STAGE 1 ARCHAEOLOGICAL ASSESSMENT

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REPORT SUMMARY

The East River Plaza project site is on a 4.7 acre parcel located east of Pleasant Avenue and just west of the FDR Drive between East 116th Street and East 119th Street. The proposed project would entail the demolition of buildings, disturbance and excavation of soils underlying structures, and the new construction of a retail complex.

Documentary research undertaken for this “Stage 1 Archaeological Assessment Report” to assesses 1) the potential for the site to have hosted significant, National Register eligible prehistoric and/or historical archaeological resources, and 2) the likelihood that such resources have survived the subsurface disturbances concomitant with urbanization.

The entire area in which the project site blocks are situated is rated as highly sensitive for Native American archaeological resources by the New York City Landmarks Preservation Commission and the New York State Historic Preservation Office. (See Appendix A)

The resource categories of potential archaeological remains on the East River Plaza site were determined by assessing information about the former land usage on the site and the known subsurface disturbance record. The categories appear to be limited to the possible survival of Native American remains and homelot backyard features on two portions of Block 1815. The two areas that are considered sensitive for archaeological resources are shown on Figure 18:

1) #527 and #529 East 118th Street. This parcel may contain shaft features associated with dwellings that occupied the two lots between c.1867 and c.1951. It is recommended that the backyard areas of #527 and #529 East 118th Street be tested to ascertain the presence or absence of shaft features associated with the inhabitants of the dwellings before the East River Plaza project construction begins. Another component of this Stage 1 research design would be a topic-intensive analysis concerning the occupation of the project site homelots, from c1870 to the advent of water and sewer service in c.1935.

2) #546 East 119th Street. This parcel may contain Native American remains. It is recommended that Stage 1 testing of the small open area fronting on the FDR Drive take place prior to construction activity. Then, after the extant building is demolished with care taken to create as little additional subsurface disturbance as possible, that area should be tested.
I. INTRODUCTION AND METHODOLOGY

The East River Plaza project site is on a 4.7 acre parcel located east of Pleasant Avenue and just west of the FDR Drive between East 116th Street and East 119th Street (Figure 1). The proposed project would entail the demolition of the buildings, disturbance and excavation of soils underlying the structures, and the new construction of a retail complex.

A "Stage 1 Archaeological Assessment Report" entails the documentary research necessary to assess 1) the potential for the site to have hosted significant, National Register eligible prehistoric and/or historical archaeological resources, and 2) the likelihood that such resources have survived the subsurface disturbances concomitant with urbanization.

In order to address these concerns, various sources of data were examined. Source material regarding the project site was collected to determine the original topography and to compile a building history and disturbance record. Historical maps, atlases, and descriptions of the project area were sought at the Local History and Map Divisions of the New York Public Library and the New York Historical Society. (Depending on repository requirements, some maps had to be drawn, traced, or photographed.) This task was aided by data provided by Allee King Rosen & Fleming, Inc. which included soil boring logs and previous site analyses.

William Ritchie's THE ARCHAEOLOGY OF NEW YORK STATE provided a valuable overview of Native American culture and lifeways during the prehistoric period. Works concerning Native American exploitation of the resources of Coastal New York written by Reginald P. Bolton, Arthur C. Parker and Robert S. Grumet were researched as well. Available site reports were sought for data specific to the project area. Inquiries to the New York City Landmarks Commission located three Phase 1A studies which had been conducted in the Upper East Side/East Harlem area (see Hunter 1990: Rubinson and Winter 1989 and 1991). Inquiries concerning inventoried prehistoric and historical sites were made at the New York State Museum and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) (see Appendix A). Of several prehistoric sites discovered in the study area, one (#A061-01-0541) is very close by at approximately Pleasant Avenue between 120th and 121st Streets. This site is discussed at length in the text of this report.

To place the project site within an historical context, local and regional histories (e.g. Riker's HISTORY OF HARLEM and Stokes's THE ICONOGRAPHY OF MANHATTAN ISLAND) were reviewed for pertinent material.

An extensive site visit and a photographic record - from an archaeological perspective - of current conditions was made in August of 1998.
II. ENVIRONMENTAL SETTING

Before the coming of Europeans, the topography of Manhattan was in distinct contrast to the gradually-sloping, homogenous landscape of concrete, brick and asphalt that presents itself to the modern observer. The retreat of the last glaciation of the Pleistocene, and the warming trend during the Holocene left Manhattan a terrain of rough and irregular hills, ridges and dales, with small streams and marshy wetlands. Underlain by schist, a hard metamorphic rock formed approximately 450 million years ago, the northern part of Manhattan Island had a very rugged appearance, with numerous schist outcrops and bluffs. Over this was deposited a layer of glacial till, composed mainly of gravel, sand and loam interspersed with pebbles and boulders. The thickness of this layer could vary from a few inches to more than thirty feet in some of the narrow valleys (Hunter 1990:2-11).

This sort of terrain is depicted on the existing 18th- and 19th-century maps of the project area, drawn before the rhythmic repetitions of the city grid system’s streets were imposed upon the wild landscape. Unfortunately, since these maps do not provide numerical measurements of elevations, the early terrain can only be described in most general terms. According to the 1807 Commissioner’s Map (Fig. 2), which has the advantage of superimposing the Manhattan street grid over the then-existing terrain, the project area was located on a low-lying area on the shore of the East River. Egbert Ludovicus Vieie’s 1874 topographical map rendering (Fig. 4) shows a ridge running through the western portion of the project blocks. Even more detail - particularly marsh/swamp - is shown on Bolton’s “Aboriginal Times” map (Fig.3).

Currently “the site topography is generally flat and at grade with the adjacent and surrounding streets. The Harlem River is located approximately 500 feet east of the site. Based on the elevation and topography of the site, the water table beneath the site is approximately 8 feet below land surface and ground-water flow direction is easterly toward the Harlem River. Underlying the site are undifferentiated recent deposits consisting of shore deposits and artificial fill (USGS, 1953). These deposits locally range in thickness from five to 15 feet and are characterized by sand, gravel, silt and clay along with pieces of concrete and brick where fill is present ” (Roux 1998:3).

“The site is at an approximate elevation of 10 feet above mean sea level with a gentle slope to the east, toward the Harlem River...Neither soils nor bedrock outcrops were observed. Soils below the site consist primarily of fill underlain by recent and Upper Pleistocene glacial deposits. Available USGS mapping of former local drainage features indicates that the eastern and northeastern portions of the subject site consisted of swamp and marshland prior to development. The unconsolidated deposits are underlain by the
Fordham Gneiss, which is present at an approximate depth of 30 feet below grade." (Law Environmental 1995:1-5).

The extant large turn-of-the-century industrial structures, occupied for many years by the Washburn Wire Company, have brick exteriors and concrete floors and columns. At present, the interiors of the structures are entirely gutted. Several fires have occurred leaving only structural components such as beams and rafters in many areas. There is standing water in some subsurface areas (e.g. Photo 5) which could not be examined. Photographs 1-12 document current conditions. These photographs of some of the massive multi-story structures and their substantial foundations indicate the degree of impact on subsurface strata both within the building footprints and on land surrounding those buildings.
III. PREHISTORIC BACKGROUND

Archaeologists have divided North American prehistory into three periods, the Paleo-Indian, Archaic, and Woodland. The latter periods are generally divided into subperiods using the appellations Early, Middle, and Late. Changes in the prehistoric environment, the characteristics of prehistoric peoples, and the cultural artifacts that were left behind enable archaeologists to present a chronological framework for the prehistory of North America. What follows is a brief overview of these periods with emphasis on the characteristics of, and archaeological evidence for, each period in the New York City area.

Paleo-Indian Period (10,000 - 7,000 B.C.)

Near the end of the Wisconsin glacial age the first humans crossed into the New World via a narrow land bridge in the vicinity of the Bering Strait. These nomadic hunters, known as the Paleo-Indians, are identified by their utilization of a distinctive artifact, the fluted point. Archaeological evidence suggests that although Paleo-Indians were limited in number and traveled in small groups, they soon spread across the pristine environment of North America. Perhaps they were following the migration patterns of the game animals they depended upon for subsistence. Numerous Paleo-Indian "kill sites" have been discovered in the western and southwestern United States. In contrast, none have been recovered in the Northeast. Several camp sites have been excavated in the Northeast, however, leading scholars to suggest that seasonal patterning or perhaps territorialism commenced during the latter part of this period (Ritchie 1965: 3,9).

The environment during the Paleo-Indian period was dominated by the retreating glaciers and the change toward the deciduous woodland setting prominent in the Archaic Period. The warmer climate and the new open river valleys provided ample hunting grounds. As a result, the favored location for Paleo-Indian sites, and all prehistoric sites, were well-elevated large fertile valleys close to a fresh water source. Along with the fluted point, scrapers and borers were part of the nomadic hunter’s "tool kit." These tools were used to hunt and butcher mastodon, elk, caribou, bison, and other smaller mammals. A variety of these animals, dated to this time period, have been excavated in New York State, particularly in the vicinity of former glacial lakes and moraines (Ritchie 1965: 9-16).

Although Paleo-Indians were dispersed across the North American continent no human skeletal material, or artifacts such as animal hides or wood objects have been recovered. Perhaps due to the transitory nature of these people little remains of their culture but lithic material. In New York State a few camp sites have been examined (For a detailed discussion on Paleo-Indian, Archaic, and Woodland sites in New York see Ritchie 1980). The closest recorded Paleo-Indian site to the project area is Port Mobil, a small camp site, recovered in Staten Island (Ritchie 1980: 1,3,7).
Archaic Period (7,000 - 1,000 B.C.)

The transition from the Paleo-Indian period to the Archaic was marked by the availability of a larger variety of plants and small-game as the post-glacial Archaic peoples exploited the now dominant deciduous woodland environment. The decreased population of big-game animals led to the hunting of smaller game including the white-tailed deer, moose, wild turkey, and rabbit. In addition, Archaic peoples began to exploit the marine environment. Although not as mobile as the Paleo-Indians, archaeological evidence indicates that early Archaic peoples continued to travel seasonally. Their group movements, however, were within well-defined territorial boundaries and the camp sites that have been recovered indicate that they were repeatedly occupied over time.

River valleys and around other sources of fresh water were locales that could support the game animals exploited by Archaic hunters. The tool kit of the Archaic Period was expanded to include the grooved axe, beveled edge, and narrow bladed projectile point. In addition, the mortar and pestle, grinders, and various implements used for fishing, are evidence of the Archaic peoples expanded diet (fishing and increased gathering).

An increase in the number and size of archaeological sites recovered from the Archaic period suggests that the human population had expanded and that Archaic peoples were becoming more settled and therefore having a greater impact on the landscape. A result of becoming more settled, and the establishment of specific territories, was the emergence of different cultural phases. A phase has been defined "as a recurring complex of distinctive archaeological traits" representing an individual cultural group (Ritchie 1965: xvi). The Lamoka, Vosburg, and Brewerton phases are among those identified in New York State by Ritchie (1980).

A number of small multi component sites have been recovered in coastal New York. Like the inland sites, they are usually located near fresh water ponds, tidal inlets, coves, and bays. These locales provided abundant resources including small game, fish, shellfish, and a large variety of plants and tuberous grasses. Sites discovered in coastal areas around New York City indicate that by the Late Archaic there was a distinct reliance upon shellfish, particularly oysters and clams. No large camp site or settlement has been found within the boundaries of the five boroughs and the few Archaic period artifacts encountered within the city are isolated finds.
Woodland Period (1,000 B.C. - c.1600 A.D.)

The Woodland period is characterized by the introduction of pottery and horticultural activity, as well as the establishment of clearly defined trade networks. During the Woodland Period primary habitation sites, or villages, had increased in size and were permanent (year-round) settlements. As in the Archaic Period these sites were located near a large fresh water source (e.g., pond, lake, tributary, or river). Secondary sites, where specific activities took place (e.g., shellfish gathering and/or processing, tool making), were usually situated near the location of the resource.

The first significant and identifiable use of pottery in New York State can be traced to the Early Woodland Period, around 1,000 B.C. By the Middle Woodland Period a wide variety of stamped, impressed and cord-decorated pottery types were developed. Smoking pipes, another Woodland innovation, reflected different cultural styles which archaeologists have been able to link to specific groups. The tool kit of the Woodland peoples expanded to include a larger variety of knives, drills, hammerstones, etc. Although some Archaic human burials have been recovered, those discovered dating from the Woodland Period suggest that more complex ceremonial burials commenced during the later period. Furthermore, this widespread mortuary ceremonialism (mound building) peaked during the beginning of the Middle Woodland and was essentially nonexistent by the close of the Period.

Although the use of cultigens was evident in many areas of North America during the Early Woodland, it was not until near the end of the Middle Woodland stage (c.800-1000 A.D.) that agriculture may have played a part in the economy of New York State culture groups. By the Late Woodland, cultigens had become an essential element in daily life. The introduction of agriculture brought about a major change in settlement patterns as larger villages, some fortified or palisaded, were established. One such site was noted by the early Dutch explorer Adriaen Block, who described seeing "large wigwams of the tribe on Castle Hill" in the Bronx (Skinner 1919: 76). With the creation of more permanent sites came the development of extensive trade networks for the exchange of goods between the coastal and inland areas.

Late Woodland Stage sites of the East River Tradition in Manhattan and other parts of southern New York have been noted on the "second rise of ground above high water level on tidal inlets," and situated on "tidal streams or coves" and "well-drained sites" (Ritchie 1980:269). Carlyle S. Smith, who studied and analyzed the distribution of prehistoric ceramics in coastal New York, stated that "village sites" are found on the margins of bays and tidal streams" (Smith 1950:130). Early twentieth century archaeologist Reginald P. Bolton writes that "the indispensable elements in the selection of native dwelling places," were an accessible spring, and shelter from prevailing winter winds, which on Manhattan Island was found on "the eastern side of hills, or a southern exposure" (Bolton 1922:46,62,64).
Contact Period (A.D. 1600-A.D. 1800)

Much of what is known about the Contact Period has been acquired from the documentary record. Using legal documents and early ethnohistoric accounts, archaeologists have been able to learn much about the Native groups that were present upon contact with Europeans. One example is the journal of Robert Juet who traveled with Henry Hudson on his 1609 voyage. Juet provided a description of the native population encountered and the exchange of "Indian Wheate" (maize) and tobacco for beads and knives (Van Zandt 1981: 10-11).

In *Native American Place Names in New York City* (1981), Robert Steven Grumet categorized data from historical documents and the work of previous scholars in an attempt to synthesize and verify known information on Native American sites, pathways and culture groups. Grumet notes that the 1610 Velasco map used the name *Manahata* as the designation for the native inhabitants of both banks of the lower Hudson River (1981: 24). The Manhattan Indians were identified on Dutch seventeenth-century maps but not on many other documents. In addition, no individual Manhattan Indian was referred to by name in the documentary record.

Isaak de Rasieres reported c.1628, that the island was "inhabited by the old Manhatesen; they are about 200 to 300 strong, women and men, under different chiefs." The Wiechquaesgeck have been identified as the denizens of northern Manhattan, as well as parts of the Bronx and Westchester County. However, there is little data available to identify the "Manhatesen" who dwelt to the south, in lower Manhattan. Tradition, rather than firm evidence, has identified them as Canarsee Indians, while another, also discredited line of reasoning, suggested that they were Rechgawawancks. However, there is no seventeenth century documentary evidence to support this, nor even the idea that Manhattan was divided north/south between different maximal groups. It is likely that the Manhattan Indians were a sub-group of the Wiechquaesgeck, with whom they eventually combined (Grumet 1981:24-26; Bolton 1972:127).

The Manhattan and their Wiechquaesgeck relatives had few furs to trade with the Dutch. As a result, there was little motivation on either side for good relations, and New Amsterdammers probably considered the local Indians an annoyance. In addition, the sometimes cruel and often dishonest practices of European traders led to Wiechquaesgeck retaliation, which took the form of several murders between 1640 and 1642, leading to various raids and counter raids between Dutch and Indians (Grumet 1981:60-61; Kammen 1975:45-46).

The Dutch practice of trading firearms to the upriver Mahican and Mohawk, while denying guns to the Indians of the lower Hudson, left them vulnerable to attack. When a
IV. PREVIOUSLY IDENTIFIED NATIVE AMERICAN SITES IN THE PROJECT AREA

A Native American feature reported by Grumet in this area is the Wickquasgeck Road - a Native trail which ran from the southern tip of Manhattan to the northern tip of Manhattan (Figure 5). The road ran west of the project site through the Upper East Side and then turned into Central Park to head northeast. The road was well traveled, and connected settlements at the southern part of the island with those on the north.

East Harlem

This area is near former flatlands called Muscoota by Native Americans, which lies between the Harlem River and Morningside Heights northwest of what was once Harlem Creek and its surrounding swampy area (Rubinson 1989:3). Rechgawanes is reported by Grumet as a point of land along the western shore of the confluence of the East and Harlem Rivers, and a long obliterated stream that ran along the route of East 125th Street (1981:46).

In this section of the project study area, the Wickquasgeck trail ran to the west through what is now Central Park. An Indian Path veered off this trail at East 110th Street near Fifth Avenue, and headed northeast towards a habitation site on the Harlem River near East 124th Street. This Amerindian Trail was incorporated into the first road system of the village of Harlem. Passing through the meadows of Muscoota to the area called Conykeekst, it crossed First Avenue at 124th Street and Second Avenue at 121st Street (Bolton 1922:72,74-76). See Figures 3 and 5.

Planting areas and old fields are shown along much of this area, especially in the vicinity of First and Second Avenues. In addition, in the vicinity of East 97th to East 101st Streets was “Konaande Kongh,” defined by Grumet as a major Indian settlement. (1981:20). Bolton reported that this was a village located approximately between Lexington Avenue and Madison Avenue and East 98th to East 100th Streets, west of Second Avenue (Ibid.).

Writing in 1881, James Riker reported that “A deposit of Indian arrow-heads was found at Harlem in 1855, in excavating for a cellar on Avenue A, between 120th and 121st streets [one block north of the project block 1815], a spot nearly central of the old Bogent or Morris Randell farm, and on the ancient Otter-spoor. Being in considerable number, of various sizes, and in all stages of manufacture, it shows that here had been the man’s workshop, where with wondrous patience and skill he chipped out those little implements of equal use to him in peace and war. They were made of a buff-colored flint, resembling the yellow semi-opal of India, but, what is remarkable, unlike any stone to be met with on or about Manhattan Island. Some of these arrow-heads, obtained by him [?] at the time, are in the author’s cabinet” (Riker 1881:137).
Reginald Bolton, noted Native American scholar, discussed the subject. "Riker records the discovery... of numerous shells, flakes, rejects, and weapons, demonstrating native occupancy. This occupied place was doubtless a native site of some importance, since it was the nearest point of access by canoe to the wide territory of Ranachqua, or Morrisania, which could be reached on foot only by a long tramp via Kingsbridge. That territory was also a part of the Reckgawawanc possessions, affording extensive hunting, fishing, and oysterling facilities for the chieftaincy. But the situation of this station lacked the necessary shelter required for winter occupancy, and it was more likely a place of landing and trade, or perhaps a fishing place."

"The broad tract of land on which this station was situated, extending north of the waters of Rechewanis and lying east of the Indian trail, between 108th street and 123rd street was known to the natives as 'Conykeest.' The queer name may have been more correctly Quinnikeek. As in other situations, the name was probably applied equally to the local settlement and to its vicinity. The tract was waterless, save for one small brook which flowed diagonally northeastward from a source at 114th street near Second avenue, and reached the Harlem River at 123rd street near Avenue A, or Pleasant avenue, passing within about three hundred feet of the place at which the native objects were found, as above described."

"The situation of Conykeekst, if such was the station's name, was without shelter on the west, except for the forest growth, and it may have been unoccupied in the winter season, and during the rest of the year to have been an oysterling and fishing camp" (Bolton 1922: 72-74, pl.IV).
V. HISTORICAL ERA BACKGROUND

The Harlem Area

New Amsterdam had been settled for 13 years before the first attempt was made to settle at Harlem. Early attempts by families in 1637 were not successful because of lack of manpower, poor health, political conflict and Indian attacks. By 1658 a village was developed in New Harlem, laid out by an order for the Director-General and Council of New Netherland. The village had house lots and garden lots with related farming land. This tract is now commonly known as Spanish Harlem (Rubinson 1989:10).

Isaac De Forest was the first documented owner of what became the village of Harlem. In 16305 he was granted about 100 acres in a narrow strip from the Harlem Creek to the Harlem River. This tract went to William Beeckman and then Claesen Swits. Swits farm was destroyed in an Indian attack (Rubinson 1989:11). Swit's abandoned land became the first documented settlement of the village of New Harlem which extended from approximately 118th to 125th Streets, from Third Avenue east to the Harlem River. Much of the area south of Harlem Village was part of the common land used by area residents as pasture land (Kearns and Kirkorian 1986: Neighborhood 2).

After New Harlem was established, Danes, Swedes, Hollanders, French Huguenots, and Germans developed rich farms there. It was originally connected with the little town of New Amsterdam by the widening of the previously-discussed Indian trail "by the Dutch West India Company's negroes" (WPA 1939:254). Interestingly, the British permitted it to retain the name of New Harlem after their capture of the city in 1664 (Ibid.:256).

It wasn't until the early nineteenth century that this area truly began to grow. East of Fifth Avenue, between East 110th and East 125th Streets, a tract was purchased by James Roosevelt, great-grandfather of Franklin Delano Roosevelt. He cultivated this land and eventually sold the property in the 1820s. The 1832 construction of the Railroad to Harlem from the southern tip of Manhattan forged the way for this region to change from a charming rural area to a "suburb" of the growing city.

Because of the growth and overcrowding in lower Manhattan, there was an increased need for low-cost housing as wage-earners required their own place of residence apart from the place of production and commercial activities. The city had changed again, internally, and organizationally. At its edges were still factories and shipyards, while other sections had small shops, factories, and residences. Residential patterns changed, and residential streets of varying wealth and character were both clustered and scattered throughout the city proper (NYCLPC 1983:25). Factories and warehouses often moved to more remote areas. When the railroad was built from Chambers Street to Harlem in the 1830s, it enabled large numbers of people to move to the northern part of the island, and Harlem's population grew.
The nineteenth century also marked the introduction of the elevated railroad up Second and Third Avenues in the 1870s. The flatlands of the upper 90s served the transportation industry with the Manhattan Railway Company's yard at East 99th Street, and a trolley barn at East 100th Street and Lexington Avenue. In the early nineteenth century, the majority of Manhattan north of 125th Street was listed as a mix of residential, agricultural, and industrial use, while in the late 19th century it was shown as residential, commercial, and unimproved land. Presumably agriculture had largely been abandoned in this area by that time (NYCLPC Neighborhood Maps 1815-1829, 1855-1879). After 125th Street was opened and regulated, it became an important cross-island thoroughfare.

The elevated trains, or els as they were commonly called, were opened in the 1870s up Second and Third Avenues. While real estate directly along their smoke-filled and noisy routes was typically reserved for the poor, surrounding neighborhoods became more fashionable (WPA 1939:256). The Polo-Grounds near Lenox and 8th Avenue were visited by New York's society during the 1880s, and the acclaimed Harlem Opera House was opened on West 125th Street in 1889. Following this period an influx of immigrants, largely Jews and Italians, changed the community character again. By the early twentieth century, African Americans, Puerto Ricans, and other Latin-American groups moved to the area. Subsequently, housing developments which once were stretched along the Lower East Side, took hold in this section of the city. Harlem has a wealth of cultural resources chronicling the communities' various transformations.

The Project Site

Regarding the project site specifically, as noted above, the village of Harlem was founded in 1658. However, as shown on the Commissioner's Plan of 1807 (Figure 2), the project blocks were south and east of the village settlement. A country road passed through the southwest corner of Block 1715, outside the project parcel, and two small structures stood across 116th Street, south of the project block.

By 1851 (Fig. 6), there were a few structures depicted on the project blocks, and several more were visible in 1867 (Fig. 7). Avenue A was renamed Pleasant Avenue in 1879. From 1870 (Fig. 8) on, mixed residential, commercial, and industrial development continued apace and by the advent of the 20th century the blocks represented typical urbanization. The original shoreline had been extended somewhat with piers and, presumably, some landfill. However, the construction in the 1940s of the FDR Drive which forms the eastern boundary of the project site, was inboard of these extensions and effectively removed them from consideration for this study.
"Review of the 1896 map indicated that the facility [covering the project parcel] was owned and operated by R.H. Woolf & Co. .which utilized the site for manufacturing wire, paint and bicycles. Review of the 1911 through 1951 maps indicated that the facility during this time was owned and operated by the Washburn Wire Company. Based on map notations the wire manufacturing process consisted of drawing wire design specifications, laboratory testing, wire dipping (e.g., acid bath etching) and wire annealing (e.g. harden metal by heating and cooling). The wire was conveyed from building to building across bridges that span East 117th and East 118 Streets. The final product was conveyed across a bridge which spans the FDR to a pier located along the west bank of the Harlem River" (Roux Associates, Inc. 1996: 7).
VI. CONSTRUCTION HISTORY AND DISTURBANCE RECORD

A series of historic maps and land-use atlases were compared in order to compile the following construction history and disturbance record. The maps are for the years 1811, 1851, 1867, 1870, 1885, 1893, 1896, 1911, 1916, 1925, 1934, 1939, 1951, 1976, 1986, 1996, and 1997. The maps that are clear enough for reproduction are included in this report. Street numbers, which are most clearly seen on the 1951 atlas (Figure 15), are used whenever possible to identify the parcel being discussed.

Dates for the availability of municipal utilities were provided by the New York City Environmental Protection Agency.

**Block 1715 between East 116th Street and East 117th Street**

Construction episodes probably impacting every square foot of the block within the project bounds are readily apparent as one studies the series of historic maps as discussed below. This subsurface impact argues against the potential for significant prehistoric resources since it would have severely affected the integrity, if not the very existence, of these usually shallow deposits.

In regard to possible backyard shaft features, utilities became available for this block in 1887. Therefore, 1887 is used as a cut-off time after which it can be assumed that new construction would have been hooked into the municipal utilities.

Along 116th Street there were all commercial buildings prior to 1887 except for #503 which was a home site. However, the building shown in 1885 (Fig. 9) at #503 was replaced before 1893 and the new structure presumably tapped into utilities then available.

Along 117th Street there were four homelots with backyards shown prior to 1887 that were not replaced before utilities were available. They were at #518, #542, #544, and #546. However, by 1911, the #518 lot had been added to three other lots and covered by a 6-story building with a basement. The #542, #544, and #546 houses were replaced by a 1-story building by 1934, which was itself replaced by a large 5-story building - part of the Washburn Wire complex - by 1951. See Photo 2.

A wooden “bathhouse” existed at the eastern end of 116th Street during part of the late 19th century (Fig. 9), but any remains were destroyed by the construction of the FDR in the 1940s and the massive Washburn Wire buildings. The same fate was met by a stone works, a paint works, a pier, and a needle factory - all of which occupied various lots at the eastern end of the block at various times between c.1870 and 1896.
Therefore, the potential for recovering significant, intact archaeological resources within the project bounds on Block 1715 is quite low because of documented subsurface disturbance accompanying construction and demolition episodes.
**Block 1716** between East 117th Street and East 118th Street

Similar to Block 1715, construction episodes probably impacting every square foot of the block within the project area are readily apparent as one studies the series of historic maps as discussed below. This subsurface impact argues against the potential for significant prehistoric resources since it would have severely affected the integrity, if not the very existence, of these usually shallow deposits.

In 1811 and in 1851 no buildings were shown on the maps within the project bounds on the block.

A number of dwellings with backyards were erected on the south side of Block 1716 (East 117th Street) within the project parcel before 1887 and remained in place until at least 1893 after the date (1887) that brought utility availability. They were at #515, #517, #519, #521, #531 and #535 East 117th Street. But by 1951, #515, #517, #519, and #521 were replaced by 6 story dwellings (with basements) that covered most of the lots. This second-generation building at #515-#517 was razed sometime before 1976, and the second-generation building at #519-#521 had been demolished by 1986.

Also on the south side of Block 1716, #531 and #535 were combined into one parcel between c. 1893 and 1911, and the original buildings replaced by a series of small attached structures associated with a "coal pocket" or "coal yard" in the rear of the lot that, with some changes in configuration, is shown on atlases through 1951. The coal yard may have been part of the Washburn Wire complex. Sometime after 1951, the coal yard with its buildings were demolished and replaced by 1-story structures. The "steel girder" building now covering this area is shown on Photos 4, 5, and 6.

The situation on the north side of Block 1716 (East 118th Street) is different because utilities were not installed until at least 1934. By 1870 dwellings existed at #506 and #512 and "manufactures" at #514 and #516. There is no evidence of any other homesites on the north side of Block 1716 through time.

Number #506 was still labeled a "Dwelling" on the 1911 and 1916 atlases, but in 1925 and 1934, #506 and the adjoining lot at #508 were covered by 3-story garage buildings that still exist (Photo 9). There is a high probability that the foundations of the 3-story building would have severely impacted any shaft features associated with the original dwelling.

By 1893, the rear half of the #512 lot was occupied by a 2-story "manufactory" with a 1-story addition. The manufactory had a basement as shown on the 1911 atlas and the configuration remained the same through 1916. By 1925, the dwelling had been demolished although the 2-story rear building remained. In 1939 and 1951 the parcel was empty and labeled "Wire Store Yard," but in 1976 there was no notation. In 1986 and
1997 the parcel is marked as being used for parking.

The manufactory originally at #514 was demolished before 1925 and became part of the parcel discussed above.

The small manufactory shown until 1893 at #516 was destroyed by a 6-story building with basement by 1911.

Therefore, there is minimal probability of finding shaft features associated with these buildings on Block 1716 given the disturbance caused by the various construction episodes.

Like Block 1715, before being subsumed into the Washburn Wire Company, the eastern end of Block 1716 hosted various commercial enterprises such as a Morocco Leather Factory (shown in 1870) and the Wolff & Co. Wire manufacturers (shown in 1885). But by 1893 the presence of the Washburn Wire complex had obliterated them (Photos 6, 7, and 8).

Therefore, the potential for recovering significant, intact archaeological resources on Block 1716 is quite low because of documented subsurface disturbance accompanying construction and demolition episodes.
**Block 1815** between East 118th Street and East 119th Street

Dwellings existed as early as 1851 on this block and utilities were not available until 1934 or 1937 according to information furnished by the New York City Department of Environmental Protection. However, only two of the homes depicted between 1851 and 1870 are within the project bounds. These are 2-story dwellings at #527 and #529 East 118th Street that appear to have been unchanged until at least 1951. Between 1951 and 1976 the dwellings were demolished and the two lots have remained empty since that time (Photo 11). There is strong potential for the recovery of intact shaft features possibly in use for many years from this area.

By 1885, three other dwellings (4- and 5-story with basements) with backyard areas were shown at #531, #533, and #535 East 118th Street. These backyard areas remained open until sometime between 1951 and 1976 when Washburn Wire erected another building for its complex. It is officially designated a 1-story building, but the foundations are very substantial and would surely have destroyed any shaft features below them.

On East 119th Street there were seven brick 3-story (with basements) dwellings with backyards occupying #528 - #540 by 1885. They replaced an earlier lumber yard depicted on the 1870 atlas. By 1916, #528, #530, #532, and #534 had been replaced by the 2-story Herbst Baking Co. building that covered the entire lot. The backyards of #536 and #538 were covered by a 1-story building by 1934. Also by 1934 #540 became part of one of the huge Washburn Wire buildings (see Photo 10). That configuration has remained in place and it is highly probable that shaft features have been destroyed by the second generation of structures.

The easternmost portion of Block 1815 was occupied by the Johnson Foundry & Machine Co. Iron Works from c. 1870 through c. 1896. However, by 1911 the configuration was changed: some buildings had been removed, some were vacant, and four tanks of concrete construction and an elevator shaft housing adjacent to them had been built. It is unclear if these tanks were associated with the Washburn Wire Company which by that time occupied the eastern ends of Blocks 1716 and 1715, but by 1934 the entire area was part of the Washburn Wire complex. Various buildings came and went, but one portion of the area along 119th Street at #546 and adjacent to the FDR appears to have remained vacant (see Figure 16). By 1986 a 1-story “Butler” type building had been built covering all but a small portion of the lot fronting on the FDR (Photo 12). The same configuration exists today. A Butler building is a type of 20th century pre-engineered utilitarian construction that rests on a simple slab foundation. Therefore, it is possible that there would not have been deep impacts from slab foundation construction on shallowly buried prehistoric archaeological deposits. This area is considered sensitive for Native American resources.
On Block 1815 there are two areas that are considered sensitive for archaeological resources as shown on Figure 18:

1) #527 and #529 East 118th Street. This parcel may contain shaft features associated with dwellings that occupied the two lots between c.1867 and c.1951.

2) #546 East 119th Street. This parcel may contain Native American remains.
VII. CONCLUSIONS AND RECOMMENDATIONS

The resource categories of potential archaeological remains on the East River Plaza site have been determined by assessing information about the former land usage on the site and the known subsurface disturbance record. As discussed in the preceding sections of the report, the categories appear to be limited to the possible survival of Native American remains and homelot backyard features on two portions of Block 1815 (Figure 18).

Pre-historic Archaeological Potential

There is overwhelming evidence that Native Americans exploited the natural resources of coastal New York for thousands of years before Europeans arrived. Specifically, there is strong evidence that portions of northern Manhattan - the vicinity of the subject parcel - were utilized by Native Americans before European colonization. Their paths and place names survived in the project area to be recorded and used by early European visitors.

Settlement pattern data of the prehistoric culture periods indicate a strong association between habitation and processing sites and: (1) the confluence of two watercourses; (2) the proximity to a major watercourse; (3) the proximity to a marsh resource; and/or (4) well-drained, elevated land. A review of the attached maps shows the project site with access to a major salt marsh biome, and within immediate proximity to two major watercourses - Harlem Creek and the East River. Some of the maps (1807) also indicate a small unnamed creek running through the project blocks.

The documented and inventoried archaeological sites (habitation and processing) in coastal New York occur most often on raised, well-drained land. According to the Viele map of 1874 (Fig.4), a small ridge traversed the site running north-south bordering the marsh-land to the east. However, this gentle slope probably would not have provided enough shelter for a habitation site, and, as Bolton pointed out, would more likely serve as a landing, trading, or fishing station.

As discussed above, a site was discovered quite near the East River Plaza project parcel in 1855 (Page 10) and the whole area has been identified as extremely sensitive by the New York City Landmarks Preservation Commission and the New York State Office of Recreation and Historic Preservation. The 1855 site was not formally excavated so the possibility of finding intact Native American deposits affords a rare opportunity to make a scientifically documented contribution to the archaeological record.

Prehistoric resources, when found in upper Manhattan, are typically in shallow deposits; that is, they are not deeply buried below the original surface largely because of the lack of soil build-up. Unless covered with introduced landfill, buried prehistoric
archaeological remains are normally found within 3 to 4 feet of the pre-development land surface, and as a result, are extremely susceptible to destruction from subsequent grading and construction. Therefore, disturbance to the prehistoric topography generally constitutes disturbance to the prehistoric resources.

In order for a potentially prehistorically sensitive area to retain that evaluation, it must be demonstrated that the original prehistoric - and pre-colonial - land surface has somehow been protected from historical manipulation. To address potential site integrity, or lack thereof, research must be aimed at demonstrating either that pristine soils have been protected beneath fill prior to modern development, or that these soils have not been protected and were disturbed by historical processes (e.g. the regulating of streets and installation of utilities).

**Historical Archaeological Potential**

In order to determine the potential for extant archaeological resources of the historical period, a compilation of horizontal and vertical disturbance through time has been made. A series of maps was studied in order to ascertain if any homelot backyard areas that would have hosted shaft features prior to utility placement have remained undisturbed by basements and/or construction episodes.

Historical archaeology of homelots is often undertaken in urban settings. The water and sewer facilities available up through the 19th century, namely wells, cisterns and privies, have become valuable time capsules of stratified deposits for the archaeologist, for once they outlived their utility to the household, and even before this, they were inevitably used as convenient depositories for household refuse, ranging from broken tools, ceramics and glass, to animal bones. When such an archaeological resource is uncovered, its analysis can provide insights into the everyday life of the past, particularly when used in conjunction with documentary evidence of the household's owners and inhabitants. Truncated portions of these shaft features are often encountered on homelots because their deeper (to approximately 8 feet below grade) and therefore earlier layers remain undisturbed by subsequent construction. In fact, construction often preserves the lower sections of the features by sealing them beneath structures, pavement and fill layers.

In order to conclude whether the hypothesized use of privies, wells or cisterns is plausible in a given context, it must first be determined whether municipal sewer and water lines were present. The presence of such utilities would eliminate the necessity for exploratory field testing for these shaft features. As reported by the NYCDEP, sewers were available on East 116th and 117th Streets in 1887, but not until 1934 or 1937 on East 118th and 119th Streets.
By 1870, 2-story brick dwellings existed at #527 and #529 East 118th Street. They remained in place until sometime between 1951 and 1976. There is no record of any structures in the two backyard areas. Therefore, shaft features associated with the period from c. 1870 to c.1935 may be extant.

Recommendations

Block 1815 - #546 East 119th Street

The northeast corner of Block 1815 is slightly inland of the original East River shoreline. A portion of the corner parcel apparently remained undeveloped until sometime between 1976 and 1986 (compare Figs. 16 and 17) when a "Butler" type building with a slab foundation, probably less than a foot in thickness, was placed on the corner lot. A small area outside the "Butler" building and fronting on the FDR Drive may still be undisturbed, although it was inaccessible during the site inspection. Because the known subsurface disturbance may be relatively shallow, this parcel is quite sensitive for Native American deposits.

The results of two soil borings taken in this vicinity in 1996 (Appendix B) did not reveal the survival of pristine subsurface strata. No shell was noted, only a small amount of silt was recorded, and no peat (often an indicator of a resource-rich environment) was present. Nevertheless, the parcel, shown on Figure 18, should be tested in order to ascertain the presence or absence of Native American resources. It is recommended that Stage 1 testing of the small open area fronting on the FDR Drive take place prior to construction activity. Then, after the "Butler" building is demolished with care taken to create as little additional subsurface disturbance as possible, that area should be tested.

Block 1815 - #527 and #529 East 118th Street

It is recommended that the backyard areas of #527 and #529 East 118th Street be tested to ascertain the presence or absence of shaft features associated with the inhabitants of the dwellings before the East River Plaza project construction begins. The clearance of extraneous overburden could be accomplished by machinery such as a Bobcat. That procedure would be monitored by archaeologists, and hand excavation would follow if features are revealed.

Another component of this Stage 1 research design would be a topic-intensive analysis concerning the occupation of the project site homelots, from c1870 to the advent of water and sewer service in c.1935. The study of city directories, census records, real estate records, tax assessments and other documents, could provide important data for the interpretation and understanding of these lots, and also enable archaeologists to formulate questions associated with work- and life-ways, diet and consumer behavior.
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1918  

1922  

1926  

1928  

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1874  

White, Norval and Elliot Willensky
1978  

ERP
THE COMMISSIONERS MAP OF 1807

Figure 2

The project parcel occupies parts of the blocks between 116th and 119th Streets and Pleasant Avenue.
Figure 3

From BOLTON, 1922

YORKVILLE AND EAST HARLEM IN ABORIGINAL TIMES.
LEGEND FOR FIVE BOROUGH MAPS

- Trail (after Bolton 1922)
- Planting Areas and Old Fields
- Indian Names of Local Origin
- "Akin" Names Not of Local Origin
- Habitation Site
- Present-Day City Parks
- Modern Shoreline
- Cemetery

from GRUMET, 1981
Figure II

1911 Bromley ATLAS OF NEW YORK

Project Site

Scale of Feet
Figure 18

Areas of archeological sensitivity

Project Site

1986 Sanborn ATLAS OF NEW YORK
Photo 1: From East 116th St.
Looking northeast at #549

Photo 2: Interior of
#546 East 117th St.
Photo 3: Interior of building complex between East 117th Street, East 118th Street and the FDR Drive
Photo 4: Looking northeast at “Steel Girder” building #517-#537 East 117th Street

Photo 5: Flooded basement area beneath “Steel Girder” building
Photo 6: Looking east at “Steel Girder” building #517-#537 East 117th Street

Photo 7: Close-up of bridge and building at #541-549 East 117th Street seen in the background of Photo 6
Photo 8: Looking east along East 118th Street
Photo 9: Looking south at
#506-508 East
118th Street

Photo 10: Interior of
540-542 East
119th Street
Photo 11: Looking north at
#527-529 East
118th Street

Photo 12: Looking south
at #546 East
119th Street
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- Camp on front map. Same as... near to Tiger. Camp of fishing place... at the rear of the water. ACP Point 2. Listed on water's edge. 1923. ACP Point 2. Piles 20. Repercussion. George Falls. and.
- Prehistoric Village. Exec. Order 11593 (NED c12) 79.
9. HISTORICAL DOCUMENTATION OF SITE:
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   Finch 1909: 65

10. POSSIBILITY OF SITE DESTRUCTION OR DISTURBANCE:

11. REMARKS:

12. MAP LOCATION
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   15 MINUTE SERIES QUAD. NAME: Salem (SW/4)
   U.S.G.S. COORDINATES: 1ST E9050 N16750
   D.O.T. COORDINATES: (if known)

   ATTACH SKETCH, TRACING OR COPY OF MAP

13. PHOTOGRAPHS (optional)

   (ATTACH)
INSTRUCTIONS: Write on hard surface with 2H Pencil. Fill in or circle where appropriate. Keep top two copies (white and yellow) and send third copy (pink) to the NYAC Central Office. Coding space is provided on the right margin. Take pad apart at top first.

NEW YORK ARCHAEOLOGICAL COUNCIL

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SITE TYPE:
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- Pictograph: [ ]
- Kill Site: [ ]
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- Ossuary: [ ]
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- Workshop: [ ]
- Family Plot: [ ]
- Village: [ ]
- Military: [ ]

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- County: NEW YORK COUNTY
- Township: [ ]
- Lot: [ ]
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- Phone: [ ]
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- Testing: [ ]
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SITE INVESTIGATION:
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- Project: CELLAR EXCAVATION
- Dates: 1855

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- Cat. Nos: UNKNOWN

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Project: WASHBURN
HARLEM, NY (117th ST EXIT)

Log of Soil Boring No. SB-2

Geographic Area: HARLEM, NY

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Date Completed: 2/26/96

Logged By: K BARTLETT
Checked By: J SCHIAEFER

Drilling Co: ROUX ASSOCIATES, INC.

Land Surface Elev: ft

Total Depth: 7.6 ft

Drilling Method: 2-INCH DRIVE SAMPLER

Borehole Diameter: 2.00 in

Drilling Equipment: GEOPROBE MODEL 5400

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