



A PHASE I CULTURAL RESOURCE ASSESSMENT OF THE 444 BRICKELL AVENUE PARCEL, MIAMI FLORIDA

ARCHAEOLOGICAL AND HISTORICAL CONSERVANCY, INC.



AHC PROJECT NO. 2021.73
AHC TECHNICAL REPORT NO. 1334
MAY 2021

A PHASE I CULTURAL RESOURCE ASSESSMENT OF THE 444 BRICKELL AVENUE PARCEL, MIAMI FLORIDA

By:

Robert S. Carr, M.S.
Oscar Pereira, B.A.
Jorge Ullua Hung, Ph.D.
John G. Beriault, B.A.

ARCHAEOLOGICAL AND HISTORICAL CONSERVANCY, INC.

4800 SW 64th Avenue, Suite 107
Davie, Florida 33314
archlgcl@bellsouth.net
(954) 792-9776

For:

THE CITY OF MIAMI

AHC PROJECT NO. 2021.73
AHC TECHNICAL REPORT NO. 1334
MAY 2021



TABLE OF CONTENTS

LIST OF FIGURES	ii
LIST OF TABLES	iii
CONSULTANT SUMMARY	1
PROJECT SETTING	3
PREVIOUS RESEARCH	12
CULTURAL SUMMARY	17
METHODOLOGY	21
SUMMARY OF SITE	25
RESULTS AND RECOMMENDATIONS	28
REFERENCES CITED	29

LIST OF FIGURES

Figure 1.	USGS map of the 444 Brickell Avenue parcel	2
Figure 2.	1845 plat map for Township 51S, Range 41E with the project parcel superimposed	4
Figure 3.	Sanborn maps of the project parcel	5
Figure 4.	1952 black and white aerial photograph of the project parcel	6
Figure 5.	1963 black and white aerial photograph of the project parcel	7
Figure 6.	1963 black and white aerial photograph of the project parcel	8
Figure 7.	2003 color aerial orthophotograph of the project parcel	9
Figure 8.	2013 color aerial orthophotograph of the project parcel	10
Figure 9.	View west of the project parcel	11
Figure 10.	View northeast of the project parcel	11
Figure 11.	USGS map showing all previously recorded archaeological sites within one mile of the project parcel	16
Figure 12.	2021 aerial photograph of the project parcel showing the location of shovel tests	22
Figure 13.	Test profiles: Shovel Tests 1, 17, 21	23
Figure 14.	Positive Shovel Test 7 showing bedrock and solution hole	24
Figure 15.	Negative Shovel Test 23	24
Figure 16.	Prehistoric incised pottery	26
Figure 17.	Prehistoric bone artifacts	26
Figure 18.	Historic copper nails and pewter button	27
Figure 19.	Historic bottle base	27

LIST OF TABLES

Table 1. Literature Review Summary	13
Table 2. Previously Recorded Sites Summary	14
Table 3. Previously Recorded Standing Structures Summary	14
Table 4. Previous Assessments	15

CONSULTANT SUMMARY

In April-May 2021, the Archaeological and Historical Conservancy, Inc. (AHC) completed a Phase I cultural resource assessment of the southern portion of the 444 Brickell Avenue parcel for the City of Miami. The ±3.75-acre parcel that includes the adjacent lot at 77 SE 5th Street is located on the south bank of the Miami River in Township 54 S, Range 41 E, Section 38. The relevant USGS map is Miami (Figure 1).

This assessment was conducted on the southern half of the 77 SE 5th Street lot to identify any cultural resources there. The overall parcel lies within a City of Miami archaeological conservation zone. The assessment was conducted to fulfill historic and cultural resource requirements of Chapter 267, Florida Statutes, and of the City of Miami Historic Preservation Ordinance. The assessment and the report conform to the specifications set forth in Chapter IA-46, Florida Administrative Code.

Prehistoric site 8DA19238 was newly documented as a result of archaeological monitoring of the demolition of a parking deck that served the U.S. Custom House, built on the northern part of the 77 SE 5th Street lot in 1972. The building and its parking structure were demolished in early 2021. The site's uncovering resulted in a notice of discovery to the City of Miami historic preservation staff on April 10, 2021.

This Phase I assessment was conducted with 24 shovel tests with the addition of three 2m² units (that were intended as part of a Phase II assessment). Twelve of the shovel tests were positive for prehistoric midden deposits. All of the positive tests occurred in the northern part of the test area (Figure 12). Cultural material includes extensive faunal bone, shell refuse, and artifacts. Prehistoric artifacts include pottery sherds, shell and bone tools, and lithic tools. The site's historic component is represented by several nineteenth century artifacts including bottle glass and a pewter button. A single isolated human tooth also was found.

Documentation of the site resulted in determining that the cultural deposits increase in depth and preservation quality as one proceeds northward towards the river, and conversely diminishes southward to the SE 5th Street right-of-way where the site is nearly fully destroyed. The reason for this variation in preservation is that prior to development the area's natural elevation above sea level increased steadily southward. Leveling the lot to construct the Custom House resulted in lowering the elevation towards the south, removing the soils and top of bedrock, and raising the elevation to the north where bedrock elevations are lower – requiring the placement of fill over the historic surface, thus preserving the archaeological deposits below.

It is recommended that a Phase II assessment be conducted to further document 8DA19238 and determine its significance. A Phase II archaeological management plan has been submitted separately.

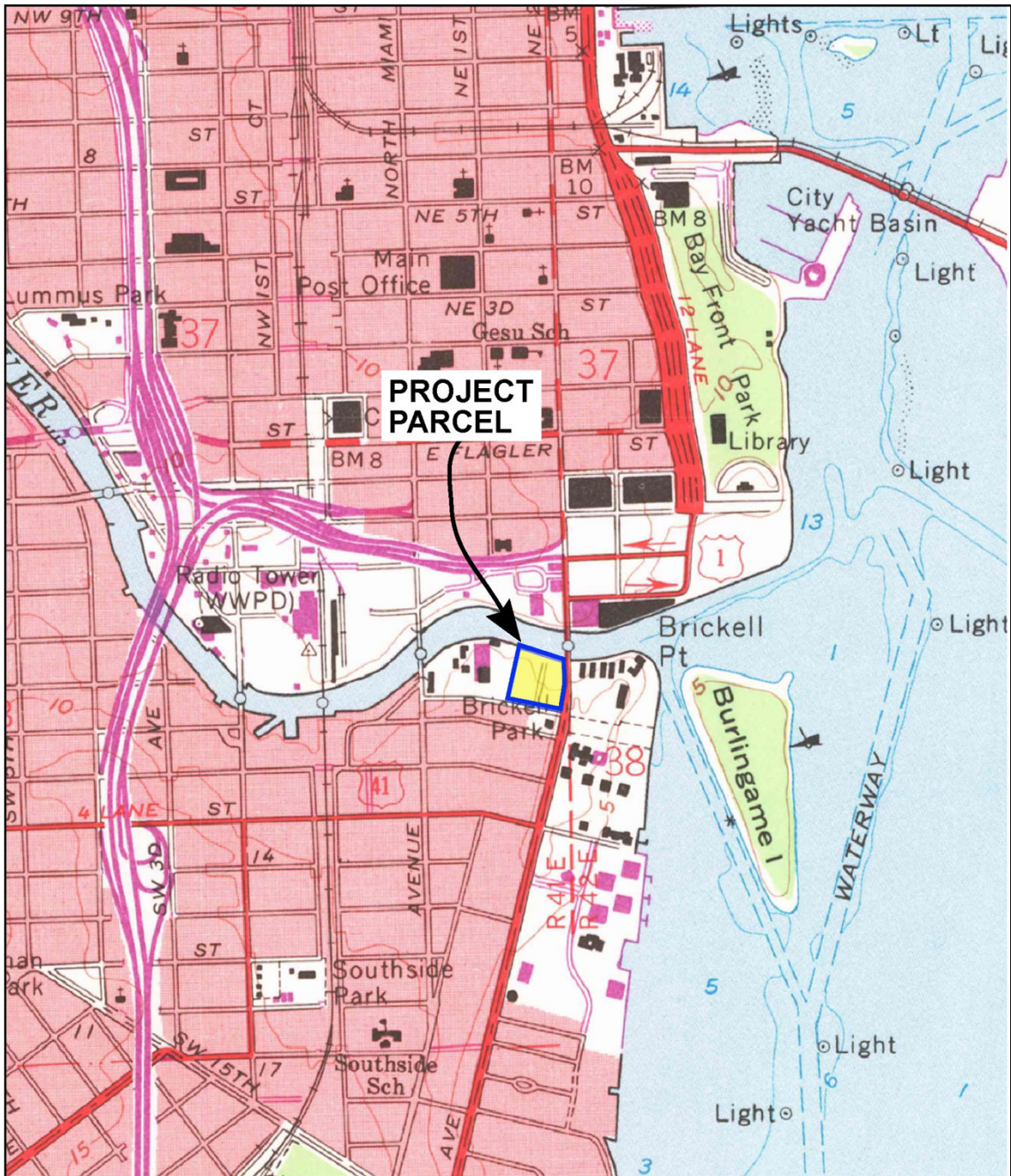


Figure 1. USGS map of the 444 Brickell Avenue parcel.

TOWNSHIP 54S, RANGE 41E, SECTION 38

USGS MAP: MIAMI 1962



0 750 1500
0 270 450

3000 Feet approx.
900 Meters approx.



PROJECT SETTING

The 444 Brickell Avenue parcel is located approximately 700 feet west of the mouth of the Miami River on its southerly bank in the City of Miami in Miami-Dade County, Florida. The parcel encompasses approximately 3.75 acres and is bounded on the north by the Miami River, on the east by Brickell Avenue, and on the south by SE 5th Street, and on the east by high-rise development. The parcel lies within Section 38 in Township 54S, Range 41E. The relevant USGS map is Miami (Figure 1).

The parcel lies within the Miami Rock Ridge sub-province of the Southern Atlantic Coastal Strip Province, part of the larger Gold Coast-Florida Bay District. This district contains an elevated Pleistocene ridge called the Atlantic Coastal Ridge and various features such as the Silver Bluff Formation an escarpment of up to several meters high paralleling the historic shore of Biscayne Bay. This coastal ridge, comprised largely of Miami oolite Limestone, historically contained and channeled the water flow of the Everglades Trough lying to the west. The ridge is broken in various places by a series of transverse glades such as Snapper Creek and further south Snake and Black Creeks which historically channeled seasonal runoff to the coast and contributed to the complex hydrology that was disrupted by early twentieth century effort to drain the Everglades.

The geology of the parcel is characterized fine-grained wind and sands and midden deposits overlying a Miami Oolite substrate. Most of the surficial sands are characterized in the *Miami-Dade County Soil Survey* as “hydric, level, poorly drained” and are fine-grained wind and water-born deposits from the late Pleistocene/early Holocene. Where the prehistoric Indians occupied locales along the coast are deposits of a dark silty organic material sometimes referred to as “black dirt” midden, which was prized as garden soil by the early white settlers. Among the soils officially present on the subject parcel are: Urban land, 0-2 percent slopes indicating the recently-disturbed nature (up to 70%) of the substrate present.

The project parcel lies in the Mrs. Hagan Donation in what historically a tropical hammock bordering the Miami River (Figure 2). The mid-nineteenth century Robert Fletcher homestead encompassed the parcel. Eventually the riverfront around the parcel was cleared and platted for commercial and residential development. Most of the parcel appears vacant for much of the twentieth century. The vacant lot was used as the YMCA ballfield in the 1960s. In 1972 the U.S. Custom House was constructed there. The building was demolished in April, 2021.

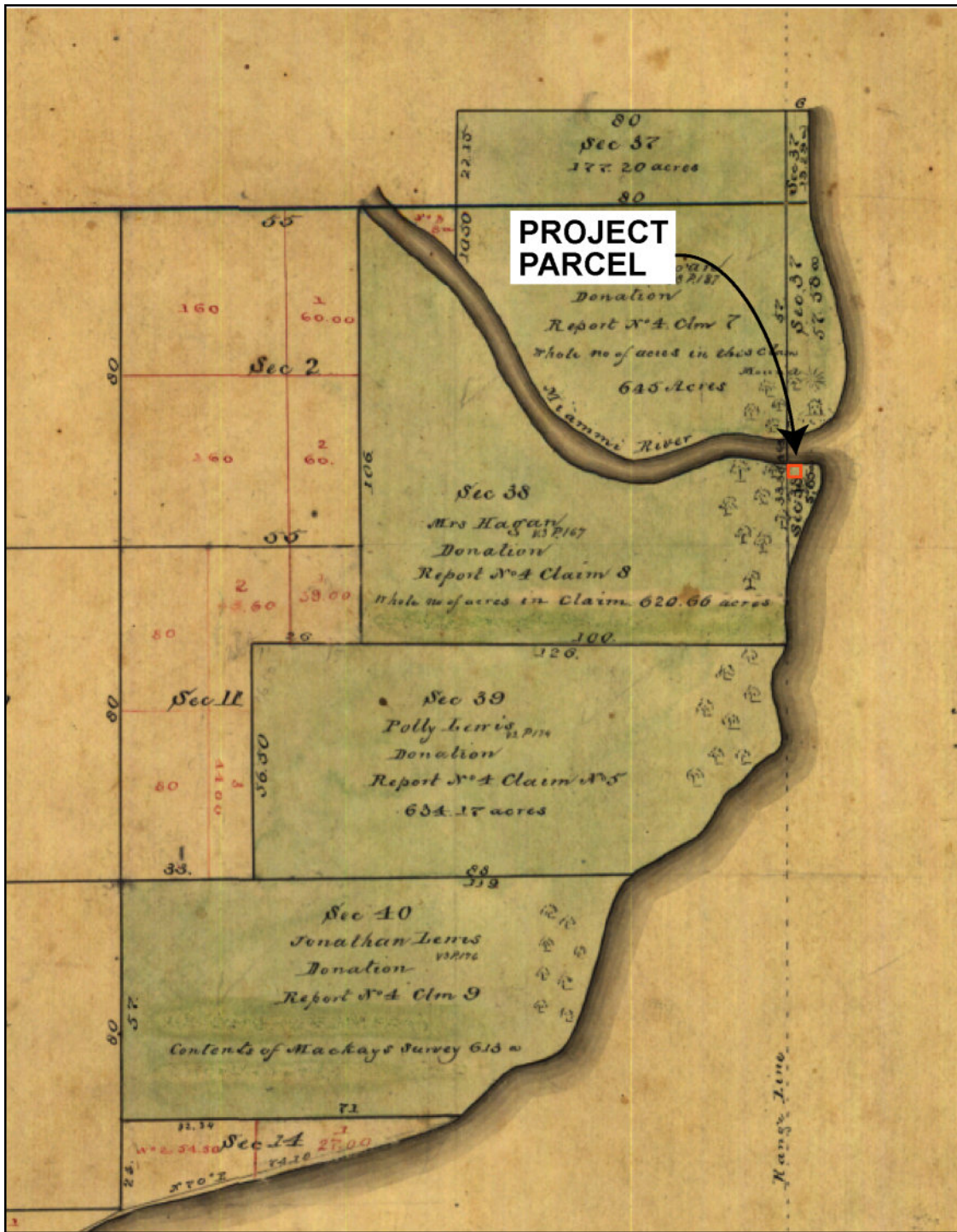


Figure 2. 1845 plat map for Township 54S, Range 41E with the project parcel boundaries superimposed.



0 750 1500
0 270 450

3000 Feet approx.
900 Meters approx.



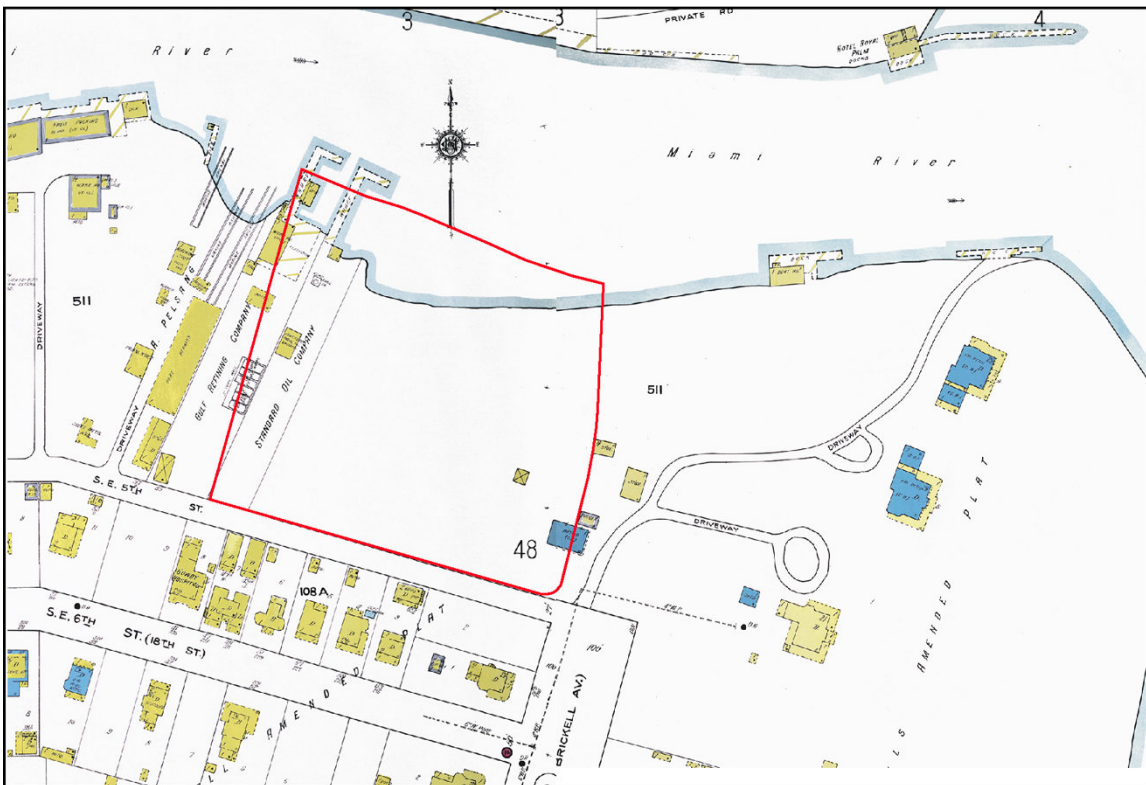
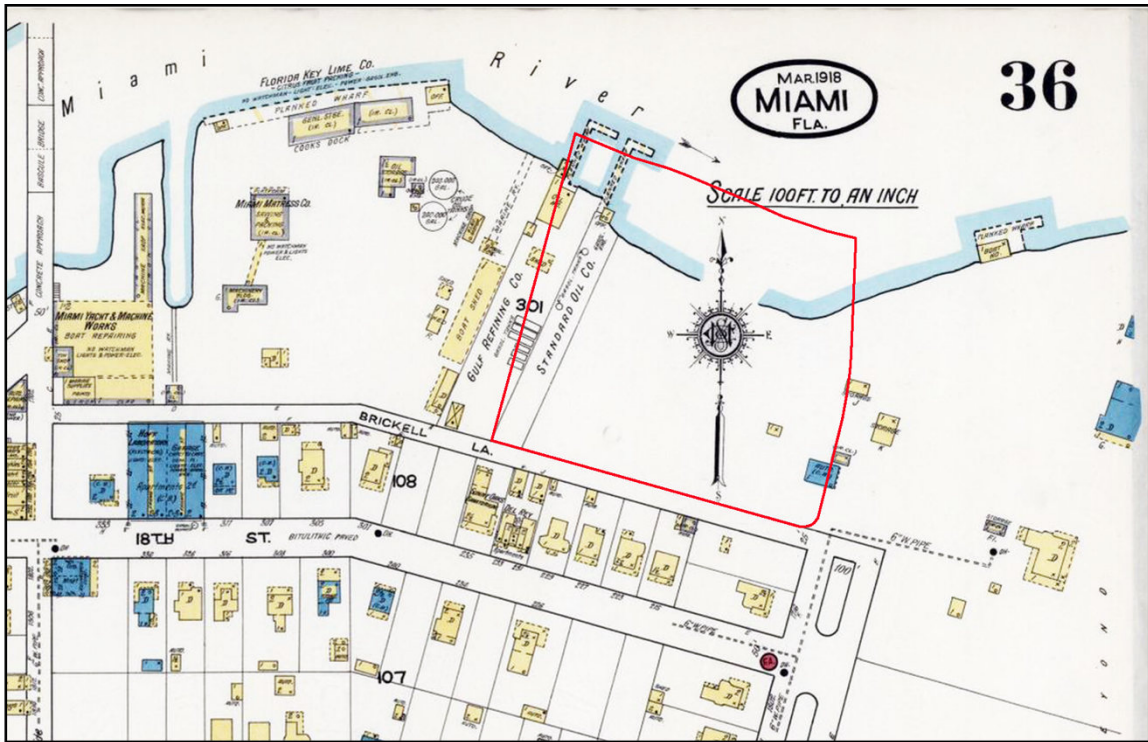


Figure 3. Sanborn maps of the project parcel. Above: 1918; below: 1921-24. Structures on the parcel remain unchanged, but the gradual augmentation of the shoreline with fill from dredging is evident.



1952 black and white aerial photograph of the project parcel.

 = PROJECT PARCEL



Figure 4. 1952 aerial photograph of the project parcel.



Figure 5. 1963 aerial photograph of the project parcel.



Figure 6. 1970 aerial photograph of the project parcel.



Figure 7. 2003 color aerial orthophotograph of the project parcel.



Figure 8. 2013 color aerial orthophotograph of the project parcel.



Figure 9. Project parcel looking north.



Figure 10. Project parcel looking east.

PREVIOUS RESEARCH

Scientific archaeological investigations in southeastern Florida date back to the Works Projects Administration (WPA) era of the 1930's. Those excavations were funded by the U.S. government and administered by the Smithsonian Institution (Willey 1949). A number of sites were tested near the Broward-Dade County line that included black earth middens located on Everglades tree islands or "hammocks", yielding evidence of prehistoric habitation dating back to the Glades II Period (ca. 750 AD), and historic artifacts associated with the Seminoles.

John M. Goggin was the first archaeologist to create an inventory of sites in Miami-Dade County, recording numerous sites along the Miami River. A hiatus in professional archaeological research in South Florida followed in the 1940s to 1950s when Goggin took a faculty position at the University of Florida. It was twenty years before any other professional archaeologist would contribute to south Florida prehistoric research. In the interim, the rapid urban development of the 1960's began to encroach into the eastern Everglades resulting in the destruction of numerous archaeological sites. The archaeological vacuum left by Goggin was partially filled when a number of local amateur archaeological societies were formed, including the Archaeological Society of South Florida and the Broward County Archaeological Society. Initially, the amateur societies excavated without any regard as to whether a site was truly endangered by development or if it was preserved in a park setting. Thus, archaeological excavations intensively damaged many of the sites such as those in Markham Park. However, an increasing conservation movement within the archaeological community has shifted amateur excavations away from conducting digs at preserved sites to sites threatened by destruction.

Several individuals emerged from the avocational archaeological movement who produced important papers about south Florida sites. These include Dan Laxson who tested numerous Everglades tree island sites in Dade and Broward Counties, and two along the Miami River. His tests were generally limited in size and rarely excavated below the depth of the concretion "hard pan" that underlies many midden deposits. Wes Coleman, one of the founders of the Miami-West India Archaeological Society, was the first to excavate below the concretion and note the presence of early St. Johns pottery, a marker for the Late Archaic Period (Coleman 1973).

Robert S. Carr, while with the Dade County Historic Preservation Division directed a comprehensive archaeological survey of Dade County between 1978-1981 (Carr 1981b). Previously recorded sites and newly discovered sites were assessed and recorded in the county files to form a database for the management of cultural resources within the county. This site inventory also helped create predictive site models for the region.

Beginning in 1978, the State of Florida conducted an ambitious salvage excavation project at the Granada Site, 8DA11, also known as the Miami 1 Site on the north bank of the Miami River recovering extensive data and cultural material (Griffin 1983).

In 1998-1999, the Miami Circle was discovered during monitoring for new development. Because of the site's significance it was acquired as a state park. In 2003-2013, extensive monitoring and archaeological excavations were conducted at the four MDM parcels north of the Miami River.

Since 1985, archaeological surveys and cultural resource assessments have been conducted on an "as needed" basis as required by various permit requirements of the City of Miami, Miami-Dade County, the State of Florida, and the U. S. Army Corps of Engineers. These assessments have resulted in numerous sites being documented.

PREVIOUS RESEARCH – 444 BRICKELL AVENUE

This site is a component of the overall site 8DA12 first recorded in the 1950s that is located on the south bank of the Miami River. However, modern development has destroyed and fragmented much of that site and various components that occur west of Brickell Point have been documented as newly recorded sites. In December, 1981, Robert S. Carr, then with the Dade County Historic Survey, completed a preliminary cultural resource assessment of 8DA1064, aka the Custom House site. He had discovered the site in 1961 as a boy growing up in Miami. The site was a prehistoric midden approximately 20m in diameter with midden deposits 50-75cm in depth. In 1981 Carr reported it destroyed as a result of the construction of the U.S. Customs Building (Carr 1983). A subsequent review of vintage aerial photography and Sanborn maps revealed that 8DA1064 was actually 100m west of the project parcel.

LITERATURE REVIEW

A search was requested on 5-1-21 with the Florida Division of Historic Resources for relevant archives and literature associated with the project area. This included, but was not limited to, site forms and reports from the Master Site File in Tallahassee concerning previously recorded sites within a 1.6 kilometer (1.0 mile) of the 444 Brickell Avenue parcel (Table 1).

Table 1. Literature Review Summary

Previously Recorded Sites:	
Within Project Parcel	0 or 1 (possibly 8DA12)
Within 1.6 km (1.0 mi) of Parcel	22-14 historic standing structures, 20 archaeological sites, 1 bridge; 3 Resource Groups
Previous Investigations:	
Within Project Parcel	1 (Survey #602)
Within 1.6 km (1.0 mi) of Parcel	38

A review of state site files conducted on 5/1/2021 resulted in the identification of one previously recorded archaeological site, 8DA1064, within the project parcel, 14 historic standing structures (within 500 feet) three resource groups, and one historic bridge within a 500 foot radius.

Table 2. Previously Recorded Sites Summary

Site No.	Name	Site Type	References	In Project Parcel	Outside of Parcel
8DA11	Granada	Black Earth Midden	Goggin 1949; J.W. Griffin 1983		X
8DA12	Miami Circle at Brickell Point	Historic/Prehistoric Site	Carr 1998, Wheeler 2001	?	
8DA13	Miami Sand Mound 4	Constructed Mound	Carr 1981		X
8DA14	Miami Sand Mound 1	Constructed Mound	Carr 1981		X
8DA15	Miami Sand Mound 2	Constructed Mound	Carr 1981		X
8DA16	Miami Rock Mound 1	Constructed Mound	Carr 1981		X
8DA17	Miami Rock Mound 2	Constructed Mound	Kerns 2019		X
8DA400	Brickell Trading Post	Store site	Goggin 1949; J.W. Griffin 1983		X
8DA1033	Bay	Prehistoric Midden	Carr 1980		X
8DA1037	South Bank	Prehistoric Midden	Carr 1981		X
8DA1064	Custom House	Prehistoric Midden	Carr 1981		X
8DA1072	Brickell Hammock	Prehistoric Midden	Carr 1981		X
8DA3220	Jose Marti	Prehistoric Midden	AHC 2020		X
8DA4577	South River Drive Historic District	Historic District/Resource Group	Survey #25644 at DHR		X
8DA5098	Brickell Avenue Bridge	Historic bridge/Resource Group const. 1929, destroyed	Survey at DHR		X
8DA5360	Brickell Resource Group	Archaeological District/Resource Group	Survey at DHR		X
8DA5993	Douglas Elementary School	Artifact scatter	Janus Research 1995		X
8DA6328	Southeast 2 nd Street Midden	Artifact Scatter	Janus Research 1997		X
8DA10001	Downtown Miami Historic District	Historic District/Resource Group	Survey #19480 at DHR		X
8DA10073	Brickell Avenue	Linear Resource/Resource Group	Survey #12014 at DHR		X
8DA10448	Flagler Street	Linear Resource/Resource Group	Survey #26506 at DHR		X
8DA12605	Brickell Citicentre Site	Prehistoric midden	AHC 2012		X
8DA13352	Flagler Street Midden	Prehistoric midden	Advanced Archaeology 2013		X

Table 3 lists all historic standing structures previously recorded as being within 500 feet of the project parcel. No historic standing structures are found within parcel boundaries.

Table 3. Previously Recorded Historic Standing Structures Summary¹

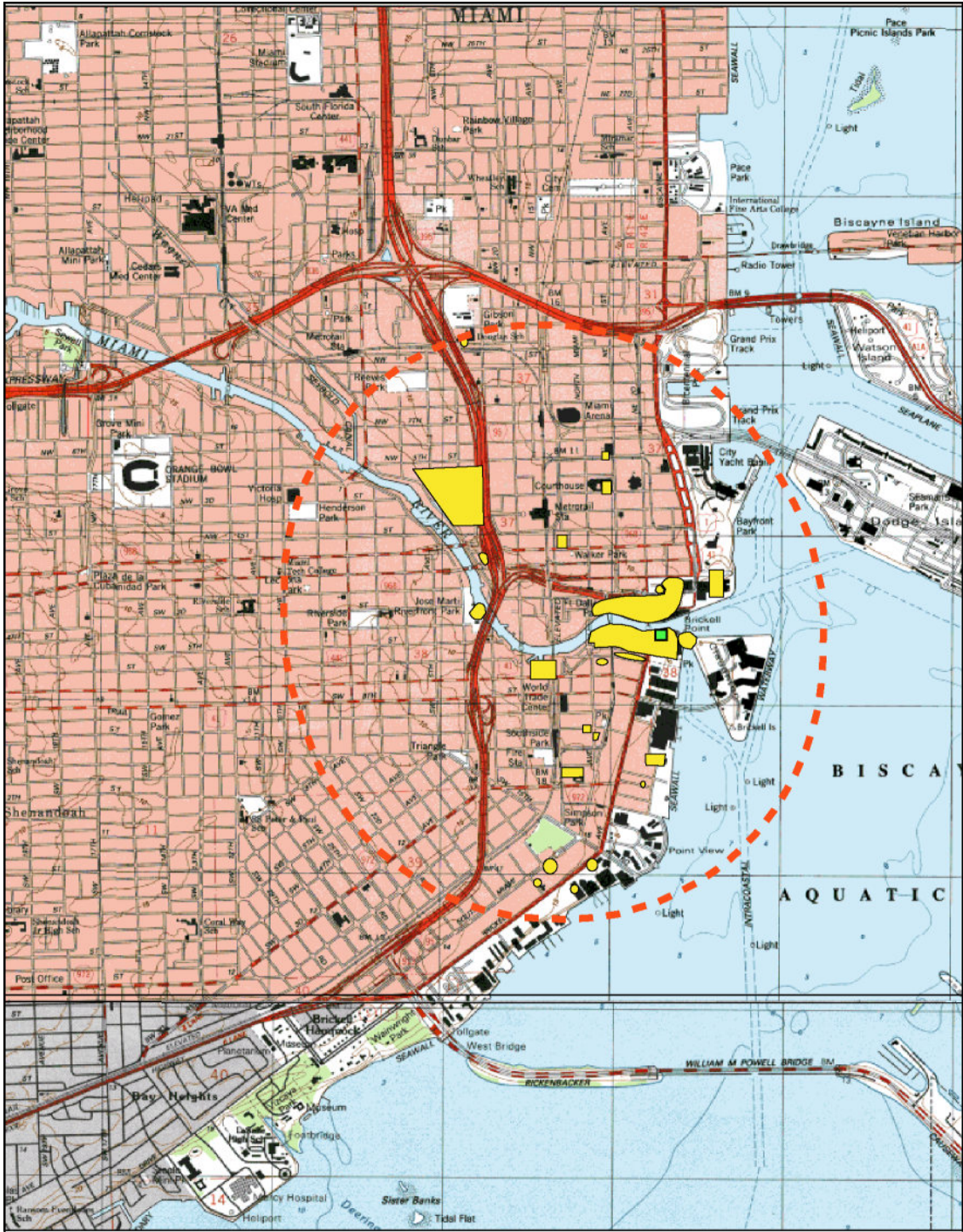
Site No.	Name	Site Type	References	In Project Parcel	Outside of Parcel
8DA240	Wickenheiser Residence	const. 1920	Site form at DHR		X

8DA257	Preston Residence	const. 1907	Site form at DHR	X
8DA367	Ferris Home	1910 Frame vernacular	Site form at DHR	X
8DA1088	Brickell Park Mausoleum	1924 Neo-Classical revival	Site form at DHR	X
8DA1124	First Presbyterian Church	1949 Mediterranean Revival	Survey #12014 at DHR	X
8DA1283	312 SE 2 nd Avenue	1925 Masonry Vernacular	Site form at DHR	X
8DA1364	24 SE 6 th Street		Site form at DHR	X
8DA1367	Southeast 6 th Street row		Site form at DHR	X
8DA1368	39 SE 6 th Street		Site form at DHR	X
8DA1369	42 SE 7 th Street		Site form at DHR	X
8DA1377	21 SE 7 th Street		Site form at DHR	X
8DA1379	35 SE 7 th Street		Site form at DHR	X
8DA4733	Palm Cottage	1897 Frame vernacular	Survey #5343 at DHR	
8DA10010	Brickell Avenue	1952 International	Survey#12014 at DHR	

In addition, a review of the state report files conducted in the same area indicated fifty cultural resource assessments previously conducted within 1.6 kilometers (1.0 miles) of the project parcel. Of these, seven were determined relevant to cultural resources in or adjoining the parcel.

Table 4. Previous Assessments

Survey No.	Date	Author	Title	In Parcel	Out of Parcel
340	1980	Metro Dade Historic Preservation Division.	Dade County Archaeological Survey Interim Report.		X
602	1981	Carr, Robert S.	<i>Dade County Historic Survey</i>	X	
5343	1997	Janus Research, Inc.	Cultural Resource Assessment Survey for I-95 Downtown Distributor Ramps Project from SR 9A/I-95 to SR 5/Biscayne Boulevard in Dade County, Florida.		X
12014	2005	Janus Research, Inc.	A Cultural Resource Assessment Survey of Brickell Avenue from SE 25 th Road to SE 4 th Street, Miami-Dade County, Florida.		X
15971	2008	Carr, Robert S.	Archaeological Investigations of the Icon-Brickell Parcel, Miami-Dade County, Florida.		X
21399	2014	Tesar, Louis	Dupont Plaza Salvage Excavation Project.		X
26717	2019	Kerns, Mechelle	Archaeological Monitoring At The Miami Underline Phase 1: Brickell Backyard Miami River To SW 13th Street, Miami-Dade County, Florida		X



USGS map showing all previously recorded archaeological sites within one mile of the project parcel.

● = ARCHAEOLOGICAL SITE
■ = PROJECT PARCEL

0 1500 3000 6000 Feet approx.
 0 450 900 1800 Meters approx.

Figure 11. Map of all previously recorded archaeological sites within one mile of the project parcel.

CULTURAL SUMMARY

The Glades area includes all of southern Florida and was originally defined as a distinctive cultural area by Stirling (1936). Goggin (1947) defined more specific boundaries for the area and identified three inclusive sub-areas: the "Calusa" in southwest Florida, the "Tekesta" in southeast Florida and the Florida Keys, and the "Okeechobee" around Lake Okeechobee. Goggin classified these sub-areas on the basis of his recognition of their distinctive natural environments, the different tribes in those regions during historic times, and differences in the archaeological record. Since Goggin's work, there have been several amendments to these definitions. Griffin (1974) noted Goggin's error in utilizing the names of historic tribes to name two of the sub-areas, and he saw no significant differences in the material culture of southern Florida that was not due to variations in coastal environments or to different frequencies of trade pottery. Further, Griffin (1974) believed that the occupation of southern Florida was generally coastal, with the Everglades being considerably less significant and containing only small midden sites, which indicate many short-term occupations through the centuries. Based on this belief, he tentatively suggested that the term "Circum-Glades" Area be applied to the area from the Ten Thousand Islands eastward through southeast Florida and northward to St. Lucie County. Unfortunately, this reclassification of the Glades area and the misconception of the insignificance of the Everglades sites have been furthered by a book on Florida archaeology. The oversight was compounded by the statement that sites are distributed "around the Everglades (with only few sites actually in the Everglades proper)" (Milanich and Fairbanks 1980:233).

The contention that sites are concentrated on the coast and are scarce in the Everglades is partially incorrect. Archaeological surveys in the Everglades (Carr et al. 1979) and within the Big Cypress Swamp (Ehrenhard et al. 1978, 1979, 1980) indicate that there are at least several hundred sites situated within the south Florida interior, some of which are large, substantial sites that suggest more than just marginal or short-term use. The term "Everglades Area" for southeast Florida was offered by Carr and Beriault to replace the "Glades" culture area (1984: 1-11). In 1988, Griffin concurred by using "Everglades Area" to describe southeastern Florida and the Florida Keys in his recent synthesis of South Florida archaeology (Griffin 1988, 1989). It is difficult to determine an exact western boundary for the area, but Carr and Beriault (1984:2) suggest one west of the Shark River and east of Turner River, near the eastern boundary of Big Cypress Swamp. A northern boundary would be near the Broward-Palm Beach County line.

PALEO PERIOD (10000 BC TO 8000 BC)

Paleoindians lived in southern Florida in association with mammoths, bison, and other types of megafauna. Deposits of fossilized Pleistocene bone have been uncovered by dredging operations from several locations in southern Florida and from solution holes in south Dade County. These deposits yielded a wide range of grazing ungulates and sloths, indicating the presence of more extensive grasslands than present (Webb and Martin 1974). With the extinction of the megafauna by about 11,000 BP, Paleoindians apparently adapted to the emerging wetlands of southern Florida and began to establish the patterns of subsistence that were to provide the basis of resource procurement for the subsequent

10,000 years. Evidence of the Paleo period in southern Florida is now well established with the discovery of a late Paleo/Early Archaic site at Cutler in south Dade County (Carr 1986, 2012). Radiocarbon dates of $9,640 \pm 120$ years were determined for this site, which yielded evidence of exploitation of deer and rabbit, some marine fauna, and some indication of hunting extinct horse and peccary. However, the majority of data from this site reflects Indian adaptation to the extinction of New World megafauna.

ARCHAIC PERIOD (6500 BC TO 1000 BC)

During the Post Glacial, the sea level rose and greatly diminished Florida's land size. It has been calculated that the rate of sea level rise was approximately 8.3 cm per 100 years from 6000 to 3000 BP. That rate has decreased to about 3.5 cm per 100 years from 3000 BP to present (Scholl and Stuiver 1967).

By 5000 BP, cypress swamps and hardwood forests characteristic of the sub-tropics began to develop in southern Florida (Carbone 1983, Delcourt and Delcourt 1981). The Archaic Period was characterized by an increased reliance on the shellfish and marine resources on the coast by the native populations, and a generally expanded hunting, fishing, and plant gathering base throughout southern Florida.

The earliest dated mid-Archaic archaeological site is the Bay West site, CR200, a cypress mortuary pond situated in Collier County northeast of Naples (Beriault et al. 1981). It is likely that the Bay West site was a hydric sinkhole that provided an "oasis" and water hole during the much drier mid-Archaic period. Radiocarbon dates recovered there indicate a temporal range of 5500 BP to 7000 BP. This chronology and the cultural materials recovered, including preserved organic materials, are similar to those recovered from Little Salt Spring 110 km to the north (Clausen et al. 1979). The mortuary pond is the mortuary pattern that occurs throughout central and southern Florida.

A mid-Archaic Period site, BD1119, was discovered on Pine Island (Carr and Sandler 1991). Characterized by a scatter of chert flakes and several mid-Archaic projectile points, the site also has a historic Seminole component.

Sites from the Late Archaic Period occur across southeast Florida; some as early as 4000 B. P. have been located along Biscayne Bay (Carr 1981a,b), and Late Archaic horizons appear to be common on Everglades tree island sites. Radiocarbon dates in the Everglades indicate early ages of 3050 ± 140 BP for the Peace Camp site (Mowers and Williams 1972:18), and 4840 ± 210 B. P. for Taylor's Head site (8BD74) (Masson et al. 1988:346). The Late Archaic Period is distinguished by the development of fiber-tempered pottery. The Orange series of fiber-tempered pottery is well documented by Cockrell (1970) on Marco Island, and undecorated fiber-tempered pottery has been recovered on the southeast coast at the Atlantis site (Carr 1981b). Sites containing fiber-tempered pottery have been dated from as early as 3400 ± 100 BP on Marco Island, from ca. 2500 BP at the Firebreak site in Collier County, and from 3000 to 4000 BP along Biscayne Bay. Partial fiber and sand-tempered pottery have been recovered from interior sites such as the Honey Hill site

(8DA411), the 202nd Street site in north Dade County, and the Markham Park (8BD183) site in Broward County.

THE GLADES PERIOD (CA. 750 BC TO 1750 AD)

Goggin (1947) defined three periods for the Formative Era. Using decorated pottery types that have proven to be effective time markers, he created the Glades I, II and III periods. These divisions have proven most useful in extreme southern Florida. The Glades I Early period (750 BC to ca. AD 200) is characterized by the use of undecorated sand-tempered pottery. Appearance of the Ft. Drum decorated series indicates ceramic decorations in extreme southern Florida were developed by AD 500. Non-local types include Deptford wares prominent at the Miami Circle. While decorated types begin appearing during Goggin's Late Glades I period, future revisions of the Glades periods may simply make the Glades II Period coincide with the first appearance of decorated wares.

During the Glades II period (AD 750 to AD 1200), shifts in ceramic styles allow archaeologists to accurately divide the period into three subperiods based on the relative frequency of certain decorative types (i.e., Key Largo Incised, Miami Incised, Sanibel Incised). Mound construction was also common during this period, reflecting the rise of a stratified society with a select ruling and/or priest class.

During the Glades II and III periods (AD 1200 to AD 1750), there was a shift in ceramic decorations and vessel shape in extreme southern Florida. Griffin (1974) believes that there is a near absence of decorated pottery between AD 1000 and AD 1200. Occurrences of St. Johns tradeware and Belle Glade Plain ware increase along the east coast, and in general, a thriving trade network that brought a variety of exotic resources, such as lithic tools and ornaments, is evident.

HISTORIC PERIOD (CA. AD 1500 - AD 1900)

When the Europeans arrived in the sixteenth century, they encountered a thriving indigenous population with at least five separate tribes in southern Florida: the Tequesta in the southeast, the Calusa in the southwest, the Jeaga and Ais along the east coast north of the Tequesta, and the Mayaimi near Lake Okeechobee. At the time of Spanish contact, the Calusa maintained political dominance over the other tribes. The principal Tequesta village was at the mouth of the Miami River. It has been estimated that there were 20,000 Indians in south Florida when the Spanish arrived (Milanich and Fairbanks, 1980). By 1763, when the English gained control of Florida, that population had been reduced to several hundred. These last survivors were reported to have migrated to Cuba with the Spanish (Romans 1962); however, it is likely that the so-called "Spanish Indians" (Sturtevant 1953), who raided Indian Key in 1840, were the mixed-blood descendants of the Calusa and/or refugees from north Florida missions raided by the English in the early eighteenth century. The Spanish Indians joined the Seminoles, who had fled en masse into south Florida in 1838 after the Battle of Okeechobee, although some Creek groups apparently had migrated to south Florida earlier in the century.

The earliest documentary evidence of Seminole settlement in South Florida is an account by John Lee Williams (1837) describing Snake Warrior's Island at the headwaters of Snake Creek, probably site BD1867 in Miramar in southern Broward County.

The area of the mouth of the Miami River was initially settled in the early nineteenth century. In 1870, William and Mary Brickell acquired more than 3000 acres of land south of the river, including the project parcel.

METHODOLOGY

ARCHIVAL REVIEW

Prior to conducting fieldwork, relevant archives and literature were reviewed. This included, but was not limited to, studying the previous archaeological reports for sites in Miami-Dade County, reviewing information from the Master Site File in Tallahassee concerning nearby sites, and examining USGS maps of the project area. A review of the LABINS database of land surveys also was conducted. In addition, archival aerial photographs from the project area, which could aid in revealing anthropogenic changes to the topography and floral communities were interpreted.

RESEARCH DESIGN

This Phase I cultural resource survey of 444 Brickell Avenue incorporated the use of certain predictive archaeological site models. These models postulate that elevated areas adjacent to the Miami River are medium to high probability areas for being associated with archaeological sites. These higher probability areas sometimes can be identified by examining vintage aerial photographs taken prior to modern development. The elevational information on the Miami quadrangle maps for the area also was used. It was determined that overall, the project parcel had a high probability for containing archaeological sites.

FIELDWORK

The project parcel was assessed by pedestrian survey and subsurface testing during monitoring of demolition. Shovel tests were dug across the parcel judgmentally where accessible. A complete delineation of positive shovel tests was impracticable due to the deep extensive fill requiring mechanical excavations. A total of 24 tests were dug across the southern part of the parcel where pending development is proposed.

All tests were dug to a depth of one meter or to the bedrock. A mechanical excavator was used to remove the fill and rubble, and upon exposure of the natural sediments the test holes were dug. All sediments were screened through ¼"-mesh hardware cloth and all cultural materials were collected. Shovel test forms were completed and a handheld GPS unit was used to record the location of all test holes.

COLLECTIONS

Recovered cultural materials were collected in self-sealing bags. Cultural material was washed, sorted, and quantified. All field notes, maps, and photos repose at the AHC offices in Davie, Florida.

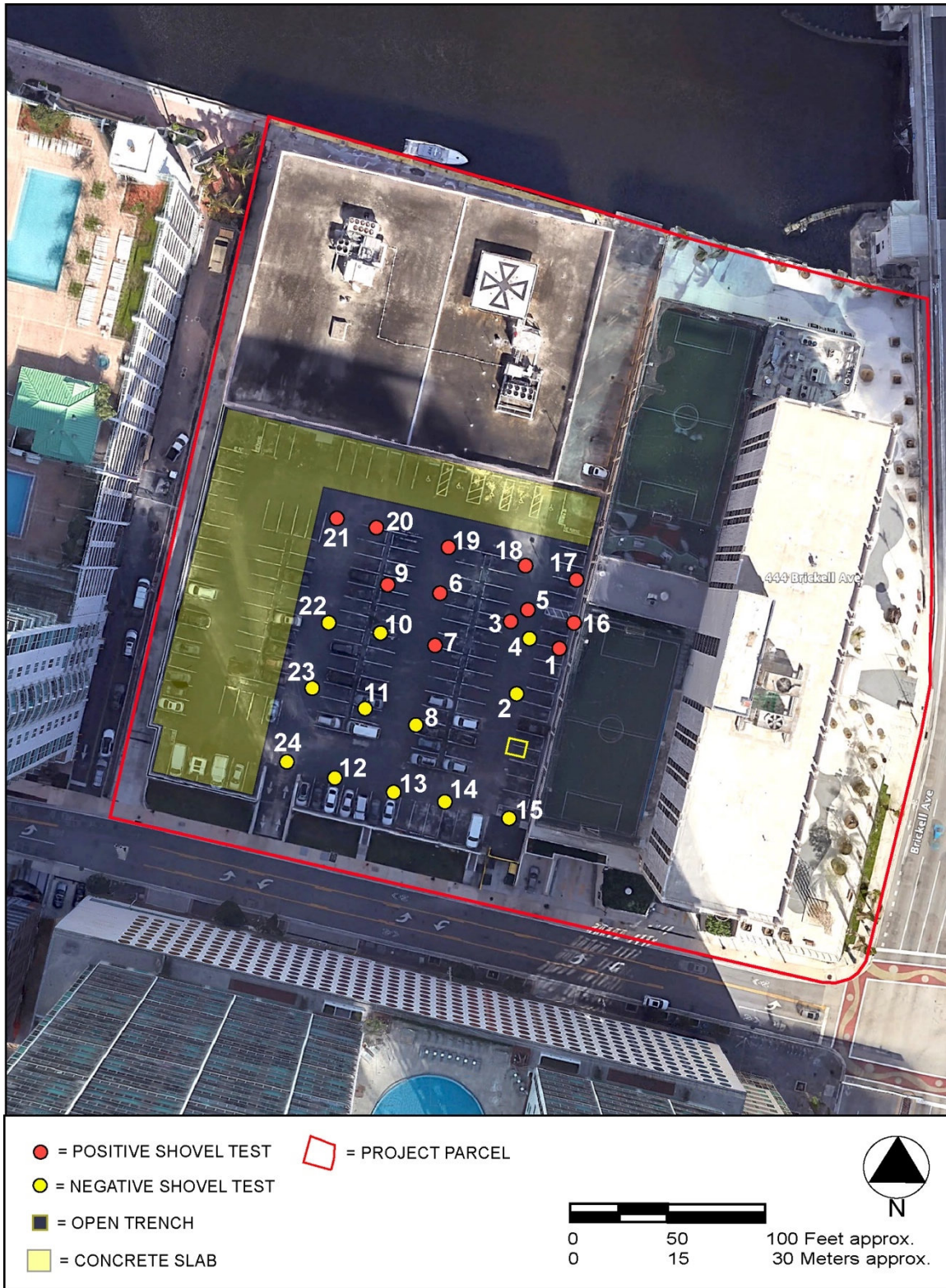


Figure 12. January 2021 aerial photograph of the project parcel showing the location of Phase I shovel tests. A concrete slab occurring on west and north bounds of the test area was inaccessible to testing.



Figure 13. Test profiles. Top left: positive Shovel Test 1. Top right: positive Shovel Test 17. Below: positive Shovel Test 21.



Figure 14. Positive Shovel Test 7 showing bedrock and solution hole.



Figure 15. Negative Shovel Test 23.

SUMMARY OF SITE

Site Name:	444 Brickell Site
Site Number:	8DA19238
Location:	Township 54S, Range 41E, Section 38
Environmental Setting:	Historic riverbank hammock, now vacant urban land
Site Type:	Black earth midden
Site Function:	Habitation
Description:	Site 8DA19238 is a black earth midden characterized by prehistoric refuse that mantles the underlying bedrock. Cultural deposits also occur within solution holes and in the bedrock. A single feature, a possible posthole, was uncovered.
Chronology:	Prehistoric: Glades I-II
Collections:	Prehistoric: bone artifacts (points, pins, drilled shark teeth), pumice, lithic weight, pottery sherds Historic: pewter button, cuprous square nails, stoneware sherd, glass bottle base (all mid-nineteenth century).
Ownership:	Private
Preservation Quality:	Disturbed but intact cultural deposits occur below disturbed midden.
Significance:	The site is potentially eligible for listing in the National Register of Historic Places based on criterion D, that it contains well preserved cultural deposits that could contribute to our knowledge of prehistoric subsistence and settlement patterns of the Tequesta.



Figure 16. Incised pottery sherds. Left: Fort Drum Incised. Right: Surfside Incised.

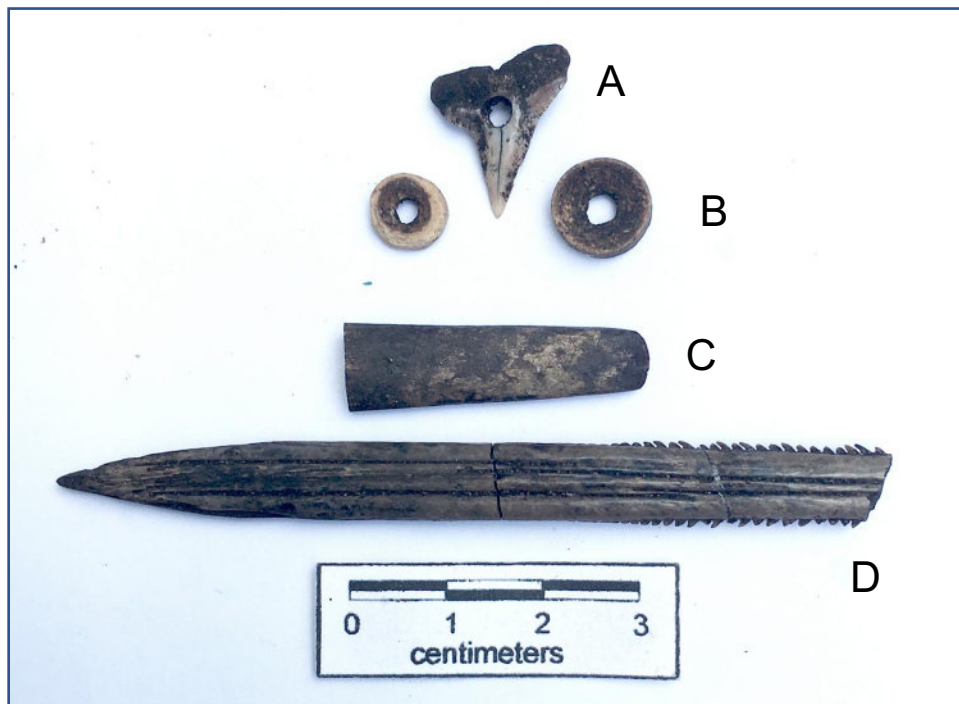


Figure 17. Bone artifacts. A: drilled shark tooth. B: possible bone beads from shark vertebrae. C: Bone pin fragment. D: sting ray point.



Figure 18.
Historic copper
nails and pewter
button.



Figure 19.
Bottle base:
early nineteenth
century.

RESULTS AND RECOMMENDATIONS

This Phase I assessment was conducted with 24 shovel tests with the addition of three units (which were intended as part of a Phase II assessment). Twelve of the shovel tests were positive for prehistoric midden deposits. Cultural material includes extensive faunal bone, shell refuse, and artifacts. Prehistoric artifacts include pottery sherds, and shell and bone tools. The occurrence of intact midden varies from a thin 5-10cm horizon on top of the bedrock to a depth of 1m in Shovel Test 5. The site was newly recorded as 8DA19238.

Artifacts include 328 pottery sherds represented by 308 sand-tempered plain, 12 St. Johns Plain, and one Dunns Creek Red. Decorated pottery includes three St. Johns Check Stamped, one Surfside Incised, one Fort Drum Incised, and one unclassified incised. Other artifacts include 15 bone artifacts including bone pins and awls, a stingray point, and a drilled shark tooth. Lithic artifacts include a non-local sandstone weight or bannerstone reused as a hammer, limestone abraders, and pumice. Of particular interest were preserved seeds including one possible gourd seed. The prehistoric artifacts (i.e., pottery sherds) indicate an age of prehistoric occupation from the Glades I-III Periods, ca. AD 500 - AD 1500.

The site's historic component is represented by nineteenth century artifacts including bottle glass, a pewter button, a stoneware sherd, and cuprous square nails.

Documentation of the site resulted in determining that the cultural deposits increase in depth and preservation quality as one proceeds northward towards the river, and conversely diminishes southward to the point where the site is nearly fully destroyed nearest SE 4th Street. The reason for this variation is that the historic natural elevation above sea level increases steadily southward and thus subsequent development, particularly the construction of the Custom House, resulted in lowering the parcel's elevation towards the south, requiring the removal of all soils and the top of bedrock; while to the north, where elevations are lower, development required the placement of fill over the historic surface, thus preserving the archaeological deposits below.

It is recommended that a Phase II assessment be conducted to further document the 8DA19238 and determine its significance.

REFERENCES CITED

Ambrosino, ML

2004 An Archaeological and Historical Survey of the Proposed Manhattan Enterprises Tower Location in Miami-Dade County, Florida. Survey #9803 on file, Division of Historic Resources, Tallahassee, Florida.

Armstrong, K

2017 Resource Assessment Survey in Support of the Miami Underline, Miami-Dade County, Florida. Survey #24533 on file, Division of Historic Resources, Tallahassee, Florida.

Austin, RJ.

1988 Cultural Resource Assessment Survey of the Proposed Alandco Miami Riverside Project Phase 1 Development Site, Miami, Florida. Survey #1612 on file, Division of Historic Resources, Tallahassee, Florida.

Ballo, GR

1990 Cultural Resource Assessment of the Proposed Replacement of the Southwest 2nd Avenue Bridge. Survey #2554 on file, Division of Historic Resources, Tallahassee, Florida.

Carbone, VA

1983 Late Quaternary Environments in Florida and the Southeast. *The Florida Anthropologist* 36(1-2):3-17.

Carr, RS

1980 Dade County Archaeological Survey Interim Report. Report #340 on file, Division of Historic Resources, Tallahassee, Florida.

1981a *Dade County Historic Final Report: The Archaeological Survey*. Metropolitan Dade County Office of Community and Economic Development, Historic Preservation Division, Miami, Florida.

1981b Salvage Excavations at Two Prehistoric Cemeteries in Dade County, Florida. Paper presented at the 45th Annual Meeting of the Florida Academy of Sciences. Winter Park.

1986 Archaeological and Historical Survey of Pine Island, Broward County, Florida. Survey #1785 on file, Division of Historic Resources, Tallahassee, Florida.

2001 Due Diligence Archaeological Assessment of Brickell Park, Miami, Florida. Survey #9545 on file, Division of Historic Resources, Tallahassee, Florida.

- 2006 A Phase I Archaeological Survey and Assessment of the Bogg Site (8DA5131), Miami-Dade County, Florida. Report #13345 on file, Division of Historic Resources, Tallahassee, Florida.
- 2008 Archaeological Investigations of the Icon-Brickell Parcel, Miami-Dade County, Florida. Survey #15971 on file, Division of Historic Resources, Tallahassee, Florida.
- 2015 An Archaeological Assessment of the Miami River Parcels: 401, 501, 621, 635, 645, SW3rd Avenue; 242 SW 6th Avenue; 220, 224, 244-252, 260, 216-269, 275 SW6th Street and 219, 233, 243, 253, 257, SW 7th Street, Miami-Dade County, Florida, February 2014. Survey #22790 on file, Division of Historic Resources, Tallahassee, Florida.
- 2020 A Desktop Cultural Resource Assessment Survey of Jose Marti Park, Miami, Florida. *AHC Technical Report #1311*.
- Carr, RS, R Franklin, JF Mankowski and W Schaeffer
 2012 Archaeological Investigations at the 1814 Brickell Avenue Park Parcel, Miami, Florida. Report # 969 on file, Division of Historic Resources, Tallahassee, Florida.
- Carr, RS, J Ulloa Hung, A Noe, and J Beriault
 2021 A Phase I Cultural Resource Assessment of Jose Marti Park, Miami, Florida. *AHC Technical Report #1328*.
- Clausen, CJ, AD Cohen, C. Emiliani, JA Holman and JJ Stipp
 1979 Little Salt Spring, Florida: a Unique Underwater Site. *Science* 203:609-614.
- Cockrell, WA
 1970 Settlement and subsistence patterns on Marco Island, Collier County, Florida. Thesis submitted to the Department of Anthropology, Florida State University.
- 2000 Edited Draft, Field Journal, Parkland Site, 8BD2154, and Margate-Blount Site, 8BD41- April 29th, 2000 - August 19th, 2000. Report on file, WCI Communities, Coral Springs, Florida.
- Cremer, D
 2010 An Archaeological and Historical Survey of the FL-MIA2039-A Tower in Miami-Dade County Florida FCC Form 621 Collocation (“Co”) Submission Packet. Survey #18120 on file, Division of Historic Resources, Tallahassee, Florida.
- Delcourt, PA and HR Delcourt
 1981 Vegetation Maps for Eastern North America: 40,000 yr. BP to the present. In RC Romans (ed.) *Geobotany II*. Plenum Publishing Corp.

Eaton, S

1988 Downtown Miami Multiple Resource Area. Survey #1085 on file, Division of Historic Resources, Tallahassee, Florida.

Ehrenhard, JE, RS Carr and RC Taylor

1978 The Archaeological Survey of the Big Cypress National Preserve: Phase I. Southeast Archaeological Center, National Park Service, Tallahassee, Florida.

1979 The Archaeological Survey of the Big Cypress National Preserve: Season 2. Southeast Archaeological Center, National Park Service, Tallahassee, Florida.

Ehrenhard, JE, RC Taylor, and G Komara

1980 The Archaeological Survey of the Big Cypress National Preserve: Season 4. Southeast Archaeological Center, National Park Service, Tallahassee, Florida.

Florida Historic Preservation Division

1989 Dade County Historic Survey, Phase II: Final Report. Survey #2127 on file, Division of Historic Resources, Tallahassee, Florida.

Florida History, LLC

2008 An Archaeological and Historical Survey of the FL266 Biscayne Building Tower in Miami-Dade County, Florida FCC Form 621. Survey #15209 on file, Division of Historic Resources, Tallahassee, Florida.

George, PS

1994 Riverside Heights Neighborhood Historic Site Survey. Survey #3908 on file, Division of Historic Resources, Tallahassee, Florida.

Goggin, JM

n.d. The Archaeology of the Glades Area, Southern Florida. Manuscript on file at the Peabody Museum.

Griffin, JW

1974 Archaeology and Environment in South Florida. In PJ Gleason (Ed.), *Environments of South Florida: Present and Past*. Miami Geological Society, Memoir 2. pp. 342-346.

1983 Archaeology and History of the Granada Site. Manuscript on file Division of Historic Resources, Tallahassee, Florida.

1988 The Archaeology of Everglades National Park: A Synthesis. National Parks Services, Southeast Archaeological Center, Tallahassee, Florida.

1989 Time and space in South Florida: A synthesis. *Florida Anthropologist* 42: 179-204.

Haiduven, R.G.

1999 A Phase I Archaeological Survey and Assessment of 1441 Brickell Avenue, Miami-Dade County, Florida. Survey #5831 on file, Division of Historic Resources, Tallahassee, Florida.

Harrington, M.R.

1909 Archaeology of the Everglades Region, Florida. *The American Anthropologist* 11:139-143.

Hoffman, K

2005 Technical Memorandum: Cultural Resource Reevaluation of Brickell Avenue from the Miami River to SE 4th Street, Financial Project No. 249102-2-52-01. Survey #14800 on file, Division of Historic Resources, Tallahassee, Florida.

Janus Research, Inc.

1997 Cultural Resource Assessment Survey for I-95 Downtown Distributor Ramps Project from SR 9A/I-95 to SR 5/Biscayne Boulevard in Dade County, Florida. Survey #5443 on file, Division of Historic Resources, Tallahassee, Florida.

2000 Phase I Archaeological Survey of the Miami River Park Apartments, Dade County, Florida. Survey #7660 on file, Division of Historic Resources, Tallahassee, Florida.

2005 A Cultural Resource Assessment Survey of Brickell Avenue from SE 25th Road to SE 4th Street, Miami-Dade County, Florida. Survey #12014 on file, Division of Historic Resources, Tallahassee, Florida.

2012 Cultural Resource Assessment Report for the All Aboard Florida Passenger Rail Project from West Palm Beach to Miami, West Palm Beach, Broward, and Miami-Dade Counties, Florida. Survey #19480 on file, Division of Historic Resources, Tallahassee, Florida.

2013 Cultural Resource Assessment Survey of the Jurisdictional Transfer of US 1/Brickell Avenue from I-95 to SW 8th Street to the City of Miami. Survey #20490 on file, Division of Historic Resources, Tallahassee, Florida.

2014 Cultural Resource Assessment Survey of the SE 6th Street from South Miami Avenue to Brickell Avenue Miami River Greenways Project, a local Agency Program Project in Miami-Dade County, Florida (Financial Project ID: 418334-2). Survey #21460 on file, Division of Historic Resources, Tallahassee, Florida.

2014 Desktop Analysis and Field Reconnaissance for SR 5/US 1/Biscayne Boulevard from SE 2nd Street, Miami-Dade County, Florida (FPID 412473-7-52-01). Survey #22259 on file, Division of Historic Resources, Tallahassee, Florida.

2014 Desktop Analysis and Field Reconnaissance for SR 5/US 1/Biscayne Boulevard from SE 3rd Avenue to North of SE 2nd Street, Miami-Dade County, Florida

- (FPID 412473-9-52-01).). Survey #22260 on file, Division of Historic Resources, Tallahassee, Florida.
- 2015 Cultural Resources Desktop Analysis for the City of Miami Metro Stations Access Local Agency Program Project, City of Miami, Miami-Dade County, Florida (FPID 412473-9-52-01). Survey #22412 on file, Division of Historic Resources, Tallahassee, Florida.
- 2016 Cultural Resources Desktop Analysis and Field Review for SR 90th SW 7th Street from SR 9/SW 27th Avenue to SW 5/Brickell Avenue, Miami-Dade County, Florida. (FPID No. 437792-1-52-01). Survey #24004 on file, Division of Historical Resources, Tallahassee, Florida.
- McMurray, C
- 1992 An Archaeological Re-Evaluation of the Proposed Brickell Avenue Bridge Replacement, Dade County, Florida. Survey #4069 on file, Division of Historic Resources, Tallahassee, Florida.
- Metro-Dade Historic Preservation Division
- 1980 Dade County Archaeological Survey Interim Report. Survey #340 on file, Division of Historic Resources, Tallahassee, Florida.
- Metropolitan Dade County
- 1989 Dade County Historic Survey, Phase II: Final Report. Survey #2127 on file, Division of Historical Resources, Tallahassee, Florida.
- 2019 A Cultural Resource Assessment Survey for Underline, Phase II from SW 13th Street to SW 19th Avenue (FPID No. 435501-1). Survey #26153 on file, Division of Historic Resources, Tallahassee, Florida.
- Milanich, JT and CH Fairbanks
- 1980 Florida Archaeology. New York: Academic Press.
- Romans, B
- 1962 *Natural History of Florida*. Facsimile of 1775 edition. Gainesville: University Press of Florida.
- Scholl, DW and M Stuver
- 1967 Recent Submergence of Southern Florida. *Geological Society of America Bulletin* 78:437-454.
- Sturtevant, WC
- 1953 Chakaika and the "Spanish Indians": Documentary Sources Compared with Seminole Tradition. *Tequesta* 13: 35-73.
- Ubelaker, DH
- 1999 *Human Skeletal Remains*. 3rd ed. Taraxacum Press, Washington.

Webb, SD and RA Martin

1974 Late Pleistocene Mammals from the Devil's Den Fauna, Levy County. In SD Webb (Ed.) *Pleistocene Mammals of Florida*. Gainesville: University Presses of Florida, pp. 114-145.