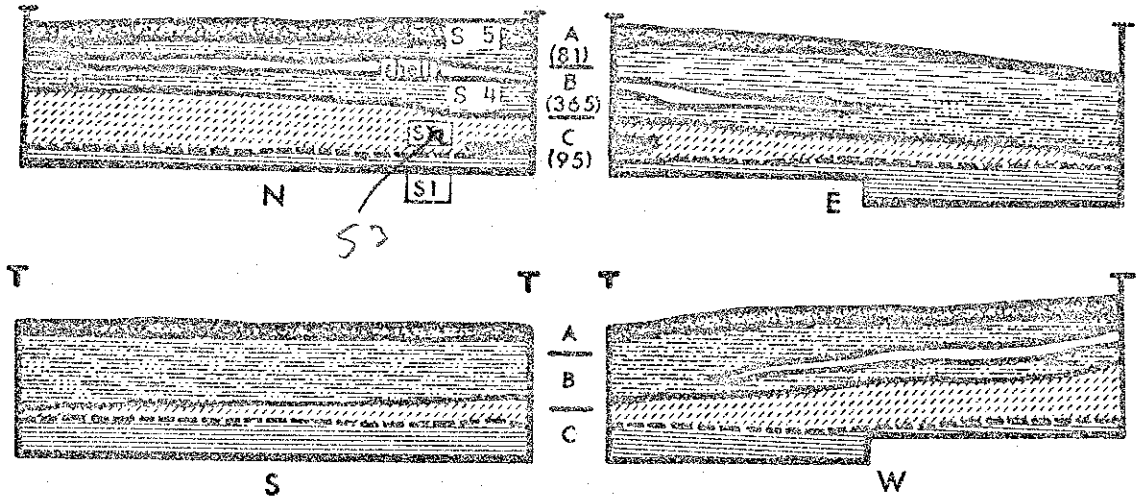

Fig. 41.--Cut 1 profiles

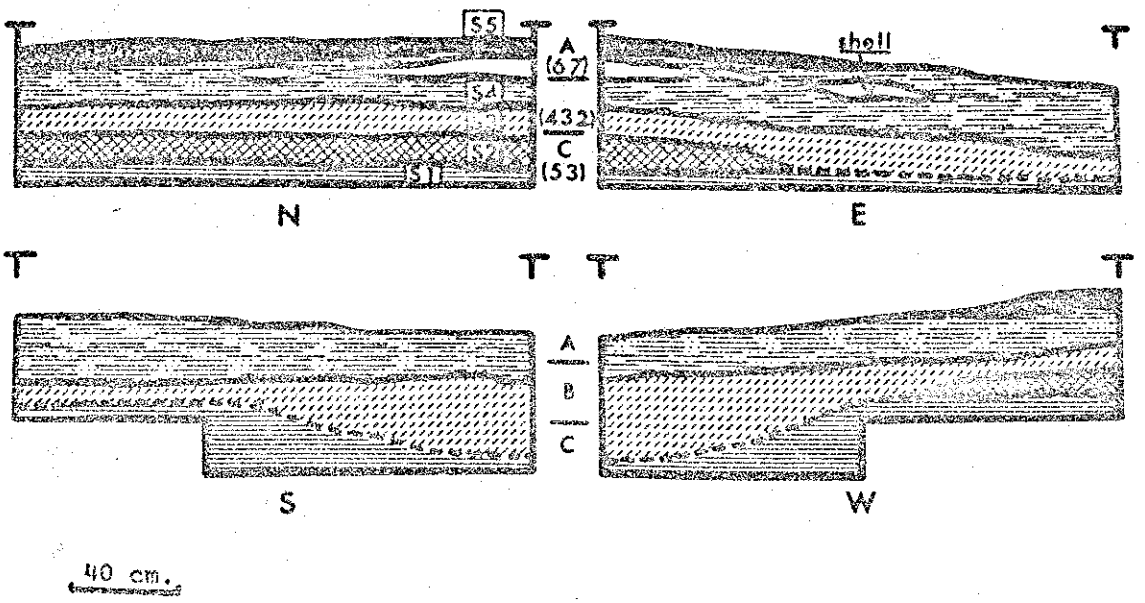

Fig. 42.--Cut 2 profiles

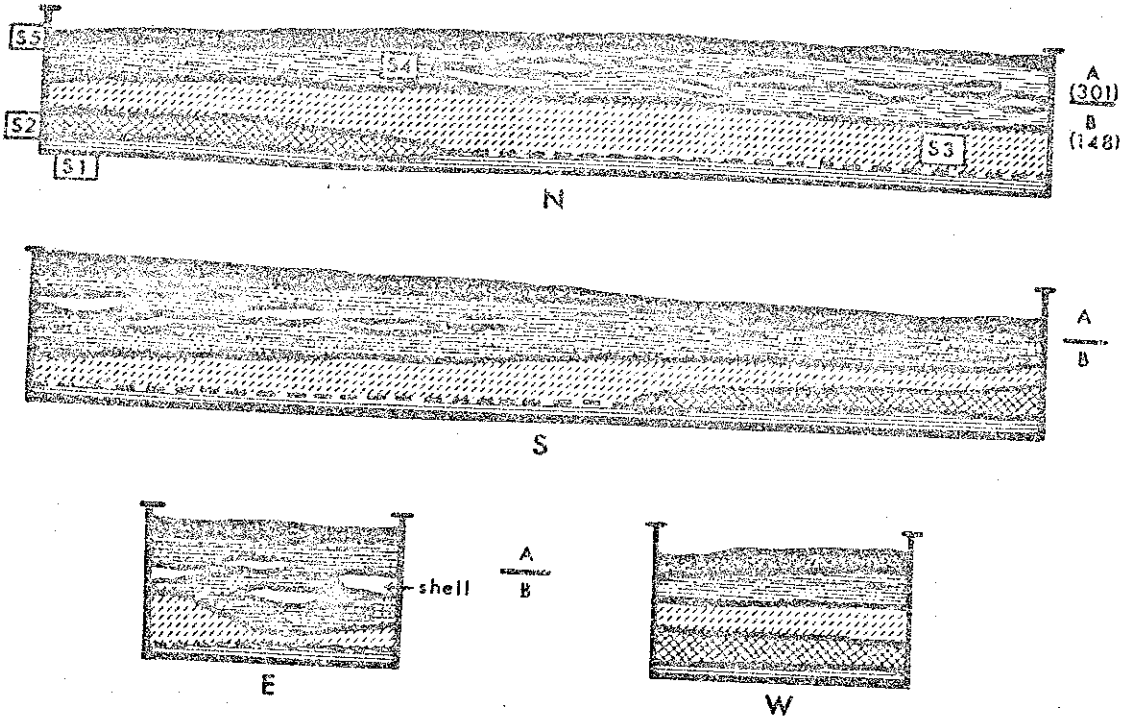

Fig. 43.--Cut 3 profiles (Preston)

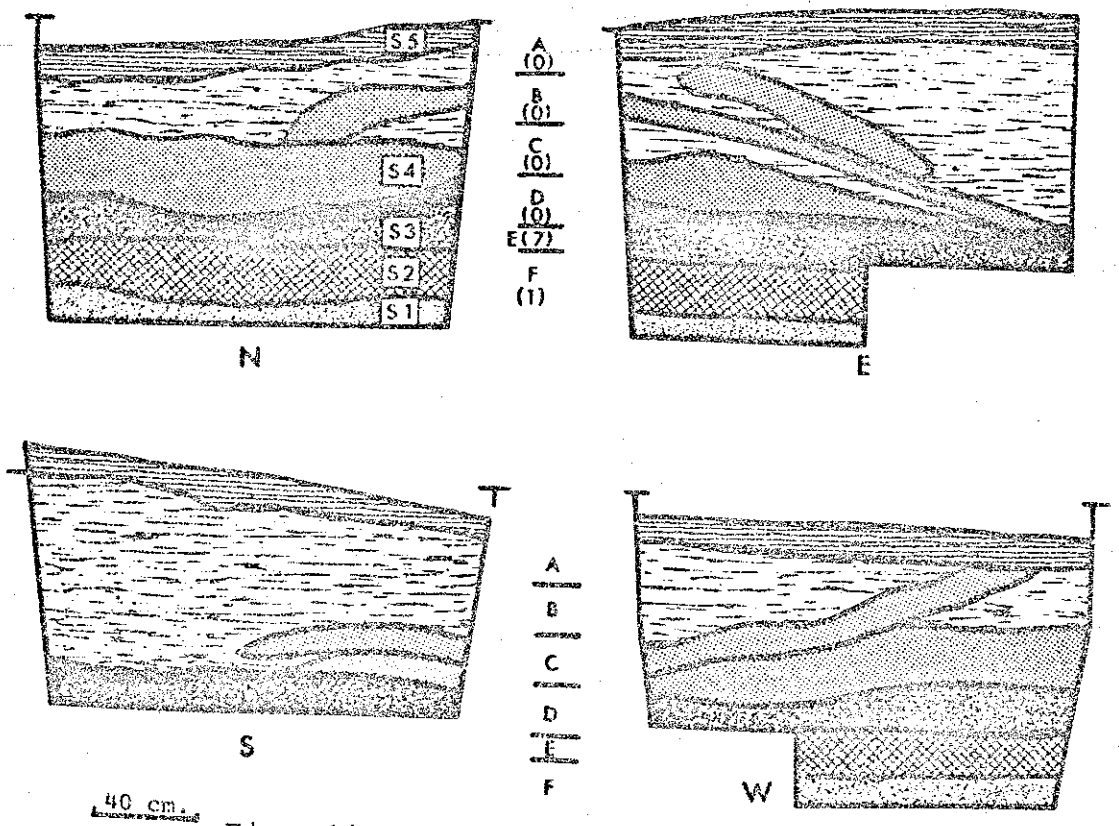

Fig. 44.--Cut 3 profiles (DuRosset)

Stratum 2 - Dark gray clay

This 10 cm. thick stratum occurred only in the northern portion of Cut 2 and the western portion of Cut 3 where it immediately overlay Stratum 1. It could not be determined whether or not the deposit was sterile.

Stratum 3 - Light gray clay

This stratum occurred throughout the three cuts and directly overlay both Strata 1 and 2. In Cut 1, it increased in thickness from 5 cm. in the south to almost 25 cm. in the north. Sherds were definitely obtained in small numbers from the deposit and at least one lens of fired clay occurred within it (Fig. 41, n, e). In the southwest corner of Cut 2, a shallow depression in the surface of Stratum 1 was filled with this material. There was no evidence that this feature was a man-made pit, although it could very well have been.

Stratum 4 - Black clay midden

The single most distinctive deposit in the 3 cuts, this stratum was characterized by its black color, abundant pottery, animal bones, and lenses of shell. Average thickness of the deposit was about 25 cm., but it appeared to be thinning out to the northeast. Although rather extensive lenses of mussel shell were present in the stratum in Cuts 1 and 2, there is evidence that recent plowing had

disturbed the midden in Cut 3. In the latter, shell was scattered, and a depression in the bottom of Stratum 4, running the length of the cut, probably represents a plow scar. This depression lined up exactly with the plow rows of the current year's cultivation. Apparently, Cut 3 marks the southern limit of plowing.

Stratum 5 - Dark brown sandy soil

A thin layer of coarse textured soil overlay the midden stratum in all cuts.

Interpretation of Stratification

Stratum 1 is undoubtedly a natural deposit laid down prior to site occupation. It was encountered to a depth of .38 MASD in the excavations but whether the ridge is composed entirely of this material is unknown. If the ridge is indeed a natural levee of the Arkansas River, it should be composed of coarser material.

Strata 2 and 3 are probably of human origin. The occurrence of artifacts and the lens of fired earth in Stratum 3, point to this conclusion as does the slight depression in Cut 3. Both strata may represent fill deposited to create a low mound for occupation. Cuts 1-3 were located on the southern flank of Mound A. The surface of this mound is higher a few meters north of the cuts. Strata 2 and 3 are either thicker or present only in the

northern part of the excavated area, indicating possibly that mound build-up was greater in that direction.

Stratum 4 represents an occupation deposit. Because of the clay soils and frequent rains during excavation, it was not possible to detect posthole and similar features emanating from this stratum. The abundance of shell and animal bone in this stratum, however, attest to its true nature.

Cultural Stratigraphy

The interpretation of cultural stratigraphy in these cuts has been very unrewarding. To begin with it is almost non-existent due to: the shallowness of cultural deposits which range in thickness between 15 cm. and 30 cm.; plow disturbance of the midden in Cut 3; and the fact that sloping strata in Cuts 1 and 2 cut across horizontal excavation levels. Interpretation of cultural stratigraphy has been further hampered by the extremely weathered condition of sherds and the small size of pottery samples which together amounted to only 76 decorated and 1342 plain sherds. The Routh component, in fact, is represented by a sample of 163 identifiable sherds of which only 28 were decorated.

Although components could not be identified on the basis of stratigraphic distribution, it has been possible to sort out pottery complexes on the basis of knowledge

gained at sites where stratigraphy does exist. Two components of Balmoral phase and Routh phase affiliation, have been identified by this means. Sherd counts are presented in Table 20. Identification of the Balmoral component is based on the presence of the marker types Coles Creek Incised, vars. Mott and Greenhouse; Mazique Incised, var. Kings Point; Sicily Island Incised, var. Iberville; and Baytown Plain var. Vicksburg. A Routh phase component can be postulated on the basis of the types Plaquemine Brushed, var. Plaquemine, Mazique Incised, var. Manchac, and L'Eau Noire, var. L'Eau Noire; and the modes "Walnut Bayou" and "Preston" bowl.

The frequency of sherds belonging to the two components suggests that Stratum 4, the black midden, is primarily a Balmoral phase deposit and that the Routh phase occupation may have been rather limited, producing only a thin veneer of refuse above the earlier midden.

A total of ten decorated sherds of Issaquena phase affiliation were obtained in Cuts 1-3. These sherds are limited, with one exception, to the second level of Cuts 1 and 2.

Total Site Analysis

Component Identification

During the initial survey of the Preston site in June 1964, large surface collections were obtained from

ISSAQUENA COMPONENT	CUT 1 A	CUT 1 B	CUT 1 C	CUT 2 A	CUT 2 B	CUT 2 C	CUT 3 A	CUT 3 B	Loc A	Loc B	Loc C
Alligator Incised, var. Alligator					1		1				
var. unspecified									1		
Churuta Punctated, var. unspecified									1		
Evansville Punctated, var. Evansville											1
Marksville Incised, var. unspecified		1							3	1	2
Marksville Stamped, var. Manny										1	
var. Troyville		5			2				2	1	

BALMORAL COMPONENT

Avoyelles Punctated, var. Avoyelles					1		1				
Baytown Plain, var. Vicksburg		4					2		2		
Beldeau Incised, var. Beldeau									1		
Coles Creek Incised, var. Greenhouse		2			2		7	2	13	1	3
var. Hardy		3			3		4		8	3	3
var. Mott		3		1	2	1	1		20	7	6
var. unspecified									1	1	
Evansville Punctated, var. Rhinehart					1		1		7		
Harrison Bayou Incised, var. H.B.								1	2	1	
Mazique Incised, var. Kings Point				1	6				3	1	1
var. Preston		1		2			1		11	5	3
var. unspecified					3				3		2
Sicily Island Incised, var. Iberville		1					1			1	
var. McNutt									1	2	4

ROUTH COMPONENT

Baytown Plain, var. Addis	23	28	28	6	15	1	31	5	232	58	31
"Delta City" bowl									2		
"Preston" bowl							3				
"Walnut Bayou" bowl	1										
Evansville Punctated, var. Sharkey									2		
L'Eau Noire Incised, var. L'Eau Noire	2								3		
var. Anna									5		
Leland Incised, var. unspecified					2		2		1		
Mazique Incised, var. Manchac				1		1	1		8	2	2
Plaquemine Brushed, var. Plaquemine	4	5		3	1		5		39	4	

INDETERMINATE COMPONENT

Baytown Plain, var. unspecified	50	309	66	53	388	50	240	138	2055	1302	1083
Dunkin Incised					2						
Maddox Engraved, var. Maddox									2	1	
Madora Incised, var. unspecified									2		
Weches Fingernail Impressed					1						
Unidentified			1					2	7	2	6

TABLE 20.--PRESTON SITE. CERAMIC COUNTS FOR CUTS 1-3 AND LOCATIONS A, B, AND C

each of the three rises. The counts for these are presented in Table 20. It is apparent from these counts that the two components have different distributions over the site. Pottery of the Balmoral phase occupation is found in nearly equal amounts on all three rises while Routh phase pottery is largely restricted to Location A. The Routh phase pottery distribution is so lopsided that it can be concluded occupation was centered in Location A.

Several diagnostic pottery types and modes not present in the excavated collections, occur in the surface collections. These include the Balmoral phase marker, Sicily Island Incised, var. McNutt, and the Routh phase marker, "Delta City" bowl. The Routh phase pottery complex is filled out by the occurrence of the types Evansville Punctated, var. Sharkey, and L'Eau Noire Incised, var. Anna. All in all the surface collections from Routh supply the additional evidence needed to confirm our component identification at Routh site.

Three pottery types in the Preston collection are difficult to assign to either the Balmoral or Routh components. Coles Creek Incised, var. Hardy, and Mazique Incised, var. Preston, are characteristic of both phases and without stratigraphy cannot be assigned to either component with certainty. Both varieties are well represented in the surface collections from Locations B and C

indicating Balmoral phase affiliation; but some specimens from Location A and the test excavations could date to the later occupation. Most evidence from the Upper Tensas Basin indicates that Medora Incised is a Balmoral phase type. However, two sherds of this type, having definite Addis paste, were collected from Location A. These differ from Medora Incised as defined by Quimby (1951) in having relatively heavy incision and may represent a late Routh phase variation of the type.

A small number of sherds in the Preston collection bear resemblances to the Alto and Bossier focus types, Dunkin Incised, Weches Finger nail punctated, and Maddox Engraved, var. Maddox (Plate II, m, n). It is difficult to assign these sherds to either component, and they are therefore listed separately in Table 20. The Maddox sherds bear a particularly close resemblance to Bossier Focus specimens illustrated by Webb (1948:Plate 11, 1-6).

Settlement Pattern

Preston is undoubtedly an occupation site. Except for the three low rises, no mounds are visible in the vicinity today. While Strata 2 and 3 may be intentionally deposited fill, the existence of Stratum 4 above suggests that domestic, rather than ceremonial, sub-structures were being built. Stratum 4 has several characteristics of an occupational deposit: lenses of mussel shell; abundant

animal, fish and bird bone (Table 21); and abundant stone tools and debris (see Chapter III). Architectural features indicative of domestic structures, however, were not observed in the stratum.

TABLE 21

FAUNAL REMAINS FROM PRESTON SITE

deer	38
raccoon	1
squirrel	1
rabbit	2
fish	5
turtle	2
unidentified	66

If we are willing to grant the domestic nature of Preston site, the three low rises can be logically interpreted as either specially constructed house platforms capped by midden, or as midden accumulations only. In either case, they indicate spatially restricted areas of habitation roughly 15 m. in diameter. This seems adequate space for a single household only.

Another site of a similar nature, New Hope (24-J-27), exists .75 miles northwest of Preston (Fig. 33). This Plaquemine site is characterized by an area of dark soil containing mussel shell and artifacts and measuring 30 m. in diameter. Unlike Preston, this midden area is not elevated. New Hope is located inside the meander scroll with which Preston is associated.

Locations A, B, and C at Preston show up as dark circles on USDA aerial photographs. Two similar features can be seen in these photographs near Preston; one is located on the same ridge as Preston approximately 500 m. to the north and the other is located back from the ridge some 80 m. east of Preston. These features were not noticed until after the 1964 field season and hence have not been investigated on the ground. Given the existence of New Hope and Preston, there is no reason why they should not be occupational sites also.

It is interesting that Preston and New Hope should be located so far away from Bayou Macon (1.5 miles distance for Preston and .5 miles for New Hope) and yet have mussel shell in some quantity. Were these sites actually located so far from water by their occupants or was there water in the meander scar along which they are situated at the time of occupation? Except for minor channel alterations, Bayou Macon is apparently confined to the terminal Arkansas River channel. It is doubtful that that stream ever flowed past the sites. Alternatively, an oxbow lake similar to Hollywood Lake, located on the west side of Bayou Macon, may have occupied the meander scar at the time of site occupation. Unfortunately, these are questions that cannot be answered with the available information.

Du Rosset (24-K-8)

Site Description

The Du Rosset site is located 1.1 miles east of the village of Westwood on the north side of Louisiana Highway 888 in Tensas Parish (Fig. 45). The site is bounded on the northeast by Du Rosset Bayou and on the southeast by Steep Bank Bayou; the two streams merge directly east of the site (Fig. 46). Both bayous are part of a larger drainage system which flows generally east to west and empties into Tensas River.

Two former Mississippi River channels, identified as Stage H and Stage 10 by Fisk (1944:Plate 22, Sheet 11) passed within one mile of the site (Fig. 45). The former, lying one mile to the west is today occupied by the Tensas River. The 10 stage channel lies less than 500 m. east of the site and contains Cypress Bayou. It is most probable that Du Rosset was established on the 10 stage levee ridge and that its relationship to the H stage channel is only coincidental.

The Du Rosset site consists of three mounds. Mound A, located approximately 30 m. west of Steep Bank Bayou, is a low rounded structure 2.10 m. in height and 30 m. in diameter. Mound B, located 80 m. to the southwest of Mound A, also lacks any identifiable shape and is 1.3 m. high and 18 m. in diameter. Mound C lies 200 m. north,

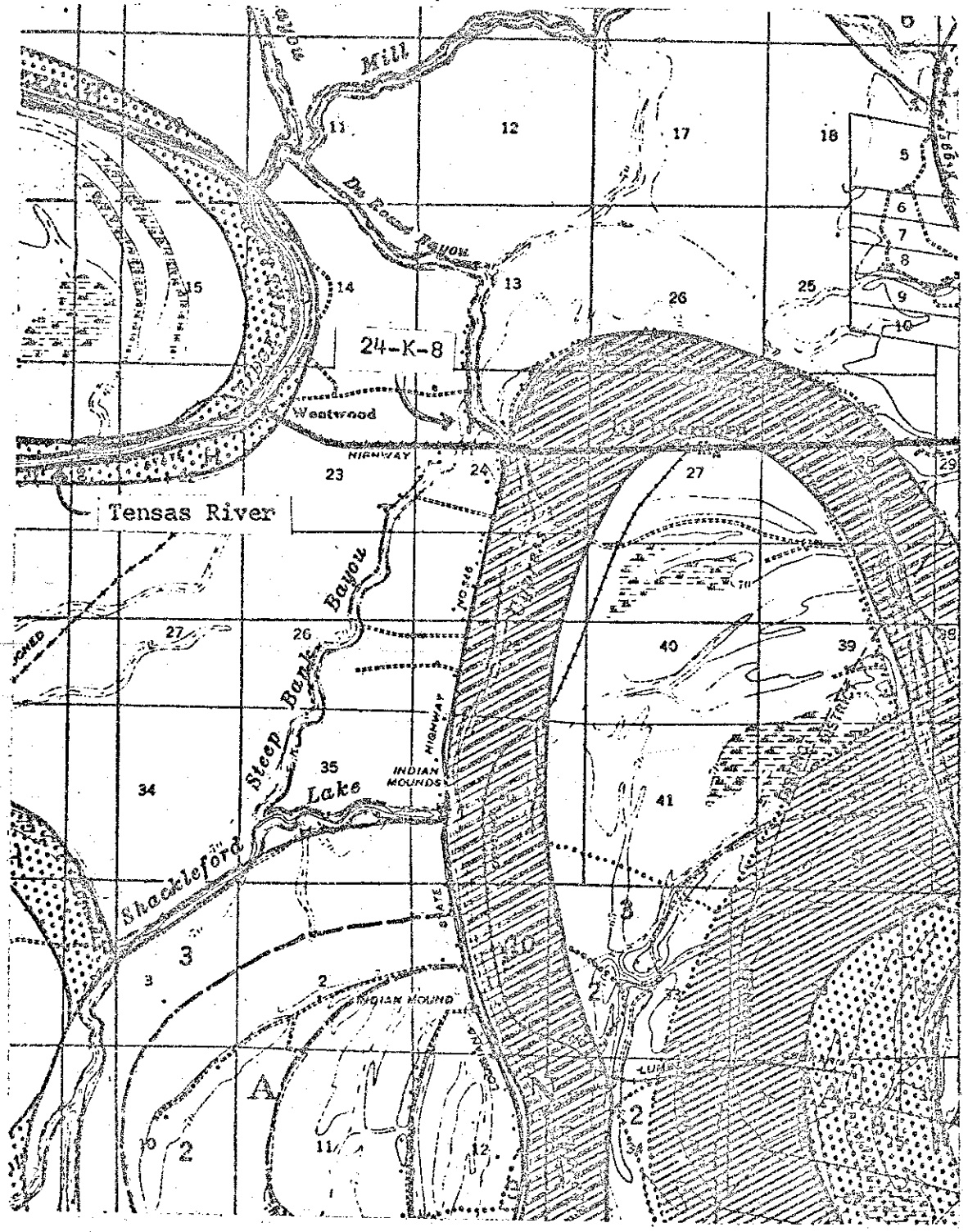

Fig. 45.--Location of DuRosset site

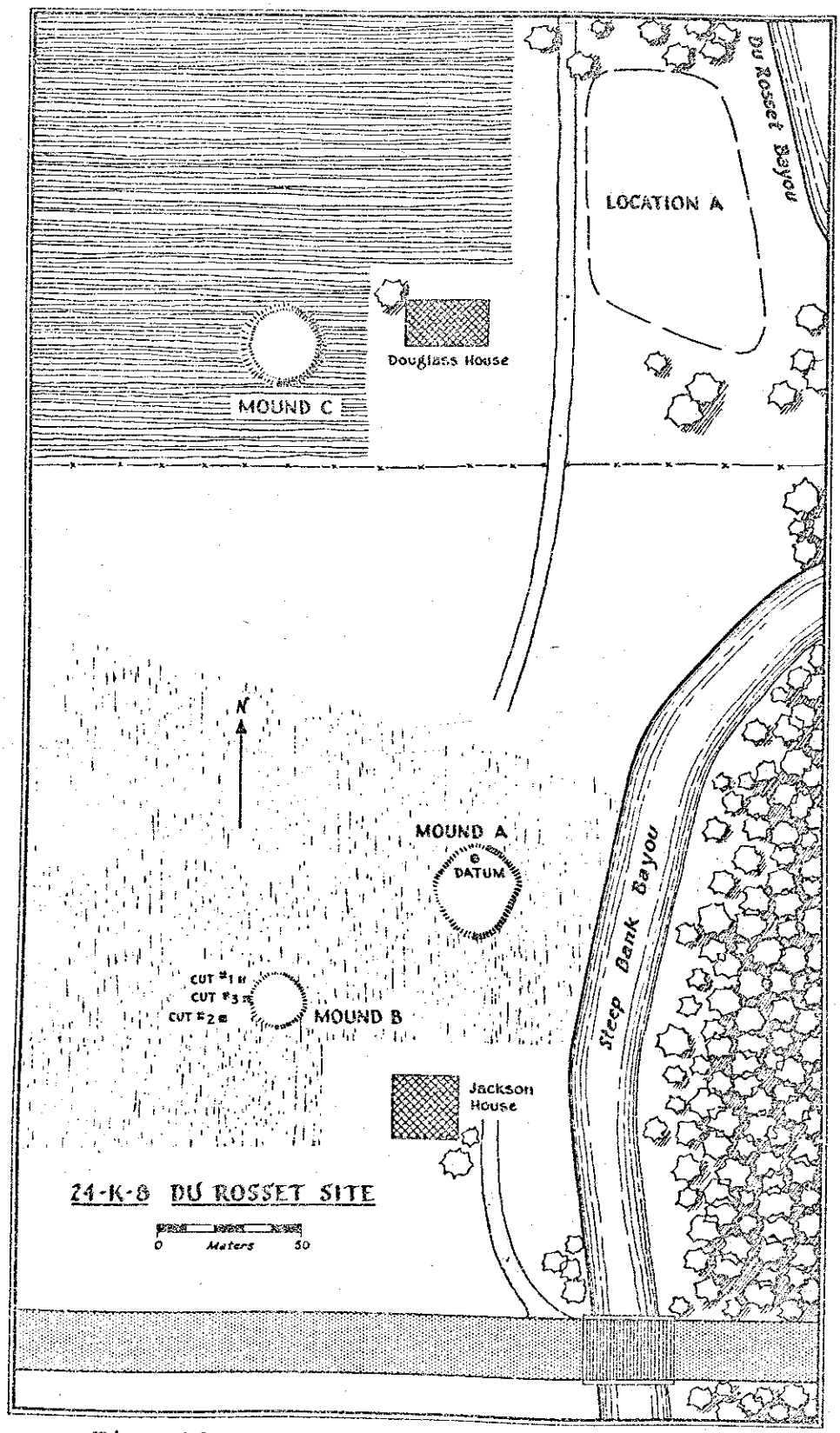

Fig. 46.--DuRosset site. LMS site map

northwest of Mound A and because of this distance may be unrelated to Mounds A and B. Like the others, this mound is amorphous in shape. It is 26 m. in diameter and 3 m. in height.

Site Investigation

The existence of the Du Rosset site was made known to the LMS prior to its initial field season in 1963 by Robert S. Neitzel, then Chief Curator of the Mississippi State Historical Museum. From the beginning, the site was considered a likely candidate for the historic Taensa villages that were believed located on an oxbow lake in the general area of Lake St. Joseph (Williams, 1969:5). A preliminary investigation of the site was conducted early in the 1963 field season, but at that time the site was heavily overgrown with weeds, and surface collecting was quite unproductive. A few Plaquemine culture sherds were obtained from Mounds B and C and some Balmoral phase sherds were collected from a plowed field (Location A) located along the bank of Du Rosset Bayou northeast of Mound C. In all, the evidence for or against an historic date for the site was inconclusive. It was decided, therefore, to continue investigations at Du Rosset by means of test excavations. Pursuant to this objective, a total of 10 posthole soundings were made in the vicinity of Mounds A and B, and in a line running between the two mounds. All

but two soundings were sterile and did not evidence occupation. Midden-like material was encountered in two soundings west of Mound B, and on this evidence three 2 x 2 meter cuts were excavated there.

Site datum, a bronze pipe with identification cap, was placed on the northern flank of Mound A. The site was mapped from this point with the aid of a transit.

Cut 1 (Fig. 47)

Cut 1 was located on level ground a few meters northwest of Mound B. Local datum, the northeast corner of the cut, was 1.10 MBSD. Excavation was by arbitrary 20 cm. levels down through Level D. Below 80 cm. one corner of the square was taken down an additional 40 cm. in order to trace a pit-like feature that was eventually identified as an animal burrow.

Stratum 1 - Mottled yellow silt

This deposit was completely sterile. Its upper surface was level and occurred at 70 cm. below datum (1.80 MBSD). An animal burrow intruded into the deposit from Stratum 4 above in the northwest corner of the cut, and five features identified by the excavator as post-holes were visible in the light colored soil at 80 cm. below datum.

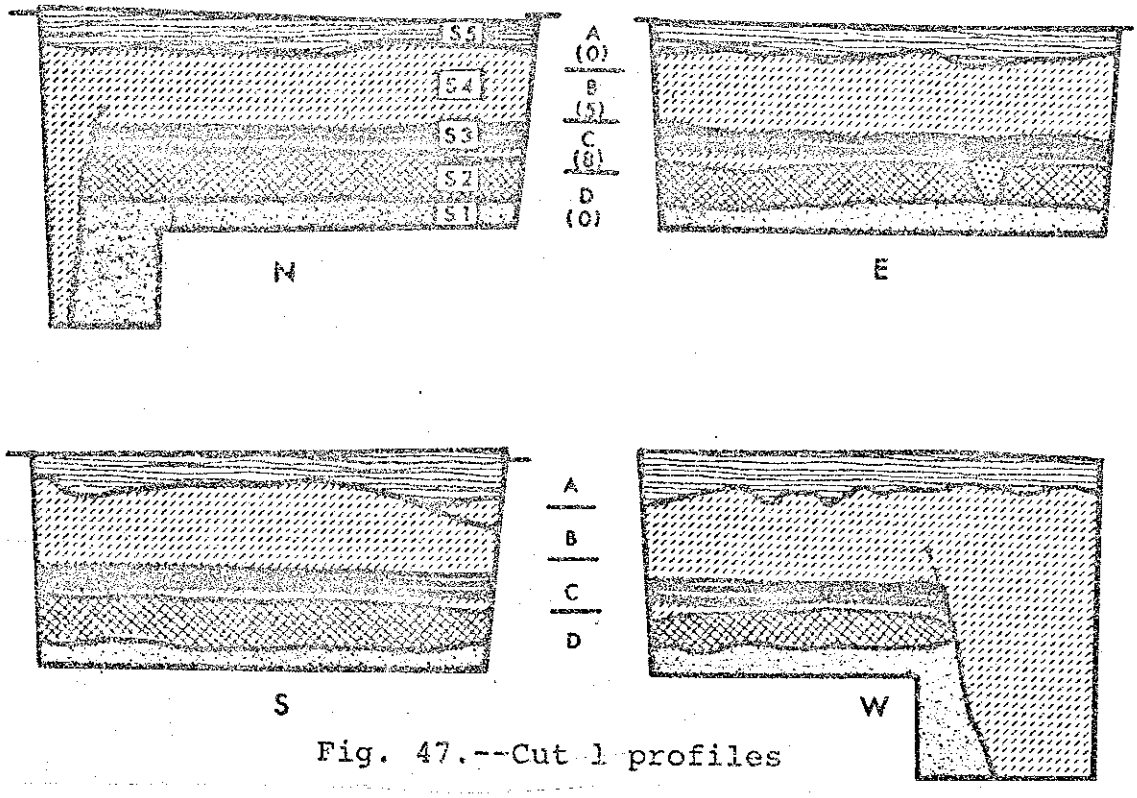

Fig. 47.--Cut 1 profiles

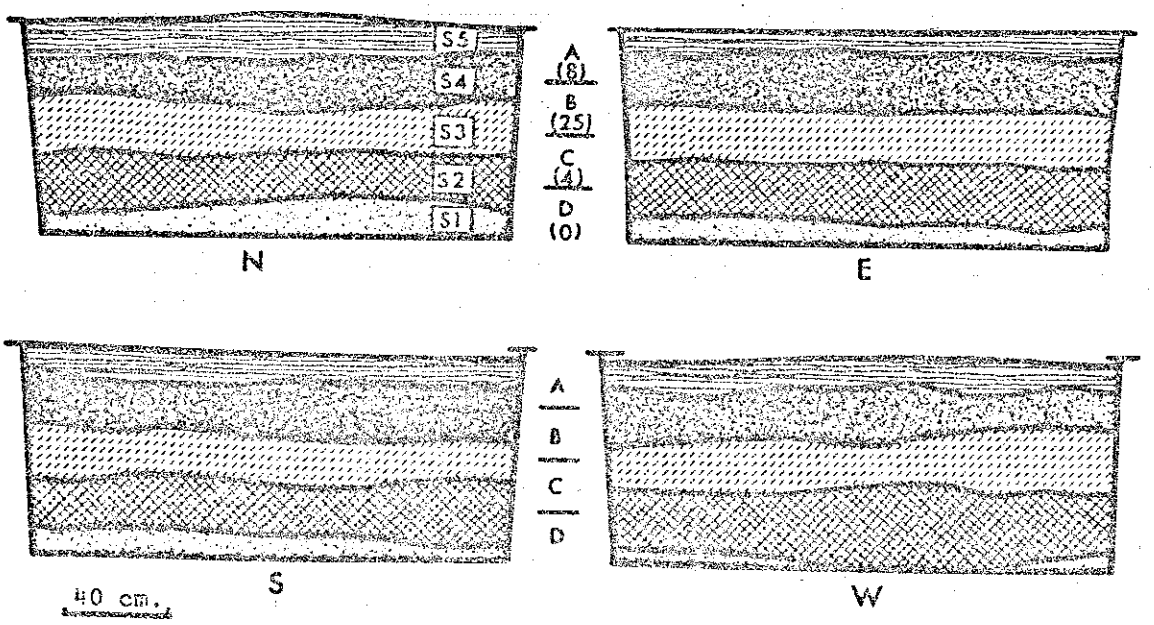

Fig. 48.--Cut 2 profiles

Stratum 2 - Black clay

Indications are that this deposit was completely sterile. Except for a small ash-filled pit intrusive into it from above, there were no cultural features associated with the stratum.

Stratum 3 - Gray and yellow silt lenses

Several thin lenses of silt, alternately gray and yellow in color, directly overlay Stratum 2 throughout the square. Pot sherds occurred in these lenses, but a single posthole-like feature filled with ash extended downward from one of them in the east profile. No other structural features or occupational refuse were found associated with the stratum. The large animal burrow in the northwest corner of the square could not be traced with any certainty above Stratum 3, but it definitely post-dated the deposition of the silt lenses.

Stratum 4 - Mixed yellow silt and gray clay

This stratum overlay Stratum 3 and consisted of a yellow silt mixed with abundant lumps of dark clay. A small amount of cultured material, six sherds and two pieces of fired clay, was obtained from the stratum.

Stratum 5 - Yellow sandy soil

This, the uppermost soil deposit, contained no aboriginal artifacts.

Interpretation of Stratification

Strata 1 and 2 were found throughout the site in test excavations and posthole soundings. In all likelihood they represent pre-occupation alluvial deposits. Stratum 3 is obviously cultural in origin. A few sherds and other artifacts were present as was one small pocket of ash. If the five features seen in Stratum 1 at 80 cm. below datum were correctly identified as postholes, it seems likely that they originated from Stratum 3. Stratum 4 can best be interpreted as mound fill (see Stratum 3, Cut 3) and indicates that Mound B has been greatly reduced in size from its original state.

Cultural Stratigraphy

A total of thirteen sherds were recovered in the excavation of Cut 1 (Table 22). Eleven of these are identifiable as Baytown Plain, var. Addis, and indicate the presence of a Plaquemine component. Their occurrence in Strata 3 and 4 indicate Mound A was constructed during this occupation.

Cut 2 (Fig. 48)

Cut 2 was located on level ground about 10 m. west of Mound B and 12 m. southwest of Cut 1. Local datum, the northeast corner of the cut, was 1.25 MBSD. Excavation was by arbitrary 20 cm. levels.

TABLE 22

DU ROSSET SITE. CERAMIC COUNTS FOR CUTS 1-3 AND SURFACE COLLECTIONS

	Cut 1		Cut 2			Cut 3		Surface Collections		
	B	C	A	B	C	E	F	Md. B	Md. C	Loc. A
BALMORAL COMPONENT										
Coles Creek Incised, var. Mott										2
Mazique Incised, var. Kings Point										1
PLAQUEMINE COMPONENT										
Baytown Plain										
var. Addis	3	8	5	21	4	3	1	22	2	31
"Walnut Bayou" bowl				2						
L'Eau Noire Incised, var. L'Eau Noire			1							
Mazique Incised, var. Manchac								1		
Plaquemine Brushed, var. Plaquemine			2	2				2		1
INDETERMINATE COMPONENT										
Baytown Plain, var. unspecified	2					3		6	3	51
unidentified punctated						1				

Stratum 1 - Mottled yellow silt

This is the same sterile silt that was found in Cut 1. It occurs at approximately the same absolute elevation.

Stratum 2 - Black clay

This stratum also has its counterpart in Cut 1. As in Cut 1, it was sterile and devoid of cultural features.

Stratum 3 - Mottled yellow sandy silt

This stratum had a distinctly courser texture than other strata encountered in the cut. Other than this, there was nothing distinctive about it. It contained a few sherds and one stone flake, but no other indications of human activity.

Stratum 4 - Dark clay midden

This stratum was identified by the excavator as a midden deposit. It is probable that the identification was made primarily on the basis of a sherd content slightly greater than that of other strata encountered in the three cuts. Small fragments of charcoal were scattered throughout the stratum, but there was no animal refuse or other artifactual material present, nor were there structural features.

Stratum 5 - Yellow sandy soil

This stratum was similar to the uppermost deposit in Cut 1.

Interpretation of Stratification

The interpretation of natural stratification in Cut 2 is similar to that of Cut 1 for the two deepest strata. Strata 3 and 4, however, cannot be equated with the mound fill deposit in Cut 1. Their significance is not known.

Cultural Stratigraphy

Thirty seven sherds were recovered during the excavation of Cut 2 (Table 22). All are identifiable as Plaquemine types. Two sherds, belonging to a "Walnut Bayou" bowl with plain rim, provide some evidence that the component is of Fitzhugh phase affiliation.

Cut 3 (Fig. 44)

Cut 3 was placed well up the western flank of Mound B, at a distance of 5 m. from Cut 1. Local datum, the northeast corner of the cut, was .67 MBSD. Excavation was by standard 20 cm. levels to a depth of 80 cm. Level E, the last full level, was 10 cm. thick. Below this point, only the northeast half of the square was excavated.

Stratum 1 - Mottled yellow silt

This is the same stratum as occurred in Cuts 1 and 2. It occurred at 1.80 MBSD.

Stratum 2 - Black clay

This stratum likewise is to be equated with the black clay stratum in Cuts 1 and 2. One sherd was found

near the surface of the stratum and doubtless was intrusive from above.

Stratum 3 - Dark silt with clay lumps

All seven sherds from Cut 3 may be attributed to this stratum. A few pieces of fired earth also were encountered here. A thin lens of gray sand overlay most of the deposit.

Stratum 4 - Mixed silt and clay

All deposits above Stratum 3, with the exception of a thin layer of topsoil, are included in this stratum. These deposits were all silts of varying shades of gray, yellow, and tan, and contained varying amounts of clay lumps. Sloping lenses of these silts could be distinguished within the deposit. No artifacts were present.

Interpretation of Stratification

Stratum 4 undoubtedly represents the sterile fill of Mound A and is similar in most respects to Stratum 4 in Cut 1. Stratum 3 can be interpreted as either mound fill or as a sub-mound occupation deposit.

Cultural Stratigraphy

A total of eight sherds were recovered from Cut 3 (Table 22). Four of these are identifiable as Baytown Plain, var. Addis. Since they all came from Strata 2 and

3 beneath mound fill, it is likely that the mound was erected during the Plaquemine occupation.

Total Site Analysis

Non-occupation Deposits

In addition to the three cuts placed around Mound B, ten posthole soundings were made: four in the vicinity of Mound B, four in a traverse between Mounds A and B, and two between Mound A and Steep Bank Bayou. In all posthole soundings, as in the three test excavations, the deepest stratum encountered was a yellow silt. This stratum occurred between 1.80 and 1.95 MBSD in the three cuts and at approximately 1.70 to 1.80 MBSD in all posthole soundings. This soil probably represents levee ridge deposition by the stage 10 Mississippi River. In all three cuts, a heavy stiff black clay was encountered between 1.60 and 1.80 MBSD. Again this stratum was encountered in the posthole soundings and at a depth of about 1.50 and 1.80 MBSD. This stratum must also be interpreted as a natural deposit because of its area extent. It may be alluvium deposited subsequent to the abandonment of the 10 stage channel by the Mississippi River.

Component Identification

Ceramic counts for surface collections from Du Rosset are presented in Table 22. Three Plaquemine brushed

sherds and one sherd of Mazique Incised, var. Manchac, are present, thus adding one more type, Manchac, to the sparsely represented Plaquemine ceramic complex. Of interest is the occurrence of two Addis sherds in the collection from Mound C. While their presence there is not sufficient evidence for assigning the mound to the Plaquemine occupation, it does, nevertheless, keep the possibility open.

A relatively large surface collection was made in a plowed field east of Mound C along the west bank of Du Rosset Bayou. Plaquemine pottery is present in the form of Baytown Plain, var. Addis, and Plaquemine Brushed, var. Plaquemine, but the collection is dominated by early pottery. Sherds of the type Coles Creek Incised, var. Mott, and Mazique Incised, var. Kings Point, indicate the presence of a Balmoral phase component in this area. Several of the Baytown Plain rim sherds conform to Balmoral standards.

There are no diagnostic Balmoral sherds in the excavated collections from Cuts 1-3, although there are Baytown Plain sherds which are undoubtedly earlier than the Plaquemine component.

In summary, two components can be identified at Du Rosset; one of Balmoral phase affiliation and one of Plaquemine culture affiliation. It is unfortunate that

the pottery collections from Du Rosset are so small. With only one diagnostic vessel mode, "Walnut Bayou" bowl, to work with, it is not possible to identify the phase affiliation of the Plaquemine component.

Routh (24-L-7)

Site Description

The Routh site is located on a narrow neck of land separating Lake Bruin and Lake St. Joseph in east-central Tensas Parish (Fig. 49). It lies one mile south of Louisiana Highway 608 and 3.5 miles southeast of the town of Newellton. The cluster of earth mounds which constitutes the site, is bounded on its southeast and southwest sides by two drainage ditches (Fig. 50). The latter is fairly large and contained water throughout the period of site investigation in 1963 and 1964. Both ditches are relatively recent constructions as they do not appear on the 1939 edition of the Davis Island quadrangle map. On its northwest side, the site is bounded by a broad, northeast-southwest oriented swale that terminates a short distance to the north, but extends over half a mile to the southwest and attains a depth in excess of 2 m. This feature and others with the same orientation are depicted on the Davis Island quadrangle map (1965 edition) to the southwest of the site (Fig. 49). Together these features

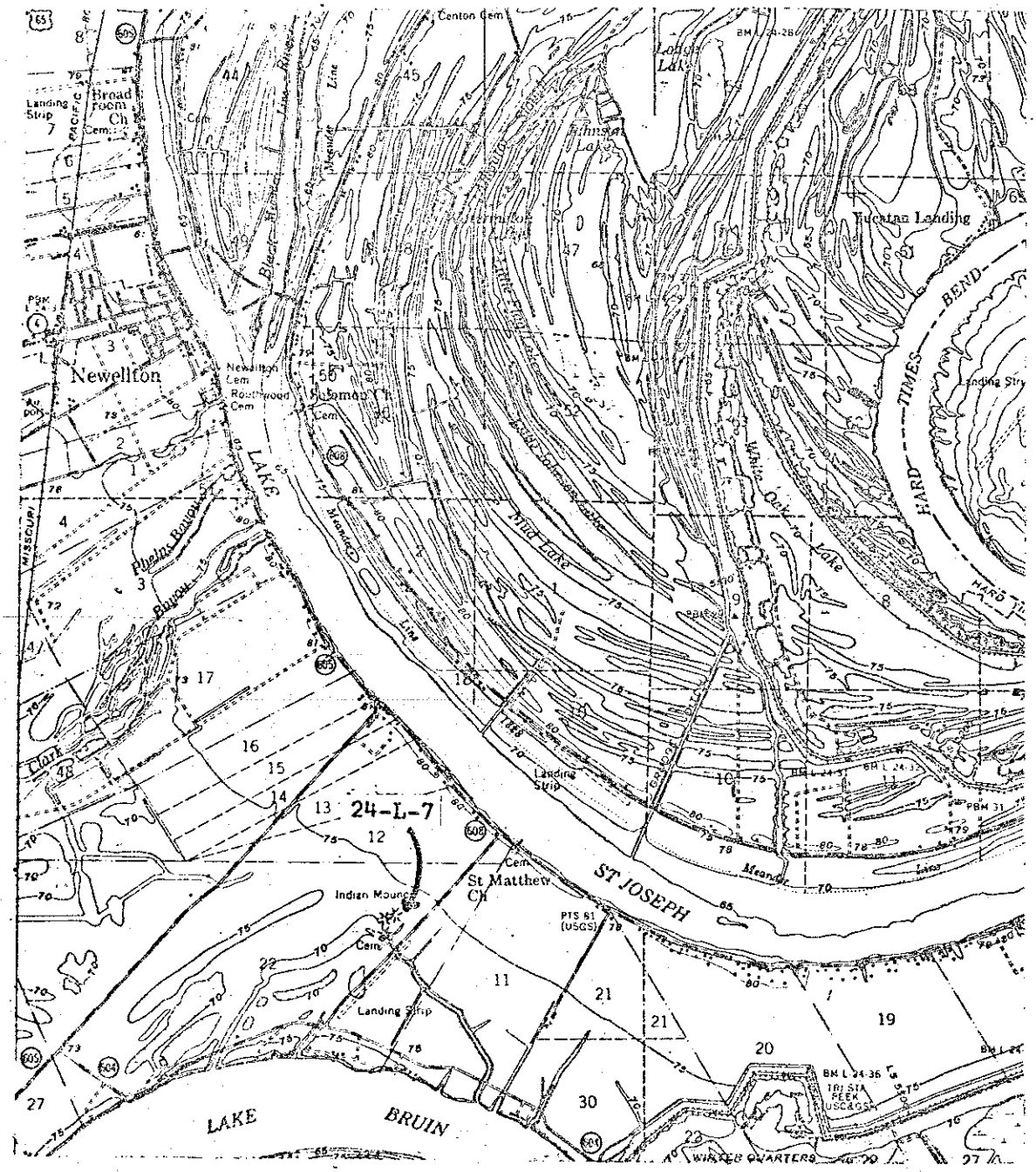

Fig. 49.--Location of Routh site

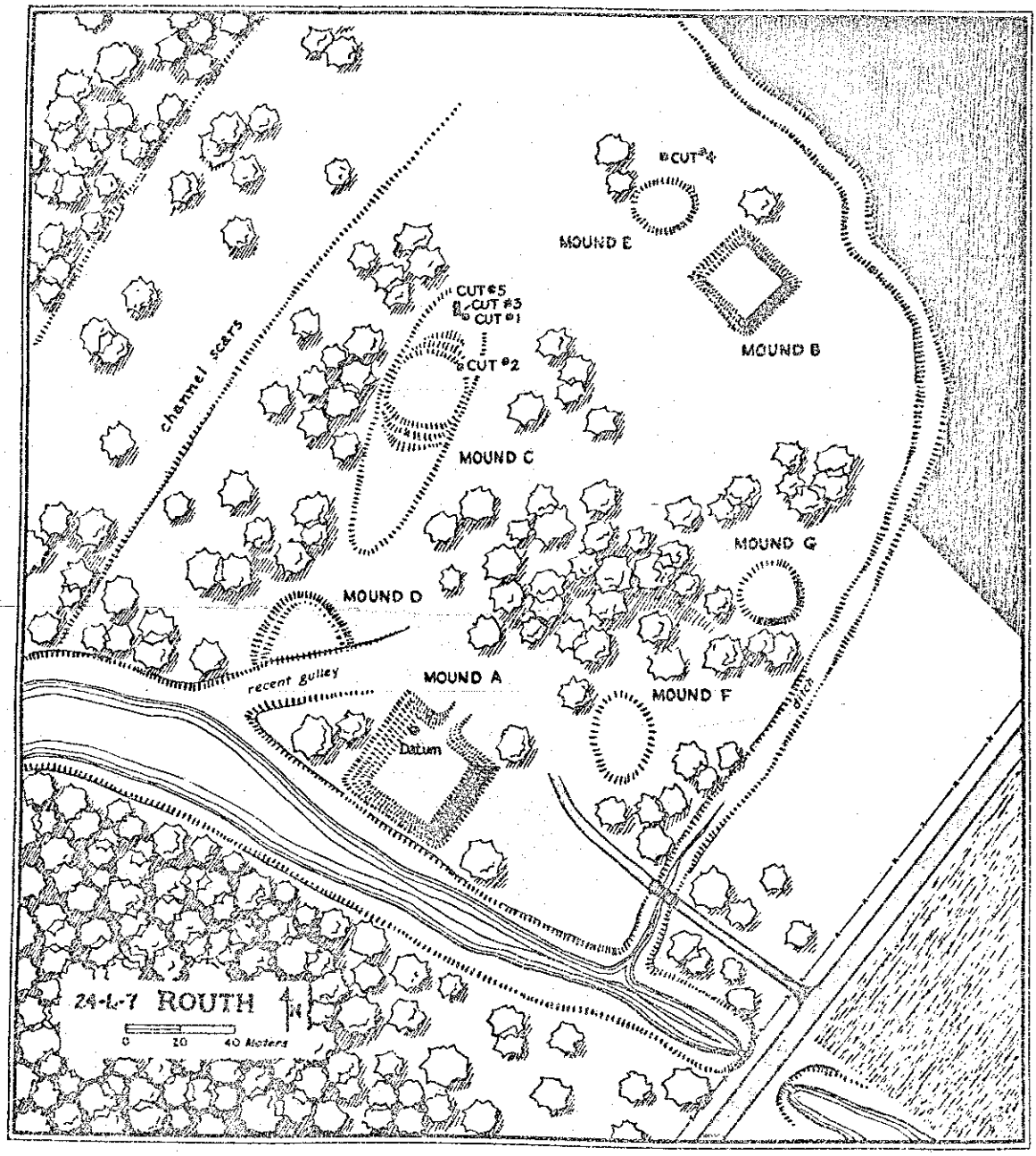

Fig. 50.--Routh. LMS site map

suggest the ridge and swale topography that forms on the inside bend of a meandering river channel.

A total of seven mounds were identified and surveyed by the LMS during its investigations of the site. The dimensions of these are listed in Table 23. These mounds are arranged so as to enclose a plaza measuring 180 m. by 100 m. Assuming that Mounds A and B were intended to be directly opposite each other at the two ends of the plaza, the orientation of the mound-plaza complex can be calculated as 30 degrees east of north. The majority of the site lies within a stand of large pines and has not been farmed in recent years. Only Mounds B and C, lying beyond this stand, were in cultivation in 1963.

TABLE 23

ROUTH SITE. MOUND DIMENSIONS

	Height	Summit Platform Area
Mound A	6.0 m.	45 x 40 m.
Mound B	5.4 m.	32 x 25 m.
Mound C	1.9 m.	100 x 30 m.
Mound D	1.5 m.	36 m. in dia.
Mound E	1.5 m.	
Mound F	.5 m.	
Mound G	.25 m.	

Mound A is a large, well formed platform mound with a ramp visible on its long side facing the plaza. Two large magnolia trees flank the ramp halfway up the mound face and date to the time when a plantation house stood on the mound summit. Mound B lies 180 m. northeast of Mound A and is also a well-preserved platform structure. The summit platform of this mound measures 22 x 20 meters.

Bordering the plaza on the northwest side is a long low ridge that has been designated Mound C. This structure, 100 m. in length and 30 m. in width, possesses a single elevated area near mound center. The entire mound is rounded and rather amorphous in shape, but the raised portion is easily distinguished.

Between Mounds A and C at the southwest corner of the plaza lies Mound D, a rather amorphous structure 1.46 m. in height. The southern half of this mound has been destroyed by a road cut that leads from plaza level down to the drainage ditch. A dark gray clay midden stratum, lying 60 cm. below ground level, was visible in the profiles exposed on both sides of the road.

Mound E is an amorphous rise, immediately northwest of Mound B. A single large pine stands in the center of the mound and it is therefore likely that while the shape of the structure has been obscured by plowing, its present height of 1.47 m. is close to original size.

Along the southeastern side of the plaza occur two very low rises that have been designated Mounds F and G. Mound F is readily distinguishable as a low rise, and a posthole sounding within its limits yielded dark midden soil with charcoal and pottery between 45 cm. and 90 cm. below ground surface. Mound G, on the other hand, is so low as to be largely imperceptible in the low grass that covers the entire site. It was not investigated by means of posthole soundings.

Site Investigation

The Routh site was brought to the attention of the LMS by local residents during the 1963 field season. Prior to this time the existence of the site was unknown to workers in the lower Mississippi Valley. There were, at least, no published descriptions of the site, and there was no record of it in the LMS files.

Investigation of the site was begun toward the end of the 1963 field season. A heavy grass cover over most of the site severely hampered surface collecting, but even in the freshly plowed field surrounding Mounds B and E, surface artifacts were virtually non-existent. In order to augment the resulting meager surface collections, it was decided to excavate a single test cut. Twenty-five posthole soundings were made throughout the site in search of a place to excavate. In addition to indicating the

northeast end of Mound C as a suitable place for excavation, this investigation made it quite clear that rich midden deposits were rare at Routh.

Preliminary analysis of the artifacts obtained in Cut 1 showed two components, belonging to late Coles Creek and Plaquemine phases, to be present. Desiring to increase the sample of Plaquemine material, investigations were continued in 1964 with the excavation of four more cuts. Three of the additional cuts were placed on Mound C near Cut 1 and the fourth was located just off Mound E to the north. Additional posthole soundings were made in 1964, but they only strengthened the conclusion that the site had never been the scene of intensive occupation. The final LMS activity at Routh in 1964 was the mapping of the site by means of transit and steel tape.

Cut 2 (Fig. 52)

A total of four 2 x 2 meter cuts were excavated in the northeast end of Mound C. Three of these cuts, 1, 3, and 5, were placed in close proximity to one another and will be described together. The stratification in Cut 2 is related to that of Cuts 1, 3, and 5, and, because it is more easily interpreted, is described first. The cut is located 16 m. due south of Cut 1 and occurs on the flank of the elevated portion of Mound C. The southwest corner of the square, at 5.27 MBSD, was utilized as local datum.

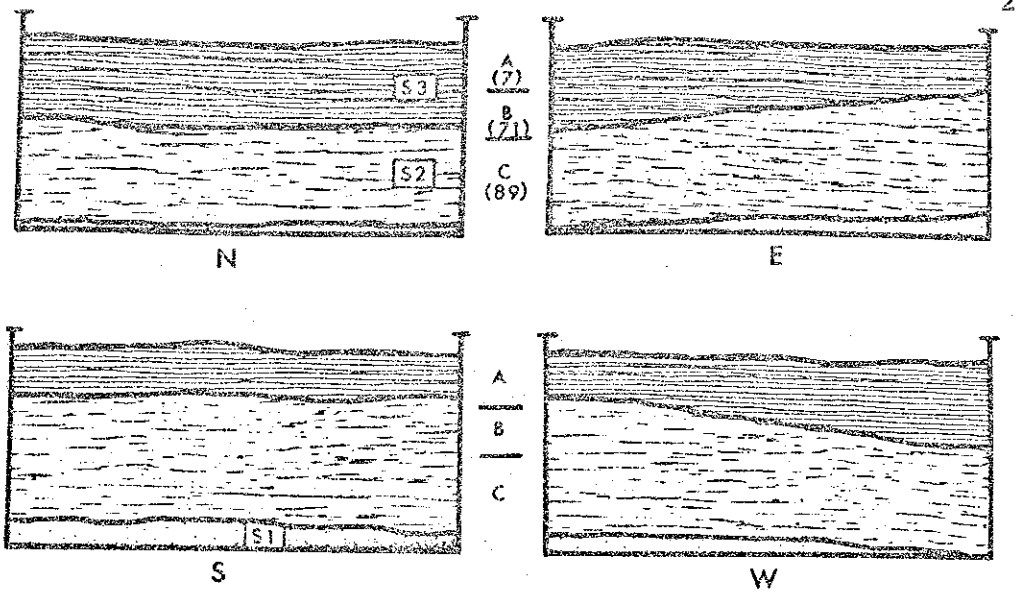

Fig. 51.--Cut 4 profiles

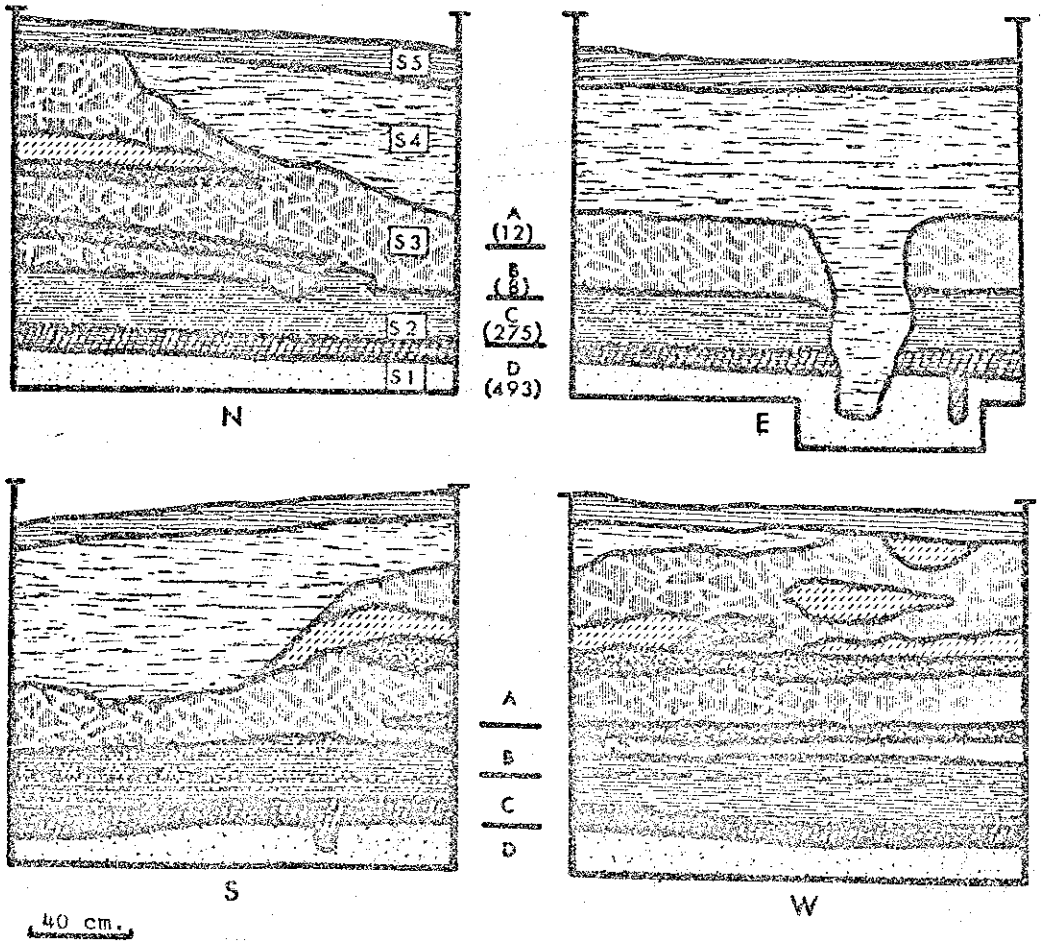

Fig. 52.--Cut 2 profiles

Posthole soundings in the area had indicated a black sandy midden stratum at approximately 1 m. below ground surface with sterile soil above. Level A was therefore excavated as a single unit to a depth of 95 cm. below datum. Levels B through D were all 20 cm. thick. A posthole sounding was made from the bottom of Level D to a depth of 2.5 m. below datum.

Stratum 1 - Tan sandy soil

This was sterile subsoil, occurring at a depth of 6.65-6.70 MBSD. The posthole sounding from the bottom of Level D, encountered this soil throughout its length to a depth of 7.75 MBSD. Several small postholes were visible in the light soil, but they formed no recognizable patterns. Two of them could be seen to originate in Stratum 4 (Fig. 52, e, s).

Stratum 2 - Dark brown sandy midden

The lowest 10 cm. of this stratum were characterized by a slightly darker color and more abundant charcoal, fired clay, and artifacts. Pottery was particularly abundant in this lower zone with nearly 500 sherds obtained in Level D.

No structural features occurred within Stratum 2, but most of the postholes visible in Stratum 1 below probably originated from it. Animal refuse was conspicuously absent.

Stratum 3 - Tan and white clay

This stratum occurred between 15 cm. and 105 cm. below datum and immediately overlay Stratum 2. It was composed of alternating horizontal deposits of tan and white clay in its lower half and what looked like basket loads of similar material in its upper half. The entire deposit was devoid of artifacts.

Stratum 4 - Mottled tan and brown clay

This deposit occurred only in the western part of the cut and between 15 cm. and 60 cm. below datum. The mottled appearance of the deposit suggested basket loading. The stratum was probably devoid of artifacts.

Stratum 5 - Tan sandy soil

This is top soil or an old plow zone.

Interpretation of Stratification

Natural stratification is relatively simple and straight forward in Cut 2. Above sandy subsoil, the initial cultural deposit is a black, sandy midden rich in pottery and burned material. Strata 3 and 4 are mound fill differing only in the way they were deposited. The former could be an early mound stage, the edge of which is represented by the sloping surface between Strata 3 and 4. Stratum 4 may represent material eroded off the

Stratum 3 mound or it could be intentionally deposited fill for a later and larger mound stage.

Strata 3 through 5 were essentially sterile. Levels A and B, accounting for the entire 105 cm. thickness of these deposits, produced a total of only 16 sherds.

Cultural Stratigraphy

The ceramic counts for Cut 2 are presented in Table 24. Levels C and D, lying entirely within Stratum 2, produced a total of 768 sherds of which 52 were decorated. All decorated pottery and identifiable plain body modes belong to the late Coles Creek Balmoral phase. The designation Baytown Plain var. unspecified, has been used for the non-Addis body sherds because of the author's inability to distinguish between pastes of the two early site occupations which date to the Balmoral and Sundown phases.

Phase identification of Strata 3 through 5 is difficult because of the small sample of sherds obtained in Levels A and B. One sherd of Coles Creek Incised, var. Hardy, and one of Sicily Island Incised, var. McNutt, are the only identifiable decorated types. Four plain sherds from Level A have been identified as Addis; the remainder from Levels A and B are earlier varieties of Baytown Plain.

Four sherds in Level C have been classified as Baytown Plain, var. Addis, on the basis of paste but in

	CUT 1					CUT 2					CUT 3					CUT 4			CUT 5				
	A	B	C	D	E	A	B	C	D		A	B	C	D	E	A	B	C	A	B	C	D	E
SUNDOWN COMPONENT																							
Coles Creek Incised, var. Chase				1									1										
var. Sundown				1													1						
Mulberry Creek Cord Marked, var. S.C.				2								4	3										
French Fork Incised, var. Wilsone					1																		
BALMORAL COMPONENT																							
Avoyelles Punctated, var. unspecified				4																			
Baytown Plain, var. Vicksburg					2				5			7	5	1									
"Vicksburg" rim									3			1											
Baldeau Incised, var. Baldeau				1									1										
Chevalier Stamped, var. Chevalier																	1					1	
Coles Creek Incised, var. Blakely								1				1	2										
var. Greenhouse					1			2	4														
var. Hardy				3		1			2		1	6	1	1								1	
var. Mott		1		2	3			6	33			3	4								1	1	
Harrison Bayou Incised, var. Unspec.				1				3					5	2									
Medora Incised, var. Medora				1	1								1					1					
Mazique Incised, var. Kings Point			1		1							1											
var. Preston				1	1							1		1									
Sicily Island Incised, var. McNutt						1																	
Unidentified Curvilinear Excised													1										
ROUTH COMPONENT																							
Baytown Plain, var. Addis	10	170	77	10				4			292	142	54	5		5	38	32	11	1	53	177	2
"interior strap" bowl rim		4	5								2		1				1	1			1	5	
"Delta City" bowl		1									2						3				1		
"Preston" bowl	1	11	2								10	10					3	4			2	8	
"Walnut Bayou" bowl		1		1							1							1					
bottles			1									1	1										
Coles Creek Incised, var. Hardy											2											1	
Evansville Punctated, var. Sharkey			1									2							1	1			
Harrison Bayou Incised, var. H.B.		1									1	3										3	
Hollyknowe Ridge Pinched, var. Patmos		2																1					
L'Eau Noire Incised, var. L'Eau Noire		1	2								14	18						3				2	
var. Anna		2	2								3		1					5		1		15	
var. Bayou Bourbe												2	1										
var. unspecified																							
Leland Incised, var. Leland			2								1	14		2			1	1				9	
Mazique Incised, var. Manchac		6	1	2							6												
Mississippi Plain, var. Pocahontas		2									2	5										1	33
Mound Place Incised, var. unspecified			1																				
Plaquemine Brushed, var. Plaquemine	2	24	27	1							18	13	2			1	11	5				4	27
Winterville Incised, var. Coleman	4	2	3								4												
INDETERMINATE COMPONENT																							
Baytown Plain, var. unspecified		7	41	195	163	6	7	259	1458		9	27	179	232		1	12	32			5	36	13
Coles Creek Incised, var. unspecified				2										1							1		
Dunkin Incised		2										1											
Evansville Punctated, var. unspecified												1											
Unidentified Incised		4	1			1					4	1		1				1		2		3	

TABLE 24.--ROUTH SITE. CERAMIC COUNTS FOR CUTS 1-5

the absence of diagnostic body shape modes this identification is not certain. As there are no sherds of definite Routh phase affiliation in Cut 2, it may be proposed that the mound structure represented by Stratum 3 is Balmoral phase in origin.

Cuts 1, 3, and 5 (Figs. 53-57)

Cuts 1, 3, and 5 were excavated adjacent to one another at the northern end of Mound C. Natural stratification is essentially the same among them, and they can therefore be described together. Datum for Cut 1 was the southwest corner of the square with an elevation of 5.45 MBSD. Variations from the standard 20 cm. excavation level can be identified in the profiles. It should be noted though, that Level D in Cut 5 was terminated at the surface of Stratum 2 throughout the square, but included the contents of a shallow pit existing in the northeast corner (Fig. 56, n, c). Stratum 2 was not excavated in Cut 5. For the purpose of drawing profiles, the walls of Cut 5 were excavated to a depth of 115 cm. below datum, and the few artifacts obtained in that operation were designated Level E.

Stratum 1 - Tan sandy soil

Sterile subsoil, similar to that in Cut 2, was encountered at 6.65 MBSD. Structural features penetrating

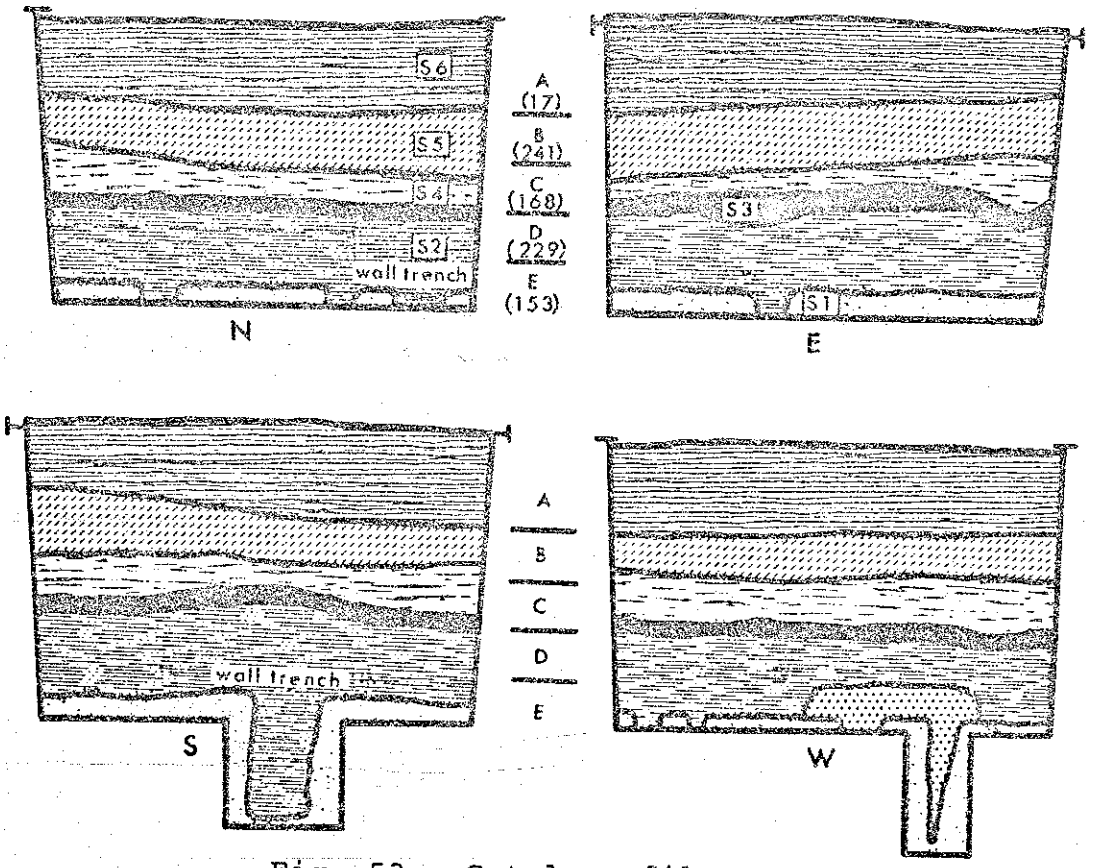

Fig. 53.--Cut 1 profiles

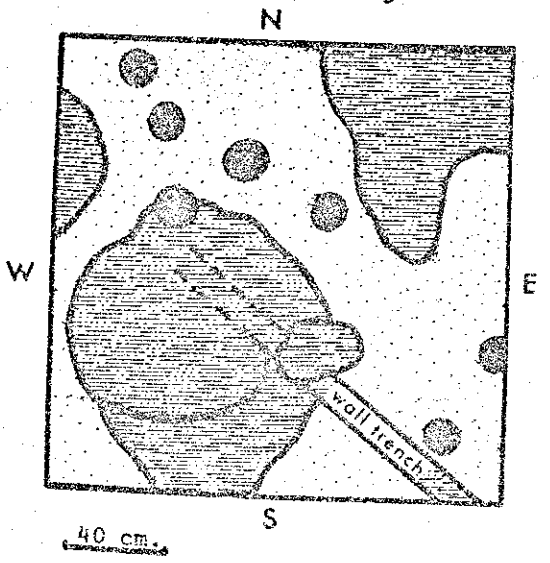

Fig. 54.--Cut 3 plan

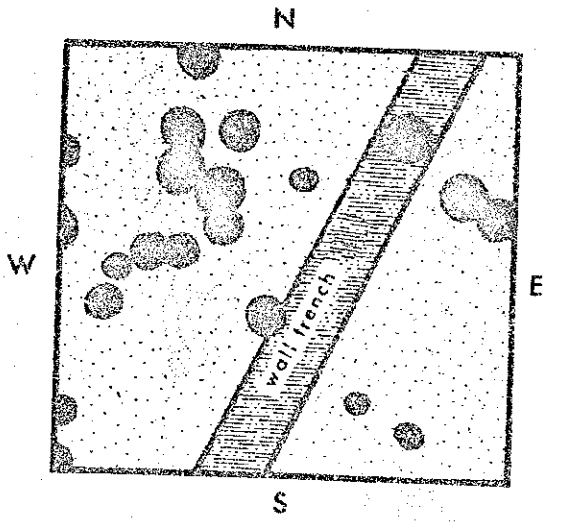

Fig. 55.--Cut 1 plan

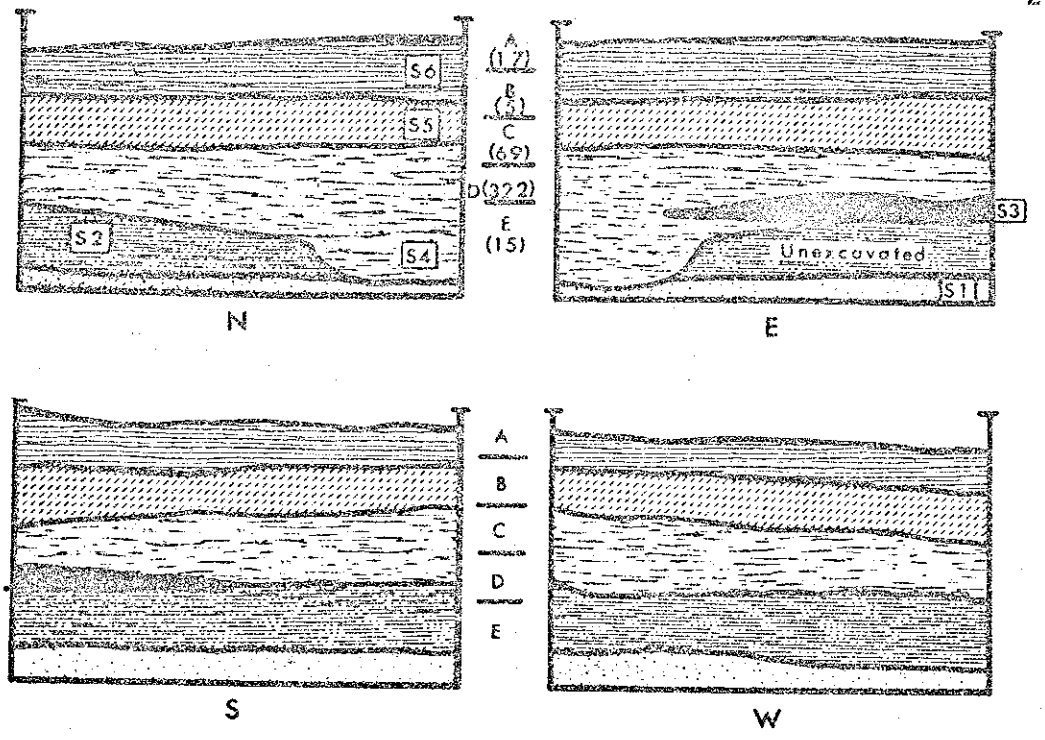

Fig. 56.--Cut 5 profiles

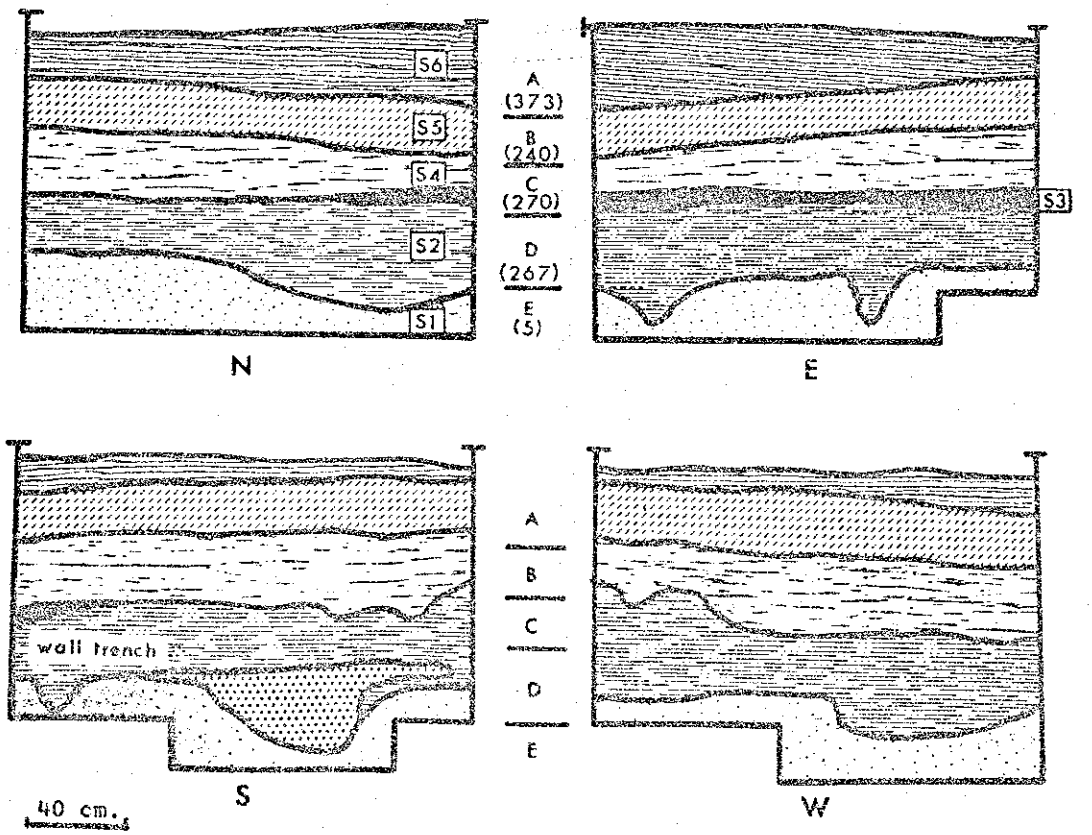

Fig. 57.--Cut 3 profiles

Stratum 1, included a wall trench and several postholes in Cut 1 (Fig. 54), and a second wall trench, postholes and 3 shallow pits in Cut 3 (Fig. 55). As Cut 5 was not excavated completely to sterile subsoil, similar features were not detected there.

Stratum 2 - Dark brown sandy midden

This stratum, immediately overlying sterile subsoil, was approximately 35 cm. thick and contained abundant fragments of charcoal, fired earth, and pottery. Habitation refuse in the form of bone and shell, however, was conspiciously absent. In Cut 1, the postholes and wall trench noted in sterile subsoil doubtless originated from this stratum. The wall trench was 25 cm. wide and extended 45 cm. into sterile subsoil. In Cut 3, three shallow pits, one of which was partially filled with charcoal and fired earth fragments also originated from the dark brown sandy midden. The wall trench segment here extended only 15-20 cm. into Stratum 1 and may therefore have originated from above Stratum 2.

Stratum 3 - Dark midden with charcoal and fired earth.

A 5-10 cm. thick midden overlay Stratum 2 throughout Cut 1 and the eastern portion of Cuts 3 and 5. There were no food remains present.

In Cut 5 the deposit consisted almost entirely of charcoal and ash. A charcoal sample was taken from this

portion of the stratum for radiocarbon dating (see Chapter VII). A shallow pit had been excavated into Stratum 2 in the northeast corner of Cut 5. This depression was filled with soil similar to Stratum 4 but containing considerable charcoal and fired earth fragments. Lying just to the northeast of Stratum 3 but at the same depth was a large portion of a shell-tempered plain jar. The association of this vessel with Stratum 3 and the shallow pit is quite certain. In Cut 3, the segment of wall trench noted in sterile subsoil probably derives from Stratum 3.

Stratum 4 - Light brown clay

Pottery was relatively abundant, but the stratum itself lacked evidence of occupation in the form of architectural features and food remains.

Stratum 5 - Light gray sandy soil

This stratum is similar to Stratum 4 in that pottery and stone debris were fairly abundant but other evidence of in situ occupation were absent.

Stratum 6 - Tan sandy soil

This stratum, like Strata 4 and 5, contained only pottery and stone debris.

Interpretation of Stratification

Stratum 1, occurring at 6.55 MBSD, doubtless represents original ground surface prior to initial site

occupation. Stratum 2, with abundant artifactual remains and associated architectural features, has accumulated as a result of human activity in the area. The absence of food remains suggests that we are not in a domestic area.

A second midden, Stratum 3, overlies Stratum 2 throughout most of the excavated area. One pit, a wall trench and postholes are probably associated with it, but as in Stratum 2, food remains are absent. Although they show no evidence of basket loading and do contain artifacts in some abundance, Strata 4, 5, and 6 can be best interpreted as mound fill. Their combined thickness of 65-70 cm. accounts for the height of Mound C at this point. Identical deposits were observed in posthole soundings at the southwest end of the mound.

Before interpretation can be carried further, information on cultural stratigraphy must be presented. Full stratigraphic interpretation of all cuts in Mound C can be found at the end of the next section.

Cultural Stratigraphy

Ceramic counts for Cuts 1, 3, and 5 are presented in Table 24. Analysis of this pottery has shown that there are three components--Sundown, Balmoral, and Routh--represented in the three cuts. The Balmoral component is most strongly represented in Levels D and E of Cut 1, and in Levels C, D, and E of Cut 3. The Routh component is

best represented in Levels A, B, and C of Cut 1, in Levels A and B of Cut 3, and in all levels of Cut 5.

In correlating excavation levels and natural stratification, the fact emerges that Stratum 2, the dark brown sandy midden, is definitely a Balmoral deposit.[1] Only Level C in Cut 3 exhibits a fair amount of mixture, and this is to be expected in view of the fact that much of it lies within Strata 3 and 4. Further confirmation of the Balmoral identification of Stratum 2 comes from Cut 2 where an identical deposit, Stratum 2, has yielded a pure Balmoral phase pottery collection.

It is clear from the sherd counts that Strata 4, 5, and 6 are Routh phase in origin. In each of the three cuts, relatively large sherd collections were obtained from these strata and in all cases these collections contain very small amounts of Balmoral phase pottery.

What is not quite so clear is the phase assignment of Stratum 3, the second midden layer. In Cut 1, this stratum lay almost completely within Level C which produced a strong Routh phase sherd collection. In Cut 3, the situation was quite different: the sherd collection from Level C was overwhelmingly Balmoral phase. Apparently

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[1] If the wall trench in Cut 1 is associated with Stratum 2, this is the first evidence we have of wall-trench construction in Coles Creek culture.

the ratio of Balmoral and Routh phase pottery here reflects the fact that only a small amount of Stratum 3 extends into the square and also the fact that much of Level C lies within the Balmoral midden, Stratum 2.

In Cut 5, Level D was excavated to conform to natural stratification. It included the lower half of Stratum 4, all of Stratum 3 that was present in the cut, and the pit that penetrated the underlying Stratum 2 midden. The ceramic collection from Level D is strongly Routh phase. This duplicates the situation in Cut 1, and it is therefore concluded that Stratum 3 is a Routh phase midden.

The full interpretation of Cuts 1, 3, and 5, then, holds that Stratum 2 is a Balmoral phase occupation deposit and that it is overlaid by strata attributed to Routh phase activities. The latter involved a certain amount of construction activity, extensive burning in the area, and finally the deposition of several layers of mound fill.

Taking the results of investigations in Cuts 1, 2, 3, and 5 together, the following reconstruction of cultural activity around Mound C can be made. Initially, a rather extensive Balmoral phase midden stratum was accumulated, and this was followed by construction of an earth mound near the center of what is Mound C today. This mound would be represented by Stratum 3 in Cut 2.

Stratum 4 in that cut may represent a later mound stage which could have been constructed during either the Balmoral or Routh phase occupation.

Following the Balmoral occupation, some Routh phase post and wall trench construction occurred immediately north of Cut 2 and the Balmoral mound. There seems to have been considerable burning in the area at this time. Mound construction was subsequently undertaken with Strata 4 through 6 in Cuts 1, 3, and 5, and possibly Stratum 4 in Cut 2 being identified with this mound stage. It is possible that a platform extension was added to the Balmoral phase mound during Routh phase. A similar extension could have been added on the southwest side of the central structure at this time also.

Cut 4 (Fig. 51)

Several posthole soundings to the north of Mound E indicated the presence in this area of a midden stratum immediately below plow zone. As a result, it was decided to excavate here, and Cut 4 was laid out on level ground immediately north of the mound. Local datum was 5.95 MBSD. Excavation Levels A, B, and C were 30 cm., 20 cm., and 40 cm. thick, respectively.

Stratum 1 - Tan sandy soil

This is sterile subsoil similar to that found in other excavations at the site. The surface of the deposit

first occurred at 6.73 MBSD. No features such as pits and postholes were noted penetrating subsoil from the stratum above.

Stratum 2 - Dark brown clay

No features were noted within this stratum, nor were food remains encountered. The presence of a single fragment of brick indicated that at least some portion of the stratum had been recently disturbed.

Stratum 3 - Gray sandy soil

Cut 4 was located in a plowed field but no distinction between plow zone and undisturbed soil could be seen in this uppermost stratum. Artifact recovery was extremely light and several brick and mortar fragments were encountered.

Interpretation of Stratification

There is no evidence to suggest that Stratum 2 was an occupation deposit as anticipated. Most likely it is mound fill displaced from Mound E by erosion or recent human activity.

Cultural Stratigraphy

The ceramic counts for Cut 4 are presented in Table 24. Routh phase pottery predominates in both Levels B and C, but there are some sherds of earlier date present:

Coles Creek Incised, var. Sundown; Chevalier Stamped, var. unspecified; and Baytown Plain, var. unspecified. The single sherd of Medora Incised in Level C has Balmoral phase characteristics and apparently belongs to that component. Stratigraphic context of Medora Incised sherds in other excavations at Routh indicate the type is of Balmoral phase date.

Total Site Analysis

Component Identification

Pottery belonging to three phases--Sundown, Balmoral, and Routh--is represented in the LMS collections from Routh. For the most part, stratigraphy and the component assignment of pottery types is quite clear, but there are some minor problems.

Stratum 2 in Cuts 1, 2, 3, and 5 consistently produced a ceramic assemblage identifiable as Balmoral phase and characterized by the following types: Coles Creek Incised, vars. Blakely, Greenhouse, and Mott; Mazique Incised, vars. Kings Point, and Preston; Beldeau Incised, var. Beldeau; Baytown Plain, var. Vicksburg; and Sicily Island Incised, var. McNutt. All of these types are well represented at the Balmoral type site (24-L-1). There are, however, three additional types represented in the Routh site collections that apparently belong with the Balmoral component but warrant some comment.

The type, Medora Incised, was first recognized and defined as a result of Quimby's (1951) excavations at the Medora site in West Baton Rouge Parish, Louisiana. Quimby (ibid.:115) assigned the type to the Plaquemine period. Medora Incised is represented by 4 sherds (3 vessels) at Routh site. One of these sherds occurs in Cut 4 in a level dominated by Routh phase pottery, but with some earlier sherds also present. The remaining 3 sherds occurred in good Balmoral stratigraphic context (Cut 1, Levels D and E; Cut 3, Level D). Paste in all examples resembles Baytown Plain, var. Valley Park, not var. Addis. Stratigraphic and typological evidence thus favor a Balmoral phase date for these sherds.

A similar problem involves Harrison Bayou Incised.[1] This type is commonly thought of as a Plaquemine type as it occurs at both Medora and Crooks sites. Phillips (1970:87), however, has expressed the opinion that Harrison Bayou Incised may extend back into Coles Creek times. The stratigraphy at Routh seems to bear him out. There are 11 sherds from this site with large diamonds (1-3 cm. across) that occur in good Balmoral stratigraphic context. Several of these have paste that resembles Baytown Plain, var. Valley Park. On both stratigraphic and typological

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[1]For further discussion of this type, see Chapter III, pg. 260.

grounds, these sherds have to be assigned to the Balmoral component.

Coles Creek Incised, var. Hardy, is generally believed to be a Plaquemine period type (Quimby 1951:114; Phillips 1970:74). At Routh there is stratigraphic and typological evidence that Hardy was being used during both the Routh and Balmoral occupations. The type is fairly evenly distributed between strata of the two components, and variations in paste and incision technique are such that it is almost possible to assign individual sherds to either component on typological grounds alone. The majority of the 19 Hardy sherds would appear to belong with the earlier occupation.

Routh phase strata in Cuts 1, 2, 3, and 5 consistently produce a ceramic assemblage consisting of types usually regarded as belonging to Plaquemine culture (Quimby 1951:107; Phillips 1970; various pages). These include: Plaquemine Brushed, var. Plaquemine; L'Eau Noire Incised, vars. L'Eau Noire, and Anna; Leland Incised, var. Leland; Evansville Punctated, var. Sharkey; Hollyknowe Ridge Pinched, var. Patmos; Winterville Incised, var. Coleman; and Mound Place Incised, var. unspecified. There remain two entries in Table 24 that require some comment.

A total of 43 sherds of the type Mississippi Plain, var. Pocahontas, were obtained in excavations at Routh. Thirty-four of these belong to a single vessel (Fig. 59, i)

that was found in association with Stratum 3 and 4 in Cut 5. The remaining 9 sherds, many of them quite small, came from Levels A and B in Cuts 1 and 3. The presence of shell-tempered pottery in Routh phase stratigraphic contexts is unexpected and gives rise to the possibility of an unrecognized, late Plaquemine component at the site. Considering the fact that a very late radiocarbon determination, A.D. 1640 ± 115 (Krueger and Weeks, 1966), was obtained on charcoal from Stratum 3 in Cut 5, such a possibility cannot be lightly dismissed.

Several alternative interpretations of the situation may be offered:

1. The Routh component itself is late Plaquemine and the radiocarbon date is correct.
2. The Routh component is early Plaquemine, but an undetected late Plaquemine utilization of the site is responsible for both the shell-tempered pottery and the radiocarbon date.
3. There was no late Plaquemine component. The Mississippi Plain sherds represent an early diffusion of shell tempering into the area. The radiocarbon date is incorrect.

Of these interpretations the first is most improbable. There is no typological evidence other than the shell-tempered pottery itself to indicate the Routh

component is late Plaquemine. The ceramic data from Fitzhugh phase sites and from the historic Fatherland site (26-K-2) demonstrate that Fitzhugh phase develops directly into historic Natchez without an intermediate Routh phase stage. Stratigraphy in Mound 5 at Anna site (Cotter, 1951), furthermore, fairly conclusively demonstrates that Routh phase precedes Fitzhugh phase.

The second interpretation is also difficult to accept. For one thing, there are no other late pottery types represented in the entire LMS collections from Routh. Granted, several types such as Plaquemine Brushed and Mazique Incised, var. Manchac, continue from Routh phase into the historic period and would therefore not be recognized as late types. Nevertheless, it is strange that no Fitzhugh phase Addis modes, late varieties of Leland Incised and Winterville Incised or shell-tempered decorated types have been found.[1]

There is no stratigraphic evidence in Cut 5 that the shell-tempered jar and charcoal were intrusive into a Routh phase midden. There were 75 cm. of mound fill above the vessel, and there was no indication of it having been

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[1]Since surface collecting at Routh was so poor and LMS excavations were limited to a small area of the site, it is possible that the elusive 17th century component is more strongly represented than now appears to be the case.

disturbed. Furthermore, the charcoal sample was obtained from a stratum that is beyond doubt part of the same stratum encountered in Cuts 1 and 3.

The third interpretation is preferred by the author. Its acceptance involves two concessions, neither of which is unreasonable. First, it is necessary to reject the radiocarbon date as being in error. Second, we must accept the fact that shell-tempered pottery could have reached the Upper Tensas Basin by Routh phase (approximately A.D. 1200) through trade or other mechanisms. The process by which shell tempering spreads into the Survey Area is discussed in Chapter IV. For now it is sufficient to note only that shell tempering is present in the lower Yazoo Basin during Winterville phase which is contemporaneous with Routh phase (Brain 1969).

The category, Harrison Bayou Incised, var. Harrison Bayou, (Table 24), refers to eight sherds that are characterized by small, irregular, incised diamonds and occur in late stratigraphic contexts. Several of these sherds have paste that is identifiable as Baytown Plain, var. Addis. In short, there seems to be a variety of Harrison Bayou Incised in the Routh component that can be readily distinguished from the Harrison Bayou variety occurring in the Balmoral component.

Nineteen decorated sherds in the Routh site collection[1] are identifiable as Sundown phase types. There are undoubtedly also plain body sherds of this phase which have not been recognized in the large sample of Baytown Plain, var. unspecified. All of the excavated, decorated and rim sherds, except those in Cut 4, were obtained from Stratum 2, the Balmoral phase midden. While it is not possible to identify separate occupation deposits or architectural features with the Sundown pottery, it does seem likely that there was an actual occupation of the site at that time.

Mississippi River Channel Association

According to Fisk's Plate 22, Sheet 11 (reproduced in Fig. 58), Routh is located in the middle of a 12 stage Mississippi River channel. If Fisk's channel history reconstruction is correct in this instance, Routh could not have been occupied until stage 13. There is every indication, however, that Fisk is wrong. Evidence described in Chapter VI points strongly to the association of Balmoral phase with stages 10 and 11. This phase is consistently the earliest occupation found along the

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[1]Fourteen of these are from excavations (Table 24). Three additional sherds, two of the types Coles Creek Incised, var. Hunt, and one of the type Mulberry Creek Cordmarked, var. unspecified, were obtained in surface collecting around Mound A.

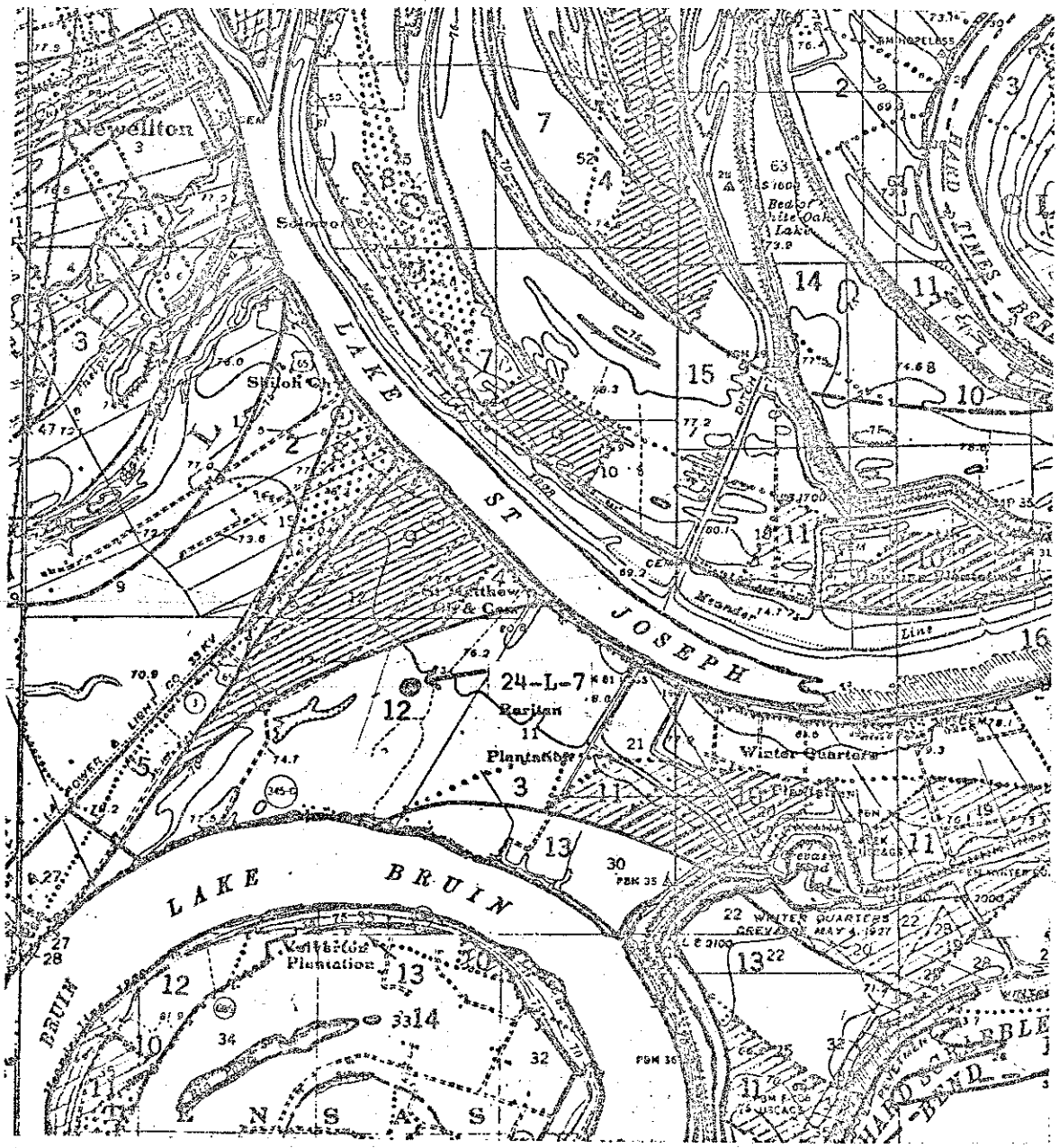

Fig. 58.--Routh site channel associations

terminal 10 and 11 stage channels of the Walnut Bayou meander belt. Phillips' (1970:517) component-channel correlation in the lower Yazoo Basin suggests that Kings Crossing phase, the local equivalent of Balmoral phase, pre-dates stage 10. If we are correct in recognizing a Sundown phase occupation at Routh, dating some 200 to 300 years earlier than Balmoral phase, it becomes even more difficult to accept Fisk's 12 stage channel identification.

Fisk's error can be easily explained. Lake Bruin, an oxbow lake formed in stage 15, lies less than one mile south of Routh site. Lake St. Joseph, a 16 stage oxbow lake, lies less than 1 mile north of Routh. With these two meander loops approaching so close to the site, one can expect topographic features marking earlier channel stages in the area to be largely obscured. In addition, almost every channel from stage 2 through stage 16 seems to have passed within a few miles of the site (Fisk, ibid).

Fisk reconstructs a meander loop migrating across the site from stage 8 through stage 10. Identification of a long-term trend such as this may be more reliable than identification of a single channel. Routh could be associated with the 8 or 9 stage channel position in this progression.

Settlement Pattern

One of the most striking features of Routh site is the paucity of artifact-rich areas. In part, this condition may reflect the heavy ground cover over most of the site. Extensive posthole testing was conducted throughout the site, including even the edges of the large swale bordering the site on the northwest. Nowhere, except at the locations of Cuts 1 through 5, and in Mounds D and F, was there any indication of midden deposits. By the time these investigations were conducted, our experience at Transylvania and Fitzhugh sites had shown that occupation deposits could usually be found between the mounds surrounding the plaza. Mounds C and F could have functioned primarily as domiciliary mounds, but with these exceptions, there was no evidence of occupation around the plaza.

Several interesting similarities exist in the form of mounds and their arrangement at the Routh and Fitzhugh sites. These are discussed in Chapter VI.