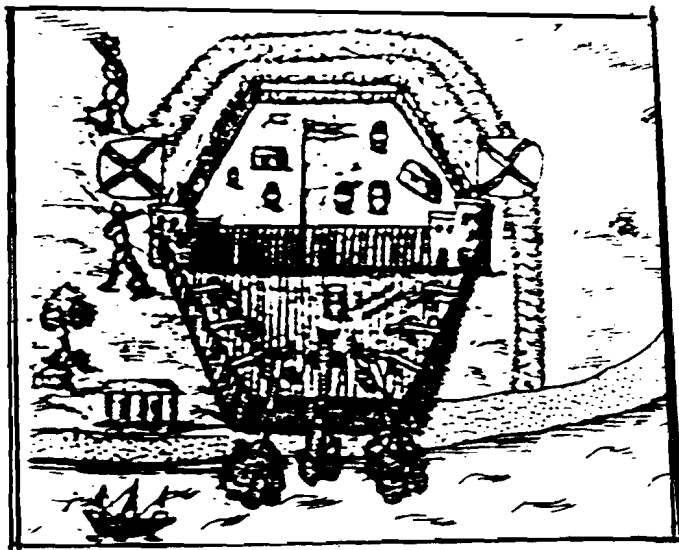


**REPORT ON THE 1992 EXCAVATIONS AT THE FOUNTAIN OF YOUTH PARK,  
ST. AUGUSTINE (8-SJ-31)**

C. Gardner Gordon  
Florida Museum of Natural History  
University of Florida

**With Introduction and Summary Interpretation of 1991 Excavations by  
Kathleen Deagan, Principal Investigator**



Summary Project Report Submitted to:  
The Fountain of Youth Properties, Inc., St. Augustine  
Division of Historical Resources, Florida Department of State

October 1992

This report and the project upon which it is based have been funded in part with historic preservation grant assistance provided by the Bureau of Historic Preservation, Florida Department of State, assisted by the Historic Preservation Advisory Council. However the contents and opinions do not necessarily reflect the views and opinions of the Florida Department of State, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the Florida Department of State.

Additional support had been provided by the Fountain of Youth Properties, Inc. and the Florida Museum of Natural History, University of Florida.

October 30, 1992

Deagan intro-1

INTRODUCTION AND SUMMARY INTERPRETATION OF 1991 ARCHAEOLOGICAL  
FIELD WORK AT THE FOUNTAIN OF YOUTH PARK SITE (8-SJ-31)

BY Kathleen Deagan  
Florida Museum of Natural History  
October, 1992

This introduction to the following report is intended to place the 1991 excavations into the overall historical and archaeological context of the Fountain of Youth Park property as a whole, and to suggest general guidelines for the interpretation of site use through the colonial period.

The 1991 excavations at the Fountain of Youth Park, supervised and reported by C. Gardner Gordon, documents the latest in a series of excavations carried out by the University of Florida at that site since 1975.

The focus of those excavations has been the low, open field bordering the water in the southeast section of the Park (see Figure 2:Gordon 1991 report). The 1991 season represents the most intensive effort so far to reveal and interpret the very early historic period occupation known to have been in this part of the site. It is hypothesized that this was the site of the first camp or fort of Pedro Menéndez de Avilés, established on September 6, 1565, at the Indian village known as Selo (see Chaney 1987 for historical summary, as well as Lyon 1976, Chatelaine 1941:41-44). A synthesis of the evidence leading to this hypothesis is given below.

#### FOUNTAIN OF YOUTH PARK ARCHAEOLOGICAL AND HISTORICAL RESOURCES

It should be noted first, however, that the entire area encompassed by the Fountain of Youth Park incorporates a number of highly significant archaeological and historic resources dating from prehistoric times to the 20th century. The hypothesized Selo-Menéndez site must be considered in this context. Most of these resources have been documented archaeologically (see Chaney 1987 for details) and Figure 2 shows the locations of the excavations that have attempted to do this.

##### Prehistoric Occupation

The earliest occupation of the Park appears to have been during the Orange Period (ca. 1500BC- ca. AD200). This was a hunting, gathering and fishing society that concentrated on coastal estuarine resources. The pottery typical of the later part of the Orange Period, known as Orange Fiber Tempered ware, has been found along the entire area of the Park bordering the Creek. This is part of an extensive region of Orange Period occupation that is documented to have extended along the intracoastal waterway from several miles north of St. Augustine, southward to below Matanzas inlet (Goggin 1952, Miller 1990, Russo 1992:111-13).

Archaeological evidence suggests that the Park was not intensively used during the subsequent cultural period, known as St. Johns I, ca. AD 200-AD 1200 (Goggin 1952:68-70). Instead, the limited testing done so far indicate that the prehistoric Indian occupation of the Park area took place more intensively during the time of a culture known as St. Johns II, ca. AD 1200-AD 1580

Deagan intro-3

(Goggin 1952:68-70). This was the period of the Timucua chief Seloy's occupation, and evidence for St. Johns II occupation has been found throughout the Park.

The most substantial feature of this period appears to be a circular log structure located by Dickson during his 1935 excavations, below the area where today the mission period burials are located. Burials, in fact, intruded into the postmolds for the structure. Dickson noted ten postholes of approximately 9 inches in diameter, comprising part of a circular structure of roughly 12 feet in diameter (Seaberg 1951). The structure was located "within 100 feet of the water's edge" (Seaberg 1951).

Excavations were carried out in the northeast quadrant of the Park in 1976 and 1977 (Jones 1976, Merritt 1977), and this work documented the presence of a St. Johns II occupation without significant evidence of any later historic occupation. (Luccetti 1976, Jones 1976, Merritt 1977). The St. Johns II occupation also extends into the area to the north of the Park boundaries (Chaney 1986; Smith and Bond 1980).

In the open field in the southeastern section of the Park (where the 1985-91 excavations have concentrated) there is also evidence for late St. Johns II occupation. These deposits, however, are overlaid by or mixed with early historic period deposits in this area, and are discussed below with the summary of 1991 excavation data.

#### Sixteenth century occupation

Occupation during the early historic period (1565-ca. 1580)

Deagan intro-4

can be archaeologically documented only in the open area bordering the water in the southeast corner of the Park. This occupation does not appear to extend north of the East-West path through the center of the Park (although this observation could well be altered by additional excavation), and the distance to which the sixteenth century occupation extends toward the west is as yet undermined. This occupation is discussed in greater detail below.

#### Mission Period

At the west end of the Park, extending from approximately Magnolia Avenue eastward to the east side of the duckpond, there is evidence for what was probably a mission Indian settlement and church, dating from the late 16th century to approximately the middle of the seventeenth century. Burials associated with this occupation are Christian, and date primarily to the late 16th/early 17th century (Goggin 1968:65; Seaberg 1951).

More than 100 burials were located by J. Ray Dickson in 1934, and some 67 were excavated and recorded. A small sample was studied by Matthew Stirling of the Smithsonian Institution. Additional excavation in the associated mission village was done in 1935 by State Archaeologist Vernon Lamme, and the burial and village areas were studied from 1951-1953 under the direction of John Goggin of the University of Florida. The eight test units excavated during the Spring of 1951 are reported by Lillian Seaberg (1951), however additional tests done in the summer of 1951 by University of Florida students Richard Cooper and Margeurite Porter remain unreported (see Seaberg 1951:34). These appear to have been in the

Deagan intro-5

southeastern quadrant of the park (the focus of the 1991 excavations). Ten more burials were excavated by Goggin student Paul Hahn in 1953, in preparation for a second burial display area (Hahn 1953).

There is some suggestion that the Indian burial area was used as a cemetery during both prehistoric times and the mission era. Three "clusters" of burials have been located and recorded. The largest group (approximately 90 individuals) were nearly all interred in a traditional Christian pattern, extended with their faces toward the east. This was the area covered by the circular, larger and northernmost of the two extant burial structures in the Park, and was closed to the Public several years ago.

These burials appear to have been associated with a church of the late sixteenth to the early 17th century, given their tightly compacted arrangement, the presence of burial intrusion on earlier historic-period burials, the presence of structural evidence (posts, clay flooring) around the burials, and their highly consistent orientations. This was probably an early site of the mission of Nombre de Dios, established in the later 16th century (Hann 1990:426; Gannon 1965:27).

There were three bundle burials and two flexed burials interspersed with this group. They were all located in the same excavation unit, and were somewhat deeper than the majority of extended burials, suggesting the possibility that these pre-dated the Christian burials.

A second group of some 25 burials was also located by Dickson

obelisk - magnolia 276 m

526  
276  
276

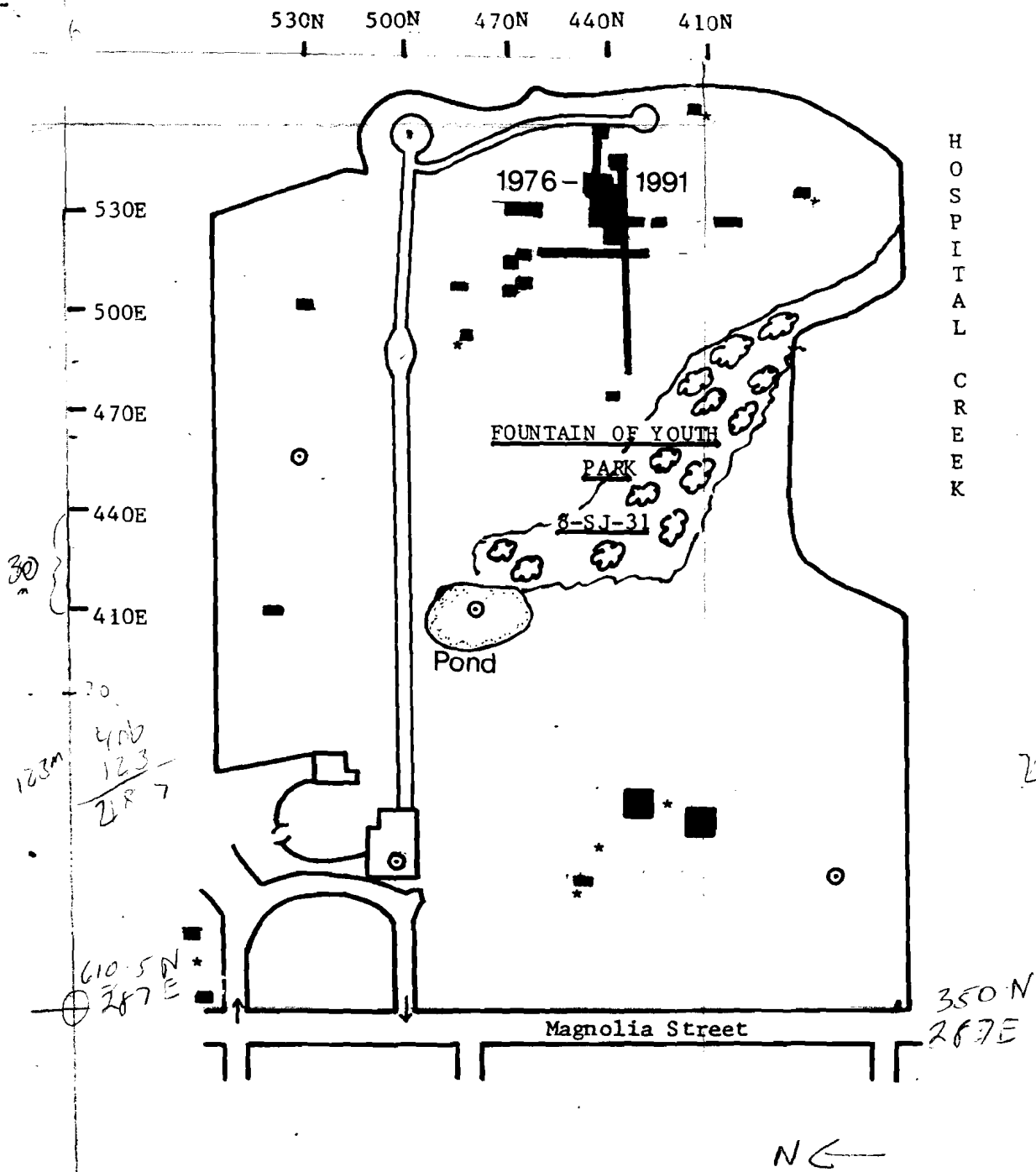


FIGURE A: APPROXIMATE LOCATIONS OF EXCAVATIONS, 1951-1991

- 1951 Excavation unit
- 1976-91 Excavation Unit
- ⊙ Artesian spring
- ☁ Tree line



Deagan intro-6

at about 40 yards south of the first group. Many of these were bundle burials or flexed burials interred along with some extended burials, suggesting that this was an area of non-Christian burials (data are insufficient to assess the dates for these burials, or whether the extended burials were Christian).

A third group of burials was uncovered by University of Florida student Paul Hahn in 1953, located between the two groups discussed above, at about 20 meters to the south of the northernmost burial structure (This is today the location of the smaller burial structure, and the site of the burials reinterred and blessed in 1991). The 10 burials excavated by Hahn appear to have been Christian interments, however they were buried facing north, unlike the northern group of Christian burials excavated by Dickson, which were facing east.

The presence of two early historic period, adjacent Christian burial areas with different burial orientations is unusual. The normal practice in Catholic burial was to place burials with their feet toward the altar of the church (that is, with faces looking toward the altar). If the eastward-facing burials excavated by Dickson were, in fact, inside the church, it might indicate that the burials excavated by Hahn (and reinterred in 1991) may have been in a cemetery outside and south of the church, buried with their feet toward the church to the north (faces looking north toward the church). Alternatively, this phenomena could also reflect the movement and rebuilding of the mission church in a different position during the seventeenth century.

Deagan intro-7

It should also be noted that State Archaeologist Vernon Lamme located burials during his 1935 excavations in the village midden to the west of the present burial structures. Lamme concluded that these were also pre-contact, non-Christian burials.

At some time during the second half of the seventeenth century the mission church of Nombre de Dios was moved to its present location, on the south bank of Hospital creek where the Shrine of Nuestra Senora de La Leche is located today. There is extensive archaeological evidence for the presence of an eighteenth century Indian settlement in that area (Luccetti 1976, Chaney 1986).

There is some archaeological evidence that the seventeenth century mission village occupation of the Fountain of Youth Park extended over most of the southern half of the property, as well as to the south outside of Park boundaries. The most intensive 17th century occupation, however, was clearly in the southwest quadrant of the Park. The somewhat limited archaeological evidence indicates that there may have been Indian occupation of this area into the early eighteenth century, but if this occurred, it was far less intensive than occupation during the previous century.

#### THE Menéndez ERA: SOUTHEAST AREA EXCAVATIONS

The area in which the University of Florida excavations have concentrated since 1976 was selected on the basis of results from a sub-surface survey done in 1976 (Luccetti 1976; Chaney 1986). The survey indicated that 16th century Spanish and Indian materials were present in this part of the Park, and excavations were

Deagan intro-8

subsequently undertaken to investigate Timucua lifeways and acculturation patterns during this very early historic era.

Excavations done by Seaberg in 1951 (Seaberg 1951, and by Merritt (1977), located what have been interpreted as Indian structures, in the areas indicated on the accompanying interpretive map. When the University of Florida returned in 1985, however, it quickly became apparent that this area also contained very early European features, including rectangular structures made with cut timbers and iron nails and a barrel well (Chaney 1987). The artifact assemblage also reflected a strongly European occupation, and included quantities of artifacts that are not normally found in historic Indian towns (lead shot, pins, metal buttons and ornaments).

The artifacts also indicated that the site was occupied by Europeans at some time before ca. 1575 or 1580, which is the date at which supplies from Mexico routinely entered the St. Augustine colony. Although Mexican pottery is found quite commonly after ca. 1580, there was none found in the Fountain of Youth Park's 16th century features. This led to the supposition that the site was that of Pedro Menéndez' initial settlement of ca. 1565-66. The bases for this hypothesis included:

1. The Pre-1580 date for the deposits,. and the clearly European origin of the structure and barrel well
- 2- The absence of any other documented European settlement before 1600 outside the boundaries of St. Augustine
- 3- The geographical position of the site. The coastal

configuration of the area around the St. Augustine Bay has changed considerably since 1565, and most especially since the 1930's when the new inlet separating Vilano Beach from Anastasia Island was dredged. 18th century maps document the original configuration of the inlet, and show clearly (Figures B-C) that the site in question had a commanding view not only of the original inlet, but also of the mouths of the Tolomato river, Matanzas river and Hospital creek. This was clearly a superior strategic location. It was also had the advantage of adjacent fresh water, not only from Hospital Creek, but also from the several natural springs that are present in the Park (one of them being claimed as the original Fountain of Youth).

- 4 - The documentary accounts of the first settlement make it clear that the site was indeed at the village of the Indian chief Seloy, who gave his "great house" to the Spaniards. They fortified this structure to serve as the first (and temporary) fort (Chatelaine 1941:41; Chaney 1987; Eugene Lyon, Personal Communication, St. Augustine, 1990).

Archaeological evidence clearly indicates the presence of late prehistoric Indian occupation in this area, superimposed on in some cases by mid-16th century European occupation.

This constellation of observations led to the further study of the site, in order to delineate the nature and extent of the European features believed to have been part of the original Menéndez settlement (Chaney 1987). The following report by Gardner Gordon

Plano general de la Plaza de San Agustín de la Florida, y sus inmediaciones, que comprehende las entradas de sus Barras, Ríos, Caños, Sierras, Páncos, y Puertos que la circuyen, manifestándose al presente tiempo (completada la Dotación que se computa necesaria) Todo lo que se propone para su Defensa.



Copia fac-simile del original que existe en el Depósito General Topográfico de la Dirección de Topografía.

Copia fac-simile del original que existe en el Depósito General Topográfico de la Dirección de Topografía.

FIGURE B: POSITION OF THE ST. AUGUSTINE INLET RELATIVE TO THE FOUNTAIN OF YOUTH PARK IN THE 18th CENTURY (1791, Roque Map)

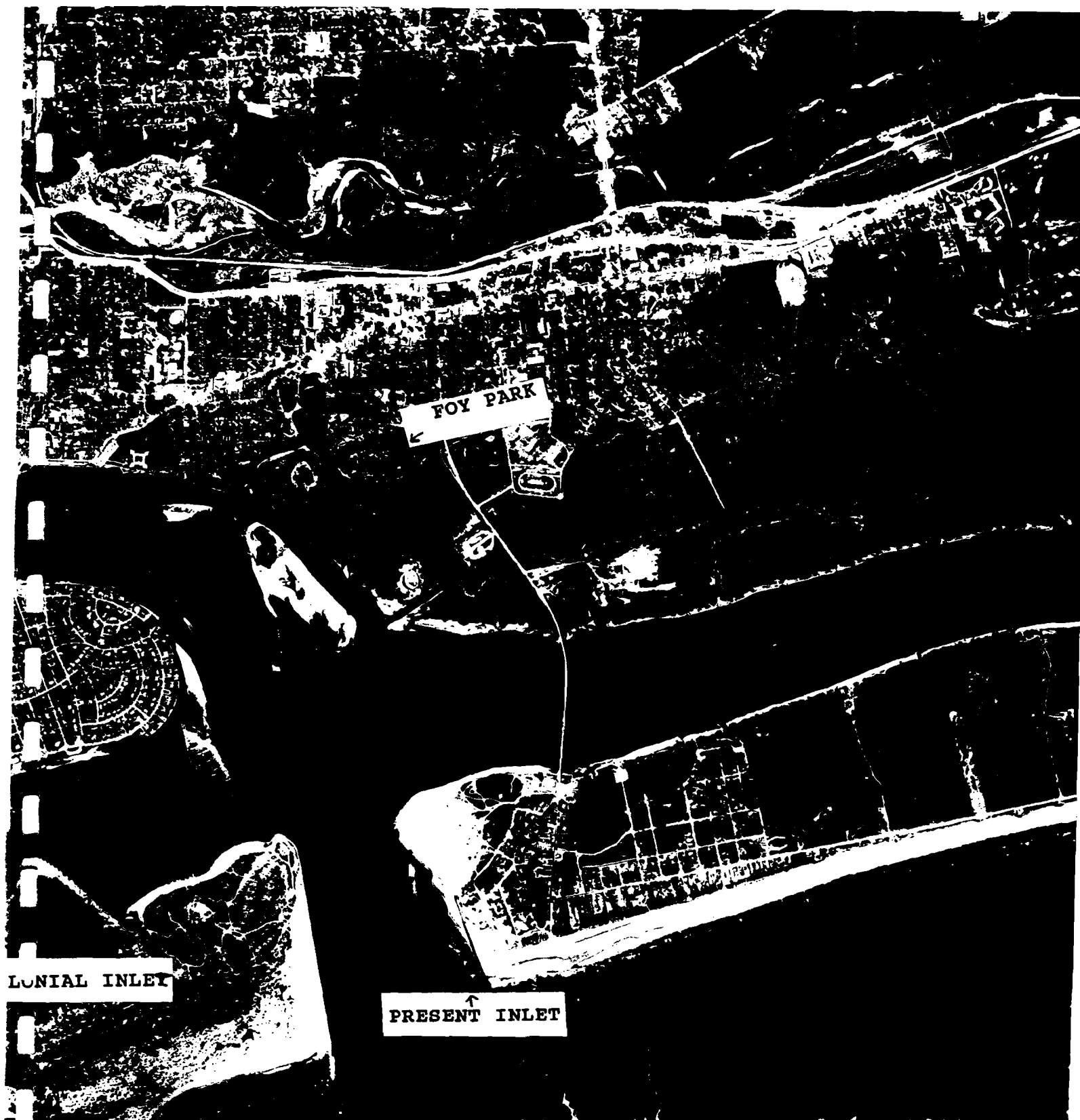


FIGURE C: PRESENT RELATION OF THE FOUNTAIN OF YOUTH PARK TO THE ST. AUGUSTINE (1969, Florida Department of Transportation)

Deagan intro-10

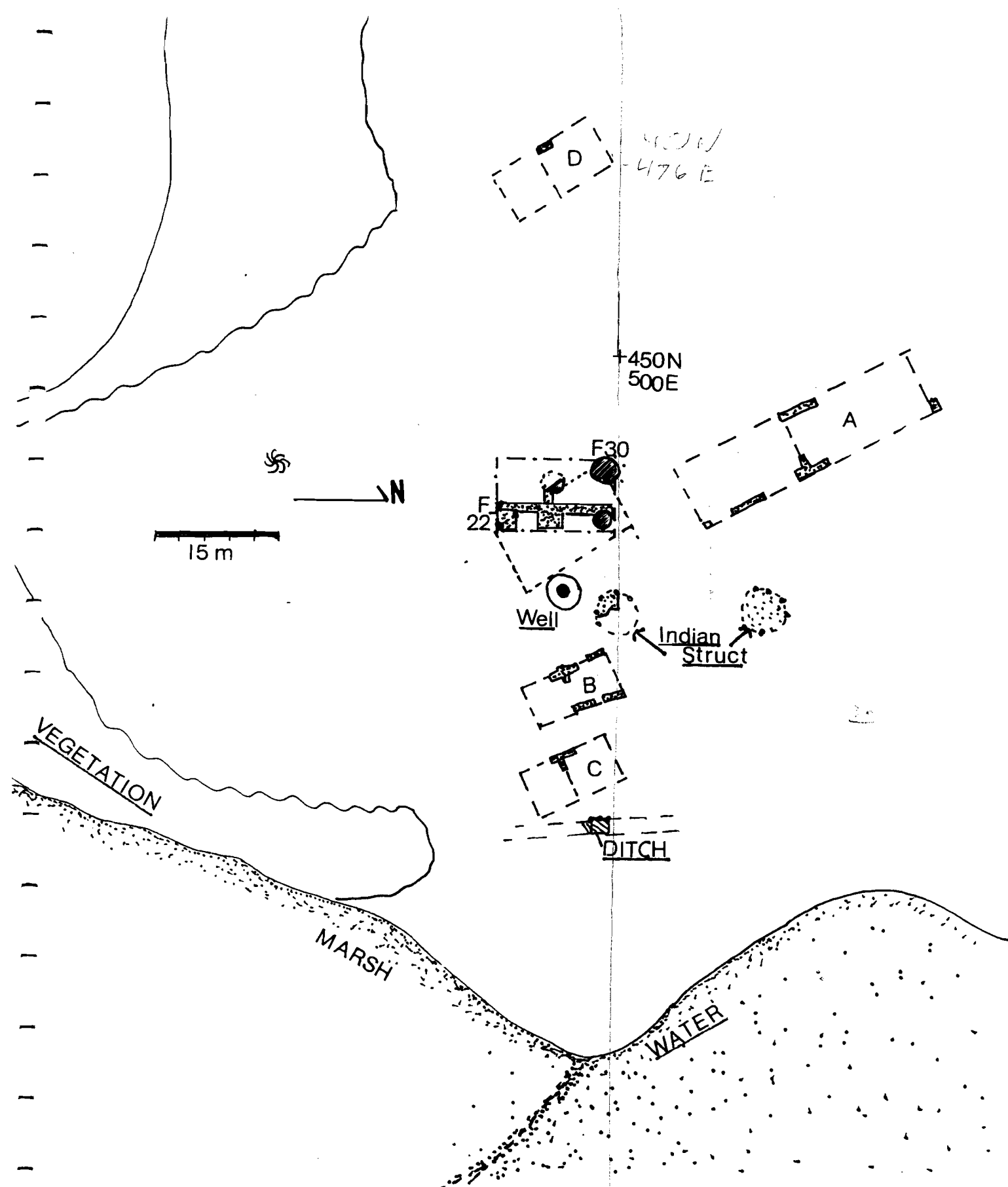
details the most recent of these studies, carried out from September 2 through December 20 of 1991.

#### INTERPRETIVE SUMMARY OF 1991 EXCAVATIONS

Gordon has identified what appears to have been three colonial activity periods at the site, including extensive remains of the suspected Menéndez occupation. The first of these is the pre-contact St. Johns II occupation, represented by several posts, trash pits and the lowest levels of the shell midden (including a St. Johns II period human burial and a dog burial in distinct parts of the site). There is also some suggestion that a very large structure, altered during the very early historic period (discussed below), may have been present.

This late prehistoric occupation was also documented by Seaberg's 1956 excavations, Merritt's 1976 excavations, and Chaney's 1985-87 work. All three projects located evidence for circular pole and thatch structures of about 3 meters in diameter. Figure D shows these late prehistoric features.

The second activity period was the ca. 1565-pre 1580 era associated with Menéndez, and these features are discussed separately below. Overlying this occupation level was a seventeenth century midden, probably associated with the mission village occupation described above. The area was heavily farmed in the late 18th and 19th centuries, however, and that activity has tended not only to obscure the true relationships among deposits at the site, but also to disturb deposits and introduce small amounts of intrusive materials into them.



**FIGURE D: HYPOTHETICAL RECONSTRUCTION OF SIXTEENTH CENTURY SPANISH FEATURES**



Deagan intro-11

The present project has concentrated most intensively upon the Menéndez-era occupation at the site. It should be noted, however, that the remains from the mission-era occupation are also extremely important, in that they are the earliest remains from St. Augustine's first mission. They should provide an invaluable resource for comparison to the later stages of the mission at the present site of Nombre de Dios; to the contemporary lifeways of the Spanish settlement in St. Augustine, and to other Franciscan mission villages on the Florida frontier.

#### MENÉNDEZ-ERA OCCUPATION FEATURES

MAP D shows the locations of the deposits believed to be associated with the European occupation of the Park before 1580. They include a barrel well, a large and probably burned structure of uncertain origin, wall trenches from at least three rectangular buildings, and a variety of postmolds and refuse-filled depressions. The final days of excavation also revealed what appears to have been a deep, wide ditch, with evidence for a possible post palisade adjacent to the water. Excavation details and stratigraphic associations of these features are discussed in the following report by Gordon.

#### The Rectangular Spanish Structures

Those excavated in 1987 and 1991 appear to date to the earliest historic occupation of the site. The trenches themselves are probably the scars from split log mud sleepers, to support a frame wall. They are on average - cm wide, and 15-20 cm deep.

Deagan intro-12

They describe at least three structures which appear to be divided into rooms.

None of the structures has been fully exposed by excavation, and so their interpretation is hypothetical at best. The two most complete examples appear to be quite large and divided into at least two rooms. The northernmost structure ("A") is 8-9 meters wide and possibly as long as 18-20 meters. The easternmost structure ("B") is some 6 meters wide, with one division fully exposed, measuring 4.5 meters in width. If the structure had two equal rooms, its dimensions are estimated at approximately ten meters by six meters. The other two structures are represented only by sections of single walls.

Very similar features have been excavated at other first Spanish period sites - a late 16th century building at the Trinity Episcopal Church site in downtown St. Augustine (Deagan 1978) and a series of houses built by Spaniards at the seventeenth century village of San Luis, near present-day Tallahassee (McEwan 1991:258-59) (Figure E). San Luis was on the mission frontier, associated with the San Luis mission and fort (ca. 1633-1702), and the board and thatch split-log foundation houses were the earliest type at the site. These rectangular, two-room houses at San Luis were smaller than those at the Fountain of Youth Park ( 6 meters by 3.75 meters as compared to 10 meters by 6 meters), nevertheless they share the same basic layout, construction techniques and orientation.

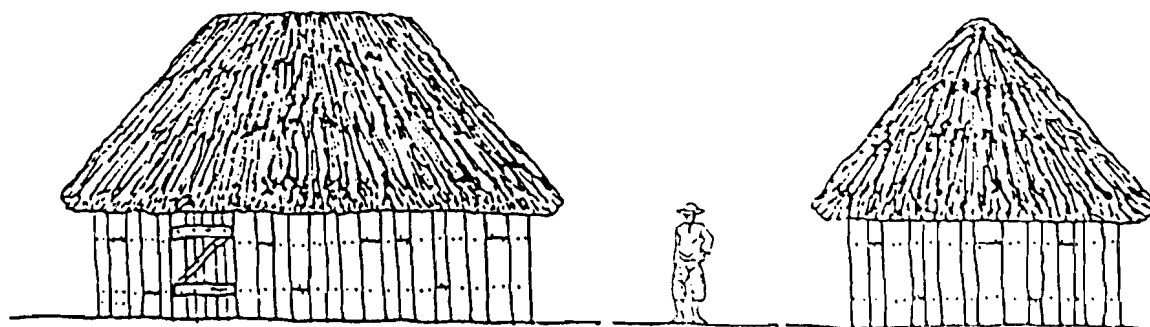
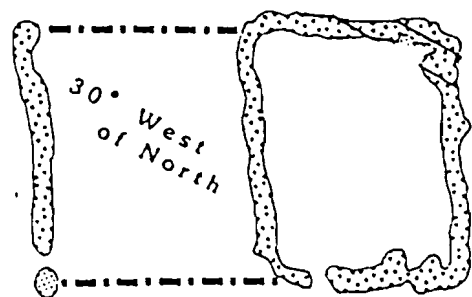
There is no reason to believe that these rectangular

Deagan intro-13

structures at the Fountain of Youth Park were occupied by Indians, since they are clearly consistent with early Spanish architectural features documented elsewhere. Furthermore, those Indian structures known from the mission-period occupation at the west end of the Park and the St. Johns II occupation in the southeast quadrant are traditional and circular in form. The rectangular structures in the 16th century settlement area appear rather to be structures occupied by European residents during the Menéndez era, and their very large size as compared to frontier town domestic structures suggests that they may have been communal dwellings for troops.

Parts of the unreported excavations by Cooper and Porter (1951) and Hahn (1953) took place in the vicinity of the Spanish settlement and located identical trench features. Unfortunately, no reports on those excavations were prepared, nor is information about the precise locations of the tests available. The best records for this work is a set of photographs taken by, and currently in the possession of John Fraser. These photographs clearly show excavations in the open field studied in 1976-91, and several linear trench-like features identical to those reported by Gordon (following) and Chaney (1987) (Figure F).

The presence of these rectangular structures in other areas of the field, however, indicate that the area in which they were built covered more than 60 meters north to south, and 90 meters east to west, with the center of the area estimated at approximately the location of the large burned structure.



Vertical Board with Thatch Roof

**FIGURE E: BOARD AND THATCH HUT FROM SAN LUIS, FLORIDA AS A POTENTIAL ANALOGY TO THE SPANISH STRUCTURES AT THE FOUNTAIN OF YOUTH PARK. (Reconstruction by albert Manucy for Bonnie G. MacEwan in McEwan 1991, Figure 4)**



FIGURE F: TRENCH FEATURES FROM 1953 EXCAVATION BY HAHN  
(Photo courtesy of John Fraser)

The large burned structure

Portions of a large and enigmatic historic period structure was located near the center of the excavation area by both Chaney and Gordon. It includes those a number of features, areas and postmolds in six excavatiuon units (see Gordon 1991 report, page 18, for a description of these deposits). On its east side, the remains of the structure are recognizable by a dark brown, black or grey colored soil stain that includes quantities of iron oxide. This appears to have been the result of burning of a wooden wall or room, and subsequent leaching of the resulting charred wood and charcoal into the low sandy soil. Postmolds are located at irregular intervals around the edges of the building. At least three of these posts (Features 30, 36 and 28) were quite large and deep, suggesting a structure of considerable size. Feature 30 was a wood post of approximately 30 cm. in diameter, placed into a posthole nearly two meters in diameter and depth.

The shape, dimensions and true orientation of the structure are difficult to determine on the basis of available evidence. There are at least two potential interpolations, indicated on Figure D. If the edges of the soil stain designated Feature 22 in fact define the extent of the building, it was rectangular, approximately 15 meters by 12 meters and oriented due north-south (in contrast to the other Spanish buildings at the site, which are oriented at about 25-30 degrees west of north).

The fact that the soil stain was not present around all sides, nor was it evident in all parts of the structure's interior,

Deagan intro-15

however, leaves open the possibility that the dark stain does not describe the whole structure. It may rather represent only a portion of the building that burned and stained the ground in a distinct manner from the rest of the structure. While the edge of the stain on its east side is well defined as a straight north-south edge, a similar stain has not been located to the west or inside of the structure, and the structure may have extended farther to the west.

The two northernmost post features are aligned with the dark stain, and could support the interpretation of a rectangular, north-south oriented wooden structure of about 15 by 12 meters (45 by 36 feet). The two post features on the west side of the structure however (Features 30 and ) are aligned roughly along an axis of 20 degrees west of north, and may reflect a structural orientation similar to that of the other Spanish buildings at the site.

The anomalous orientation of the building is difficult to interpret, and might be suggested as having been an earlier native structure rebuilt and incorporated into the Spanish settlement. The orientation may also be a function of the partial excavation of the structure, and only full exposure of the building will determine its original and nature.

#### ARTIFACT DISTRIBUTIONS

Table 1 shows the distribution of the 1991 season artifacts, organized by the time periods of the soil deposits. Clearly the

Deagan intro-16

great majority of remains come from deposits that date to the post-colonial period (Mostly Zone 1 and Zone 2, level 1 deposits). This is not unexpected, given the intensive farming that took place at the site, which severely mixed the upper deposits.

A closer look at the distribution of majolicas from the whole assemblage helps clarify the dates of the Spanish colonial occupation:

**16A (ca. 1565-1575) 34 .3 % of all, 44% of identifiable**  
(Columbia Plain, Isabela polychrome, Yayal B/W, Italianate B/B, Sto. Domingo B/W, Morisco ware)

**16B (post 1540 in Mexico, post 1575 in Florida) 19- 19% of all, 25% of identifiable**  
(San Luis B/W. San Luis poly, Fig Springs poly)

**17A (ca. 1600-1650) 10- 9% of all, 13% of identifiable**  
(Ichtucknee B/W)

**17B (ca. 1650-ca. 1725) - 3 - 3% of all, 4% of identifiable**  
(Aucilla poly, Puebla poly)

**18 (1700-1750) 8- 8% of all, 10% of identifiable**  
(Puebla B/W, San Agustín B/W)

**Unidentifiable: 25 - 25%**

Nearly half of the identifiable majolicas from the excavation overall date to the Menéndez era, and if the sixteenth century Mexican majolicas can date to that time period, 63% of the majolicas date from this Menéndez-era occupation (although these Mexican majolica types were being produced in Mexico before Menéndez arrived in Florida, there are as of yet no documents that show that these Mexican pots were imported into Florida before about 1575).

Given the long occupation of the Park, it is clear that the



Deagan intro-17

sixteenth century was the most intensive European occupation. By the middle of the 17th century, through the end of the colonial era, there is only scant evidence for occupation of the site.

Several additional observations can be made from a consideration of the artifacts from colonial era proveniences (16A, 16B, 17A, 17B) at the Fountain of Youth Park as compared to sixteenth century St. Augustine (from Deagan 1985). Although both sixteenth century areas are European occupations, they are very different in their artifact profiles. Aboriginal ceramics are twice as abundant at the Fountain of Youth Park than in St. Augustine, which is not unexpected in that this was an Indian town prior to Spanish arrival. The exception to this is San Marcos pottery, which occurs only half as frequently at the Fountain of Youth Park as it does in St. Augustine. This undoubtedly reflects the early occupation date of the Fountain of Youth Park settlement, which took place before the sustained entry of San Marcos pottery into the Spanish colony after about 1580.

European ceramics are considerably more abundant overall in St. Augustine than at the Fountain of Youth Park settlement, although this statistical difference is probably a factor of the greater proportion of aboriginal ceramics in the FOY assemblage. Architectural elements are also much more common in the sites of St. Augustine, probably owing to more numerous and more substantial buildings in the town.

This is generally true for most artifact categories. Apart from aboriginal ceramics, the only artifact categories that are

Deagan intro-18

proportionally higher at the Fountain of Youth Park are those of Personal items (including beads), which constitutes .7% overall of the FOY assemblage, and .04% of St. Augustine's assemblage. This considerable difference may well be owing to the greater number of beads present at the Fountain of Youth Park. Probably the most striking difference between the two sixteenth century occupation areas is in the arms and weapons category - 1.5% overall of the FOY assemblage, and .4% of the St. Augustine assemblage ( 37 times greater at FOY) undoubtedly reflecting the military frontier nature of that initial settlement.

\*\*\*\*\*

**COMPARISON OF SJ 31 COLONIAL MATERIALS TO 16TH CENTURY ST. AUGUSTINE**

	1991 Exc.		1985 exc.		St. Augustine	
Majolica	18	.8	51	2.9	612	5.7
Olive Jar	103	4.6	781	43.7	3155	29.3
Other Euro.	10	.45	11	.6	714	6.6
(Tot. euro)	131	5.9	843	47.2	4481	41.6
St. Johns	1326	59.0	578	32.2	2884	26.8
Sn. Marcos	376	16.8	40	2.2	1952	18.1
Other Abo	356	15.9	238	13.1	611	5.6
(Tot. Abo)	2058	91.5	856	47.9	5447	50.6
Glas/Kitch	9	.4	17	.9	158	2.1
Arch.	26	1.2	10	.5	593	5.5
Arms	8	.4	46	2.6	41	.4
Clothing	4	.2	2	.1	46	.4
Personal	12	.6	15	.8	4	.04
<b>TOTAL</b>	<b>2249</b>		<b>1787*</b>		<b>10,770</b>	

\* - 1404 (78.6%) of the 1787 total colonial artifacts came from the well and well construction pit)

\*\*\*\*\*

SJ 31: FOUNTAIN OF YOUTH PARK 1991: ARTIFACT DISTRIBUTIONS

ITEM:	P	16	16B	17A	17B	SP2A	19	MOD	TOTAL
MAJOLICA									
CP	0	3	0	2	1	18	1		25
ICHBW	0	0	2	0	0	1	7		10
ISABELA	0	0	0	0	0	1	0		1
LIGBB	0	0	0	0	0	1	0		1
SEVBB	0	0	0	0	0	0	3		3
STODOM	0	0	0	0	0	1	2		3
UIDBW	0	0	0	0	0	1	0		1
UIDMOR	0	0	0	0	0	1	0		1
UIDPOLY	0	1	0	0	0	0	0		1
YAYAL	0	1	0	0	0	0	0		1
AUCILLA	0	0	0	0	0	1	0		1
FIGSP	0	0	0	0	1	4	0		5
PUEBW	0	0	0	0	0	2	1		3
PUEPOLY	0	0	0	0	0	1	1		2
SABW	0	0	0	0	0	1	4		5
SLBW	0	3	0	0	0	0	2		5
SLPOLY	0	0	0	2	1	1	8		12
UIDMEX	0	0	0	0	0	0	1		1
UIDPOLY	0	0	0	0	0	2	0		2
UIDPUE	0	0	0	0	0	3	0		3
UIDBW	0	2	1	0	0	3	3		9
UIDPOLY	0	1	0	0	0	0	0		1
UIDWITE	0	0	0	0	0	4	2		6
SUBTOT.	0 0	11	.011 3	.022 4	.010 3	.012 46	.007 35	.010	102
LD. GLZD. EWARE									
LDGLCE	1	0	1	5	0	19	2		28
LDGLTECE	0	0	0	0	1	1	0		2
ELMOR	1	0	0	0	0	2	7		10
SUBTOT.	2 .003044	0	1	.007 5	.012 1	.004 22	.003 9	.002	40
UNGLZD. EURO. EWARE									
OJ	29	29	6	9	6	350	128		557
OJGL	15	8	0	3	2	151	65		244
UIDCEW	0	0	0	3	0	7	2		12
REDWAR	0	0	0	0	0	0	1		1
MEXRED	0	0	0	0	0	0	1		1
ORMIC	0	1	0	0	0	0	0		1
SUBTOT.	44 .066971	38	.037 6	.043 15	.036 8	.031 508	.074 197	.053	816
18TH C. TABLEWARE									
WSGS	0	0	0	0	0	1	1		2
ELERS	0	0	0	0	0	1	0		1
JACK	0	0	0	0	0	1	0		1
SLIPMET	0	0	0	0	0	1	1		2
SLIPST	0	0	0	0	0	0	1		1
SLIPSTF	0	0	0	0	0	3	4		7
SLIPRED	0	0	0	0	0	1	0		1
UIDSLIP	0	0	0	0	0	4	0		4
DELFT	0	0	0	0	0	1	0		1
DELFTBW	0	0	0	0	0	2	0		2
DELFTPOLY	0	0	0	0	0	1	0		1
PORIMARI	0	0	0	0	0	1	0		1
POROR	0	0	0	0	0	0	1		1
WHEILDOP	0	0	0	0	0	0	1		1
SUBTOT.	0 0	0	0	0	0	0 17	.002 9	.002	26
UTIL. STONEWARE									
BSGSW	1	0	0	0	0	2	0		3
CROCK	0	0	0	0	0	1	2		3
GSGS	0	0	0	0	0	1	0		1
UIDLGSW	1	0	0	0	0	0	0		1
UIDSGS	0	0	0	0	0	1	0		1
UIDSW	0	0	0	0	0	6	1		7
SUBTOT.	2 .003044	0	0	0	0	0 11	.002 3	.001	16

REFINED EWARE										
CW	0	0	0	0	1	25	7	33		
PWB	0	0	0	0	0	4	0	4		
PW	0	0	0	0	1	24	4	29		
PWFE	0	0	0	0	0	1	1	2		
PWHP	0	0	0	0	0	5	5	10		
PWLP	0	0	0	0	0	3	4	7		
PWPP	0	0	0	0	0	4	0	4		
PWPT	0	0	0	0	0	0	1	1		
PWSE	0	0	0	0	0	3	3	6		
PWSP	0	0	0	0	0	1	0	1		
PWTP	0	0	0	0	0	12	5	17		
WW	0	0	0	0	0	49	28	77		
WWHP	0	0	0	0	0	1	0	1		
WWTP	0	0	0	0	0	7	4	11		
YW	0	0	0	0	0	0	1	1		
IRNSTN	0	0	0	0	0	22	2	24		
REFEW	0	0	0	0	0	11	2	13		
REFEWHP	0	0	0	0	0	2	1	3		
REFEWTP	0	0	0	0	0	1	2	3		
PORMOD	0	0	0	0	0	3	3	6		
PORUID	0	0	0	0	0	4	2	6		
SUBTOT.	0	0	0	0	0	2	.008 182	.027 75	.020 259	
TOT EURO	48	.073059	49	.047 10	.072 24	.057 14	.054 786	.115 328	.089 1259	
ABORIGINAL WARES										
FIB.TEMP.	49	2	4	0	0	38	17	110		
UIDABO	80	123	49	35	40	859	458	1644		
NONLOCAL	0	6	1	1	4	1	11	24		
STJOHNS	333	664	59	270	167	2811	1601	5905		
SANMARCOS	115	173	5	83	24	1354	722	2476		
(Other Aboriginal items)										
PIPESABO	1	0	0	0	0	0	0	1		
CHERT	3	1	0	1	0	12	8	25		
TOT ABO	581	.884323	969	.938 118	.855 390	.933 235	.907 5075	.741 2817	.765 10185	
GLASSWARES										
GLASUID	0	0	3	0	1	2	27	33		
GLASMB	0	0	0	0	0	1	1	2		
GLASGRN	1	1	1	0	1	98	40	142		
GLASQA	0	0	0	0	0	6	5	11		
GLASBLK	0	0	0	0	0	0	1	1		
GLASBLU	0	0	0	0	0	2	2	4		
GLASBRN	0	0	0	0	1	14	22	37		
GLASCLR	0	0	0	0	0	164	69	233		
GLASEGRN	0	0	0	0	0	2	0	2		
GLASFLT	0	0	0	0	0	0	2	2		
GLASFROST	0	0	0	0	0	0	2	2		
GLASLTGRN	0	0	0	0	0	2	8	10		
GLASMLK	0	0	0	0	0	4	1	5		
GLASOLIVE	1	0	0	0	0	1	6	8		
GLASOPQ	0	0	0	0	0	0	1	1		
GLASPAT	0	0	0	0	0	0	2	2		
GLASPINK	0	0	0	0	0	2	2	4		
GLASPUR	0	0	0	0	0	1	1	2		
GLASWITE	1	0	0	0	0	3	0	4		
GLASYEL	0	0	0	1	0	3	0	4		
STEMW	0	0	0	0	0	0	1	1		
SUBTOT:	3	.004566	1	.001 4	.029 1	0 3	.012 305	.045 193	.052 510	
ARCHITECTURAL										
GLASFLT	4	1	2	0	2	141	54	204		
NAILCUT	0	0	0	0	0	1	0	1		
NAILMC	0	0	0	0	0	0	1	1		
NAILSQUID	0	1	0	0	0	26	22	49		
NAILUID	8	5	4	0	2	456	218	693		
NAILWI	0	0	0	0	0	7	5	12		
RIVET	0	0	0	0	0	1	0	1		
SCREWM	0	0	0	0	0	1	0	1		
SCREWUID	0	0	0	0	0	0	2	2		
SPIKESQUI	0	1	0	0	0	0	0	1		

SPIKEUID	0	0	0	0	0	1	3	4							
TILERF	0	0	0	0	0	0	3	3							
TILEUID	0	0	0	0	0	0	2	2							
SUBTOT.	12	.018265	8	.008	6	.043	0	0	4	.015	634	.093	310	.084	974
FURNISHINGS															
TACK	1	0	0	0	0	2	0	3							
BRTACK	0	0	0	0	0	1	0	1							
CLAVO	0	0	0	0	0	1	0	1							
FHRDWR	0	0	0	0	0	1	0	1							
SUBTOT.	1	.001522	0	0	0	5	.001	0	0	6					
WEAPONRY															
BULLET	0	1	0	0	0	0	1	2							
CARTGUN	0	0	0	0	0	0	1	1							
SHOT	2	2	0	0	0	12	7	23							
SHOTSHL	0	0	0	0	0	0	1	1							
CAS	0	0	0	0	0	0	1	1							
SUBTOT.	2	.003044	3	.003	0	0	12	.002	11	.003	28				
CLOTHING															
AGLET	2	0	0	0	0	0	0	2							
BUCKLE	1	0	0	0	0	0	0	1							
BUT	1	0	0	0	0	7	6	14							
BUTBAK	0	0	0	0	0	1	1	2							
STRTP	0	0	0	0	0	1	0	1							
SUBTOT.	4	.006088	0	0	0	9	.001	7	.002	20					
PERSONAL ITEMS															
BEADCAN	1	1	0	0	0	1	1	4							
BEAD	1	0	0	1	0	3	0	5							
BEADCORN	1	0	0	0	0	0	1	2							
BEADSEED	0	2	0	0	1	0	0	3							
COMB	0	0	0	0	0	0	1	1							
PIPE5	0	0	0	0	0	2	0	2							
PIPEB	1	0	0	0	0	4	5	10							
PIPES4	0	0	0	1	0	1	0	2							
PIPES5	0	0	0	0	0	6	2	8							
PIPES6	0	0	0	0	0	0	1	1							
PIPES7	0	0	0	0	0	1	0	1							
BELLH	0	0	0	1	0	0	0	1							
SUBTOT.	4	.006088	3	.003	0	0	3	.007	1	.004	18	.003	11	.003	40
MISC. ACTIVITIES															
SPRING	0	0	0	0	0	0	1	1							
WIRE	2	0	0	0	0	0	4	6							
TOOL	0	0	0	0	0	1	0	1							
AWL	0	0	0	0	2	0	1	3							
PULLEY	0	0	0	0	0	1	0	1							
TOYCUP	0	0	0	0	0	1	0	1							
PENCLEAD	0	0	0	0	0	0	1	1							
SUBTOT	2	.003044	0	0	0	2	.008	3	<.001	7	.002	14			
MISC SUBSTANCES															
FLINT	3	0	0	0	0	1	0	4							
LEAD	0	0	0	0	0	0	1	1							
MARBLE	0	0	0	0	0	1	0	1							
ALLOYFR	0	0	0	0	0	0	3	3							
BROBJ	0	0	0	0	0	0	1	1							
IRFR	0	0	0	0	0	0	67	67							
IROBJ	0	0	0	0	0	2	3	5							
TINALLOYO	0	0	0	0	0	0	2	2							
TINOBJ	0	0	0	0	0	0	1	1							
UIDOBJ	0	0	0	0	0	3	0	3							
SUBTOT	3	.004566	0	0	0	7	.001	78	.021	88					
GRAND TOT	657	1	1033	1	138	1	418	.998	259	1	6850	.999	3684	1	13039
%OF GRND	.050387		.079		.011		.032		.020		.525		.283		1

	16	16B	17A	17B	SP2A-	19	KOD	TOTAL
(Fiber tempered)								
ORNGFTP	29 .063	1 .001	0 0	0 0	0 0	28 .0075	14 .0067	72 .0094
FTDEC	0 0	1 .001	0 0	0 0	0 0	1 .0003	3 .0014	5 .0007
ABOFTP	20 .043	0 0	2 .018	0 0	0 0	9 .0024	0 0	31 .0040
ABOFTSP	0 0	0 0	2 .018	0 0	0 0	0 0	0 0	2 .0003
Subtot:	49 .106	2 .003	4 .035	0 0	0 0	38 .0102	17 .0081	110 .0143
(UID & Misc.)								
ABOGRITCK	1 .002	0 0	0 0	0 0	0 0	0 0	0 0	1 .0001
ABOGRITCM	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ABOGRITDE	0 0	2 .003	0 0	1 .003	1 .005	0 0	97 .0465	101 .0131
ABOGRITIN	0 0	2 .003	0 0	1 .003	0 0	1 .0003	5 .0024	9 .0012
ABOGRITP	7 .015	20 .025	18 .159	8 .026	0 0	153 .0412	78 .0374	284 .0370
ABOGRITPU	0 0	0 0	0 0	0 0	0 0	0 0	2 .0010	2 .0003
ABOGRITRF	0 0	7 .009	0 0	0 0	0 0	2 .0005	2 .0010	11 .0014
ABOGRITS	3 .006	0 0	10 .088	3 .010	9 .043	11 .0030	3 .0014	39 .0051
ABOGRITSS	1 .002	0 0	0 0	2 .007	0 0	3 .0008	0 0	6 .0008
ABOGROGCM	0 0	0 0	0 0	0 0	1 .005	0 0	0 0	1 .0001
ABOGROGDE	0 0	2 .003	0 0	2 .007	0 0	0 0	0 0	4 .0005
ABOGROGP	20 .043	11 .014	18 .159	2 .007	7 .033	125 .0337	84 .0402	267 .0348
ABOGROGS	0 0	4 .005	0 0	0 0	0 0	0 0	0 0	4 .0005
ABOGROGSS	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ABOGRITDEC	0 0	2 .003	0 0	0 0	0 0	0 0	0 0	2 .0003
ABOGRITINC	0 0	0 0	0 0	0 0	0 0	2 .0005	0 0	2 .0003
ABOGRTP	0 0	0 0	0 0	0 0	0 0	95 .0256	0 0	95 .0124
ABOGRTS	0 0	0 0	0 0	0 0	0 0	8 .0022	0 0	8 .0010
ABOGRTSHP	0 0	4 .005	0 0	0 0	0 0	0 0	0 0	4 .0005
ABOGRTSHS	0 0	1 .001	0 0	0 0	0 0	0 0	0 0	1 .0001
ABOGRTSS	0 0	0 0	0 0	0 0	0 0	2 .0005	0 0	2 .0003
ABOGRTSTD	0 0	1 .001	0 0	0 0	0 0	0 0	0 0	1 .0001
ABOGRTSTP	1 .002	16 .020	0 0	0 0	10 .047	16 .0043	7 .0034	50 .0065
ABOGRTSTS	0 0	1 .001	0 0	0 0	0 0	1 .0003	0 0	2 .0003
ABOSGRTSH	0 0	4 .005	0 0	0 0	0 0	0 0	0 0	4 .0005
ABOSHDEC	0 0	0 0	0 0	2 .007	0 0	0 0	0 0	2 .0003
ABOSHELDE	0 0	1 .001	0 0	0 0	0 0	0 0	0 0	1 .0001
ABOSHP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	2 .0003
ABOSTCK	1 .002	4 .005	0 0	1 .003	0 0	3 .0008	0 0	9 .0012
ABOSTCM	0 0	0 0	0 0	0 0	0 0	0 0	1 .0005	1 .0001
ABOSTCOMP	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ABOSTDEC	1 .002	2 .003	0 0	0 0	0 0	2 .0005	5 .0024	10 .0013
ABOSTINC	0 0	1 .001	0 0	0 0	0 0	3 .0008	1 .0005	5 .0007
ABOSTOEC	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ABOSTP	42 .091	35 .044	3 .027	12 .039	12 .057	420 .1132	163 .0781	687 .0894
ABOSTPUNC	0 0	1 .001	0 0	0 0	0 0	0 0	1 .0005	2 .0003
ABOSTRF	0 0	0 0	0 0	0 0	0 0	0 0	1 .0005	1 .0001
ABOSTS	3 .006	1 .001	0 0	1 .003	0 0	6 .0016	6 .0029	17 .0022
ABOSTXSIM	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ABOTGRITD	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
ACOGRITXS	0 0	1 .001	0 0	0 0	0 0	0 0	0 0	1 .0001
Subtot:	80 .173	123 .155	49 .434	35 .114	40 .190	859 .2315	458 .2195	1644 .2140
(Non-local types)								
ALTAINC	0 0	1 .001	0 0	1 .003	0 0	0 0	0 0	2 .0003
LAMLK	0 0	0 0	0 0	0 0	0 0	0 0	3 .0014	3 .0004
LAMLKINC	0 0	0 0	0 0	0 0	1 .005	0 0	0 0	1 .0001
WEEDPUNC	0 0	0 0	1 .009	0 0	0 0	0 0	0 0	1 .0001
MISSGRITP	0 0	2 .003	0 0	0 0	0 0	0 0	0 0	2 .0003
MISSRED	0 0	0 0	0 0	0 0	0 0	0 0	8 .0038	8 .0010
MISSSTP	0 0	3 .004	0 0	0 0	2 .009	0 0	0 0	5 .0007
SWCRINC	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
SWCRS	0 0	0 0	0 0	0 0	1 .005	1 .0003	0 0	2 .0003
Subtot:	0 0	6 .008	1 .009	1 .003	4 .019	2 .0005	11 .0053	25 .0033
(St. Johns)								
SJCK	42 .091	169 .213	12 .106	69 .225	64 .303	226 .0609	315 .1509	897 .1168
SJCOB	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	1 .0001
SJGROGP	1 .002	0 0	0 0	0 0	0 0	1 .0003	0 0	2 .0003
SJINC	0 0	8 .010	0 0	0 0	0 0	1 .0003	0 0	9 .0012
SJP	290 .628	486 .611	47 .416	201 .657	103 .488	2582 .6966	1283 .6148	4992 .6497
SJPUNC	0 0	0 0	0 0	0 0	0 0	0 0	1 .0005	1 .0001
SJS	0 0	0 0	0 0	0 0	0 0	0 0	1 .0005	1 .0001
SJSS	0 0	1 .001	0 0	0 0	0 0	0 0	0 0	1 .0001
SJSTP	0 0	0 0	0 0	0 0	0 0	0 0	1 .0005	1 .0001
SJSTS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Subtot:	333 .721	664 .835	59 .522	270 .882	167 .791	2811 .757	1601 .7671	5905 .7686

(Deagan 1991) TABLE 2: Distribution of Aboriginal Ceramics at  
SJ 31, 1991

San Marcos							10 .0048	34 .0044
SMCK	5 .011	5 .006	0 0	2 .007	3 .014	9 .002	1 .0005	1 .0001
SMCH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	2 .0003
SMCOMP	0 0	0 0	2 .018	0 0	0 0	0 0	0 0	6 .0008
SMDEC	0 0	0 0	0 0	5 .016	1 .005	0 0	0 0	1 .0001
SMIMP	0 0	1 .001	0 0	0 0	0 0	0 0	1 .0005	8 .0010
SMINC	0 0	1 .001	0 0	1 .003	0 0	5 .0013587	.2813	2042 .2658
SMP	91 .197	135 .170	2 .018	64 .209	15 .071	1148 .3094	0 0	5 .0007
SMPUNC	0 0	0 0	0 0	0 0	0 0	5 .0013123	.0589	356 .0463
SMS	18 .039	30 .038	0 0	9 .029	1 .005	175 .0472	0 0	2 .0003
SMSCOMP	0 0	0 0	0 0	2 .007	0 0	0 0	0 0	1 .0001
SMXSIMP	0 0	0 0	0 0	0 0	0 0	1 .0003	0 0	8 .0010
Subtot:	115 .249	173 .218	5 .044	83 .271	24 .114	1344 .3623	722 .3460	2466 .3210
TOTAL ABO	462	795 1	113 1	306 1	211 1	3710 1	2087 1	7683

## SUMMARY AND CONCLUSIONS

The three seasons of excavation in the Southeast quadrant of the Fountain of Youth Park support the hypothesis that this area was part of the 1565 encampment made by Pedro Menéndez de Aviles and his settlers. It has also demonstrated the presence of a late St. Johns IIC occupation in the area prior to the arrival of Menéndez, and an ephemeral shell midden deposit overlying the Menéndez era deposits and dating to the early 17th century mission phase.

The sixteenth century Spanish occupation extends from the southeast corner of the park northward to a line about ten meters south of the east-west pathway containing the Ponce de Leon monument. The distance to which the area of European activity extended westward from the creek is as yet unknown, however there is archaeological evidence for this occupation extending for at least 90 meters west of the shell pathway bordering the creek.

The area thus covers some 540 square meters or more, and appears to have been a living area or encampment. Large barracks-like structures are suggested, constructed of board and thatch over log sleepers. A barrel well provided water. The wooden "barracks"-like buildings were grouped around a large wooden building supported by massive posts. The structure appears to have had an alignment different from that of the other European structures at the site( due north compared to ca 25° west of north), and may, in



fact have been an pre-existing structure reworked and incorporated into the Spanish settlement. It may have been a storehouse or other public building, although its complete form and size are not yet known. It appears, however, to have been burned.

There is a tentative suggestion that this encampment was bordered at least on the east (water) side by a ditch and possibly a palisade. Additional excavation will also be needed to verify this.

Careful re-analysis of documents related to the establishment and occupation of Menéndez's 1565 settlement in the light of these archaeological findings should greatly assist in the location of the first fort. There are several possibilities extant:

1. The remains excavated in the southeast section of the Park are in fact part of the fort itself.
2. The encampment is adjacent to the fort, which is located elsewhere in the Park
3. The encampment is adjacent to the Fort, which is located to the south, at the northeast corner of the property that is today the mission of Nombre de Dios. Excavations in this area by Chaney in 1987 revealed a deep, moat-like feature, and artifacts clearly dating to the Menéndez era.

All of these possibilities are archaeologically testable, and there is no doubt that continued work in the Park will be richly rewarding. Gardner Gordon establishes in the following report some priorities for continued work in the section of the Park excavated in 1991. I would like to add in a more general sense the following needs and priorities for continued study of this extremely important area for Florida history:

Deagan intro-21

1. Intensive professional analysis of the multispectral imagery taken of the park in 1987 by NASA. This should be the first priority and be conducted before any additional excavation is done. Analysts now have sufficient "ground truthed" archaeological information about what is under the ground, to develop and recognize remotely-sensed "signatures" for buried features.

2. Continued excavation in the southeast section of the Park, specifically the exposure of the large central structure, the complete exposure of at least one "barracks"-type structure, and the exploration of the hypothesized palisade ditch on the east side.

3. Expansion of the excavations to the west, in order to determine the extent of the sixteenth century European occupation and the nature of occupation in that area., searching specifically for evidence of the fort and for the western boundary of the settlement.

4. Continued exploration of the potential moat feature site at the Nombre de Dios mission, to confirm or disprove the hypothesis that the fort site is in this area.

5. The re-opening of excavation in the mission village area. This area has the potential of containing the first mission church in La Florida, the first Indian mission town, and the one with the

Deagan intro-22

longest history of daily interaction with Spaniards, and the late St. Johns II Timucua occupation. Few Timucua villages of this era are known or studied, and the Fountain of Youth Park Timucua village offers an unparalleled opportunity for reconstructing Timucua lifeways on the eve of their destruction.

#### REFERENCES CITED

Chaney, Edward

1986 Survey and Evaluation of Archaeological Resources in the Abbott Tract and North City, St. Augustine. Ms. on file, Florida State Museum, Gainesville.

1987 Report on the 1985 Excavations at the Fountain of Youth Park (8-SJ-31), St. Augustine, Florida. Ms. on file, Florida Museum of Natural History, Gainesville.

Chatelaine, Verne

1941 The Defenses of Spanish Florida, 1565-1763. Carnegie Institute of Washington Publication 511.

Deagan, Kathleen

1978 Archaeological investigation into an unknown era: sixteenth century St. Augustine. Summary report prepared for the St. Augustine Foundation, Inc. St. Augustine. (on file, Florida Museum of Natural History, Gainesville.

1985 The Archaeology of Sixteenth Century St. Augustine. The Florida Anthropologist 38:6-33.

Gannon, Michael V.

1965 The Cross in the Sand: The Early Catholic Church in Florida, 1513-1870. University Presses of Florida, Gainesville.

Goggin, John

1952 Space and Time Perspective in Northern St. Johns Archaeology, Florida. Yale University Publications in Anthropology 47.

1968 Spanish Majolica in the New World. Yale University Publications in Anthropology 72. Yale University Press, New Haven.

Hahn, Paul

1953 Report on 1953 burial excavations at the Fountain of Youth

Deagan intro-23

Park, St. Augustine. Unpublished field report on file, Florida Museum of Natural History, Gainesville.

Hann, John

1990 Summary guide to Florida missions and visitas with churches in the sixteenth and seventeenth centuries. The Americas XLVI (4): Whole number.

Jones, Rick

1976 Test excavations of a St. Johns II village: SJ31. Unpublished student field report on file, Florida Museum of Natural History, Gainesville.

McEwan, Bonnie G.

1991 Hispanic life on the seventeenth century Florida frontier. The Florida Anthropologist 44(2-4):255-67.

Merritt, James D.

1977 Excavations of a Coastal Eastern Timucuan Village in Northeast Florida. Master's thesis, Florida State University, Tallahassee.

1983 Beyond the Town Walls: The Indian Element in Colonial St. Augustine. In Spanish St. Augustine: The Archaeology of a Colonial Creole Community, edited by K. Deagan, pp. 125-150. Academic Press, New York.

Russo, Micheal

1992 Chronologies and cultures of the St. Mary's region of northeast Florida and Southeast Georgia. The Florida Anthropologist 45(2): 107-126.

Seaberg, Lillian

1951 Report on the Indian Site at the "Fountain of Youth". Ms. on file, Florida State Museum, University of Florida, Gainesville. (Reprinted in Spanish St. Augustine: A sourcebook for America's Ancient City. edited by K. Deagan. 1991, Garland Press.)

Smith, Jimmy and Stanley Bond

1981 Phase III archaeological survey of St. Augustine, Florida. Ms. project report on file, Historic St. Augustine Preservation Board.

**REPORT ON THE 1991 EXCAVATIONS AT THE FOUNTAIN OF YOUTH PARK,  
ST. AUGUSTINE (8-SJ-31)**

C. Gardner Gordon  
Florida Museum of Natural History  
University of Florida

October 30, 1992

## TABLE OF CONTENTS

LIST OF FIGURES

ACKNOWLEDGEMENTS

HISTORICAL BACKGROUND.....	1
THE 1991 EXCAVATIONS: PURPOSE AND METHODOLOGY.....	3
FIELD EXCAVATIONS: 1991.....	8
CENTRAL UNITS.....	9
FEATURES AND AREAS OF THE CENTRAL UNITS.....	12
NORTHERN UNITS.....	23
FEATURES AND AREAS OF THE NORTHERN UNITS.....	28
EASTERN UNITS.....	38
FEATURES AND AREAS OF THE EASTERN UNITS.....	41
THE WESTERN UNITS.....	50
AREAS OF THE WESTERN UNITS.....	51
CONCLUSIONS.....	53
REFERENCES.....	59

## LIST OF FIGURES

- FIGURE 1....GENERAL SITE LOCATION
- FIGURE 2....PARK AND SITE BASE MAP
- FIGURE 3....1991 SITE BASE MAP
- FIGURE 4....FEATURE MAP: CHANEY'S 1987 SEASON
- FIGURE 5....STRATIGRAPHY: CENTRAL SAMPLED AREA PROFILE
- FIGURE 6....FEATURE 30 PLAN VIEW
- FIGURE 7....FEATURE 30 AND SURROUNDING POSTS
- FIGURE 8....PROFILE OF FEATURE 30
- FIGURE 9....FEATURE 30 BASE POSTMOLD PLAN VIEW
- FIGURE 10...CENTRAL AND EASTERN FEATURES IN PLAN VIEW
- FIGURE 11...STRATIGRAPHY: NORTHERN SAMPLED AREA PROFILE
- FIGURE 12...NORTHERN TRENCH FEATURES PLAN VIEW
- FIGURE 13...NORTHERN TRENCH FEATURES PLAN VIEW
- FIGURE 14...FEATURES 26 AND 34 IN PROFILE
- FIGURE 15...DOG BURIAL PLAN VIEW
- FIGURE 16...STRATIGRAPHY: EASTERN SAMPLED AREA PROFILE
- FIGURE 17...CHANEY'S 1987 FEATURE 21 PLAN VIEW
- FIGURE 18...PROFILE OF FEATURE 40
- FIGURE 19...FEATURE 28 TRENCH FEATURE IN PROFILE

## ACKNOWLEDGEMENTS

The research carried out in the 1991 season was funded by the Florida Department of State Bureau of Historic Resources Grants-In-Aid program and The Fountain of Youth Park under the ownership of John Fraser. Additional support was provided by the Florida Museum of Natural History (FMNH) and The Historic St. Augustine Preservation Board.

Continual ground support was given by Mr. John Fraser and Mr. Brian Fraser of the Fountain of Youth Park, and Park Manager Alan Andrews. These individuals, along with the park staff, saw to our every need, were patient in dealing with our requests and uplifting in their interest with the project.

Back at the FMNH, Maurice Williams constantly gave guidance in the finer points of project procedure and direction in laboratory analysis. Dr. Elizabeth Wing and her assistants were kind enough to excavate and analyze the plaster-jacketed pre-historic dog burial, while Lisa Hoshower oversaw the excavation and identification of the pre-historic burial we encountered.

Dr. Eugene Lyon of the St. Augustine Restoration Foundation greatly aided us by supplying historical documentation and insight pertaining to the initial settlement of St. Augustine. Dr. Michael Gannon of the University of Florida was also instrumental in providing historical details. Stan Bond and Bruce Platek of the Historical St. Augustine Preservation Board offered equipment, insight and moral support throughout the field season.

The brunt of our screening and quite a bit of shoveling was



done by a core of volunteers from the St. Augustine Archaeological Association. Without the selfless hours given by these individuals, we would probably still be trying to wrap up fieldwork to this day. Though too numerous to name, I am indebted to each one of them.

Then there's the crew! Steve Ferrell, Mary Herron, Greg Seaney and Charles Townsend worked with me as a true team. They were patient and understanding of my frequent ramblings and made the field season and analysis (Herron) the success that it was.

To Dr. Kathleen Deagan, principle investigator with FMNH, I extend extreme thanks for her mentorship, patience, support and trust. Under her professional guidance, the 1991 season and lab analysis was wholly accomplished.

Personal thanks go to my friends and family for bearing with me, particularly my father for his guidance, and to my Lord Jesus Christ.

HISTORICAL BACKGROUND (see Chaney, 1987:9-26).

In addition to Chaney's history of the site, some intriguing information has come to light from archival research. Dr. Eugene Lyon of the St. Augustine Foundation of Historic Research has been able to compile clues from legal cases and correspondence of 1566 and 1567 as to the location and construction of the first three St. Augustine forts.

According to Chaplain and Vicar Mendoza Grajales and other witnesses, the first Spanish fort of St. Augustine was burned on April 19, 1566. This was allegedly the work of flaming Indian arrows. The storeroom (housing munitions and trophies from the siege of Ft. Caroline), barracks and "half of the fort" were destroyed (AGI EC 154-A, fo. 1481 vo. et ff.; Lyon, personal communication).

The destruction came on the heels of prior unrest, as the fort had been plagued by mutiny. On March 12 and 13, 1566, trial proceedings of the mutineers recorded aspects of the settlement layout and location. We learn that the mutineers went from the real, or camp, to the fort, revealing the separation of the two areas. Upon reaching the gates of the fort and beating on them with lances and halberds, the rebels resorted to firing arquebuses upon the doors. Surrendering, the officials inside were placed in stocks. The Maestre de Campo Pedro de Valdes, however, was able to free himself and recapture the fort, the mutineers fleeing in a fregata to a bar downriver. It is noted that de Valdes attempted to fire cannon from the fort upon the marauders, but they were out

of range and their position was "very far" away. This downriver location of the bar would place the fort north of an east-west line through the bar of St. Augustine (AGI JU 999, No. 2, ramo 6; Lyon, personal communication).

Within the same document, a witness indicated the position of the storeroom, or casa de municion, to be located inside a buyo (buhio). This could indicate the Spanish application of the term to storerooms in St. Augustine or that the storeroom in question was in fact situated within Seloy's longhouse (Lyon, personal communication).

Questions remain as to the proximity of the first, second and third Spanish forts. By the end of June of 1566 it appears the second fort was built. Whether it was a rebuilding of the burnt out original fort or constructed in an entirely different location is a question perhaps archaeology can best answer. The arrival of reinforcements with the Archiniega relief fleet at the end of that June made necessary and possible the construction of a third, more substantial fort.

This third fort, built in the summer of 1566, abutted or was partially constructed upon the preceding structure. In a discussion from October 26, 1566, a witness describes how a sentinel, upon making his round, went "to the royal cavalier, which use to be the gate of the old fort" (AGI EC 154-A, fo. 1359vo.; Lyon, personal communication). A trench, or trinchera, from the third fort extended out to or possibly even cut into the old fort, while guardposts and barracks were situated outside the fort gate.

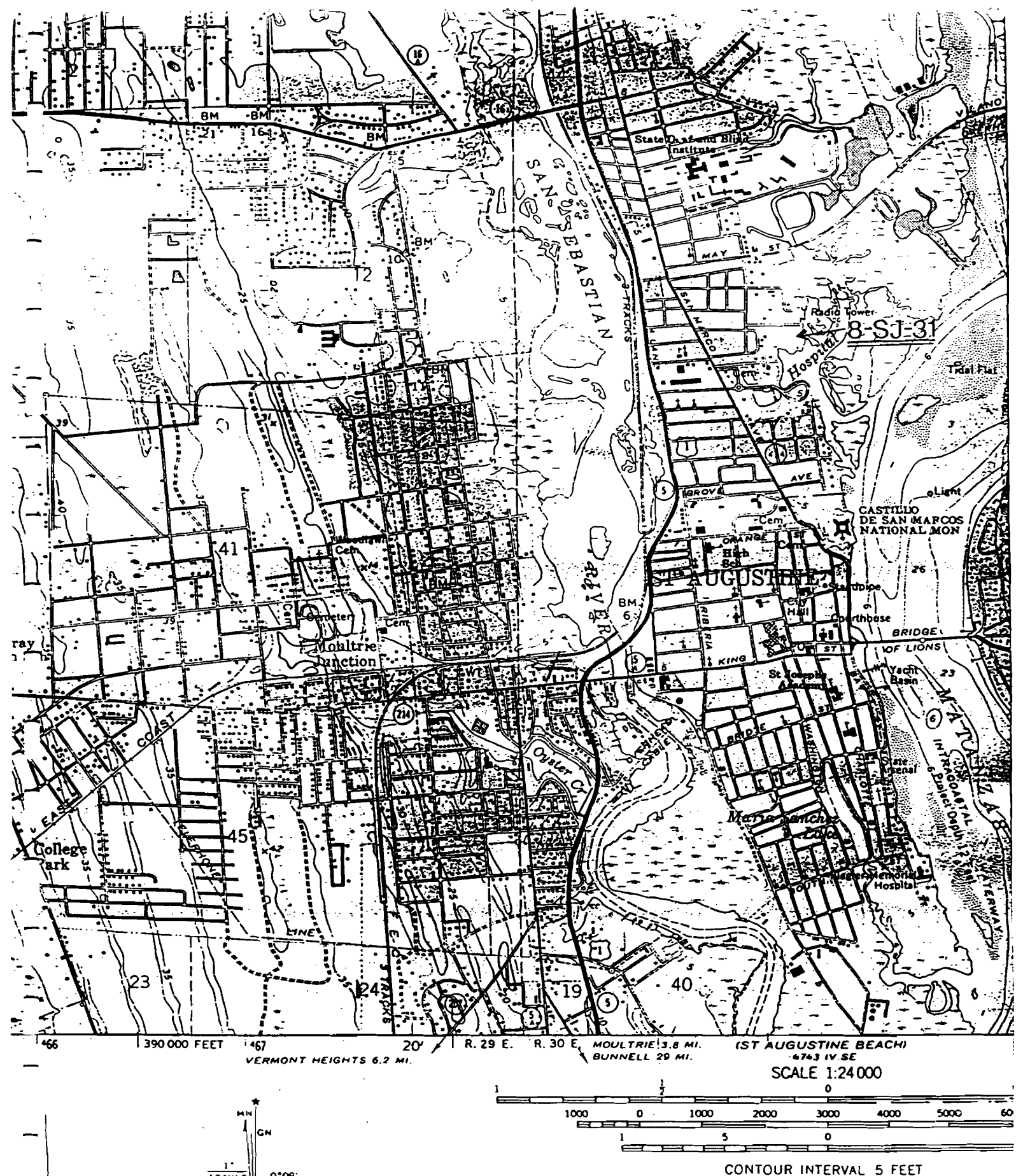


FIGURE 1  
Site Location

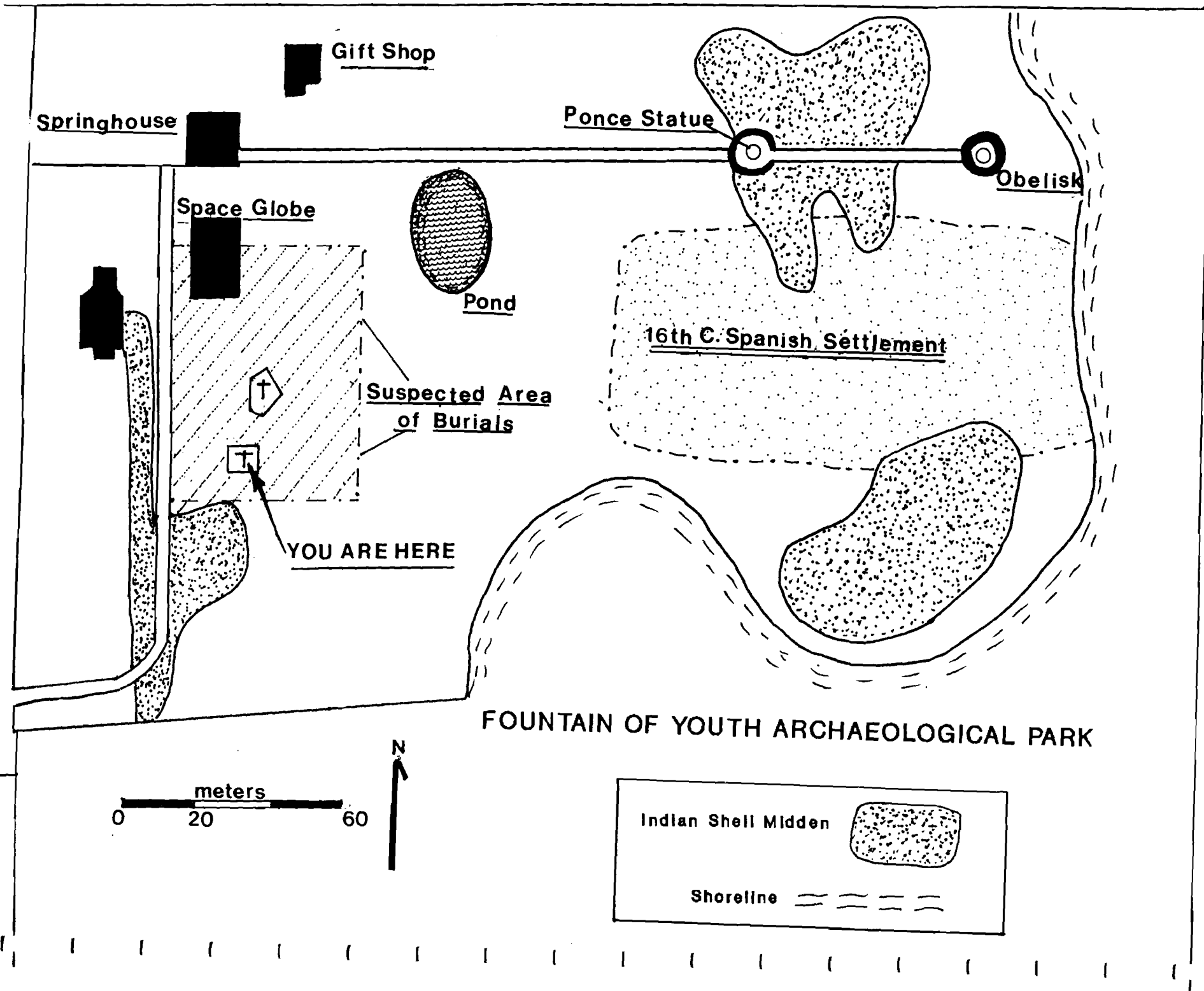


FIGURE 2....PARK AND SITE BASE MAP

From other documents we learn that the third fort followed a triangular, or traza, design, thereby having three cavaliers (one at each point), with a community church and adjoining storeroom harbored within the fort walls (Lyon, personal communication).

#### THE 1991 EXCAVATIONS: PURPOSE AND METHODOLOGY

The 1991 excavations at 8-SJ-31 were to serve as a continuation of the 1976, 1985 and 1987 investigations conducted by the University of Florida (Merritt, 1977; Chaney, 1987). A Chicago grid system was employed for horizontal control, using an iron rebar pin set by Merritt in 1976 at 500N/500E to re-establish the grid of previous seasons. The 500N/500E pin is set in a tabby pathway 11 meters east of the corner of the eastern flagstone base of the Ponce DeLeon Monument. From this reference point, a pin at 450N/500E was placed by Chaney in 1985. Both the 500N/500E and 450N/500E pins were used for establishing the 1991 grid. Wooden stakes of rectangular cross section were used to delineate actual unit boundaries. The southwest corner of the southwest stake of a unit marked that unit's coordinate designation. Due to continual flooding and accidental dislodgement, the wooden stakes proved often to be untrustworthy and were therefore removed at the end of the season.

For vertical control, a datum plane was established in relation to the 1985 and 1987 season datum planes. The 1991 datum plane was established 1.60 meters above ground surface at the southwest corner of the Ponce DeLeon Obelisk. The 1985 datum in

reference to this point was 1.51 meters above surface (9 centimeters below the 1991 datum), and the 1987 datum was at 1.81 meters above surface (21 centimeters above the 1991 datum). A permanent transit station was placed on the eastern rise of the site, midway between the Ponce DeLeon Obelisk to the north and the San Juan del Pinos Monument to the south. An additional datum reference, a nail marked with flagging tape, was placed 1.47 meters above ground surface on a palm tree roughly 18 meters south of the transit. All provenience elevations of the 1991 season were recorded in meters below datum (MBD) using the transit and stadia rod.

All excavation units were designated by the southwest corner grid coordinate and received sequential unit numbers beginning, with Unit #51 for 447N/511E (The last unit excavated in 1987 was #50). As a rule, a 10 cm balk was left unexcavated on all sides of the unit unless otherwise specified. Excavation followed natural stratigraphy, designated as zones, each strata being removed in arbitrary 5 cm levels. As the season progressed, 10 cm levels were often employed in sterile or near-sterile strata.

"Zone" was used to describe natural soil strata and extensive, non-intrusive cultural deposits such as midden layers or occupational surfaces. Zone excavation followed the above guidelines. "Area" designations were assigned to amorphous intrusions with questionable origin and function. Areas were designated sequentially within each unit. "Feature" designations were distinct, well defined intrusions of cultural origin and

relating to a single event or activity. Areas, upon expressing these characteristics after initial excavation, were sometimes "featurized." Features were designated on a site-wide basis beginning with Feature 27, picking up where the 1987 season left off. When exposing previously recorded features, the original feature number was adhered to. Initial levels of areas and features were often excavated in arbitrary 5 cm levels to obtain clearer boundary definition. Once clearly defined, 10 cm arbitrary levels were used.

"Postmolds (PM)" and "Possible Postmolds (PPM)" were terms used to designate post-like intrusions, often expressed in plan view as a circular stain. The two terms were used interchangeably. PPMs were cut in cross section to determine depth, shape and base of intrusion, to test their potential as an actual post. Oftentimes, PPMs were found to be bio-turbation (root molds or animal burrows) and therefore disregarded. PPMs were excavated in their entirety unless otherwise specified as excavated in levels, and were numbered sequentially unit by unit.

All proveniences were assigned a Field Specimen (F.S.) number. Specimens were numbered sequentially starting with F.S. 1305 for the 1991 field season (Chaney's 1987 final number being F.S. 1304). The final designation for the 1991 season was F.S. 1751.

The standard unit size was a 3 meter by 3 meter square with interior balks. Units of measure 3 m x 1.5 m were often used to expose questionable deposits while adhering to convention.



Exploratory trenches were only one meter in width, while shovel tests were kept to a 50 cm x 50 cm area. As mentioned before, units were designated grid coordinates with respect to the coordinate of their southwest corner.

Excavated soils were water screened through 1/4 inch and 1/8 inch step screens. The 1/4 inch screen functioned to gather cultural material and larger faunal and floral samples, while the 1/8 inch screen recovered finer faunal and floral material. This 1/8 inch "fine screen" material is to be sent to subsistence specialists for detailed analysis. The material in the 1/4 inch screen was sorted and bagged into the categories of cultural, faunal, charcoal and shell. All shell was weighed and recorded by F.S. number, but only whole shell and shell hinges were kept and bagged. Shell fragments without the hinge were discarded. Upon sorting, materials were placed into their respective bags, all material from the same provenience receiving the same F.S., and the number of bags, shell weight (if any) and additional comments were logged into the F.S. catalogue next to the corresponding number. Material from the 1/8 inch screen, once dry, was bagged unsorted under the same F.S..

A 4 liter soil sample was taken from each distinct zone, feature, area and PPM for detailed float screening analysis. The samples were usually taken from the second level of a given provenience or deeper to insure absence of contamination from overlying deposits. Occasionally the sample size was inflated to accommodate bagging an entire PPM of rather small dimensions, while

still other PPMs did not fill the 4 liter limit. Numerous samples were often taken from the same provenience if it was a large deposit (such as Feature 30).

One exception to the above is the excavation of Zone 1, the "plow zone." The upper 10 to 20 cm of all units suffered substantial disturbance due to previous agricultural use, mixing prehistoric through nineteenth century deposits. This rendered faunal and floral samples of no use and left the context of any cultural material questionable. Therefore, fine screens were not used when sifting Zone 1, and only cultural material was gathered from the 1/4 inch screen. To facilitate the rapid excavation of Zone 1, the southwest square meter was often the only sample initially screened of the plow zone. The remaining Zone 1 material (excavated as one level) was set aside for later screening at a convenient time.

An additional mode of trench excavation was facilitated with what is commonly called a "Ditch Witch." The Ditch Witch is a motorized, hand guided tiller used to cut trenches of 30 cm width and varying depth, often for subsurface pipe or cable placement. By lowering the tiller blade to a desired depth of 70-80 cm, we were able to strategically and rapidly place trenches, allowing exposure of stratigraphy within the area. Though provenience samples were not taken due to the mixed nature of the tilled soil, noted artifacts were bagged and profiles drawn of the Ditch Witch trenches (D.W.#1, #2 and #3).

Field records of the 1991 season included supervisor field notes (vol. I, II and III), pertinent crew field notes, unit excavation forms, unit provenience forms, feature forms and stratigraphic records with associated plan and profile maps. A F.S. catalogue was maintained, listing proveniences with associated depths (MBD), number and type of bags and additional comments. Combined shell weights were recorded on a separate form in association with the proper F.S. and provenience. In addition to the flood of forms, black and white and color photographs were taken. The black and white contact sheets and color slides are kept on file at the Florida Museum of Natural History along with originals and duplicates of all forms. Over two hours of video material of the excavations were also recorded using a high resolution 8mm format.

#### FIELD EXCAVATIONS: 1991

Excavations done from 1976-1987 (Merritt, 1977; Chaney, 1987) indicated the presence of a mid-sixteenth century European Occupation of the area. The 1991 season was designed to both help identify and interpret these previously excavated features and to expand excavationsto reveal additional features. These excavations are discussed below, organized in categories according to their general site location (see Figure 3).

#### CENTRAL UNITS

The central sampled portion of the site was a shallow basin

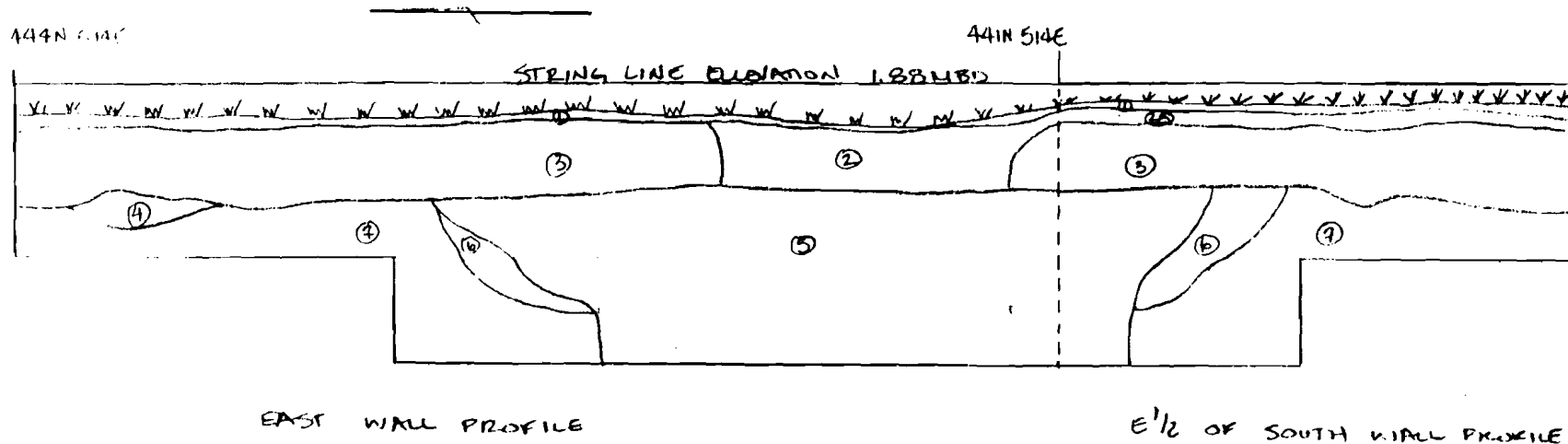


confined by shell midden deposits to the south, east and north (see Figure 2). Within the central sampling area in 1985, Chaney had uncovered a sixteenth century barrel well (Feature 9) in 441N/527E. In 1987, possible rectangular structural remains (Feature 22) were exposed in units 435N/518E, 442N/518E and test trench section #6 (see Figure 4). These finds prompted further investigation to determine any relationship between the two features. Below are listed the 1991 central unit coordinates and corresponding unit numbers: 438N/518E (#59), 438N/524E (#60), 441N/511E (#55), 441N/514E (#72), 441N/518E (#71), 444N/511E (#68), 444N/514E (#58), 444N/518E (#70), 444N/521E (#57), 447N/511E (#51) and 447N/518E (#52) (see Figure 10).

Due to tidal flux and recurring storms, much of the central low lying area remained underwater or saturated throughout the 1991 season. Excavations were often temporarily suspended in favor of working on the higher, drier northern and eastern units. Many exposed wall profiles and pedestals suffered irreparable damage from the inundating water. Many of the units in the central area were not fully excavated for lack of the extensive well-point equipment necessary to adequately drain the water. However, the lowest-lying features in these units were all exposed and mapped.

The stratigraphy within the central area was similar from unit to unit (see Figure 5). Zone 1, as mentioned earlier, was determined to be a culturally deposited "plowzone." Directly underlying the root mat, Zone 1 had a thickness of 15-20 cm and was generally medium brown grey to brown grey in soil color with very

500 31 Foy 41  
 CHAIN SILE  
 SCALE 1:10  
 1:100



KEY - SOIL COLOR

- ① ROOT MAT
- ② ED CHANEY'S 1985 TR. #10
- ③ GREY BROWN SOIL
- ④ BRN GRAY SOIL W/ LT BRN MOTT
- ⑤ BRN GRAY W/ OCC. RUST BRN MOTT
- ⑥ BRN W/ GRN RUST MOTTING
- ⑦ BRN TAN W/ OCC. RUST MOTTING

EXCAVATED BY

- DISCARDED
- DISCARDED
- ZONE 1 L1, 22 L1
- PART OF 22 L1, L2
- FEA 36
- FEA 36
- 22 L2, L3, L4

FS#

- 1321, 1322
- 1322, 1325
- 1439
- 1444, 1702
- 1325, 1430, 1432, 1441

FIGURE 5.....STRATIGRAPHY: CENTRAL SAMPLED AREA PROFILE

little if any shell. Zone 1 had a high artifact density compared to subsequent zones, including such modern items as plastic and lightbulb fixtures as well as Spanish majolica and course earthenware dating to the sixteenth century. This typical mixed nature of disturbed proveniences does not allow sorting of the materials into a tight stratigraphic framework. Upon determining the depth of the Zone 1 deposit through initial arbitrary 5 to 10 cm levels, the Zone 1 of remaining units was excavated as one 15-20 cm level to facilitate exposing underlying intrusions. Occasionally, one meter square samples were taken and the bulk of Zone 1 soil was set aside for later processing by volunteers.

There was a higher frequency of sixteenth century materials in Zone 1 compared to the amount found in Zone 2. This suggests that the actual level of sixteenth century occupation, and thus latter occupation layers, were severely impacted by agricultural activity at the site. The expression of features immediately below Zone 1 within the transitional Zone 2, Level 1 (discussed below) also suggests a disturbed upper occupation layer. Though the visual tops of the features were recorded, it is most likely that the actual tops of the intrusions were obscured by Zone 1 related activity. Any remaining portion of the original Spanish occupation layer would be manifest in the upper 5 to 10 cm of Zone 2.

Zone 2 was marked by the appearance of grey brown to brown soil that became lighter tan brown with depth. Levels were excavated in 5 cm depths for tighter stratigraphic control. Where fully excavated, Zone 2 had an overall depth of 20 cm. The upper

level (Level 1) had a relative high artifact density compared to lower levels (Levels 2-4). Level 1 was somewhat of an interface between the overlying plowzone and the more naturally deposited Zone 2, being greyish in color and having the occasional early period artifact.

At the top of Zone 2, Level 2, the color had become homogenous brown/tan brown. The majority of features and postmolds became evident within or at the base of Zone 2, Level 1. This indicates that Zone 2 was culturally impacted and perhaps contained the sixteenth century occupation layer. However, the bulk of Zone 2 appears to be culturally intruded, near-sterile soil. Artifact densities within Zone 2 decrease with depth.

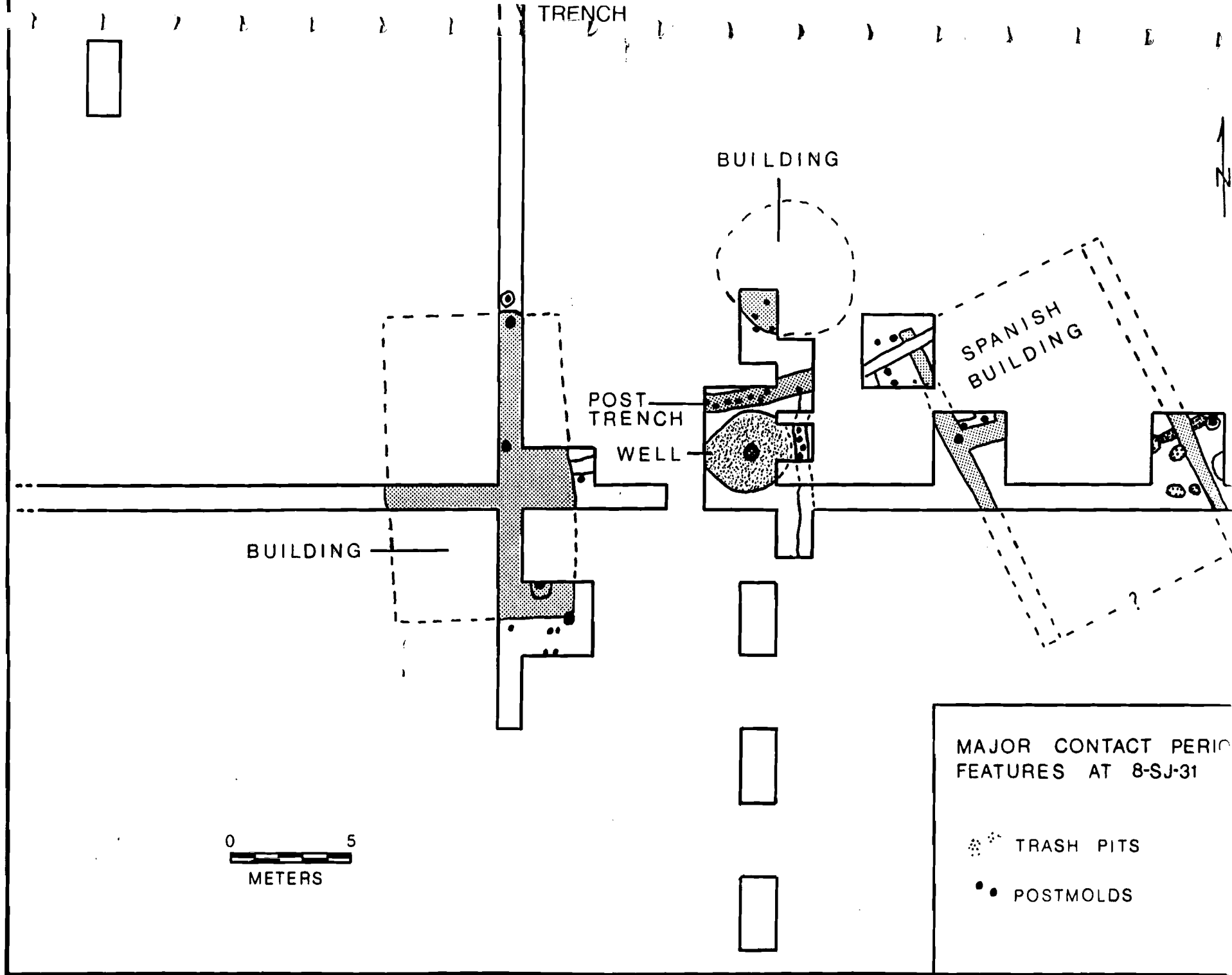
Zone 3 marked the appearance of tan soil with no artifactual content, referred to as culturally "sterile." Once reached, the soil was often too saturated to excavate and was thus left unexcavated. One exception is the sampling of a 1 m x 1 m area of Zone 3 in 447N/511E.

#### FEATURES AND AREAS OF THE CENTRAL UNITS

This series of units was opened to expose Feature 22 and determine its northern and eastern boundaries. Chaney described this as a "dark, roughly rectangular stain...containing aboriginal and early Spanish artifacts...and charcoal, suggesting that Feature 22 was the floor of a building which burned." From Chaney's



FIGURE 4. MAJOR CONTACT PERIOD FEATURE MAP: CHANEY'S 1987 SEASON



excavations of 435N/518E and 442N/518E, Feature 22 appeared to be striking northward with its eastern boundary running roughly north-south along the 520E grid line.

An array of units was placed to track this possible floor stain. Units #55 (441N/511E) and #52 (447N/518E) were staked out to uncover areas of Feature 22 abutting sections of the feature Chaney had previously exposed. Unit #51 (447N/511E) was placed in anticipation of uncovering a corner diagonal and northwest from that which Chaney described in 435N/518E. Units #55 and #52 were instrumental in defining the southwestern and northeastern extent of Feature 22, respectively, while Unit #51 lent support to the structural interpretation of the central feature complex. The most intriguing feature in the central sampled area was Feature 30 in Unit #51. At 25 cm below surface, Areas 1, 2, and 3 appeared as distinct bands of brownish grey to dark grey soil with brown mottling intruding into Zone 2. By 35 cm below surface (2.25 MBD), these three areas had blended into a circular stain of greyish brown soil with reddish brown mottling measuring two meters in diameter (see Figure 6). At this depth the intrusion was labeled Feature 30. Eight possible post molds (PPMs) were located throughout the unit at this level.

Four 5 cm levels (F 30, L1-4) were excavated to a depth of 2.45 MBD. Here, Feature 30 exhibited two distinct manifestations: a central brownish grey charcoal flecked soil intruded into, and was therefore surrounded by, a tan, white and brown mottled expression of the feature. These were labeled Feature 30A (F30A)



85031 101 W  
2478 / 111 E  
PEA 30 L4 2312  
PE 18 7 11  
NO 10 11  
R.87 11 W

XXXXXX

FIGURE 6....FEATURE 30 PLAN VIEW

and Feature 30B (F30B) respectively, and were excavated separately in 10 cm levels unless otherwise noted. As F30A represented the core of the intrusion, its level designations continued in sequence with those of F30 proper (F30A, L4-9). Feature 30B began with Level 1 at 2.45 MBD (F30B, L1-7).

Another related area to Feature 30 was Feature 30, Area 3, Levels 1-2, located on the southeast edge of the major intrusion. The brownish grey, white and brown mottled soil of this area suggested it to be a possible extension of F30B.

Initial interpretations of Feature 30 (A and B) ranged from a possible barrel well to a large posthole. With flooding of the site, excavation of Feature 30 was temporarily suspended at 2.45 MBD. A decision was made to place two well-points in Unit #51 to lower the water table and facilitate further excavation of the feature. To prepare the unit for well-points while avoiding loss of archaeological information, all PPMs in Unit #51 were excavated and the walls profiled at the existing level.

The four PPMs located immediately around Feature 30 formed a triad (see Figure 7). In the east wall of the unit and 20 cm off the east edge of Feature 30, PPM #10 originated around 2.30 MBD with an ultimate depth of 25 cm and width of 40 cm. The rounded base of this charcoal flecked intrusion was muddled by apparent bioturbation, but otherwise suggests a postmold (PM). No artifacts were recovered.

Lying 10 cm from the northwest of edge of Feature 30 were PPMs #1 and #7. PPM #1 abutted the west edge of PPM #7. While both

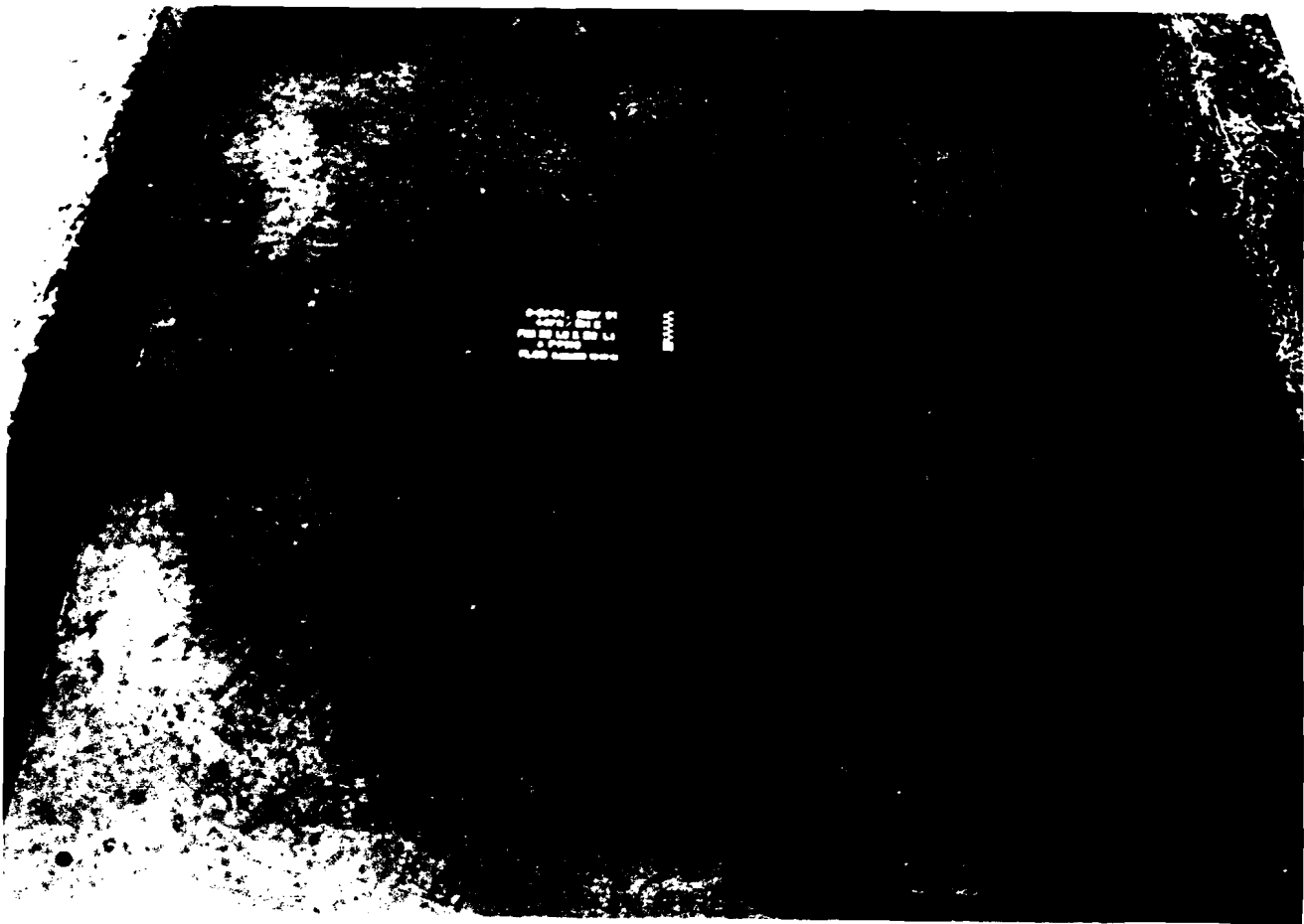


FIGURE 7....FEATURE 30 AND SURROUNDING POSTS

intrusions originated at 2.20 MBD, PPM #1 had a depth of 35 cm, width of 5-8 cm and a flat base while PPM #7 was 39 cm deep, 35 cm wide and exhibited a rounded base. The color schemes differed in that PPM #1 was darker grey with tannish brown mottling and PPM #7 was greyish brown to light grey soil. While PPM #1 yielded no artifacts, PPM #7 contained St. John's Plain sherds. These postmolds may be contemporaneous to or pre-date Feature 30.

The third in the triad of postmolds was PPM #2 located on the southern edge of Feature 30. Originating at 2.21 MBD with depth of 40 cm and basal width of 17 cm, the rounded point base and charcoal flecked brownish grey soil suggest this intrusion to be a postmold. The presence of San Marcos and St. John's Plain pottery indicate this to be a possible historic intrusion. Nearby PPM #3, designated within the boundaries of Feature 30, was determined to be merely an expression of Feature 30 and not a postmold.

While cleaning the east wall for profiling, PPM #11 was revealed. From profile information, no definite top could be determined other than a blending into overlying zone at 2.25 MBD. The base of the PPM was clearly visible at 2.54 MBD as a tapered rounded point.

What was labeled PPM #9 could more appropriately be considered a pit of some undetermined function. With a depth of 23 cm and width of 40 cm, the brownish grey to dark grey charcoal flecked soil intrusion originated at 2.30 MBD and contained an aboriginal pipestem fragment. This pit may pre-date or be contemporaneous to Feature 30.

A gas powered auger was used to excavate two holes, each five feet deep, in the northwest and southeast corners of Unit #51. Well-points were constructed of 2 inch PVC pipe and sunk into the prepared holes to approximately 4.00 MBD. A cross section connected the two points and directed the water flow to a gas powered pump. From here, the water was pumped out into the nearby marsh. The entire drainage and excavation process of the Feature 30 complex lasted two days, entailing nightlong well-point pumping and weary vigilance.

Features 30A and 30B were bisected with a rough north-south cut, the west portion of the features being excavated while the eastern portions remained intact for profiling purposes. Plan view maps were drawn at 2.55, 2.75 and 3.05 MBD as the water level and excavation level approached the base of the intrusion.

The profile of Feature 30A, Levels 4-9, suggests an overall depth of 50 cm (see Figure 8). Throughout its extraction, the diameter of Feature 30A continued to decrease. The base of this intrusion was gently, yet irregularly, curved. Particularly large amounts of waterlogged bark, twig and wood chunks were found in both Features 30A and 30B. Field analysis of this material suggests it to be pine wood. One small wooden artifact appeared to have been whittled. Within the medium brownish grey and charcoal flecked soil of Feature 30A were fragments of Spanish Olive Jar, iron, the head of a tack and fragments of St. John's Plain and Checkstamped pottery. This clearly demonstrates the feature to date to the historic period.

8-SJ-31 FOY 91  
447M/511E  
FEATURE 30A & 30B  
EAST PROFILE  
2.45-3.05 MBD  
R131 12-9

MAP # 91-145

8-SJ-31  
447M/511E  
FEATURE 30  
MAPERS: CTS  
DECEMBER, 1991  
SCALE: 1:120

0 10 20 30 40 50

- |  |               |
|--|---------------|
| ① Brown Gray to Medium Brown Gray with charcoal flecking | F. 30A        |
| ② Tan, Medium Brown Gray and Brown Mottled Sand          | F. 30B        |
| ③ Tan, White, and Light Brown Mottled                    | F. 30B        |
| ④ Tan, Light Brown Gray, and White Mottled               | F. 30, Area 3 |
| ⑤ Light Tan to White Tan Sand.                           | Zone          |

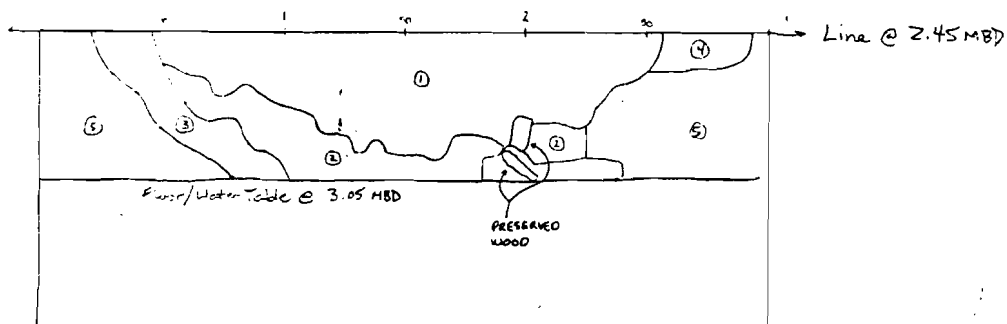


FIGURE 8....PROFILE OF FEATURE 30



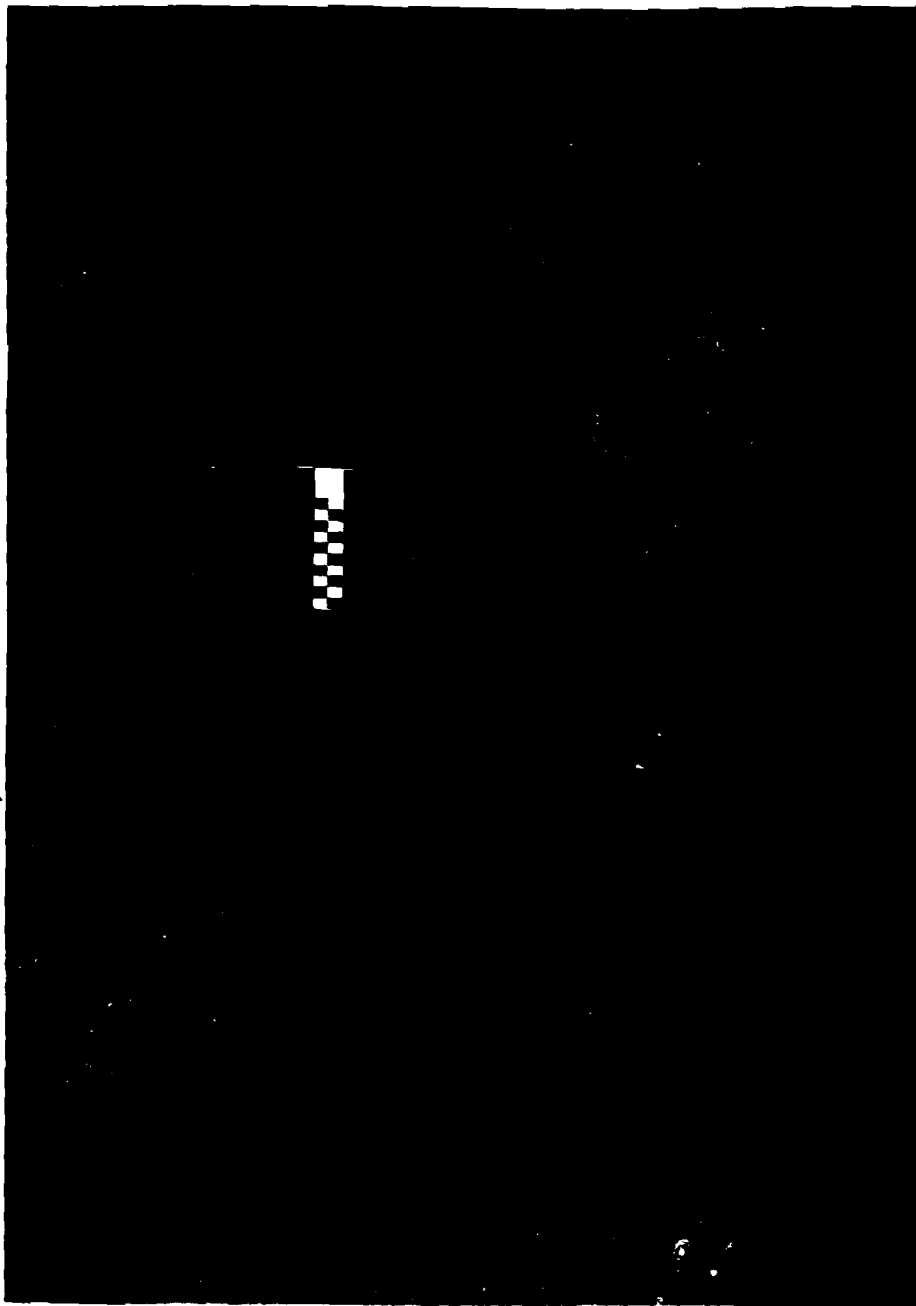


FIGURE 4-11. FEATURE 30 BASE POSTMOLD PLAN VIEW

Feature 30B, Levels 1-7, has an overall depth of 69 cm and was demonstrated through excavation and profile to underlie Feature 30A. As levels were excavated, Feature 30B was restricted to the northwest fringe of Feature 30A until the base of the latter was taken out. At 3.05 MBD, 60 cm from the top of the bisection, the floor of the unit became water saturated. The profile of Features 30A and 30B was drawn at this point, and not a moment too soon.

As the profile was being completed the well-point pump shut off. The water table in the unit slowly but surely began to rise, causing the already weak walls and bisection profile to crumble and spall. In an attempt to preserve the unit floor at the existing level while not losing the entire eastern portion of the feature complex, a rapid salvage effort was put into motion. Feature 30A (E1/2) was excavated as one 50 cm level with a top of 2.45 MBD. Another sample, labeled Feature 30 A and B (FS# 1745), contained the soil lying between Feature 30A proper and sterile soil.

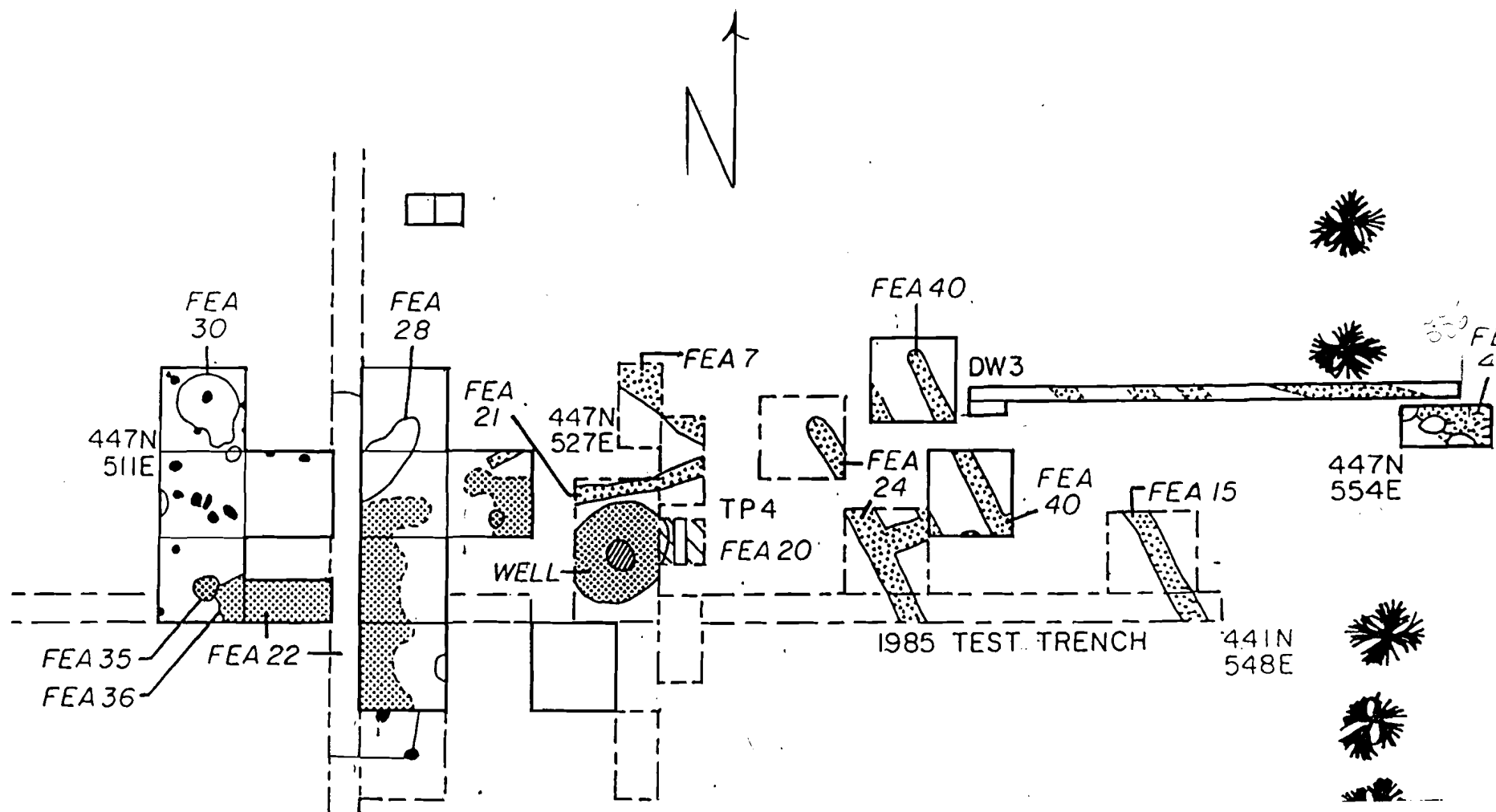
The well-point pump was eventually restarted in an effort to reach the base of Feature 30B. This was accomplished at 3.14 MBD where fragments of Spanish Olive Jar, iron and St. John's Plain and Checkstamped pottery were found. At the base of Feature 30B a postmold of 30 cm diameter and a depth of nearly 20 cm (3.14-3.33 MBD) was evident (see Figure 9). Along with St. John's Plain and Checkstamped pottery, an iron object of undetermined function and some possible mortar were recovered. A heavy concentration of waterlogged wood fragments also was contained in the postmold, as was charcoal and a possible bottle gourd seed (Personal

communication, Lee Ann Newsome, Florida Museum of Natural History, 1992).

The presence of a basal postmold containing Spanish artifacts, coupled with the size and depth of the Feature 30 intrusion suggest this feature to be a massive posthole dating to the historic period. Judging by the size of the post (30 cm diameter) and the depth to which it was set, it appears to have been a major structural support. The apparent intrusion of Feature 30A into Feature 30B may have been for the purpose of resetting or restrengthening a post. As the feature bisection did not cut a profile on line with the basal post, and due to the hurried salvage extraction of Feature 30A overlying the basal postmold, the relationship between the feature and the postmold could not be fully understood. The exhaustiveness with which Features 30A and 30B were discussed will help in understanding the interpretation of Features 28 and 36, discussed below. These features, though not fully excavated, are similar in appearance to the Feature 30 complex and may provide the key to the overall interpretation of the central sampled area. These features must be considered in the context of Feature 22, which tied these deeper intrusions together (see Figure 10).

Units #59 (438N/518E), #71 (441N/518E), and #70 (444N/518E) were opened to expose the area between Chaney's southeast corner of Feature 22 and the newly uncovered northeast extent of dark staining. A brownish grey stain with reddish brown mottling can be seen in all of the above mentioned units, the eastern boundary

FIGURE 10...CENTRAL AND EASTERN FEATURES IN PLAN VIEW



meandering northward along the 520E grid line. Differences in soil color or texture were assigned separate field designations, but all are thought to have comprised part of the feature complex represented by Feature 22 (Feature 22 complex is represented in Unit #59 by Feature 22; in Unit #71 by Feature 22 and Area 8; in Unit #70 by Area 2 and Feature 28; in Unit #52 by Features 27 and 28; and in Unit #55 by Features 35 and 36) (see Figure 10).

Though not fully excavated in any of the units due to saturated soils, Feature 22 displayed a gentle sloping to the west where exposed in Unit #59. With a top 25-30 cm from the surface, Feature 22 maintained its characteristic dark color from 2.15 to 2.35 MBD and then became slightly greyer. This may be from leaching of the overlying soil into underlying sterile soil. Darker concentrations of soil within the confines Feature 22 were observed in the unit floor at its 2.50 MBD base, possibly representing deeper intrusions. Artifacts from the excavated portions of Feature 22 included fragments of Olive Jar, iron, St. John's Plain and Checkstamped and San Marcos pottery, and a small fragment of what appears to be a pipe bowl. No postmolds were found in association with the feature.

In Unit #71, Feature 22 was disturbed by various intrusions, including some bioturbation. Here, the northern expression was separated by brown colored, disturbed soil from the southern portion, and was designated as Area 8. The southern portion was designated as Feature 22. A core sample of Area 8 revealed 45 cm more in depth at 2.30 MBD with brownish grey soil with underlying

light grey soil. Coring of Feature 22 revealed 50 cm of greyish brown soil remained with underlying greyish tan soil. Both cores support an ultimate depth for Feature 22 to be around 2.75-2.80 MBD. The excavated levels of Feature 22 yielded fragments of Spanish Olive Jar, iron, a small iron buckle, and sherds of St. John's Plain and Checkstamped and San Marcos pottery. Excavation of this unit was suspended at 2.30 MBD, the base of Zone 2, Level 2.

Unit #70 was also suspended at 2.17 MBD, the top of Zone 2, Level 1. Here, the probable continuation of Feature 22 from Unit #71 was labeled Area 2 due to its lighter color and amorphous boundary. No levels below Zone 1 of this unit were excavated. Occupying the northwest corner of the unit was Feature 28, an oblong stain of medium to dark greyish brown soil with reddish brown mottling. The boundary of this deposit extended north into the southwest and southcentral portion of Unit #52. Cores from this feature in Unit #70 suggested a depth of at least 43 cm (2.60 MBD), possibly extending deeper. No postmolds were evident at the suspended level of excavation.

Feature 28 of Unit #52 marked the northern extent of the greyish brown staining. Feature 28 was designated at 2.20 MBD and became increasingly confined to the southcentral portion of the unit. Though unit excavation was halted at 2.30 MBD, core samples from this portion of Feature 28 revealed a continuation of the intrusion for at least 45 cm (2.75 MBD). As is the case with the deep stain in Unit #71 (Area 8), Feature 28 may represent a deep

pit or posthole as opposed to being a continuation of the relatively thin sheet expression of Feature 22. Though the shape is different than Feature 30, the color scheme, depth, magnitude and artifactual content of Features 28 and 30 are very similar.

Associated with Feature 28 was Feature 27, a small circular deposit only 9 cm in depth, 60 cm original diameter and having a shallow curved base. While Feature 28 yielded a piece of Spanish Olive Jar, iron fragments, fragments of St. John's Plain and Checkstamped and a few San Marcos sherds, Feature 27 was artifactually sterile. It was unclear to what degree Feature 27 was a constituent of Feature 28, though the former certainly appeared to intrude into the latter. A similar relationship is also seen between Features 35 and 36 in Unit #55.

Unit #55 displayed the southwestern most extent of possible Feature 22 staining. In the southeast corner of the unit, a stain similar in color and size to Feature 28 and Feature 30 was designated as Feature 36. This intrusion could not be fully excavated due to standing groundwater, but the initial levels of this intrusion mirrored the medium brownish grey and reddish brown mottled soil of the above mentioned Features 28 and 30. Taken out in three levels (L1 and L2 were each 5 cm while L3 was 29 cm), Feature 36 proper began at 2.30 MBD while its true top may have been expressed at 2.22 MBD as Areas 1 and 2. The form took on a circular edge with depth while sloping gently inward. Along with St. John's Plain and Checkstamped and two sherds of San Marcos

Plain pottery, a piece of white majolica (possibly Fig Springs), small caliber lead shot and iron fragments were recovered.

At 2.25 MBD in Unit #55, Area 1 began to assume a faint circular form on the northwest edge of Feature 36. This circular stain (Area 1) was 80 cm in diameter at 2.30 MBD, where it was redesignated Feature 35. Much the same as Feature 27 discussed earlier, Feature 35 was excavated in one 9 cm level, the base being slightly curved and diameter restricting with depth. Only a single fragment of St. John's Plain pottery was recovered. Though the extent of the relationship between Features 35 and 36 is difficult to ascertain, the former appears to intrude into the latter, thereby dating Feature 35 to the historic period. The size, shape, color, depth of origin and artifactual content of Features 28, 30 and 36 were all very similar. Another tie between these intrusions was the distances that separated them. Each feature is separated from the others by a distance of six to seven meters, measuring center to center. This does not conform with Chaney's corner post in unit 435N/518E and lends problems to the proposed rectangular shape of Feature 22.

To determine the eastern extent of Feature 36, a 1 x 3 meter section of Chaney's east/west trench was reopened. Labeled Unit #72, the floor was excavated to 2.31 MBD to see below the level Chaney described in 1987. The entire floor of the unit exhibited the dark brownish grey color of Feature 36 and Feature 22 and did not allow for discrimination of boundaries between the two. Core samples across the unit did reveal a decrease in depth of the dark



stained soil from west to east, approaching Feature 22 proper.

Core samples were taken in unexcavated areas north of the 438N grid line and east of the 514E grid line in an attempt to delineate the edges of Feature 22. The dark staining associated with Feature 22 appeared to follow the 440N grid line to the east, then extend southward as it approached the 517E grid line. North of Unit #72, the dark staining died out by the 443N grid line and did not appear north of this. In fact, no staining remotely similar to Feature 22 appeared in Units #58 (444N/514E) or #68 (444N/511E). This leaves the overall shape of Feature 22 to be somewhat T-shaped, the top running north/south along the 520E grid line (see Figure 10).

The staining of Feature 22 may represent some form of organic decay, perhaps from a fallen or burnt structure, or an area of intense cultural activity. The various deep intrusions may represent a separate, yet still early, complex of features from a different Spanish occupation than that of Feature 22. Yet if related to the deeper intrusions of Features 28, 30 and 36, Feature 22 would imply these features were part of the same complex. Further work in connecting these features is needed. Perhaps another deep feature similar to Feature 30 lay to the southwest of the stained area near the point 437N/513E. This would furnish a fourth corner post and support the hypothesis that the Feature 22 complex is of rectangular shape.

#### NORTHERN UNITS

The northern sampling area lies on the south slope of a shell

midden occupying the northeast corner of the park. Though some testing was done in the center of the midden by Merritt in 1977, little is known of the relationship between the midden and the lower lying basin. Units were initially placed to gain some idea of the change in upslope stratigraphy and to search for boundaries of the Spanish occupation. Units within the northern sampling area are: 464N/515.5E (#66), 468.5N/506.5E (#65), 470N/505E (#64), 470N/511.5E (#67), both 472N/536E (#54) and 475N/536E (#53) to the northeast, and 486N/505E (#63) (see Figures 3 and 12).

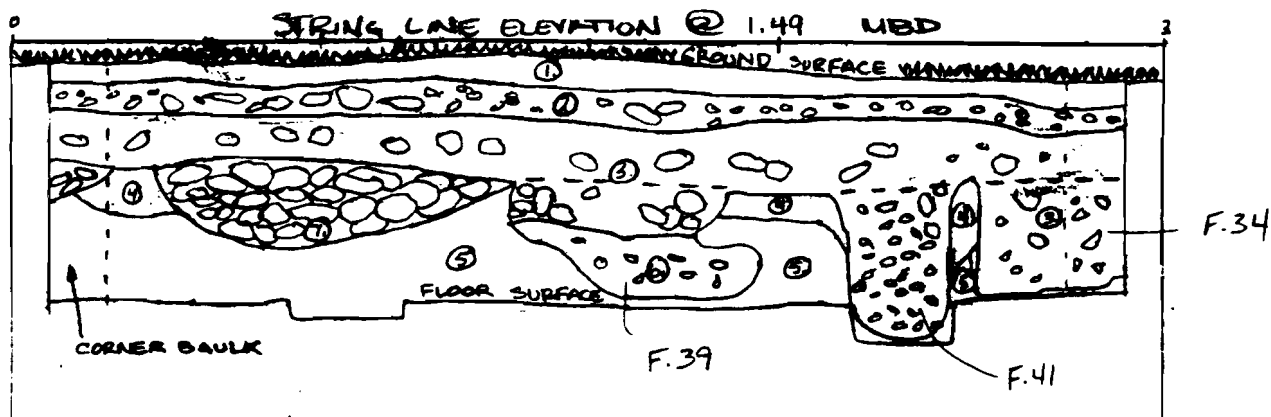
Shell deposit thickness increased little upslope, remaining between 20 to 25 cm from 470N/505E to 489N/505E, with the underlying soil having a minor topographic increase. The underlying soil matrix underwent a 15 cm rise from 470N/505E (1.83 MBD top) to 489N/505E (1.68 MBD top) while the overlying midden rose 20 cm (tops from 1.58 MBD to 1.38 MBD respectively). At the northern end of unit 486N/505E, the midden becomes 35 cm thick. This point marks the most substantial topographic increase of the midden and signals the southern edge of the fairly level midden top.

The zone designations changed with as stratigraphy varied among the northern units. In Unit #66, the southernmost unit of the sample group, Zone 1 was much like the Zone 1 plowzone described in the central units. The soil color was brownish grey to brown with light amounts of crushed shell. Its thickness was 20 cm and was removed as one level (Zone 1, Level 1). Likewise, Zone

MAP# 91-96  
S.R. #12

B.S.J.31 F.O.Y. 91  
□ 468.5N 506.5E  
11.11.91  
MAPPERS MKH:CT  
SCALE 1:20  
EAST WALL PROFILE

East Wall



# PROVENIENCE

## SOIL COLOR

① ROOT MAT

② Light Grey with some crushed shell; very dry/sandy

③ Very Dark Brown Grey with Moderate Broken, Crushed, and Whole Shell

④ Grey Brown with occasional shell flecking

⑤ yellow Brown with Brown Highlights

⑥ Grey Brown with Light Broken and Crushed shell

⑦ Grey Brown with Dense whole and Broken shell

2 was brown to tannish brown in color with a thickness of 20-30 cm. Level 1 of Zone 2 was an arbitrary 5 cm level to better expose features while Levels 2 and 3 were both 10 cm levels. The appearance of features in Unit #66 was immediately below Zone 1 and often had the same soil description as Zone 1. The plowzone undoubtedly cut into the feature tops here as well. Ten centimeters of yellowish tan colored Zone 3 was excavated as Level 1 and was shown to be sterile.

The stratigraphy among Units #64, 65 and 67 was similar due to their relatively close positions. Beneath the root mat, Zone 1 consisted of a 5-10 cm layer of loosely packed broken and crushed shell in dark grey soil. It appears that agricultural activity did not penetrate through the shell midden to a depth like that in the central sampling area. Only the Zone 1 from Unit #64 was screened, while that of #65 and #67 was discarded with the root mat. Zone 2 was designated because of its dark brownish-grey soil color and the occurrence of whole shell within the denser packed midden. Zone 2 appears to be undisturbed midden, unlike the redeposited overlying Zone 1. The thickness of the deposit varies between units as follows: Unit #64 was 8-10 cm, #65 was 15-20 cm, and #67 was 20-25 cm in overall thickness. Zone 2 in each unit was excavated as one level (Level 1) (see Figure 11).

Distinguishing intrusions within the midden itself was difficult until the underlying yellowish brown soil of Zone 3 helped to define feature edges. The appearance of seventeenth and sixteenth century Spanish artifacts and San Marcos and St. Johns

aboriginal pottery within Zone 2 suggest a build up of the midden predominately in the sixteenth and early seventeenth centuries.

The appearance of medium brown to yellowish brown shell-free soil marks the beginning of Zone 3. Artifact content is minimal outside of designated feature boundaries, but appears to reflect the pre-midden occupation of the site. Again, the thickness of Zone 3 varies between units: 10-15 cm in #64, 5-10 cm in #65 and 20-30 cm in #67. Because of the possible occupational association, all levels were 5 cm arbitrary levels with the exception of Zone 3, Level 4 of 10 cm in Unit # 67 (see Figure 11).

Zone 4 was marked by homogenous yellowish brown to tannish brown colored sterile sub-soil. In Unit #64, two 5 cm levels (Zone 4, Levels 1 and 2) were removed while Level 3 was a 10 cm level. Unit #65 had one 5 cm level followed by two 10 cm levels (Levels 1, 2 and 3 respectively). Unit #67 had two 10 cm levels (Levels 1 and 2) taken out of Zone 4.

Two units (472N/536E and 475N/536E) were situated east of the northern sampling group. Here the shell midden was not dense and only scattered shell occurred in Zones 1 and 2. Beneath the 3-5 cm root mat was dark brownish grey "plowzone" with some scattered shell fragments and modern artifacts.

Zone 1 in 472N/536E was excavated in two 5 cm levels, down to the more homogeneous dark brown soil of Zone 2 with only light crushed shell. Though only a 5 cm level (Zone 2, Level 1) was excavated, core samples showed Zone 2 continuing for 10 cm. Cores

also revealed Zone 2 to be followed by a 10 cm layer of brown and yellowish brown mottled sand (Zone 3), with underlying yellowish brown subsoil (Zone 4).

Unit 475N/536E had only a 6 cm layer of dark brownish grey Zone 1, with an underlying Zone 2 of brownish grey and brown mottled soil with light shell scatter. Levels 1, 2 and 3 of Zone 2 were found to be contaminated with modern tin foil, glass and a button. Each level was excavated in 5 cm and treated like Zone 1 soil (only 1/4 inch screened). Because of the amount of disturbance and presence of sterile-looking light brown mottling, the entire unit was featurized as Feature 37 and left unexcavated.

Unit 486N/505E (#63) offered an excavation challenge due to the 22 cm upsloping of the unit from south to north. An attempt was made to follow stratigraphy by initiating excavation with the natural slope. As the depth progressed and features became evident, the trend was to level off the floor of the unit for mapping and feature comparison.

Beneath the 3 cm root mat, Zone 1 was designated by relatively loosely-packed broken shell in dark grey to black sand. Zone 1, Level 1 was 10 cm to the south while only 2 cm on the north. This further increased the slope across the unit. Zone 2 was marked by an increase in shell density and compaction. The soil color remained dark grey to black. Zone 2, Level 1 was excavated only in the northern portion of the unit as a 10 cm level. This functioned to bring the north end (1.40 MBD) to within 12 cm depth difference of the south end (1.52 MBD). Zone 2, Level 2 was a 5 cm level

across the unit, exposing many features and areas. This level of Zone 2, containing Ichetucknee Blue on White majolica (a seventeenth century marker), appears to be a separate deposit from the overlying levels and Zone 1 which contained nineteenth and twentieth century artifacts. As these new proveniences were excavated the floor of the unit leveled out at 1.58 MBD.

The matrix at 1.58 MBD, designated as Zone 3, was of rich brown soil with some grey mottling and moderate amounts of whole and broken shell. Zone 3 artifacts consisted of predominately St. John's pottery with smaller percentages of San Marcos and Orange Fiber Tempered sherds. Despite a small, possibly intrusive sherd of course earthenware, Zone 3 appeared to have been deposited beginning in prehistoric times with possible continued deposition into the historic period. Levels 1 and 2 of Zone 3 were 5 cm thick while Levels 3 and 4 were 10 cm. Shell density decreased with depth and by Level 3 only light amounts of crushed shell were in the matrix. At 1.88 MBD, Zone 4 was designated as brown soil with some yellowish brown mottle. Zone 4 was left unexcavated.

#### FEATURES AND AREAS OF THE NORTHERN UNITS

A complex of trench features were exposed in the northern units. Feature 26 was initially described by Chaney in 1987 and is present in Units #66 and #67. This was a 55-60 cm wide linear trench stain, possibly a wall trench or shallow ditch. Feature 34, similar in form and orientation to Feature 26, was found only in Unit #64 (see Figure 13). Feature 41, a deeper and narrower

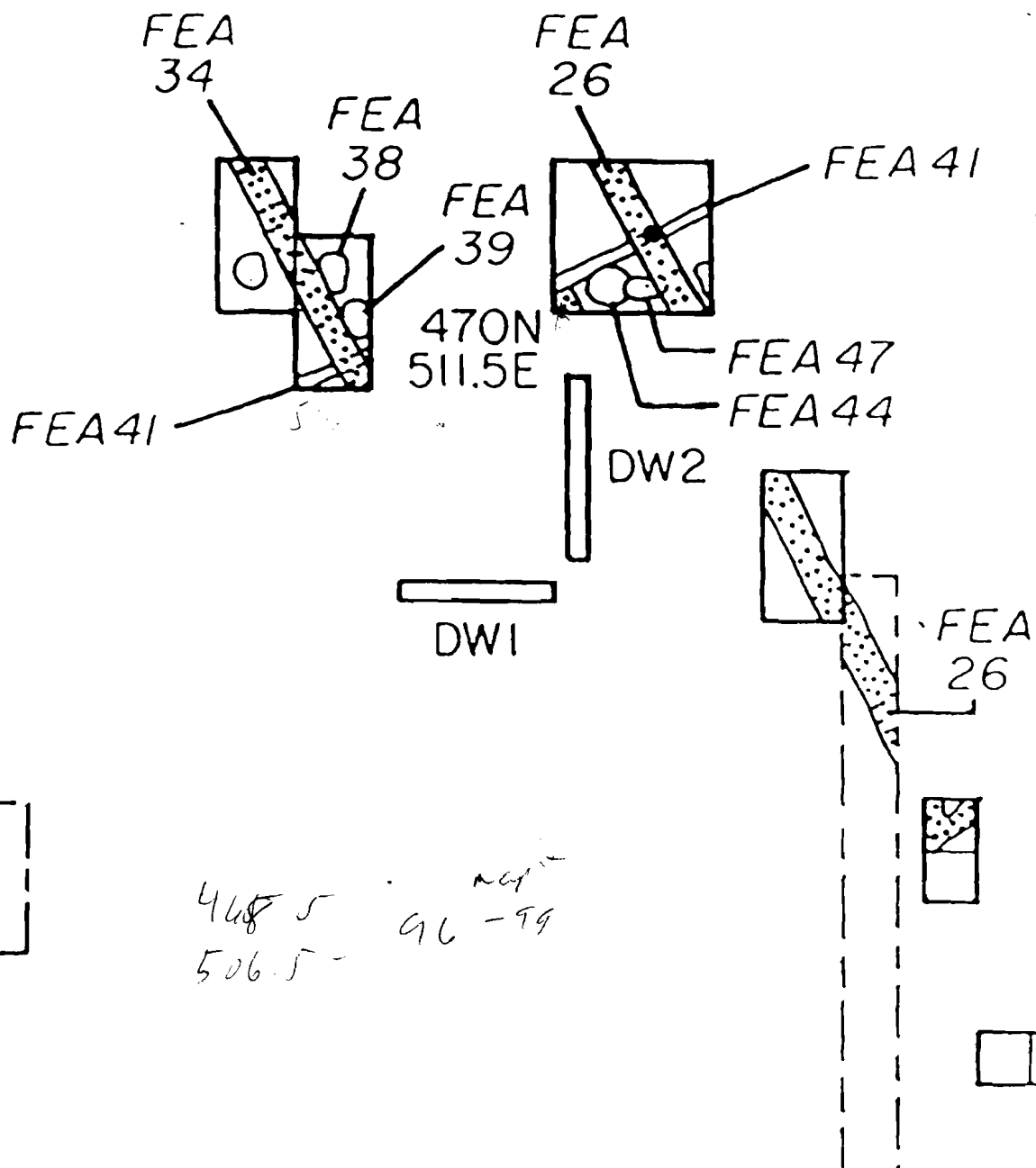


FIGURE 12...NORTHERN TRENCH FEATURES PLAN VIEW



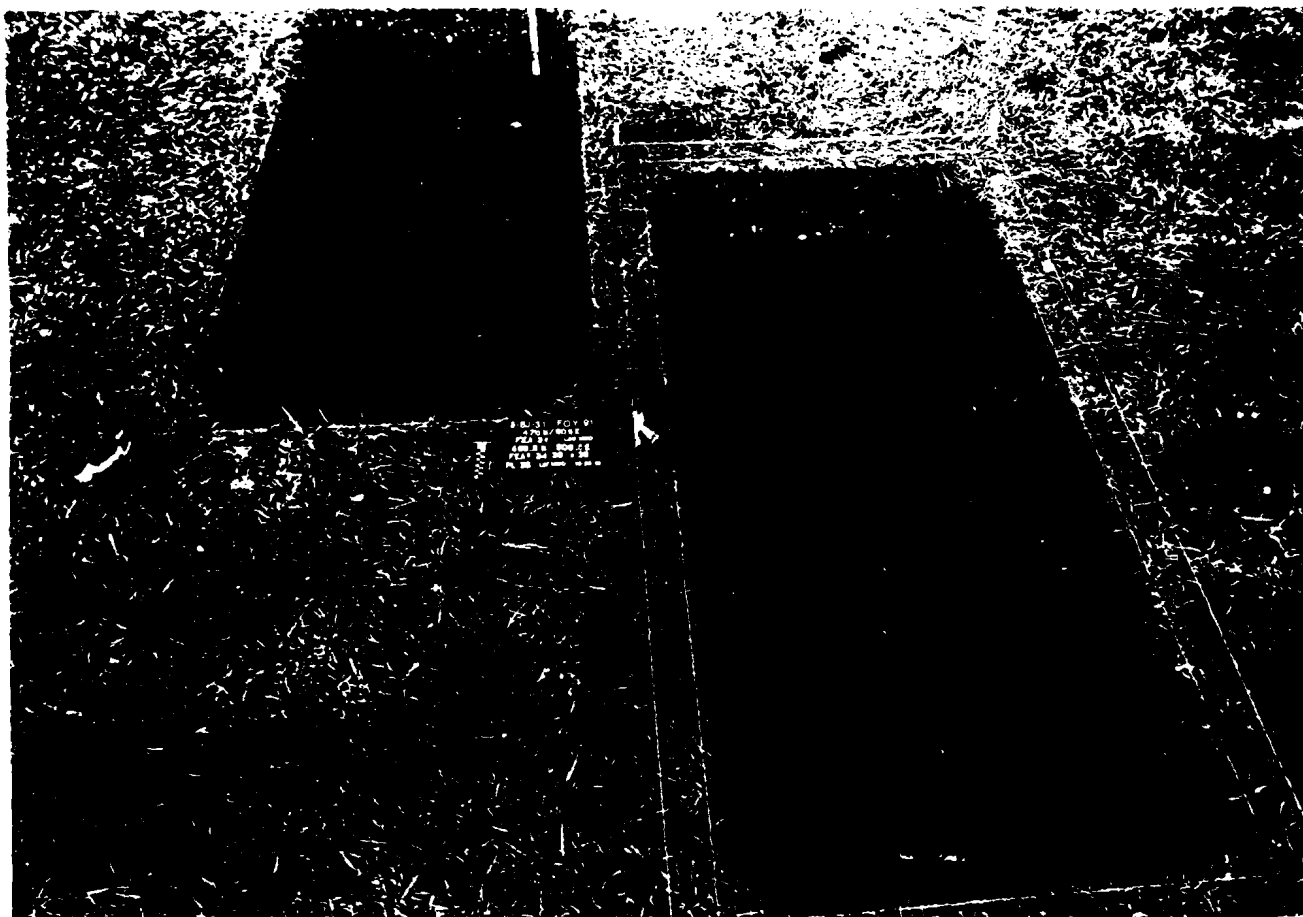


FIGURE 13...NORTHERN TRENCH FEATURES PLAN VIEW

trench, runs perpendicular to Features 26 and 34 and was exposed in Units #64 and #67 (see Figures 12 and 13).

Feature 26 was comprised of medium greyish brown soil fill when in a sandy matrix (Unit #66) to dark brownish grey with moderate shell inclusion when underlying shell midden (Unit #67). Although these depositional differences suggest temporal association with the midden, the actual tops of the trench features could not be discerned as intruding through the overlying strata. As the shell-less underlying soil below the midden was approached, the shell-included boundaries of the features became more evident. Chaney first reported Feature 26 in northern trench sections #10 and #11 from 1987. The southern and northern extent of the feature were not explored.

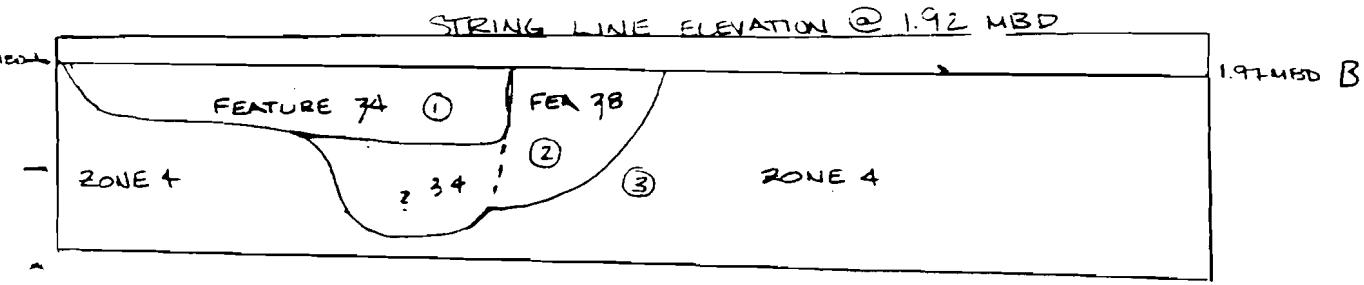
Unit #66 was opened to expose more of Feature 26 in an attempt to uncover a terminus. Here the feature continued its north/northwest bearing (roughly 25 degrees west of north) from the southeast corner up into the northwest corner of the 1.5 m x 3 m unit. At 30 cm below the surface, Feature 26 intruded into the greyish brown soil of Zone 2, Level 2. With a width of 60 cm and ultimate depth of 20 cm, the feature was excavated in two 10 cm levels. The bottom eastern edge of Feature 26 dipped 2 to 3 cm below the western base. Though this expression does not appear obvious or significant in a sandy matrix, the depth and definition of this basal "furrow" is more evident when the feature intrudes into the shell midden of Unit #67. Only one shallow (6 cm) possible postmold (PPM 1) was evident in the base of Feature 26.

Perhaps the basal furrow functioned to hold non-intrusive posts or a wooden sill on which posts could be fastened. Presence of Columbia Plain majolica, Olive Jar sherds and aboriginal ceramics suggest this feature to be from an early Spanish occupation. One postmold, excavated as Area 6, Level 1, was in the northeast corner of the unit. It had a depth of 37 cm and contained a nail fragment.

Feature 26 continued north into Unit #67 where it exited the east side of the south wall to enter the west side of the north wall. Because of the dark greyish brown soil color with crushed and broken shell, Feature 26 was designated below Zone 2 where the feature could be differentiated from the tannish brown soil of Zone 3. The descriptive similarities between Zone 2 and the feature suggest that Feature 26 probably originated within Zone 2 and that Feature 26 fill derived from Zone 2. These similarities complicated a designation of Feature 26 at its true top. In Unit #67, Feature 26 retained a width of 60 cm and an overall depth of 20 cm. The basal furrow on the eastern side was more prominent and defined than in Unit #66, being 5 cm deeper than the rest of the intrusion (see Figure 14). No postmolds were uncovered in the base of the feature. The presence of olive jar, iron and lead fragments and an abundance of St. Johns aboriginal ceramics suggest the feature to be from an early Spanish occupation.

Feature 26 intrudes into many other features of Unit #67, most from the late prehistoric or very early historic periods. Along the north wall, Feature 45 was an oblong to rectangular shaped pit

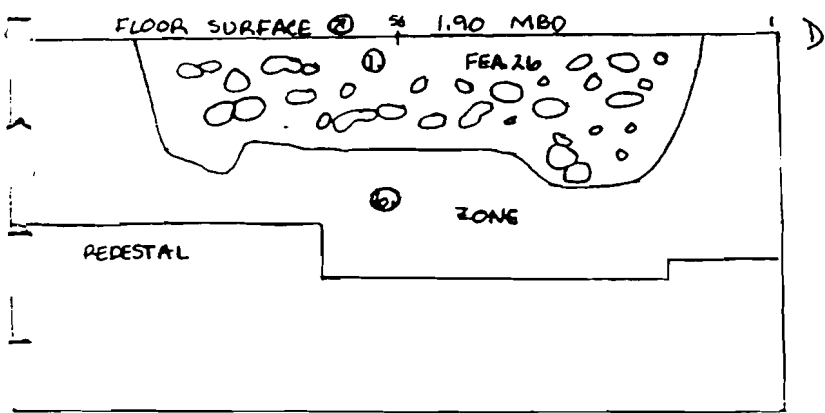
468.5N 506.5E  
 7.28.91 MKH  
 SCALE 1:10



NORTH PROFILE (SEE P.L. # 77)

- ① D. to Med. Gray Brown with Broken and crushed shell F. 34
- ② D. Brown Grey with Broken and crushed shell and charcoal F. 33
- ③ Yellow Brown (sterile)

NORTH PROFILE



8-SJ-31  
 F.O.Y. '91  
 470N/511.5E  
 SOUTH & NORTH PROFILES  
 OF F.26/F.41 DPM3 Bisect  
 MAPPERS: G & SF  
 NOVEMBER 15, 1991  
 SCALE: 1/10

Descriptions COLOR

- ① DARK BROWN/GREY WITH WHOLE AND BROKEN SHELL.
- ② GREY/BROWN AND TAN/BROWN MOTTLE.
- ③ DARK GREY WITH SOME BROKEN SHELL AND CHARCOAL FLECKING.
- ④ Y/BROWN AND TAN/BROWN MOTTLE.
- ⑤ BROWN/GREY WITH TAN/BROWN MOTTLE.
- ⑥ YELLOW/BROWN

FIGURE 14...FEATURES 26 AND 34 IN PROFILE

lying 43 cm below the surface (53 cm to the top of the Feature proper) and was bisected by Feature 26. Originally excavated as Area 2, Level 4 and Area 15, Level 1 (on west and east sides of Feature 26 respectively), Feature 45 proper was excavated for 35 cm down to ground water. Throughout its depth, the feature was represented by mottled areas (such as Area 19, Level 1) within the main feature boundary. At the base of excavation, five such distinct areas existed. This may represent different episodes of filling and refilling to support a post within the pit. Only aboriginal ceramics were present in Feature 45 and the frequencies were low, suggesting this to be a pre-Columbian feature. Feature 45 was excavated as Area 2, Level 4 and Area 15, Level 1 (each 10 cm) and Feature 45, Levels 1 and 2 (10 cm) and Level 3 (15 cm).

Feature 47 was also intruded upon by Feature 26 in the south central area of the unit. Feature 47 proper was greyish brown soil with some yellowish brown mottling and originated 54 cm below the surface. The top of the feature suffered from various disturbances. It is unclear how the overlying Area 5 was associated with both Features 47 and 44. Within the south central portion of the unit lay another intrusion, Feature 44. It was determined through cross sectional views that Feature 47 intruded into Feature 44. Feature 47 was oblong in shape with roughly rectangular edges similar to Feature 45 and had a rounded base. Within the intrusion were aboriginal ceramics and two iron nail fragments. Feature 47 was excavated as Levels 1, 2 and 3 of 6, 10 and 11 cm respectively and probably represented a small storage or

trash pit.

Feature 44 was dark brownish grey and brown mottled soil with heavy charcoal flecking. Though Feature 47 appears to have intruded into Feature 44, the top of the latter was noticed first and therefore was designated at a higher elevation, 48 cm below the surface. As the intrusion descended it became rounded in form. Feature 44 was excavated for 57 cm in four levels (Level 1, 4 cm; Level 2, 6 cm; Level 3, 10 cm; Level 4, 37 cm) down to the water table. Within Level 4, the intrusion became extremely constricted and resembled a postmold in profile. Only aboriginal ceramics came out of Feature 44, hinting that this feature was possibly a pre-Columbian burnt post and posthole or trash pit.

Feature 41 was a trench feature intruded upon by Feature 26. The two trenches were perpendicular to each other, with Feature 41 taking a west/southwest by east/northeast bearing (roughly 65 to 70 degrees east of north). In Unit #67 Feature 41 exited the south end of the west wall to enter the north end of the east wall. The color scheme and fill of this trench was the same as that of Feature 26 and therefore the top probably originated within the shell midden of Zone 2. The relation of Features 26 and 41 was discernable only through cross sectional profiling. As with Feature 26, Feature 41 began 30 cm below the surface but otherwise had different characteristics. Though the initial width of Feature 41 was 60 cm, after 20 cm of excavation the width was reduced to 20 cm. The ultimate depth of this trench was 40 cm and was excavated in four levels (Levels 1-4, all 10 cm levels). The presence of

Olive Jar, nail and iron fragments and numerous aboriginal ceramic sherds within the fill suggest this feature to be from a Spanish occupation. One small sherd of blue on white majolica (San Luis Blue on White?) from deep within the feature may put a date of post-1580 on Feature 41, if the sherd was not intrusive.

A few postmolds were found within Unit 67. PM 3 was the largest of these with a diameter of 30 cm and depth of 78 cm to the water table. Cross sections revealed that Feature 26 intruded into PM 3 and that PM 3 intruded into Feature 41 and may be associated with that feature. PPMs 4 and 10 (14 and 10 cm depths respectively) began at lower elevations (2.16 and 2.20 MBD respectively) and had pointed bases. Neither contained artifacts and do not seem to be associated with any features.

Areas 14 and 16 were suspected to be small smudge pits. Area 14 was located in the south end of the east wall and was dark brownish grey with charcoal flecking and lumps. The base was designated PPM 8 due to the constriction of the intrusion but proved not to be a PM. Overall depth was 30 cm. No artifacts were recovered from this pit.

Area 16 was located in the east portion of the south wall and was medium greyish brown with charcoal flecking. At the base of the intrusion, small areas of heavier charcoal were redesignated as PPMs 11 and 12. These were shown through excavation, however, not to have been posts. The overall depth of this probable smudge pit is 34 cm and Feature 26 intrudes into the east side of the pit. Area 16 contained a sherd of San Marcos pottery, suggesting a date

of deposition in the historic period.

In Units #64 and #65, another trench feature very similar to Feature 26 was found seven meters to its west, and designated Feature 34. As the units progressed upslope, the initial below datum depths along the feature became dissimilar. Below surface measurements place each section of the Feature 34 at 30 cm from the ground surface. This indicated the existence of the slope pre-dating the trench and midden deposits. In Unit #64, Feature 34 had an overall depth of 22 cm (1.83-2.05 MBD) and was excavated in two levels. The trench feature displayed a depth of 26 cm in Unit #65.

Though the profiles of Feature 34 did not display as pronounced an eastern furrow as seen in Feature 26, the presence of a deeper area of intrusion was evident in Unit #65. Here, the eastern portion of Feature 34 continued deeper than the western portion and was labeled and excavated as Feature 34A, L1 (2.06-2.17 MBD) (see Figure 14). As Feature 34 was designated and excavated prior to Feature 26, this serves to further express the similarities between the two features. Present in the various levels of Feature 34 were Spanish Olive Jar, lead shot, a blue glass drawn bead (Ichetucknee Blue?), a green seedbead, a square spike, an unidentifiable sherd of blue on white majolica and sherds of St. John's Checkstamped, Plain, and San Marcos pottery. These clearly date the deposition to the historic Spanish period. In Unit #65, Feature 34 intrudes into three other features



(Features 38, 39 and 41) all thought to date to the early historic period. Both features 38 and 39 appeared to be pits. Feature 38 was initially labeled Area 3, L1 at 1.91 MBD (37 cm below surface). After 5 cm of excavation, the intrusion was redesignated Feature 38. Two levels of the rectangular shaped pit were excavated to an ultimate depth of 2.19 MBD, an overall depth of 28 cm.

Having a dark brownish grey color, Feature 38 was distinguished from Feature 34 in that the former contained a dense fill of broken, whole and crushed oyster shell. Profiles at the juncture of the two also helped to define boundaries and display the intrusion of Feature 34 into Feature 38, similar to Feature 26's intrusion into the rectangular Feature 45 pit. Artifacts within the pit feature were fragments of Olive Jar, St. John's Plain pottery and sand tempered aboriginal pottery sherds.

Feature 39, also intruded upon by the eastern edge of Feature 34, was rounder in form than Feature 38. Originally designated Area 4, L1 at 1.91 MBD, the deposit was redesignated as a feature at 1.96 MBD. The probable pit was excavated in two levels down to 2.20 MBD, giving Feature 39 an overall depth 29 cm. The fill and color scheme were similar to Feature 38, with less of a concentration of shell throughout. Though profiling revealed Feature 34 to intrude into Feature 39, not until 2.08 MBD was the coagulation of Features 34, 38 and 41 untangled. The slightly sloping, rounded base of Feature 39 and the well defined edges of Feature 41 became evident at this depth. Fragments of Olive Jar, iron, a piece of polychrome majolica (San Luis Polychrome?), and

sherds of St. John's Checkstamped, Plain and San Marcos pottery were contained within the bounds of Feature 39.

The westward extension of Feature 41 spanned from the southerly east wall to the southwest corner of the unit. Keeping true to its form seen in Unit #67, the intrusion maintained a dark greyish brown color with moderate amounts of crushed, broken and whole shell. The straight, steep sides and deep, slightly rounded bottom were also evident.

Designated as Area 5, L1 at 1.91 MBD (31 cm below surface), the trench was excavated as such for 17 cm before being redesignated Feature 41 at 2.08 MBD. Once redesignated, two 10 cm levels were taken out leaving the final depth of Feature 41 at 2.29 MBD, an overall depth of 38 cm (This is consistent with the 40 cm depth of Feature 41 in Unit #67). Within the fill of the trench, sherds of St. John's Checkstamped and Plain as well as San Marcos pottery were found. This possibly dates the intrusion to the historic period.

Lying 15 meters to the north in Unit #63, and running parallel to Feature 41, was Feature 32. This trench feature extends from the southwest corner to the southerly east wall, displaying the same 25 degree north-of-east orientation as Feature 41. Having dark brownish grey soil with dense crushed, broken and whole shell fill, the 50 cm wide intrusion was strikingly similar to Feature 41. The top of the feature was evident 20 cm below surface (1.58 MBD) with an ultimate depth on the eastern edge of 42 cm (2.00 MBD).



FIGURE 15...DOG BURIAL PLAN VIEW

Near the eastern wall, Feature 32 takes a dive in depth, possibly signifying the presence of a postmold. This is evident in the profile of the east wall of the unit. The western portion of the trench had steep sides and a flatter base compared to the slightly more rounded base of the eastern portion. In the four levels of excavation (L1 and 2, 5 cm; L3 10 cm; L4 22 cm), Olive Jar fragments, lead shot, and St. John's Plain, Checkstamped, and San Marcos pottery sherds were found.

Questions remain concerning the relation of Feature 32 to the other northern trenchworks. Although the northernmost extent of the north/south running trenches (Features 26 and 34) is unknown, Feature 32 is extremely similar to Feature 41 in composition and form. These two features may represent contemporaneous structural deposits and may possibly be related to a much grander scale complex involving Features 26 and 34. An alternative view is that Features 32 and 41 represent a slightly earlier occupation than the intrusive Features 26 and 34. Regardless of their association, all of the above mentioned features appear to belong to early Spanish occupations.

Perhaps the most unique feature of the 1991 season also came out of Unit #63: Feature 46, a pre-historic dog burial (see Figure 15). While dog burials are often encountered in the Southeast archaeological record, Florida finds of this nature are not as common. The actual burial pit was noticed deep in Unit #63, only fully distinguishable in the brown soil of Zone 4 underlying the midden. With the pit's top at 1.82 MBD (56 cm from the surface)

and diameter of 50 cm, actual remains were encountered by 1.88 MBD. The base of excavation was at 2.18 MBD. The medium brown soil fill contained a single sherd of St. John's Plain pottery and some occasional oyster shell. The absence of Spanish artifacts and the location of the deposit beneath pre-historic midden clearly date this interment to the pre-historic period.

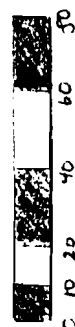
Within the pit, the dog was laying with its head to the north and facing west, the hind feet tucked up under its chin. The remains were exposed, cleaned in situ and plaster jacketed for removal and transport back to the Florida Museum of Natural History. There, a team of zooarchaeologists under the direction of Dr. Elizabeth Wing carefully excavated the dog remains from the surrounding soil for analysis. The dog was small to medium in stature as is the case with most pre-historic canines. Though the overall preservation was not extraordinary, stomach contents remained allowing a glimpse into the dog's dietary pattern. Bones and vertebrae of various fish, bird and mammal species (including deer phalanges) were all present.

#### EASTERN UNITS

The 1991 eastern sampling area units were placed to further expose a series of linear trench works described by Chaney from the 1987 field work. These possible structural trenches were uncovered in Chaney's Units 442N/535E (Features 21 and 24), 446N/532E (Feature 24), and 442N/544E (Feature 15) (see Figures 4 and 10). In form and orientation they are much like Feature 26 to the

Map = 71-85

8-5J-31 Foy 91  
Ditch witch #3  
North Wall Profile  
Map 71-85  
11/1/91  
Scale 1:20

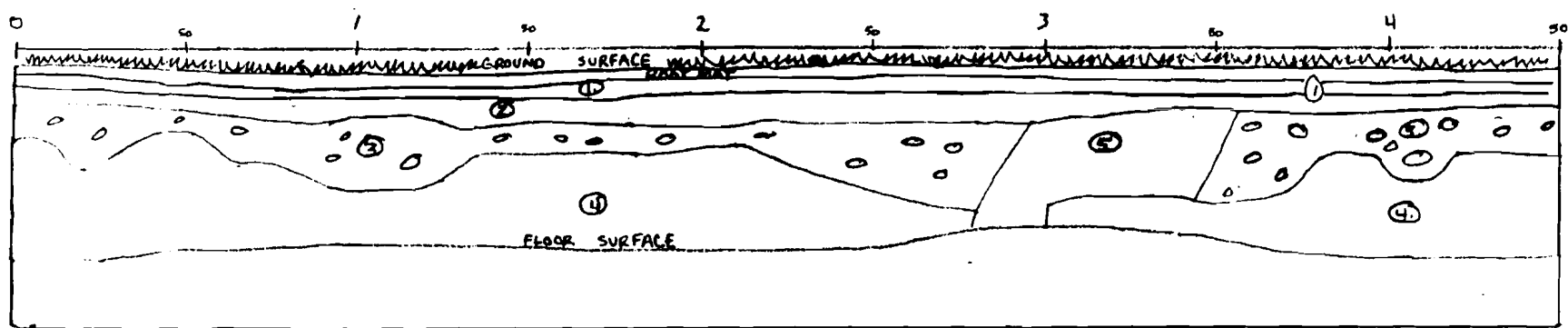


From  
539.5 E to 548 E

### Descriptions

- ① LIGHT GREY/BROWN WITH OCCASSIONAL shell.
- ② GREY/BROWN WITH OCCASSIONAL shell.
- ③ DARK BROWN/REY WITH WHOLE AND BROKEN SHELL.
- ④ TAN/BROWN
- ⑤ Brown Grey
- ⑥ Yellow Brown Mottled
- ⑦ BROWN/REY w/ SOME WHOLE AND BROKEN SHELL.
- ⑧ BROWN/REY w/ SOME WHOLE AND BROKEN SHELL.

LINE ELEVATION @ 1.85 MBD



### NORTH PROFILES

LINE ELEVATION @ 1.76 MBD

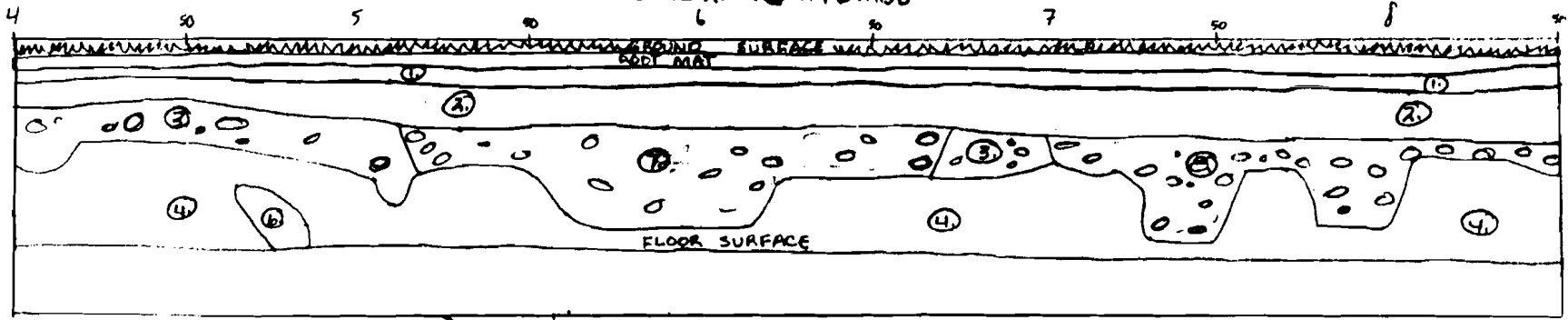


FIGURE 10... STRATIGRAPHY: EASTERN SAMPLED AREA PROFILE

north/northwest: roughly 50 to 60 cm wide, 15 to 20 cm deep in a sandy matrix and having a bearing 25 degrees west of north. Feature 21 is an exception in that it contained nineteenth century artifacts and was deeper (50 cm) and ran in a fashion perpendicular to Features 15 and 24. The 1991 units in this area were 444N/538E (#61), 448N/536E (#69), 448.3N/539.5E (#74), Ditch Witch Trench #3 (D.W.#3) and 447N/554E (#73). Units #61, #69 and #74 were all in the sandy matrix of the eastern edge of the basin while D.W.#3 cut a cross section up onto the eastern shell midden where Unit #73 was located.

The zones of these eastern units were much like the zones of the central sampling area (see Figure 16). In Unit #61 Zone 1 was 15 cm thick with many distinct underlying proveniences. Being unfamiliar with the Zone 2 expression in this portion of the site, all proveniences in Unit #61 were given Area designations down to 2.17 MBD (12 cm below the base of Zone 1). At this depth, feature definition began and Zone 2 was represented by brown soil with some grey and reddish brown mottling. Zone 2 was not excavated due to suspension of the unit.

Unit #69 displayed a typical Zone 1 with a thickness of 18 cm under a 3 cm-thick root mat. Like the plowzone of other units, Zone 1 was dark brownish grey in color and contained a mixture of unassociated artifacts. Zone 2 was more easily distinguishable than in Unit #61 but was of the same color scheme. Only one 5 cm level (Level 1) was excavated from Zone 2 before the unit was suspended.

Unit #74 was a small half meter N/S x one meter E/W extension of the western end of D.W.#3. The purpose of this unit was to expose burial remains noticed in D.W.#3 for better identification. Because of the profile created by the trench, the visible stratigraphy facilitated excavation. Zone 1 was excavated as one level with a thickness of 23 cm and displaying typical plowzone characteristics. Zone 2 was greyish brown mottled with occasional pieces of shell. This also was excavated as only one level (Level 1) with a thickness of 13 cm. Underlying Zone 2 and surrounding the burial was tan sand with dark brown mottling and was excavated as Feature 42 burial fill.

Unit #73 stratigraphy varies greatly from the other units in the eastern sampling area. Situated atop the eastern shell midden, the stratigraphy was much like that of the northern units. The root mat and dark greyish brown, shell scattered Zone 1 were excavated as one 22 cm level and discarded. Zone 2 was dark grey/brownish grey with moderate to dense whole, broken and crushed shell. This appeared to be undisturbed midden and constituted a 10 cm level (Zone 2, Level 1). At the base of Zone 2 areas of various shell densities were designated as Areas and excavated in two 10 cm levels. Zone 3 tannish brown soil did not appear until 20 cm below the base of Zone 2 and was left unexcavated.

#### FEATURES AND AREAS OF THE EASTERN UNITS

Perhaps the most intriguing features of the eastern area were the linear trench Features 21, 24 and 40. All of these features



appeared below Zone 1 and intruded into Zone 2, Level 1. Feature 21 was described by Chaney from Unit 446N/532E in 1987, and extends into Unit #69 of the 1991 season. Chaney assigned this feature to the post-colonial period. Feature 21, Level 1 was a 5 cm cut into the medium brownish grey and reddish brown mottled soils of the intrusion. The path of Feature 21 in Unit #69 is out of the southwest wall and into the northeast corner. Just east of the midpoint of the unit, Features 21 and 40 intersect. As both were nearly the same in soil color, the junction of the two features was excavated as a separate 5 cm provenience (Junction F.21/40). After initial excavation, it appeared in plan view that Feature 21 intruded into Feature 40, and was indeed a post-colonial feature.

This is suggested artifactually as well, as Feature 21, Level 1 contained pearlware, clear glass, Olive Jar and aboriginal ceramics while Feature 40, Level 1 contained Olive Jar and aboriginal ceramics. Feature 21 was not excavated below Level 1 (base at 2.20 MBD), but core samples indicated the intrusion continued for another 50 cm before tan sterile sand was encountered. Chaney's stratigraphic record showed Feature 21 to be a flat bottomed, straight walled trench with a depth of 50-55 cm (Chaney, S.R.#3, 1987). Chaney also reported nineteenth century artifacts associated with Feature 21, as well as postmolds in the feature's base suggesting the trench may have functioned as a fence line (see Figures 10 and 17).

Feature 40 was exposed in both Units #61 and #69 with excavations in the latter providing us with the majority of

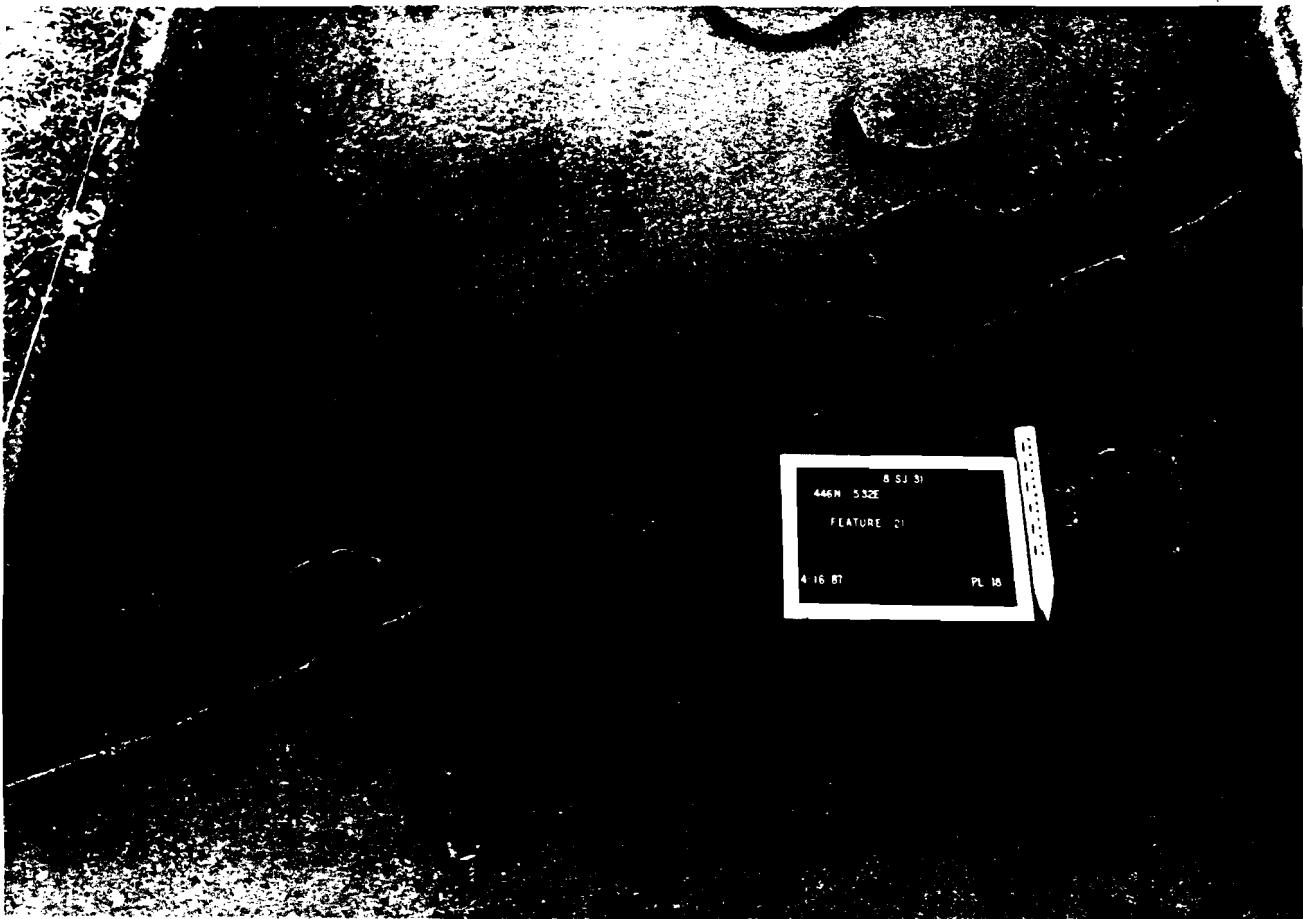


FIGURE 17...CHANEY'S 1987 FEATURE 21 PLAN VIEW

information about the feature. The linear Feature 40 exited the southeast corner of Unit #69 with a north/northwest heading (roughly 25 degrees west of north) and approached the middle of the north wall. The feature ended 30 cm before meeting the wall, terminating in a rounded tip. Throughout its extent, Feature 40 was 55-60 cm wide and dark brownish grey in color with reddish brown mottling. Feature 21 bisected Feature 40, separating the terminus from the main body of Feature 40. Feature 40, Level 1 was a 5 cm level that incorporated both parts of the bisected provenience and contained Olive Jar and aboriginal ceramic fragments. A cross section of Feature 40 was made revealing the intrusion to have a sloping west side and a flat bottom (see Figure 18). The ultimate depth of Feature 40, including Level 1, was 15 cm.

In Unit #61, the 60 cm wide Feature 40 intruded into Zone 2, Level 1 and followed the same description given above in Unit #69. From the southeast corner of the unit the feature struck a path north/northwest to just west of the midpoint of the north wall. The southeast portion of Feature 40 turned eastward to create a 90 degree angle with the main body of the feature, which itself continued to the south wall. Feature 40 may represent a wall line or mud sleeper with a partition to the east or an associated posthole in the southeast corner of Unit #61. No artifactual evidence was obtained as the feature was not excavated in Unit #61.

In 1987 Chaney excavated Feature 15 in 442N/544E, a linear feature with the same dimensions and orientation as Feature 40 and

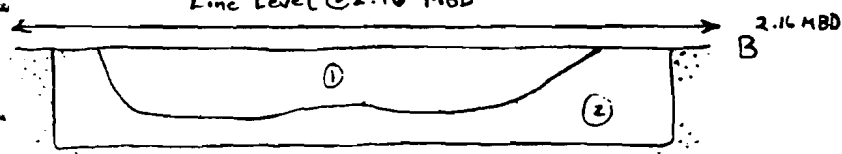
located 4 meters to the east when its path was extrapolated. Chaney described a perpendicular feature (Feature 25) that was bisected by Feature 15, but uses artifactual evidence and numerous basal postmolds to support this as a pre-Columbian feature. Feature 15 originated only a half centimeter above Feature 25. Feature 25 may represent a wattle partition extending out from a larger wall line, Feature 15. Artifacts from both Features 15 and 40 suggest that both belong to a Spanish occupation, but temporal association cannot be narrowed to a specific period. The presence of Columbia Plain majolica and Mexican Red Film earthenware in Feature 15 suggest a date in the late sixteenth or early seventeenth century.

Chaney believed Feature 15 to be associated with other parallel features lying to the west of Unit #61. In Units 442N/535E and 446N/532E from 1987, Feature 24 was exposed and displayed similar trench characteristics. Features 15, 24 and 40 were all parallel and four meters apart at their midpoints when their paths were projected.

Feature 24 extended from 442N/535E up into 446N/ 532E. In an uncanny fashion, the expressions of Feature 24 and the intruding Feature 21 in this unit nearly exactly duplicated the expressions of Features 21 and 40 in Unit #69 (see Figures 10 and 17). Feature 24 exited the southeast corner only to stop before the north wall and have its terminus separated by an east/northeast heading Feature 21. Again we saw the flat bottomed, shallow (15-20 cm), straight sided linear intrusion containing European and aboriginal

# Feature 40 Bisection South Profile

Line Level @ 2.16 MBD



8-5J-31

F.O.Y. 191

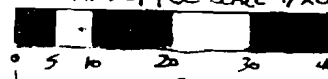
□ 448N / 536E

NOVEMBER 7, 1991

PROFILE OF PPM's +

Features

MAP: CT & G SCALE 1/20



Scale 1:10

① Med. Brown Grey with some Tan Brown Mottle, some D. Brown Mottle

② Tan Brown with some Red Brown Ferric Mottle

FIGURE 18...PROFILE OF FEATURE 40

artifacts. Chaney reported recovery of a sixteenth century lead glazed course earthenware strap handle from Feature 24, Level 3, along with various fragments of utilitarian ware and a bead in Level 1.

In 442N/535E, Feature 24 leaves the center of the south wall and heads north/northwest to terminate in the northwest corner. In the north half of the unit, Feature 24 branches east at a 90 degree angle with the main body of the trench. This perpendicular arm extends into the northeast corner of the unit but appears to branch again and turn back to the northwest. The path of Feature 24 was unclear until the 1991 excavations (see Figures 3 and 10). Feature 24 appears in the southwest corners of Units #61 and possibly #69.

In Unit #61, Feature 24, Level 1 barely occupies the southwest corner of the unit and is brownish grey in color with some reddish brown mottling. This provenience was left unexcavated but matches up closely with Chaney's Feature 24. This would mean that Feature 24 either terminates here or does in fact turn north as hinted by Chaney's excavations.

In Unit #69, we see a similar brownish grey stain occupying the southwest corner of the unit. Designated as Area 1, Level 1, the stain intrudes into Zone 2, Level 1 and appears to be intruded upon by Feature 21. A 5 cm level was removed and indeed the boundaries appear to line up with the Feature 24 expression of Unit #61. The east side of the stain is two meters from the east side of Feature 40, as is the case with Feature 24 and 40 in Unit #61.

The linear features of the eastern area all have similar

orientation and dimensions as Feature 26 and the more northern Feature 34. Another point in common is the lack of postmolds in the base of the intrusions. Two possible postmolds, PPMS 2 and 3, were mapped off the east side of Feature 40 in Unit #61, but neither were excavated. As originally thought by Chaney, the trench features could be footing ditches for early Spanish structures. Lack of postmolds suggests that wood sills may have been placed in the base of the ditches, creating what is referred to as a mud sleeper (Deagan, 1978:39-41; McEwan, 1991:50-57).

An alternative to the structural theory is that the ditches functioned agriculturally. Stanley South, in his excavations of Santa Elena in South Carolina, has repeatedly encountered parallel ditches (South, 1982:25-26). He has concluded many of these to be vineyard ditches based on historical reference (South, 1982:6-7). One of the priests at the settlement, Father Rogel, acknowledged a thriving vineyard at Santa Elena in 1568. The Santa Elena ditches follow a description of proper vineyard planting by Louis de Saint Pierre in 1772. Such ditches would be 12 to 18 inches (30-46 cm) wide, 18 inches (46 cm) deep and 3 to 4 feet (90-120 cm) apart (South, 1982:6-7).

The ditches encountered at Santa Elena were spaced 7-9 feet (2.5-3 meters) apart and were 0.5-1.2 feet (15-37 cm) wide (South, 1982:25). The ditches at the Fountain of Youth site do not follow this pattern, and were often shown to branch or intersect other trenches. To determine if the linear ditches played a role in agriculture will require a thorough botanical study of the feature

fill.

Ditch Witch Trench #3 (D.W.#3) was opened to explore the midden stratigraphy to the east of the central basin. A machine commonly referred to as a Ditch Witch was used to cut an east/west trench 16 meters long, 50 cm wide and 50-80 cm deep. No proveniences were designated as the churning action of the machine left no discernable deposits separated. Any noted artifacts were simply bagged as belonging to D.W.#3. Upon mapping and comparing the north and south profiles, however, some interesting deposits were noticed. By projecting like-deposits across the unit to the opposite wall, 3 probable ditches similar to Features 15, 24 and 40 were evident. One such ditch appeared to be an extension of Feature 15.

Still more vexing was the deep presence of a wide, shell-bearing intrusion of dark soil at the extreme east end of D.W.#3. Projection of the feature from the south to the north wall revealed a possible ditch two meters wide and 50 cm deep. This larger trench did not follow the same heading as the previous ditches in the area, and appeared to have a more direct northwest/southeast bearing. Overlying the intrusion was 20-30 cm of light shell midden. Influx of tidal waters caused heavy wall slumping in D.W.#3 and prompted its backfilling to preserve the remaining profile.

To better view the deep ditch of D.W.#3 in plan view, Unit #73 (447N/554E) was opened. The northern wall of this 1.5 x 3 m unit was located 40 cm south of D.W.#3 south wall. Distinct areas



(Areas 1, 2 and 3, Levels 1) did not appear until 35 cm below the surface and were amorphous and changed through the 10 cm excavation of their level. At 55 cm below the surface, Feature 48 was designated. Feature 48 was dark brownish grey soil with some tannish brown mottling that covered the entire north, central and east portions of the unit (see Figure 19). Feature 48 appears to be the basal component of the deep ditch evident in neighboring D.W.#3. From the dimensions of this feature and its location near the extreme eastern boundary of the site, Feature 48 may possibly represent a substantial wall or fortification ditch. The persistent upflow of ground water and the termination of the field season prohibited the excavation of this feature.

Running diagonally along the western boundary of Feature 48 were three oval shaped intrusions, Areas 5, 6 and 7. These three areas all were dark brownish grey soil with dense whole and broken shell fill. Area 5 was fully within the confines of the unit and measured nearly one meter by 70 cm in width. What is visible of Areas 6 and 7 appeared similar to Area 5. Area 4 was also a large apparently circular intrusion occupying the southwest corner of the unit. Area 4 seems to cut into Area 5. Though not excavated, these intrusions could well represent post holes in conjunction with Feature 48. The easternmost edge of the unit was designated Zone 3 tannish brown soil.

The initial excavation of D.W.#3 was only 25 cm wide. But wall slumping caused us to widen the trench to 50 cm. Upon doing so, skeletal remains were noticed in the south wall of the extreme

east end of the trench. What appeared to be the left side of a human skull and accompanying humerus protruded from the profile. The presence of a burial in such a location relative to many possible wall trenches posed many questions. From the portion of the burial that was visible, we could not ascertain the ethnicity of the individual, nor the style of burial. Such information could greatly affect the interpretation of surrounding features. A small one meter E/W x 50 cm N/S extension unit, 448.3N/539.5E (Unit #74), was excavated alongside the southeast edge of DW#3.

The purpose of Unit #74 was to merely examine the burial and determine the possible association with Features 15, 21 and 40. The profile of DW#3 helped with strata designations. Zone 1, Level 1 was a 22 cm layer of typical brownish grey plowzone, overlying the greyish brown mottled soil of Zone 2, Level 1. This zone was excavated as a 13 cm layer and appeared contemporaneous with the surrounding Zone 2 stratum. No evidence of intrusion through this layer could be seen. At the base of Zone 2, Level 1, the soil became tan with dark brown mottling. This was designated as Feature 42 burial fill.

Feature 42 was excavated as one 20 cm level and included all burial fill and soil surrounding the burial proper. A distinct burial pit outline was barely detectable in plan view. As excavation depth proceeded, the soil became more saturated and inhibited differentiation of intrusions with the tan sterile matrix.

The water served to preserve the burial extremely well,

however, and in situ evaluation was possible. Lisa Hoshower, a physical anthropologist from the Florida Museum of Natural History, supervised the excavation and identification of the burial.

The individual was interred in a flexed position, resting slightly on the right side, with the knees folded on top of the chest and hands folded and resting to the right side of the cranium. The burial was situated east/west with the head to the west and tilted, looking to the south. The zygomatic arches and wear pattern on the teeth, coupled with the flexed burial position, indicated the individual to be Native American, possibly Timucuan.

A more detailed inspection revealed fused third molar root tips and extensive wear of the teeth, suggesting an age over 25 years. Scapular morphology indicated the age to be no greater than 35 years. From cranial features and the presence of the siatic notch on the pelvis the sex of the individual was determined to be female. No pathologies were noted on the burial, but such in situ analysis is difficult. Following examination, the burial was photographed, mapped, covered with plastic and backfilled.

No artifacts were associated with the burial and stratigraphical evidence does not appear to link the burial to any surrounding features. The unintruded Zone 2 overlying Feature 42 suggests the interment of the burial preceded the intrusions of the nearby Features 15, 21 and 40.

#### THE WESTERN UNITS

The western sampling units are two 1 meter N/S x 3 meter E/W

trenches spaced 36 m apart on the 475E grid line. These units were placed to better our understanding of the western stratigraphy and determine the western extent of the Spanish occupation. The two units are 441N/475E (#56) and 477N/475E (#62) (see Figure 3).

Though thickness of the Zone 1 deposits differed, the color scheme was similar. Zone 1 was dark brownish grey to black soil with crushed and broken shell inclusions. The soil was extremely hard packed which may be due to the areas low lying condition and action of the inundating tidal waters. Unit #56 had a 22 cm thick Zone 1 excavated in two levels while that of Unit #62 was only 5 cm. Both had modern artifacts within the fill.

Zone 2 in unit #56 was lighter in color than Zone 1 (grey versus black) and had decreasing shell content. Only one 5 cm level was excavated, but core samples revealed another 10-15 cm of brown grey Zone 2 soil still atop the tan sterile Zone 3. Unit #62 had a denser shell component that persisted for two 5 cm levels (Zone 2, Levels 1 and 2). The shell was mostly all crushed and broken with modern artifacts intermixed; this may represent redeposited midden. Zone 3 was reached only by core samples in Unit #56, while Unit #62 had two 10 cm levels of Zone 3 excavated (Levels 1 and 2).

Unit #62 soils were grey in color with some shell inclusions and appear very similar to the Zone 2 expression in unit #56. Below the 20 cm of Zone 3 was the brown/tannish brown soil of Zone 4 (similar to Zone 3 of Unit #56) of which no levels were excavated.

## AREAS OF THE WESTERN UNITS

Intruding into Zone 2, Level 1 of Unit #56 was Area 1. At its top, Area 1 was an amorphous, dark brownish grey color with heavier crushed and broken shell than the surrounding matrix. After the first 5 cm level, however, Area 1 took on a linear shape with much the same bearing (northwest-southeast) and width (50 cm) as Features 26, 34 and 40. The intrusion traverses the unit from the southeast corner to enter the western wall at about its midpoint. Though not excavated, core samples showed the intrusion persisting for 10 cm for an overall depth of 15 cm.

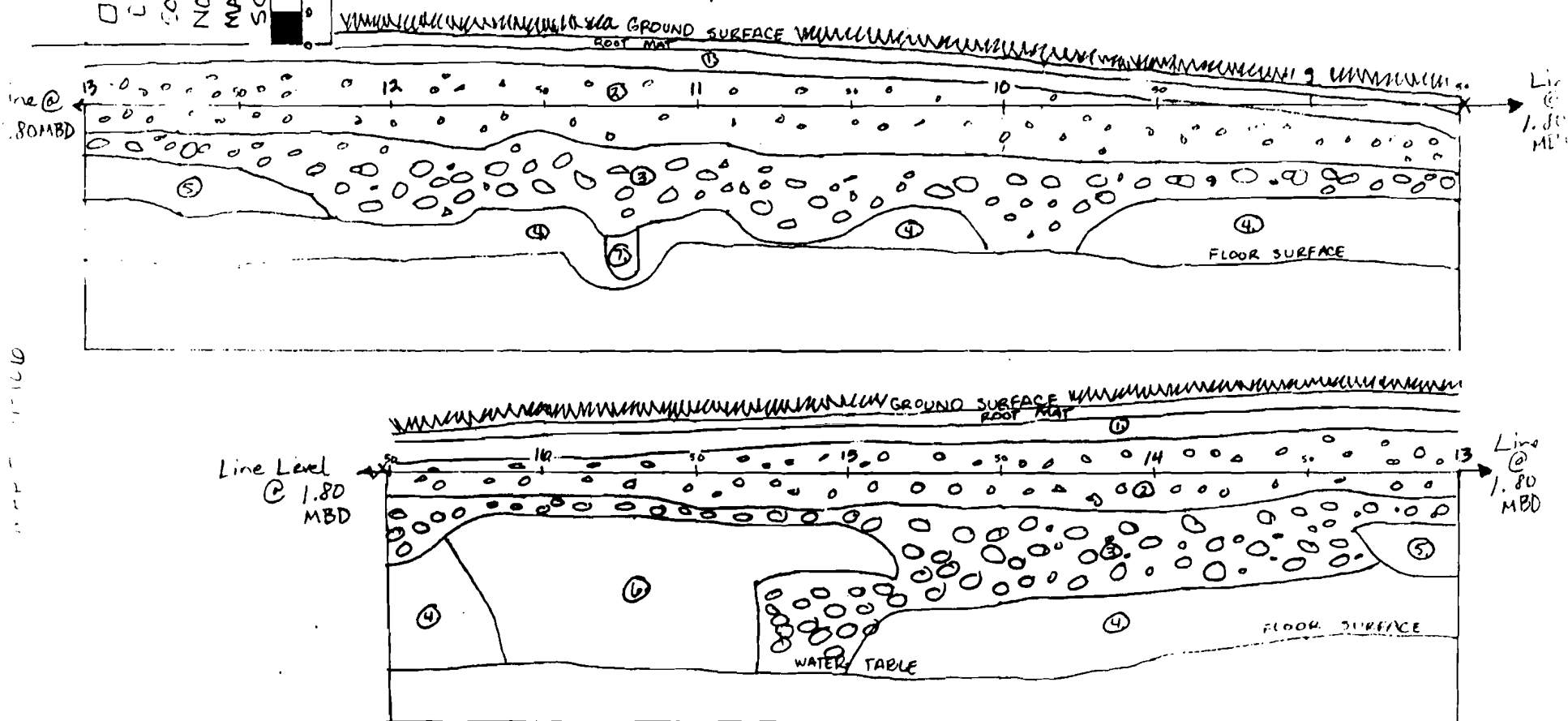
Appearing at the same elevation as Area 1, Level 2 (2.15 MBD) was Area 3. The initiation of Area 3 was noted 5 cm higher as slightly more shell flecked than the Zone 2 matrix. Area 3, Level 1 occupies the northwest corner of the unit and is brownish grey with light broken and crushed shell. Extrapolation of Areas 1 and 3 show the two to meet at a right angle just beyond the west wall. Though no artifactual evidence was recovered from either area, context and similar fill may link the two areas as belonging to a common feature. The orientation and linear nature of the areas suggest a possible structural affiliation, either a shallow wall trench or mud sleeper.

Unit #62 displayed a similar linear feature, but it was determined to be a modern disturbance. Feature 43 was initially noted as Areas 2 and 4 at the base of Zone 2, Level 2 (1.85 MBD) as dark grey and brown mottled soil with abundant crushed shell. At the top of Zone 3 (1.90 MBD) Feature 43 was clearly revealed

8-SJ-31  
 15.0. Y. 191  
 58E to 53E  
 DITCH WITCH #3  
 SOUTH PROFILE  
 NOVEMBER 18, 1991  
 MAPPERS: G & GS  
 SCALE: 1/20



# South Wall Profile



## DESCRIPTIONS:

- ① GREY/BROWN W/SOME BROKEN SHELL.
- ② GREY/BROWN W BROKEN AND WHOLE SHELL.
- ③ LIGHT BROWN/BREY W/OCCASIONAL shell.
- ④ BROWN/TAN
- ⑤ LIGHT BROWN/BREY W/OCCASIONAL shell.
- ⑥ GREY/BROWN W/RED/BROWN FERRIC STAIN.

FIGURE 19...FEATURE 28 TRENCH FEATURE IN PROFILE

covering the majority of the unit from the southeast to the northwest corner. The greyish brown and brown mottled soil contained various modern artifacts and organic material. Portions of the underlying Zone 3 were evident in the southwest and northeast corners. Two 10 cm levels of Feature 43 were excavated. At the top of Zone 4 sterile subsoil (2.10 MBD), Feature 43 continued but the saturation of the unit prevented further excavation. From artifactual and stratigraphic information (S.R. #10) Feature 43 appears to be an early twentieth century intrusion, possibly the result of filling of a pre-existing depression.

#### CONCLUSIONS

The area of early Spanish occupation at the Fountain of Youth site has been impacted by apparent agricultural activity. However, many features remain and provide insight to the lifeways of what may have been the first Spanish settlement of St. Augustine.

The central portion of the sampled area may have struck the heart of the Spanish settlement. From Chaney's 1985 and 1987 work, the remains of a mid-sixteenth century barrel well and possible associated structural remains were uncovered. The 1991 fieldwork further exposed what appears to be the remains of a large structure dating to the latter half of the sixteenth century. A deep set post and posthole (Feature 30) could have served as the massive support for such an extensive structure.

Features 28 and 36 are probably structurally related deep

pits, sharing a similar shape and soil matrix with Feature 30. These intrusions are roughly seven meters apart and each is roughly seven meters from Feature 30. Perhaps these represent a group of central structural supports. Many posts and pits within the central area appear to be of aboriginal origin, yielding solely pre-Columbian artifacts. Yet the deep features mentioned above all contained a mix of aboriginal and sixteenth century Spanish artifacts.

The dark stained Feature 22, previously designated by Chaney, was further exposed in the 1991 season. Excavations suggest this feature may be the result of soil leaching, possibly from the remains of a burned structure, rather than a specific cultural intrusion. Complete excavation (during the dry season) of one or two key units in this immediate area will help to further define the relationship between Feature 22 and the nearby deep intrusions.

To the east several features (Features 15, 24, and 40) were exposed that were reminiscent of structural remains. These parallel and evenly spaced trenches are fairly shallow (20 cm). Because these features were not completely excavated it is uncertain if these trenches had postmolds at their bases. Even though evidence of posts are lacking, the junction of perpendicular trenches displayed by Feature 24 suggests a possible function as a wall trench. The structural support for such a wall would be in the form of a wooden sill, or mud sleeper. The northern terminating ends of Features 24 and 40 are not linked by a perpendicular trench, yielding no exterior corner. An interior



corner, however, is evident from Chaney's 1987 excavations of Feature 24, and 1991 excavations uncovered the eastern extent of this intrusion.

An alternative interpretation of these parallel trenches would be one of agricultural origin. Vineyards were known to exist in other early Spanish settlements such as St. Elena (South, 1982). Further excavations and soil analysis would provide more information and aid the interpretation of these trench features at the Fountain of Youth Park.

The mechanically excavated test trench Ditch Witch #3 (D.W.#3) uncovered more parallel trenches as well as a wide and deep intrusion which was designated Feature 48. The extent of Feature 48 was not determined, yet it displayed characteristics often associated with large defensive trenchworks. A more comprehensive view of Feature 48 could be obtained with systematic core sampling and shovel testing.

The northern sampled area also displayed a complex of trenches. Feature 26 was exposed by Chaney in 1987 and further exposed throughout the 1991 season. The orientation, width, depth, base and fill of Feature 26 was nearly identical to that of the eastern area trenches. As Feature 26 strikes north into the shell midden, the fill becomes a dark brown to dark grey soil with heavy shell inclusions. This seems to indicate that this feature intruded into a pre-existing midden or that the midden and Feature 26 were contemporaneous. Feature 34, parallel and seven meters to

the west of Feature 26, also displays a shell filled matrix when found in association with the shell midden.

As Features 26 and 34 became filled with a shell matrix, the side and basal shape of the intrusions were preserved with more definition. Here, a significant furrow appears on the eastern edge of each of these trenches. Though no more than 10 cm wide and 10 cm deep, these basal furrows may represent either an excavated portion of the trench for the placement of a footer or an area of added depth to brace posts or walls against the vertical eastern side of the trench.

Feature 41, running southwest to northeast, was bisected by Features 26 and 34 perpendicularly. Though of narrower width and deeper depth, Feature 41 contained the same fill as the two intruding trenches. At the junction of Features 26 and 41, a large postmold (PPM 3) lends credence to a possible structural support being shared by both trenches. Feature 41 extends to the west of Feature 34 and to the east of Feature 26, possibly exhibiting a system of inner partitioning within a substantial structure.

Near the northern complex of trenches, many pits were excavated containing aboriginal and early Spanish artifacts. Though none of the pits contained an overabundance of refuse, many appeared to be trash or storage pits (Features 38, 39, and 47) while others displayed the shape and charcoal-flecked fill associated with smudge pits. Feature 44, unable to be completely excavated, may represent a burnt post or small hearth.

Feature 32, lying parallel and 15 meters to the north of

Feature 41, displayed an orientation and shape similar to Feature 41. Limited excavation in this area was unable to positively link Feature 32 to either Feature 26 or 34. Further excavation in the northern area could reveal such key associations or perhaps a definite terminus of one of the many trench features. There appears to be a clear relationship between the northern and eastern trenchworks based on their respective orientations and profile similarities.

Though the western portion of the site was not as heavily tested as the other areas, excavated units revealed interesting questions. Unit #56 appeared to display similar trench-like intrusions as units in the north and east. This may give some clue as to the extent of the western boundary of the site and deserves further investigation.

As is the case with many archaeological excavations, the 1991 fieldwork at the Fountain of Youth Park established new and interesting questions. The existence of a large, deep set post (Feature 30), stains of possible mate posts and an intact Spanish barrel well suggest a rather substantial structure of early Spanish origin once stood overlooking the inland waterway. The seemingly related trenchworks of the northern and eastern sampled areas of the site (Features 26, 32, 34, 41 and 15, 24, and 40 respectively) hint at possible structural complexes. Such features may furnish insight into the spatial planning characteristics of the first St. Augustine settlement. As zooarchaeological and ethnobotanical

analysis is completed, a clearer understanding of the probable function of these trenches will be revealed.

The extent of the relationship between the northern and eastern trenchworks needs to be explored further, as does the possible existence of similar trenches on the western side of the site. Further fieldwork is needed before more conclusive evidence concerning the link between the barrel well, probable nearby structure and these outlying trenches can be established. The upper 15 to 20 centimeters of soil in the field basin has been shown to be disturbed plowzone. Perhaps large sections within this area could be mechanically stripped of the plowzone down to visible feature tops. This would provide a more comprehensive view of spatial planning and cultural activity within the area.

## REFERENCES

- Chaney, Edward E.  
1987 Report on the 1985 Excavations at the Fountain of Youth Park Site (8-SJ-31), St. Augustine, Florida. MS. on file, Florida Museum of Natural History, Dept. of Anthropology.
- Deagan, Kathleen  
1987 Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500-1800, Volume 1: Ceramics, Glassware, and Beads. Washington, D.C.: Smithsonian Institution Press.
- Lyon, Eugene  
1979 Location of the St. Augustine Forts, 1565-1567. MS. on file, Florida Museum of Natural History, Dept. of Anthropology.
- McEwan, Bonnie G.  
1991 San Luis de Talimali: The Archaeology of Spanish-Indian Relations at a Florida Mission. Historical Archaeology. 25(3):36-60.
- Merritt, James  
1977 Excavations of a Coastal Eastern Timucua Village in Northeast Florida. Unpublished MA. thesis on file, Florida Museum of Natural History, Dept. of Anthropology.
- South, Stanley  
1982 Exploring Santa Elena 1981. University of South Carolina, Institute of Archeology and Anthropology, Research Manuscript Series 184.