PHASE I ARCHAEOLOGICAL IDENTIFICATION INVESTIGATIONS
MANAGEMENT SUMMARY
BLUE BALL PROPERTIES AREA TRANSPORTATION IMPROVEMENT PROJECT
PROPOSED ROUTE 141 SPUR
BRANDYWINE HUNDRED, NEW CASTLE COUNTY, DELAWARE

By

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and

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Director of Planning

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I. Introduction

The Federal Highway Administration (FHWA) and the Delaware Department of Transportation (DelDOT) are developing the proposed Blue Ball Properties Area Transportation Improvement Project. The project is located in Brandywine Hundred, New Castle County, Delaware and involves improvements to the intersections of existing Route 202 with Route 141, Murphy Road, Rockland Road and Foulk Road and the interchange between Route 202 and Interstate 95. The results of the Phase I Archaeological Identification Survey for the Proposed Route 141 Spur, a component of the Blue Ball Properties Area Transportation Improvement Project, are discussed in this document ***(Figure 1)***.

The Nemours Historic District dominates the area on the west side of Concord Pike and consists of the A.I. DuPont Institute, mansion and gardens; the Murphy House; the Bird-Husbands House and the Blue Ball Barn. Although not included in the district, the DuPont Experimental Station and the DuPont Country Club are situated nearby. Municipal sites in the project area are the Porter Reservoir and Filtration Plant and the Rock Manor (public) Golf Course. Residential development in the area consists of Deerhurst, Fairfax, Alapocas and Rock Manor subdivisions. In addition, there are several strip malls to accommodate the suburban community. This area is a suburb of Wilmington.

The project must be in compliance with Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's (ACHP's) implementing regulations, 36 CFR § 800. McCormick, Taylor & Associates, Inc (MTA) is completing the cultural resources work.

MTA is currently completing a survey of all historic architectural resources and archaeological resources within the area of potential effect (APE) for this project, in consultation with DelDOT, FHWA, the Delaware State Historic Preservation Officer (SHPO), and additional Consulting Parties. The APE has been previously established (Shaffer and Arnold 2000). The survey of historic architectural resources (Arnold 2000) is currently being reviewed by the Consulting Parties. A Phase I Archaeological Identification Survey is being completed. Three archaeological sites have been identified that require Phase II Archaeological Evaluation Testing: 7NC-B-11, the Weldin Plantation Site, previously identified by Thunderbird Archeological Associates, Inc. (Taylor et al. 1989), 7NC-B-49, the Augustine Cutoff Site, previously identified by Thunderbird Archeological Associates, Inc. (Wholey et al. 2000) and 7NC-B-54, the Milner #1 Site, previously identified by John Milner Associates, Inc. (JMA) (Roberts 1999). The goal of the additional testing is to provide enough information to determine if these sites are eligible for inclusion in the National Register of Historic Places.

The Principal Investigator for the Archaeological Identification and Evaluation Testing was Barbara Shaffer. Richard Baublitz, MTA's Pennsylvania Archaeological Group Coordinator, provided technical assistance and participated in the field work. Robert Eiswert was the Archaeological Field Director. Macon Coleman, Scott Emory, and Jonathan Bream were Archaeological Field Technicians and served as Field Supervisors when necessary. Additional Archaeological Field Technicians were Elise Alexander, Brenda Carr, and Kathryn Ersoz.

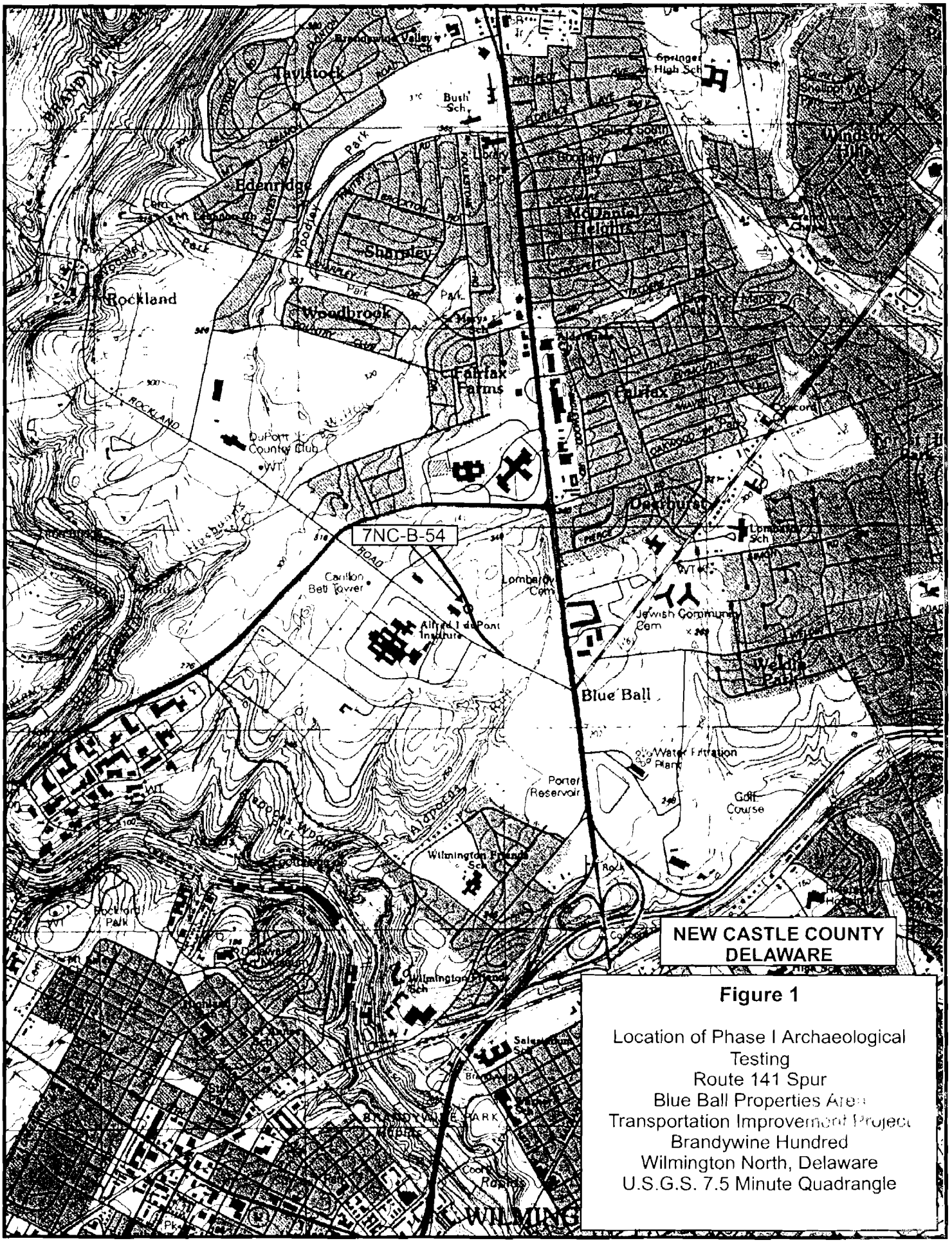


Figure 1

Location of Phase I Archaeological Testing
Route 141 Spur
Blue Ball Properties Area
Transportation Improvement Project
Brandywine Hundred
Wilmington North, Delaware
U.S.G.S. 7.5 Minute Quadrangle

Graphics were produced by Jennifer Dolan, John Schwab, Charles Kumpas, and Ryan Akins. Qualifications of key personnel are in ***Appendix A***.

The results of the Phase I Archaeological Identification Survey for the Route 141 Spur are discussed in this management summary. Summaries of the Phase I Archaeological Identification Survey for the remainder of the Blue Ball Properties Area Transportation Improvement Project and for the Phase II Archaeological Evaluation Testing will be presented in separate documents. A final Phase I/II Archaeological Identification and Evaluation Report will be prepared once all of the archaeological testing for the project has been completed.

II. Archaeological Survey Methodology

A. Previous Archaeological Testing

The Phase I Archaeological Survey was conducted in the area to be impacted by the proposed Route 141 Spur. No testing was conducted in areas which had been tested previously or which were severely disturbed. Extensive archaeological investigations have been previously conducted within the APE for this project.

Phase I Archaeological Identification Testing has been completed by JMA in the area from Station 533 to existing Rockland Road. Therefore, no additional testing was conducted within this area. A parking area has recently been constructed in this area by AstraZeneca.

Several archaeological resources have been identified within the APE for the Blue Ball Properties Area Transportation Improvement Project, three of which are potentially eligible for listing in the National Register of Historic Places. One of these sites, 7NC-B-54, identified by JMA (Roberts 1999), is within the area of the proposed Route 141 Spur.

This site was identified by JMA in November 1999 during testing for the AstraZeneca Property. It was identified in three STPs, which were excavated at 5 meter intervals in an "L" shape. Two 1x1 meter units were then excavated at the site. The units were located between the artifact bearing STPs. Artifacts recovered by JMA include eleven quartz flakes, a quartz biface base, a quartzite biface fragment, a pitted stone, and a crude quartz tool were recovered (Roberts 1999). AstraZeneca planned to avoid the site during their proposed construction; however, JMA recommended a Phase II Archaeological Evaluation if proposed construction would adversely affect the site (Catts and Kellogg 2000). In their August 4, 2000 letter, the SHPO expressed the opinion that 7NC-B-54 was potentially eligible for the National Register. On behalf of FHWA and DelDOT, MTA defined the boundaries of the site and completed additional testing to evaluate the National Register eligibility of the site (Shaffer 2000). The area which was previously tested during the Phase II Archaeological Evaluation Survey, from approximately Station 529.5 to Station 526.5, was not tested again during the Phase I Archaeological Identification Survey.

B. Survey Methodology/Results

The Archaeological Identification Survey was conducted in October, 2000, in accordance with *Guidelines for Architectural and Archaeological Surveys in Delaware*, Delaware State Historic Preservation Office, October 1993, as amended and MTA's *Cultural Resources Scope of Work* (Shaffer and Arnold 2000).

The proposed Route 141 Spur is located on an upland setting on the Piedmont Plateau Physiographic Province. The mapped soils are Talleyville silt loam, with 2-5% slopes, moderately eroded (TaB2), a well drained soil (Mathews and Lavoie 1970). The soil profile has been relatively stable throughout the Holocene.

The proposed Route 141 Spur was tested with shovel test pits (STPs) measuring 0.57 meter in diameter placed at 15 meter intervals ***(Figure 2)***. One row of STPs was excavated along the proposed centerline and two transects were excavated in each direction from the centerline. The width of the tested area was approximately 60 meters.

The STPs were excavated 0.10 meter into the sterile subsoil. All soils removed from the STPs and TUs were screened through ¼ inch mesh hardware cloth. STPs were excavated by natural strata (designated Levels). Modern trash was discarded during the excavations. Notes regarding excavations as well as plan view and profile maps were recorded in the field. Black and white and color photographs were taken where appropriate.

Seventy STPs were excavated within the area of the proposed Route 141 Spur. The testing is discussed from east to west along the proposed alignment. As noted above, the area east of Station 533 was tested by JMA under contract to AstraZeneca; therefore, this area was not tested.

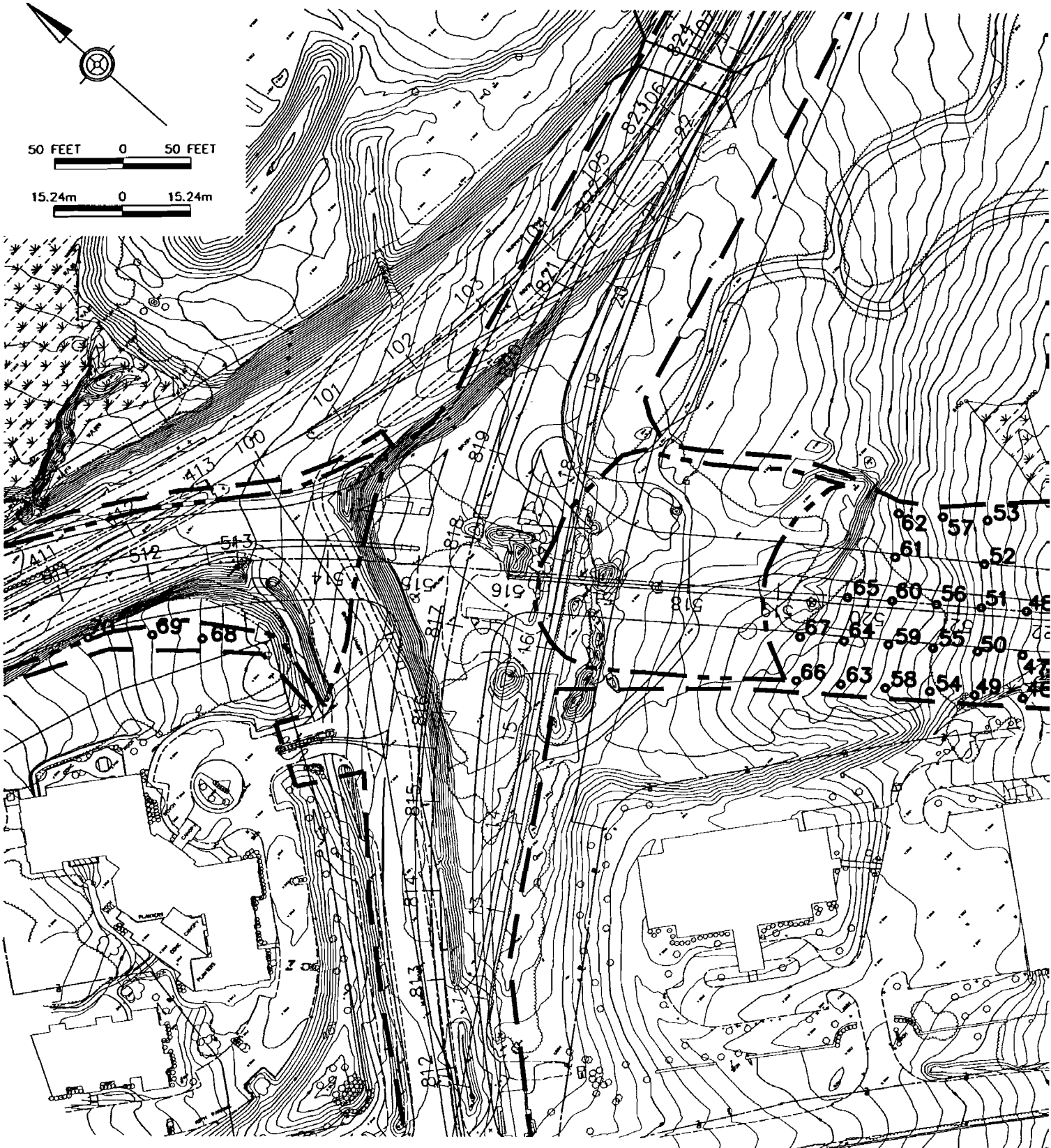
The area from Station 533 to Station 529.5 was tested using the strategy discussed above. No STPs were excavated to the northeast of STPs 3, 6, 9, 12, and 15 due to a delineated wetland. No STPs were excavated to the southwest of STPs 1, 4, and 7 due to the existing parking lot for the Ronald McDonald House. The Ronald McDonald House itself prevented testing to the southwest of STPs 10, 13, 16, and 20. The interval between STPs 26 and 27 was thirty meters since the Phase II Archaeological Testing for 7NC-B-54 extended into the area between the two STPs.

The areas closest to the Ronald McDonald House and its parking lot exhibited a disturbed soil profile, with various fill levels overlying sterile subsoil. The soil profile for STP 14 consisted of two fill levels over a mottled subsoil ***(Figure 3)***, suggesting that the fill had been placed over a wetland.

STP 28 was excavated 15 meters to the southwest of the centerline at approximately Station 525.5. No STP was excavated to the southwest of STP 28 due to a cut slope. The area to the northeast of the STP had been tested during the Phase II Archaeological Testing for 7NC-B-54. The area from approximately 525.25 to 523.25 was tested at 15 meter intervals. No testing was conducted to the southwest of STPs 34, 38, 42, and 44 due to a parking lot associated with the Nemours Health Clinic. There are thirty meter intervals between STPs 42 and 43 and between STPs 44 and 45 due to a delineated wetland. No STPs were excavated to the northeast of STPs 43 and 45 or between Station 523.25 and Station 522 for the same reason.

Soil profiles south of the centerline were generally disturbed, with various fill levels overlying sterile subsoil. This is probably due to disturbance caused when the Nemours Health Clinic and parking garage were constructed. The remaining STPs in this area exhibited a more natural shallow profile, similar to the profile for STP 46 ***(Figure 3)***.

The area from approximately Station 521.75 to Station 519.75 were excavated at 15 meter intervals. No STPs were excavated to the northeast of STP 48 due to large piles of rock. There was also a pile of rock and fill between STPs 56 and 57, resulting in an interval of 30 meters. The soil profile for STP 46 ***(Figure 3)*** is an example of a typical soil undisturbed soil profile for



LEGEND

PROPOSED GROUND DISTURBANCE

SHOVEL TEST UNIT

AREA TESTED DURING PHASE II ARCHAEOLOGICAL EVALUATION SURVEY OF 7NC-B-54

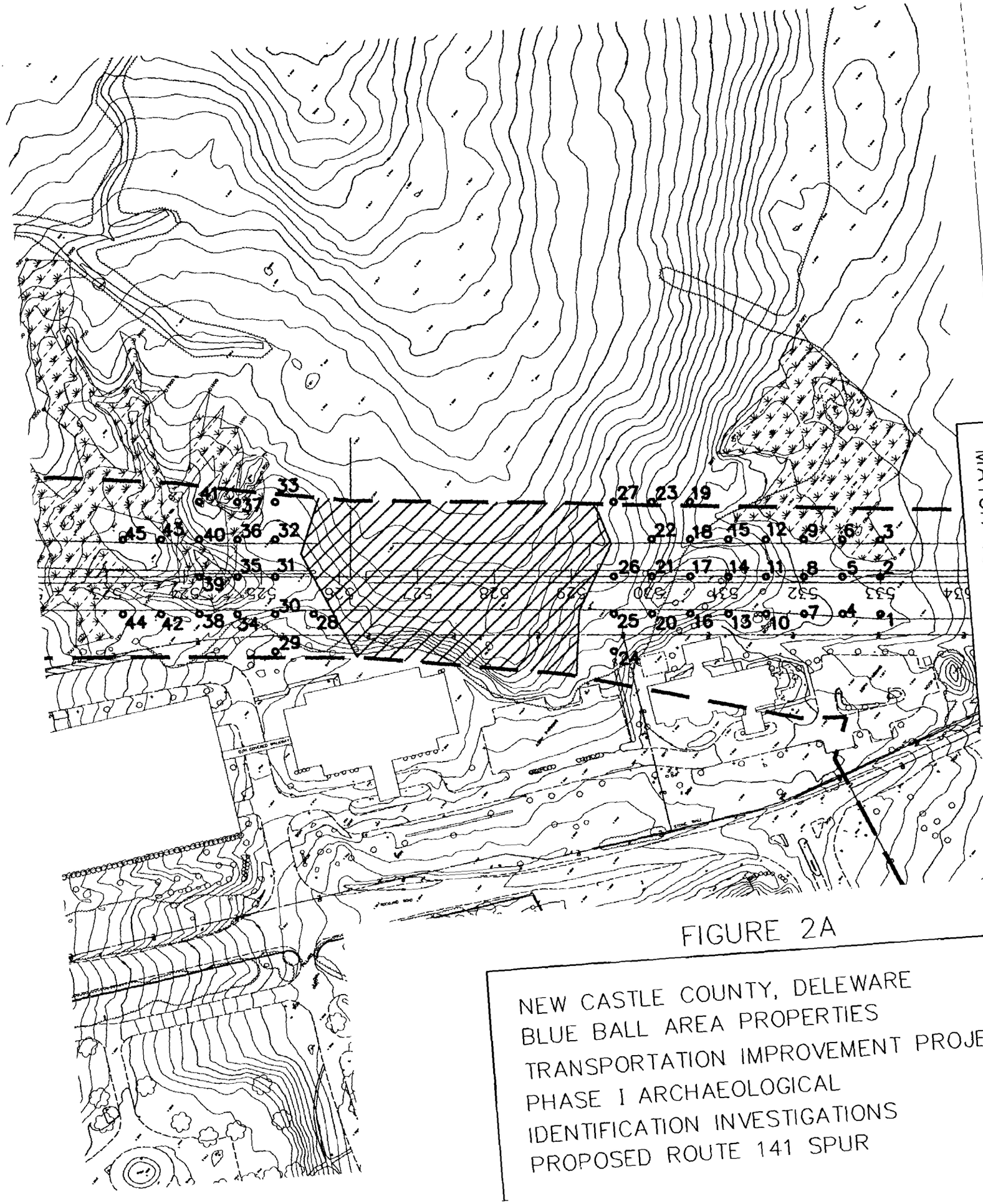


FIGURE 2A

NEW CASTLE COUNTY, DELEWARE
BLUE BALL AREA PROPERTIES
TRANSPORTATION IMPROVEMENT PROJECT
PHASE I ARCHAEOLOGICAL
IDENTIFICATION INVESTIGATIONS
PROPOSED ROUTE 141 SPUR

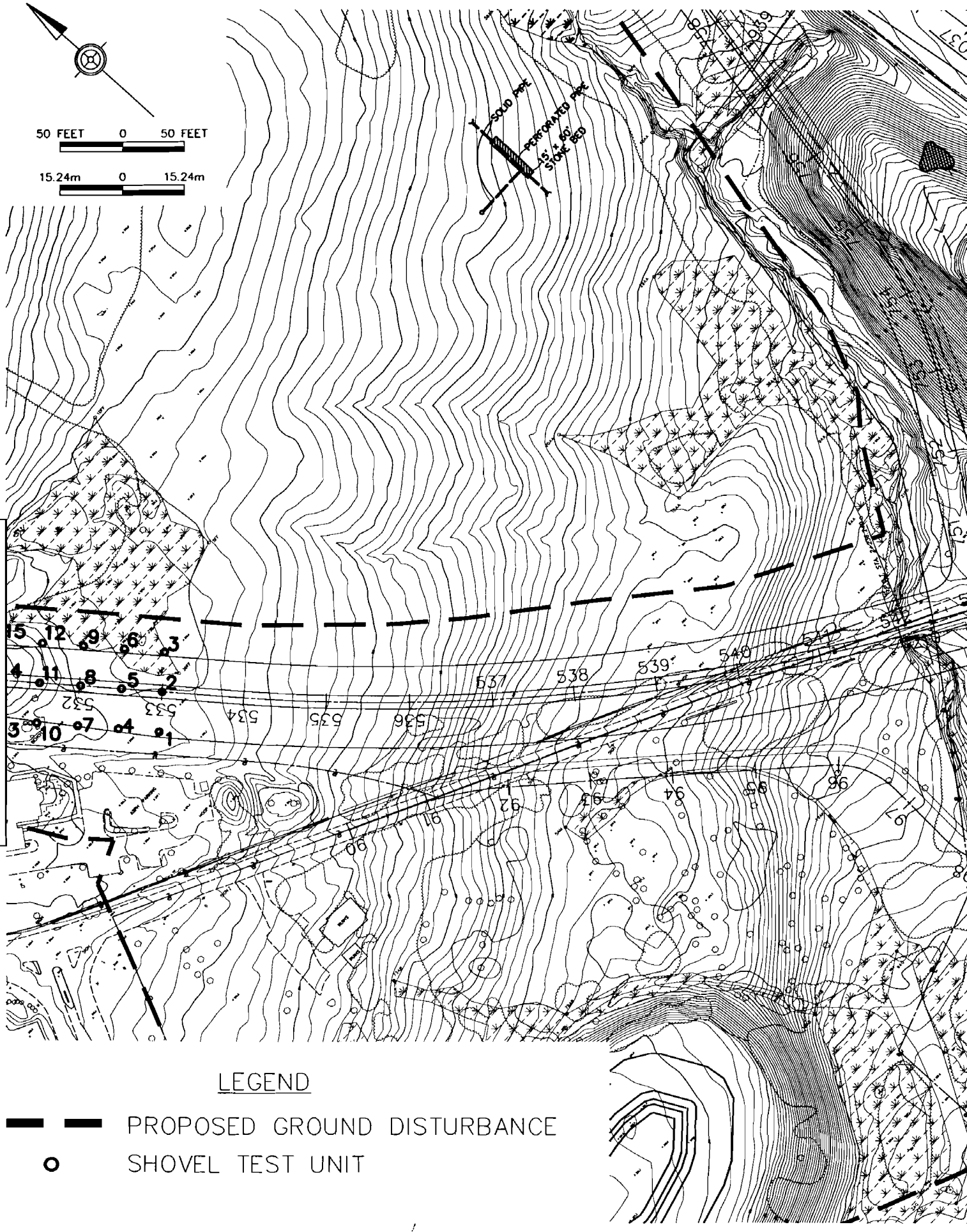


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FIGURE 2B

NEW CASTLE COUNTY, DELEWARE
BLUE BALL AREA PROPERTIES
TRANSPORTATION IMPROVEMENT PROJECT
PHASE I ARCHAEOLOGICAL
IDENTIFICATION INVESTIGATIONS
PROPOSED ROUTE 141 SPUR

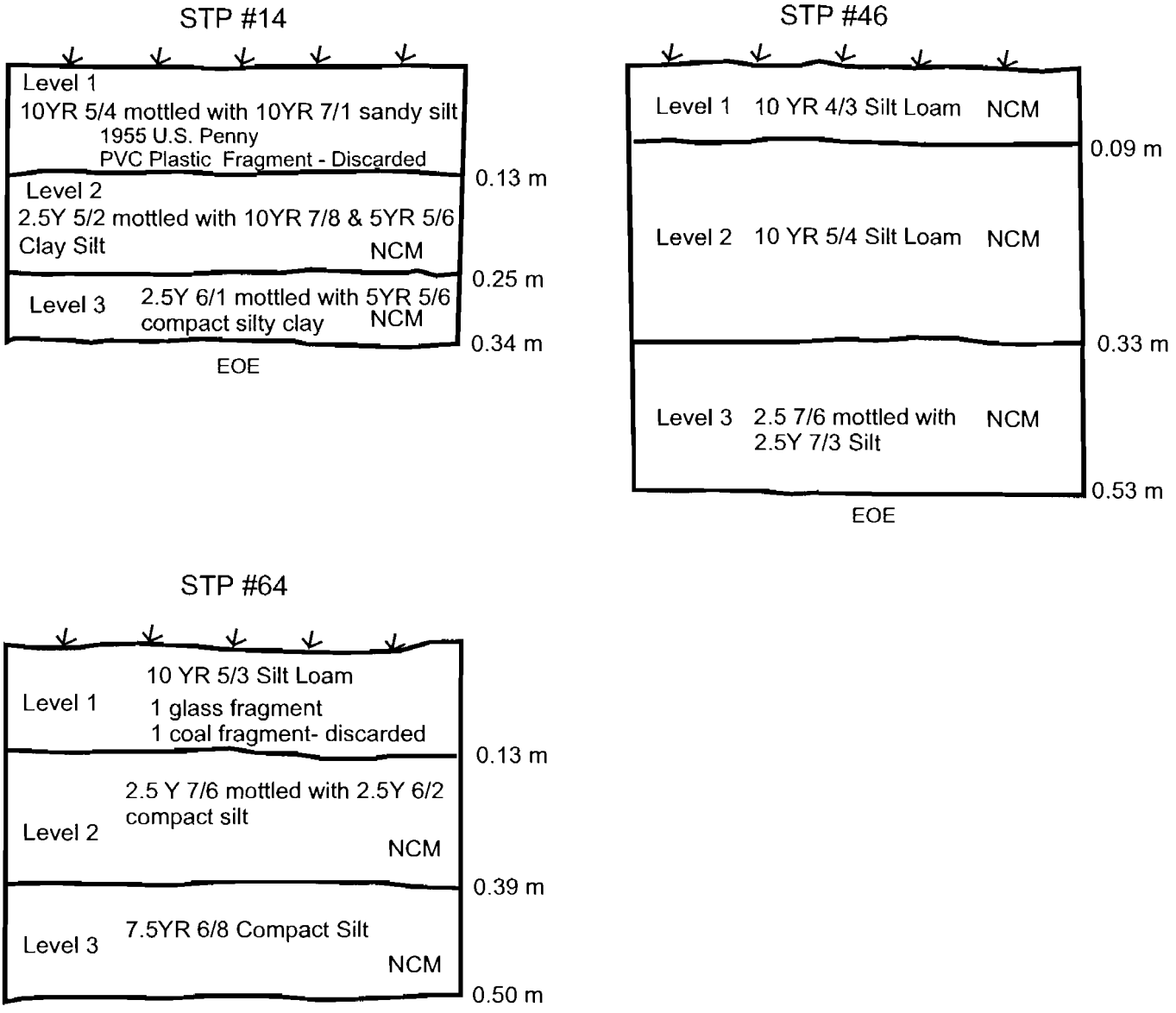

Figure 3

New Castle County, Delaware
Blue Ball Area Properties
Transportation Improvement Project
Route 141 Spur
Phase I Archaeological Identification Survey
Representative Soil Profiles

the STPs excavated during the Phase I Archaeological Identification Survey for the Route 141 Spur. STP 64 had a more disturbed profile, with a mottled level directly below the topsoil. In general, the STPs between Station 520.75 and 519.75 exhibited the more disturbed profile.

The area to the northeast of STPs 65 and 67 as well as from Stations 519.25 to 516.5 have been severely disturbed through recent earth moving activities.

The entire area from Station 516.5 to existing Route 141 and from existing Children's Drive to the existing Route 141 to the northeast of the proposed Route 141 Spur has been previously disturbed, with an exception discussed below, by previous road construction.

A small area to the west of the intersection of existing Route 141 and Children's Drive has not been previously disturbed ***(Figure 2)***. STPs 68-70 were excavated in this area. The STPs exhibited a natural profile, similar to STP 46. Stone walls are visible outside of the APE for this project near where these STPs were excavated. Background research has not provided any evidence of any structures or other features in this area. The walls were probably used to demarcate fields.

No archaeological sites were identified during the Phase I Archaeological Identification Survey. No archaeological artifacts were recovered nor were any features identified.

III. Recommendations

No archaeological artifacts were recovered from any of the 70 STPs excavated within the area of the proposed Route 141 Spur and no archaeological features were identified; therefore, no archaeological sites were recorded. No additional archaeological testing is recommended in the area of the proposed Route 141 Spur, with the exception of the area in which 7NC-B-54 (Milner #1 Site) is located. The eligibility of archaeological site 7NC-B-54 is being assessed in a separate document (Shaffer 2000).

IV. References

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2000 *Phase I Archeological Investigations for the Proposed Augustine Cut Off, New Castle County, Delaware.* Prepared by Thunderbird Archeological Associates for submission to the Delaware Department of Transportation.

Appendix A

Qualifications of Investigators

Qualifications of Investigators

***Barbara J. Shaffer**, Archaeologist, Principal Investigator*
M.A., Anthropology/Archaeology, Pennsylvania State University, 1996
Graduate Certificate, Historic Preservation, Goucher College, Maryland, 1999
B.A., Anthropology, Minor in Sociology, Pennsylvania State University, 1989
Meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology and Architectural History.
Eight years of professional experience in historic and archaeological research in the Middle Atlantic Region.

***Richard T. Baublitz**, Archaeological Group Coordinator*
M.A., Anthropology/Archaeology, University of Pennsylvania, 1991
B.A., Independent Studies, focus on East Asian History and Culture, University of Maryland, 1986
Meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology.
Ten years of professional experience in archaeological research in the Middle Atlantic region.

***Francine F. Arnold**, Historic Structures Group Coordinator, Principal Investigator*
M.A., Historic Preservation, Graduate School of Fine Arts, University of Pennsylvania, in progress
B. A., General Arts and Science, Concentrations in Fine Arts and Anthropology, Pennsylvania State University, 1990
Meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History.
Ten years of experience in historic research, inventory, and evaluation of historic structures and archaeological resources in the Middle Atlantic region.

***Robert H. Eiswert**, Archaeological Field Director*
B.A., History and Anthropology, Bloomsburg University, Pennsylvania, 1995
Three years of professional experience in archaeological research in the Middle Atlantic region.

***Macon H. Coleman IV**, Archaeological Field Supervisor*
B.S., Anthropology and History, Longwood College, Virginia, 1990
Ten years of professional experience in archaeological research in the Middle Atlantic region.

***Scott A. Emory**, Archaeological Field Supervisor*
M.A., Maritime History and Nautical Archaeology, East Carolina University, North Carolina, 2000
B.A., Anthropology, University of Delaware, 1991
Meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology.
Four years of experience in maritime archaeological fieldwork. Nine years of professional experience in archaeological research in the Middle Atlantic region.

***Jonathan W. Bream**, Archaeological Field Supervisor*
Ph.D., Spanish Colonial History, Universidad de Sevilla, Spain, in progress
M.A., Maritime History and Nautical Archaeology, East Carolina University, North Carolina, in progress
B.A., Kutztown University, Pennsylvania, 1986
Ten years of professional experience in archaeological research in the Middle Atlantic region.

***Elise Alexander**, Archaeological Field Technician*
M.A., Anthropology, Certificate in Latin American Studies, University of Pittsburgh, 1999
B.A., Anthropology, University of New Hampshire, 1995
One year of professional experience in archaeological research in the Middle Atlantic region.

***Brenda Carr**, Archaeological Field Technician*
M.A., Anthropology, Specialization in Zooarchaeology, State University of New York at Binghamton, in progress
B.A., Anthropology, Indiana University of Pennsylvania, 1994
Five years of professional experience in archaeological research in the Middle Atlantic region.

***Kathryn Ersoz**, Archaeological Field Technician*
B.A., Art Conservation, University of Delaware, 2000
Six months of professional experience in archaeological research in the Middle Atlantic region.