ARCHAEOLOGICAL MONITORING AT THE OLD WEST FARMS
SOLDIER CEMETERY, THE BRONX, NEW YORK

Prepared For

Volmar Construction Inc,
4400 Second Avenue, Brooklyn, NY 11234

and

New York City Department of Design and Construction
Historic Preservation Office, Structures Division
30-30 Thomson Avenue – 5th Floor
Long Island City, NY 11101

January 2000

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EXECUTIVE SUMMARY

In September of 1999, Parsons Engineering Science (Parsons) was retained by the Volmar Construction Inc. (Volmar), a contractor working for the NYC Department of Design and Construction (DDC), to provide two archaeologists to monitor the manual excavation by construction workers of foundation trenches for the installation of new fencing along two sides of the Old West Farms Soldier Cemetery, located in the Bronx, New York. The archaeologists were to monitor the excavation activities in the event that human remains should be encountered. A protocol was established between Parsons, Volmar and DDC whereby, if any partial or complete human remains were found during the monitoring, that they would be sent for identification by a bioarchaeologist at the Smithsonian Institution in Washington, D.C.

A preliminary walkover reconnaissance of the project area was conducted by archaeologists on October 4, 1999. Archaeological monitoring by archaeologists from Parsons of the manual excavation by construction workers of the fence foundation trenches was conducted over a three-day period, October 14-15 and October 21, 1999. During archaeological monitoring, no intact or significant archaeological deposits were encountered. A single bone, found in the tunnel of a burrowing animal, was examined by a bio-archaeologist and determined not to be human.

On November 8, the Parsons team was called back to the project area by Volmar and DDC. A heavy rainstorm had washed dirt into an excavated pit. In the course of digging out the trench, workers dug deeper than intended and had dislodged human remains. The Parsons team collected the human remains found by the construction workers, sifted all the excavated soils through a screen in order to collect artifacts and human remains still remaining within the excavated soil, and drew soil profiles of the portion of the trench containing the human remains.

Fragments of coffin furniture recovered from the excavated soil were examined in the Parsons Archaeological Laboratory, located in Fairfax, Virginia. Although fragmentary, the artifacts appear to date to the turn-of-the-century. The human remains were examined and identified by Marilyn London, a bio-archaeologist at the Smithsonian Institution. She concluded that the remains represent at least two individuals, of which one was an adult, African-American female. Based on the results of the identification of the human remains and the few fragmentary remains of coffin furniture, it would appear that the human remains in question result from a cemetery relocation that took place during, or shortly after, the last quarter of the 19th century.

After identification, the human remains were returned to Mr. Thomas Agnew at DDC and have since been reinterred in their original location at the Old West Farms Soldier Cemetery.
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1.0 INTRODUCTION

In September of 1999, Parsons Engineering Science (Parsons) was retained by Volmar Construction Inc., a contractor working for the NYC Department of Design and Construction (DDC), to provide two archaeologists to monitor the manual excavation by construction workers of foundation trenches for the installation of new fencing along two sides of the Old West Farms Soldier Cemetery, located in the Bronx, New York (Figures 1.1, 1.2 and 1.3). The archaeologists were to monitor the excavation activities in the event that human remains were encountered. A protocol was established between Parsons, Volmar and DDC whereby, if any partial or complete human remains were found during the monitoring, that they would be sent for identification by a bioarchaeologist at the Smithsonian Institution in Washington, D.C.

The archaeological monitoring for the proposed new decorative fence at the Old West Farms Soldier Cemetery consisted of two phases of fieldwork during October 1999 and one additional day of fieldwork in November. The first phase, a site reconnaissance visit on October 4th, entailed a perimeter walkover (where access permitted) and a visual inspection of the terrain, vegetation, and general conditions within the cemetery. The second phase, the archaeological monitoring of the below grade excavations for the new fence line was conducted over a three day period: October 14th, 15th and 21st, 1999. Parsons' archaeologists were asked by DDC to return to the project area on November 8th to inspect and document the location from which construction workers dislodged human remains and to sift the excavated soil for any additional human remains that it may contain. The results of the archaeological monitoring are reported in Chapter 2 while the results of the examination and identification by Marilyn London of the human remains dislodged by the construction workers is presented in Chapter 3. A summary of the project is presented in Chapter 4.

1.1 PROJECT LOCATION

The Old West Farms Soldier Cemetery is located in the central portion of the Borough of the Bronx, City of New York, referred to as Tax Map Block 3133, Lot 25. The address of the property is 2103 Bryant Avenue. The cemetery property is bounded to the east by Bryant Avenue (now de-mapped, but remains a pedestrian thoroughfare and utility easement), to the south by East 180th Street, to the west by the adjacent property line of the Aquinas Housing Corporation Senior Citizen Apartment Housing Project (under construction at the time of this writing), and to the north by the rear lot lines of several
properties which front onto East 181st Street. The actual footage of the project area is as follows:

190.87 feet along Bryant Avenue;
155.56 feet along East 180th Street;
188.07 feet along the western boundary; and,
156.97 feet along the northern boundary.

The cemetery property lies on a hill that slopes up primarily to the West, and slightly to the South. The site field survey, conducted for the NYC Department of Design and Construction (DDC), was completed on January 15, 1999, by the NYC Bureau Of Site Engineering Topographical Section, and is depicted on a map dated March 3, 1999. Elevation above the Bronx Highway Datum (2.608 feet above MSL at Sandy Hook, New Jersey) is nearly 60 feet at the southwest corner of the cemetery, 47 feet at the southeast corner, and 42.5 feet at the northeast corner. The northwest corner of the cemetery property was not included in the 1999 topographic survey. The elevation of the granite curbing along East 180th Street, however, is 54.6 feet at the southwest corner of the cemetery property and 47.4 feet at the southeast corner, which suggests that historic grading activities such as cut and fill episodes took place along East 180th Street. The cemetery topographic profile is at a higher elevation than the bluestone sidewalk and granite curbing along East 180th Street, particularly at the southwest corner of the cemetery, where a 6-foot differential is noted. The hill continues to rise to the West towards Vyse Avenue, however, grading activities related to the ongoing construction of the Aquinas Housing Corporation property adjacent on the western boundary of the cemetery have obliterated the historic grade.

1.2 PROJECT AREA HISTORICAL BACKGROUND

At the time of contact with Europeans, the Wickequesquek and the Siwanoy were the two major Native American groups inhabiting the Bronx. The Bronx River, called “Aquehung” by indigenous Native Americans, generally demarcated the territories of the two groups, with the Wickequesquek occupying areas west of the Bronx River and the Siwanoy to the east. Representatives of both tribes were involved in the sale of West Farms in 1663. The last Native American village in the Bronx, located northeast of the project area, was active up until around 1789.

Edward Jessup and John Richardson acquired the land that was to become West Farms from Native Americans in 1663. In April of 1666 they received a Patent for the West Farms from Governor Richard Nicolls. In January of 1686 Governor Thomas Dongen reissued the patent to the West Farms to Thomas Hunt, Sr., who divided the property into twelve lots. A second division of the lots was made in 1711.
The west Bronx was home to a relatively large population of slaves, all of whom appear to have been freed prior to 1820. By the mid-nineteenth century West Farms was home to one of the largest and wealthiest groups of African Americans in the Bronx.

In 1814 the heirs of Thomas Lawrence sold property to the trustees of the First Presbyterian Church in the Village of West Farms. The church, surrounded by a graveyard, was built in 1815 on the top of a hill just west of the project area. John Butler purchased the east slope of the hill, just below the church. Butler hired Alfred Pettit to parcel out the lot into private plots for a cemetery. It served as a private burial ground for wealthier families until 1954 when the City assumed possession on a “Quit Claim” deed (Landmarks Preservation Commission 1967).

During the widening of 180th Street, circa 1909, many graves associated with the West Farms Presbyterian Church were disturbed. After a loud civic outcry, eleven remains were removed and reinterred in the Butler cemetery. In 1910 the Butler cemetery was renamed the Old West Farms Soldiers Cemetery. At the time of dedication a statue of a Union soldier and three nineteenth century field artillery pieces were placed in the cemetery (McNamara 1989).

The Old West Farms Soldiers Cemetery contains the remains of two veterans of the War of 1812 and thirty-five from the Civil War. The Sixth New York Heavy Artillery and the New York Duryea’s Zouaves recruited several companies of soldiers from West Farms and they are represented at the cemetery. Two veterans of the Spanish-American War and two veterans of the First World War are also buried in Old West Farms Soldier Cemetery.

1.3 SITE RESTORATION PLAN

The restoration plan for the Old West Farms Soldier Cemetery involves the construction of an eight foot high decorative steel fence along the southern, or East 180th Street, and eastern, or Bryant Avenue property lines. The new fence along East 180th Street will be located approximately five feet south of the present chain link fence which is embedded into the one foot wide stone and concrete retaining wall which marks the southern cemetery boundary.

The new fence will be adjacent to the extant bluestone sidewalk and the area between the old fence line/retaining wall and the new fence and gates will be planted with sheep laurel bushes and English ivy. Additional restoration work will include the reconstruction of the main gate entranceway and steps on East 180th Street, reconstruction of service gates near the northeast corner of the property on Bryant Avenue, removal of the extant six foot high chain link fence atop the one foot wide stone and concrete retaining wall along East 180th Street, painting of the retaining wall, and decorative plantings along the new southern and eastern fence lines.
The fence construction will first require the excavation of a trench approximately one foot wide and 18 inches deep along both the 155.56-foot length of the southern property line and the 190.87-foot length of the eastern property line. In addition, the excavation for the new fence anchor post footings will require 2.5 foot square holes to be dug to a depth of approximately 4 feet below grade every 20 feet along the southern and eastern property lines. Reconstruction of both the main gates along East 180th Street and the service road gates near the northeast corner of the property on Bryant Avenue will require excavation of 2.5 ft. by 5 ft. holes approximately 4 feet deep to anchor the foundations for the new gate posts. Along the eastern boundary, or Bryant Avenue, the removal of the chain link fence also requires the removal of the concrete anchors that were placed approximately every 10 feet.
Figure 1.2
Map of Project Location
Figure 1.3
Map of Project Area

Source: Bromley's Atlas Map (1967 update)
2.0 RESULTS OF ARCHAEOLOGICAL MONITORING

The archaeological monitoring at Old West Farms Soldier Cemetery was conducted over a period of five working days in the field. Prior to any subsurface excavation work, the Parsons team visited the project area to document existing conditions. A few weeks later, the Parsons team spent three days monitoring the manual excavation by construction workers. After a brief hiatus, the Parsons team was asked to return to the project area to inspect, document and retrieve human remains which the construction workers had exposed when they inadvertently excavated to a depth below that which was called for in the construction documents.

2.1 EXISTING CONDITIONS

A site visit was conducted on October 4, 1999, prior to any subsurface excavation work. The cemetery perimeter was found to be enclosed by a 6-foot high steel chain link fence topped by barbed wire, with two sets of gates for access, both locked. The main entrance gates front onto East 180th Street, the second set of gates, located near the northeast corner of the cemetery property, front onto Bryant Avenue and lead to a paved service road which runs east-west near the northern property line. Two additional paved pathways were noted running north-south through the cemetery, perpendicular to the rear service road. The first of these runs from the main entrance gates on East 180th Street northward to the service road; the second is located approximately 40 feet east of the main gate pathway, running northward to the service road. The pathways appeared to be in fair to poor condition due to overgrown vegetation and large tree root displacement in places. Large diameter trees were noted scattered within the cemetery amidst the tombstones, as well as a probable former double row of plantings along the main entrance pathway. One large tree was down in the central portion of the cemetery, probably due to fairly recent storm damage. In addition, two dead crows were noted lying in the main pathway.

Along the eastern, or Bryant Avenue property line, the 6 foot high chain link fence is set into the ground, topped by barbed wire, and is in fair condition. Along the southern, or East 180th Street property line, the 6 foot high chain link fence is embedded in a one foot wide stone and concrete retaining wall which runs from the southwest corner of the property downhill to the East for approximately 125 feet, where it disappears into the grade. The remainder of the fence is set into the ground, and it meets with the Bryant Avenue fence line to form the southeast corner of the property. The fence appears to be in fair condition; the retaining wall is in need of repair in places.

The chain link fence along the western boundary is set into what appears to be original (?) cemetery grade, as it is located at a 3 to 5 foot higher elevation than the adjacent property grade. Tombstones were noted abutting this fence line for a good portion of its length. The ongoing construction on the adjacent property appears to have involved cut
and grading activities right up to the cemetery fence line. One large diameter tree just
outside, or west of the chain link fence marking the western boundary of the cemetery has
been left pedestaled at the grade of the cemetery, and kept contained by a stacked 4 by 4
inch wood tie box construction. The chain link fence itself is in poor condition. The
northern property line chain link fence was viewed from the northwest corner of the
property (from the parking lot of the new construction adjacent to the West) and from the
northeast corner of the property (from a point on the Bryant Avenue walkway near the
service road entrance gates), and appeared to be in poor condition.

Several Civil War era tombstones in the southwest quadrant of the cemetery were legible
from the 180th Street property line, many with military regiment information. The stone
pedestal for a statue is located on the high ground amid these tombstones, and still bears a
plaque on its eastern face "1861-1865." To the west of this pedestal is an aluminum
flagpole. Many stones appear to be in good condition, while many others appear broken.

From the orientation of the tombstones and their inscriptions it appears that the cemetery
originally, or historically, faced eastward. When standing on the Bryant Avenue
pedestrian walkway facing west, the cemetery rises in elevation in front of you, with the
tombstones running in north-south lines, their inscriptions facing you. The stone pedestal
is also inscribed on its eastern face, and the statue would also (presumably) have faced
eastward. The question of whether or not the extant main entrance gates on East 180th
Street represent the original early nineteenth century main entrance gates requires
additional research.

2.2 ARCHAEOLOGICAL MONITORING: OCTOBER 14, 1999

Subsurface excavation began along the Bryant Avenue proposed new fence line on
October 14, 1999. Since the reconnaissance visit of October 4th, the Bryant Avenue chain
link fence poles had been cut at the base, moved and reset temporarily approximately 3
feet eastward, to allow for access as well as security during ongoing work. Four laborers
with picks and shovels were on site to dig the fence foundation trench.

The first task was the laying out of the centerline for the new decorative fence, which
followed the centerline of the truncated chain link fence parallel to Bryant Avenue. It
appeared that the erection of the chain link fence had only involved post holes dug every
ten feet or so, with the anchor poles set in concrete in these holes. Actual manual
excavation for the new concrete grade beam foundation trench began at the southeast
corner of the property and proceeded northward. The trench was dug to a depth of 18
inches along the entire length of the eastern boundary of 190.87 feet, and was
approximately 1 foot wide.

For horizontal as well as vertical provenience control during the monitoring of this trench
evacuation, notes were taken and any diagnostic artifacts encountered were recorded to
within the approximate 10 foot sections of excavation between the in-situ concrete
footings of the old chain link fence. Actual horizontal distances from the southeast corner of the fence/property line to the center point of these concrete footings were measured, as the 10 foot interval was not entirely consistent along the 190.87 foot length. The 18-inch trench excavation was completed on October 14, 1999.

2.2.1 STRATIGRAPHY AND ARTIFACTS: BRYANT AVENUE 18" DEEP FOUNDATION TRENCH

The stratigraphy encountered along the eastern, or Bryant Avenue fence line trench was fairly consistent for its 190.87-foot length. Recent debris such as plastic wrappers, cigarette butts, newspapers, broken bottle glass, and bags of household trash littered the surface. The top stratum, which ranged in depth from 3 to 4 inches below grade consisted of a very dark brown (Munsell 10 YR 2/2) humus, root mat and brown loam. Modern debris was noted throughout, but not collected from this stratum.

The stratum below the humus layer was a brown sandy silt (Munsell 7.5 YR 4/2). This stratum was encountered at 3 to 4 inches below grade, and continued to 18 inches in depth throughout the entire length of the foundation trench (Figure 2.1). Modern, or 20th century cultural materials were encountered during monitoring of this stratum, primarily from 8 to 14 inches in depth below grade. Heavy tree root disturbance occurred throughout the stratum for the entire length of the foundation trench. Much loose rock debris was present throughout, primarily angular pieces of friable schist; some waterworn cobbles were also encountered.

No cultural material was recovered from the excavation of the trench from the southeast corner to approximately 50 feet north. At 50 feet north along the trench, a partial red brick and one sherd of yellowware were noted, at a depth of 1-foot. At approximately 80 feet north, one sherd of unglazed red earthenware, probably from a flowerpot, was noted at a depth of 14 inches below the surface. Twentieth century machine made milk bottle fragments were encountered at approximately 95 feet north at a depth of 8 to 12 inches. At approximately 105 feet north, one piece of iron hardware, a broken flange or gasket, was noted at a depth of 8 inches. At approximately 115 feet north, a serving spoon marked "Rogers Stainless Steel Made in Korea" was encountered at 4 to 10 inches in depth. At the same location, one sherd of yellowware was noted at a depth of 1 foot below the surface. At approximately 120 feet north, a modern machine made bottle was noted at a depth of 1 foot. At the same location, a Rheingold beer can with a pull tab closure (post 1962) was recovered from 14 inches in depth. At approximately 135 feet north, modern machine made bottle glass fragments and an oval plastic eyeglass lens was noted at approximately 1 foot in depth. At approximately 140 feet north, a broken iron hinge was noted at 12 to 14 inches below the surface. At approximately 150 feet north, a recent "Good-O" clear glass beverage bottle and "Coca Cola" cans were encountered at 9 to 12 inches in depth. At approximately 160 feet north, a machine made milk bottle neck and soda bottle base were noted at 8 inches in depth. No cultural material was noted from
160 feet north to the northeast corner of the cemetery, located at approximately 190 feet north.

2.3 ARCHAEOLOGICAL MONITORING: OCTOBER 15, 1999

The second day of monitoring was also focused on excavations along the new Bryant Avenue fence line. Three laborers with picks, shovels, and a jackhammer were on site to continue the excavation.

The first task accomplished was the leveling off of the 18-inch deep trench excavated the day before. Beginning at the southeast corner of the property and proceeding northward, the concrete footings for the former chain link fence were jackhammered apart, removed and the trench leveled to 18 inches below grade. The postholes for the former fence were approximately 18 inches deep, by 1 foot round. No cultural material was observed or recovered during this leveling activity.

The second phase of excavation for the new decorative fence was then begun. The excavation of anchor points entailed the further excavation of the 18-inch deep trench to a depth of 3 feet at 2-foot wide sections along the centerline every 20 feet, beginning at the southeast corner of the property, and proceeding northward. Notes were taken and any cultural materials recovered were provenienced as Anchor #1 - 11, from the southeast to the northeast corners. Anchor locations #1 through 10 were dug to approximately 3 feet as planned. Anchor #11, at the northeast corner of the cemetery property, which will also be the north gatepost location for the reconstructed service road gates, was impeded at 20 to 24 inches below grade due to bedrock or an impenetrable boulder.

2.3.1 STRATIGRAPHY AND ARTIFACTS: BRYANT AVENUE 36" DEEP ANCHOR FOOTINGS

The excavation for the 11 anchor footings along the eastern boundary began with the first hole dug to a depth of approximately 36 inches at the southeast corner of the property, and proceeded northward.

Stratum 2, the brown sandy silt (Munsell 7.5 YR 4/2) with root disturbance and much loose rock debris continued to a depth of approximately 22 inches below grade. Stratum 3 was then identified, a strong brown, fine-grained silt (Munsell 7.5 YR 4/6), also with heavy root disturbance and loose rock throughout. This stratum continued to a depth of approximately 36 inches below grade. Some cultural materials were noted within Stratum 3, however, precise depths were not obtainable. At the base of the 36-inch deep anchor footings #1 through 9, from the southeast corner of the property to approximately 160 feet north, it appeared that the soil was changing from a strong brown to a lighter, yellowish brown (Munsell 10 YR 5/6). This was designated Stratum 4.
Anchor #1 did not contain any cultural material. Anchor #2, located approximately 20 feet north of the southeast corner, yielded decorated whiteware sherds and bottle glass fragments from Stratum 2 at a depth of 18 to 22 inches. One hard shell clam fragment was noted in Stratum 3 at 30 inches in depth. Anchor #3, located approximately 40 feet north, was full of loose rock, and yielded one coal fragment, as well as decorated sherds of whiteware and ironstone at an approximate depth of 2 feet. Anchor #4, approx. 60 feet north, was very rocky, and yielded one sherd of possible pearlware. The depth of this sherd could not be determined more precisely than 18 to 36 inches below the surface. Anchor #5 was located 80 feet north, contained large roots, much rock debris, and yielded one embossed metal fragment from Stratum 3, most likely from a depth of 30 to 36 inches. Anchor #6, approx. 100 feet north, contained much rock and large roots but no cultural material to a depth of 36 inches. A "void" was encountered at 22 to 27 inches in depth in the east wall that ran at least 10 inches to the southeast. It possibly represents a burrow or rotted root location. Anchor #7, approximately 120 feet north, yielded no cultural material. Another "void" was encountered at approximately 2 feet in depth in the west wall profile, and ran northwest for at least 8 inches. Anchors #8 and #9, 140 and 160 feet north respectively, contained no cultural material. Anchor #10, located approx. 180 feet north, which is also the location of the South Gate post footing, yielded no cultural material (see Figure 2.1). The north gate post footing, which is located near the northeast corner of the cemetery, contained a modern amber beer bottle fragment at approximately 18 to 20 inches in depth. Bedrock, or an impenetrable boulder halted the digging at 20 to 24 inches below the surface.

2.4 ARCHAEOLOGICAL MONITORING: OCTOBER 21

The third day of monitoring work began with the proposed concrete grade beam trench excavation along the southern boundary, or East 180th Street. Two laborers with picks and shovels were on site to continue excavation work. The third day of monitoring was October 21, 1999, one week after the start of excavation/monitoring work. The delay was due to the time necessary to obtain the required permits to close East 180th Street in front of the cemetery to pedestrian traffic and to erect a temporary wooden fence along the curb. In addition, the day before excavation/monitoring work resumed was a rain day.

After consultation with Volmar, DDC and the Parsons Project Manager, it was decided that there should be a sampling of the deepest footing excavations along the eastern, or Bryant Avenue proposed fence line and the deepest footing excavations along the southern, or East 180th Street proposed fence line, as well as a test section of the 18-inch deep concrete grade beam trench along East 180th Street be monitored.

Specific locations along the eastern, or Bryant Avenue, proposed fence line were chosen to be monitored based on the proposed depth and size of the footing excavation and their proximity to questionable features within the cemetery. The largest proposed anchor footing along the eastern fence line was to be the new service road entrance south gate
post, measuring 3 feet north-south, 5 feet east-west, and 4 feet deep. This location, mentioned above in this text as Anchor #10, is approx. 180 feet north of the southeast corner of the cemetery. The second proposed deep anchor footing location that was chosen has been mentioned above in this text as Anchor #7, approx. 120 feet north of the southeast corner. This anchor footing was to be 2.5 feet by 2.5 feet by 4 feet deep. This location lies due east of a cluster of vertically stacked tombstones, which are obviously not in their original locations. This cluster may represent those stones removed from either or either the widening of East 180th Street prior to 1910, or the former Presbyterian Burial Ground to the West. The third deep anchor footing location chosen has been mentioned above in this text as Anchor #4, which lies approx. 60 feet north of the southeast corner. This excavation was to be 2.5 feet by 2.5 feet by 4 feet deep. This footing location lies closest to the extant tombstone that represents the nearest marked north-south line of interments to the eastern fence line.

Specific deep anchor footing locations along the southern, or East 180th Street proposed fence line were also chosen to be monitored. The first was the southwest corner footing, which was to be 2.5 feet by 2.5 feet by 4 feet deep. The second was the deep footing for the eastern gatepost for the new main entrance gates, which was to be 3 feet by 3 feet by 4 feet deep. In addition, the 18-inch deep concrete grade beam trench was to be monitored beginning at the southeast corner of the cemetery and proceeding uphill to the West.

Excavation began on the southern, or East 180th Street fence line at the southeast corner and proceeded up slope to the west, toward the location of the new main entrance gates, for approximately 30 feet. The trench was approximately 1-foot wide, 18 inches deep, located adjacent to the extant bluestone sidewalk.

The next area monitored was along the eastern, or Bryant Avenue fence line. The three, discussed above, deep anchor footing locations were completed. Next excavated were the deep anchor footing locations along the southern, or East 180th Street fence line. By the end of day 3, the length of the concrete grade beam 18-inch deep trench was completed from the southeast corner of the property to the eastern gatepost for the new main entrance gates.

2.4.1 STRATIGRAPHY AND ARTIFACTS: EAST 180TH STREET 18” FOUNDATION TRENCH

The stratigraphy encountered along the southern, or East 180th Street fence line trench was consistent for all areas monitored. These areas included the southeast corner foundation footing up slope @80 feet to the west of the main entrance gate eastern foundation footing, and the southwest corner foundation footing, as was noted along the eastern, or Bryant Avenue fence line, the surface was littered with modern debris such as plastic wrappers, cigarette butts, broken bottle glass and a few bags of household trash.
The stratigraphy encountered during the excavation for the concrete grade beam, however, was very different from that noted along Bryant Avenue. The top stratum, which averaged 4 inches below grade consisted of a very dark brown humus, (Munsell 10 YR 2/2) root mat and brown loam. Recent debris was observed (but not collected) throughout this stratum.

The stratum below the humus layer was a yellow sand (Munsell 5 Y 8/8). This stratum was uniformly 10 inches thick, or 4" - 14" below grade. No cultural material was noted in this layer, which is most likely associated with the installation of the bluestone sidewalk and former granite cobbled areas between the bluestone pavement and the retaining wall of the cemetery present. Most of the granite cobbles are missing as of this writing.

Below this clean sand fill layer was a thin, 1-2 inch layer of mixed ashy gravel and silty sand, 14-16" inches below grade. The Munsell color was 10 YR 3/2, very dark gray brown. No cultural material was noted from this thin stratum or possible transition zone.

The next stratum encountered during the excavation of the 18 inch deep concrete grade beam was a dark grayish brown fine sandy silt (Munsell 10 YR 4/2) with coal ash, slag and cinder. This layer, 16-18" below grade, may represent the bedding for a former roadbed/walkway/pavement. Cultural material noted in this stratum included molded plastic fragments, bottle glass fragments, and pieces of red brick. These 20th century artifacts were noted but not collected.

2.4.2 STRATIGRAPHY AND ARTIFACTS: BRYANT AVENUE 48" DEEP ANCHOR FOOTINGS

The deep anchor footing, above a referenced as Anchor #10 was the proposed location for the new service road entrance South Gate post. The excavation from 36" to 48" below grade showed a transition from a brown (7.5 YR 4/2) mixed with a strong brown (7.5 YR 4/6) and yellowish brown (10 YR 5/4) to an increasingly more uniform yellow brown (10 YR 5/4). Modern green bottle glass, 1 sherd of glazed redware, 2 sherds of unglazed red earthenware, possibly from a flowerpot, 1 corroded iron nail, and 1 partially burned coal fragment and 1 porcelain artifact were recovered from between 36 and 48 inches below grade. The porcelain object, a glazed disk, 1.5 inches in diameter, 0.5 inches thick, is embossed "NY EDISON CO" on one side, and "METER DEPT. PAID APRIL 28 08" on the other. "64" in underglaze black is above the latter embossing. This disk is most likely to have been associated with an early form of Con Edison gas or electric meters.

The deep anchor footing above referenced as Anchor #7 was approximately 120 feet north of the southeast corner of the cemetery, due east of the cluster of tombstones which appear to have been gathered up and moved to their present location most likely at some point during the early 20th century. The stratum tentatively identified as Stratum 4 during the 36-inch deep excavation for the anchor footings continued at this location to the final excavation depth of 48" below grade. This stratum, a yellow brown silt (Munsell
10 YR 5/6) yielded one small mammal bone fragment. This fragment was sent to the forensic anthropology department at the Smithsonian Institution for identification, as per prearranged agreement. This bone fragment was subsequently determined to be of non-human origin. No other cultural materials were recovered from this portion of the excavation.

The deep anchor footing mentioned above as Anchor #4 was approximately 60 feet north of the southeast corner of the property. It was the deep anchor footing closest to an extant tombstone, which was the only remaining stone on the closest North-South line of interments to the proposed fence line along Bryant Avenue. The stratigraphy encountered at this location was the same as that of Anchor #7, 60 feet to the North. A yellow brown silt (Munsell 10 YR 5/6) was present from 36 to 48" below grade. No cultural material was noted in this stratum.

2.4.3 STRATIGRAPHY AND ARTIFACTS: EAST 180<sup>TH</sup> STREET 48" DEEP ANCHOR FOOTINGS

The first deep anchor footing excavated on the southern, or East 180th Street proposed fence line was that of the east gate footing for the new main entranceway. This footing excavation was to be 3x3x4 feet deep. The stratigraphy encountered for the first 18 inches was identical to that of the 18" concrete grade beam trench dug from the southeast corner of the property, up slope to the North, except for the presence of granite paving blocks or cemented cobblestones marking the walkway to the extant main gates from the bluestone sidewalk. A thin dark humus/loam layer was identified below the cobbles. Below the humus was a 10-inch layer of clean yellow sand followed by a thin, 1-2 inch layer of mixed ashy gravel and silty sand (Munsell 5 Y 8/8) very dark gray brown in color (Munsell 10 YR 3/2). Below this thin stratum was a dark grayish brown fine sandy silt (Munsell 10 YR 4/2) with coal ash, slag and cinder, at a depth of 16-24" below grade with 20th century artifacts such as plastic were noted but not collected. The final stratum encountered at 24" below grade and continued to the depth of excavation, was a gray brown sandy silt (Munsell 10 YR 5/2) with gravel and pebbles (Figure 2.2). No cultural material was noted from this layer.

The second deep anchor location excavated was at the southwest corner of the property on the highest spot along the proposed East 180th Street fence line. The stratigraphy encountered from the first 18 inches was essentially the same as that of the concrete grade beam trench dug from the southeast corner of the property which was the lowest spot along the proposed East 180th Street fence line. The humus layer was approximately 4 inches thick; the clean yellow sand was 10 inches thick below the humus; the 1-2 inch very dark gray brown ashy layer was below the clean sand and the gray brown silty sand with coal ash, slag and cinder was present from approximately 16 to 22 inches below grade. Bedrock or large deeply striated boulders at this depth, however, impeded the excavation.
The stratigraphic sequence noted along the East 180th Street fence line is vastly different from that encountered along the Bryant Avenue fence line. The clean 10 inch thick yellow sand layer and the dark grayish brown silt with furnace debris strongly suggests that the East 180th Street elevation has been cut and graded, possibly more than once in the recent historic past.

2.5 ADDITIONAL MONITORING: NOVEMBER 8, 1999

On November 5th Volmar and DDC contacted Parsons and asked that the team of archaeologists return to the project area. On a previous day, a rainstorm had washed dirt into an excavation unit. While re-digging the trench for the footing of the Southern Gate along Bryant Avenue, the workers had inadvertently excavated below the depth called for in the scope of work and in so doing had dislodged human remains. All excavation work was stopped and Volmar and DDC were contacted. Mr. Thomas Agnew of DDC notified the Landmarks Preservation Commission to inform them of what had occurred. Parsons was asked to come out to the site and collect the human remains found by the construction workers, to examine and draw the profile of the trench in which the human remains were found and, to sift the excavated dirt for any additional human remains and artifacts that it may contain.

An assessment in the field indicated that the workers had cut through a portion of a coffin that was visible in the profile at a depth between approximately 44-52" below the surface. Stains of decayed wood from the coffin, as well as coffin furniture and human remains were still visible in the profile (see Figure 2.1). The workers had placed the bones they found in a plastic bag. These consisted of a cranium, mandible fragments and portions of long bones. Screening the excavated dirt retrieved additional human remains, as well as artifacts.

In consultation with DDC, all of the retrieved human remains and fragments of coffin furniture were sent to the Parsons Project Manager in Fairfax, Virginia for identification.
Bryant Avenue Service Entry, South Footing

10YR 2/2 very dark brown loam with roots

7.5YR 4/2 to 4/6 brown to strong brown loam, increasing compactness and shift to
10YR 5/4 yellowish brown with depth

Asphalt Road Bed

Concrete and Rock

Concrete Driveway

Former Gate

Post Hole

Dark Stain with Fragile Hardware

Human Bones

Coffin Hardware

Root

Source: Parsons Engineering Science

Figure 2.1
Profile of Bryant Avenue Service Entry, South Footing for Gate
E 180th Street, East Footing for Gate

Source: Parsons Engineering Science

Figure 2.2
Profile of E. 180th Street,
East Footing for Gate

- South Wall
  - Blue Stone
  - Concrete
  - 5Y 8/8 yellow sterile, clean sand
  - 10YR 3/2 very dark grayish brown ashy gravel and sand

- West Wall
  - Stone Blocks
  - 10YR 4/2 dark grayish brown dense fine sand with roots
  - 10YR 5/2 grayish brown sterile sandy loam with gravel and pebbles

- Dark Brown, Humus and Pebbles

0 - 1 Foot Scale
3.0 IDENTIFICATION OF HUMAN REMAINS

The Parsons Project Manager took the human remains collected from the Old West Farms Soldiers Cemetery to Marilyn London, a bioarchaeologist at the Smithsonian Institution for identification. The results of Ms. London’s examination are presented below:

A box of human remain was delivered to me at the Smithsonian Institution by Petar Glumac, Ph.D. of Parsons Engineering Sciences on 8 November 1999. The box contained several plastic bags labeled “West Farms Cemetery - Bronx, Bryant Avenue F. L., South Gate Post Anchor Footing.”

The bags contained the partial remains of at least two individuals, which will be referenced as Individual A and Individual B. The two individuals were separated on the basis of duplicated skeletal parts, size, and condition.

INDIVIDUAL A

Bones present and condition  Individual A is represented by upper body elements, specifically: a cranium and mandible, cervical vertebrae C1 through C3, fragments of humerus (left and right?), the proximal ends of left and right radius and ulna, and the left scapula and clavicle. The fragmentary remains of a left innominate also belongs to this individual, and the partial lumbar vertebra (L5) and sacrum (S1) probably are also associated. The bones are damaged and in some cases fragmentary.

Age  The sphenooccipital synchondrosis is fused; this suture at the base of the skull is usually fused by the age of 18. There has been extensive antemortem loss of dentition, with only some anterior teeth still present. Endocranial etching is moderate, and there are some Pacchionian depressions; these begin to appear after the age of 30. Osteophytic lipping is seen on the glenoid fossa of the scapula and on the acetabulum, indicating arthritic changes in both the shoulder and the hip. The age at death of the individual is estimated to be 40 years or older.

Sex  The superior margins of the orbits are sharp, and the frontal bone is vertical. The mastoid process present is small. The shape of the cranium and these specific features are consistent with a female.

Population  There is no depression at nasion. The inferior margins of the nasal aperture are smooth, and the nasal index (60.4) indicates a broad nose. The maxillae do not recede below the orbits. There is some keeling along the sagittal suture, with a depression just posterior to bregma. The cranial index indicates a long, narrow skull. There is slight alveolar prognathism. These features are all consistent with an African ancestry.
Pathological Conditions  In the mandible, the second right incisor has lost its crown and there is an abscess in the bone around the root. The second and third cervical vertebrae are fused together, at least on the right side at the intervertebral facet; this is suggestive of trauma or stress in the upper neck. The arthritic changes in the shoulder and hip joints are probably age-related.

Anomaly A small extra bone is present on the skull at right pterion.

Summary This partial skeleton represents a female at least 40 years old, probably of African ancestry. She suffered from age-related arthritis, partial fusion (and therefore limited movement) in the neck, and dental disease which probably caused considerable pain. There is no indication of cultural/historical affiliation in the materials present, and time since death cannot be determined.

INDIVIDUAL B

Bones present and condition This individual is represented only by the right humerus, the distal left humerus, and the right radius and ulna, plus a fragment of left innominate which appears to duplicate the bone found with Individual A. The bones are in poor condition and extremely fragile. Very little information can be gleaned from this fragmentary material.

Age The size of the bones and the fact that all epiphyses present are fused indicates that this is an adult.

Sex Because these bones are larger than and easily separated from those of Individual A it is probable that this individual is male.

Summary This partial and fragmentary skeleton represents an adult male. There is no indication of ancestry, pathological conditions, or cultural/historical affiliation on the materials present, and time since death cannot be determined.

4.0 SUMMARY

During the three day of archaeological monitoring at the Old West Farms Soldiers Cemetery, the Parsons team did not observe any intact archaeological deposits nor did it retrieve any significant artifacts.

Examination of the human remains indicates that at least two individuals were placed within a single coffin that was buried along the eastern edge of the cemetery. Examination of the fragmentary coffin furniture which primarily consists of decorative metal covers for nails and studs suggests a manufacturing date sometime during or right after the last quarter of the nineteenth century (Chattanooga Coffin and Casket Company 1905a; 1905b; Chicago Coffin Company 1896; Crowell 1992).

The results of both the examination of the human remains and the associated coffin furniture suggests that the human remains are not those of a soldier, nor are they evidence of a more recent homicide. The collective evidence suggests that the human remains were probably those of individuals who had been reinterred at some time around the turn of the century. The human remains most likely were originally associated with the graveyard of the West Farms Presbyterian Church, which once stood on the hill adjacent to the project area. Many of the graves from the church were disturbed and relocated during the widening of 180th Street, which took place in 1908.
5.0 REFERENCES

Chattanooga Coffin and Casket Company


Chicago Coffin Company

Crowell, E., et al

Landmarks Preservation Commission

McNamara, John
APPENDIX A

LIST OF PERSONNEL

Project Manager: Petar Glumac, Ph.D, R.P.A.

Project Archaeologists: Nancy Stehling, M.A., R.P.A.
                       George Meyers, M.A.

Bio-archaeologist: Marilyn London, M.A.

Laboratory: Nancy Stehling, M.A., R.P.A.
            Elizabeth Crowell, Ph.D., R.P.A.
            Carter Shields

Graphics: George Meyers, M.A.
          Sulah Lee