Archeological Investigations of Seven Locations Associated with the Bladensburg Battlefield

Prince George's County, Maryland.

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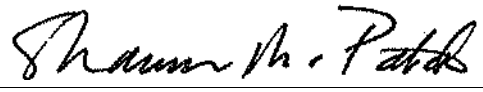

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ABSTRACT

New South Associates, Inc., conducted a systematic program of soil auger and core testing, excavation of two 50x50-centimeter units, and limited systematic metal detecting of portions of the Bladensburg Battlefield (ABPP designation MD 403), Prince George's County, Maryland. Fieldwork was conducted the week of November 10, 2012 by Shawn Patch and Patrick Severts. Seven separate locations were investigated covering different portions of the battlefield.

Results indicate that most of the study locations have been severely impacted from historic and modern activities. No battle-related artifacts were recovered and there was little direct evidence for landforms or soils that might be associated with the battle. Overall, integrity is poor, with two exceptions: an area west of the George Washington house and a very small segment of the Dueling Grounds. Even in these areas, the surfaces associated with the battle are likely not at the present ground level. The remaining areas had extensive evidence of landform alteration as a result of grading, construction, and modern stream stabilization efforts.

TABLE OF CONTENTS

ABSTRACT i
TABLE OF CONTENTS iii
LIST OF FIGURES v
LIST OF TABLES v

INTRODUCTION 1

METHODS 4
Soil Testing 4
50x50-Centimeter Units 4
Metal Detecting 4

RESULTS 7
Area B (Washington House) 7
Area C (Cottage City Nursery) 10
Area D (Cottage City Neighborhood) 16
Area E (Cottage City Recreational Fields) 18
Area F (Dueling Grounds) 22
Area G (Industrial) 29
Area I (Fort Lincoln Cemetery) 32

DISCUSSION AND RECOMMENDATIONS 37
Summary 40

REFERENCES CITED 42

LIST OF FIGURES

Figure 1. Location of Study Areas in Prince George's County, Maryland..... 2
Figure 2. ABPP Map of Bladensburg Battlefield Showing Study Area, Core Area and Potential National Register Area (POTNR) 3
Figure 3. Systematic Metal Detecting..... 5
Figure 4. Photographs of Site Conditions in Area B (Washington House) 6
Figure 5. Testing Locations in Area B..... 9
Figure 6. Profile and Photograph of Unit 1 in Area B (Washington House)..... 11
Figure 7. Photographs Showing General Conditions in Area C (Cottage City Nursery) 12
Figure 8. Testing Locations in Area C..... 13
Figure 9. Testing Locations in Area D..... 17
Figure 10. Testing Locations in Area E..... 19
Figure 11. Photographs Showing General Conditions in Area F (Dueling Grounds) 26
Figure 12. Testing Locations in Area F 27
Figure 13. Profile and Photograph of Unit 2 in Area F (Dueling Grounds) 29
Figure 14. Photographs of Selected Artifacts Recovered by Metal Detector Survey in Area F (Dueling Grounds)..... 30
Figure 15. Photographs Showing General Conditions in Area G (Industrial)..... 32
Figure 16. Testing Locations in Area G..... 33
Figure 17. Photographs Showing General Conditions in Area I (Fort Lincoln Cemetery) 37
Figure 18. Testing Locations in Area I (Fort Lincoln Cemetery)..... 38

LIST OF TABLES

Table 1. Summary of Bucket Auger Core Results for Area B (Washington House) 7
Table 2. Summary of Tube and Bucket Auger Results for Area C (Cottage City Nursery) 14
Table 3. Summary of Tube Auger Results for Area D (Cottage City Neighborhood) 18
Table 4. Summary of Bucket Auger Results for Area E (Cottage City Recreational Fields)..... 20
Table 5. Summary of Tube and Bucket Auger Results for Area F (Dueling Grounds) 22
Table 6. Summary of Tube Auger Results for Area I (Industrial)..... 31
Table 7. Summary of Tube Auger Results for Area I (Fort Lincoln Cemetery). 34

INTRODUCTION

As part of a broader study, New South Associates, Inc., conducted a limited archeological survey of portions of the Bladensburg Battlefield, Prince George's County, Maryland (Figure 1). Funding for this study was provided by a grant from the American Battlefield Protection Program (ABPP). ABPP has designated the Bladensburg Battlefield (MD403) with Class A status, which refers to battlefields that shaped the strategy, direction, outcome, or perception of the war (National Park Service 2007). The battlefield is defined by a core area and broader study area (Figure 2).

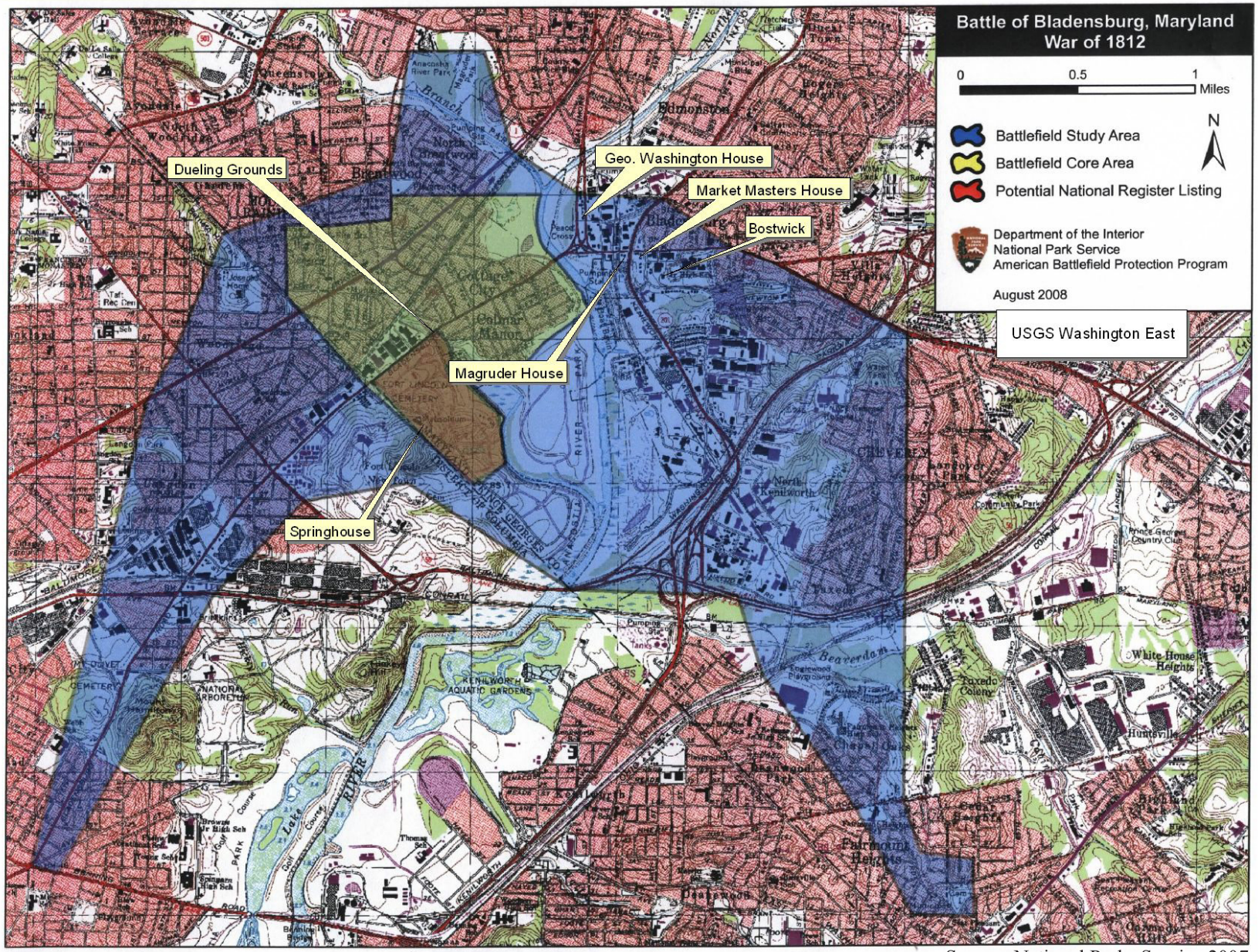
Previous work by Ervin (2011) included detailed KOCOA methods to identify and analyze key and decisive terrain features; avenues of approach and withdrawal; fields of fire and observation; troop positions and movement routes; areas of concealment and cover; and natural and cultural obstacles that affected troop movements. Results of this analysis were incorporated into GIS and used to refine the battlefield boundaries. Defining features included Lowndes Hill; the Bostwick, Market Master's, Magruder, and George Washington Houses; the Anacostia River; Bladensburg Road; Dueling Creek; the low hills overlooking the floodplain of the Anacostia River (now Cottage City); elevated landforms in Fort Lincoln Cemetery; and Veitch's Hill.

The research design for this study was focused on assessing different areas of the battlefield to determine the potential for intact soils and landforms dating to the battle. Seven locations were selected within the Core and Potential National Register (POTNR) boundaries based on results of previous studies. Key defining features that were tested include an area near the George Washington House and limited areas around Dueling Creek. Specific research questions were developed, including: do different areas of the battlefield retain physical integrity? If so, what is their spatial extent both horizontally and vertically? To what extent has modern development affected the battlefield? What types of impacts have occurred? If buried soils are present, how deep are they and what is the likelihood they contain potential features? Archeological evaluation of these questions was focused on tube and core auger sampling, excavation of two 50x50-centimeter test units, and supplemental selective metal detecting.

Fieldwork was conducted the week of November 10, 2012 by Shawn Patch, M.A., RPA and Patrick Severts. Weather during that period was generally favorable and did not affect the investigations.

The investigations included a systematic program of subsurface testing using a combination of tube augers and bucket augers and the excavation of 50x50-centimeter units. Supplemental investigations included sampling selected areas with systematic metal detecting. Spatial locations for all test locations and metal detector finds were recorded with a Trimble GeoXT handheld GPS unit with sub-meter accuracy.

Figure 1.
Location of Study Areas in Prince George's County, Maryland



Source: National Parks Service 2007

Figure 2.
ABPP Map of Bladensburg Battlefield Showing Study Area, Core Area and Potential National Register Area (POTNR)

Public outreach activities to date have been handled by Maryland State Highway Administration (SHA) and were not specifically requested for the present study. More detail on these efforts can be found in Crowl et al. (2012) and URS Corporation (2013).

METHODS

SOIL TESTING

Subsurface testing consisted of tube auger and bucket auger sampling at systematic intervals in each location. Soil stratigraphy was recorded using standard U.S. Department of Agriculture (USDA) nomenclature and Munsell color charts. All test locations were backfilled upon completion.

Tube auger tests were approximately 0.75 inches in diameter and designed for deposits less than one meter in depth. The advantage of this method is that a short soil column is produced intact and stratigraphy can be more accurately recorded. Its disadvantage is the relatively shallow depth and narrow diameter. Bucket auger texts were approximately three inches in diameter and designed for deposits greater than one meter in depth. The primary advantages of this method are the increased depth and larger diameter. The disadvantage of this method is that the soils are identified through successive buckets rather than a complete column.

50X50-CENTIMETER UNITS

Two 50x50-centimeter excavation units were placed in selected locations. The goal of this step was to provide better vertical control over subsurface deposits through a larger window. Each unit was established with metric tapes. Excavation proceeded in 10-centimeter levels within natural strata and all sediments were screened through 0.25-inch mesh hardware cloth. Information regarding each level was recorded in a field book. One profile was photographed and drawn to scale. Each unit was backfilled upon completion.

METAL DETECTING

Systematic metal detecting was conducted on a limited basis in areas that were suspected to retain the 1814 surface within reach of the instruments (Figures 3). Metal detecting was conducted at two locations in Area E (Dueling Grounds) and one location in Area B (Washington House). Specific instruments included a Minelab eTrac and a Fisher F-75. Non-metallic survey tapes were used to create guide lanes spaced 1.5 meters apart. Operators then walked each lane sweeping the instruments at ground level. All finds were given unique numbers and marked with plastic pin flags. Any artifacts that were potentially battle-related were collected for additional analysis. Field specimen numbers were assigned to each operator

Figure 3.
Systematic Metal Detecting

Figure 4.
Photographs of Site Conditions in Area B (Washington House)

A. Area B Looking South

B. Area B Looking North

as either odd (Severts, Minelab) or even (Patch, Fisher) and these were further associated with specific instruments. Previous research has indicated that coverage of the same area with multiple instruments can produce significantly better results (Patch et al. 2012).

RESULTS

AREA B (WASHINGTON HOUSE)

Area B (Washington House) is characterized by a public park with recreational trails dotted with mature trees and a secondary area to the south that is heavily wooded (Figure 4). Terrain is relatively flat. Investigations here consisted of bucket auger sampling (n=10), excavation of a single 50x50-centimeter unit, and limited metal detecting (Figure 5, Table 1).

Table 1. Summary of Bucket Auger Core Results for Area B (Washington House)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 1	1	0-8	10YR 3/3	Sand/Gravel		Lower Half Intact
		2	8-30	10YR 5/6	Sandy Loam		
		3	30-40	10YR 6/8	Sandy Clay		
		4	40-60	10YR 4/6	Sandy Clay	Mottled	
Bucket Auger	Core 2	1	0-8	10YR 3/4	Silty Sand		Intact
		2	8-94	10YR 4/6	Silty Sand		
		3	94-108	10YR 4/6	Fine Sand		
		4	128-133	10YR 5/6	Sand	Charcoal Flecking	
Bucket Auger	Core 3	1	0-8	10YR 4/3	Loamy Sand		Intact
		2	8-31	10YR 5/8	Coarse Sand		
		3	31-100	10YR 4/6	Silty Sand		
		4	100-130	10YR 4/6	Silty Sandy Clay	Rock Impasse	
Bucket Auger	Core 4	1	0-8	10YR 4/3	Silt Loam		Intact
		2	8-20	10YR 5/8	Coarse Sand		
		3	20-45	10YR 5/6	Coarse Sand		
		4	45-80	10YR 4/6	Silty Clay		
		5	80-95	10YR 5/4	Silty Clay		
Bucket Auger	Core 5	1	0-5	10YR 3/3	Silt Loam	Natural Profile	Intact
		2	5-60	10YR 4/6	Silt		
		3	60-105	10YR 5/6	Silt		
		4	105-125	10YR 5/4	Silty Clay		

Table 1. Summary of Bucket Auger Core Results for Area B (Washington House)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 6	1	0-80	10YR 4/4	Silt		Intact
		2	80-105	10YR 5/8	Sandy Loam		
		3	105-115	10YR 6/6	Sandy Loam		
		4	115-125	7.5YR 5/6	Silt Loam		
Bucket Auger	Core 7	1	0-5	10YR 3/2	Silty Clay		Disturbed
		2	5-90	10YR 4/4	Silty Clay		
		3	90-100	10YR 5/6	Sandy Silt		
Bucket Auger	Core 8	1	0-12	10YR 3/3	Loam		Intact
		2	12-20	10YR 4/6	Loamy Sand		
		3	20-60	10YR 4/6	Loamy Sand	Gravels at Bottom	
Bucket Auger	Core 9	1	0-5	10YR 3/3	Loam		Intact
		2	5-15	5YR 4/4	Clay		
		3	15-65	10YR 6/6	Loamy Sand	Increased Clay Content	
		4	65-125	10YR 5/6	Sand	Stream Deposit	
Bucket Auger	Core 10	1	0-65	10YR 3/4	Silt Loam	Modern Fill	Disturbed
		2	65-80	5YR 4/4	Sand And Clay	Mottled, Fill	

Bucket augers were excavated at approximately 30-meter intervals in a single transect (Cores 1-7), with subsequent testing at judgmental locations closer to the modern levee (Cores 8-10). Eight of the 10 cores showed evidence of intact stratigraphy capped by modern alluvial deposits that varied in thickness approximately 10-30 centimeters. A typical profile (Core 3) consisted of loamy sand (0-8 cmbs), coarse sand (8-31 cmbs), silty sand (31-100 cmbs), and silt clay (100-130 cmbs). In this case, the upper 30 centimeters appeared to be historic alluvial deposits.

Two cores (7 and 10) showed evidence of likely disturbances. Core 7 was located on the far southern end of the first transect closer to the bridge over the Anacostia River and Core 10 was located in the southwest portion of the survey area close to a channelized stream and the modern levee. In both cases, these areas appear to have been clearly impacted from historic construction activities.

Figure 5.
Testing Locations in Area B

Source: Microsoft Imagery 2011

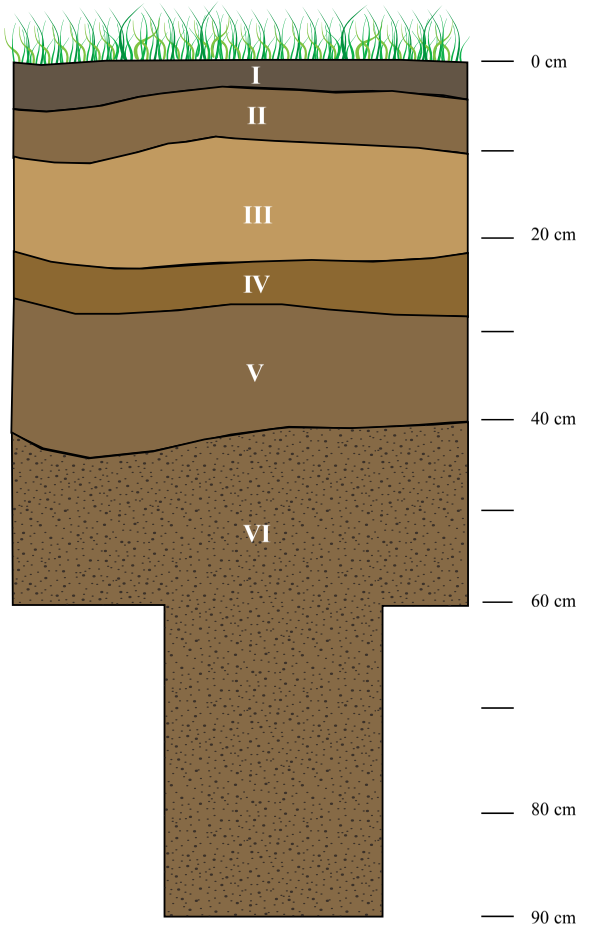
A single 50x50-centimeter unit was excavated close to Core 4 and oriented 31 degrees east of magnetic north. Formal excavation was terminated at approximately 60 centimeters below surface (cmbs) and then a shovel test was excavated in the center of the unit to a depth of approximately 90 cmbs. Six strata were identified (Figure 6). Stratum I was defined as a very dark grayish brown (10YR 3/2) silt loam that varied from 3-5 cmbs. Stratum II consisted of dark yellowish brown silt (10YR 4/4) that varied from 8-11 cmbs. Stratum III consisted of brownish yellow (10YR 6/6) coarse sand that varied from 8-23 cmbs. Stratum IV consisted of dark yellowish brown (10YR 4/6) fine sand that varied from 21-28 cmbs. Stratum V consisted of dark yellowish brown (10YR 4/4) silt loam that varied from 28-44 cmbs. Stratum VI consisted of dark yellowish brown (10YR 4/4) silt clay that varied from 44-90 cmbs. There is a clear and abrupt boundary between Strata III and IV. In addition, the textural and color differences are noticeable. Stratum III appears to represent an unconformity with Stratum IV. By contrast, the boundaries between Strata IV through VI are much more gradual, and represent only minor changes in texture and color.

No diagnostic artifacts were recovered. However, Level 2 (10-20 cmbs) yielded coal (n=9) and slag (n=8) and Level 3 (20-30 cmbs) yielded coal (n=2) and one piece of non-diagnostic modern trash. None of these were collected and the upper portion of the profile was of historic origin (post-1814). However, the overall profile is interpreted as indicating a relatively intact deposit capped by approximately 30-32 centimeters of historic alluvium.

Systematic metal detecting was conducted over a small area measuring approximately 30x6 meters. The grid was oriented east to west immediately north of the existing heavily wooded area and south of a picnic shelter. Although metal objects were abundant, they were all associated with recent activities, including coins, pull tabs, and cans. Depths for artifact recovery were generally in the upper 10-15 centimeters depending to at least a certain extent on the instrument (i.e., Minelab v. F-75). The original land surface is capped by modern (post-1814) deposits that range in thickness from at least 10 centimeters to as much as 50 centimeters. These conditions make it difficult to reach potential battle-related artifacts. However, this area still has the potential to yield artifacts and features related to the battle.

AREA C (COTTAGE CITY NURSERY)

Area C (Cottage City Nursery) is a narrow floodplain bounded by a residential neighborhood on the north, a heavily industrialized area on the south, a railroad on the west, and Bladensburg Road on the east (Figures 7 and 8). The north side of Dueling Creek is characterized by mowed grass in the rear yards of private residences and a large, artificial slope on the western end approaching the railroad. Fill episodes have encroached on the original floodplain and modern



I = 10YR 3/2 Very Dark Grayish Brown Silty Loam
II = 10YR 4/4 Dark Yellowish Brown Silt
III = 10YR 6/6 Brownish Yellow Coarse Sand
IV = 10YR 4/6 Dark Yellowish Brown Fine Sand
V = 10YR 4/4 Dark Yellowish Brown Silt Loam
VI = 10YR 4/4 Dark Yellowish Brown Silty Clay Inclusions

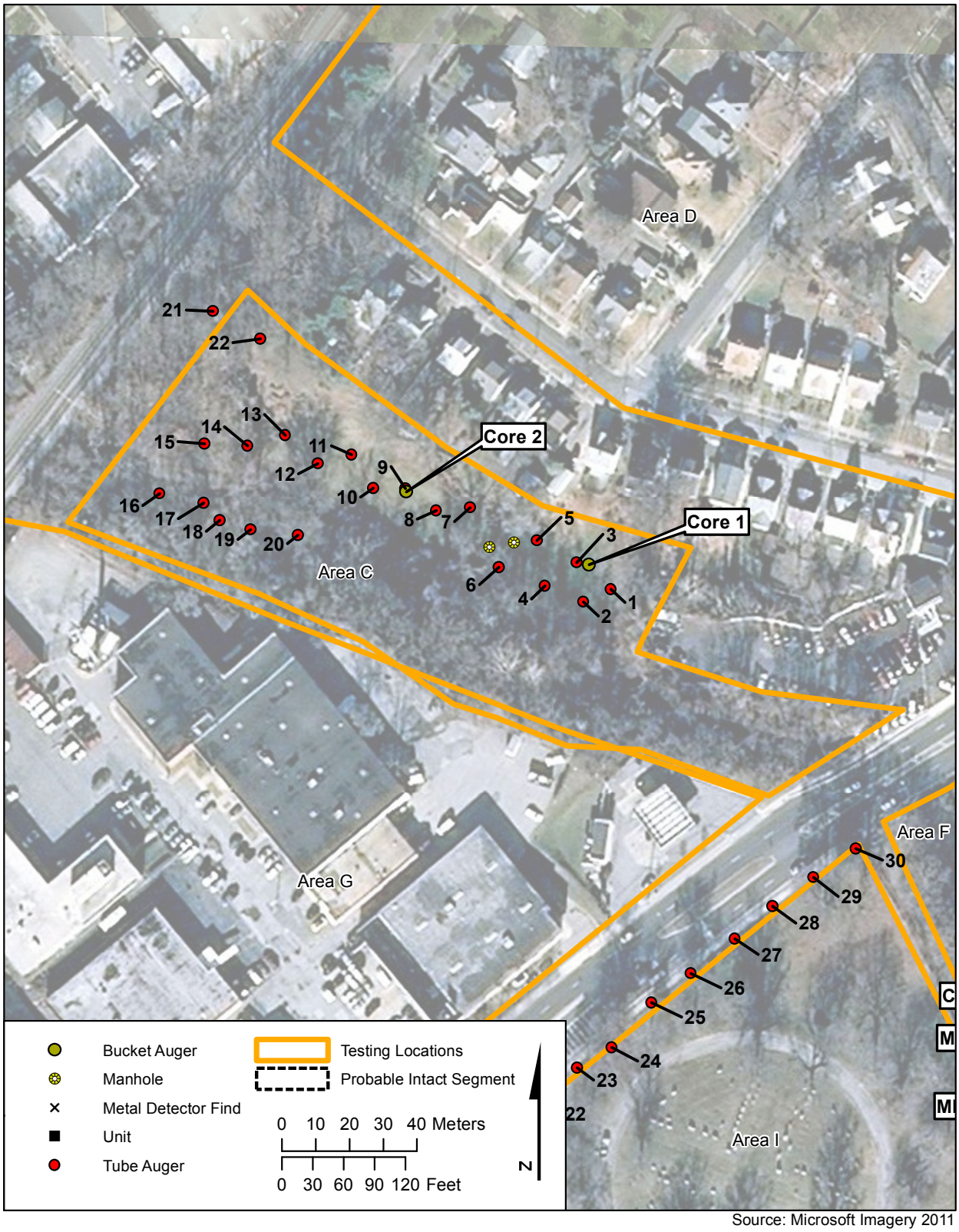
Figure 6.
Profile and Photograph of Unit 1 in Area B (Washington House)

Figure 7.
Photographs Showing General Conditions in Area C (Cottage City Nursery)

A. Looking Northwest

B. Looking Southeast

Figure 8.
Testing Locations in Area C



Source: Microsoft Imagery 2011

utilities have also impacted the area. Two separate manhole covers for sewer access are present in the central portion of the floodplain. The south side of Dueling Creek is much different, with almost no floodplain. It is bounded on the south by a steep slope that consists entirely of fill. The stream itself has been heavily impacted from channelization and stabilization efforts that include the placement of large boulders along the banks. Investigations here consisted of tube auger tests (n=22) and supplemental bucket auger sampling (n=2) (Figure 8, Table 2). Tube augers were spaced approximately 10 meters apart.

Table 2. Summary of Tube and Bucket Auger Results for Area C (Cottage City Nursery)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 1	1	0-18	10YR 3/2	Silt Loam		Intact
		2	18-30	10YR 5/8	Silt Loam		
		3	30-50	10YR 7/4	Silt Clay	Subsoil	
Bucket Auger	Core 2	1	0-8	10YR 3/6	Silt Loam		Disturbed
		2	8-30	10YR 5/6	Sandy Clay	Refusal (Gravel)	
Tube Auger	1	1	0-5	10YR 4/2	Silt Loam		Disturbed
		2	15-35	10YR 4/6	Sandy Silt	Refusal	
Tube Auger	2	1	0-15	10YR 4/6	Silt		Disturbed
		2	15-32	10YR 5/6	Silty Clay		
		3	32-45	10YR 5/8	Sandy Clay		
Tube Auger	3	1	0-15	10YR 4/2	Silt Loam		Disturbed
		2	15-70	10YR 4/6	Sandy Clay	Very Soft	
		3	70-80	7.5YR 6/6	Sandy Clay		
Tube Auger	4	1	0-12	10YR 3/3	Silt		Disturbed
		2	12-44	10YR 4/6	Loam	Refusal (Fill)	
Tube Auger	5	1	0-30	10YR 3/4	Silt Loam		Disturbed
		2	30-40	10YR 5/6	Silt Clay	Refusal (Rock Or Pipe)	
Tube Auger	6	1	0-10	10YR 3/3	Silt		Disturbed
		2	10-25	10YR 4/6	Silty Clay	Refusal (Fill)	
Tube Auger	7	1	0-10	10YR 3/2	Silt Loam		Disturbed
		2	10-15	10YR 5/8	Silt Clay	Clay Lumps	
Tube Auger	8	1	0-8	10YR 3/3	Silt		Disturbed

Table 2. Summary of Tube and Bucket Auger Results for Area C (Cottage City Nursery)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
		2	8-42	10YR 4/6	Silty Clay	Refusal (Fill)	
Tube Auger	9	1	0-6	10YR 3/3	Silt Loam		Disturbed
		2	6-63	10YR 4/6	Silt Clay	Refusal (Fill)	
Tube Auger	10	1	0-5	10YR 3/3	Sand		Disturbed
		2	5-35	10YR 4/4	Sand And Clay	Mottled	
		3	35-38	10YR 5/8	Sandy Clay		
Tube Auger	11	1	0-8	10YR 3/3	Silt Loam		Disturbed
		2	8-20	10YR 6/6	Sandy Clay	Refusal (Fill)	
Tube Auger	12	1	0-5	10YR 3/3	Silt		Disturbed
		2	5-25	10YR 4/6	Sandy Clay	Compact And Hard	
Tube Auger	13	1	0-55	7.5YR 4/4	Silt Loam	Mottled, Very Soft	Disturbed
Tube Auger	14	1	0-35	10YR 2/2	Coarse Sand	Slopewash	Disturbed
		2	35-45	10YR 4/6	Clay		
Tube Auger	15	1	0-5	10YR 3/3	Silt Loam		Disturbed
		2	5-25	7.5YR 4/6	Sandy Clay	Refusal (Fill)	
Tube Auger	16	1	0-6	10YR 3/4	Coarse Sand		Disturbed
		2	6-17	10YR 5/6	Clay	Subsoil	
Tube Auger	17	1	0-8	10YR 3/3	Silt Loam		Disturbed
		2	8-26	7.5YR 5/6	Silt Clay	Refusal (Root)	
Tube Auger	18	1	0-12	10YR 3/4	Silt		Intact
		2	12-60	10YR 5/6	Clay		
Tube Auger	19	1	0-12	10YR 3/6	Silt Loam		Disturbed
		2	12-22	5YR 5/6	Clay	Refusal (Subsoil)	
Tube Auger	20	1	0-10	10YR 3/4	Silt		Disturbed
		2	10-20	10YR 5/6	Clay		
Tube Auger	21	1	0-10	10YR 3/3	Silt Loam		Disturbed
		2	10-20	7.5YR 5/6	Sandy Clay	Refusal (Fill)	

Table 2. Summary of Tube and Bucket Auger Results for Area C (Cottage City Nursery)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	22	1	0-15	10YR 3/3	Silt	Coal and Glass	Disturbed
		2	15-35	10YR 5/6	Sandy Clay	Refusal	

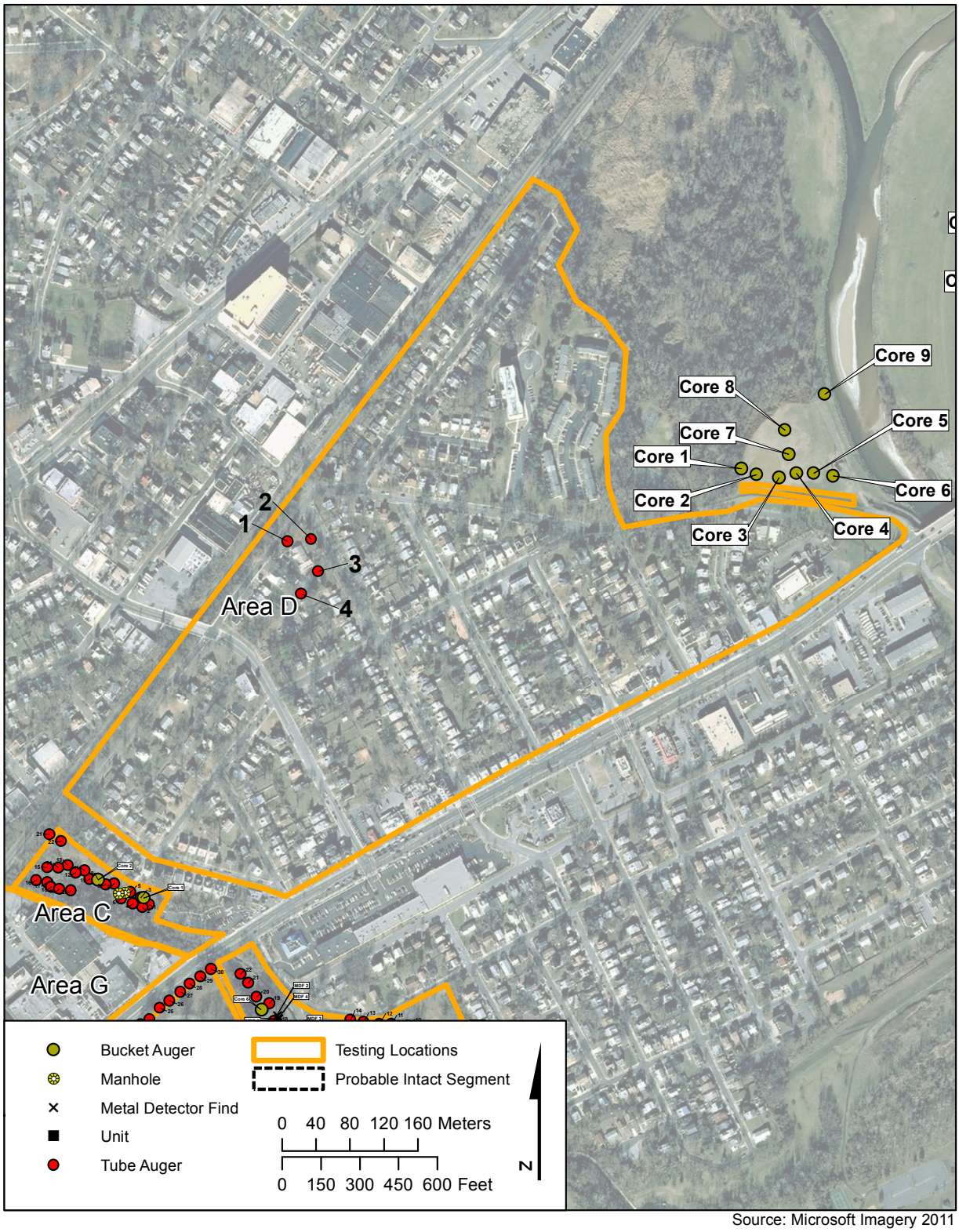
Tube Augers 1-15 were placed on the north side of Dueling Creek proceeding from east to west in two alternating transects. There was slight variation but all of them indicated highly disturbed contexts. In general, profiles consisted of approximately 10-15 centimeters of silt loam directly on top of sandy clay or silty clay subsoil. Refusal was encountered in almost all tests at relatively shallow depths. Auger Tests 3, 13, and 14 had additional layers of loose, unconsolidated material that was easily penetrated. These were interpreted as fill episodes or other disturbed contexts. Toward the western end of this section the slope increases significantly. Auger tests in this area indicated obvious fill deposits that likely resulted from construction of the railroad embankment and stream crossing.

Tube Augers 16-22 were placed on the south side of Dueling Creek from west to east. As noted above, there was very little ground that had not been impacted from fill episodes farther south. Auger Test 18 had a slightly deeper profile that was relatively natural when compared to the others. The remaining tests all showed extensive evidence of modern disturbances. Visual inspection of this area from the parking lot above clearly indicated that modern construction and fill encroached on the original terrain.

AREA D (COTTAGE CITY NEIGHBORHOOD)

Area D (Cottage City Neighborhood) is a largely residential neighborhood with houses, streets, a railroad, and businesses. The density of housing varies from one street to the next with some closer together than others. The goal for this area was to identify specific yards and approach individual property owners to request permission for auger testing. This proved more difficult than expected for two reasons. First, there were fewer areas that seemed suitable for testing. Second, very few residents were at home and available to seek permission. However, one favorable location was identified at the Cottage City Town Hall at the corner of 40th Avenue and Cottage Terrace. This was in the general vicinity of the probable Second American Line, it appeared to be on an original landform, and there was sufficient yard space for multiple tests. Permission was requested and granted, and four tube auger tests were excavated. Investigations in Area D (Cottage City Neighborhood) consisted of judgmental tube auger sampling in selected locations (Figure 9, Table 3).

Figure 9.
Testing Locations in Area D



Source: Microsoft Imagery 2011

Table 3. Summary of Tube Auger Results for Area D (Cottage City Neighborhood)

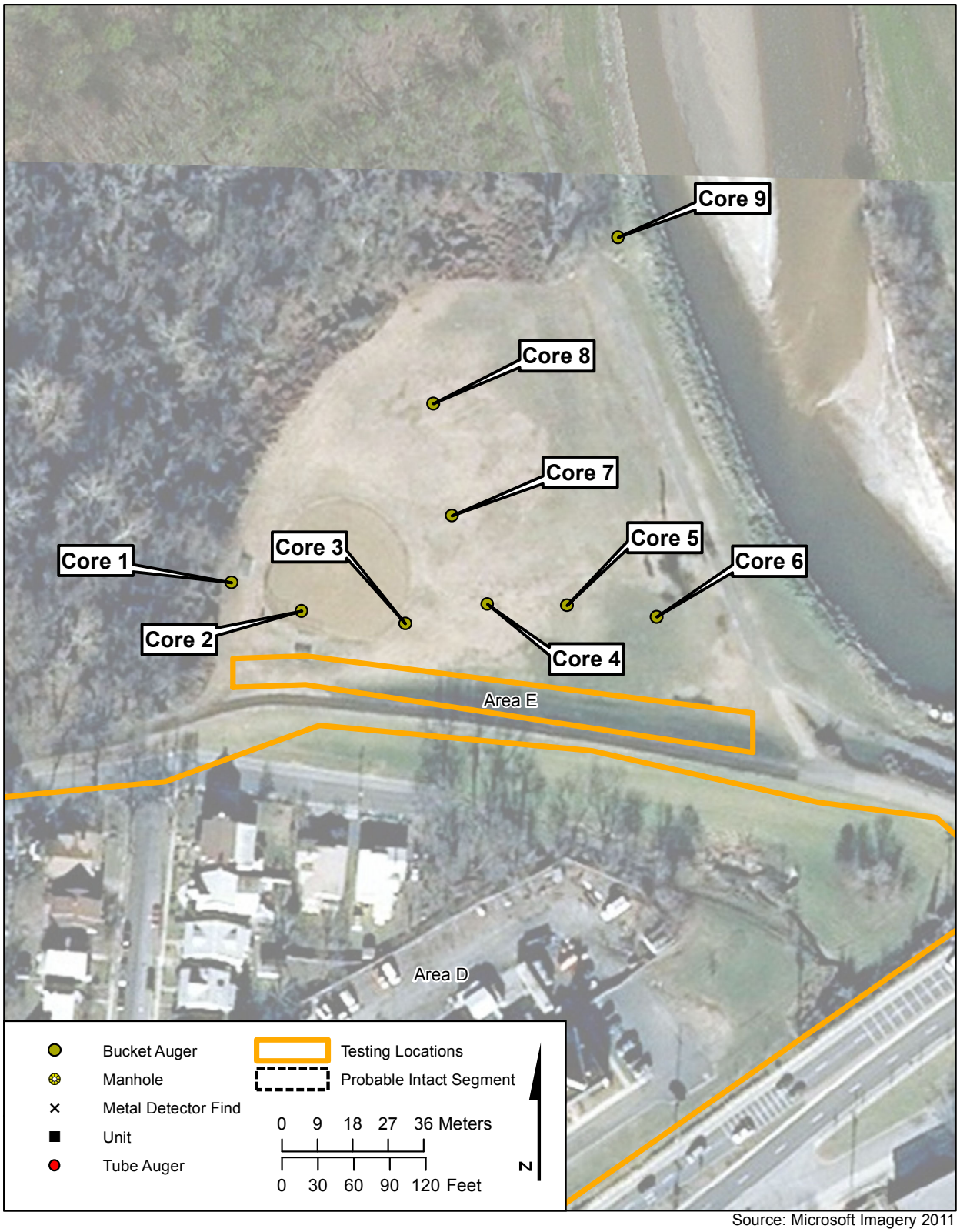
Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	1	1	0-20	10YR 3/3	Loam	Fill	Graded
		2	20-25	10YR 2/2	Fill	Brick, Charcoal	
		3	25-30	5YR 5/6	Sandy Clay	Subsoil	
Tube Auger	2	1	0-5	10YR 3/3	Loam		Graded
		2	5-10	5YR 5/6	Clay	Graded	
Tube Auger	3	1	0-5	10YR 3/3	Loam		Graded
		2	5-9	5YR 5/6	Clay		
		3	9-18	10YR 3/3	Loam		
		4	18-24	5YR 5/6	Clay	Subsoil	
Tube Auger	4	1	0-15	10YR 3/3	Fill	Fill	Graded
		2	15-30	10YR 4/4	Loam		
		3	30-35	7.5YR 5/8	Clay	Subsoil	

Despite the favorable location, the results indicated that this particular area had been extensively graded and modified. All four auger tests indicated shallow loamy deposits, some with construction debris in the matrix, directly on top of sterile clay subsoil. It is hard to infer what the remaining portions of the neighborhood might be like from only one location. However, it seems probable that a large majority of potential test locations have been impacted to a certain extent. The chances of finding intact stratigraphy and landforms is much more difficult through an opportunistic sampling approach. Systematic sampling in multiple yards along a single street or potential contour might be more productive but would require consultation with multiple property owners through formal channels.

AREA E (COTTAGE CITY RECREATIONAL FIELDS)

Area E (Cottage City Recreational Fields) is a large recreational complex with ball fields, trails, and open fields. Investigations here consisted of bucket auger sampling (n=8) (Figure 10, Table 4). Initial investigations focused on a strip of land parallel to an existing trail and adjacent to recreational fields. Modern construction activities have clearly impacted this general area with abundant evidence for stream channelization, bank stabilization, and levees.

Figure 10.
Testing Locations in Area E



Source: Microsoft Imagery 2011

Table 4. Summary of Bucket Auger Results for Area E (Cottage City Recreational Fields)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 1	1	0-5	NA	Grass/Loam		Disturbed
		2	5-40	5YR 4/6	Sandy Loam		
		3	40-45	5YR 4/6	Sandy Loam and Clay	Mottled	
		4	45-65	7.5YR 5/8	Coarse Sand		
		5	65-90	10YR 5/6	Coarse Sand		
		6	90-95	2.5Y2.5	Clay	Gley	
Bucket Auger	Core 2	1	0-8	10YR 6/8	Sand		Disturbed
		2	8-40	10YR 6/8	Silty Sand		
		3	40-65	10YR 6/6	Sand		
		4	65-105	10YR 6/6	Sand	Saturated Wood in Bucket	
		5	105-120	10YR 5/4	Sand		
		6	120-125	10YR 4/4	Sand/Water Table	Plastic Recovered from Bottom	
Bucket Auger	Core 3	1	0-15	10YR 5/3	Silt Loam		Disturbed
		2	15-50	10YR 5/6	Sand	Modern Bottle Glass	
		3	50-60	10YR 6/6	Sand		
		4	60-85	7.5YR 4/6	Sand And Clay	Mottled	
Bucket Auger	Core 4	1	0-10	10YR 3/3	Loam		Disturbed
		2	10-45	10YR 5/8	Sand		
		3	45-55	Gley 4/1	Clay	Solid Clay	
Bucket Auger	Core 5	1	0-5	10YR 3/3	Grass/Loam		Disturbed
		2	5-20	10YR 5/8	Sand		
		3	20-50	10YR 5/3	Silt		
		4	50-60	10YR 6/2	Silt Clay	Highly Mottled, Sterile Subsoil	
Bucket Auger	Core 6	1	0-5	10YR 3/3	Grass/Loam		Disturbed

Table 4. Summary of Bucket Auger Results for Area E (Cottage City Recreational Fields)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
		2	5-60	10YR 3/3	Silt Loam		
		3	60-95	10YR 5/3	Silt	Mottled with Clay Inclusions	
Bucket Auger	Core 7	1	0-8	10YR 3/3	Grass/Loam		Disturbed
		2	8-15	10YR 6/6 And 5YR 5/8	Sand And Clay	Mottled, Fill	
		3	15-60	10YR 5/6	Sand		
		4	60-80	10YR 6/1	Sand And Clay	Water, Cinder Fragment at Bottom	
Bucket Auger	Core 8	1	0-10	10YR 3/3	Grass/Loam		Disturbed
		2	10-15	5YR 4/4	Loamy Sand		
		3	15-75	10YR 6/6	Sand And Clay	Plastic at 50 cm	
		4	75-80	10YR 6/1	Sand And Clay	Water	

Bucket Auger Tests 1-6 were placed parallel to the trail from west to east. Bucket Auger Tests 7 and 8 were subsequently placed northward from the trail in a cruciform pattern. All tests yielded evidence for highly variable and altered deposits that were not consistent with natural/intact stratigraphy. For this reason, there is not a typical profile that is representative of the entire area. All cores showed alternating deposits of coarse sand, mottled clay, and clay. Many of the clay deposits were dark gray in color. Modern debris was found in Cores 2, 3, 7, and 8 at variable depths. Plastic was recovered between 120-125 cmbs in Core 2 and between 15-75 cmbs in Core 8. Cinder fragments were recovered between 60-80 cmbs in Core 7. The water table was encountered at approximately 80 cmbs in Cores 7 and 8 (proceeding north across the recreational fields). Based on these results, it appears that modern construction has significantly altered this section of the landscape. The coarse sandy profiles and alternating clay deposits suggest that the existing material originated as stream deposits, yet they do not represent intact stratigraphy. A large amount of fill has clearly been deposited to create the current grade, but it is not clear if an original land surface is present at greater depths. If so, it is at or below the water table in certain areas.

AREA F (DUELING GROUNDS)

Area F (Dueling Grounds) is located between the northern end of Fort Lincoln Cemetery and a residential neighborhood (Figure 11). This survey location consists of two segments that are separated by 37th Avenue (east and west). The stream has been rerouted into a concrete structure that spans its entire length from under Bladensburg Road to well outside the study area. The widest portion of the floodplain is the eastern section. Tube auger tests were placed systematically and spaced approximately 15 meters apart. Test locations were chosen to intercept the best areas of the floodplain yet far enough from the stream to be outside the area that was disturbed by modern construction (i.e., concrete channel). Investigations in Area F (Dueling Grounds) consisted of tube auger (n=32) and bucket auger sampling (n=6), excavation of a single 50x50 centimeter unit, and limited metal detecting (Table 5, Figure 12).

Table 5. Summary of Tube and Bucket Auger Results for Area F (Dueling Grounds)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 1	1	0-8	10YR 3/3	Silt Loam		Intact
		2	8-80	10YR 5/6	Sandy Clay Loam	Mottled	
Bucket Auger	Core 2	1	0-8	10YR 4/4	Loam		Intact
		2	8-50	5YR 5/8	Sandy Clay Loam		
		3	50-70	5YR 6/8	Silt Loam		
		4	70-105	5YR 5/8	Silt		
Bucket Auger	Core 3	1	0-13	10YR 3/2	Silt Loam		Disturbed
		2	13-40	10YR 4/6	Silty Clay	Brick And Mortar Fragments	
		3	40-50	10YR 4/3	Clay		
		4	50-55	10YR 5/6	Sandy Clay		
Bucket Auger	Core 4	1	0-18	10YR 3/2	Silt Loam		Disturbed
		2	18-40	10YR 6/8	Clay		
Bucket Auger	Core 5	1	0-20	10YR 3/4	Silt Loam		Intact
		2	20-35	7.5YR 5/8	Sandy Clay		
		3	35-50	7.5YR 5/8	Sand		

Table 5. Summary of Tube and Bucket Auger Results for Area F (Dueling Grounds)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
Bucket Auger	Core 6	1	0-14	10YR 3/4	Loam		Disturbed
		2	14-45	10YR 5/6	Sandy Loam		
		3	45-50	10YR 5/6 And 10YR 6/4	Sandy Loam	Highly Mottled	
Tube Auger	1	1	0-5	10YR 3/2	Silt Loam		Disturbed
		2	5-40	10YR 5/6	Sandy Silt		
Tube Auger	2	1	0-8	10YR 3/3	Silt		Disturbed
		2	8-16	10YR 4/6	Sily Clay	Refusal	
Tube Auger	3	1	0-5	10YR 4/3	Silt Loam		Disturbed
		2	5-9	10YR 4/6	Silt Loam		
		3	9-20	7.5YR 5/8	Sandy Silt	Refusal	
Tube Auger	4	1	0-9	10YR 3/3	Silt		Disturbed
		2	9-35	10YR 3/4	Silt		
		3	35-40	5YR 4/6	Clay		
Tube Auger	5	1	0-3	10YR 3/2	Silt Loam		Disturbed
		2	3-12	10YR 5/8	Silty Sand	Refusal	
Tube Auger	6	1	0-5	10YR 3/4	Silt		Disturbed
		2	5-15	10YR 4/6	Silt Clay	Refusal	
Tube Auger	7	1	0-7	10YR 3/4	Silt Loam		Disturbed
		2	7-16	10YR 3/3	Silt Loam	Mottled	
		3	16-80	7.5YR 5/8	Silty Clay Loam	Very Soft, Likely Redeposited	
Tube Auger	8	1	0-10	10YR 3/3	Loam		Disturbed
		2	10-17	10YR 4/6	Silt		
		3	17-23	10YR 3/6	Silt		
		4	23-30	7.5YR 5/6	Clay		
		5	30-73	10YR 3/8	Silt		
		6	73-83	7.5YR 5/6	Silty Clay	Subsoil	
Tube Auger	9	1	0-5	10YR 3/2	Silt Loam		Disturbed
		2	5-12	10YR 3/4	Silt Loam	Refusal (Root)	
Tube Auger	10	1	0-10	10YR 3/4	Silt		Disturbed
		2	10-15	10YR 6/6	Silt	Refusal	
Tube Auger	11	1	0-5	10YR 3/3	Silt Loam		Disturbed
		2	5-15	7.5YR 4/6	Sandy Loam		

Table 5. Summary of Tube and Bucket Auger Results for Area F (Dueling Grounds)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
		3	15-25	7.5YR 5/4	Clay	Subsoil	
Tube Auger	12	1	0-8	10YR 3/4	Sandy Silt		Disturbed
		2	8-44	10YR 6/6	Sand	Refusal	
Tube Auger	13	1	0-4	10YR 3/1	Loam		Disturbed
		2	4-13	10YR 5/3 And 7.5YR 5/6	Clay	Subsoil	
Tube Auger	14	1	0-5	10YR 3/4	Silt		Disturbed
		2	5-23	10YR 6/6	Sand		
		3	23-32	7.5YR 4/6	Clay	Subsoil	
Tube Auger	15	1	0-7	10YR 3/3	Silt Loam		Disturbed
		2	7-10	10YR 4/6	Sandy Clay	Subsoil	
Tube Auger	16	1	0-8	10YR 3/4	Silt		Disturbed
		2	8-13	10YR 4/4	Silt		
		3	13-32	10YR 5/8	Sand		
Tube Auger	17	1	0-10	10YR 4/4	Silt		Disturbed
		2	10-12	10YR 6/8	Sandy Silt	Refusal	
Tube Auger	18	1	0-15	10YR 3/4	Silty Sand		Disturbed
		2	15-25	10YR 5/8	Sandy Clay	Subsoil	
Tube Auger	19	1	0-5	10YR 3/4	Loam		Disturbed
		2	5-8	7.5YR 5/6	Sandy Silt	Refusal	
Tube Auger	20	1	0-5	10YR 3/3	Loam		Disturbed
		2	5-25	2.5Y4/4	Clay	Subsoil	
Tube Auger	21	1	0-4	10YR 3/4	Sandy Clay Loam		Disturbed
		2	4-14	10YR 4/6	Sandy Clay	Refusal	
Tube Auger	22	1	0-10	10YR 3/3	Loam		Disturbed
		2	10-25	10YR 5/8	Sandy Clay		
Tube Auger	23	1	0-12	1oYR 3/4	Silt Loam		Disturbed
		2	12-20	10YR 5/8	Sandy Clay	Refusal	
Tube Auger	24	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-32	10YR 4/6	Silty Clay	Refusal	
Tube Auger	25	1	0-13	10YR 4/4	Sandy Silt		Intact

Table 5. Summary of Tube and Bucket Auger Results for Area F (Dueling Grounds)

Method	Test ID	Stratum	Depth (Cmbs)	Munsell	Texture	Notes	Assessment
		2	13-35	10YR 5/8	Sandy Clay Loam	Refusal	
Tube Auger	26	1	0-10	10YR 3/4	Sandy Clay		Intact
		2	10-30	10YR 4/6	Clay	Refusal	
Tube Auger	27	1	0-12	10YR 3/3	Silt Loam		Intact
		2	12-40	10YR 4/6	Sandy Silt	Refusal (Root)	
Tube Auger	28	1	0-10	10YR 3/4	Silt		Intact
		2	10-65	10YR 4/6	Sandy Clay		
Tube Auger	29	1	0-10	10YR 4/3	Sandy Loam		Intact
		2	10-60	10YR 6/8	Sandy Silt		
Tube Auger	30	1	0-10	10YR 3/4	Sand		Intact
		2	10-32	10YR 4/6	Sand		
		3	32-55	10YR 6/6	Silt Clay		
Tube Auger	31	1	0-10	10YR 4/2	Loam		Intact
		2	10-39	2.5Y5/3	Silt		
		3	39-59	10YR 5/8	Sandy Silt		
Tube Auger	32	1	0-12	10YR 3/4	Sand		Intact
		2	12-34	10YR 4/6	Sand		
		3	34-55	10YR 6/4	Clay		

Tube Auger Tests 1-14 were placed in the eastern section on the north side of Dueling Creek. A typical profile (Auger Test 6) consisted of silt loam (0-5 cmbs) and silty clay (5-15 cmbs) subsoil. Slight variations were noted among different tests but the overall stratigraphy was fairly consistent. Supplemental bucket auger tests (Bucket Auger Tests 1-4) were also placed in this area. Cores 1 and 2 along the far eastern end had deeper profiles that suggested intact deposits below the upper 20 centimeters (although likely very old geologically and pre-dating the 1814 surface). Cores 3 and 4 were shallower and more consistent with the tube auger. Overall, these data suggest that the upper portions of the profile have been impacted through erosion and construction activities. Lower and deeper segments are likely intact in certain locations but are not expected to be associated with the battlefield because of their geologic age. In short, these areas appear to represent the lower (and geologically older) segments of truncated soil profiles.

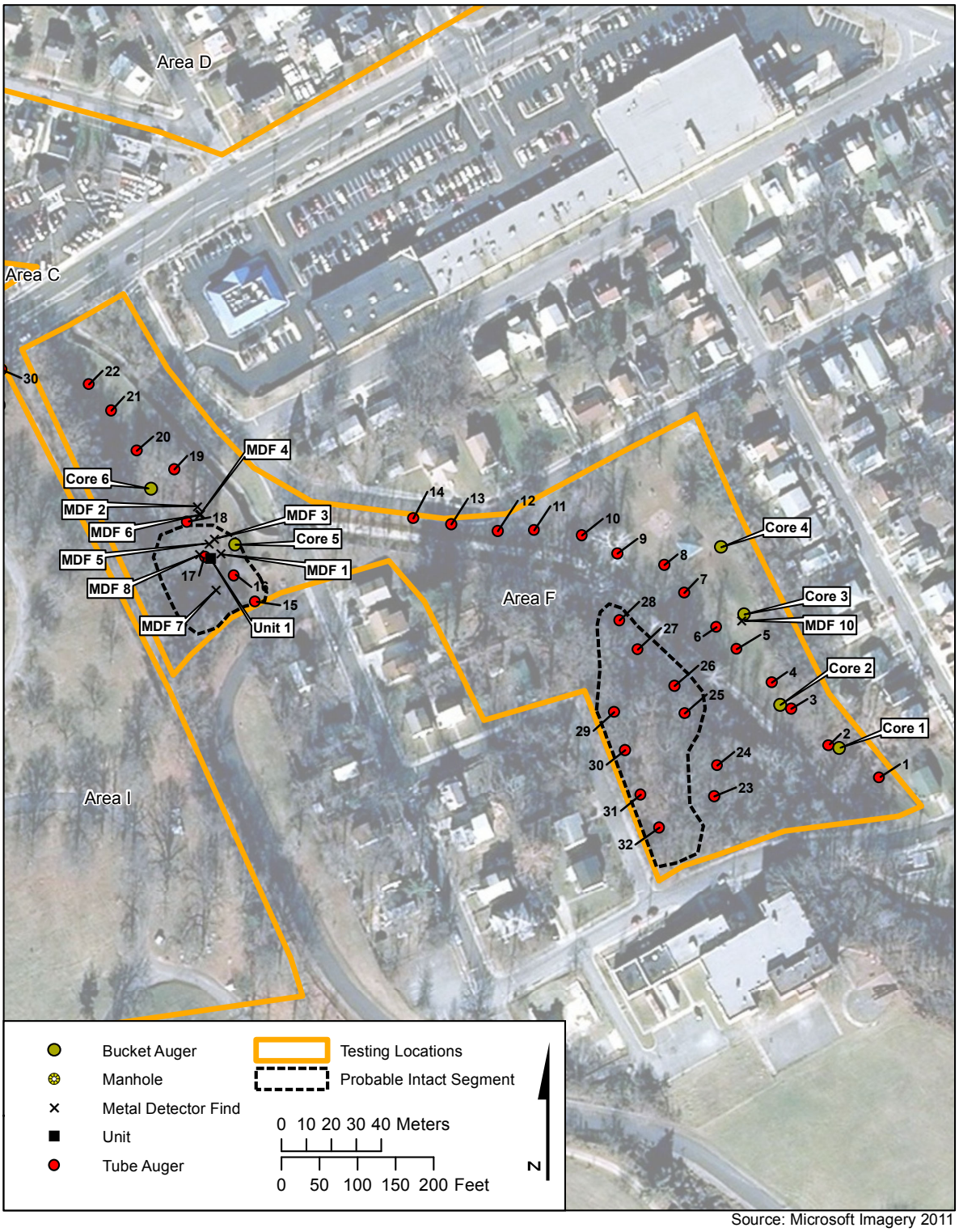
Figure 11.
Photographs Showing General Conditions in Area F (Dueling Grounds)

A. Looking West

B. Looking East

C. Looking North

Figure 12.
Testing Locations in Area F



Source: Microsoft Imagery 2011

Tube Auger Tests 15-22 were placed in the western section on the south side of Dueling Creek, closest to Bladensburg Road. A typical profile (Auger Test 18) consisted of silt loam (0-15 cmbs) and sandy clay subsoil (15-25 cmbs). Minor variations were noted that appeared to be localized. In general, the profiles are relatively shallow. Supplemental bucket auger tests (Bucket Auger Tests 5 and 6) were placed to provide additional resolution on subsurface deposits. Both of these were terminated at approximately 50 centimeters and the resulting profiles showed additional evidence for disturbances.

A single 50x50-centimeter excavation was placed near the base of the slope. Formal excavation was terminated at approximately 30 cmbs and a bucket auger test was placed in the center to a depth of approximately 70 cmbs. Four strata were identified (Figure 13). Stratum I was defined as a very dark grayish brown (10YR 3/2) silt loam from 0-11 cmbs. Stratum II was defined as strong brown (7.5YR 5/8) silt loam that varied from 10-20 cmbs. Stratum III was defined as a brownish yellow (10YR 6/6) and strong brown (7.5YR 5/8) silt loam that varied from 17-60 cmbs. Stratum IV was defined as a light gray (10YR 7/2) silt between 60-70 cmbs. In general, the boundaries between each stratum are subtle and gradual, with the exception of Strata III and IV. This profile is interpreted as representing natural soil development with little to no modification.

Tube Auger Tests 23-32 were placed in the eastern section on the south side of Dueling Creek. This area is characterized by a narrow floodplain and relatively high embankment. Tests 23-28 in the floodplain section were slightly deeper and had better developed profiles than those on the north side of the creek, suggesting that fewer impacts may have occurred. Specifically, Tests 25-28 were interpreted as having intact deposits that may have been visible in 1814. Tests 29-32 were placed on top of the embankment. Despite the presence of abundant trash this appeared to be an original landform with little to no alteration. The auger tests in this location yielded deeper, stronger, and better developed soil profiles up to 55-60 cmbs. These were interpreted as intact deposits.

Systematic metal detecting was conducted in the eastern and western sections to test specific areas where the original 1812 surface was suspected of being at or near the surface. High frequencies of modern trash were noted in both areas, including coins, pull tabs, and cans. The sheer volume of these made detecting very slow and tedious because many of these items have signals that are similar to battle-related artifacts. Nine metal detector finds were recorded and collected in the field. However, once they were cleaned and analyzed, none of these were clearly associated with the battle. They included artifacts such as a brass drawer pull (MDF 10—not collected), unidentified iron (MDF 1, 3, and 8), iron stove parts (MDs 2 and 6), an iron kettle fragment (MDF 4), an unidentified brass ring (MDF 5), a brass hose cap, and a steel ball bearing (MDF 7) (Figure 14). Results of the metal detector survey in these areas suggest that battle-related artifacts, even if present, would be difficult to identify given the amount of modern trash and possible artifacts from the Civil War era.

Unit 2
South Profile

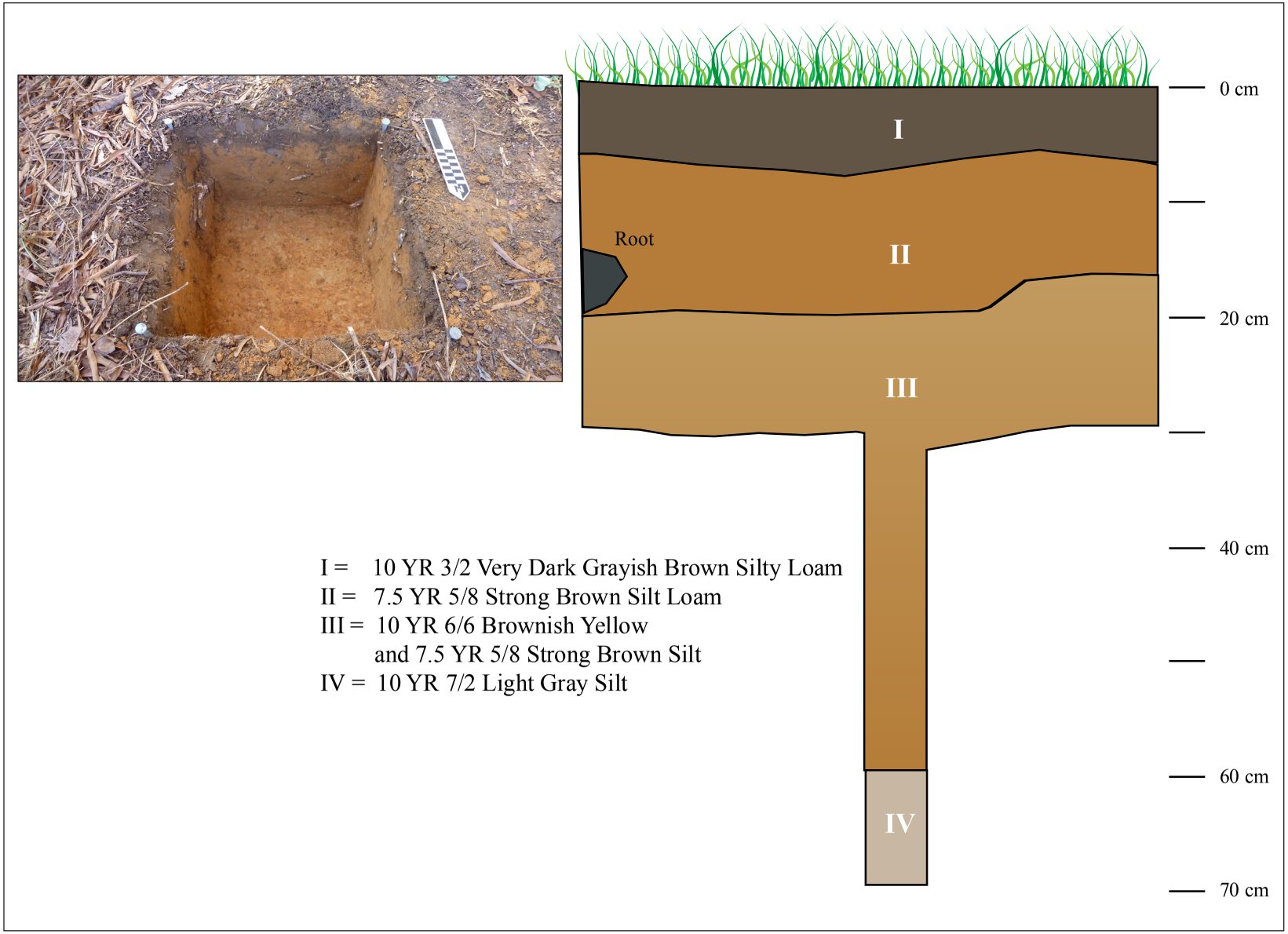
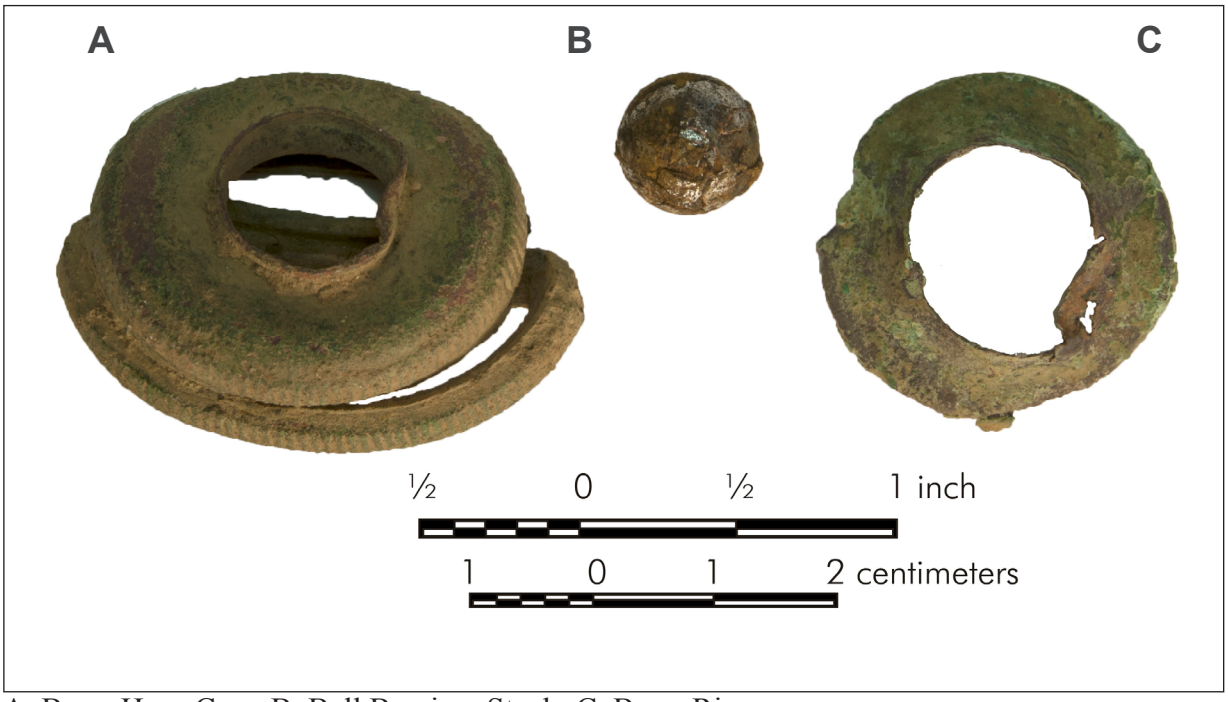


Figure 13.
Profile and Photograph of Unit 2 in Area F (Dueling Grounds)

Figure 14.
Photographs of Selected Artifacts Recovered by Metal Detector Survey in Area F
(Dueling Grounds)



A. Brass Hose Cap; B. Ball Bearing, Steel; C. Brass Ring

A. Kettle/Pot Fragment; B. Stove Part; C. Stove Part

AREA G (INDUSTRIAL)

Area G (Industrial) is bounded on the east by Bladensburg Road, on the west by an active railroad, on the north by Dueling Creek, and on the south by Eastern Avenue Northeast (Figure 15). The overwhelming majority of this area has been severely impacted and altered from modern construction. Investigations in Area G (Industrial) consisted of tube auger sampling (n=8) (Table 6, Figure 16).

Table 6. Summary of Tube Auger Results for Area I (Industrial)

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	1	1	0-20	10YR 3/3	Loam		Disturbed
		2	20-25	10YR 5/6	Sandy Clay	Graded, Subsoil	
Tube Auger	2	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-25	10YR 5/6	Clay	Graded, Subsoil	
Tube Auger	3	1	0-10	10YR 3/3	Loam		Disturbed
		2	10-45	10YR 5/6	Sandy Clay	Graded, Subsoil	
Tube Auger	4	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-45	10YR 5/6	Sandy Clay	Graded, Subsoil	
Tube Auger	5	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-70	10YR 5/6	Sandy Clay	Graded, Subsoil	
Tube Auger	6	1	0-4	10YR 3/3	Loam		Disturbed
		2	4-20	7.5YR 5/8	Clay	Graded, Subsoil	
Tube Auger	7	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-25	7.5YR 5/6	Sandy Clay	Graded, Subsoil	
Tube Auger	8	1	0-10	10YR 3/3	Loam		Disturbed
		2	10-15	7.5YR 5/6	Sandy Clay	Graded, Subsoil	

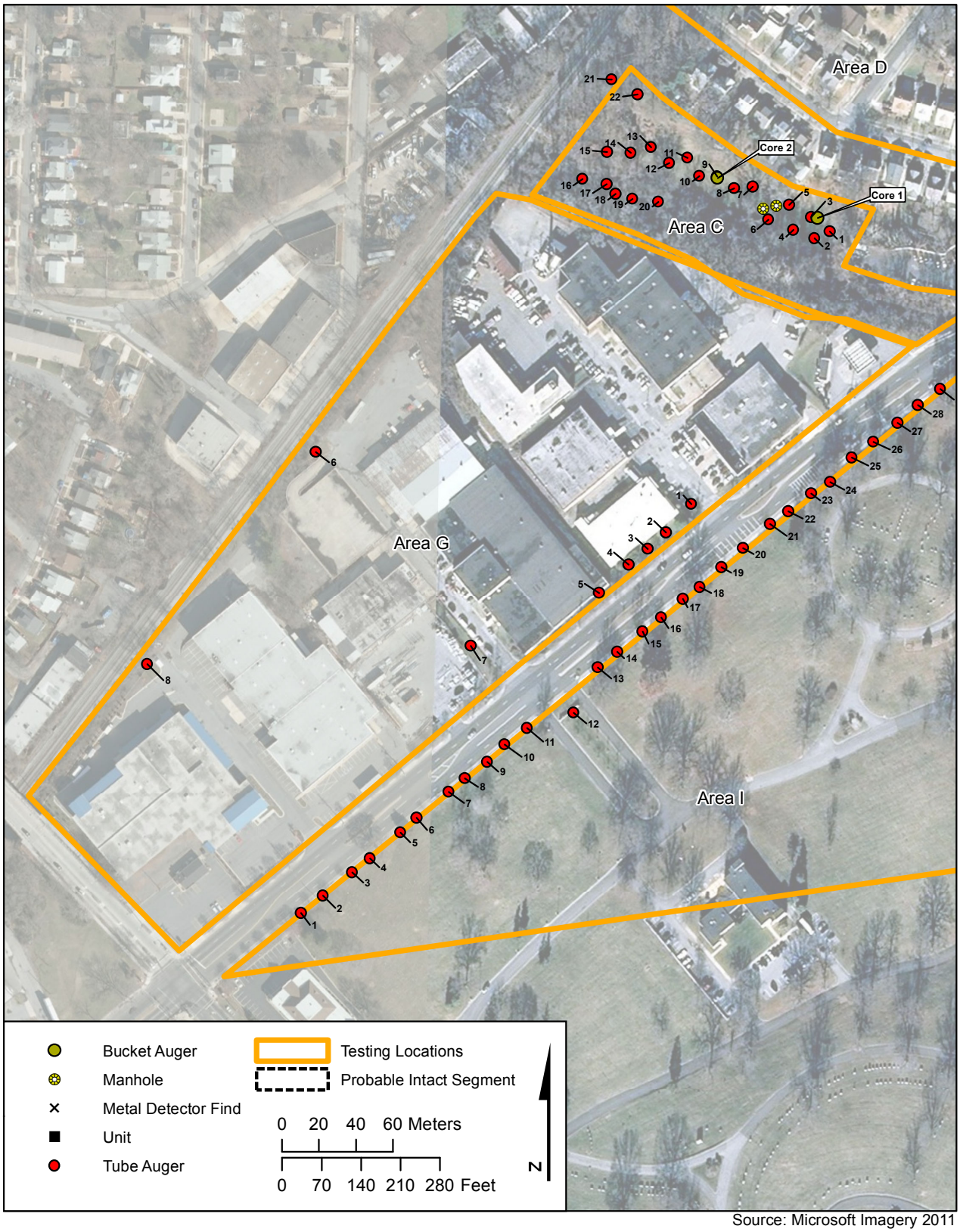
Auger test locations were selected judgmentally as specific areas could be identified. Without exception, all auger tests revealed evidence for extensive grading. A typical profile (Auger Test 1) consisted of loam (0-20 cmbs) directly on top of sterile clay subsoil (20-25 cmbs). This area has virtually no potential for intact landforms or deposits related to the battle.

Figure 15.
Photographs Showing General Conditions in Area G (Industrial)

A. Looking West

B. Looking North

Figure 16.
Testing Locations in Area G



Source: Microsoft Imagery 2011

AREA I (FORT LINCOLN CEMETERY)

Area I (Fort Lincoln Cemetery) is an active, well maintained, perpetual care cemetery with manicured grass (Figure 17). Investigations here consisted of tube auger sampling (Table 7, Figure 18).

Table 7. Summary of Tube Auger Results for Area I (Fort Lincoln Cemetery).

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	1	1	0-8	10YR 3/3	Silt Loam		Disturbed
		2	8-12	5YR 5/6	Clay	Graded, Subsoil	
Tube Auger	2	1	0-8	10YR 4/3	Loam		Disturbed
		2	8-15	7.5YR 5/8	Clay	Subsoil	
Tube Auger	3	1	0-15	10YR 3/3	Silt Loam		Disturbed
		2	15-30	10YR 4/4	Sandy Silt	Refusal	
Tube Auger	4	1	0-15	10YR 3/4	Loam		Disturbed
		2	15-35	7.5YR 5/8	Clay	Subsoil	
Tube Auger	5	1	0-10	10YR 3/3	Silt Loam		Intact
		2	10-15	10YR 4/6	Sandy Loam		
		3	15-35	7.5YR 5/6	Sandy Clay		
Tube Auger	6	1	0-20	10YR 3/3	Loam		Disturbed
		2	20-30	7.5YR 5/8	Clay	Subsoil	
Tube Auger	7	1	0-10	10YR 3/3	Silt Loam		Disturbed
		2	10-20	10YR 3/3 and 75.YR 5/6	Silt Loam	Mottled	
		3	20-25	7.5YR 5/6	Clay	Graded	
Tube Auger	8	1	0-15	10YR 3/3	Loam		Intact
		2	15-32	10YR 4/4	Sand		
		3	32-45	7.5YR 5/8	Clay	Subsoil	
Tube Auger	9	1	0-10	10YR 3/3	Silt Loam		Disturbed
		2	10-25	7.5YR 5/6	Clay	Graded	
Tube Auger	10	1	0-32	10YR 3/3	Sand		Intact
		2	32-48	10YR 5/8	Sandy Clay	Subsoil	
Tube Auger	11	1	0-12	10YR 3/3	Silt Loam		Disturbed
		2	12-22	7.5YR 5/6	Clay	Graded	
Tube Auger	12	1	0-15	10YR 3/3	Loam		Disturbed
		2	15-32	10YR 5/8	Clay	Subsoil	

Table 7. Summary of Tube Auger Results for Area I (Fort Lincoln Cemetery).

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	13	1	0-10	10YR 3/3	Silt Loam		Disturbed
		2	10-14	5YR 5/6	Silty Clay Loam	Mottled	
		3	14-20	5YR 5/6	Clay		
		4	20-24	2.5Y5/6	Sandy Clay	Graded	
Tube Auger	14	1	0-32	10YR 3/4	Sandy Clay		Intact
		2	32-55	10YR 5/8	Sandy Clay	Subsoil	
Tube Auger	15	1	0-12	10YR 3/3	Silt Loam		Disturbed
		2	12-25	10YR 5/8	Silt Clay	Graded	
Tube Auger	16	1	0-25	10YR 3/3	Sandy Loam		Intact
		2	25-32	10YR 4/4	Sand		
		3	32-40	10YR 5/8	Clay	Subsoil	
Tube Auger	17	1	0-10	10YR 3/3	Silt Loam		Disturbed
		2	10-13	10YR 5/8	Sandy Clay	Graded	
Tube Auger	18	1	0-3	10YR 3/3	Silt		Disturbed
		2	3-20	10YR 5/2	Silt Clay	Subsoil	
Tube Auger	19	1	0-40	10YR 3/3	Loam		Disturbed
		2	40-50	10YR 5/6	Sandy Clay	Slopewash In Depression	
Tube Auger	20	1	0-10	10YR 3/3	Silt		Disturbed
		2	10-25	10YR 4/4	Sandy Clay	Subsoil	
Tube Auger	21	1	0-12	10YR 3/3	Loam		Disturbed
		2	12-21	2.5Y5/6	Sandy Clay	Graded	
Tube Auger	22	1	0-10	10YR 3/3	Silty Sand		Disturbed
		2	10-32	10YR 4/4	Silty Clay	Subsoil	
Tube Auger	23	1	0-12	10YR 3/3	Loam		Disturbed
		2	12-27	2.5Y5/6 and 7.5YR 5/6	Sandy Clay	Graded	
Tube Auger	24	1	0-10	10YR 3/3	Silt		Disturbed
		2	10-22	7.5YR 5/8	Clay	Subsoil	

Table 7. Summary of Tube Auger Results for Area I (Fort Lincoln Cemetery).

Method	Test ID	Stratum	Depth (cmbs)	Munsell	Texture	Notes	Assessment
Tube Auger	25	1	0-20	10YR 3/3	Loam		Disturbed
		2	20-25	7.5YR 5/6	Sandy Clay	Graded	
Tube Auger	26	1	0-10	10YR 3/3	Silt		Disturbed
		2	10-32	7.5YR 5/8	Clay	Subsoil	
Tube Auger	27	1	0-40	10YR 3/3	Loam		Disturbed
		2	40-50	7.5YR 5/6	Sandy Clay	Very Soft	
Tube Auger	28	1	0-15	10YR 3/4	Loam		Disturbed
		2	15-32	7.5YR 5/8	Clay	Subsoil	
Tube Auger	29	1	0-50	10YR 3/4	Loam		Disturbed
		2	50-55	7.5YR 5/6	Sandy Clay	Fill	
Tube Auger	30	1	0-38	10YR 4/4	Fill		Disturbed
		2	38-44	7.5YR 5/8	Clay	Subsoil	

Tube augers were placed immediately inside the iron fence oriented parallel to Bladensburg Road. Spacing was approximately 15 meters apart to ensure adequate coverage along the full length of road frontage. Of the 30 tests, only five showed evidence of intact stratigraphy. Even in those cases, the profiles were relatively compressed. A typical profile (Auger Test 5) consisted of silt loam (0-10 cmbs), sandy loam (10-15 cmbs), and sandy clay (15-35 cmbs).

There is no clear patterning to the physical locations of these tests except in a broad sense. Auger tests with intact stratigraphy tend to be limited to southwest portion of this particular survey area.

The remaining 25 tests revealed strong evidence for grading and/or removal of original land surfaces along the northwest boundary of the cemetery. Profiles tended to consist of approximately 10-15 centimeters of loam directly on sandy clay/clay subsoil. Overall, these results fit with descriptions of construction activities as noted by Ervin (2011), particularly at the southwest portion of the survey area (near the existing funeral home structure) and in the central portion of the survey area, on both sides of the main cemetery entrance road. Investigations by SHA in 2009 and 2010 (Ervin 2011) found buried land surfaces farther away from Bladensburg Road (roughly perpendicular to Tube Auger 5, about 65 meters southeast of Bladensburg Road). They also found that the terrain in the northernmost section of the cemetery (called "Acacia Circle") appears to be approximately at its original grade, although it has been mostly disturbed by cemetery interments.

Figure 17.
Photographs Showing General Conditions in Area I (Fort Lincoln Cemetery)

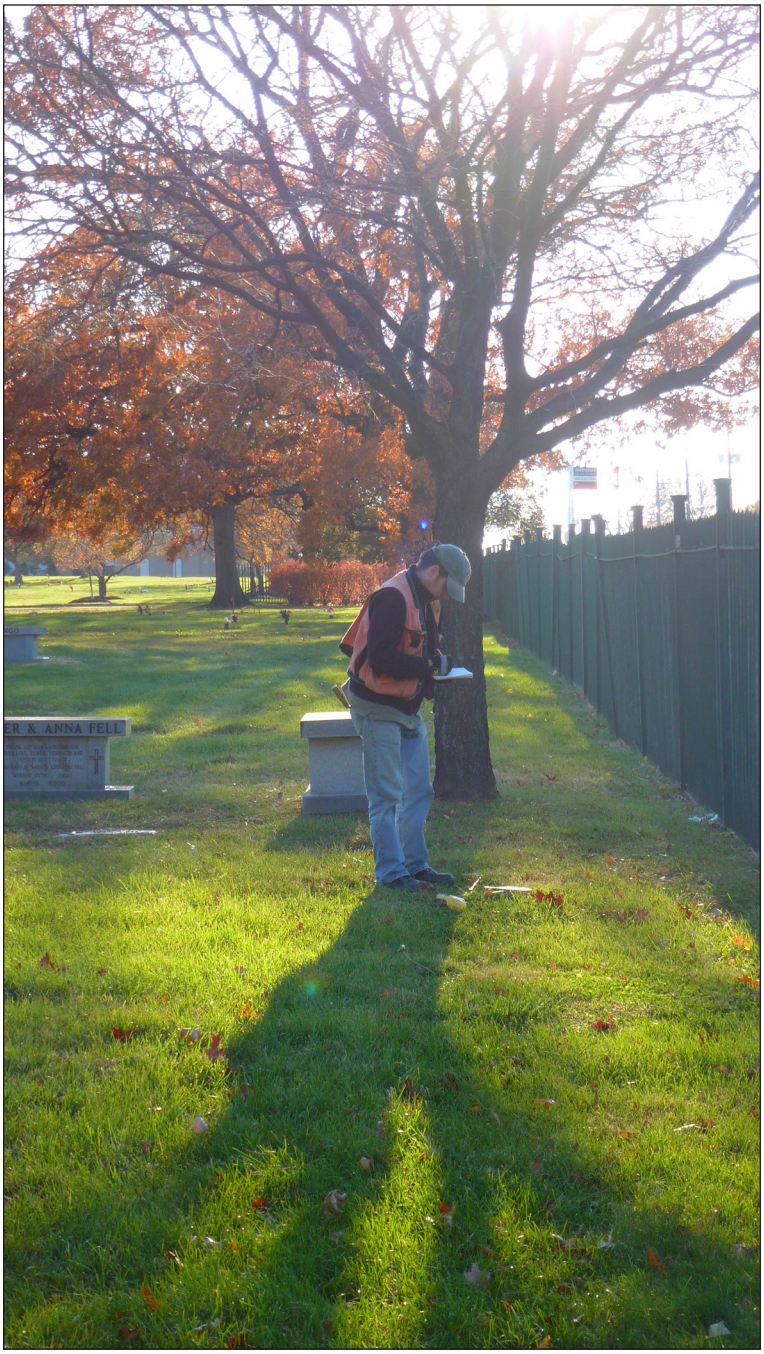
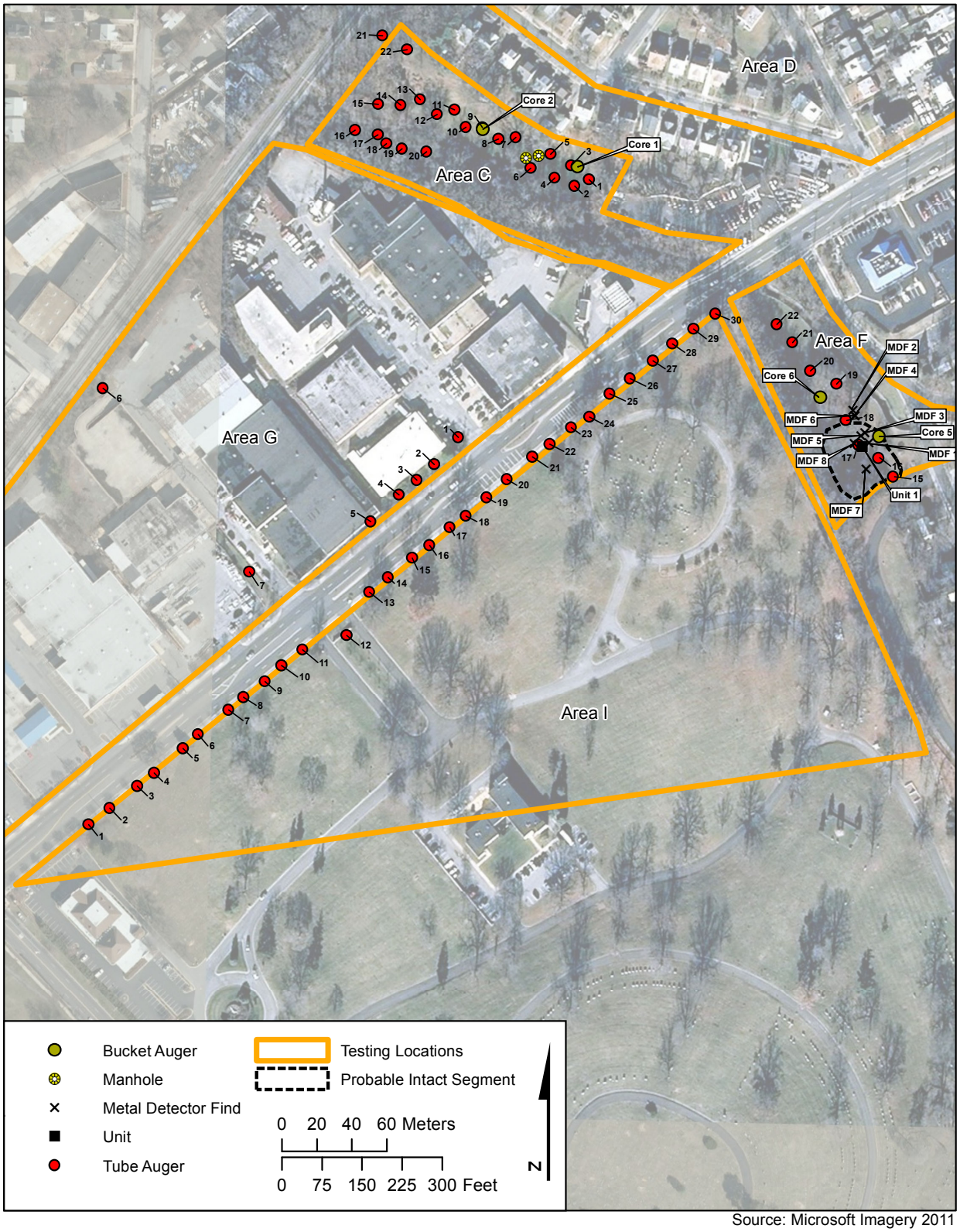


Figure 18.
Testing Locations in Area I (Fort Lincoln Cemetery)



Source: Microsoft Imagery 2011

DISCUSSION AND RECOMMENDATIONS

Despite high expectations, physical integrity of the current study locations is fair to poor with only minor and highly localized exceptions. Historic and modern development (residential and commercial) has severely impacted the original battlefield. Although certain undeveloped areas remain, they, too, have been affected. A wide range of impacts have occurred, including erosion, deposition from fill, grading, stream stabilization, and general construction.

Area B (Washington House) represents the best area with the potential for intact deposits that might contain artifacts or features. Historic and modern alluvium appears to have capped at least portions of earlier landforms. A large portion of this area is heavily wooded and the remaining portion is open public park. This area is interpreted as having moderate to good integrity.

Area F (Dueling Grounds) represents the next best area for potentially intact deposits, although on a very limited scale. Specifically, the area at the foot of the hill in the western section appears to have good soil profiles and the embankment along the southern edge of the eastern section is unaltered. Both of these areas are very small and constricted by modern landscape features. Because of their small size the probability of locating or identifying battle-related artifacts and features is low, particularly given the amount of modern trash.

The single area that was tested within Area D (Cottage City Neighborhood) was found to be disturbed, although intact deposits cannot be ruled out within the greater neighborhood. Despite extensive residential development, intact landforms or soils may still be present in areas not impacted by residential, road, or utility construction. Possible approaches to identifying intact areas might include public notices requesting information or input regarding artifacts in private collections as well as developing a systematic sampling strategy in consultation with specific property owners to assess their lots.

Areas C (Cottage City Nursery), G (Industrial), and I (Fort Lincoln Cemetery) all have little to no potential for intact deposits related to the battle. Physical condition in these areas has been impacted to such an extent that original landforms have either been removed or buried under modern construction.

No new defining features were identified and no changes to the battlefield study area, core area, or POTNR are recommended at this time as a result. The battlefield has been altered by a variety of modern activities (primarily twentieth century), including residential and commercial development, transportation upgrades, stream channelization, Army Corps of Engineers dredging, railroad construction and maintenance, and erosion. Despite the extent of these disturbances, two isolated areas were identified that appear to have good integrity. In addition,

there are other areas not investigated by the current study that may have potential for intact deposits.

The presence of archeological data (e.g., artifacts, features, graves, fortifications) related to the battle would make a significant contribution to NRHP eligibility. Potential research questions under Criterion D that might be addressed based in part on the current work include the following:

> How does the modern landscape relate to the landscape at the time of the battle?
>
> How can archeological artifact distributions contribute to an understanding of troop positions and movements during the Battle of Bladensburg? For example, are there archeological deposits present within the Fort Lincoln property in that might indicate Barney or Beall's positions along the third American line?
>
> Are intact deposits or discernible artifact scatters related to the battle present within the Cottage City Neighborhood that might provide information about the exact locations of the second American line or the advancing British lines?
>
> Are there intact artifact scatters or features related to the battle in the area behind the Washington House, which appears to retain integrity?
>
> Are there graves of British enlisted men along Bladensburg Road as indicated in historic documents? Is a mass grave of British officers present near Dueling Creek (possibly north of Bladensburg Road on what would later become the Rives' property)? If present, what can the nature of the graves tell us about the events immediately following the battle? If found, what do the graves indicate about the age, health, clothing, and weaponry of the soldiers?
>
> As the Battle of Bladensburg was predominantly fought by Maryland militiamen, what information do the artifacts from the battlefield suggest about the military history of Maryland, including militia attire, weaponry, and equipment?

SUMMARY

New South Associates conducted limited archeological testing of seven locations associated with the Bladensburg Battlefield (ABPP designation MD403). This study was focused primarily on evaluating the archeological integrity of these locations through identification of original landforms, soils, and surfaces associated with the battle. Results indicate significant alterations to the landscape from a variety of modern activities. However, two isolated areas were identified

that appear to have good physical integrity. Although relatively small compared to the scale of the overall battle, these locations suggest additional localized pockets may exist with archaeological potential.

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