Department of Energy

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FEB 2 8 2013

Dr. David Snyder, Ph.D.
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Ohio Historic Preservation Office
800 East 17th Avenue
Columbus, Ohio 43211

PPPO-03-1764101-13

Dear Dr. Snyder:

TRANSMITTAL OF TWO PHASE I ARCHAEOLOGICAL SURVEYS OF SELECTED AREAS OF THE PORTSMOUTH GASEOUS DIFFUSION PLANT IN SCIOTO AND SEAL TOWNSHIPS, PIKE COUNTY, OHIO

Enclosed for your information are the following reports: *Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant in Scioto and Seal Townships, Pike County, Ohio and the Phase I Archaeological Surveys of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant in Scioto and Seal Townships, Pike County, Ohio.*

Beginning in 1996, the U.S. Department of Energy (DOE) has conducted a number of cultural resource surveys at the Portsmouth Gaseous Diffusion Plant (PORTS). The surveys were conducted for purposes of identifying historic properties, pursuant to Section 110 of the National Historic Preservation Act. In 2011 DOE initiated additional archaeological surveys with the intention of completing the identification process for the PORTS site. The work was completed in late 2012.

For survey management purposes, PORTS was divided into six areas (areas 1-6) with further subdivision into areas 4A, 4B, 5A, 5B, 6A, and 6B. The survey work resulted in preparation of six Phase I prehistoric survey reports, as well as one Phase II prehistoric survey report. Two of the Phase I reports; Area 1 and Areas 5A, 5B and 6A are attached. The balance of the four reports are in various stages of preparation. DOE will plan to send the additional reports to you as they are finalized.

Information contained within these reports as well as earlier PORTS cultural resource reports will be incorporated into a *Comprehensive Summary Report of Cultural Resource Investigations Conducted at the Portsmouth Gaseous Diffusion Plant (PORTS Facility), Scioto and Seal Townships, Pike County, Ohio*. The above referenced report, which is in development, will include information on all temporal aspects of PORTS, from the prehistoric period, to the historic-era to the DOE-era, and will be submitted to the Ohio Historic Preservation Office in the near future. DOE believes that this comprehensive report will be a useful resource in understanding and interpreting the overall history of the PORTS site.

The enclosed survey reports are provided to assist you in your understanding of these survey areas and their resources, and to supplement the information that will be included in the forthcoming comprehensive summary report.

If you have any questions please contact Amy Lawson of my staff at 740-897-2112.

A copy of the report is enclosed and can also be obtained at the Environmental Information Center by contacting 740-289-8898 or at eic@wems-llc.com. Additionally, an electronic copy can be found at http://www.pppo.energy.gov/nhpa.html.

Sincerely,

Dr. Vincent Adams
Portsmouth Site Director
Portsmouth/Paducah Project Office

Enclosures:
Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant in Scioto and Seal Townships, Pike County, Ohio and the Phase I Archaeological Surveys of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant in Scioto and Seal Townships, Pike County, Ohio

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Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio

By

Chuck Mustain and David Lamp

Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio

By

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ABSTRACT

ASC Group, Inc. conducted Phase I archaeological investigations of portions of the non-secured area at the Portsmouth Gaseous Diffusion Plant property in Scioto and Seal townships, Pike County, Ohio. The project area for the survey, designated Areas 5A, 5B, and 6A in the Request for Proposal encompasses 121 ha (299 ac), 161 ha (398 ac), and 100 ha (247 ac) respectively of dry glacial lakebed along the western and southern periphery of the Portsmouth Gaseous Diffusion Plant property. This area is just east of the Scioto River Valley along the edge of a pre-glacial river valley that contained Pre-Illinoian Lake Tight. Little Beaver Creek and Big Run have cut across the glacial lakebed within the project area; the former eroding all the way to the bedrock. Small portions of the project area extend down the bluff onto the valley floor of the Scioto River Valley and the area above the bluff includes steep ridges and sand dunes that rise above the level part of the glacial lakebed.

The current research is intended to augment an earlier Phase I survey efforts completed by ASC Group, Inc. in 1997. Several recent studies by ASC Group, Inc., Ohio Valley Archaeology, Inc., and Gray & Pape, Inc. have focused on historic period sites on the Portsmouth Gaseous Diffusion Plant property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

Five soil types were defined in the Request for Proposal for the project. Two of them did not require testing because of extensive post-1952 disturbance associated with Portsmouth Gaseous Diffusion Plant activities or previous Phase II level archaeological testing. Cursory inspections of these areas were performed and they were photographed. The remaining portions of Areas 5A, 5B, and 6A were tested through cursory inspections of previously tested areas and a combination of visual inspection, shovel probe excavation, and shovel test pit excavation. Although large areas of slope are present and large amounts of Areas 5A, 5B, and 6A have been disturbed, a substantial portion of the project area contains relatively undisturbed landforms. All of the relatively undisturbed, dry, and generally level landforms within Areas 5A, 5B, and 6A of the Portsmouth Gaseous Diffusion Plant property that had not been previously surveyed were tested by digging shovel test pits at 15-m (50-ft) intervals.

Eight sites were documented within Areas 5A and 5B of the Portsmouth Gaseous Diffusion Plant property: two prehistoric lithic scatters (33PK376 and 33PK383), four two prehistoric isolated finds (33PK373, 33PK377, 33PK378, and 33PK384), one historic scatter (33PK374), and a small historic dump (33PK375). No sites were documented in Area 6A. None of these sites could be placed in their historic contexts and none appear capable of yielding data sufficient to find them significant. Therefore, they are not recommended eligible for inclusion in the National Register of Historic Places. Additional remains of a previously documented historic site (33PK322) were encountered in Area 5B, but the results of testing at this site are presented in a separate report. With two exceptions—potential forthcoming recommendations for the treatment of historic sites documented in recent studies and a geomorphological investigation of Little Beaver Creek and one of its tributaries—no further work is recommended within Areas 5A, 5B, and 6A of the Portsmouth Gaseous Diffusion Plant property or at 33PK373–33PK378, 33PK383 and 33PK384 if they are impacted by a future undertaking.

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INTRODUCTION

Under contract with Fluor-B&W Portsmouth, LLC, ASC Group, Inc. (ASC), completed Phase I archaeological investigations of a portion of the non-secured area at the Portsmouth Gaseous Diffusion Plant (PORTS) property in Scioto and Seal townships, Pike County, Ohio (Figure 1). The current research is intended to augment an earlier Phase I survey completed by Schweikart et al. (1997). Recent studies by ASC, Ohio Valley Archaeology, Inc. (OVAI), and Gray & Pape, Inc. (G&P), have focused on historic period sites on the PORTS property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

The project area for the survey, designated as Areas 5A, 5B, and 6A in the Request for Proposal (RFP), is located along the western and southern periphery of the PORTS property with Areas 5A and 5B between North Access and Principle Access roads and Area 6A between Contractor's Access and South Access roads (Figure 2). Containing wooded, scrubby, and grassy areas, Area 5A encompasses 121 ha (299 ac), Area 5B encompasses 161 ha (398 ac), and Area 6A encompasses 100 ha (247 ac). The PORTS property is situated along the edge of a pre-glacial river valley. The valley floor is the dry glacial lakebed of Pre-Illinoian Lake Tight and the eastern edges of the valley are uplands in the unglaciated Allegheny Plateaus (Brockman 1998; Pavey et al. 1999). Little Beaver Creek, which flows through Area 5B, and Big Run, which is in Area 6A, have cut across the glacial lakebed, with the former eroding all the way to the bedrock. The project area is along the eastern bluff of the Scioto River Valley and small portions of it extend down the bluff onto a terrace at the edge of the valley floor. The area above the bluff includes steep ridges and sand dunes that rise above the level part of the glacial lakebed.

The purpose of this investigation is to provide information for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended. The archaeological investigation is being completed largely without a specific undertaking driving it. Rather, in light of several possible projects related to the remediation and re-use of PORTS, the United States Department of Energy (DOE) is attempting to proactively evaluate and manage the cultural resources within the PORTS property. Five soil types were defined in the RFP for the project (Figures 3–5), two of which (Types 4 and 5) did not require testing because of extensive disturbance or previous Phase II archaeological testing. Survey efforts for the project focused on the areas containing the other three types of soils.

The survey was completed in accordance with *Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines* (Federal Register 1983). The federal standards are supplemented by the Ohio Historic Preservation Office (OHPO) [1994] *Archaeology Guidelines*. The goals of this survey were to identify and document archaeological resources in areas that have not been inventoried by previous studies, and, if possible, to determine if any of the identified resources might be eligible for inclusion in the National Register of Historic Places (NRHP). The evaluation of eligibility followed the NRHP criteria for evaluation (Andrus 1997).

Chuck Mustain and David Lamp supervised the fieldwork for the Phase I archaeological testing, which was conducted March 7 through April 5, 2012. The field technicians were Sara Bens, Drake Brownfield, Noel Grosze, Ryan Jackson, Arthur Ramcharan, Chris Ritter, Charlie Rose, Chase Searles, Scott Shupe, Bernie Slaughter, Tom Stetar, Colleen Westmor, Jeff White, and Michele Wiker. The weather was variable with periods that were unseasonably warm and occasional snow and rain. Although some of the rain was heavy enough to halt fieldwork, the weather did not unduly hamper the survey or affect its results. The principal investigator and project manager was David Klinge, MA, RPA. This report outlines the methods and results of the Phase I cultural resources survey.

RESEARCH DESIGN

RESEARCH GOALS

The primary goal of a typical Phase I survey is to locate and identify archaeological resources within a study area. If possible, a secondary goal is to collect sufficient data to make a preliminary determination of any identified resource's eligibility for inclusion in the NRHP. As such, it is difficult to link the Phase I study with a specific research design outside of the basic goals of anthropological and historical research. These goals include the construction of cultural chronologies, the reconstruction of past lifeways, and the search for the processes of cultural change.

Recent efforts have been taken to document prehistoric and historic period sites on the PORTS property. However, the results of much of the most recent research are not presently available and will not be addressed in any detail in this report. Although previously undocumented historic sites encountered during the survey are being inventoried, the focus of the

current investigation is to locate and document prehistoric sites. If possible, sufficient information will be collected to offer an opinion about whether any documented cultural resources are eligible for listing in the NRHP. The current survey is designed to complement and extend an initial Phase I survey of the PORTS property conducted by Schweikart et al. (1997) that documented 36 sites, taking into account as much of the recent archaeological testing as possible based on the limited available information.

BACKGROUND RESEARCH

To conduct an effective archaeological survey, it is necessary to have an understanding of the environmental setting, as well as the prehistoric and historic setting of a study area. Additionally, it is beneficial to be aware of the previous archaeological research that has been conducted in the vicinity. With this information it is possible to develop a general understanding of the prehistoric settlement patterns and systems and historic development in the region. The understanding can guide field investigations and inform the interpretation of any cultural remains that are encountered. In this instance, a great deal of environmental and cultural background data has already been gathered about the PORTS property.

Environmental Setting[1]

It is generally accepted that human occupation in the eastern United States started between 11,000 and 13,000 years ago (Lepper 1986). The environmental data for the period are incomplete, but preliminary studies based on the pollen record suggest that the period from 12,000 B.C. to 7000 B.C. was a time of major vegetation and climatic change (Shane 1994). Warming trends in the late postglacial periods resulted in the replacement of spruce forests and spruce woodlands with coniferous-deciduous forests. By approximately 8000 B.C., the environment had begun to resemble the present-day environment. Data recorded by early Euro-American settlers in the region along with environmental information derived from recorded archaeological and geological data can be utilized to approximate the environment in which the prehistoric people of Ohio lived.

Pike County is situated within the unglaciated Allegheny Plateaus Section of the Appalachian Province (Brockman 1998). Beyond the broad Scioto River valley, the terrain is hilly and cut by narrow, steep-sided tributaries. Upland elevations range between 171 m (560 ft) and 360 m (1,180 ft) above mean sea level (AMSL) with elevations averaging 168 m (550 ft)

[1] Adapted from Mustain (2012).

AMSL in the Scioto River valley (Fenneman 1938). Bedrock in the vicinity of the project area consists of a complex mix of Lower Mississippian and Upper Devonian sandstones, limestones, and shales in the uplands and along preglacial valley trains (Slucher et al. 2006). The Scioto River flows through a deeper, glacial valley that has cut through these layers into the Upper Devonian Ohio Shales (Slucher et al. 2006; United States Department of Agriculture, Soil Conservation Service [USDA, SCS] 1990). According to Stout and Schoenlaub (1945), no flint sources are known within the county, excluding glacial chert cobbles in the river and stream valleys.

Almost all of Pike County is drained by the Scioto River and its tributaries, such as Big Beaver Creek, Little Beaver Creek, and Big Run, which drain the northern and southern portions of the PORTS property. Drainage is generally good, except for occasional flooding that can occur in the spring (USDA, SCS 1990). Below 165 m (540 ft) AMSL of elevation, the active floodplain has been altered by the meandering of the Scioto River.

Upland areas east of the Scioto River, including portions of the PORTS property, have been affected by the preglacial Teays River that drained much of the southeastern United States. This ancient, abandoned valley is a wide cut through the uplands filled with sands, silts, and old alluvium along with various lacustrine clays and local colluvium, alluvium, and loess currently occupied by various "misfit" drainages (including Big Beaver Creek and its tributaries). Glaciers blocked the Teays channel and formed Lake Tight. Most of the PORTS property is located on the dry bed of this Pre-Illinoian glacial lake (Pavey et al. 1999; USDA, SCS 1990).

During early glacial advances the Newark River cut a channel through what was to become the Scioto River valley in Pike County. This channel was deeper than the preglacial Teays River and the channel of the Scioto River today. Furthermore, smaller tributary streams also cut deeper into side valleys which were later filled with local colluvium and alluvial sediments. Outwash terraces formed of meltwater sediments deposited during the Wisconsinan and earlier Illinoian periods are present in the Scioto River valley west of the PORTS property. Glacial till deposits are restricted to the extreme northwestern corner of the county along Massie Run in Perry Township and exist in very small areas along the glacial boundary (Pavey et al. 1999; USDA, SCS 1990).

The PORTS property encompasses preglacial valleys that contained a glacial lake and moderate to steeply sloped and dissected uplands that are correlated with two soil areas:

Olmulga soils in and along the edges of the glacial lakebed in the valley and Shelocta-Latham soils in the adjacent uplands. Soils in the Olmulga map unit are described as deep and moderately well-drained and occur on slight rises at the head of drainageways, high saddles, and on side slopes in preglacial valleys. They formed in loess, colluvium, and old alluvium. Soils in the Shelocta-Latham map unit are deep and moderately deep, strongly sloping to steep, well-drained and moderately well-drained, and formed in colluvium and residuum derived from shale, siltstone, and sandstone on hillsides and ridgetops in the uplands (USDA, SCS 1990).

Prior to widespread Euro-American settlement in the region, uplands— including the western portions of the PORTS property—were covered in Mixed Mesophytic forest, which included associations of oak-chestnut-tulip tree, oak-hickory-tulip tree, white oak-beech-maple, and hemlock-beech-chestnut-red oak. Mixed Mesophytic forests prefer moister and more shaded areas that are often on north-facing slopes or in narrow valleys or hollows (Gordon 1969).

The eastern portions of the PORTS property were once covered in Mixed Oak forests, which included associations of white oak-black oak-hickory, white oak-black oak-chestnut, and oak-chestnut types. Mixed Oak forests occurred on the drier south-facing slopes or other areas prone to late summer drought in unglaciated areas (Gordon 1969).

In the adjacent Scioto River valley, extensive bottomland forests covered the valley floor. Depending upon differences in elevation, wetness, and underlying soils within the valley, bottomland hardwood associations include such trees as beech-white oak, beech-maple, beech-elm-ash-yellow buckeye, elm-sycamore-river birch-red maple, and sweet gum-river birch (Gordon 1966).

Within the PORTS property, understory growth would have been composed of numerous small shrubs and trees with natural openings in the forest filled with seed and wild berry colonizers. Sedges, cattails, and other marshy plants would have been available in wet marshy areas along Little Beaver Creek, Big Run, and other wetland areas.

Archaeological investigations at the nearby Madeira Brown site (33PK153), located just north of the PORTS property on a terrace of the Scioto River near the intersection of US 23 and SR 32, yielded evidence of prehistoric utilization of hickory, hazelnut, walnut, acorn, and squash during the Late Archaic period (Church 1995). Features dating to the Middle Woodland period yielded economically important seed species including goosefoot, amaranth, *Mollugo*, *Galium*,

pokeberry, raspberry, and maygrass, indicating that both domesticated and wild plants were utilized prehistorically in the vicinity (Church 1995).

The fauna in southern Ohio has been greatly affected by modern patterns of land use in much the same way that the flora has been altered. Many species that were adapted to forest environments faced habitat loss when these original forests were cleared, and to varying degrees have re-established themselves in areas allowed to revert to forest growth.

By post-Pleistocene times, the faunal component of the landscape would have included most of the species noted by early Euro-American explorers and settlers. Animal species included large mammals such as elk, white-tailed deer, bear, and wolf, a variety of medium-sized animals like raccoon, woodchuck, bobcat, dog, red fox, gray fox, coyote, beaver, muskrat, opossum, and skunk, as well as a number of small mammals including gray and fox squirrels, ground squirrels, chipmunks, wood rats and field mice. Avian species included flocks of wild turkey, bobwhite, quail, passenger pigeon, and a wide variety of migratory fowl. Reptilian species present in the region included a variety of snakes (poisonous and nonpoisonous species), turtles, as well as numerous amphibian, piscean, and molluscan species in the Scioto River, tributary streams, ponds, and marshy areas. Faunal resources utilized by the Late Archaic prehistoric inhabitants of the nearby Madeira Brown site (33PK153) included white-tailed deer and turtle, as well as small avian and molluscan species (Church 1995).

To summarize, seasonal resources in the vicinity of the PORTS property were many and varied. Probably the prime season of natural abundance, as elsewhere in the Eastern Woodlands, would have been from late summer into late fall, when wild seeds and berries were ripening, nut mast was produced, animals were at their fattest, and herds and flocks of migratory species were congregating. For prehistoric and historic inhabitants involved in food production activities, the glacial lakebed in the pre-Illinoian valleys and terraces of the PORTS property would have served as productive areas for crop or livestock production with convenient access to the Scioto River and routes for interregional communication and exchange.

Cultural Overview

The intent of this section is to develop broad overview for the region containing the project area that can be used for predicting the locations and types of sites and for interpreting the significance of cultural resources documented during the field reconnaissance. The

prehistoric and historic settings are basic in scope yet specific enough to encompass variation in land-use and settlement patterns.

Prehistoric Setting

It is estimated that the occupation of Ohio would have been possible in approximately 13,000 B.C. to 13,500 B.C. By this time the glaciers that had once covered the northwestern two-thirds of Ohio had retreated to Ontario (Seeman and Prufer 1982). The Paleoindians, the first known prehistoric population to occupy Ohio, were highly mobile, small-band hunters moving on a seasonal basis in order to more fully exploit the available natural resources (Dragoo 1976). Although probably in pursuit of herd animals, the Paleoindians opportunistically utilized a broad spectrum of animal and plant resources.

Data pertinent to the content of Paleoindian sites in Ohio is extremely rare. Information concerning the distribution of Paleoindian sites in Ohio was documented by Prufer and Baby (1963) and subsequently updated by Seeman and Prufer (1982). Seeman and Prufer (1982) attributed the low density of fluted points in Pike County to ecological factors relating to a poor habitat in the area for the large herbivores the Paleoindian preyed on. In contrast to this interpretation, more recent studies by Lepper (1983) suggest that the low frequency of Paleoindian points in the unglaciated plateau is attributable both to the low population of individuals in these areas who would search for and report these finds, and to the limited acreage under agricultural production. The latter characteristic is a measure of potential exposure of prehistoric artifacts. Lepper (1983) suggests that there may have been a larger Paleoindian population within the unglaciated plateau than is currently reflected by fluted point distributions.

The Archaic era has been subdivided into three separate temporal periods. Traditional interpretations suggest that during the Early Archaic period, 9000 B.C. to 6000 B.C., small mobile groups gradually became more geographically restricted. Seasonally oriented hunting-and-gathering activities were focused on smaller, well-exploited territories; this orientation is seen as a direct link to the expansion of the deciduous forests which produced a more favorable habitat for game species (Chapman 1975). Although hunting was a major subsistence activity, a narrow spectrum of nutritious plant foods was also utilized (Chapman 1975; Cleland 1966). This transition is marked in the material culture by a change from lanceolate spear points to a series of notched and stemmed points (Broyles 1971).

During the Middle Archaic period, 6000 B.C. to 3000 B.C., the economy became more diffuse as a wider selection of plant foods was exploited, but the major emphasis was still on hunting (Cleland 1966). The broadening economy is reflected in the material culture as well. Specifically, plant processing tools appear in artifact assemblages. Most of these implements were ground stone rather than chipped stone, indicating the need for durable surfaces and edges. These types of tools included grooved axes, pestles, metates, and nutting stones. Atlatl weights are also noted (Broyles 1971; Lewis and Lewis 1961).

During the Late Archaic period, 3000 B.C. to 900 B.C., the expansion of the deciduous forest reached its northernmost limit, and the climate was warmer than the present day (Cleland 1966). An increase in territorial permanence is suggested by the appearance of regional adaptations (Chapman 1977; Vickery 1980). These adaptations are characterized by a variety of projectile point styles which exhibit stylistic ties with the eastern states, such as the Brewerton and Ashtabula point types (Ritchie 1961; Witthoft 1953), and areas to the south, such as the Buffalo Stemmed points (Broyles 1971). This hypothesized increase in territorial permanence is supported by the appearance of regional adaptations which differentiated southern Ohio from other areas in the Ohio Valley (Winters 1968). Furthermore, this period in general shows a more efficient and broad-based exploitation of local animal and plant resources, evidenced by the recovery of charred botanical remains of a variety of nutshells, including acorn, hazelnut, hickory, and black walnut. Fruit was also becoming an important food resource as documented by the diversity of fruit seeds such as grape, blueberry, raspberry, and strawberry (Dye 1977; Yarnell 1974).

Archaic projectile point finds are common in southern Ohio; however, few sites have contained in situ cultural deposits, and thus may represent only single, short-term occupations. One important exception to this is the identification of Late Archaic features and associated artifacts at the Madeira Brown site (33PK153) which is located 3.2 km (2 mi) north of PORTS, in Seal Township, Pike County, Ohio (Church 1995).

Earlier research drew a distinction between the Archaic and Woodland periods based on the introduction of agriculture, elaborate burial ceremonialism, and the appearance of ceramics. However, more recent evidence has demonstrated a continuum from the end of the Archaic through the Middle Woodland period for the intensification of horticulture and the formalization and elaboration of mortuary practices (Dragoo 1976). The innovation and adaptation of these

traits by the different human groups was not uniform, but occurred at different rates in different regions. The introduction and use of these traits had to be synchronized with the perceived biological and social needs of the different human groups. Consequently, the rate of change in subsistence and mortuary practices varies from region to region, with some local groups maintaining Late Archaic lifestyles through the Late Woodland, while other groups, primarily those along the main river valleys, like the Scioto River valley, underwent rapid transformations.

In central and southern Ohio, the local Early Woodland expression from around 900 B.C. to 100 B.C. is called the Adena culture, and is noted for the manufacture of Fayette Thick, Adena Plain, and Montgomery Incised ceramics, and the use of conical burial mounds for interment (Greenman 1932; Webb and Baby 1957). In addition to the above-mentioned ceramic types and conical-shaped mounds, several projectile point forms are diagnostic of the Early Woodland period, including Adena Stemmed, Cresap, and Robbins (Converse 1973; Dragoo 1963). The production of these materials and associated activities could well represent a continuation and elaboration of local Late Archaic lifeways, particularly in terms of mortuary ritual. Early Woodland period mounds seem to have functioned as the focus for community identity, being constructed during a number of building episodes which occasionally culminated in very large earthworks such as the Miamisburg mound in southwestern Ohio and the Cotiga and Grave Creek mounds in West Virginia. However, in marked contrast, the few Adena habitations that have been investigated in the region appear to have been generally small, possibly seasonally-occupied residences of small groups or family units dispersed within defined territories which may have shared ritual facilities with adjacent groups (Clay and Niquette 1989; Schweikart 1997).

There is considerable evidence for Early Woodland occupation in the lower Scioto Valley as indicated by numerous conical mounds, many of which are probably Adena in origin. However, corresponding Early Woodland habitation sites have been far less conspicuous in the region (Prufer 1975a).

The Middle Woodland period in central and southern Ohio lasted from around 100 B.C. to A.D. 500 and was characterized by the construction of elaborate geometric earthworks, enclosures, and mounds which were often associated with multiple burials, and a diverse assemblage of exotic artifacts (Brose and Greber 1979). For the region, the term “Hopewell” has become synonymous with the Middle Woodland period. Ceremonially, Hopewell appears to

have developed out of the local Adena culture in the Scioto Valley, albeit on a more expanded and spectacular scale (Greber 1991; Prufer 1964). Hopewellian trade networks were extensive, and raw materials for ceremonial objects were obtained from across much of North America (Seeman 1979). Like the preceding Adena culture, most of the early research on the Hopewell focused on the earthworks and their contents. It was not until late in the twentieth century that efforts were made to investigate the domestic sphere and to reevaluate interpretations of economic, ceremonial, social and political aspects of the Hopewell culture (c.f. Brose 1979; Church 1984; Ford 1979; Greber 1979; Pacheco 1988; Prufer 1965; Seeman 1979; Wymer 1992; Yerkes 1990).

Prufer (1975b) interpreted the Middle Woodland period in Ohio as a dual tradition. One level or tradition was the Hopewell culture which consisted of vacant ceremonial centers surrounded by dispersed agricultural communities, while the second tradition consisted of local Middle Woodland traditions that did not participate in the Hopewell tradition. Pacheco (1988, 1992) and Dancey and Pacheco (1992) developed the "Vacant Ceremonial Center Model" or "Hamlet Hypothesis" which suggested that Hopewell habitations represent dispersed sedentary agricultural hamlets associated with major unoccupied earthwork complexes. A growing body of data from excavated Middle Woodland habitation sites from across the region has shown that there is significant variability in the expression of Hopewell habitations which may require modifications to the original model (Aument 1992; Church and Ericksen 1997; Genheimer 1992).

During the Middle Woodland period, the Scioto River valley in southern Ohio was one of the largest and most elaborate Hopewell culture centers. Numerous extensive earthworks were constructed, some of which, like the Piketon Mounds (33PK1) and Scioto Township Works I (33PK22), are or were in the vicinity of or adjacent to PORTS.

The Late Woodland period in Ohio (ca. A.D. 500 to A.D. 900) has often been viewed as a prehistoric "dark age" following the disappearance of the elaborate earthworks and evidence of mortuary ceremonialism which came to define the Hopewell period in the region. However, investigations of several Late Woodland sites in central and southern Ohio and elsewhere (e.g., Church 1987, 1991, 1992, 1996; Nass et al. 1990; Shott et al. 1990) have identified nucleated and sometimes strategically located settlements (Dancey 1992; Seeman 1980), refinements in ceramic technology (Braun 1988), and evidence for increasing effects on the local environment

resultant from horticultural dependence (Wymer 1992, 1996). This research has largely changed the prevailing view of the Late Woodland as a period of cultural stagnation (Rafferty 1985; Railey 1984, 1992).

During the early part of the Late Woodland period in central and southern Ohio, sites consisted of small nucleated settlements frequently located on bluff edges along major streams or rivers with encircling ditches or low embankments (Church 1987). Ceramics and point types appear to have developed out of earlier utilitarian Middle Woodland forms, with the notable exception of the blade core industry which appears to have ended with the Middle Woodland period (Odell 1994). During the latter part of the Late Woodland, the appearance of the bow and arrow and a developing reliance upon maize after A.D. 800 coincides with nucleated settlements giving way to smaller, more dispersed settlements located on terraces or floodplains, and with higher frequency, in the uplands (Church 1987; Shott et al. 1990). Furthermore, these late Late Woodland sites begin to develop traits indicative of early Late Prehistoric assemblages (Church 1987).

While a number of sites in the region contain Late Woodland components, major investigations of Late Woodland sites near PORTS are lacking. Two Late Woodland sites that have been investigated in the region include the Harness 28 site (33RO186) near Chillicothe (Skinner 1986) and the Bentley site (15GP15) which is located south of the Ohio River in Greenup County, Kentucky, across from Portsmouth (Henderson and Pollack 1985).

The Late Prehistoric period in Ohio extends from approximately A.D. 900–A.D. 1600. In southern Ohio the Fort Ancient culture emerged out of local Late Woodland cultures. The development of Fort Ancient was stimulated by a growing reliance on maize agriculture, increased sedentism, and an influx of southern Mississippian influences (Brose et al. 1978; Church 1987; Essenpreis 1978). Ceramic attributes were probably the earliest influences to enter the Ohio Valley with the appearance of shell-tempered pottery (Brose et al. 1978).

The Fort Ancient subsistence economy was based on the cultivation of maize, beans, and squash, with supplemental hunting (Essenpreis 1978). Settlements were occupied year round and were concentrated along the major rivers (Essenpreis 1978). During the middle of the Late Woodland period, circular palisades were often associated with Fort Ancient villages (Brose et al. 1978). Griffin (1943) has identified four distinctive areas for the expression of Fort Ancient culture in southern Ohio which were centered on different parts of the major river valleys.

Within the vicinity of PORTS, two of these phases, are most relevant: the Baum phase in the Chillicothe area and the Feurt phase near the mouth of the Scioto River.

The Baum phase is known from excavations at the Baum site and other related village sites which are primarily located in Ross County (Prufer and Shane 1970). These sites generally date from A.D. 1000–A.D. 1500. These Baum phase sites show a clear continuity with earlier Late Woodland occupations (Griffin 1978).

The Feurt phase is perhaps the least well known of the Fort Ancient phases, and is named after the Feurt site in Scioto County, Ohio. The mortuary regimen and pottery complex at these village sites differ from the other phases, but show an early connection with the Baum phase (Griffin 1978).

Only a few Late Prehistoric components have been identified in and around Pike County and little can be said conclusively about them. However, PORTS sits nearly equidistant between the center for the Baum phase to the north and the Feurt phase to the south. The Pike County area may represent a transitional zone between these two Late Prehistoric cultural expressions.

Around A.D. 1550, Late Prehistoric groups in western Pennsylvania procured materials which indicate indirect contact with European settlers (Herbstritt 1983). These materials include wire-wound beads, copper tinklers, and native manufactured artifacts such as triangular glass and metal pendants made from imported European goods. In contrast to later sites, there is no change in intrasite patterning or subsistence procurement strategy. Recognition of protohistoric sites is based solely on the occasional occurrence of European trade items (Skinner and Brose 1985). This influx of trade items is documented in the Middle Ohio Valley ca. A.D. 1650–A.D. 1750 at two contact period sites in Greenup County, Kentucky (Pollack and Henderson 1983). The difficulty in recognizing these sites given the limited changes in the material culture undoubtedly has resulted in the lack of proper protohistoric designations. No known sites of this period have been documented in Pike County.

Historic Setting[2]

Intensive Euro-American occupation in Pike County can be traced to the mid-1790s, when the first permanent settlers moved into the region from Pennsylvania and Virginia. Those first settlers established themselves on the Pee Pee Prairie northeast of Waverly and approximately 13.6 km (8.5 mi) north of the sites considered here (Howe 1902). During the first

[2] Adapted from Mustain and Klinge (2011a).

decade of the nineteenth century, settlement was slowed by rising tensions with western and northern Native Americans and British forces in Canada, culminating in the War of 1812. After the conclusion of that conflict, the pace of settlement in Pike County increased greatly. Both Pike County and the Village of Piketon were established in 1812 (Howe 1902).

Pike County was established from portions of Ross, Highland, Adams, Scioto, and Jackson counties. The county is roughly bisected by the Scioto River, and the western half falls within the Virginia Military District (VMD). The VMD was a reservation of 1,701,561 ha (688,891 ac) between the Little Miami and Scioto rivers set aside for the Virginia's veterans of the Revolutionary War. The part of Pike County east of the Scioto River is located in an original Ohio land subdivision called the Congress Lands. The Congress Lands were surveyed in 1798–1802 under the regulations of the Land Ordinance of 1796, which specified the rectangular method of surveying. This method called for dividing the land into square townships, arranged into north-south ranges. The townships were composed of 36 one-mile square sections that are 259 ha (640 ac). Each section was divided by "quarter lines" into 64.75-ha (160-ac) quarter sections, which, after the Land Act of 1800, were the smallest units of land sold by the government, at $2.00 per acre (Bond 1941). Whereas many of the earliest settlers within the VMD hailed from Virginia, present-day West Virginia, and Kentucky, many of the first settlers in rest of Pike County came from Pennsylvania, with a significant number of German immigrants settling in the eastern half of the county after ca. 1825 (Howe 1902).

With the exception of broad river valleys surrounding the Scioto River and Beaver Creek and a handful of smaller valleys formed by lesser watercourses, Pike County is largely covered by hills that can be steeply sloped. Contrary to anticipated patterns of settlement in similar geographic regions, many of the first generation of settlers in Pike County did not clear and settle along the river bottoms. Rather, they established their farms along the side slopes of the many hills. The river bottoms, it was reported, were so densely overgrown that clearing the open woods along the hills was easier for the small labor force that typically accompanied an immigrating family (Howe 1902). Recent scholarship regarding the Upland South settlement pattern suggests the use of marginal uplands rather than more fertile lowlands may be connected to the cultural origins of the settlers (Smith 1993). Although the valley bottoms are well-developed and productive farmland today, this pattern of hillside subsistence persisted throughout the development of Pike County and culturally connects the region to other portions

of Appalachia. This settlement pattern persisted in the region despite changes in the immigrant base and the rise of other patterns as the region became more settled (Schweikart and Coleman 2003).

Although Pike County includes part of the rich Scioto Valley, most of the county is much less productive. The Scioto Valley in Pike County shares many characteristics with Ross County, while the remainder of the hilly and dissected county is more typical of others portions of Appalachian Ohio. Agriculture was the primary industry of the initial settlers in Pike County. Subsistence was provided by cultivating crops or raising livestock to feed the family and to sell locally for cash, or to barter for necessary items. Although new settlers were largely self-sufficient out of necessity, they still had to trade for basic supplies such as coffee, tea, salt, sugar, hardware, farm implements, and cloth. This stands in contrast to popular notions of an entirely self-reliant first generation settler that pervades our understanding of American history.

During the first generations of settlement, farm life and labor was relatively egalitarian in that all members of a household participated in the family economy. Gender-based labor divisions were diminished, as all available labor was employed to clear fields, plant crops, tend livestock, and harvest/store foodstuffs. The average settler family cleared 2 ha–3 ha (5 ac–7 ac) of their land per year. Generally they used a small portion of land (approximately 4 ha [10 ac]) for crops and reserved plenty for pasture for animals and forest for firewood and hogs. To produce much more than the family needed would have been pointless as early roads were not adequate to get goods to market to make a profit (Noble and Wilhelm 1995). This egalitarianism tended to fade as settlement progressed and the thrust of agriculture shifted from household consumption toward a professionalized, market-based activity (Hartgen Archeological Associates 2004).

Corn was the most important crop of the initial settlers. It was grown primarily to be consumed on the farm by the family and their livestock. It was invariably the first crop planted by the initial settlers as it did relatively well regardless of topography or soil conditions and was of immediate benefit (Jones 1983). However, the soils and topography of Pike County were not, and are not, suited for large scale crop farming, and cattle raising was an important early industry brought by the settlers from western Virginia, Pennsylvania, and Kentucky. Cattle needed a minimum of care and initially ranged free year-round. Milk and meat were sold locally (Jones 1983).

Hog production developed simultaneously, as pigs required as little, if not less, care during the first years of settlement. Initially, allowed to roam free as were the cattle, the South Branch method of feeding cattle and hogs in feedlots came to dominate the raising of these creatures in the nineteenth century. Hog raising emerged as a significant agricultural practice in the Scioto Valley starting in 1840, and the region was the third most productive for hogs in Ohio by the 1850s and 1860s. Fattened hogs were usually driven to pork-packing centers like Cincinnati, Chillicothe, and Marietta (Jones 1983). The ability to drive livestock to market "on the hoof" was important to the region in the mid-nineteenth century, as a transportation network capable of quickly delivering perishable goods did not exist at the time.

In the second quarter of the nineteenth century, the Ohio and Erie Canal brought some measure of prosperity to the farms of the area and connected inland portions of eastern and central Ohio with national markets (Jones 1983). At the time, corn remained the most important crop in the Scioto Valley, but wheat production rose as ground flour was easily shipped to markets along the Mississippi River and the Eastern Seaboard through the canals. Higher wheat production resulted in an expansion of the milling industry within the county. Starting in the mid-nineteenth century, the railroad made for faster transport to eastern markets and the price of corn rose based on demand from these additional markets. The rising cost of corn limited the raising cattle and hogs, which were dependent on inexpensive feed (Jones 1983).

In 1887, Pike County had about 25,000 ha (61,000 ac) of woodland, 24,000 ha (60,000 ac) of cultivated land, 20,000 ha (50,000 ac) of pasture and 2,400 ha (6,000 ac) unused. The major agricultural products were about 17,619 m^3 (500,000 bushels) of corn, 4,757 m^3 (135,000 bushels) of wheat, and 2,960 m^3 (84,000 bushels) of oats. Other products included rye, buckwheat, hay, potatoes, tobacco, butter, sorghum, maple syrup, eggs, grapes, wine, sweet potatoes, apples, peaches, pears, and wool (Howe 1902).

The agricultural economy continued to flourish during the industrialization of the second half of the nineteenth century. Innovations in agricultural implements increased the efficiency of farm production. As a result, average farm acreage increased into the 1910s (Noble and Korsok 1975). This era saw many counties within Ohio shifting to manufacturing and other industries. One of the major demographic impacts of industrialization was the rapid and widespread shift of populations from rural contexts to urban centers in the late nineteenth and early twentieth centuries. Pike County, however, remained nearly entirely rural.

Agricultural production collapsed during the Great Depression of the 1930s. As a result, more and more rural workers migrated to urban centers to find work, contributing to the suburban sprawl that commenced in the 1930s. Agricultural production experienced a slight boost in production after the Second World War, which also saw the rise of large mono-crop farms in place of the smaller farms with more a more diversified crop yield that characterized much of the region prior to the war (Kiefer 1972; Noble and Korsok 1975). Farming practices changed after World War II, from farms that traditionally fielded several crops on smaller amounts of acreage to farms that fielded a single crop on a larger amount of acreage.

After the initial period of settlement, transportation infrastructure played an important role in the historical economic development of Pike County, as it did elsewhere. Types of transportation included rivers, trails, roads and railroads. The use, construction and improvement of these transportation methods altered the pattern of settlement and farming. Settlers entered the area on the transportation routes that were available, and typically preferred to live near a means of transportation. Easier access to markets provided material benefits in delivering goods as well as securing goods and materials that were not produced at home. Improvements to transportation routes provided markedly easier market access, which in turn provided the impetus to farmers to increase their cultivated land and their income (Noble and Wilhelm 1995).

The Scioto River was a significant, navigable, natural waterway in Pike County, which drew early settlers to enter the area. Before the Ohio and Erie Canal was built, most Scioto Valley produce was rafted down the Scioto River to the Ohio and Mississippi rivers and then to Southern markets (Howe 1902). The Scioto probably fell out of use when the canal became operational. Overland routes used by the settlers were Native American trails, which often dictated the first settlement locations. Ohio possessed a network of trails weaving through the forests and prairies and complementing the system of waterways. A few were of transcontinental importance, and some were of regional importance, and many were minor trails connecting one obscure Native American village to another. Mapping and descriptions of these trails tend to be ambiguous and conflicting, with early roads often confused with the older and somewhat different trails. The importance of some trails have been exaggerated or obscured simply because one was recorded and another was not. Various trails were in different levels of use at different times, as dictated by the location of Native American towns, availability of open land, and warfare (Conway 1965).

Four distinct trails are indicated in Pike County. The first and most important was the Scioto Trail or Warrior's Path, running through the Scioto Valley and connecting the Ohio River at the mouth of the Scioto with Lake Erie at Sandusky Bay. This was one of the most important north-south trails in the Ohio Country, connecting to trails feeding southward into Cherokee territory. The Scioto Trail in Pike County ran along the west side of the Scioto River. At what is now Waverly, it headed northward toward Chillicothe and cut across a low divide, bypassing the eastward swing of the Scioto River. This route is approximated by US 23 north of Waverly, and SR 104 south of Waverly (Conway 1965; Hulbert 1900; Lewis and Dawley ca. 1902; Mills 1914). The second distinct trail is an unnamed route running east-west through what is now Piketon. It is approximated by Beaver Road, Zahns Corner Road, probably Prairie Road, and farther west, by SR 220 and SR 124. It primarily connected Pee Pee, the early settlement near Piketon, to the salt works at what is now Jackson, Ohio (Conway 1965; Lewis and Dawley ca. 1902).

Two other distinct trails were in the western part of Pike County. One was the Pickawillany Trail, running northwestward. Another was the route followed by Colonel Robert Todd in a military expedition in 1787, and later improved by Ebenezer Zane as Zane's Trace (Conway 1965; Lewis and Dawley ca. 1902; Schneider and Stebbins 1973). In 1796, a year after the Greenville Treaty made most of Ohio safe for settlement, Congress contracted Ebenezer Zane to open a road between Wheeling, West Virginia, and Maysville, Kentucky. Known as Zane's Trace, this road ran through the western part of Pike County, running through what is now Morgantown and Latham. This trace represented the first attempt to open a public thoroughfare through the interior of the Northwest Territory. Although it was at first only a horse trail and not a wagon road, with its opening, settlement of the region increased rapidly and Zane's Trace became an important part of the Ohio Road system. In 1798, it was designated as a post road and United States mail was carried on the road on horseback. In 1804, the trace was improved into a 6.1-m (20-ft) wide road (Bond 1941; Schneider and Stebbins 1973).

However, early roads were virtually impassable when the spring rains arrived and required significant maintenance to remain in serviceable condition. In the first decades of the nineteenth century, state legislators realized that if they were to induce more people to come to Ohio, they would have to ensure that these prospective settlers had reliable and affordable market access. The resulting canal system was largely constructed between 1825 and the 1840s. The

system consisted of two main canals and many public and private branch canals, totaling nearly 1,600 km (1,000 mi) of waterways with almost 30 different names (Canal Society of Ohio 1975:4; Gieck 1992).

The Ohio and Erie Canal, the eastern of the two main canals, ran from Lake Erie at Cleveland through Akron, Newark, and Circleville to the Ohio River at Portsmouth, passing through Waverly in Pike County (Canal Society of Ohio 1975; Huntington and McClelland 1905). In late 1832, it was opened to traffic and within a year it revolutionized the economy of the Scioto Valley. Waverly grew in population because of its favorable location on the canal and a significant number of Irish and German immigrants, who were often drawn to the area as canal construction workers, remained in the area (Evans 1987; Gieck 1992; Grabb 1985).

Within decades, however, the canal system began to yield to railroads. After a peak in 1853, canal revenues decreased rapidly. Over the next 30 years, general lack of maintenance and design flaws of the Newark Summit led to the disuse of the entire southern part of the Ohio and Erie Canal by the late 1880s. In 1911, the state officially abandoned the canal from the Dresden Side Cut to Newark and from Columbus to Portsmouth. The flood of 1913, the worst in the state's history, severely damaged or destroyed much of what remained. Afterward, the state abandoned the entire canal system of Ohio and began selling off the land (Canal Society of Ohio 1975).

Three railroads were built through Pike County. The Scioto Valley Railroad was built north-south from Portsmouth to Columbus, and first operated in Pike County in 1877–1878. It ran on the east side of the Scioto Valley to Piketon, and crossed over to the west side near Waverly. The Scioto Valley Railroad made a connection with the Norfolk and Western Railway in 1892, and soon became a part of the Norfolk and Western Railway. Apparently during construction of PORTS in 1952, a spur was built from the Norfolk and Western Railway to the north side of the federal reservation to ship in materials and connect with the Chesapeake and Ohio. In 1982, the Norfolk and Western Railway became Norfolk Southern. This railroad line is still active (Drury 1985; Sheldon 1924).

The second railroad, the Scioto, Jackson and Pomeroy, ran east-northwest through the county in 1878–1879. It ran through the south side of Waverly and eastward after crossing the Scioto River. In 1905, it became the Detroit, Toledo and Ironton. The line was abandoned after becoming a part of the Grand Trunk Western Railroad in the early 1980s. The third railroad was

built in the county in 1917 by the Chesapeake and Ohio Railway, and was designed to avoid towns and road crossings. Thus, it had a limited influence on the local economy (Drury 1985; Sheldon 1924).

In the early twentieth century, the surface road system consisted of largely unpaved paths between individual farmer's parcels. Railroads dominated the shipping of goods and passengers. The push for a paved national highway system occurred in the first three decades of the twentieth century. At first the automobile was seen as a means of short-distance leisure transportation for the well-to-do. But by the eve of the First World War, both longer-distance passenger driving and the early use of motorized trucking led to the organization of movements for publicly financed hard-surface roads. These roads, the supporters believed, should be linked in a systematic manner that would tie distant points together much like the existing rail network.

As early as 1910, the state began thinking in terms of a road network oriented toward the automobile. That year the Highway Department published a bound set entitled *Highway Maps of Ohio* that showed, county by county, the condition of the sectional roads. In 1911, state roads were designated with numbers, and state funds were made available for their maintenance. As an important state road, the Columbus and Portsmouth Road was probably paved and improved in the 1910s or 1920s, allowing improved transportation. In 1925, it was designated US 23, running from Portsmouth through Columbus and Toledo to Mackinac, Michigan. US 23 is one of 16 roads in Ohio that were considered of primary importance for interstate or continental traffic (Aumann 1954; Ohio Department of Highways 1930).

LITERATURE REVIEW

In 1997, an archaeological literature review was completed for the entire PORTS property as a part of a site-wide Phase I investigation (Schweikart et al. 1997). That literature review was designed to examine a sufficient geographic area to develop a predictive model of site type and location within the PORTS property. As such, it identified all documented archaeological resources within a 6-km (4-mi) radius of the PORTS property. This is far in excess of typical literature review search areas, which are generally constrained to 0.8 km (0.5 mi) or 1.6 km (1 mi). In all, 71 documented archaeological sites were found within that radius. Rather than restate the results of that literature review here, the results of the survey will be summarized along with recent archaeological investigations that have occurred on the PORTS property.

The 1997 Phase I investigation resulted in the identification of 36 archaeological sites within the boundary of the PORTS property (Schweikart et al. 1997) [Table 1]. Thirteen of the sites were determined to represent historic farmsteads, seven were identified as historic period open refuse dumps or artifact scatters, two are historic period isolated finds, four are sites associated with PORTS, one is a historic period cemetery, five are prehistoric isolated finds, two are prehistoric lithic scatters, and two sites had both prehistoric and historic period elements (a prehistoric lithic scatter and historic farmstead and a prehistoric isolated find and cemetery). Schweikart et al. (1997) recommended further work on 33PK210, a prehistoric lithic scatter on the bluff edge of the Scioto River Valley with a high potential to contain subsurface archaeological remains. Schweikart et al (1997) identified the landform as a ridgetop, but it is actually a dune along the bluff edge. This site has since been the subject of a Phase II investigation. It was found to extend south of the PORTS property, but was recommended not eligible for inclusion in the NRHP (Hazel and Foss 2003). Site 33PK214 [PIK-207-12]) and the historic component of 33PK189 (PIK-206-9) are two cemeteries on the PORTS property, that despite the fact that cemeteries are generally not eligible for nomination to the NRHP, Schweikart et al. (1997) recommended be preserved along with two other historic period cemeteries (33PK212 and 33PK213) immediately adjacent to the PORTS boundary.

The 13 historic farmsteads were recommended potentially eligible for inclusion in the NRHP and it was recommended that a sample of those sites be subjected to Phase II site evaluations. Each was identified as at least one "architectural cluster" which consisted of either building rubble, exposed building foundations, driveways, or other evidence of cisterns, wells, and similar structures, and a scattering of artifacts on the ground surface. Limited shovel testing was completed at a handful of the sites, but each was identified as a farmstead dating from the late-nineteenth to mid-twentieth century. They were recommended as potentially eligible based on their potential to contain data regarding changes in settlement patterns and subsistence systems over time in this rural area (Schweikart et al. 1997).

In 2010 and 2011, ASC and OVAI completed Phase II investigations of each of the 13 farmstead sites (Klinge 2010; Klinge and Mustain 2011). Sites 33PK184, 33PK185, 33PK193, 33PK194, 33PK195, 33PK197, 33PK203, 33PK206, 33PK211, 33PK212, 33PK213, 33PK217, and 33PK218 were subjected to close-interval shovel testing and test unit excavation, and some level of geophysical work was conducted at all but two of these sites. None of the 13 sites were

recommended eligible for inclusion in the NRHP. Sites, 33PK193, 33PK195, and 33PK197 were determined to be elements of larger farmsteads, rather than individual farms themselves. Phase II testing of this larger farm as a whole was not completed. Accordingly, insufficient data was collected to determine whether or not those sites meet NRHP eligibility criteria. The remaining sites, however, were recommended not eligible for the NRHP (Klinge 2010; Klinge and Mustain 2011).

Subsequently, Burks (2011) identified an additional 51 historic period sites on the PORTS property through a review of historic cartographic sources and aerial photographs that predated the construction of PORTS. Each of those sites was assigned a Historic Map Building Location (HMBL) number and each was investigated during preliminary assessments conducted in late summer 2011. Three separate studies were undertaken to examine these HMBLs, one by ASC (Mustain and Klinge 2011b) and two others by OVAI and G&P. The reports for the latter two studies were not available at the time this report was prepared. A handful of the 51 HMBLs were identified as schools, churches or other structure types based on the map data, but most were identified as either residences or farmsteads. The preliminary assessment was designed to confirm the location of sites in the field, document visible site elements, and evaluate each site's condition. Several sites were documented in areas of excessive disturbance associated with the PORTS construction or land use, and many others were documented in the peripheral portions of the property beyond the plant.

The goal of the preliminary assessment was to determine which of the 51 HMBLs are archaeological sites and to evaluate their suitability for Phase I testing. Of 12 HMBLs that ASC reviewed, three were selected for testing (Mustain and Klinge 2011b). At the conclusion of the preliminary assessment, 33PK322 (HMBL 4) was identified as a series of stone footers and a stone and concrete stoop for a house. Site 33PK323 (HMBL 5) was identified as the location of a school house that had likely been impacted by demolition. Site 33PK324 (HMBL 50) was identified as the remnants of a large farmstead with numerous foundation remnants, all of which were made of poured and cast concrete. These three sites were selected for Phase I study as the first two are types that were not well-represented in the previous investigations that have occurred, and the last showed a greater degree of integrity than has been found at similar sites on the PORTS property documented by Klinge (2010) and Klinge and Mustain (2011).

The Phase I testing at 33PK322, 33PK323, and 33PK324 was undertaken in the fall of 2011 (Mustain and Klinge 2011a). Similar studies were completed at this time by OVAI and G&P but the results of these studies were not available at the time this report was written. Site 33PK322 was found to contain the remains of additional outbuildings that were not identified during the preliminary assessment. The site has been razed, but much of the ground surface was relatively undisturbed. During that investigation, the maximum depth of excavation was limited to 30.5 cm (12 in) based on guidance from Fluor B&W Portsmouth, LLC. Because it was possible that sealed archaeological deposits might exist below that depth that could provide important data, Mustain and Klinge (2011a) could not make a determination as to the significance of the site (i.e., whether it meets NRHP eligibility criteria) and they recommended additional Phase I testing, including excavations that exceeded 30.5 cm (12 in). The site was later subjected to a geophysical investigation that detected extensive modern disturbance across the site limits and did not detect shaft features or other archaeological contexts below the disturbed soil. Accordingly, the site was determined not eligible for inclusion in the NRHP (Klinge 2012). The school house (33PK323) has been completely destroyed and was recommended not eligible for the NRHP (Mustain and Klinge 2011a). Site 33PK324 has suffered significant post occupation disturbance. There are bulldozer ruts and a large push pile at the edge of the site. Although many of the foundations of the farm buildings are readily discernible, little information about activities at the site remain and it was not possible to confirm the location of the house. Mustain and Klinge (2011a) concluded that the site lacked sufficient integrity and recommended it not eligible for inclusion in the NRHP.

In early 2012, investigations examining the prehistoric settlement in the periphery of the PORTS property were conducted. Again, ASC completed part of the survey (Mustain 2012) and OVAI and G&P completed similar surveys. The reports were not available at the time this report was written. While not ignoring undocumented historic sites, these surveys focused on prehistoric archaeological sites. Mustain (2012) documented five sites (33PK339–33PK343). Site 33PK340 is a small historic scatter and the other four sites are prehistoric isolated finds, none of which could be placed in their historic contexts. All were recommended not eligible for inclusion in the NRHP (Mustain 2012).

METHODS

ARCHAEOLOGICAL FIELD METHODS

Four methods of investigation were utilized during the Phase I archaeological survey: cursory inspection, visual inspection, shovel probe excavation, and shovel test pit (STP) excavation. Five soil types were defined in the RFP for the project (Figures 3–5), two of which (Types 4 and 5) did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II archaeological testing. Cursory inspection is not a survey method, per se, but rather, as the name implies, is a simple visual examination of an area to confirm that it is disturbed as described in the RFP or to determine the extent of the previous survey and how much of a landform had been tested.

Visual inspection consists of a formal walkover of areas along transects spaced at 15-m (50-ft) intervals. Areas were visually inspected to identify readily visible archaeological resources, such as mounds, earthworks, and building or structure remnants, and to identify areas of disturbance or small habitable landforms. It is the only method used to examine the non-habitable portions of Areas 5A, 5B, and 6A of the PORTS property.

Shovel probes are excavated in suspected disturbed areas not identified in the RFP to document the disturbance. No fixed interval is used for their placement; however, they are spaced no more than 50 m (164 ft) apart. Typically, the shovel probes are 5 cm to 25 cm (2 in to 10 in) deep and measure approximately 25 cm (10 in) square. Their locations are recorded on a map but no notes are taken.

STP excavation is a subsurface testing strategy utilized to determine the presence of archaeological resources in relatively level areas where the surface visibility is less than 50 percent. The STPs are excavated at 15-m (50-ft) intervals either along transects that follow narrow landforms or on a grid in larger areas. All intervals are paced. Units are 50 cm (20 in) square in size and typically are excavated a minimum of 5 cm (2 in) into the subsoil, but do not typically exceed 50 cm (20 in) in depth. For this survey, the maximum depth of STPs was 30.5 cm (12 in) following guidance from Fluor B&W Portsmouth, LLC. In general, this was sufficient to expose subsoil in Area 5A, 5B, and 6A. However, it must be noted that it was not possible to penetrate some alluvial deposits along the larger water courses in Areas 5A and 5B. Soil from the STPs is screened through 0.64-cm (0.25-in) hardware cloth to facilitate the

recovery of artifacts. Notes are taken on each STP, recording soil characteristics and the presence of cultural material.

Additional field notes are also kept recording information including field conditions, methods of investigation, locations of sites, photographs, shovel probes, STPs, etc. Similar notes are taken for the site encountered recording location, method of investigation, physiographic setting, etc. All artifacts collected are placed in paper bags with the site number and provenience marked on the bag. Each bag is numbered and entered into a bag-log. Photographs of the project area are taken as deemed appropriate. A record of the photographs is kept in a photo-log. The locations of datum points for STP grids or sites are recorded using a Trimble ProXRS Global Positioning System (GPS) unit. The locations of shovel probes, STPs excavated along transects, the photographs, and the boundaries of the sites and Archaeological Survey Areas are also recorded with the GPS unit.

ARTIFACT ANALYSIS

All artifacts were sent to the ASC archaeological laboratory for processing and analysis. Artifacts were washed, dried, and analyzed during this stage of work.

Prehistoric Material

Lithic materials are the most durable artifacts collected on prehistoric sites and generally represent the largest portion of an assemblage. Another important category of prehistoric artifacts is ceramics, the forms and decorations of which are key temporal and cultural indicators. Faunal and botanical remains can provide a wide variety of information and generally require specialized comparative analysis. Only lithic material was recovered during this survey.

Lithic Analysis

Although prehistoric peoples utilized many organic materials, lithic material is often the only evidence of prehistoric activity to survive. The primary technique used in the manufacture of lithic tool is chipped stone. Lithic materials from archaeological sites are divided into two general categories: debitage and tools. Additional categories of lithic artifacts include but are not limited to ground stone and fire-cracked rock (FCR).

Debitage Analysis[3]

The debitage analysis consists of sorting the material into two broad categories: shatter and flakes or fragments thereof. Shatter is defined as debitage that is usually blocky or angular

[3] Adapted from Cowan and Weinberger (2004).

in appearance and exhibits no obvious dorsal or ventral surfaces. Attributes recorded for shatter are limited to raw material, presence or absence of cortex, evidence of heat alteration, and weight.

Flakes are identified as either bipolar (exhibiting points of applied force at opposing ends of the flake) or whole. Flake fragments are identified as proximal fragments, distal fragments, or medial fragments. The following attributes (if present) are recorded for flakes and flake fragments: raw material, amount of dorsal surface cortex (none, less than 50 percent, 50 percent or more but less than 100 percent, and 100 percent), platform surface (cortical, flat, or complex), presence of platform edge trim (present, absent, or indeterminate), platform edge grinding (present, absent, or indeterminate), flake termination (feathered, stepped, hinged, or plunging), evidence for heat alteration, length, width, thickness, and weight. These attributes are defined and explained in Appendix E.

Tool Analysis

The tool analysis consisted of classifying the tools based on their nominal attributes. The classification of a tool is based upon the presumed primary function of the tool or, if the particular function of a tool cannot be determined, is descriptive in nature. The classification of some tools, in particular projectile points, allows a determination of temporal or cultural affiliation. Tool analysis involves recording the metric attributes (length, width, and thickness) of the tools, if possible, along with raw material, presence or absence of cortex, and the presence or absence of heat alteration. Only one type of tool was identified during this survey: projectile point. It is defined in Appendix E.

Lithic Raw Material Identification

Efforts to identify the sources of the lithic raw materials utilized at archaeological sites are often problematic because there can be great variations of attributes between chert samples taken from the same source, and there are similarities in the attributes of cherts from different sources (Odell 2003). For example, it can be difficult to distinguish Columbus from Delaware chert.

The lithic artifacts were manufactured from four different types of chert. During this investigation, four chert types were observed in the artifact assemblage: Columbus-Delaware, Upper Mercer, Vanport, and unidentified. Unidentified cherts refer to cherts with attributes that cannot be found in the literature or type collection, or that exhibit attributes too similar to two or

more types to permit an accurate determination. Descriptions of the remaining chert types are found in Appendix E.

Historic Material

Historic cultural material is identified according to various accepted typographies. These included *The Development and Application of a Chronology for American Glass* (Deiss 1981), Gillio et al.'s (1980) *Some Common Artifacts Found at Historical Sites*, Magid's (1984) Ceramic Code Book, *Nail Chronology as an Aid to Dating Old Buildings* (Nelson 1968), the Florida Museum of Natural History (2011) Digital Type Collection, "Telling Time for Archaeologists" (Miller et al. 2000), and *An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin, Central Illinois, U.S.A*. (Stelle 2001).

The ceramic artifacts were initially sorted by function and ware type. Ware types are distinguished on the basis of paste color, paste texture, glaze, and decoration; attributes generally recognized as temporal indicators for historic ceramics. Architectural brick was also included in the ceramic material type.

Glass artifacts were assigned to functional categories, when that could be determined. Categories include window, bottle, drinking, and a broad category of "vessel" glass when a more refined category could not be determined. Window glass was analyzed for production-related diagnostic attributes. During the nineteenth century, window glass was most often manufactured as either crown glass, improved broad glass, or plate glass, and each manufacturing method can leave diagnostic markers on glass fragments. The manufacture of bottle glass had remained technologically static for thousands of years, but underwent a revolution during the nineteenth century. The introduction of bottle molds, lipping tools, snap-cases, press-molding machines, and other advances resulted in identifiable and diagnostic attributes and markings on many bottle fragments from the nineteenth and twentieth centuries. These manufacturing characteristics and their respective temporal ranges were identified for bottle, jar, tableware, window, and miscellaneous glass, if possible.

Metal artifacts were first identified by type of material (e.g., iron, steel, brass, copper, lead, etc.) and function (wagon hardware, tools, nails, etc.). Where possible, the technique of manufacture was identified, especially in the classification of nail types (e.g., machine-cut versus wire). However, metal objects are often oxidized to the point that their original shape and function cannot be established. In those instances, metal objects were cataloged as unidentified.

CURATION

All maps, notes, photographs, and artifacts associated with the archaeological survey conducted in Areas 5A, 5B, and 6A of the PORTS property will be returned to the proper DOE authorities for final disposition. Ohio Archaeological Inventory (OAI) forms documenting the archaeological resources encountered during this research were completed and will be submitted to OHPO upon release by DOE.

RESULTS AND CONCLUSIONS

PORTS is located about 5 km (3 mi) south of Piketon in Scioto and Seal townships, Pike County Ohio and is situated along the west edge of the Scioto Valley (Figures 1 and 2). Area 5A, which encompasses 121 ha (299 ac), is on the western periphery of the PORTS property west of Booster Pump Station Road and north of Principle Access Road. Area 5B, which encompasses 161 ha (398 ac), is immediately north of Area 5A in the northwest corner of the PORTS property, west of Shyville and Northern Access roads. Area 6A, which encompasses 100 ha (247 ac), is in the southwest corner of the PORTS property west of South Access Road and south of Contractor's Access Road. These areas are along the edge of a pre-glacial river valley. The valley floor contains a Pre-Illinoian glacial lakebed and the edges of the valley to the east are uplands in the unglaciated Allegheny Plateaus (Brockman 1998; Pavey et al. 1999). Little Beaver Creek, which flows through Area 5B, has cut across the glacial lakebed and into the bedrock below the lacustrine sediments and deposited alluvial material that is a mix of the residuum eroded from the adjacent uplands, as most of the clay from the lakebed has washed away (USDA, NRCS 2010, 2011). Similarly, but to a lesser extent, Big Run has cut into the lakebed deposits in Area 6A, but it has not cut completely through them (USDA, NRCS 2010, 2011).

Although some conflicting information exists, comparing current and early topographic representations of the areas (Ohio Department of Natural Resources, Division of Geologic Survey [ODNR, DGS] 2003a, 2003b; USGS 7.5′ topographic maps, 1979 Piketon and 1992 Waverly South quadrangles; USGS 15′ topographic maps, 1917 Piketon and 1908 Waverly quadrangles), quaternary geology maps (ODNR, DGS 2005; Pavey et al. 1999), and soil survey data (USDA, NRCS 2010, 2011) indicates that the edge of the glacial lakebed runs along the bottom of the hill to the northeast of Shyville Road and extends northeastward south of the railroad tracks along the north edge of the PORTS property east of Areas 5A, 5B, and 6A.

Landforms in the northwestern portion of the periphery within Areas 5A and 5B appear to be unglaciated, dissected uplands. Soils on the ridgetops and hillsides were all formed in residuum or residuum and colluvium (USDA, NRCS 2011). However, this area is clearly depicted as within lacustrine deposits of Lake Tight (Pavey et al. 1999) and the bedrock topography map indicates that ridgetops in this area are underlain by older material those west of the glacial lake (ODNR 2003a; Slucher et al. 2006). The elevations of the ridgetops within Lake

Tight are not significantly different from those east of it and it is unknown if they were islands in the lake or submerged and the lacustrine deposits have eroded away leaving residuum. Regardless, they are steep sided ridges that extend above the level glacial lakebed composing the majority of the PORTS property.

The hills in the western portion of Area 6A are substantially lower than those to the north in Areas 5A and 5B. They do not have lacustrine soils on them and were not formed in residuum. This area contains eolian (i.e., windblown) deposits (USDA, NRCS 2011). These low rises are sand dunes formed during the Pleistocene when strong winds off the nearby Wisconsinan glaciers deposited loess across much of the southeastern part of the continent, leaving large sand deposits in Pike County (Hazel and Foss 2003). The dunes formed on the lakebed along the edge of the Scioto River Valley well after Lake Tight drained.

The dunes and steep ridges are along the eastern edge of the Scioto River Valley. Much of the western edge of the PORTS property is along the bluff edge. The edge of the river valley is cut by numerous small drainages that have eroded ravines into the bluff and bluff edge. As well as encompassing part of the bluff, portions of Areas 5A and 6A along two access roads extend down the bluff and onto a terrace on the floor of the Scioto River Valley.

Five soil types were defined in the RFP for the project (Figures 3–5). Two of them (Types 4 and 5) did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II level archaeological testing respectively. Cursory inspections of these areas were performed and they were photographed. Except in areas that Schweikart et al. (1997) tested at 15-m (50-ft) intervals or Mustain and Klinge (2011a) tested at 5-m (15-ft) intervals, which were also subjected to cursory inspections and photographed, habitable landforms (i.e., relatively level) in Areas 5A, 5B, and 6A defined as containing Types 1–3 soils were tested with shovel probes to document disturbance or STPs to search for archaeological deposits in undisturbed areas. The remaining portions of Areas 5A, 5B, and 6A with Types 1–3 soils, primarily hillsides, were visually inspected along transects spaced at 15-m (50-ft) intervals. The various methods used to examine Type 1, 2, and 3 soils can be identified by comparing Figure 3 through Figure 8.

ARCHAEOLOGICAL SURVEY AREA DESCRIPTIONS

Areas 5A, 5B, and 6A, as defined in the RFP, were divided into 96 smaller Archaeological Survey Areas (ASA) to facilitate record keeping (Figures 6–8). Factors such as

ground cover, landform, and method of investigation were the main considerations in delineating the ASA. Some areas were designated based on the soil types defined in the RFP and others based on where previous archaeological testing had been completed. All portions of Areas 5A, 5B, and 6A were examined at some level and each ASA was photographed and its limits recorded with the GPS data recorder.

Area 5A

Area 5A is located along the western periphery of the PORTS property west of Booster Pump Station Road, which is on the west edge of the scrap yard, and north of Principle Access Road at the plant's west gate (Figure 2). It was divided into 19 ASAs (Figure 6; Table 2). The area is characterized by steep hillsides and narrow ridgetops between the level glacial lakebed and edge of the Scioto River Valley. Most of it is above the bluff, but a small part extends down onto a terrace along the east edge of the valley. One prehistoric lithic scatter (33PK376) and two prehistoric isolated finds (33PK377 and 33PK378) were documented in Area 5A (Figure 9, Sheets 1–8; Table 3).

ASA 200

ASA 200 encompasses a ridgetop in Area 5A north of the power substation (Figure 9, Sheets 1–3; Table 2). It is a narrow wooded area with a small grassy area along a power-line easement (Plate 1) that is generally level and mostly undisturbed, so STPs and shovel probes were excavated to test it. A total of 29 STPs were excavated, one of which was disturbed. Site 33PK376 was identified at the north end of ASA 200. Eight radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. In the wider, north part of the ridgetop they were on a grid and in the center of the ASA, where the ridgetop narrows and curves, STPs were excavated along a transect that followed the landform. Three shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the north, east, and west by the top of the sloping hillsides that surround it. The eastern boundary is along the edge of a power substation in a large cut and fill area (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities. The power-line easement and the area to the south of it are disturbed. There is a two-track road that has disturbed much of the narrow portion of the ridgetop.

ASA 201

ASA 201 includes a sloping ridgetop, hillside, toes, and a ravine in Area 5A north and east of the power substation along the west edge of the PORTS property (Figure 9, Sheets 1–6; Table 2). It is a primarily wooded area, but there are areas of planted pines and grassy and scrubby areas along power-line easements (Plate 2). There is a small unnamed tributary to Little Beaver Creek in a long ravine in the western part of the ASA. Five small toes along the hillside are relatively level so STPs were excavated to test them. Two of these toes are within an area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing. However, a cursory inspection indicated that the toes were undisturbed and they were tested as part of ASA 201. A total of 22 STPs spaced at 15-m (50-ft) intervals were excavated. All were excavated along transects that followed the landforms. The remaining portion, by far the bulk of ASA 201, is not level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The northern and western boundaries are along the edge of Area 5A. Most of the eastern boundary is along the edge of edge of a power substation in a large cut and fill area (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities. The northeast corner is the base of the hill along the edge of the glacial lakebed. The ASA is bounded to the south by a curving ridgetop. There are wet and scoured areas along most of the bottom of the ravine. The power-line easements are likely disturbed, but are sloping. No STPs were excavated in the wet areas and no shovel probes were excavated in the sloping areas to confirm the disturbance.

ASA 202

ASA 202 is located on the glacial lakebed in Area 5A north of the power substation (Figure 9, Sheet 2; Table 2). It is an area of planted pines with a grassy area along a power-line easement (Plate 3) that is generally level and somewhat undisturbed, so STPs and shovel probes were excavated to test it. Twenty STPs spaced at 15-m (50-ft) intervals were excavated, 11 of which were disturbed. One shovel probe was excavated in the ASA to confirm disturbance. The ASA is bounded to the north and west by the base of a sloping hillside and to the east by the edge of the power-line easement. The southern boundary is along the edge of a large cut and fill area (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities. The power-line easement is disturbed.

ASA 203

ASA 203 is a toe in Area 5A north of the power substation (Figure 9, Sheet 1; Table 2). It is a wooded area (Plate 4) that is generally level and largely undisturbed so 12 STPs were excavated to test it. Site 33PK377 was identified at the north end of ASA 200. Four radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The ASA is bounded to the northwest, northeast, and southeast by the top of the sloping hillsides that surround it. The southwestern boundary is at the base of the sloping hillside above the toe.

ASA 204

ASA 204 is located on the glacial lakebed in Area 5A north of the power substation (Figure 9, Sheet 2; Table 2). It is an area of planted pines with a grassy area along a power-line easement (Plate 5) that is generally level but disturbed. Shovel probes were excavated to test it. Four shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the east by the edge of Area 5A, to the south by the edge of cut and fill (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities, and to the east by a power-line easement. The part of the northern boundary is along the edge of Area 5B and the rest is at the base of the sloping hillside. The entire ASA is disturbed.

ASA 205

ASA 205 encompasses a toe in Area 5A northwest of the power substation (Figure 9, Sheet 1; Table 2). It is a mostly wooded area with an area of scrub along a power-line easement (Plate 6) that is generally level and largely undisturbed, so STPs were excavated to test it. A total of 24 STPs were excavated, one of which was disturbed. Site 33PK378 was identified at the south end of ASA 205. Four radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The ASA is bounded to the northwest by the top of the sloping hillside and to the east by the slope along the edge of the ravine. The southern boundary is at the base of the sloping hillside above the toe. The power-line easement is disturbed.

ASA 206

ASA 206 encompasses two toes and a small floodplain in Area 5A northwest of the power substation (Figure 9, Sheet 1; Table 2). It is a wooded area (Plate 7) that is generally level

and largely undisturbed so STPs were excavated to test it. A total of 28 STPs spaced at 15-m (50-ft) intervals were excavated. The ASA is bounded to the east by the base of the sloping hillside, to the south by the top of the sloping hillside below the toe, and to the west by a small unnamed tributary to Little Beaver Creek that flows through the ravine. The north edge is partially bounded by the edge of the floodplain along the creek and partly by the base of the hillside above the toe. There is a sloping swale between the north and south toes and a sloping bluff between the north toe and the floodplain where no STPs were excavated.

ASA 207

ASA 207 encompasses three toes in Area 5A west of the power substation (Figure 9, Sheets 1 and 3; Table 2). It is a wooded area (Plate 8) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 41 STPs spaced at 15-m (50-ft) intervals were excavated, one of which was disturbed. The ASA is bounded to the east by the base of the sloping hillside, to the north and south by the top of the sloping hillside below the toe, and to the west by a small unnamed tributary to Little Beaver Creek that flows through the ravine. There are sloping swales between the toes where no STPs were excavated.

ASA 250

ASA 250 encompasses a small portion of the bluff edge above the Scioto River Valley in Area 5A, east of the security gate and north of Principle Access Road on the west edge of the PORTS property (Figure 9, Sheet 8; Table 2). It is a grassy area (Plate 9) that is generally level and largely undisturbed so STPs were excavated to test it. Three STPs spaced at 15-m (50-ft) intervals were excavated, all of which were disturbed. The ASA is bounded to the north by the edge of Area 5A and to the east, west, and south by sloping disturbed hillside.

ASA 251

ASA 251 encompasses a small portion of a terrace in the Scioto River Valley in Area 5A, north of the security gate on Principle Access Road on the west edge of the PORTS property (Figure 9, Sheet 8; Table 2). It is a wooded area (Plate 10) that is generally level and largely undisturbed so STPs were excavated to test it. Six STPs spaced at 15-m (50-ft) intervals were excavated. The ASA is bounded to the north and west by the edge of Area 5A and to the south and east by sloping disturbed hillside.

ASA 252

ASA 252 encompasses a sloping hillside in Area 5A north and south of Principle Access Road on the west edge of the PORTS property (Figure 9, Sheet 8; Table 2). It is a primarily wooded area, but there are grassy sections of roadside and a grassy area along a power-line easement (Plate 11). As no parts of the hillside are level enough to be considered habitable, it was visually inspected along transects spaced at 15-m (50-ft) intervals. Most of the northern, southern, and western boundaries are the edge of the PORTS property. The eastern boundary is along the edge of the glacial lakebed. Nearly all of the hillsides in this ASA are cut and fill along a raised roadbed and road cut for Principle Access Road. There are deep ditches along both sides of the road. These areas and the power-line easement are likely disturbed, but are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 253

ASA 253 is located on the glacial lakebed in Area 5A north of Principle Access Road and east of Perimeter Road (Figure 9, Sheet 7; Table 2). It is an area of planted pines with grassy areas along numerous power-line easements (Plate 12) that is generally level but disturbed. Shovel probes were excavated to test it. A total of 49 shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the north and west by the hillside. Part of the southern boundary is hillside along the road cut for Principle Access Road. The rest of the southern boundary and the eastern boundary are along the edge of Area 5A. There is a paved area and some slope along Perimeter Road. The entire area appears to be disturbed. No shovel probes were excavated in the paved or sloping areas to confirm the disturbance.

ASA 254

ASA 254 encompasses a ridgetop in Area 5A west of the power substation (Figure 9, Sheet 3; Table 2). It is a wooded area (Plate 13) that is generally level and partly undisturbed so STPs were excavated to test it. A total of 31 STPs spaced at 15-m (50-ft) intervals were excavated, 24 of which were disturbed. The ASA is bounded to the north, east, and west by the top of the surrounding hillside and to the south by the base of the sloping ridgetop. Nearly all of the ASA is disturbed.

ASA 255

ASA 255 is a ridgetop in Area 5A southwest of the power substation (Figure 9, Sheets 3 and 5; Table 2). It is a wooded area (Plate 14) that is generally level but mostly disturbed so STPs and shovel probes were excavated to test it. A total of 30 STPs spaced at 15-m (50-ft) intervals were excavated, 26 of which were disturbed. A total of 23 shovel probes were excavated in the ASA to confirm disturbance. The ASA is almost entirely bounded by the top of the surrounding hillside. Part of the western boundary is along the edge of Area 5A and the southwest corner is bounded by a power-line easement where it crosses the narrow ridgetop. Nearly all of the ASA is disturbed.

ASA 256

ASA 256 encompasses a ridgetop in Area 5A southwest of the power substation (Figure 9, Sheet 5; Table 2). It is a wooded area with narrow scrubby areas along power-line easements (Plate 15) that is generally level but disturbed so shovel probes were excavated to test it. A total of 18 shovel probes were excavated in the ASA to confirm disturbance. The ASA is almost entirely bounded by the top of the surrounding hillside. It is bounded to the west by a power-line easement where it crosses the narrow ridgetop and to the north by the edge of edge of a power substation in a large cut and fill area (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities. There is a two-track road running down this ridgetop. The entire ASA is disturbed.

ASA 257

ASA 257 is a ridgetop in Area 5A south of the power substation (Figure 9, Sheet 5; Table 2). It is a wooded area (Plate 16) that is generally level and partly undisturbed so STPs were excavated to test it. A total of 13 STPs spaced at 15-m (50-ft) intervals were excavated. The ASA is bounded to the northeast by disturbance along a two-track road and to the southwest and southeast by the top of the surrounding hillside.

ASA 258

ASA 258 is located on the glacial lakebed and encompasses ridgetop and hillsides in Area 5A northwest of Perimeter Road and west of the Booster Pump Station Road and the scrap yard (Figure 9, Sheets 1–7; Table 2). It is a large area of cut and fill encompassing electric substation and rail yard identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). A cursory inspection of the area confirmed this

disturbance. The area depicted in the RFP included two undisturbed toes that were tested as part of ASA 201. ASA was photographed (Plate 17) and its boundary was recorded. No other testing was performed.

ASA 259

ASA 259 encompasses a toe in Area 5A north of Principle Access Road and east of Perimeter Road (Figure 9, Sheet 7; Table 2). It is a wooded area (Plate 18) that is generally level and partly undisturbed so STPs were excavated to test it. A total of 35 STPs spaced at 15-m (50-ft) intervals were excavated, five of which were disturbed. The ASA is bounded to the south, east, and west by the top of the surrounding hillside and to the north by the base of the sloping ridgetop. There is a swale in the east part of the ASA where no STPs were excavated.

ASA 260

ASA 260 includes a sloping ridgetop and hillside in Area 5A north of Principle Access Road and east of Perimeter Road along the west edge or the PORTS property (Figure 9, Sheets 5–7; Table 2). It is a primarily wooded area, but there are scrubby areas along power-line easements (Plate 19). No portions of the ridgetop or hillside are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The western boundary is along the edge of Area 5A and eastern boundary is along the edge of a large cut and fill area (ASA 258) identified in the RFP as post-1952 disturbance associated with PORTS activities. The north edge is bounded by the ridgetop and the south edge by the base of the hillside and the edge of Area 5A. The power-line easements are likely disturbed, but are sloping. No shovel probes were excavated in the sloping areas to confirm the disturbance.

Area 5B

Area 5B is located along the northwestern periphery of the PORTS property between North Access and Booster Pump Station roads from Perimeter Road north to the edge of the property (Figure 2). It was divided into 54 ASAs (Figure 7; Table 2). This topographically complicated area is characterized by steep hillsides and narrow ridgetops in the west, level areas of glacial lakebed in the east and south, and is crossed by Little Beaver Creek and one of its unnamed tributaries, both of which have fairly substantial valleys. One prehistoric lithic scatter (33PK383), two prehistoric isolated finds (33PK373 and 33PK384), one historic scatter (33PK374), and a small historic dump (33PK375) were documented in Area 5B (Figure 10,

Sheets 1–9; Table 3). Additional remains of a previously documented historic site (33PK322) were encountered in Area 5B.

ASA 1

ASA 1 is located on the glacial lakebed in Area 5B northeast of Stockdale Road (CR 301) along the north edge of the PORTS property (Figure 10, Sheets 1 and 2; Table 2). It is a large area of cut and fill along a railroad bed identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 4). A cursory inspection of the area confirmed disturbance in most of the area. The area depicted in the RFP included part of an undisturbed landform tested by Mustain and Klinge (2011a) that was designated ASA 2 and a small undisturbed area with additional remains of 33PK322 that was designated ASA 4. Site 33PK320 (HMBL 2) is a secondary deposit of historic rubble documented by Mustain and Klinge (2011b) along the north edge of ASA 1. Rubble that had been previously documented at the site was observed. No additional testing was carried out at the site. ASA 1 was photographed (Plate 20) and its boundary was recorded. No other testing was performed.

ASA 2

ASA 2 encompasses a terrace and floodplain in Area 5B west of old Shyville Road and north of the railroad bed (Figure 10, Sheet 2; Table 2). It is a wooded area (Plate 21) that is mostly within an area along the railroad bed identified in the RFP as post-1952 disturbance associated with PORTS activities and did not require testing. However, a cursory inspection indicated that it is part of a landform tested by Mustain and Klinge (2011a) that is generally level and largely undisturbed so STPs were excavated to test it. Eight STPs spaced at 15-m (50-ft) intervals were excavated, two of which were disturbed. The ASA is bounded to the east by the edge of Area 5B and to the south and west by the fill along the railroad bed. The northern boundary is an unnamed tributary to Little Beaver Creek. The ASA contains a linear sloping area between the terrace and floodplain.

ASA 3

ASA 3 is located on the glacial lakebed in Area 5B west of Shyville Road and north of the railroad bed (Figure 10, Sheet 2; Table 2). It is a mostly wooded area with a small area of scrub (Plate 22) that is generally level but disturbed so shovel probes were excavated to test it. Four shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the north and east by the edge of Area 5B, to the south

by an unnamed tributary to Little Beaver Creek, and to the south and west by the edge of cut and fill associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities. The entire ASA is disturbed. The west end of ASA is a large swale and slope along the edge of the creek valley that appear to have been disturbed by railroad construction. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 4

ASA 4 is located on the glacial lakebed in Area 5B north of the railroad bed near the north edge of the PORTS property (Figure 10, Sheet 2; Table 2). It is a wooded area (Plate 23) that is within an area along the railroad bed identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing. However, a cursory inspection indicated that it contained a foundation remnant so STPs were excavated to test it. Four STPs spaced at 15-m (50-ft) intervals were excavated, two of which were disturbed, and a third was on a concrete floor. The ASA is bounded to the north and east by a ditch or channelized drainage and to the southwest by the railroad bed. None of the STPs produced artifacts. The foundation remnant (Plate 24), which appears to be a razed milk barn, is a newly discovered part of 33PK322 (HMBL 4). The portion of the site on the south side of the railroad bed was documented by Mustain and Klinge (2011a) and these additional remains were investigated using methods commensurate with that earlier study and reported in an addendum to their report (Klinge 2012).

ASA 5

ASA 5 is located on the glacial lakebed in Area 5B southwest of the railroad bed (Figure 10, Sheets 1 and 2; Table 2). It is a long area of scrub with a grassy field at its west end (Plate 25) that is generally level but disturbed, so shovel probes were excavated to test it. Seventeen shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the west by the edge of Area 5B and the northeast by the edge of cut and fill associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities. The most of the southwestern boundary is along Stockdale Road (CR 301) and part of it is along a power-line easement. The southeastern boundary is along a previously surveyed area. The entire ASA is disturbed. The northwest end of ASA has two sloping areas that appear to have been disturbed railroad and power line construction. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 6

ASA 6 encompasses a sloping hillside in Area 5B between the railroad bed and Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a wooded bluff (Plate 26) between the bottomland along an unnamed tributary to Little Beaver Creek and the glacial lakebed. No portions of the bluff are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. It is bounded to the northwest by a previously surveyed area, to the southwest by Stockdale Road (CR 301), and the northeast by the edge of cut and fill associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities. The southeastern boundary is the bottom of the hillside. The roadside is sloping and appears to be cut and fill. No shovel probes were excavated in this sloping area to confirm the disturbance.

ASA 7

ASA 7 is located on the glacial lakebed in Area 5B southwest of Stockdale Road (CR 301) [Figure 10, Sheets 1 and 2; Table 2]. It is a wooded area (Plate 27) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 55 STPs spaced at 15-m (50-ft) intervals were excavated. The northeast edge is along Stockdale Road (CR 301) and the northwest and southwest boundaries are along the edges of cut and fill from power-line and railroad construction. The southeast boundary is a wetland and slope. Site 33PK321 (HMBL 3) is a historic residential site documented by Mustain and Klinge (2011a) in the west corner of ASA 7. A well or cistern documented at the site was observed. No additional testing was carried out at the site. A small drainage runs along the northwest edge of the ASA and through the center of the ASA that opens up into wetlands within the ASA and at its southeast end. The roadside is sloping and appears to be cut and fill. No STPs were excavated in the wet areas or in the sloping areas to confirm the disturbance.

ASA 8

ASA 8 is located on the glacial lakebed in Area 5B southwest of Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a largely wooded area (Plate 28) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 76 STPs spaced at 15-m (50-ft) intervals were excavated, one of which was disturbed. It is bounded to the east by a ravine, to the north by a wetland and slope, and to the southwest by a disturbed power-line

easement. The southeastern boundary is along the bluff edge above the valley of an unnamed tributary of Little Beaver Creek. There is a wetland in the ASA where no STPs were excavated.

ASA 9

ASA 9 is located on the glacial lakebed in Area 5B southwest of Stockdale Road (CR 301) [Figure 10, Sheets 1 and 2; Table 2]. It is a narrow grassy area along a power-line easement (Plate 29) that is partially level but disturbed, so shovel probes were excavated to test it. Eight shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the northeast and southwest by the power-line easement, to the northwest by a small drainage, and to the southeast by the bluff edge above an unnamed tributary to Little Beaver Creek. The entire ASA is disturbed. The power line is along the base of a ridge and several portions of the easement are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 10

ASA 10 is located on the glacial lakebed in Area 5B along the south side of Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a wooded area (Plate 30) that is generally level and largely undisturbed so STPs were excavated to test it. Five STPs spaced at 15-m (50-ft) intervals were excavated. It is bounded to the north by a wetland, to the south and southwest by a small drainage in a swale that drops off quickly into a ravine, and to the northeast by Stockdale Road (CR 301). The roadside is sloping and appears to be cut and fill. No STPs were excavated in this sloping area to confirm the disturbance.

ASA 11

ASA 11 is located on the glacial lakebed in Area 5B south of Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a largely wooded area (Plate 31) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 65 STPs spaced at 15-m (50-ft) intervals were excavated. It is bounded to the north and west by slope on the side of a ridge and to the northeast by a disturbed power-line easement. The southern boundary is along the bluff edge above the valley of an unnamed tributary of Little Beaver Creek. There is a swale in the ASA where no STPs were excavated.

ASA 12

ASA 12 encompasses a ridgetop in Area 5B along the west edge of the PORTS property (Figure 10, Sheet 2; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced

at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 12 was photographed (Plate 32) and its boundary was recorded. No other testing was performed.

ASA 13

ASA 13 encompasses sloping hillsides and a ravine in Area 5B between Stockdale Road (CR 301) and the west edge of the PORTS property (Figure 10, Sheets 1–4; Table 2). It is a mostly wooded area with narrow areas of grass along power-line easements (Plate 33) that includes part of the hillside of a ridge, hillsides that comprise bluffs along parts of Little Beaver Creek and one of its unnamed tributaries, a steep ravine, and wetlands and a swale at the head of the ravine. No portions of the hillsides or bluffs are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. Site 33PK375 was identified in a wooded swale at the south edge of ASA 13. The ASA, which is very irregularly shaped, is bounded by the edge of Area 5A to the west and north, a power-line easement and Stockdale Road (CR 301) to the northeast, and the bottoms of the bluffs and hillside to the south. A small drainage runs along the northwest edge of the ASA that opens up into a wetland. There are some areas along the roadside at the northeast edge of the ASA, within the power-line easement, along an old roadbed, and on the hillside northeast of 33PK375 that are likely disturbed, but are sloping. No STPs were excavated in the wet areas or in the sloping areas to confirm the disturbance.

ASA 14

ASA 14 encompasses part of a toe in Area 5B along the west edge of the PORTS property (Figure 10, Sheets 2 and 3; Table 2). It is an area that Schweikart et al. (1997) tested with STP spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 14 was photographed (Plate 34) and its boundary was recorded. No other testing was performed.

ASA 15

ASA 15 encompasses part of a toe in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 35) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 74 STPs were excavated. Site 33PK383 was identified in center of ASA 15. Six radial units were excavated at the site spaced at 7.5-m (25-ft) intervals.

The rest of the STPs were spaced at 15-m (50-ft) intervals. A few of the STPs at the west end of the toe were excavated at slightly smaller intervals because the 15-m (50-ft) grid points did not fall on top of the landform. The ASA is bounded to the north by the edge of Area 5B and a previously tested area. The rest of the boundary is along the edge of the toe. There are two swales and a sloping area along the southwest edge of the landform where no STPs were excavated.

ASA 16

ASA 16 encompasses a series of small ravines and toes in Area 5B along the west edge of the PORTS property (Figure 10, Sheet 3; Table 2). It is the location of 33PK203, identified in the RFP as a previously surveyed area where a Phase II investigation had been completed that did not require testing (Figure 4). Site 33PK203 is a historic farmstead documented by Schweikart et al. (1997). Phase II testing was completed by OVAI (the report for this testing was not available at the time this report was prepared). A cursory inspection of the area confirmed the presence of the site and identified the habitable (i.e., relatively level) portions of the landforms that were surveyed. The area delineated as being tested extended across Little Beaver Creek. The portion of the previously surveyed area on the opposite side of the creek from the site is included in ASA 32. ASA 16 was photographed (Plate 36) and its boundary was recorded. No other testing was performed.

ASA 17

ASA 17 is located on the glacial lakebed in Area 5B along the northeast side of Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a grassy area (Plate 37) that Mustain and Klinge (2011a) tested with STPs spaced at 5-m (15-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. Site 33PK322 (HMBL 4) is a historic farmstead documented by Mustain and Klinge (2011b) in ASA 17. Foundations and various other elements of the site were observed. No additional testing was carried out in this portion of the site, but additional remains associated with the site were documented in ASA 4. ASA 17 was photographed and its boundary was recorded. No other testing was performed.

ASA 18

ASA 18 is located on the glacial lakebed in Area 5B west of Shyville Road and south of the railroad bed (Figure 10, Sheet 2; Table 2). It is a mostly wooded area with scrub along a

power-line easement (Plate 38) that is generally level but disturbed, so shovel probes were excavated to test it. Six shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the east by the edge of Area 5B, to the north by the edge of cut and fill associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities, and to the south by a previously surveyed area. The western boundary is along the bluff edge above an unnamed tributary to Little Beaver Creek. The entire ASA is disturbed.

ASA 19

ASA 19 encompasses a sloping hillside in Area 5B between the railroad bed and Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a wooded area (Plate 39) that is the bluff between the bottomland along an unnamed tributary to Little Beaver Creek and the glacial lakebed. No portions of the bluff are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. It is bounded to the southwest by Stockdale Road (CR 301) and the northeast by the edge of cut and fill associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities. The southeastern and northwestern boundaries are the top and bottom of the hillside. The roadside is sloping and appears to be cut and fill. No shovel probes were excavated in this sloping area to confirm the disturbance.

ASA 20

ASA 20 encompasses a floodplain in Area 5B between the railroad bed and Stockdale Road (CR 301) [Figure 10, Sheet 2; Table 2]. It is a narrow wooded area (Plate 40) that is generally level and largely undisturbed so STPs were excavated to test it. Six STPs spaced at 15-m (50-ft) intervals were excavated, one of which was disturbed. The ASA is along the floor of a ravine containing an unnamed tributary to Little Beaver Creek and is bounded to the northwest and southeast by adjacent hillsides. The southwestern boundary is Stockdale Road (CR 301) and the northeast boundary is the edge of a cut and fill area associated with a railroad bed (ASA 1) identified in the RFP as post-1952 disturbance associated with PORTS activities. There is a wetland along the southeast edge of the floodplain. The roadside is sloping and appears to be cut and fill. No STPs were excavated in the wet area or the sloping area to confirm the disturbance.

ASA 21

ASA 21 encompasses a floodplain in Area 5B south of Stockdale Road (CR 301) [Figure 10, Sheets 2 and 4; Table 2]. It is a narrow wooded area with a small grassy area in a power-line easement (Plate 41) that is generally level, but much of it was disturbed so STPs and shovel probes were excavated to test it. A total of 25 STPs spaced at 15-m (50-ft) intervals were excavated, three of which were disturbed. STPs were excavated along transects that followed the landform and were placed on both sides of the drainage. The southern part of the ASA is disturbed and two shovel probes spaced no more than 50 m (164 ft) apart were excavated to confirm this disturbance. The ASA is along the floor of a ravine containing an unnamed tributary to Little Beaver Creek and is primarily bounded by adjacent hillsides. At the northeast end of the ASA it is bounded by Stockdale Road (CR 301) and the southwest end is at the old shooting range (33PK219). Site 33PK219 was documented by Schweikart et al. (1997). It is a disturbed area that is the location of the former plant shooting range. No additional testing was carried out at the site. The stream meanders significantly and there are areas of the ravine floor that are wet and scoured where no STPs were excavated. There is an old roadbed in the ASA that has disturbed part of the floodplain. The roadside along the north edge is sloping and appears to be cut and fill. No STPs were excavated in this sloping area to confirm the disturbance.

ASA 22

ASA 22 encompasses a floodplain and terrace in Area 5B north of Little Beaver Creek (Figure 10, Sheet 4; Table 2). It is a narrow wooded area (Plate 42) that is generally level but much of it was disturbed so STPs and shovel probes were excavated to test it. Seventeen STPs spaced at 15-m (50-ft) intervals were excavated, three of which were disturbed. STPs were excavated along transects that followed the landform. An old roadbed has disturbed much of the ASA and five shovel probes spaced no more than 50 m (164 ft) apart were excavated to confirm this disturbance. The central and southern portions of the floodplain within ASA 22 are very narrow and the roadbed takes up the entire landform in these parts of the landform. The north edge of the ASA is at 33PK219, the west edge is an unnamed tributary to Little Beaver Creek, and the eastern boundary is along the base of the bluff. The southern edge is at the boundary between the road disturbance at the south end of ASA 22 and an undisturbed floodplain at the confluence of Little Beaver Creek and its unnamed tributary.

ASA 23

ASA 23 encompasses a floodplain in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area with narrow areas of scrub along power-line easements (Plate 43) that is generally level and largely undisturbed, so STPs were excavated to test it. Ten STPs were excavated spaced at 15-m (50-ft) intervals. The ASA is bounded to the north by an unnamed tributary to Little Beaver Creek and a roadbed, to the south by Little Beaver Creek, and to the east by a railroad bed. The power-line easement that crosses the ASA appears to be undisturbed. The ASA contains some wet, scoured areas along the creeks where no STPs were excavated.

ASA 24

ASA 24 encompasses a floodplain and terrace in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 44) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 60 STPs were excavated spaced at 15-m (50-ft) intervals. The ASA is bounded to the south and east by Little Beaver Creek and its unnamed tributary and to the north by the base of the bluff. An old roadbed crosses the floodplain near its northeast corner where no STPs were excavated. The ASA contains some wet, scoured areas along the creeks where no STPs were excavated.

ASA 25

ASA 25 encompasses a small bench in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 45) that is generally level and largely undisturbed so STPs were excavated to test it. Three STPs were excavated spaced at 15-m (50-ft) intervals. STPs were excavated along a transect that followed the landform. The ASA is bounded to the north by an old roadbed and to the south by the bluff above the confluence of Little Beaver Creek and its unnamed tributary. The western tip of the ASA is adjacent to a previously surveyed area.

ASA 26

ASA 26 includes part of a bench in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. The area Schweikart et al. (1997) reported as being tested extended down over the bluff edge. The

portion of the previously surveyed area on the hillside is included in ASA 13 and two small areas at the base of the bluff were included in ASA 24 and ASA 28. ASA 26 was photographed (Plate 46) and its boundary was recorded. No other testing was performed.

ASA 27

ASA 27 encompasses part of a bench in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 47) that is generally level and largely undisturbed so STPs were excavated to test it. Fifteen STPs were excavated spaced at 15-m (50-ft) intervals. The ASA is bounded to the north by the hillside and to the south by a previously surveyed area. An old roadbed extends along the south edge of the ASA where no STPs were excavated.

ASA 28

ASA 28 is a floodplain in Area 5B north of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 48) that is generally level and largely undisturbed so STPs were excavated to test it. Nine STPs were excavated at 15-m (50-ft) intervals. The ASA is bounded to the west by Little Beaver Creek and to the east by the base of the bluff.

ASA 29

ASA 29 encompasses a hillside in Area 5B between Stockdale Road (CR 301) and Little Beaver Creek (Figure 10, Sheets 2 and 4; Table 2). It is a mostly wooded area with narrow areas of scrub and grass along power-line easements (Plate 49) that includes hillsides that comprise bluffs along parts of Little Beaver Creek and one of its unnamed tributaries. No portions of the hillsides or bluffs are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by Stockdale Road (CR 301) to the north, Little Beaver Creek to the south, and the edge of the floodplain along an unnamed tributary to Little Beaver Creek to the west. The eastern boundary follows the bluff edge except at the southern end of the ASA where it is along the railroad tracks. There is a large, steeply sloping area of fill where the railroad bed is built up to pass over Little Beaver Creek and there is a power-line easement in the ASA that is likely disturbed, but both of these areas are sloping. The roadside along the north edge is sloping and appears to be cut and fill. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 30

ASA 30 is a floodplain in Area 5B north of Little Beaver Creek (Figure 10, Sheet 4; Table 2). It is a wooded area (Plate 50) that is generally level and largely undisturbed so STPs

were excavated to test it. Ten STPs were excavated spaced at 15-m (50-ft) intervals. The ASA is bounded to the east by an unnamed tributary to Little Beaver Creek and to the west by the base of the bluff. The ASA contains some wet, scoured areas along the creek where no STPs were excavated.

ASA 31

ASA 31 is a floodplain in Area 5B south of Little Beaver Creek (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 51) that is generally level and largely undisturbed so STPs were excavated to test it. Eighteen STPs were excavated spaced at 15-m (50-ft) intervals, one of which was disturbed. The ASA is bounded to the north by Little Beaver Creek and to the south by the base of the bluff.

ASA 32

ASA 32 is a floodplain in Area 5B south of Little Beaver Creek at the west edge of the PORTS property (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 52) that is generally level and largely undisturbed so STPs were excavated to test it. Eight STPs were excavated spaced at 15-m (50-ft) intervals, one of which was disturbed. The ASA is bounded to the north by Little Beaver Creek and to the south by the base of the bluff.

ASA 33

ASA 33 encompasses sloping ridgetop, a ravine, and hillsides in Area 5B, south of Little Beaver Creek between the west edge of the PORTS property and a railroad bed (Figure 10, Sheets 3–6; Table 2). It is a mostly wooded area with an area of planted pines and narrow areas of grass and scrub along power-line easements (Plate 53) that includes the sloping portions of a ridgetop and the adjacent hillside. The bottom portion of the hillside along the north edge of the ASA comprises the bluff along Little Beaver Creek. The ASA also includes a long ravine along the west side of the railroad bed. No portions of the hillsides or bluffs are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 5A to the west and south and the base of the bluff above Little Beaver Creek to the north. The western boundary is along the edge of cut and fill associated with a railroad bed in a large area (ASA 51) identified in the RFP as post-1952 disturbance associated with PORTS activities. There is a large, steeply sloping area of fill where the railroad bed is built up to pass over Little Beaver Creek. This area and the power-line

easements are likely disturbed, but are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 34

ASA 34 is a ridgetop in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 3; Table 2). It is a wooded area (Plate 54) that is generally level and largely undisturbed so STPs were excavated to test it. Twelve STPs were excavated. Site 33PK384 was identified at the west end of ASA 34. Three radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The ASA is bounded by the top of the sloping hillsides that surround it.

ASA 35

ASA 35 encompasses a toe in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 3; Table 2). It is an area of planted pines (Plate 55) that is generally level and largely undisturbed so STPs were excavated to test it. Eight STPs were excavated at 15-m (50-ft) intervals. The ASA is bounded to the north, south, and east by the top of the sloping hillsides that surround it. The western boundary is at the base of the sloping ridgetop.

ASA 36

ASA 36 encompasses a toe in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheets 3 and 5; Table 2). It is an area of planted pines (Plate 56) that is generally level and largely undisturbed, but completely eroded, so STPs and shovel probes were excavated to test it. Seven STPs spaced at 15-m (50-ft) intervals were excavated, all of which had subsoil at the surface. Eight shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm there was no topsoil on the rest of the landform. The ASA is bounded to the north and east by the top of the sloping hillsides that surround it. The western boundary is at the base of the slope above it and the southern boundary is along the edge of an area of cut and fill (ASA 40) identified in the RFP as post-1952 disturbance associated with PORTS activities.

ASA 37

ASA 37 is located on the glacial lakebed in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 5; Table 2). It is a mostly grassy area with a narrow area of scrub along a power-line easement (Plate 57) that is generally level but disturbed, so

shovel probes were excavated to test it. A total of 14 shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the west by the edge of cut and fill area (ASA 40) identified in the RFP as post-1952 disturbance associated with PORTS activities and the base of a sloping hillside. The north and east boundaries are the top of a ravine in the hillside above the Little Beaver Creek Valley and the southern boundary is along the edge of Area 5B. The entire ASA is disturbed. It includes several disturbed power-line easements. There is a wet area along the west edge of the ASA that appears disturbed. No shovel probes were excavated in the wet area to confirm the disturbance.

ASA 38

ASA 38 is a saddle in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 5; Table 2). It is a mostly wooded area with grass along a power-line easement (Plate 58) that is generally level and largely undisturbed, so STPs were excavated to test it. A total of 33 STPs were excavated at 15-m (50-ft) intervals, six of which were disturbed. The ASA is bounded to the north and south by the bottoms of the sloping hillsides that surround it and the east and west by the tops of the sloping hillsides that surround it. There is a power-line tower within the ASA and no STP was excavated in the immediate vicinity of the tower.

ASA 39

ASA 39 encompasses a toe in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 5; Table 2). It is an area of planted pines and scrub with grassy areas along power-line easements (Plate 59) that is generally level and somewhat undisturbed, so STPs and shovel probes were excavated to test it. A total of 46 STPs were excavated, 14 of which were disturbed. Sites 33PK373 and 33PK374 were identified at opposite ends of ASA 39. Twelve radial units were excavated at the sites at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The central part of the ASA is disturbed and two shovel probes spaced no more than 50 m (164 ft) apart were excavated to confirm this disturbance. The ASA is bounded to the north by a swale in the hillside, to the east by a short slope down to the glacial lakebed and to the south and west by the hillside above the toe.

ASA 40

ASA 40 is located on the glacial lakebed in Area 5B south of Little Beaver Creek and west of the railroad bed (Figure 10, Sheet 5; Table 2). It is an area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing

(Figure 4). A cursory inspection of the area confirmed this disturbance. ASA 40 was photographed (Plate 60) and its boundary was recorded. No other testing was performed.

ASA 41

ASA 41 is a floodplain in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheet 6; Table 2). It is a wooded area (Plate 61) that is generally level but disturbed, so shovel probes were excavated to test it. Four shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the west by the edge of a landfill in a large cut and fill area (ASA 51) identified in the RFP as post-1952 disturbance associated with PORTS activities and to the east by the base of the hillside in a ravine above an unnamed tributary to Little Beaver Creek. The entire ASA is disturbed.

ASA 42

ASA 42 is a floodplain in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 4 and 6; Table 2). It is a narrow wooded area with a small grassy area along a power-line easement (Plate 62) that is generally level and largely undisturbed, so STPs were excavated to test it. It also included a small area of disturbance where shovel probes were excavated instead of STPs. A total of 63 STPs spaced at 15-m (50-ft) intervals were excavated, eight of which were disturbed. In the wider western part of the floodplain they were on a grid and at the east end of the ASA, where the floodplain narrows and curves, STPs were excavated along transects that followed the landform. Two shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the north by Little Beaver Creek and to the south by the base of the bluff. The eastern boundary is along the edge of Area 5B and the western boundary is along the edge of a landfill in a large cut and fill area (ASA 51) identified in the RFP as post-1952 disturbance associated with PORTS activities. The ASA contains some wet, scoured areas along the creek and on the floodplain where no STPS were excavated. The power-line easement at the east end of the ASA is disturbed.

ASA 43

ASA 43 is a floodplain in Area 5B north of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 4 and 6; Table 2). It is a narrow wooded area with a small grassy area along a power-line easement (Plate 63) that is generally level and largely undisturbed, so STPs were excavated to test it. It also included a small area of disturbance where shovel probes were excavated instead of STPs. A total of 53 STPs spaced at 15-m (50-ft) intervals were excavated,

five of which were disturbed. Two shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the south and west by Little Beaver Creek and to the north by the base of the bluff. The eastern boundary is along the edge of Area 5B. The ASA contains some wet, scoured areas along the creek and on the floodplain where no STPS were excavated. The power-line easement at the east end of the ASA is disturbed.

ASA 44

ASA 44 encompasses a sloping hillside in Area 5B north of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 4 and 6; Table 2). It is a primarily wooded area with a narrow grassy area along a power-line easement (Plate 64) that includes the hillsides that comprise the bluff along Little Beaver Creek. No portions of the hillside are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by to the south by the floodplain of Little Beaver Creek and to the north by the edge of the glacial lakebed. The eastern boundary is along the edge of Area 5B and the western boundary is the railroad bed. Site 33PK202 is a historic dump documented by Schweikart et al. (1997) that is located in the power-line easement along the east edge of ASA 44. No aboveground remains of the site were observed and no additional testing was carried out at the site. There is a large, steeply sloping area of fill where the railroad bed is built up to pass over Little Beaver Creek and there is a power-line easement in the ASA that is likely disturbed, but both these area are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 45

ASA 45 is located on the glacial lakebed in Area 5B north of Little Beaver Creek and east of the railroad bed (Figure 10, Sheet 4; Table 2). It is a wooded area (Plate 65) that is generally level and largely undisturbed so STPs were excavated to test it. Six STPs were excavated at 15-m (50-ft) intervals, one of which was disturbed. The ASA is bounded to the north by an area of disturbance associated with the railroad bed and to the south by the bluff edge of Little Beaver Creek. The eastern edge is along a previously surveyed area.

ASA 46

ASA 46 is located on the glacial lakebed in Area 5B along the railroad bed north of Little Beaver Creek (Figure 10, Sheets 2 and 4; Table 2). It is a wooded and scrubby area with a

grassy area along a power-line easement (Plate 66) that is generally level and somewhat undisturbed, so STPs and shovel probes were excavated to test it. A total of 28 STPs spaced at 15-m (50-ft) intervals were excavated, four of which were disturbed. STPs were excavated along transects that followed the railroad bed. The southern part of the ASA is disturbed and a shovel probe was excavated to confirm this disturbance. The ASA is bounded to the northwest by a previously surveyed area and to the southeast by a previously surveyed area and the edge of a cut for the railroad bed. The south edge of the ASA is in an area disturbed by the railroad bed, most of which is sloping. The shovel probe was excavated to document disturbance in the level portion of this area. There is a narrow area between the railroad bed and a previously surveyed area where the STPs were excavated. This includes a small grassy power-line easement, which was undisturbed. The rest of the ASA is the railroad bed. It is built up at the south end of the ASA, which is at the north edge of the Little Beaver Creek Valley and it is cut at the north where it rises onto the glacial lakebed. No shovel probes were excavated to document the disturbance in the railroad bed.

ASA 47

ASA 47 encompasses a sloping hillside and ravine in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheet 6; Table 2). It is a wooded area (Plate 67) that includes hillsides that comprise the bluff along Little Beaver Creek. The ravine extends up out of the creek valley at the west end of the ASA. No portions of the hillside or ravine are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by to the north by the floodplain of Little Beaver Creek and to the south by the edge of the glacial lakebed. The eastern boundary is along the edge of Area 5B and the western boundary is the edge of a landfill in a large cut and fill area (ASA 51) identified in the RFP as post-1952 disturbance associated with PORTS activities and the base of the slope on the east side of the ravine. The bottom and west half of the ravine are disturbed and were not included in ASA 47. Fill from the disturbed areas to the south extends partway down the sloping hillside. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 48

ASA 48 is located on the glacial lakebed in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 6 and 8; Table 2). It is an area of scrub (Plate 68) that

is generally level but disturbed so shovel probes were excavated to test it. Twenty shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the south by the edge of cut and fill area (ASA 51) identified in the RFP as post-1952 disturbance associated with PORTS activities and to the north by the bluff edge of Little Beaver Creek. The western boundary is along a previously surveyed area and the edge of Area 5B and the eastern boundary is along another previously surveyed area and the top edge of a ravine. The entire ASA is disturbed.

ASA 49

ASA 49 is located on the glacial lakebed in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheet 6; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. The area Schweikart et al. (1997) reported as being tested extended down over the bluff edge. The portion of the previously surveyed area on the hillside is included in ASA 47. ASA 49 was photographed (Plate 69) and its boundary was recorded. No other testing was performed.

ASA 50

ASA 50 is located on the glacial lakebed in Area 5B south of Little Beaver Creek and east of the railroad bed (Figure 10, Sheet 6; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. The area Schweikart et al. (1997) reported as being tested extended down over the edge of the adjacent ravine. The portion of the previously surveyed area on the hillside is included in ASA 47. ASA 50 was photographed (Plate 70) and its boundary was recorded. No other testing was performed.

ASA 51

ASA 51 is located on the glacial lakebed in Area 5B north of Perimeter Road between North Access Road and the scrap yard (Figure 10, Sheets 3 and 5–9; Table 2). It is a large area of cut and fill encompassing landfills, storage areas, a scrap yard, a detention pond, etc., identified in the RFP as post-1952 disturbance associated with PORTS activities that did not

require testing (Figure 4). A cursory inspection of the area confirmed this disturbance. ASA was photographed (Plate 71) and its boundary was recorded. No other testing was performed.

ASA 52

ASA 52 is located on the glacial lakebed in Area 5B north of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 2 and 4; Table 2). It is a grassy area (Plate 72) that is generally level but disturbed so shovel probes were excavated to test it. A total of 12 shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the south by a previously surveyed area, to the west by the cut for the railroad bed, and the east by the edge of Area 5B. The entire ASA is disturbed.

ASA 53

ASA 53 is located on the glacial lakebed in Area 5B north of Little Beaver Creek and east of the railroad bed (Figure 10, Sheets 4 and 6; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. Site 33PK198 (a prehistoric isolated find), 33PK199 (a historic isolated find), 33PK200 (a historic scatter) and 33PK201 (a prehistoric isolated find) documented by Schweikart et al. (1997) are located within ASA 53. No aboveground remains of any of these sites were observed and no additional testing was carried out. ASA 53 was photographed (Plate 73) and its boundary was recorded. No other testing was performed.

ASA 54

ASA 54 is located on the glacial lakebed in Area 5B north of Little Beaver Creek and west of the railroad bed (Figure 10, Sheets 2–4; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals that also includes the location of 33PK211, identified in the RFP as a previously surveyed area where a Phase II investigation had been completed that did not require testing (Figure 4). Site 33PK211 is a historic farmstead documented by Schweikart et al. (1997). Phase II testing was completed by OVAI (the report for this testing was not available at the time this report was prepared). No additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. The area Schweikart et al. (1997) reported as being tested extended into the adjacent railroad cut. The portion of the previously surveyed area in the railroad bed is included in ASA 46. The cursory inspection also identified habitable portions of

the bluff edge containing part of 33PK211 that extended outside the limits of the area identified in the RFP where Phase II testing had occurred. The part of the bluff edge outside the area delineated in the RFP included the house foundation and survey stakes marking out the grid used during the Phase II testing. The gird stakes were present across all of the level area above the bluff. John Collins confirmed that the entire habitable area along the bluff edge had been included in the Phase II study (personal communication, March 12, 2012) so all of the habitable portions of the landform were included ASA 54. ASA 54 was photographed (Plate 74) and its boundary was recorded. No other testing was performed.

Area 6A

Area 6A is located along the southwestern periphery of the PORTS property outside Perimeter Road, west of South Access Road, and south of Contractor's Access Road (Figure 2). It was divided into 23 ASAs (Figure 8; Table 2). The western part of the area is along the bluff edge of the Scioto River Valley. Most of it is on the glacial lakebed above the bluff, but parts extend down onto a terrace along the east edge of the valley. Large sand dunes are located along the bluff edge between the level portion of the glacial lakebed and the Scioto River Valley. No sites were documented in Area 6A.

ASA 100

ASA 100 includes the hillsides in Area 6A west of South Access Road (Figure 11, Sheet 1; Table 2). It is a grassy and wooded area (Plate 75) that is primarily road fill extending across the Big Run Valley. The ASA extends across the valley along two small ravines on opposite sides of the creek. No portions of the hillsides or ravines are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 6A to the north and east, buy the bottoms of the ravines to the south and a broad area of cut and fill to the west. The roadbed is disturbed, but is sloping. No shovel probes were excavated in this sloping area to confirm the disturbance.

ASA 101

ASA 101 encompasses a hillside and floodplain in Area 6A west of South Access Road along the south edge of the PORTS property (Figure 11, Sheet 1; Table 2). It is a wooded area with an area of scrub along a power-line easement (Plate 76) with a narrow floodplain along Big Run that is relatively level so STPs were excavated to test this area. Nine STPs spaced at 15-m (50-ft) intervals were excavated. The remaining portion of ASA 101 is a hillside that is not level

enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The southern and eastern boundaries are along the edge of Area 6A. The ASA is bounded to the west by Big Run and to the north by the bottom of a ravine. There is a wet area along Big Run where no STPs were excavated. The power-line easement appears to be undisturbed, although a portion may be disturbed, but it is either wet or sloping. No STPs were excavated in the wet or sloping areas to confirm this disturbance.

ASA 102

ASA 102 encompasses a floodplain in Area 6A west of South Access Road (Figure 11, Sheet 1; Table 2). It is a wooded area with an area of scrub along a power-line easement (Plate 77) that is generally level and largely undisturbed, so STPs were excavated to test it. A total of 22 STPs were excavated at 15-m (50-ft) intervals. The ASA is bounded to the north by the bottom of a ravine, to the east by Big Run, and to the west by the bottom of the sloping hillside and a wetland. The small section of power-line easement in the southern tip of the ASA appears to be undisturbed.

ASA 103

ASA 103 is located on the glacial lakebed in Area 6A west of South Access Road along the south edge of the PORTS property (Figure 11, Sheet 1; Table 2). It is a wooded area (Plate 78) that is generally level and largely undisturbed so STPs were excavated to test it. Three STPs were excavated at 15-m (50-ft) intervals. The ASA is bounded to the north, east, and west by the top of the adjacent hillside and to the south by the edge of Area 6A.

ASA 104

ASA 104 encompasses a hillside in Area 6A west of South Access Road along the south edge of the PORTS property (Figure 11, Sheet 1; Table 2). It is a partially wooded area with a grassy area along a power-line easement (Plate 79) on the sloping side of a ravine. No portions of the hillside are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The east boundary is along the edge of the Big Run floodplain and the northern boundary is the bottom of the ravine and a wetland. The west edge is bounded by a broad area of cut and fill. Most of the southern boundary is along the edge of Area 6A, but a small section of it is along the edge of the glacial lakebed. Concrete foundation remnants associated with 33PK331 (designated HMBL 53 by Burks [2011]) were observed in the eastern portion of ASA 104. This site was documented and inventoried in a recent study of

the historic sites on the PORTS property, but the report was not available at the time this report was written. The power-line easement appears to be disturbed, but it is sloping. No shovel probes were excavated in this sloping area to confirm the disturbance.

ASA 105

ASA 105 encompasses a ravine in Area 6A south of Southwest Construction Access Road in the southwest corner of the PORTS property (Figure 11, Sheets 2 and 3; Table 2). It is a mostly wooded area with grassy areas and scrub along several power-line easements (Plate 80). The ravine is along a small drainage that has cut into the bluff of the Scioto River Valley. The center of the ravine is occupied by a detention pond (ASA 112) identified in the RFP as post-1952 disturbance associated with PORTS activities and is not included in ASA 105. No portions of the ravine are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The northern boundary is Southwest Construction Access Road and the eastern boundary is Perimeter Road. Most of the western boundary and a small part of the southern boundary are the edge of Area 6A. The rest of the southern boundary is along the edge of the dune at the top of the ravine, part of which is along a previously surveyed area and the bluff edge of the Scioto River Valley. There are some areas along the roadside at the northeast edge of the ASA, within the power-line easements, and on the hillside in the southeast corner of the ASA that are likely disturbed, but are sloping. No STPs were excavated in these sloping areas to confirm the disturbance.

ASA 106

ASA 106 is located on the glacial lakebed in Area 6A south of Perimeter Road along the south edge of the PORTS property (Figure 11, Sheets 1 and 2; Table 2). It is a narrow grassy area along a power-line easement (Plate 81) that is partially level but disturbed so shovel probes were excavated to test it. Eight shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. The ASA is bounded to the north by Perimeter Road and to the south by the edge of Area 6A. Part of the western boundary is along the edge of Area 6A and part is along the edge of an undisturbed section of power-line easement on the top of a dune. The east edge is at the top of the ravine. The entire ASA is disturbed. The power line is along an undulating part of the glacial lakebed and several portions of the easement are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 107

ASA 107 encompasses part of a dune in Area 6A southwest of Perimeter Road along the south edge of the PORTS property (Figure 11, Sheets 2 and 3; Table 2). It is an area of grass and scrub along a power-line easement (Plate 82) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 66 STPs were excavated at 15-m (50-ft) intervals, four of which were disturbed. The ASA is bounded to the south by the edge of Area 6A and the west by a previously surveyed area. The eastern boundary is along the edge of a broad area of cut and fill on the glacial lakebed. The ASA is bounded to the north by the top of a ravine and Perimeter Road. The roadsides are disturbed, but are sloping. No STPs were excavated in the sloping area to confirm the disturbance.

ASA 108

ASA 108 encompasses part of a dune at the bluff edge of the Scioto River Valley in Area 6A, southwest of Perimeter Road along the south edge of the PORTS property (Figure 11, Sheet 3; Table 2). It is the location of 33PK210, identified in the RFP as a previously surveyed area where a Phase II investigation had been completed that did not need to be re-examined for this study (Figure 5). Site 33PK210 is a prehistoric lithic scatter documented by Schweikart et al. (1997). Phase II testing was completed by Hazel and Foss (2003). A cursory inspection of the area confirmed the presence of the site and identified the habitable (i.e., relatively level) portions of the landforms that were surveyed. ASA 108 was photographed (Plate 83) and its boundary was recorded. No other testing was performed.

ASA 109

ASA 109 encompasses part of a dune at the bluff edge of the Scioto River Valley, the bluff, and a small portion of a terrace on the valley floor in Area 6A, south of Southwest Construction Access Road along the west edge of the PORTS property (Figure 11, Sheet 3; Table 2). It is a wooded area (Plate 84) with a portion of a dune above the bluff edge that is relatively level, so STPs were excavated to test it. Thirteen STPs spaced at 15-m (50-ft) intervals were excavated, one of which was disturbed. Most of the remaining portion of ASA 109 is not level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The eastern and western boundaries of the ASA are along the edge of Area 6A and the northern boundary is Southwest Construction Access Road. The ASA is bounded to the east by the top of the ravine. There is a paved area on a small portion of a terrace along the

east edge of the Scioto River Valley at the intersection of Southwest Construction Access Road and Wakefield Mound Road where no STPs were excavated.

ASA 110

ASA 110 is a terrace in Area 6A south of Perimeter Road (Figure 11, Sheet 1; Table 2). It is a grassy wetland area with cattails (Plate 85). No portions of the landform are dry enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded to the north and south by the base of the slope along the sides of the ravine and to the east by a floodplain.

ASA 111

ASA 111 encompasses part of a dune at the bluff edge of the Scioto River Valley and ravine in Area 6A south of Contractor's Access Road along the west edge of the PORTS property (Figure 11, Sheet 6; Table 2). It is a wooded area (Plate 86) that is generally level and somewhat undisturbed, so STPs and shovel probes were excavated to test it. Ten STPs spaced at 15-m (50-ft) intervals were excavated, seven of which were disturbed. Six shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the north and south by ravines in the bluff of the Scioto River Valley, to the west by the edge of Area 6A, and to the east by the edge of a cut and fill area (ASA 122) identified in the RFP as post-1952 disturbance associated with PORTS activities. The northern three quarters of 33PK190 (the remains of a historic radio tower) documented by Schweikart et al. (1997) are located along the bluff edge at the south end of ASA 111. Concrete foundation remnants were observed. No additional testing was carried out at the site.

ASA 112

ASA 112 includes part of a ravine in Area 6A south of Southwest Construction Access Road (Figure 11, Sheets 2 and 3; Table 2). It is a detention pond identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 5). A cursory inspection of the area confirmed this disturbance. ASA 112 was photographed (Plate 87) and its boundary was recorded. No other testing was performed.

ASA 113

ASA 113 is located on the glacial lakebed in Area 6A between Perimeter Road and the bluff edge of the Scioto River Valley (Figure 11, Sheets 4–6; Table 2). It is a large, primarily grassy area with some small wooded areas (Plate 88). It is generally level but mostly disturbed,

so STPs and shovel probes were excavated to test it. Eight STPs spaced at 15-m (50-ft) intervals were excavated, three of which were disturbed. Ninety shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the north by the edge of a cut and fill area (ASA 122) identified in the RFP as post-1952 disturbance associated with PORTS activities and to the east by Perimeter Road. The southern boundary is along the base of a dune and the western boundary is along the bluff edge above the Scioto River Valley, except where it is along the edge of a previously surveyed area. Site 33PK187 (a historic farmstead) and the southern half of 33PK188 (a historic worker's barracks), both documented by Schweikart et al. (1997), are located within ASA 113. No aboveground remains of either site were observed. No additional testing was carried out at them. There are isolated wet areas and slope along part of the bluff edge were no shovel probes were excavated. There are numerous power-line easements, most of which are disturbed. The small partly undisturbed area where the STPs were excavated is within one of the easements.

ASA 114

ASA 114 encompasses a bench in Area 6A north of Southwest Construction Access Road (Figure 11, Sheets 3 and 4; Table 2). It is a wooded area (Plate 89) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 22 STPs were excavated spaced at 15-m (50-ft) intervals, one of which was disturbed. The ASA is bounded to the north and west by the hillside and to the south and east by the bottom of the ravine.

ASA 115

ASA 115 encompasses hillsides and the bluff and small portion of a terrace in the Scioto River Valley in Area 6A north of Southwest Construction Access Road along the west edge of the PORTS property (Figure 11, Sheets 2–7; Table 2). It is a mostly wooded area with narrow areas of scrub along power-line easements (Plate 90) that includes hillsides of a dune and the bluff along the Scioto River Valley. No portions of the bluff or hillside are level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals. The western boundary is along the edge of Area 6A and the southern boundary is Southwest Construction Access Road. It is bounded to the east by the top of the bluff and the bottom of the hillside of the dune except where it is along the edge of a previously surveyed area. The western portion of 33PK186 (a prehistoric lithic scatter), as defined by Schweikart et al. (1997), extends off the top of the adjacent landform and down the slope outside the area they

indicated was tested with STPs spaced at 15-m (50-ft) intervals. Extending the site boundary down the slope appears to be a mapping error on their part. The sloping portion of the site is included in ASA 115. No aboveground remains of either site were observed and no additional testing was carried out at the site. The southern quarter of 33PK190 (the remains of a historic radio tower) documented by Schweikart et al. (1997) is located along the bluff edge at the south end of ASA 111. Concrete foundation remnants were observed. No additional testing was carried out at the site. There is a paved area on a small portion of a terrace along the east edge of the Scioto River Valley at the intersection of Southwest Construction Access Road and Wakefield Mound Road where no STPs were excavated. The power-line easements and roadsides appear to be disturbed, but are sloping. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 116

ASA 116 encompasses part of a dune at the bluff edge of the Scioto River Valley in Area 6A west of Perimeter Road (Figure 11, Sheet 5; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. Site 33PK186 is a prehistoric lithic scatter documented by Schweikart et al. (1997). No aboveground remains of the site were observed. The western portion of the site, as they defined it, extends from the top of the landform and down the adjacent slope, which is outside the previously surveyed area. This appears to be a mapping error on their part. The sloping portion of the site is included in ASA 115. No additional testing was carried out at the site. ASA 116 was photographed (Plate 91) and its boundary was recorded. No other testing was performed.

ASA 117

ASA 117 encompasses a dune in Area 6A between Perimeter Road and the bluff edge of the Scioto River Valley (Figure 11, Sheet 4; Table 2). It is a wooded area (Plate 92) that is generally level and largely undisturbed so STPs were excavated to test it. Ten STPs were excavated at 15-m (50-ft) intervals, one of which was disturbed. The ASA is the top of the dune that is bounded on all sides by the top of the adjacent hillside.

ASA 118

ASA 118 encompasses part of a dune at the bluff edge of the Scioto River Valley and a ravine in Area 6A south of Contractor's Access Road along the west edge of the PORTS property (Figure 11, Sheet 6; Table 2). It is a wooded area (Plate 93) with a narrow section of a dune that is relatively level so STPs were excavated to test it. Eight STPs spaced at 15-m (50-ft) intervals were excavated, two of which were disturbed. The remaining portion of ASA 118 is a ravine in the bluff of the Scioto River Valley that is not level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The eastern boundary is the edge of a cut and fill area (ASA 122) identified in the RFP as post-1952 disturbance associated with PORTS activities. The northern boundary and most of the southern boundary are along the edge of Area 6A. A small portion of the southern boundary extends along the top of the ravine. There is a large underground concrete structure that has disturbed a portion of the dune. Earl Brinkerhoff (personal communication, March 25, 2012) reported that it is an abandoned septic tank associated with PORTS activities so it was not recorded as an archaeological site. The areas along the roadside are disturbed, but are sloping. No STPs were excavated in these sloping areas to confirm the disturbance.

ASA 119

ASA 119 is located on the glacial lakebed in Area 6A between Perimeter Road and the bluff edge of the Scioto River Valley (Figure 11, Sheet 5; Table 2). It is a grassy area with a small area of woods and scrub along a power-line easement (Plate 94) that is generally level and largely undisturbed, so STPs were excavated to test it. A total of 36 STPs were excavated at 15-m (50-ft) intervals, 20 of which were disturbed. The ASA is low rise on the glacial lakebed and is bounded by the disturbed soils in the surrounding area. The power-line easement is disturbed.

ASA 120

ASA 120 encompasses a dune at the bluff edge of the Scioto River Valley in Area 6A between Perimeter Road and the bluff edge of the Scioto River Valley (Figure 11, Sheet 4; Table 2). It is a wooded area (Plate 95) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 34 STPs were excavated at 15-m (50-ft) intervals, 16 of which were disturbed. In the wider northeastern part of the dune they were on a grid, and in the south part of the ASA, where the top of the dune narrows and curves, STPs were excavated along a

transect that followed the landform. The ASA is the top of a dune that is bounded to the west by the bluff and to the north, south and east by the top of the adjacent hillside.

ASA 121

ASA 121 is located on the glacial lakebed in Area 6A north of the Southwest Construction Access Road (Figure 11, Sheets 2 and 4; Table 2). It is a grassy area along a power-line easement (Plate 96) that is generally level but disturbed, so shovel probes were excavated to test it. Six shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. The ASA is bounded to the south by Southwest Construction Access Road and to the east by the edge of Area 6A. The western boundary is the base of the hillside and the northern boundary is at the south edge of a disturbed area with push piles. The entire ASA is disturbed.

ASA 122

ASA 122 located on the glacial lakebed in Area 6A south of Contractor's Access Road and west of Perimeter Road (Figure 11, Sheets 6 and 7; Table 2). It is an area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 5). A cursory inspection of the area confirmed this disturbance. The northern half of 33PK188, a historic worker's barracks documented by Schweikart et al. (1997), is located within ASA 122. No aboveground remains of the site were observed and no additional testing was carried out at the site. ASA 122 was photographed (Plate 97) and its boundary was recorded. No other testing was performed.

SITE DESCRIPTIONS

Eight sites were documented within Areas 5A and 5B of the PORTS property: two prehistoric lithic scatters (33PK376 and 33PK383), four prehistoric isolated finds (33PK373, 33PK377, 33PK378, and 33PK384), one historic scatter (33PK374), and a small historic dump (33PK375) were documented in Areas 5A and 5B (Figure 2; Table 3). No sites were documented in Area 6A. Additional remains of a previously documented historic site (33PK322) were encountered in Area 5B, but the results of testing at this site are presented in a separate report (Klinge 2012) that is an addendum to the original research carried out at the site (Mustain and Klinge 2011a). Three of the prehistoric sites are located on or near the top of steeply sloping ridges. The other three prehistoric sites are on elevated landforms along streams. The prehistoric sites all lack "temporally diagnostic" artifacts (i.e., contain sufficient identifying

characteristics that they can be identified as a type of artifact know to be associated with a specific culture or time period). Artifacts recovered from the historic sites were insufficient to date the sites more precisely than to the late-nineteenth–mid-twentieth century. These eight sites are discussed individually below.

Site 33PK383[4]

Site 33PK383 is a prehistoric site located in ASA 15, which is in Area 5B (Figure 10, Sheet 3; Table 3; Plate 98). The site is situated in a wooded area with 0–10 percent visibility on the bluff edge above the confluence of Little Beaver Creek and one of its unnamed tributaries. This area is sloping to the southeast with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 20 cm–30 cm (8 in–12 in) deep, dark yellowish brown (10YR 4/4) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. Two of the STPs excavated in the vicinity of the site were "positive" (i.e., produced an artifact) [Figure 12]. Six radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of one piece of shatter and one whole flake, which are both Columbus-Delaware chert (Table 4). They are not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. The limits of the site were delineated based on the extent of the artifact scatter. It is linear and measures 1 m x 15 m (3 ft x 50 ft) with an area of about 15 m^2 (161 ft^2). The site is relatively undisturbed, but has been plowed and probably suffered from erosion of the bluff edge. The site type for 33PK383 is unknown, as defined in the OAI. This means that from the information available it cannot be assigned to one of several generally accepted site types like habitation, resource extraction, camp or village. It can best be described as a lithic scatter from an unassigned prehistoric period.

Site 33PK384

Site 33PK384 is a prehistoric site located in ASA 34, which is in Area 5B (Figure 10, Sheet 3; Table 3; Plate 99). The site is situated in a wooded area with 0–10 percent visibility on a ridgetop above Little Beaver Creek. This area is sloping to the northeast with a gradient of 4 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 10 cm (4 in) deep, brown (10YR 4/3) silt loam A horizon at the site, from which the artifact was recovered. The habitable portion of the ridgetop is a small knob most of which was

[4] Sites are presented out of order because a clerical error at OHPO resulted in reassigning the OAI numbers for 33PK383 and 33PK384 after the report was ready for publication.

somewhat sloping. Several of the STPs excavated on it were completely eroded (i.e., had subsoil at the surface). Only one of the STPs excavated in the vicinity of the site was positive. There was no room on top of the landform to the northeast of the site, but radial STPs were excavated at 7.5-m (25-ft) intervals in the other thee directions, none of which were positive. The assemblage is composed of a single medial flake fragment of unidentified chert (Table 4). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m x 1 m (3 ft x 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively undisturbed, but has suffered from erosion of the ridgetop. The site type for 33PK384 is unknown as defined in the OAI. It best described as an isolated find from an unassigned prehistoric period.

Site 33PK373

Site 33PK373 is a prehistoric site located in ASA 39, which is in Area 5B (Figure 10, Sheet 5; Table 3; Plate 100). The site is situated in a grassy area with 0–10 percent visibility on a toe at the top of a ravine. The adjacent ravine cuts into the glacial lakebed down to the Little Beaver Creek Valley. This area is sloping to the east with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 10 cm (4 in) deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Most of the area surrounding the site is disturbed and the small area of relatively undisturbed plow zone the site lies within is largely eroded. Only one of the STPs excavated in the vicinity of the site was positive. Four radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of a single Columbus-Delaware chert projectile point base fragment (Table 4; Plate 101A). The hafting element (i.e., the portion of a stone projectile point, knife, drill, etc., where it is attached or "hafted" to a handle or shaft) is a stem and the point had fairly square shoulders, but the portion of it that was recovered is too fragmentary to confidently determine its point type so it is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m x 1 m (3 ft x 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively undisturbed, but has suffered from plowing and erosion of the toe. The site type for 33PK373 is unknown as defined in the OAI. It can best be described as an isolated find from an unassigned prehistoric period.

Site 33PK374

Site 33PK374 is a historic period site located in ASA 39, which is in Area 5B (Figure 10, Sheet 5; Table 3; Plate 102). No buildings are indicated at this location on early cartographic sources (Burks 2011; Schweikart et al. 1997). The site is situated in an area of scrub brush with 0–10 percent visibility on a toe at the top of a ravine. The adjacent ravine cuts into the glacial lakebed down to the Little Beaver Creek Valley. This area is sloping to the north with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 10 cm–20 cm (4 in–8 in) deep, dark brown (10YR 3/3) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. Most of the area south and west of the site is disturbed and the small area of relatively undisturbed plow zone the site lies within is largely eroded. The area north of the site is a swale on the adjacent hillside and it is low and wet to east of the site. Eight of the STPs excavated in the vicinity of the site were positive (Figure 13). Nine radial STPs were excavated at 7.5-m (25-ft) intervals, five of which were positive. The assemblage is composed of 35 artifacts that are generally considered "domestic" or associated with houses and household activities (Table 4). The bulk of the material (n=28) recovered was ceramic kitchen or tableware fragments, but the assemblage also included four architectural items, one milkglass button, and two flowerpot fragments. The whiteware sherds date to ca. 1820–present (Florida Museum of Natural History 2011; Magid 1984; Miller et al. 2000). A detailed analysis of the historic artifacts is included in Appendix D.

Inspection of the toe and the area surrounding this landform failed to identify any remains of buildings or structures associated with the site. Although some of the artifact types have established manufacture dates, the size of the assemblage is small and lacking other evidence it is not possible to determine precisely when the artifacts were deposited. Based on the ceramics the site has been assigned a late-nineteenth–mid-twentieth century temporal affiliation. The limits of the site were delineated based on the extent of the artifact scatter. It is irregularly shaped and measures about 22.5 m x 30 m (74 ft x 98 ft) with an area of about 739 m^2 (7,955 ft^2). The site is relatively undisturbed, but has suffered from plowing and erosion of the toe. The OAI site type for 33PK374 is unknown. It can best be described as an artifact scatter from the late-nineteenth to mid-twentieth century.

Site 33PK375

Site 33PK375 is a historic period site located in ASA 13, which is in Area 5B (Figure 10, Sheet 3; Table 3; Plate 103). No buildings are indicated at this location on early cartographic sources (Burks 2011; Schweikart et al. 1997). The site is situated in a wooded area with 0–10 percent visibility in a swale on a hillside. The swale contains a seasonal stream that has cut into the bluff of the Little Beaver Creek Valley. This area is sloping to the south with a gradient of 70 percent. The site was identified through visual inspection. The hillside is fairly steep at the site and there were no reasonably level areas to excavate STPs (Figure 14). All of the artifacts were recovered from the surface in the streambed. They are scattered down the swale, spreading out at the bottom of the hill where they are slightly more concentrated. The assemblage is composed of 50 mostly domestic artifacts (Table 4). Glass vessel fragments and kitchen-related ceramics (n=44) made up the bulk of the material recovered, but the assemblage also included a leather shoe fragment, a pressed milkglass decorative vessel fragment, an iron wire fragment, a milkglass pill bottle (Plate 104A), and a milkglass cosmetic jar (Plate 104B). A spent .38 cal bullet was also recovered, but it is presumed to be related to the adjacent shooting range (33PK219). Manufacture dates for some of the ceramics are available and range from the early-nineteenth century to the mid-twentieth century and to the present. The whiteware sherds date to ca. 1820–present (Miller et al. 2000), ironstone dates to 1842–present (Magid 1984; Miller et al. 2000), and various types of stoneware date to between ca. 1890 and 1940 (Stelle 2001). A detailed analysis of the historic artifacts is included in Appendix D.

Inspection of the hillside and the area surrounding this landform failed to identify any remains of buildings or structures associated with the site. There is a disturbed area along the hillside north of the site but there are no indications that a building or structure once stood there or that there are any historic deposits that might be related to 33PK375. Although some of the artifact types have established manufacture dates, the size of the assemblage is small and lacking other evidence it is not possible to determine precisely when the artifacts were deposited. Based on the ceramics the site has been assigned a late-nineteenth–mid-twentieth century temporal affiliation. The limits of the site were delineated based on the extent of the artifact scatter. It is irregularly shaped and measures about 15 m x 50 m (25 ft x 164 ft) with an area of about 709 m^2 (7,632 ft^2). The site is relatively undisturbed, but has suffered from erosion in the swale. The

OAI site type for 33PK375 is unknown. It can best be described as a dump site that was created sometime between the late-nineteenth and mid-twentieth centuries.

Site 33PK376

Site 33PK376 is a prehistoric site located in ASA 200, which is in Area 5A (Figure 9, Sheets 1– 3; Table 3; Plate 105). The site is situated in a wooded area with 0–10 percent visibility north end of a narrow section of ridgetop. This area is flat with a slope gradient of 0 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 15 cm–20 cm (6 in–8 in) deep, dark yellowish brown (10YR 3/4) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. A few of the STPs on the ridgetop were partly or entirely eroded (i.e., had subsoil near or at the surface). Three of the STPs excavated in the vicinity of the site were positive (Figure 15). Eight radial STPs were excavated at 7.5-m (25-ft) intervals, one of which was positive. The assemblage is composed of two pieces of shatter (one is Vanport chert and the other is unidentified chert) and one whole flake of Upper Mercer chert (Table 4). They are not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. The limits of the site were delineated based on the extent of the artifact scatter. It measures 15 m x 22.5 m (50 ft x 74 ft) with an area of 327 m^2 (3,520 ft^2). The site is relatively undisturbed, but has suffered from plowing and erosion of the ridgetop. The OAI site type for 33PK376 is unknown. It can best be described as a lithic scatter from an unassigned prehistoric period.

Site 33PK377

Site 33PK377 is a prehistoric site located in ASA 203, which is in Area 5A (Figure 9, Sheet 1; Table 3; Plate 106). The site is situated in a wooded area with 0–10 percent visibility on a toe along a steep hillside. The toe is off the north end of a ridgetop about 12 m (40 ft) down the hill. This area is sloping to the northeast with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 25 cm (10 in) deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Only one of the STPs excavated in the vicinity of the site was positive. Four radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of a single piece of Columbus-Delaware chert shatter (Table 4). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m x 1 m (3 ft x 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively

undisturbed, but has suffered from plowing and probably erosion of the toe. The OAI site type for 33PK377 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

Site 33PK378

Site 33PK378 is a prehistoric site located in ASA 205, which is in Area 5A (Figure 9, Sheet 1; Table 3; Plate 107). The site is situated in a wooded area with 0–10 percent visibility on a toe along the side of a ravine. The adjacent ravine is along an unnamed tributary of Little Beaver Creek. This area is sloping to the east with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is a ca. 20 cm (8 in) deep, brown (10YR 4/3) silt loam A horizon at the site, from which the artifact was recovered. Only one of the STPs excavated in the vicinity of the site was positive. Four radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of a single projectile point tip fragment of unidentified chert (Table 4; Plate 101B). The recovered portion is too fragmentary to confidently determine its point type so it is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m x 1 m (3 ft x 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. The site appears to be undisturbed. The OAI site type for 33PK378 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

CONCLUSIONS

Five of the sites are along Little Beaver Creek or its tributaries on elevated landforms above the valley floor. This is too small of a sample of sites from which to draw reliable conclusions. Not surprisingly however, it appears that proximity to permanent and seasonal water sources (Little Beaver Creek and its tributaries) was a factor in land use decisions. This pattern was also observed among the five sites documented by Mustain (2012). The remaining three sites are on or near ridgetops 50 m–60 m (164 ft–197 ft) above the adjacent drainages and glacial lakebed. They appear to be small sites associated with single, shorter occupations of the landforms that are common in upland areas with similar topography to this portion of the PORTS property. They are generally assumed to be related to hunting, foraging, or collecting activities. However, with the exception of historic refuse disposal (dumping), no specific activities can be associated with the sites documented in Areas 5A and 5B. As a group or individually they do little to improve the current understanding of the prehistory and history of the region.

NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which these sites are potentially eligible. However, the historic contexts of the sites could not be established. The archaeological remains at 33PK373, 33PK376–33PK378, 33PK383, and 33PK384 are insufficient to date them more precisely than to an unassigned prehistoric period or indicate the sites' functions. The small sizes of the assemblages suggests it is unlikely there are archaeological deposits at any of these sites substantial enough to provide data capable of dating them or indicating the sites' functions. The materials recovered from the historic sites were sufficient to assign general late-nineteenth–mid-twentieth century dates to the sites, but they could not be precisely dated. Although 33PK375 is clearly the result of dumping, neither site can be associated with a specific occupation or broader context (e.g., farming, residential or commercial activities, etc.). As with the prehistoric sites, the small sizes of the assemblages suggests it is unlikely there are archaeological deposits at either of the sites substantial enough to provide data capable of dating them or indicating the sites' functions. Because they cannot be placed in their historic contexts they are not considered to be significant sites. Sites 33PK373–33PK378, 33PK383, and 33PK384 are recommended not eligible for inclusion in the NRHP.

CULTURAL RESOURCE MANAGEMENT RECOMMENDATIONS

All of the undisturbed, dry, and generally level landforms in Areas 5A, 5B, and 6A of the PORTS property have been tested through the excavation of STPs at 15-m (50-ft) intervals or less during this survey effort, or by Schweikart et al. (1997), or by Mustain and Klinge (2011a), or during Phase II archaeological testing at 33PK203, 33PK210, and 33PK211. All of the remaining disturbed or sloping areas have also been surveyed through a combination of cursory inspections of areas with extensive post-1952 disturbance associated with PORTS activities identified in the RFP, visual inspection along transects spaced at 15-m (50-ft) intervals in sloping areas, and excavation of shovel probes spaced no more than 50 m (164 ft) apart to confirm disturbance in relatively level disturbed areas.

Eight archaeological sites (33PK373–33PK378, 33PK383, and 33PK384), including four prehistoric isolated finds, two prehistoric lithic scatters, one historic dump, and one historic artifact scatter, were encountered within Areas 5A and 5B of the PORTS property during this Phase I archaeological survey. None of these sites meet the NRHP evaluation criteria because they cannot be placed in their historic contexts and are deemed unlikely to contain sufficient remains to yield data that would allow them to be placed in their historic contexts through further research. No further work is recommended at these sites.

With two exceptions, no further archaeological investigations are recommended for Areas 5A, 5B, and 6A. The results from recent preliminary assessments and Phase I investigations of a historic site within Area 6A were not available at the time this report was written. This report does not preclude or overwrite any site-specific recommendations of further testing could be forthcoming from other consultants. The other exception involves deeply buried sites. It is not possible to confirm that buried prehistoric archaeological resources do not exist in areas of deeper alluvium along Little Beaver Creek and one of its unnamed tributaries in Area 5B. Discontinuous pockets of alluvium along both waterways that exceeded the 30.5-cm (12-in) excavation-depth guidelines for the survey are present along both waterways. Inspection of the eroded banks along the waterways indicated that these soils may extend more than 50 cm (19 in) in some instances. Although the geologic history of Area 5B indicates it is highly unlikely that NRHP-eligible archaeological resources are buried in these relatively discrete alluvial deposits, but the current study cannot demonstrate that they do not exist. ASC recommends a geomorphological study of the Little Beaver Creek floodplain and that of its major tributary in

Area 5B. This study can determine if those deposits have the potential to contain deeply buried archaeological resources.

SUMMARY

ASC conducted Phase I archaeological investigations of portions of the non-secured area at the PORTS property in Scioto and Seal townships, Pike County, Ohio. The project area for the survey, designated Areas 5A, 5B, and 6A in the RFP, encompasses 121 ha (299 ac), 161 ha (398 ac), and 100 ha (247 ac) respectively of dry glacial lakebed along the western and southern periphery of the PORTS property. This area is just east of the Scioto River Valley along the edge of a pre-glacial river valley that contained Pre-Illinoian Lake Tight. Little Beaver Creek and Big Run have cut across the glacial lakebed within the project area, with the former eroding all the way to the bedrock. Small portions of the project area extend down the bluff onto the valley floor of the Scioto River Valley and the area above the bluff includes steep ridges and sand dunes that rise above the level part of the glacial lakebed.

The current research is intended to augment an earlier Phase I survey efforts completed by Schweikart et al. (1997). Several recent studies by ASC, OVAI, and G&P have focused on historic period sites on the PORTS property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

Five soil types were defined in the RFP for the project. Two of them did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II level archaeological testing. Cursory inspections of these areas were performed and they were photographed. The remaining portions of Areas 5A, 5B, and 6A were tested through cursory inspections of previously tested areas and a combination of visual inspection, shovel probe excavation, and STP excavation. Although large areas of slope are present and a great deal of Areas 5A, 5B, and 6A have been disturbed, a substantial portion of the project area contains relatively undisturbed, habitable landforms. All of the relatively undisturbed, habitable landforms within Areas 5A, 5B, and 6A of the PORTS property that had not been previously surveyed were tested by digging STPs at 15-m (50-ft) intervals.

Eight sites were documented within Areas 5A and 5B of the PORTS property: two prehistoric lithic scatters (33PK376 and 33PK383), four prehistoric isolated finds (33PK373, 33PK377, 33PK378, and 33PK384), one historic scatter (33PK374), and a small historic dump (33PK375) were documented in Areas 5A and 5B. No sites were documented in Area 6A. None of these sites could be placed in their historic contexts. Because of this and that the sites do not appear capable of yielding data sufficient to place them in their historic contexts, they are not

significant and therefore are not recommended eligible for inclusion in the NRHP. Additional remains of a previously documented historic site (33PK322) were encountered in Area 5B, but the results of testing at this site are presented in a separate report. With two exceptions—potential forthcoming recommendations for the treatment of historic sites documented in recent studies and a geomorphological investigation of Little Beaver Creek and one of its tributaries—no further work is recommended within Areas 5A, 5B, and 6A of the PORTS property or at 33PK373–33PK378, 33PK383, and 33PK384 if they are impacted by a future undertaking.

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APPENDIX A: FIGURES

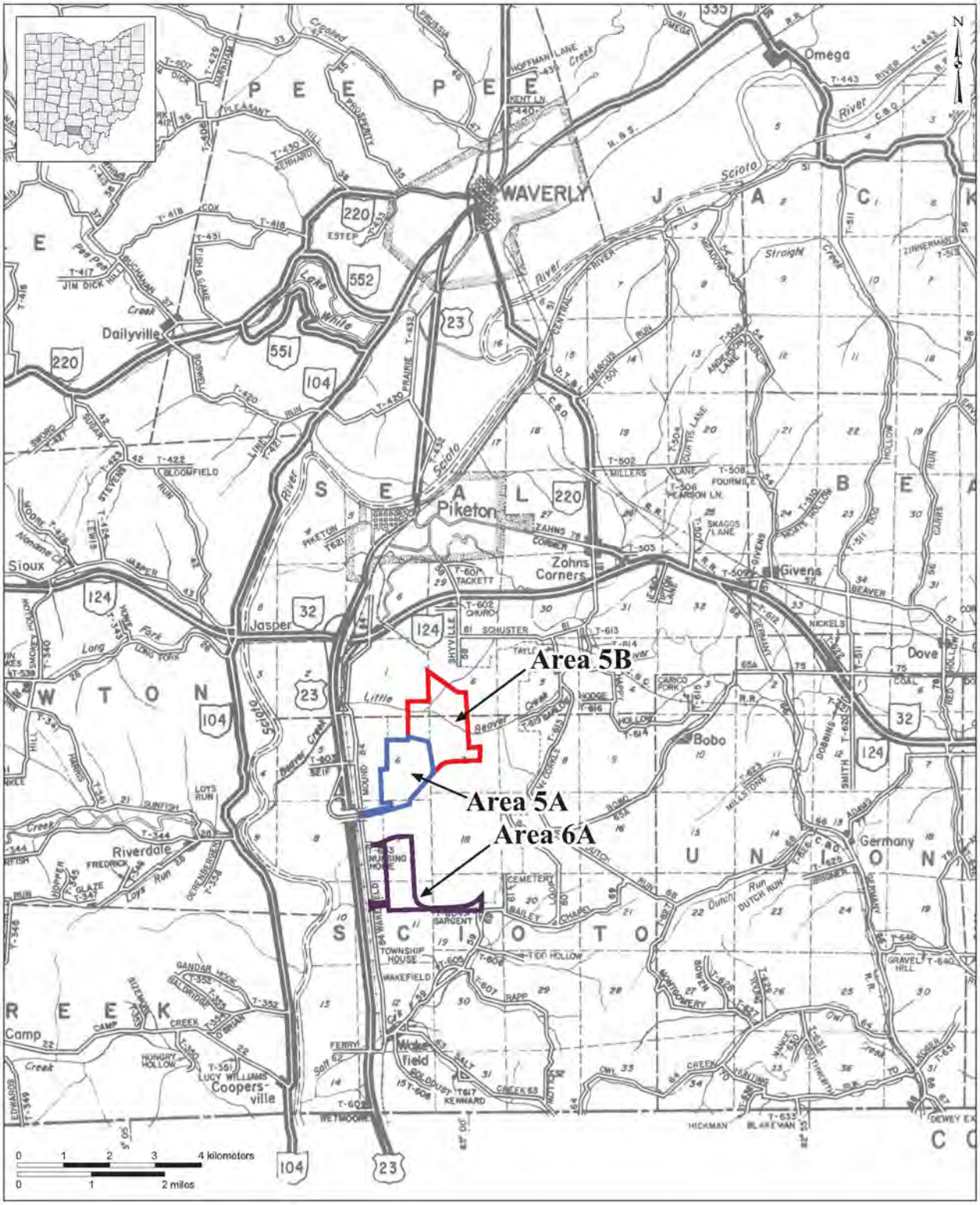


Figure 1. Portion of the ODOT Pike County highway map showing the vicinity of Areas 5A, 5B, and 6A.

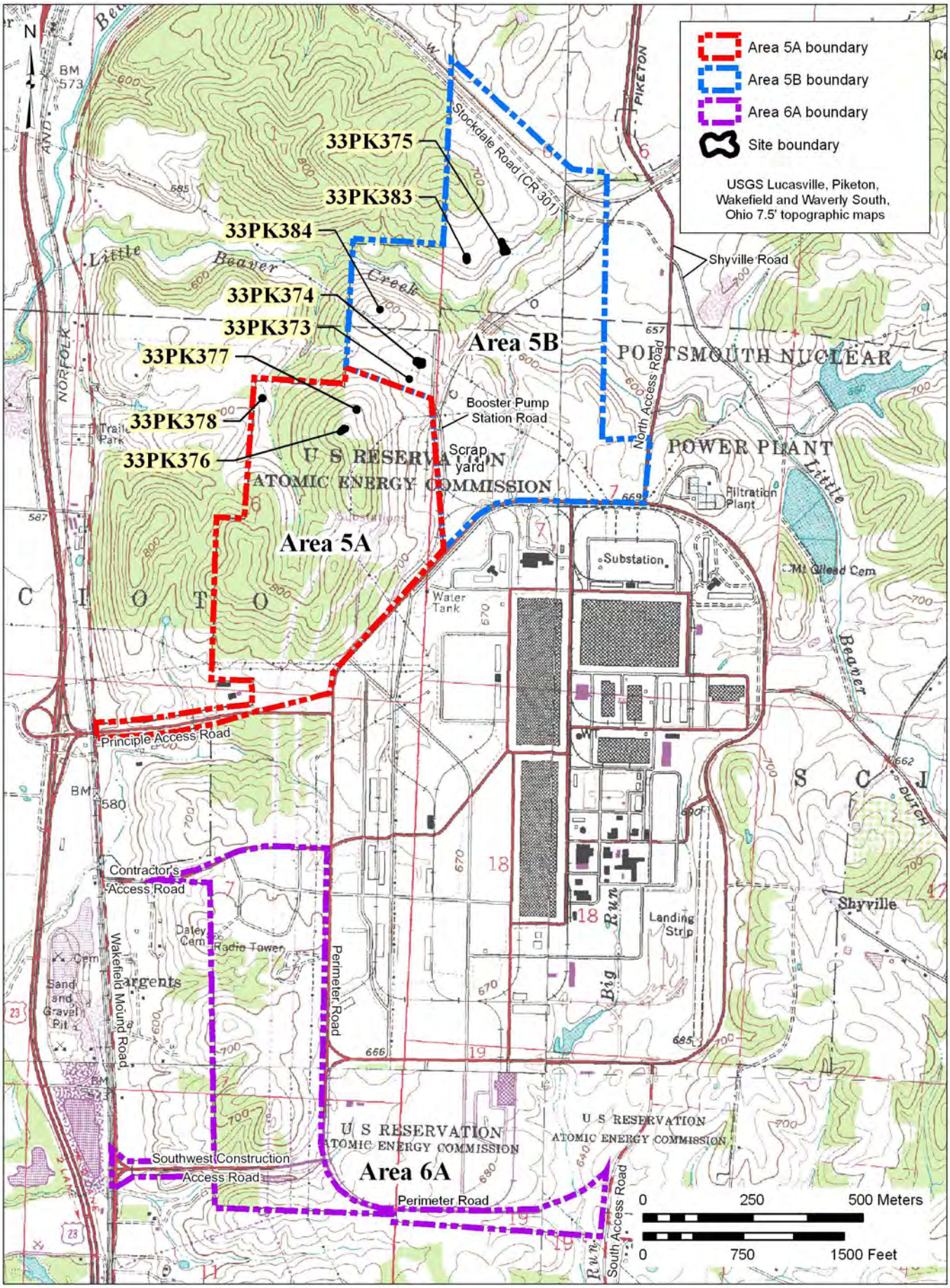


Figure 2. Portions of the 1972 Lucasville, 1979 Piketon, 1986 Wakefield, and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing Areas 5A, 5B, and 6A and the inventoried cultural resources.

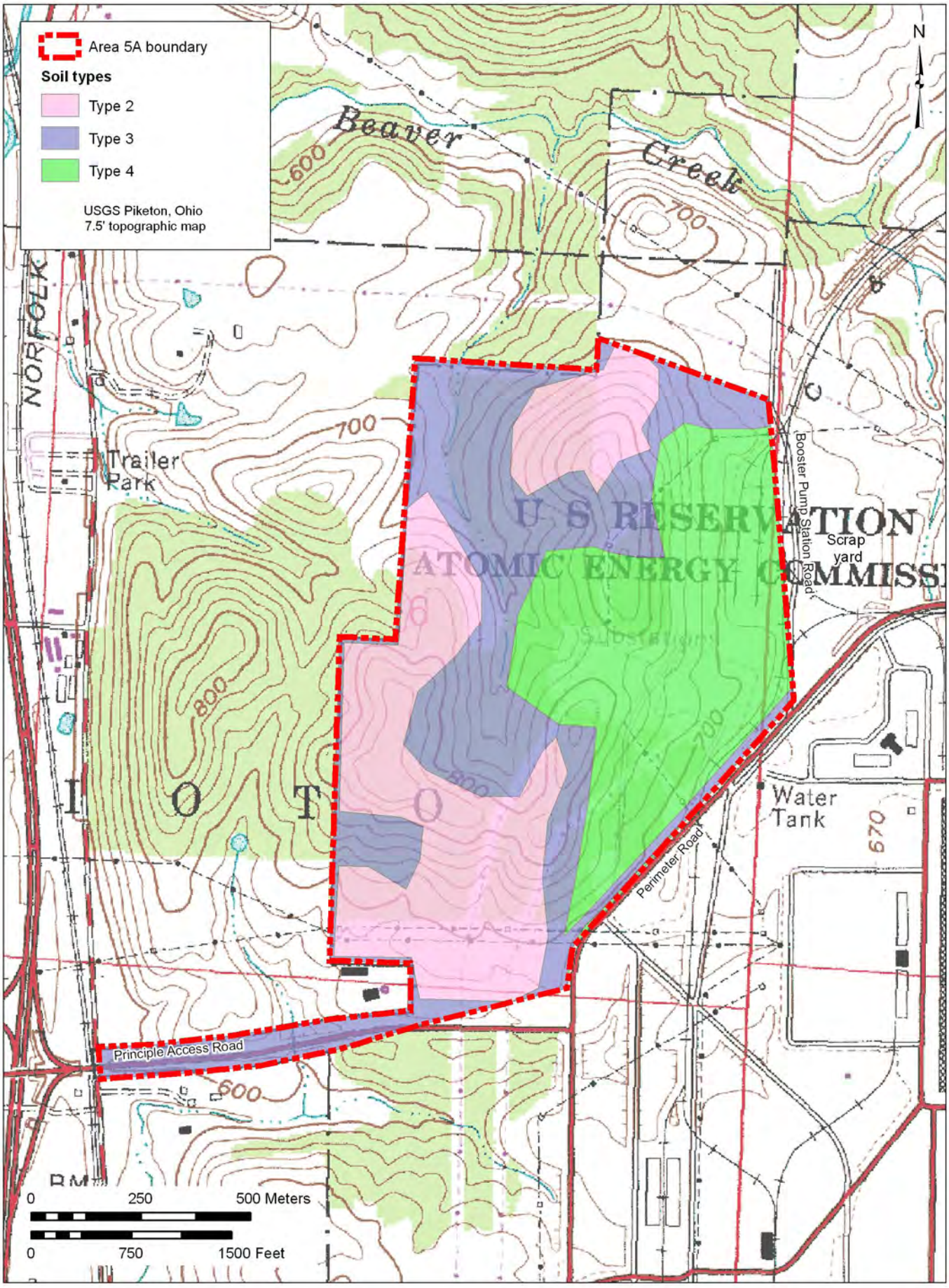


Figure 3. Portion of the 1979 Piketon quadrangle (USGS 7.5' topographic map) showing the soil types within Area 5A of the PORTS property as defined in the request for proposal.

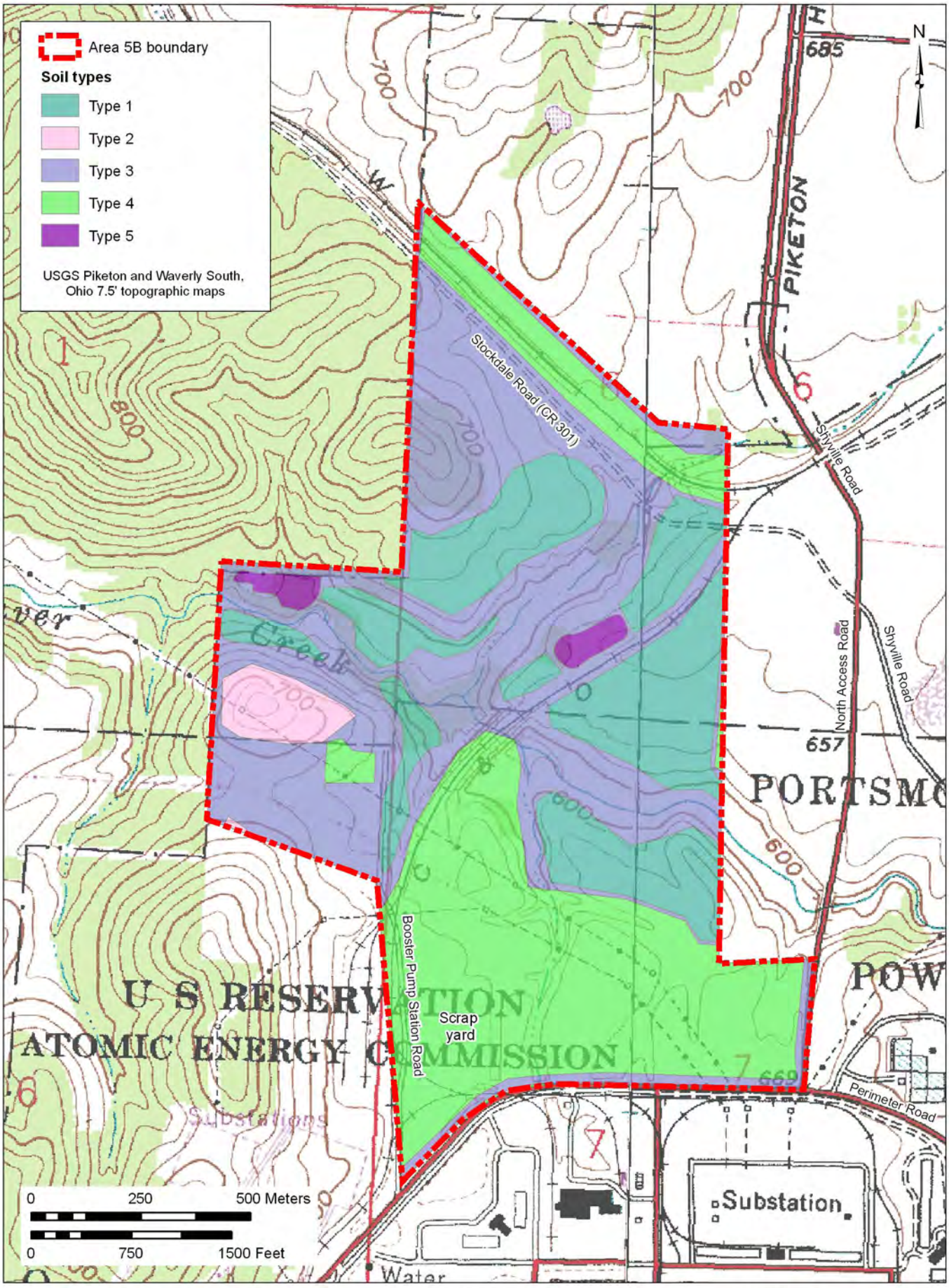


Figure 4. Portions of the 1979 Piketon and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing the soil types within Area 5B of the PORTS property as defined in the request for proposal.

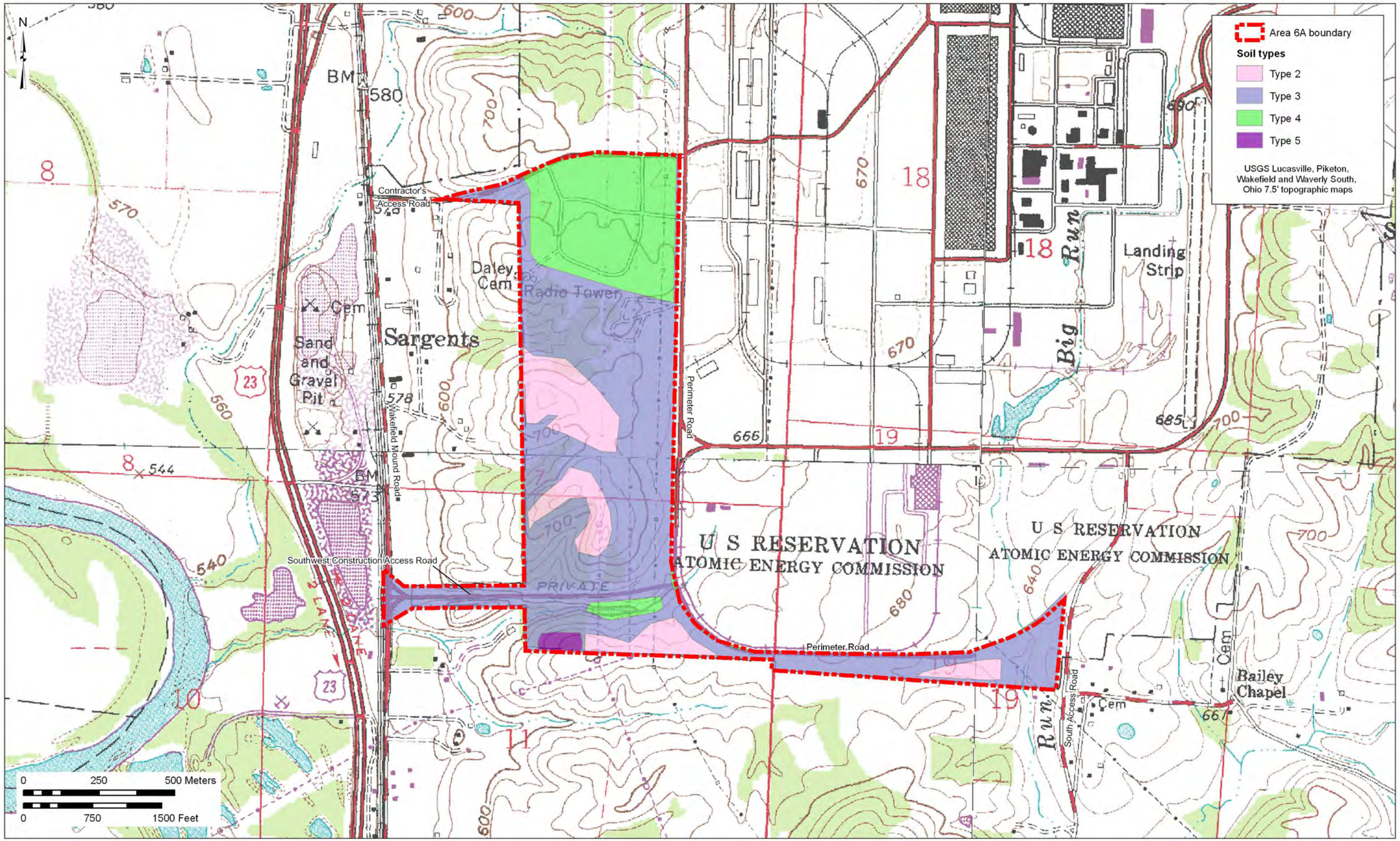


Figure 5. Portions of the 1972 Lucasville, 1979 Piketon, 1986 Wakefield, and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing the soil types within Area 6A of the PORTS property as defined in the request for proposal.

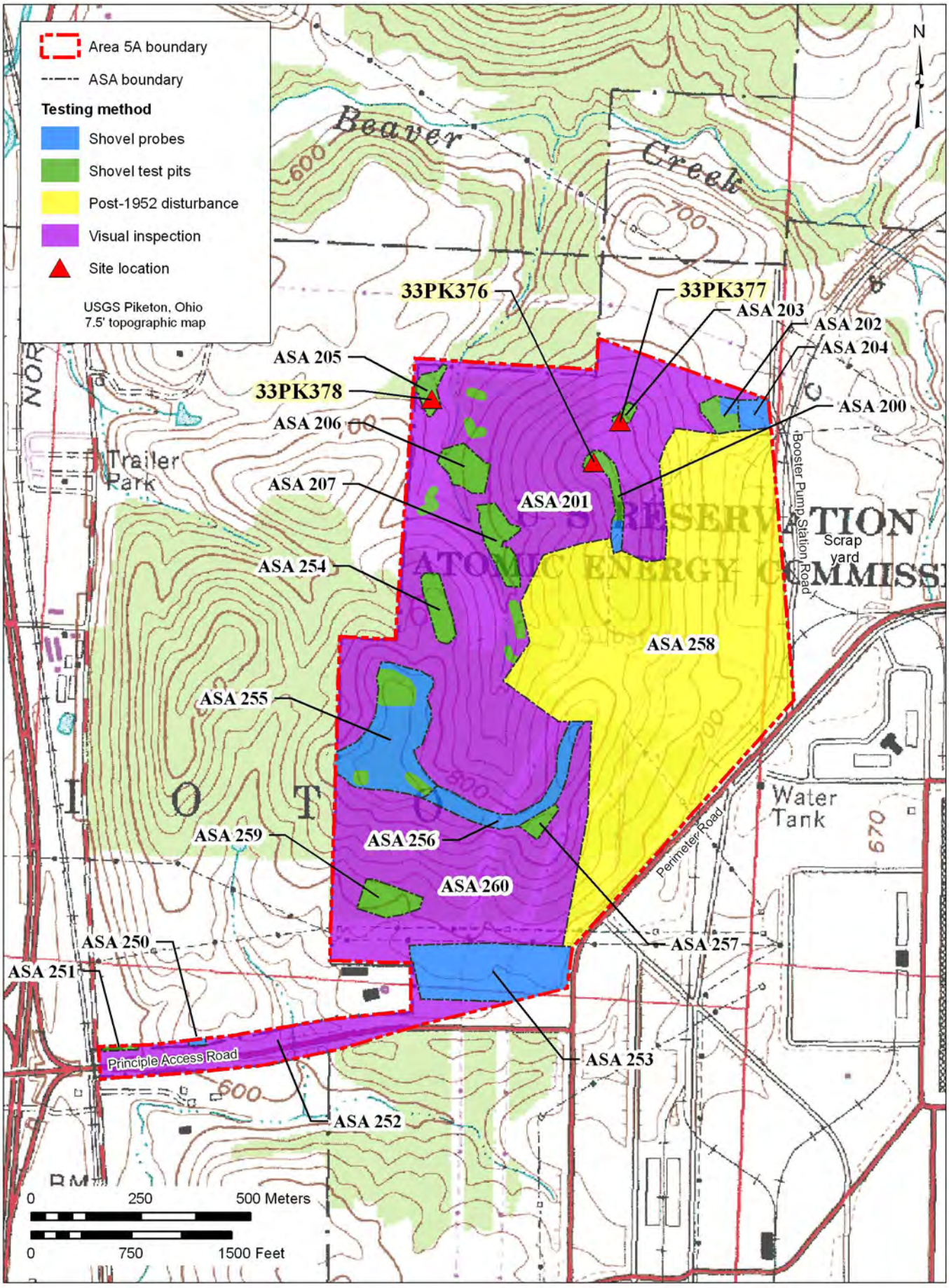


Figure 6. Portion of the 1979 Piketon quadrangle (USGS 7.5' topographic map) showing archaeological survey areas and testing methods used in Area 5A of the PORTS property.

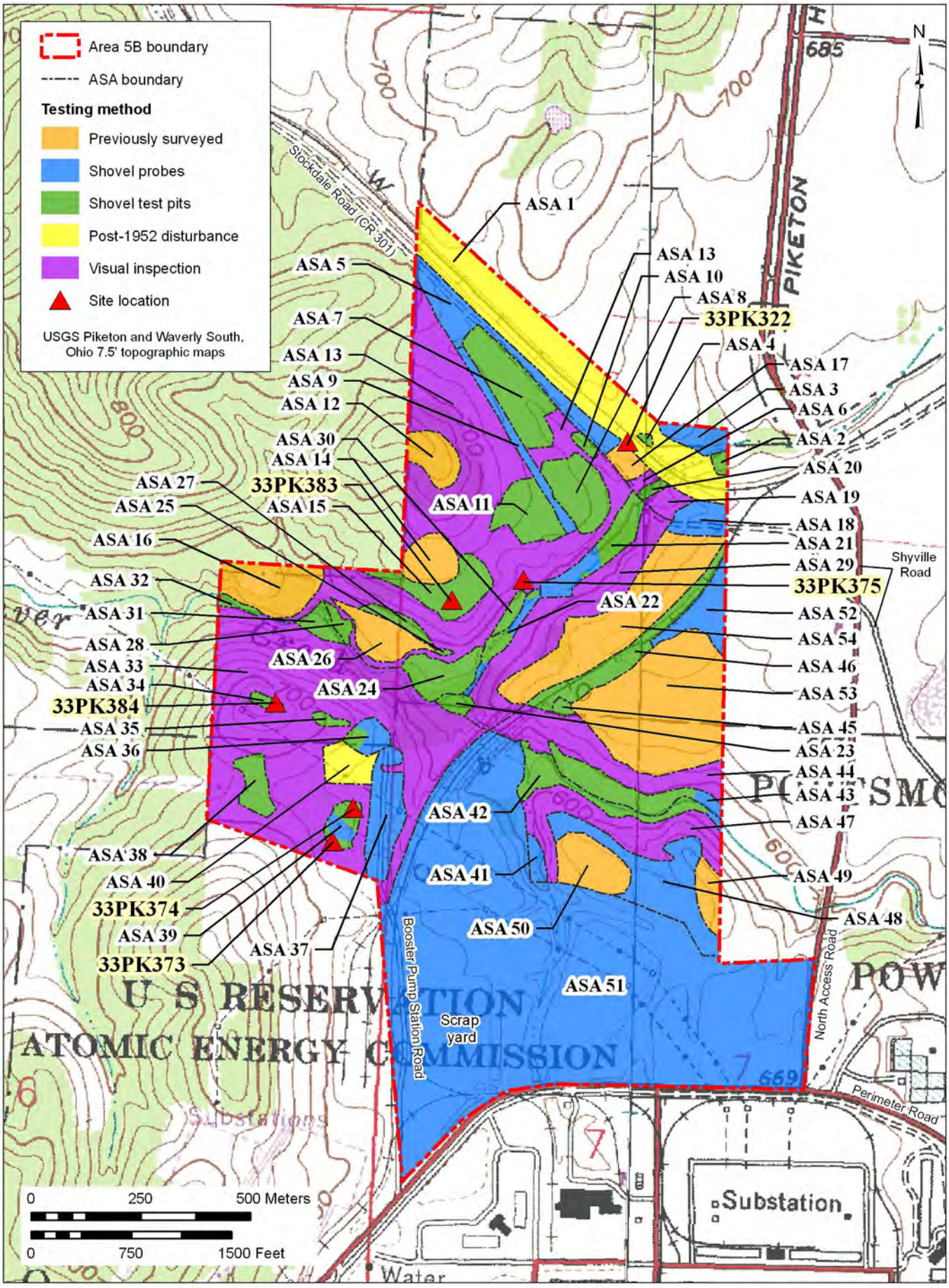


Figure 7. Portions of the 1979 Piketon and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing archaeological survey areas and testing methods used in Area 5B of the PORTS property.

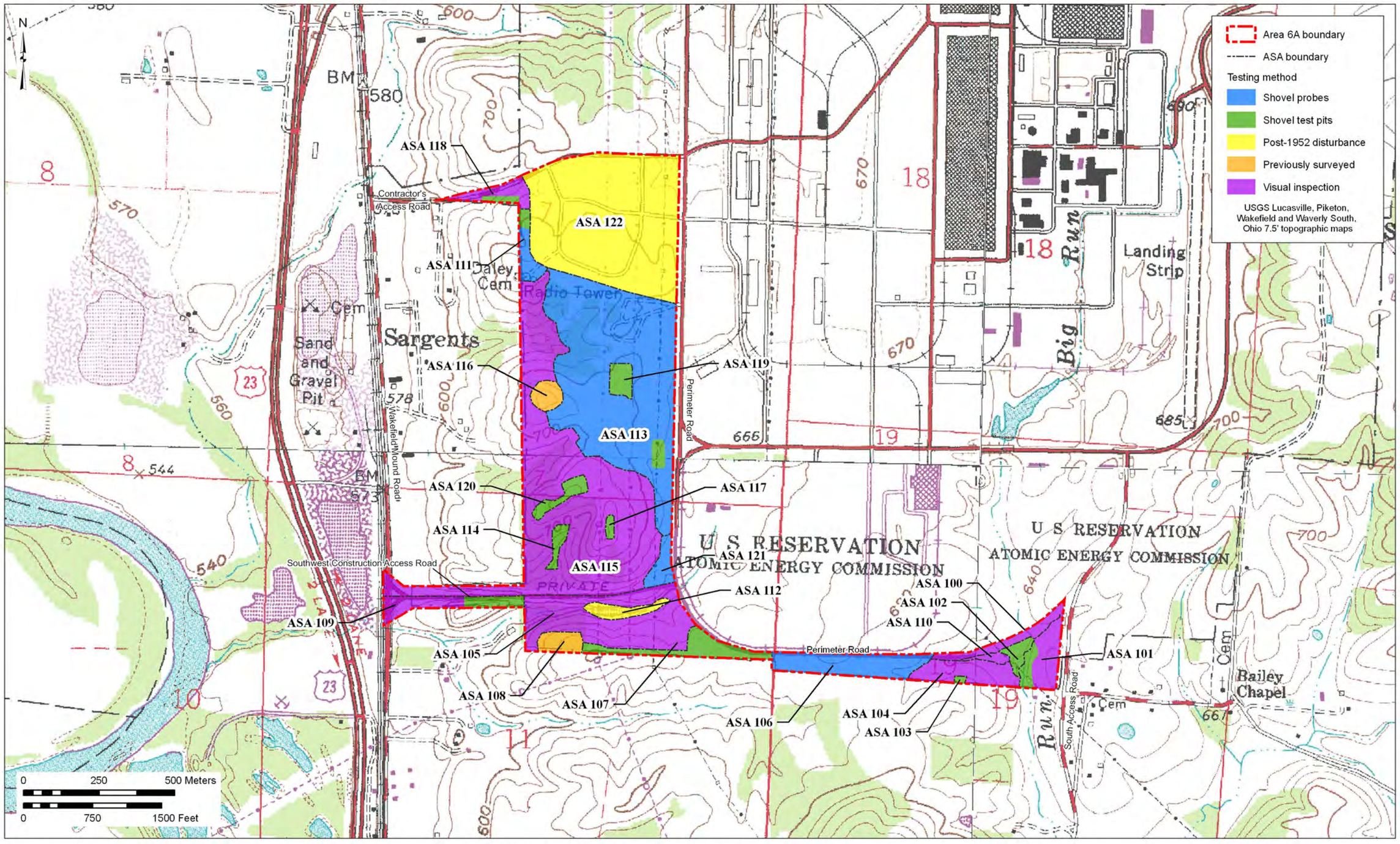


Figure 8. Portions of the 1972 Lucasville, 1979 Piketon, 1986 Wakefield, and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing archaeological survey areas and testing methods used in Area 6A of the PORTS property.

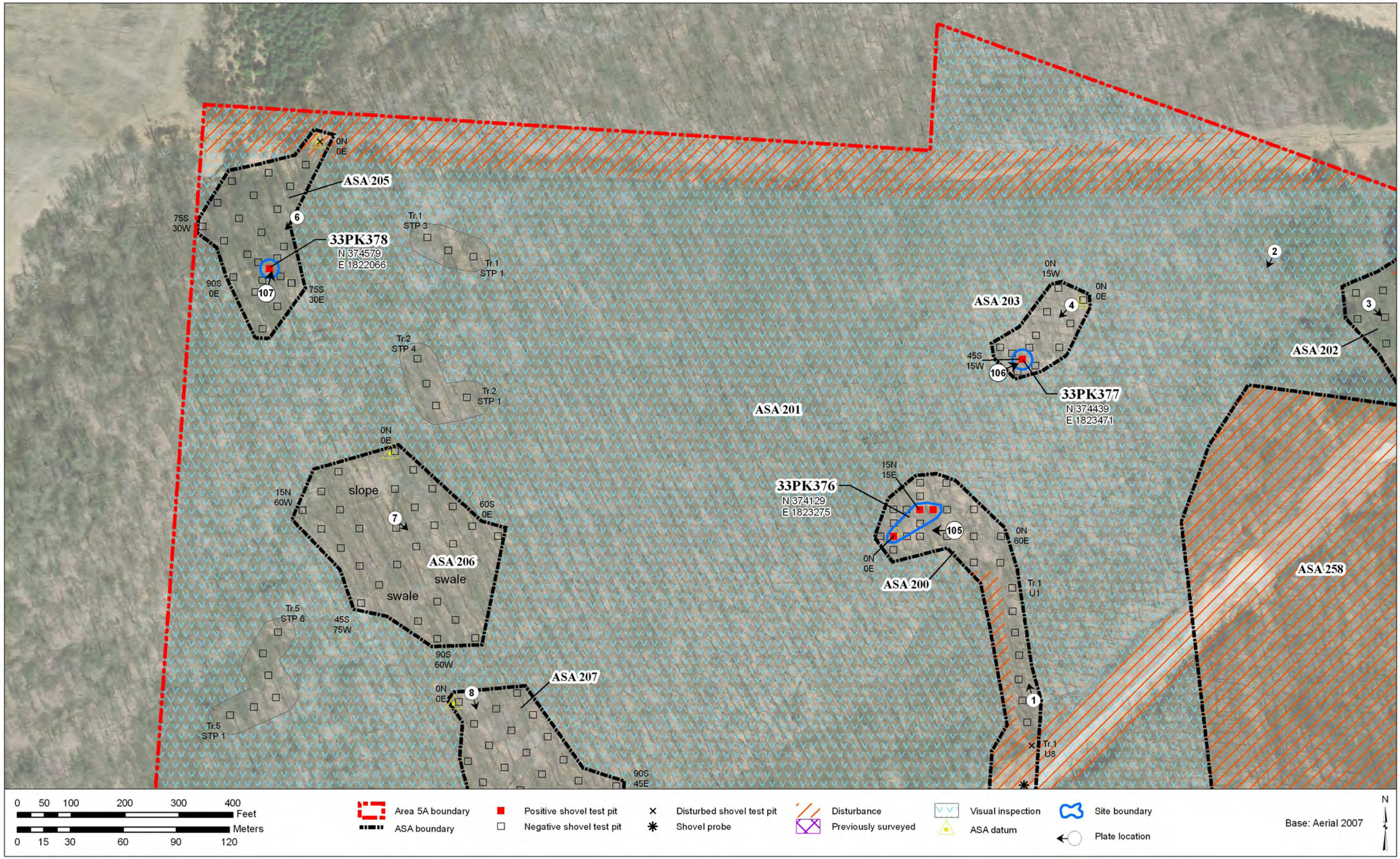
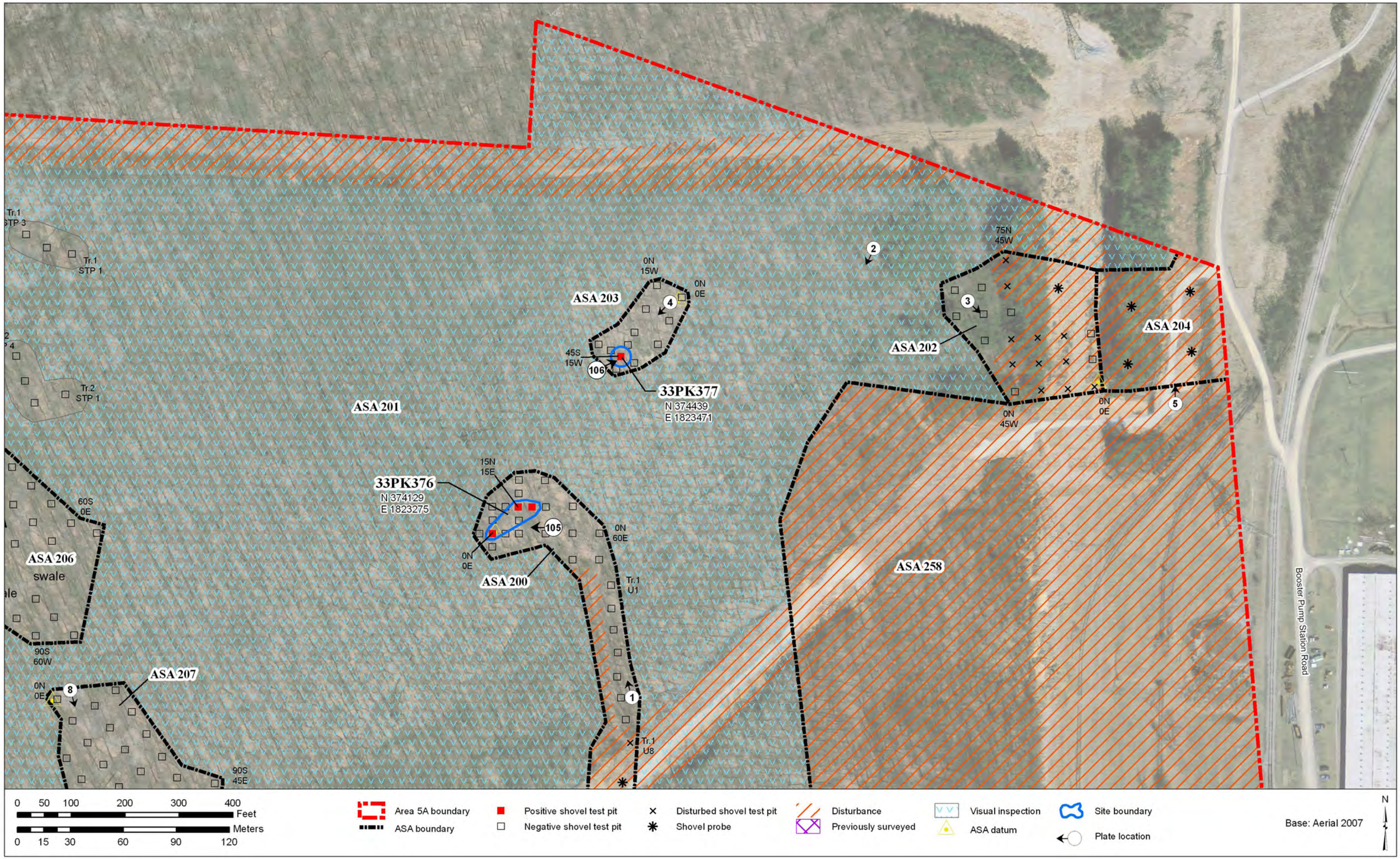


Figure 9. Project map detailing the archaeological investigation in Area 5A of the PORTS property and keyed to Plates 1–19 and 103–105. (8 Sheets)



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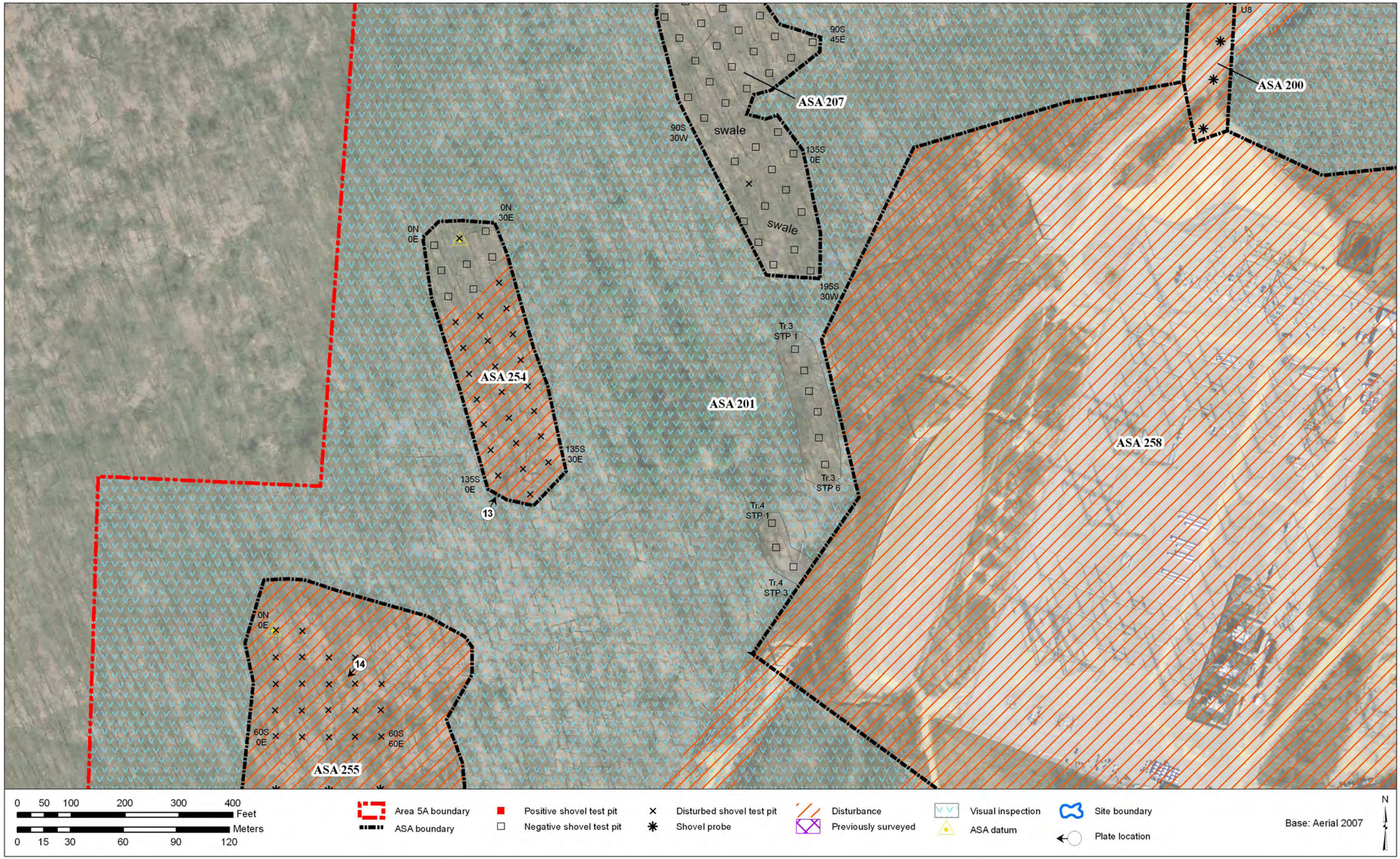

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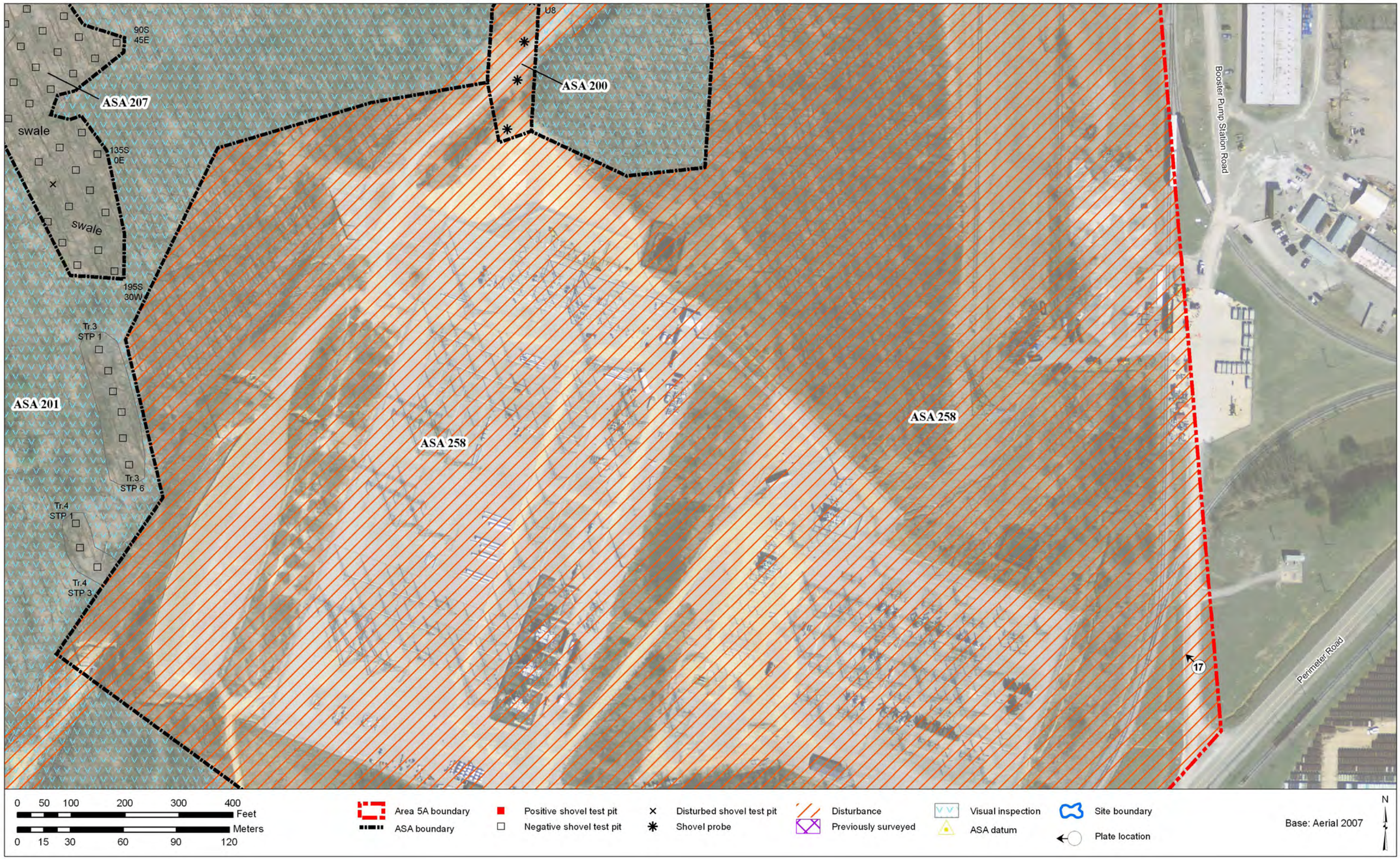

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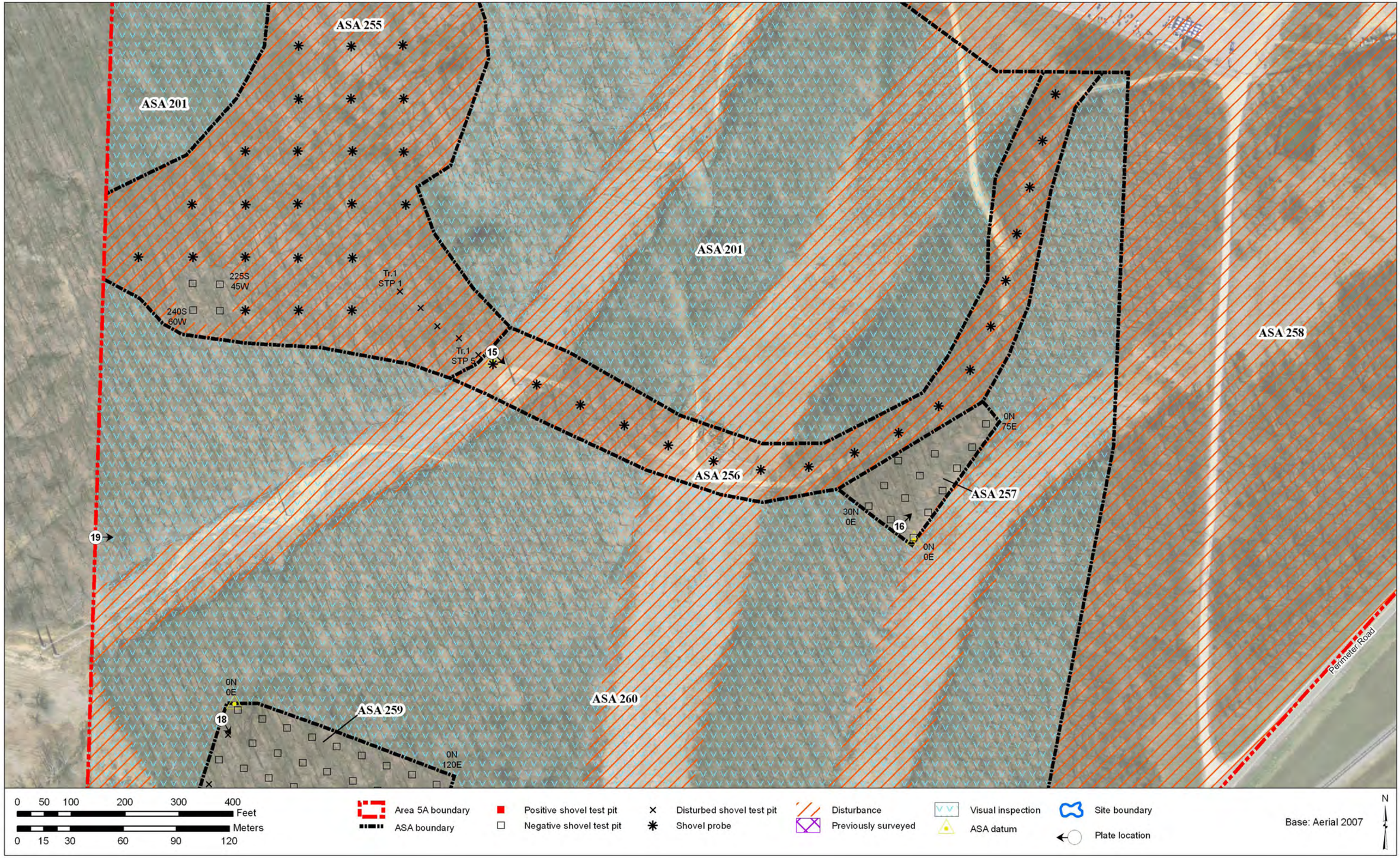

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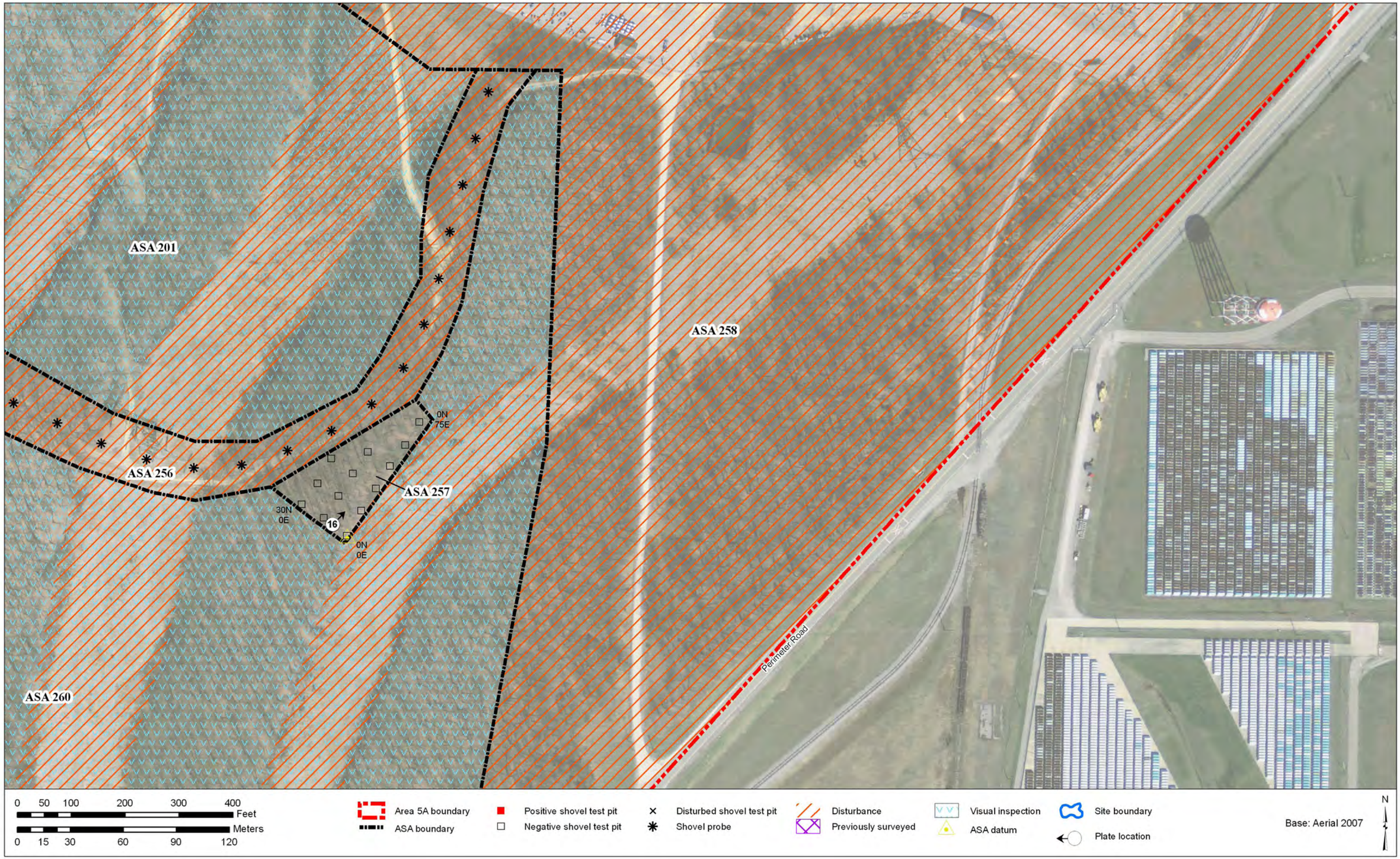

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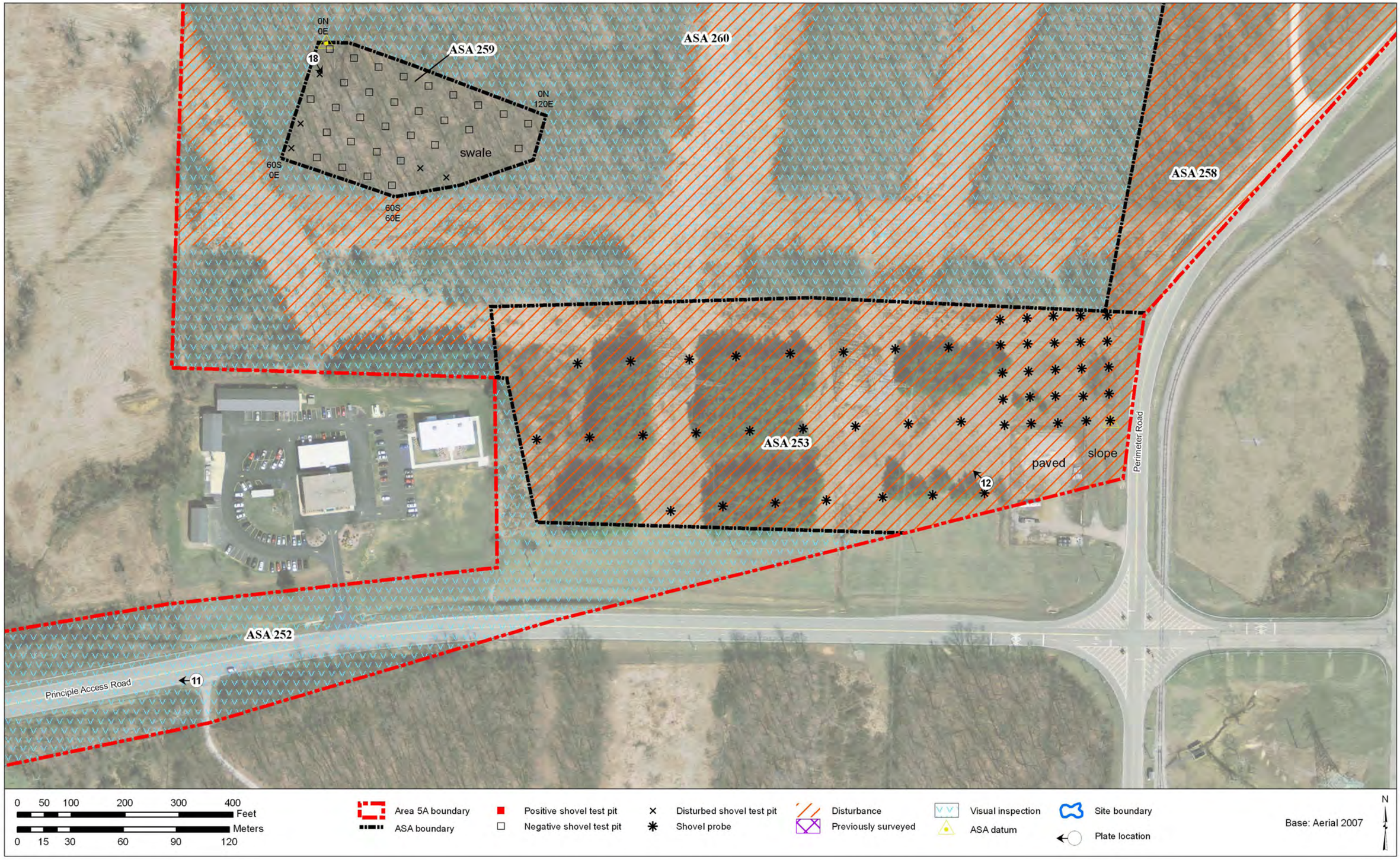

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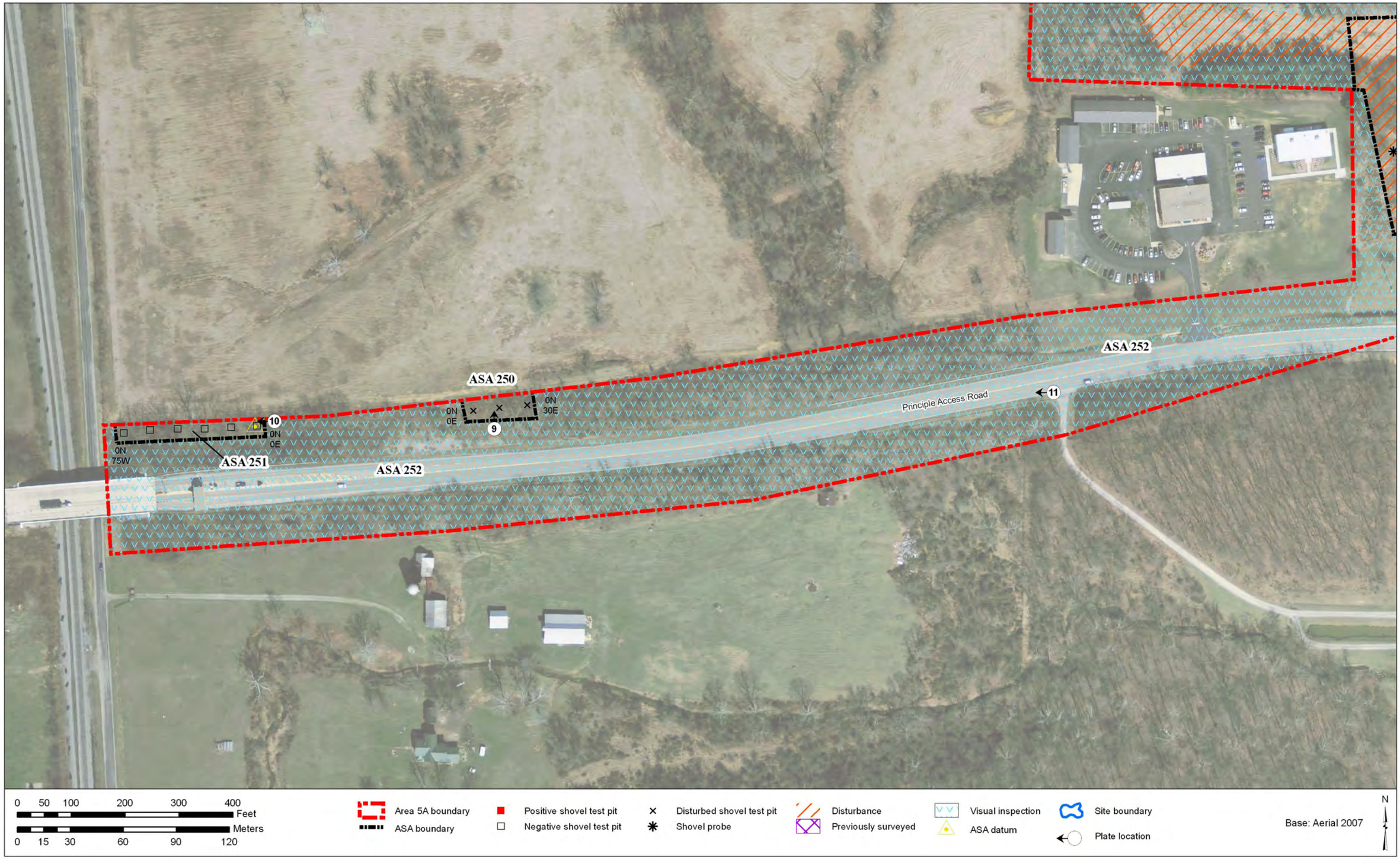

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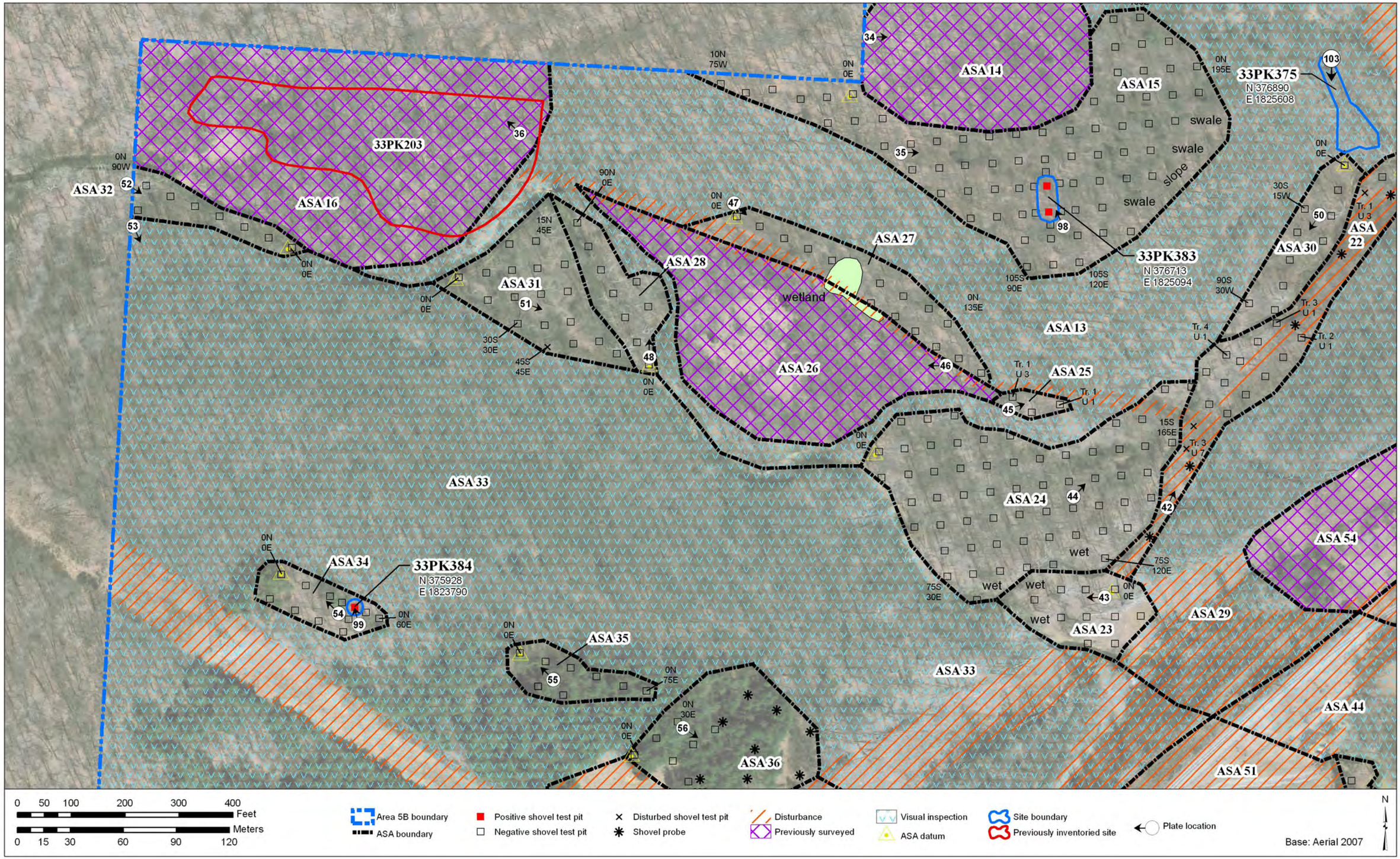

Figure 10. Project map detailing the archaeological investigation in Area 5B of the PORTS property and keyed to Plates 20–74 and 98–102. (9 Sheets)

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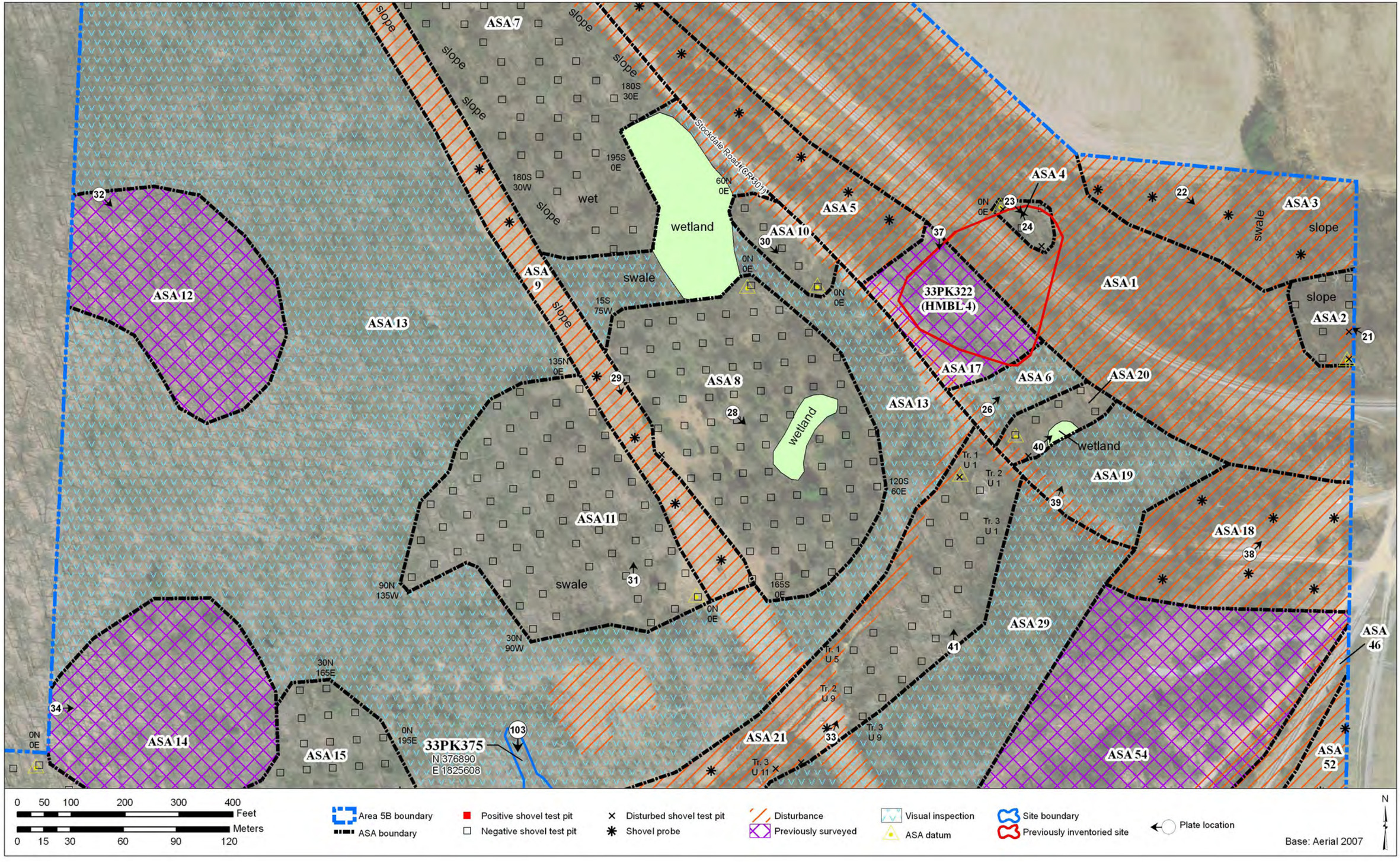

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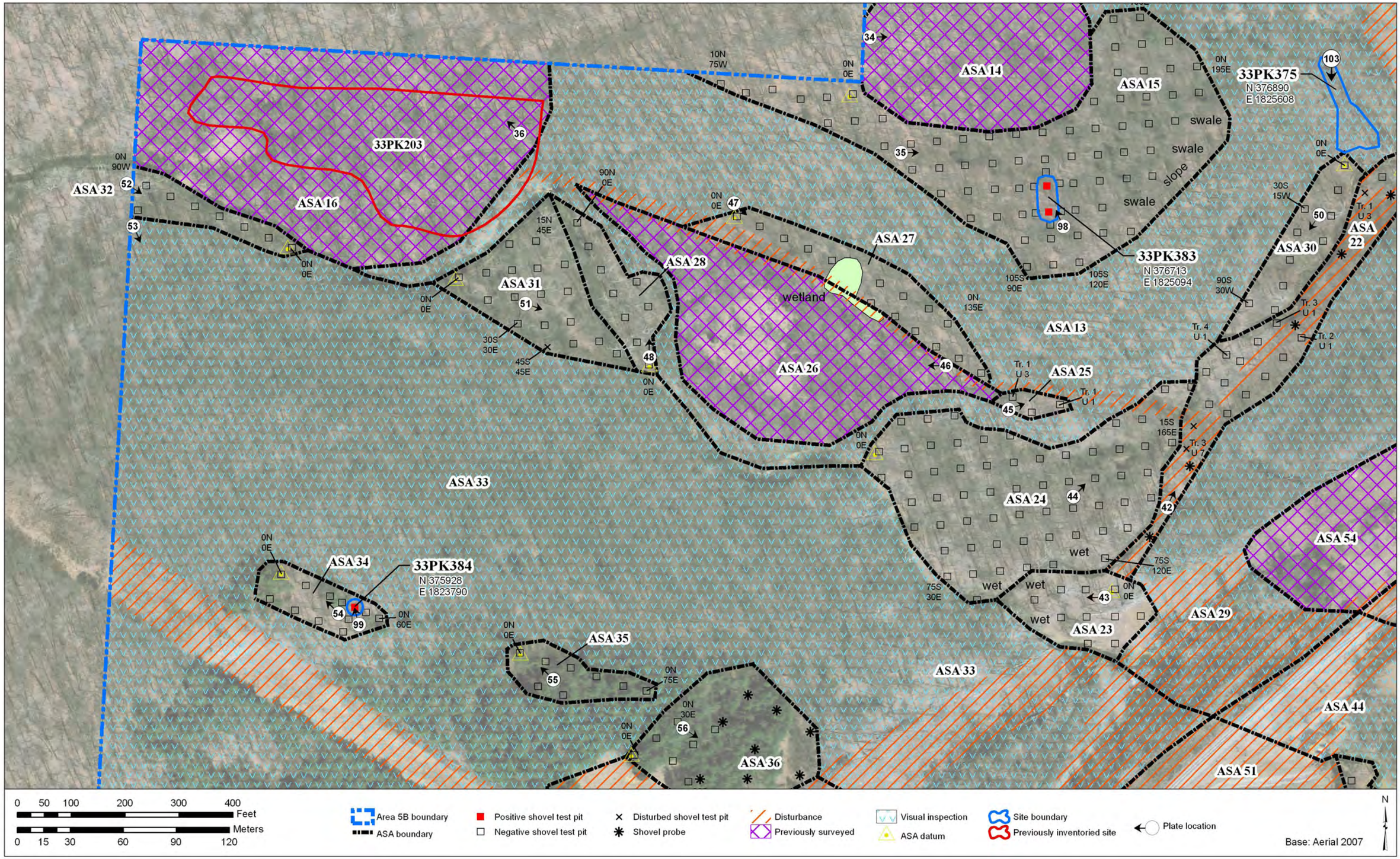
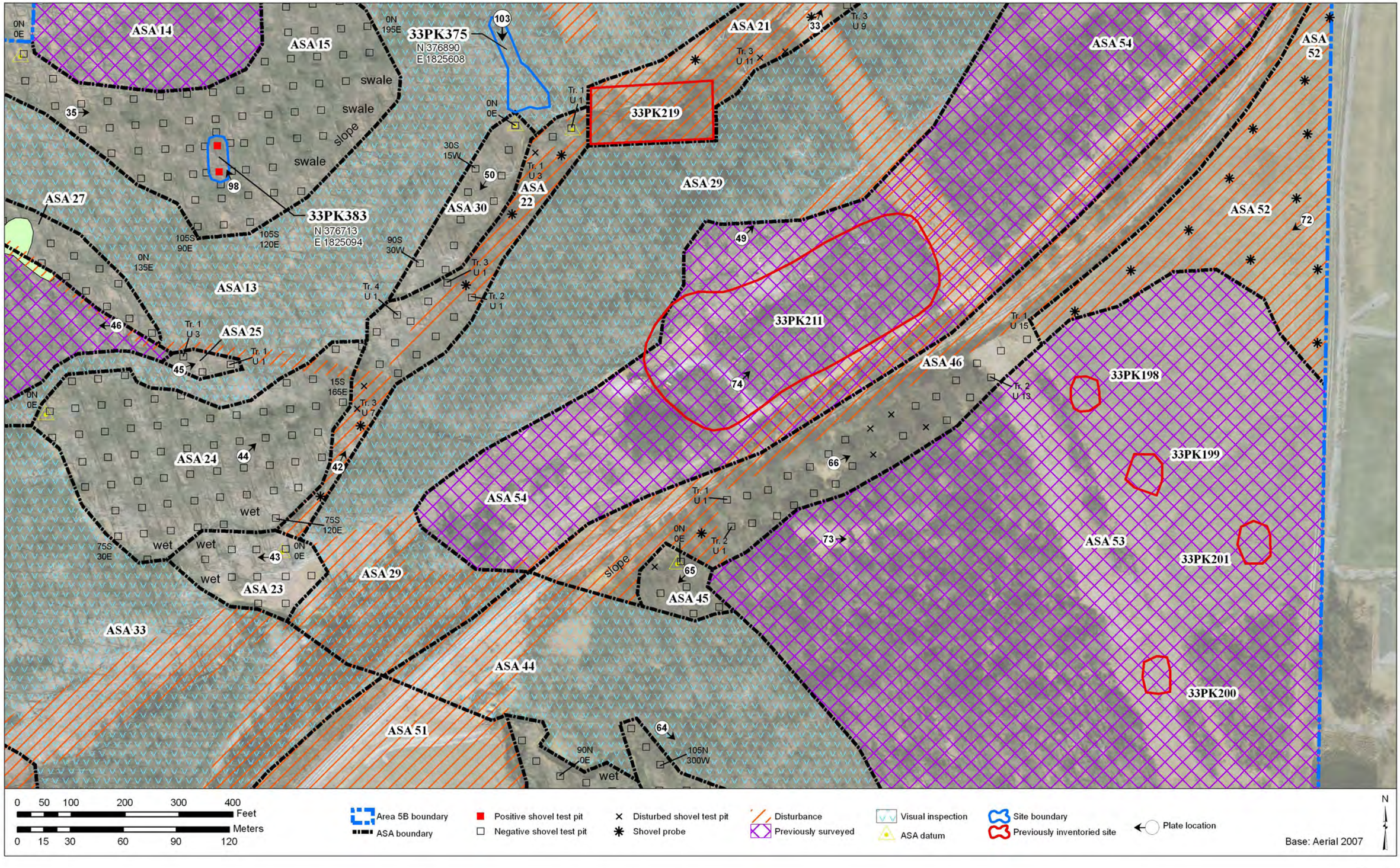


Figure 10. Project map detailing the archaeological investigation in Area 5B of the PORTS property and keyed to Plates 20–74 and 98–102. (9 Sheets)



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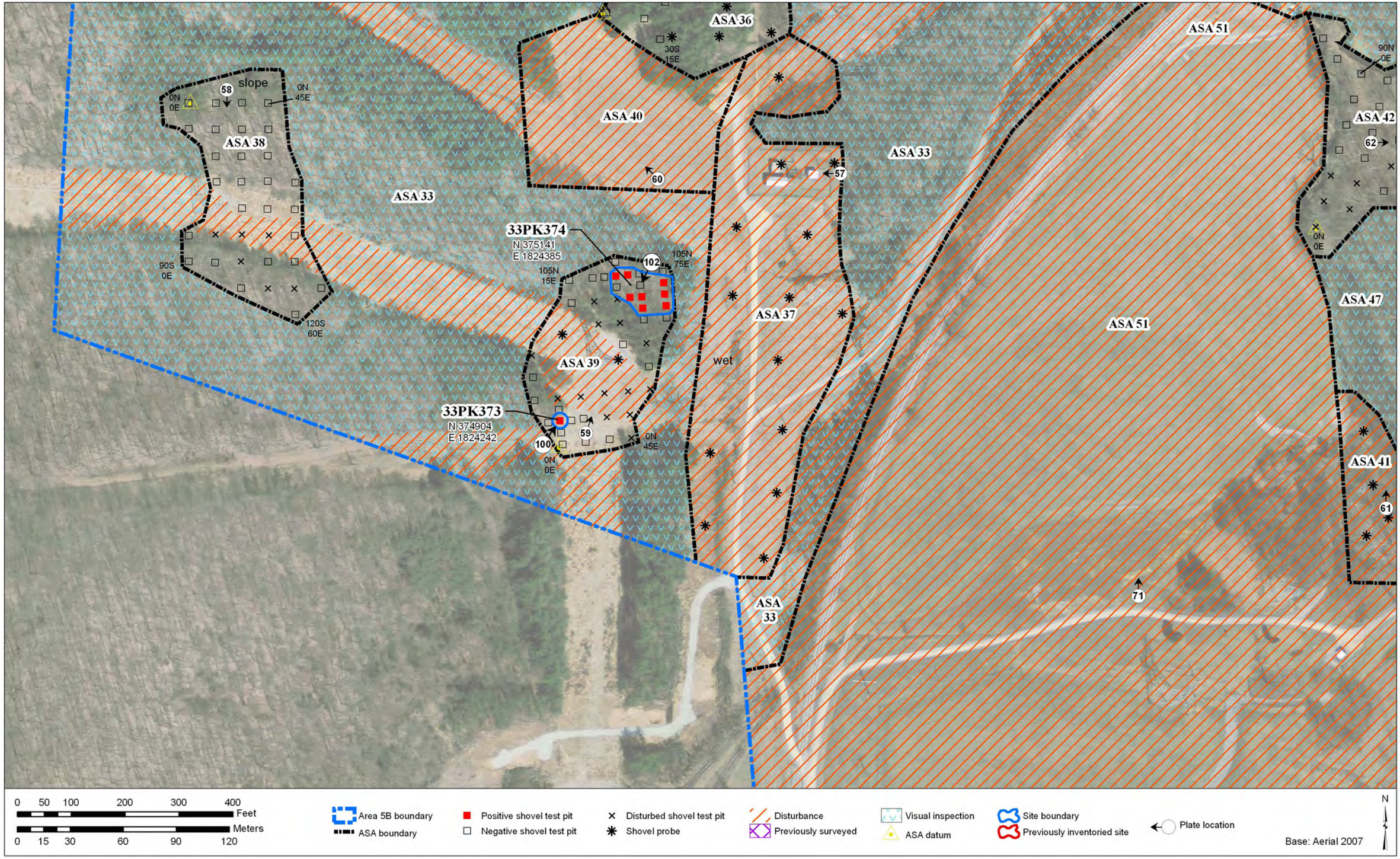

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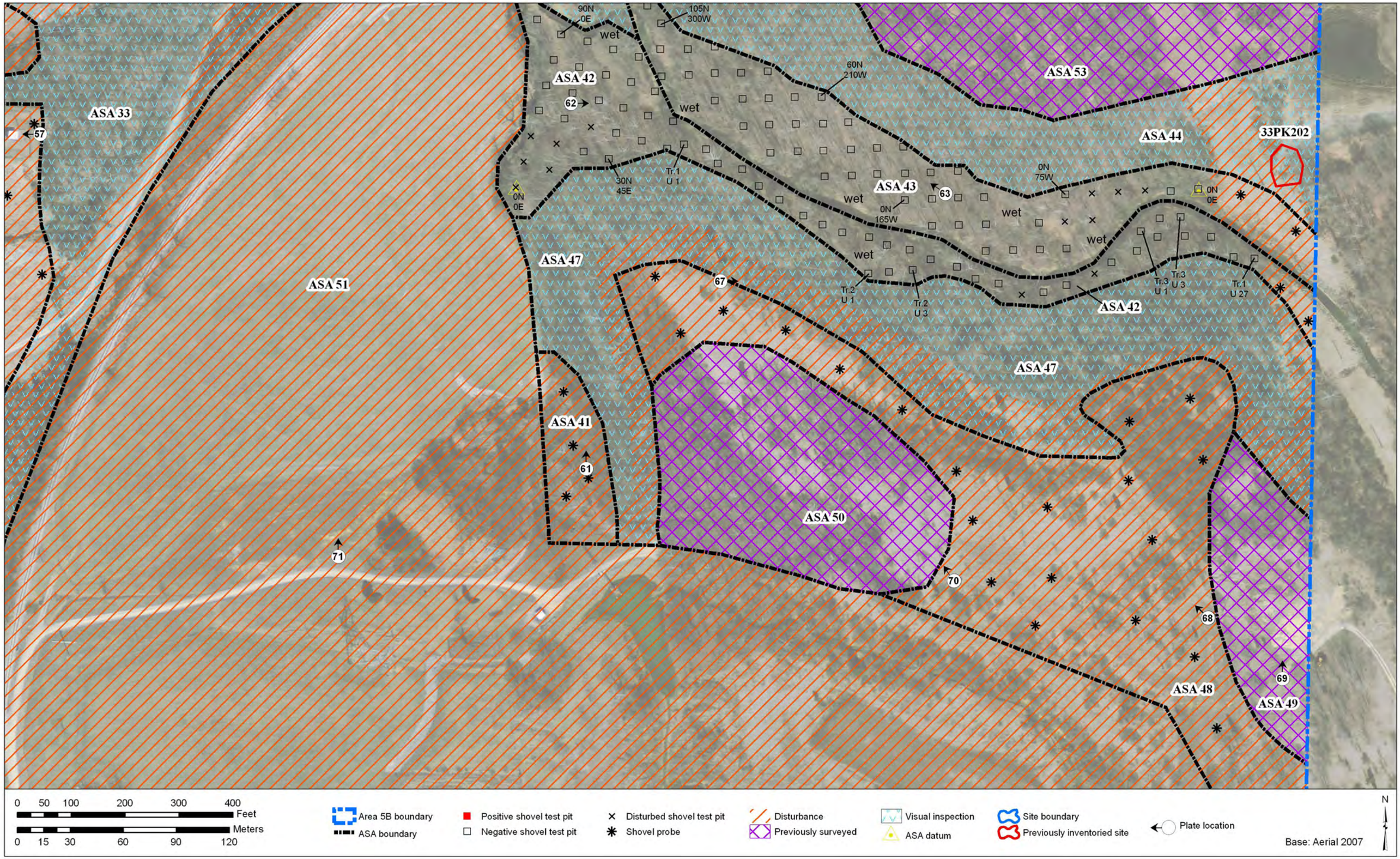

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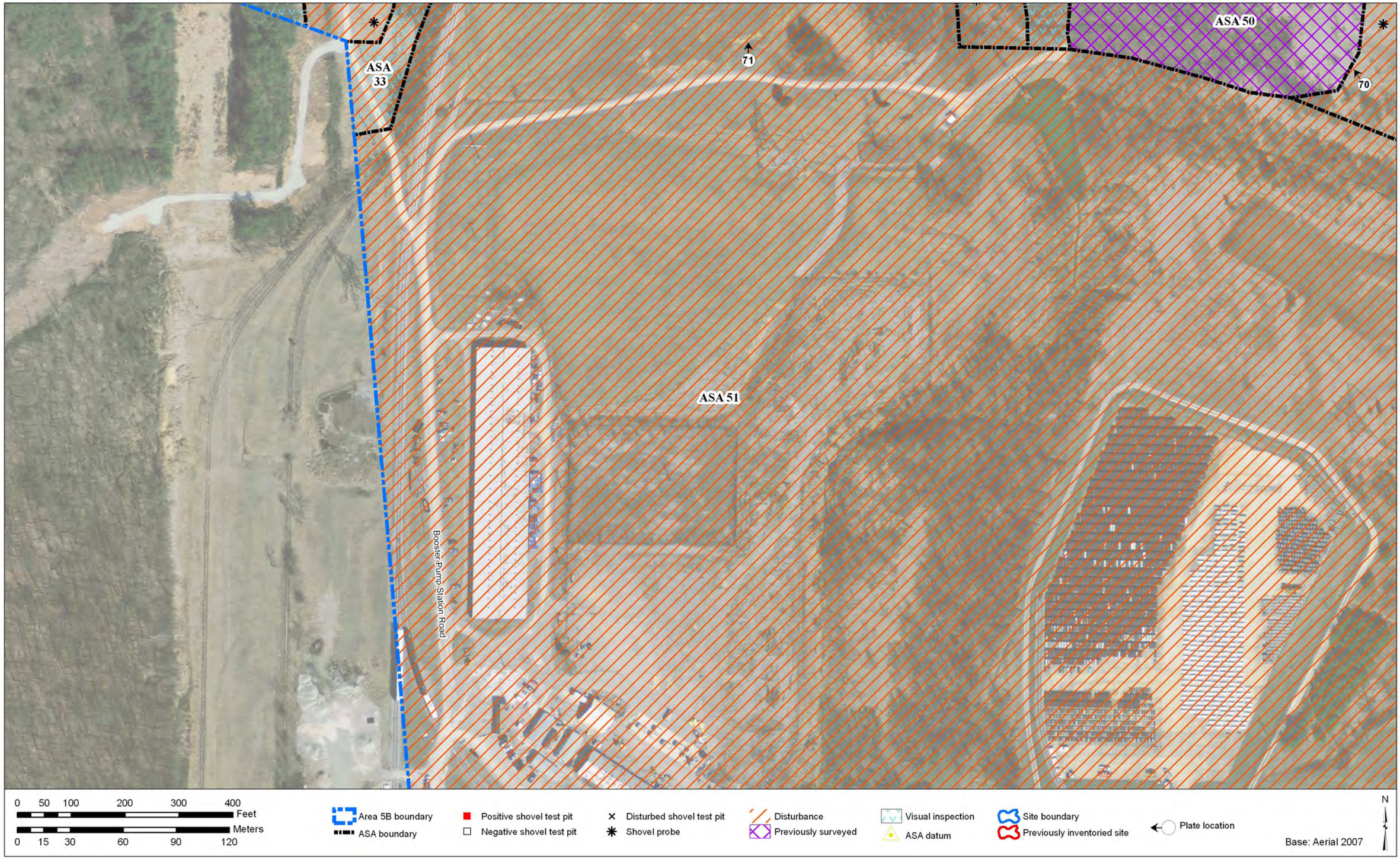

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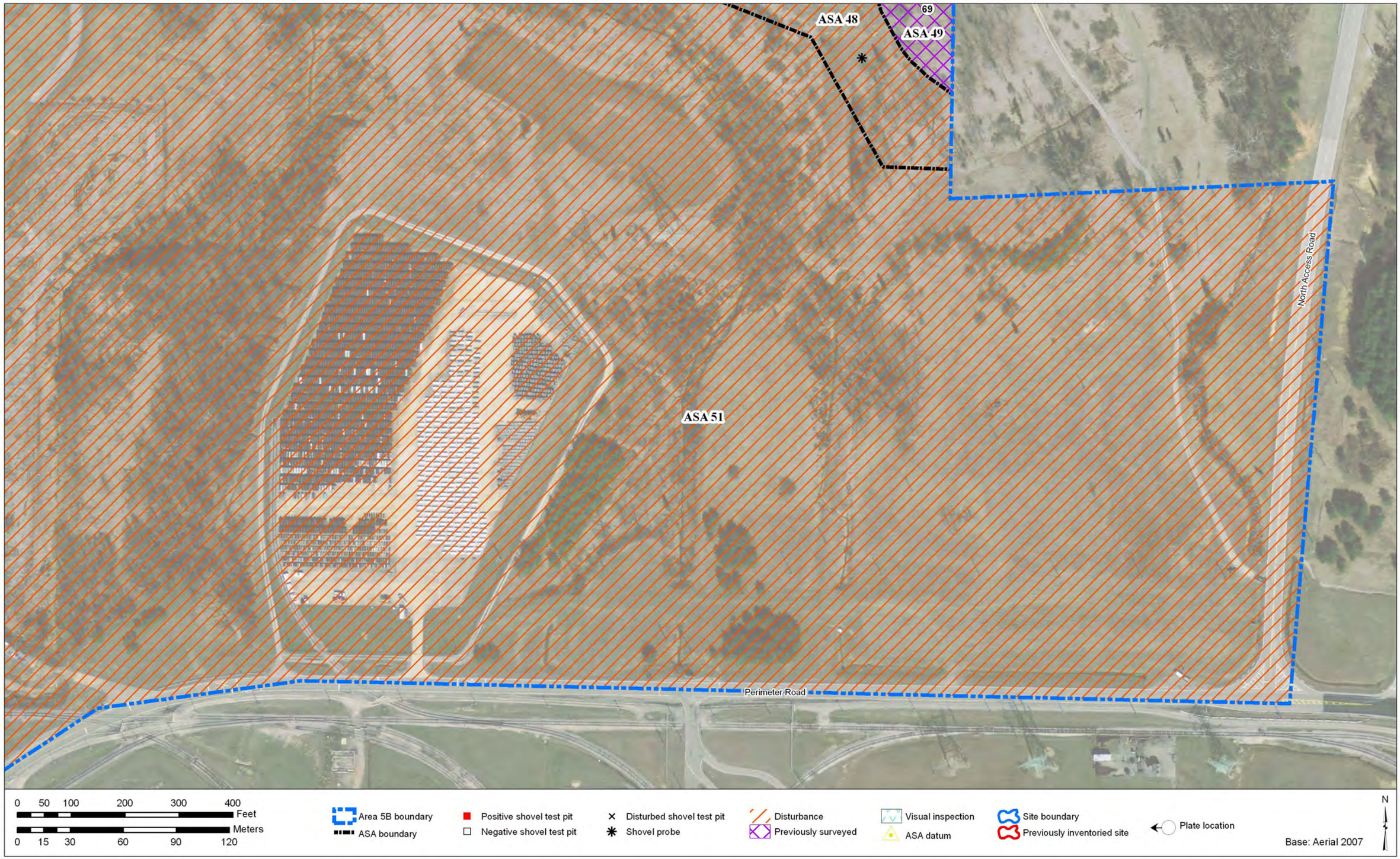

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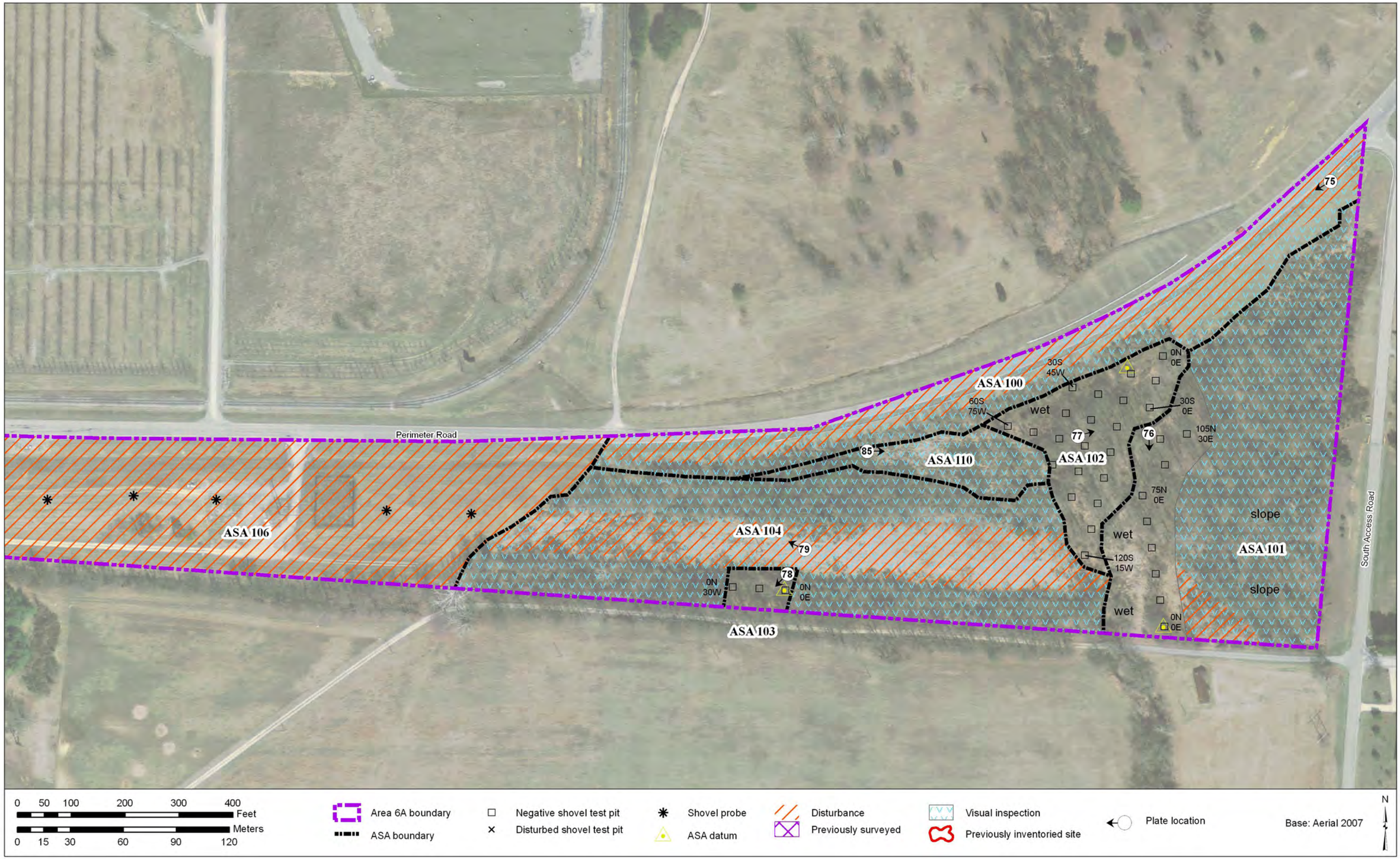
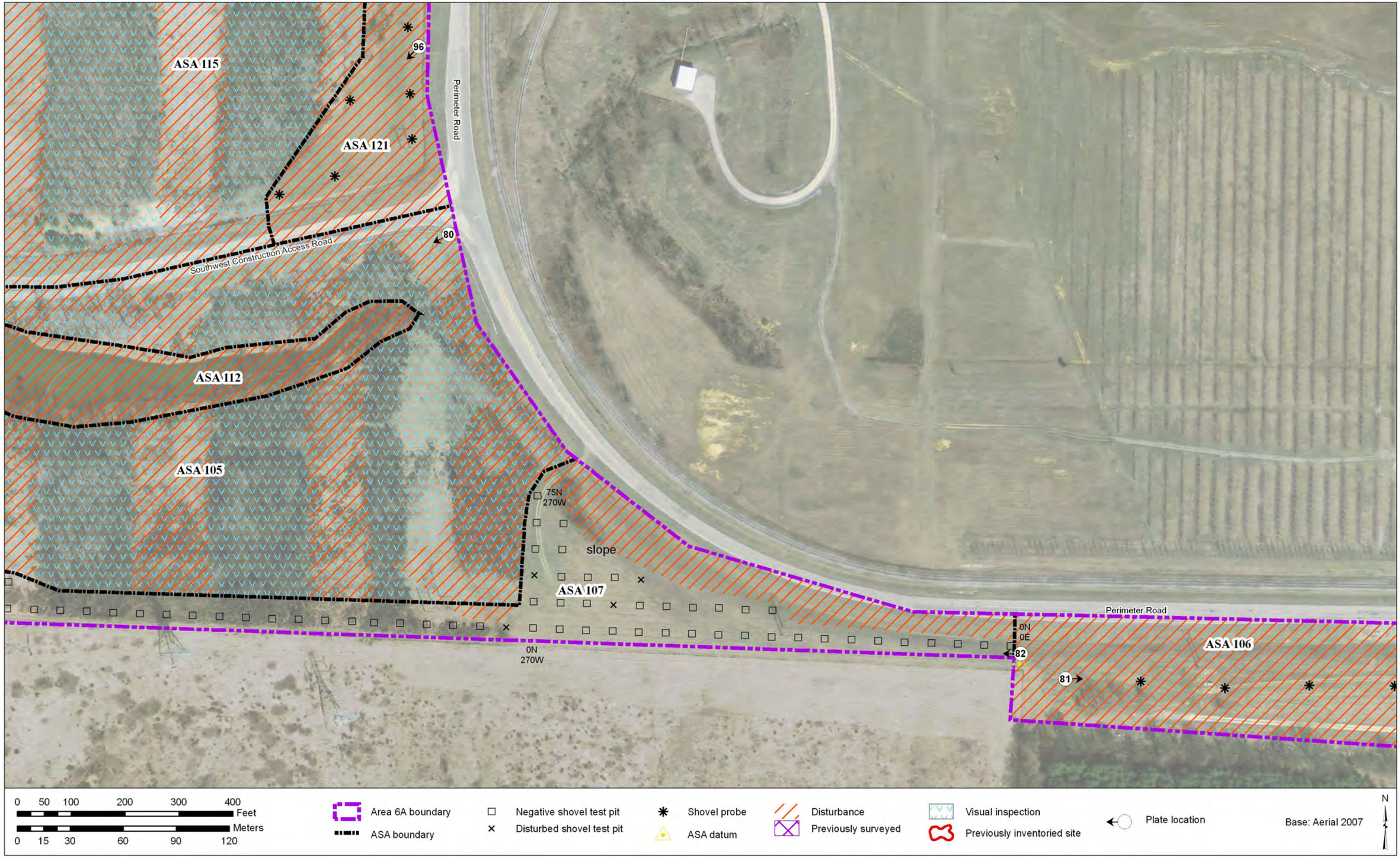


Figure 11. Project map detailing the archaeological investigation in Area 6A of the PORTS property and keyed to Plates 75–97. (7 Sheets)



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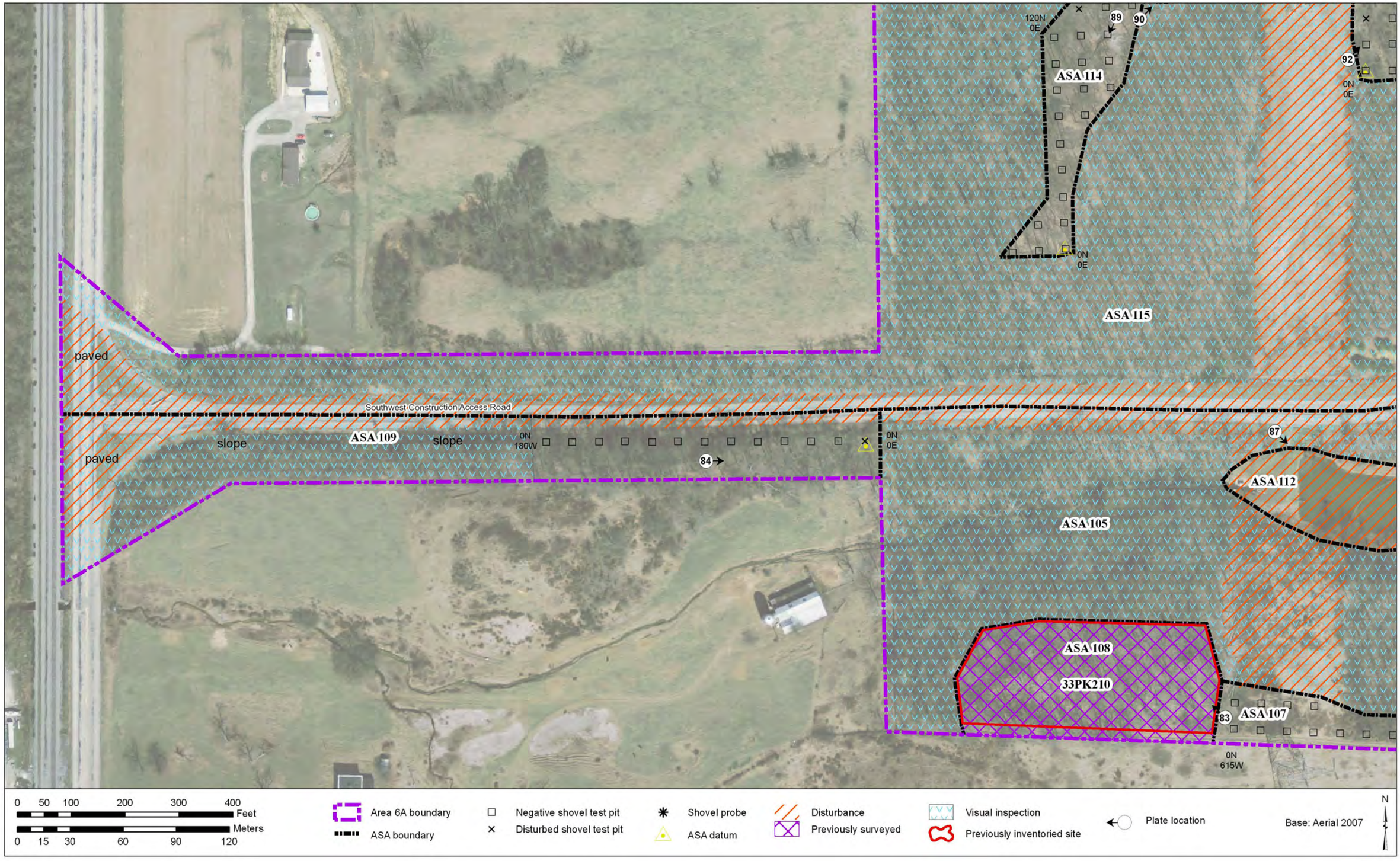

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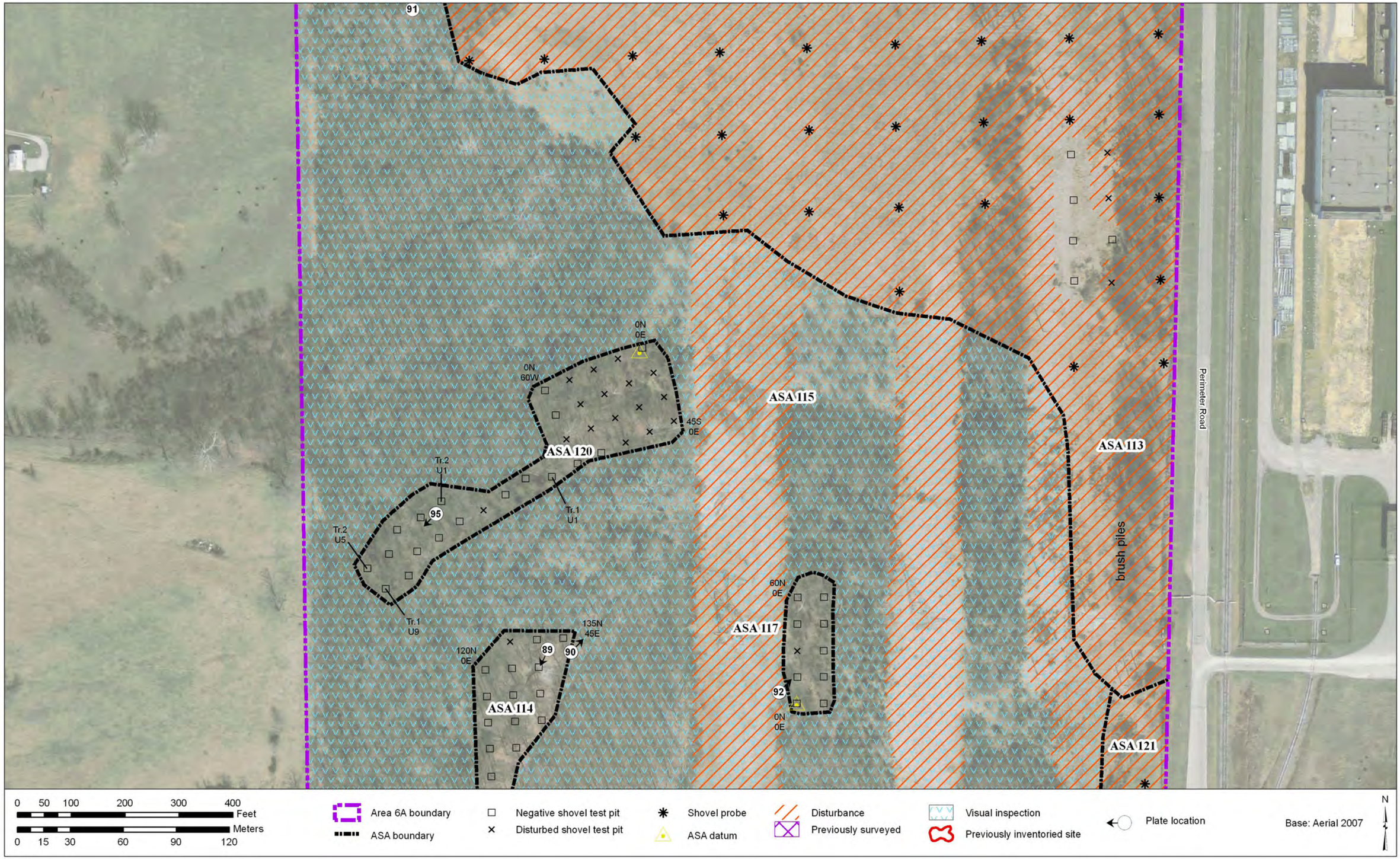

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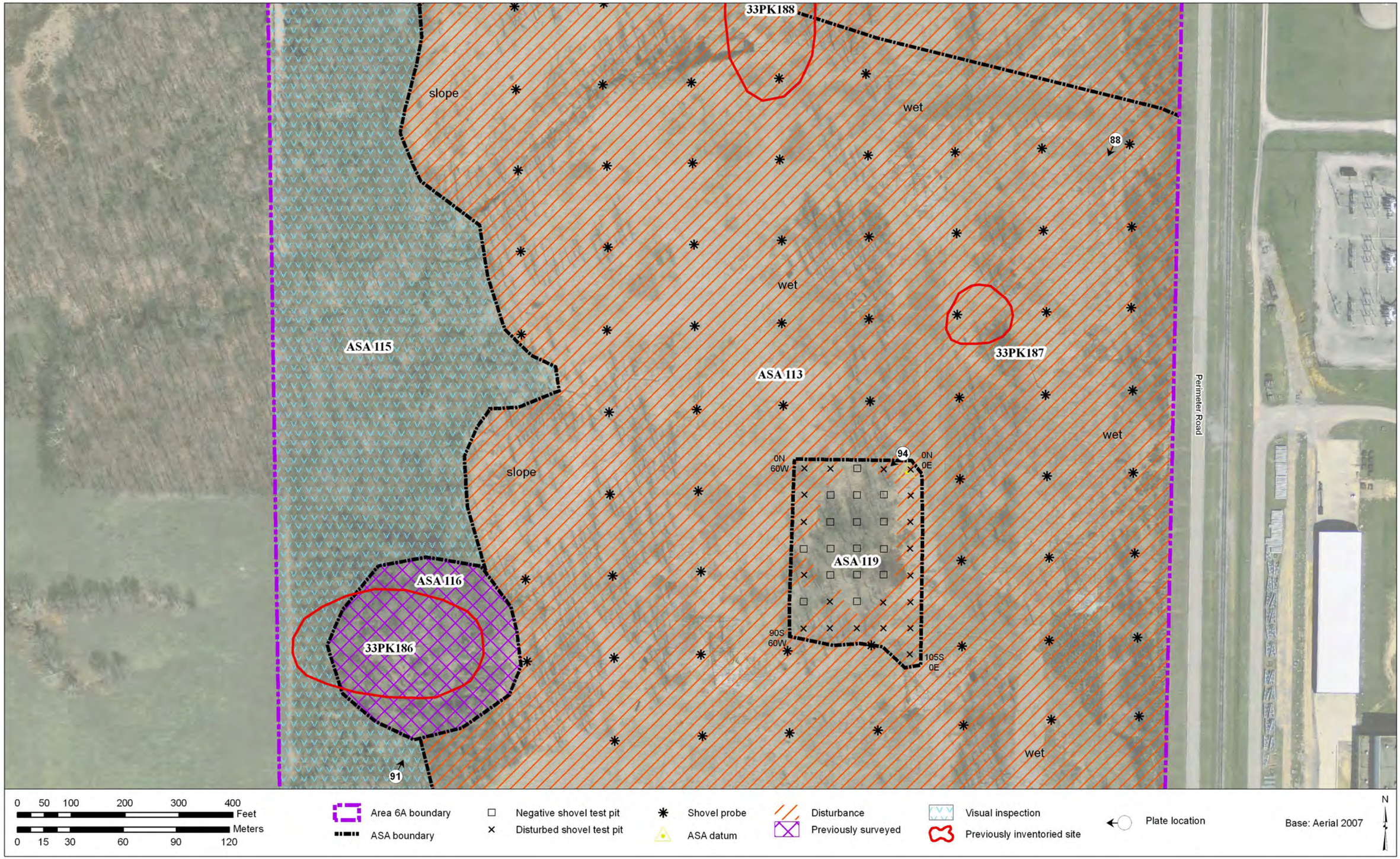

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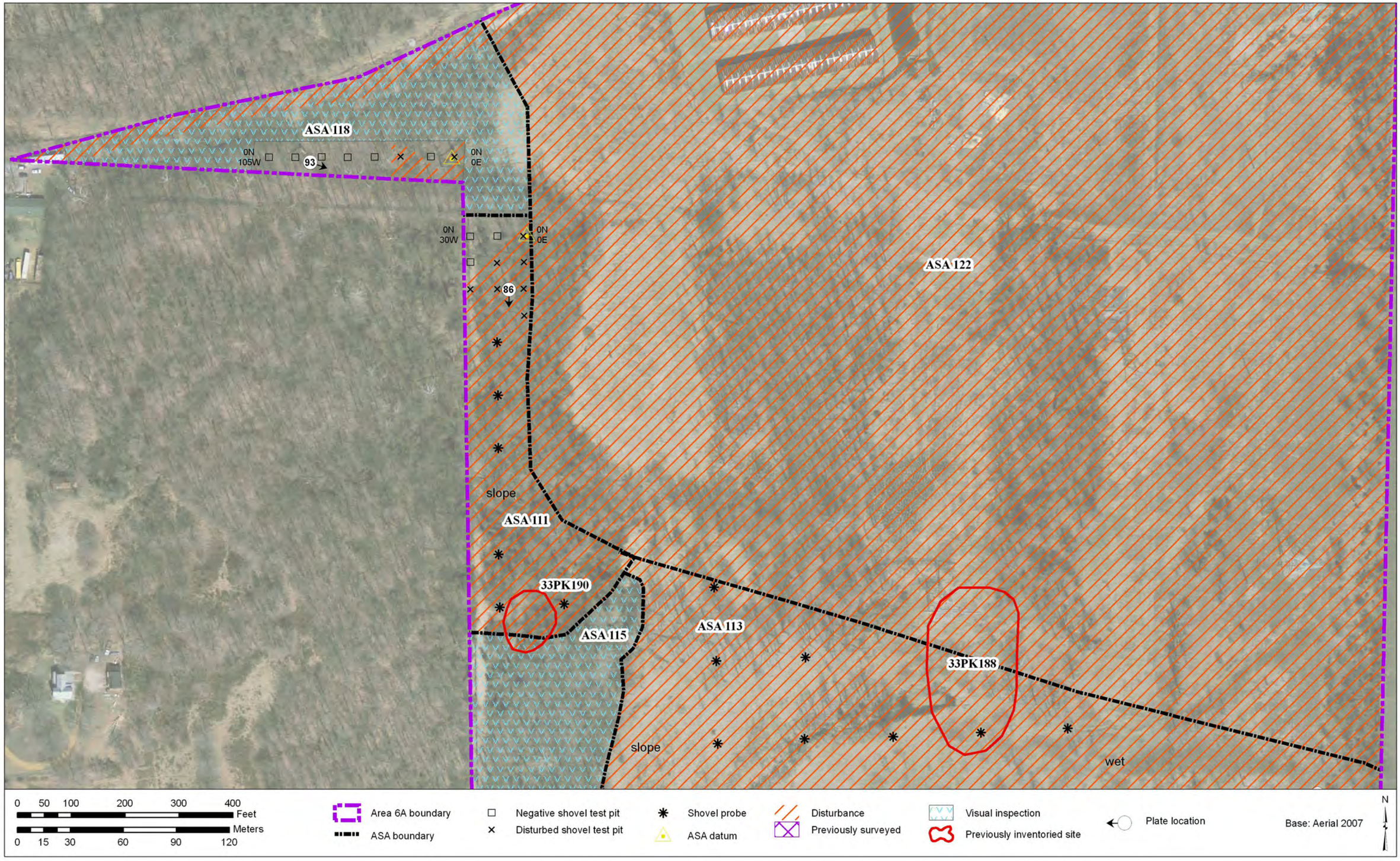

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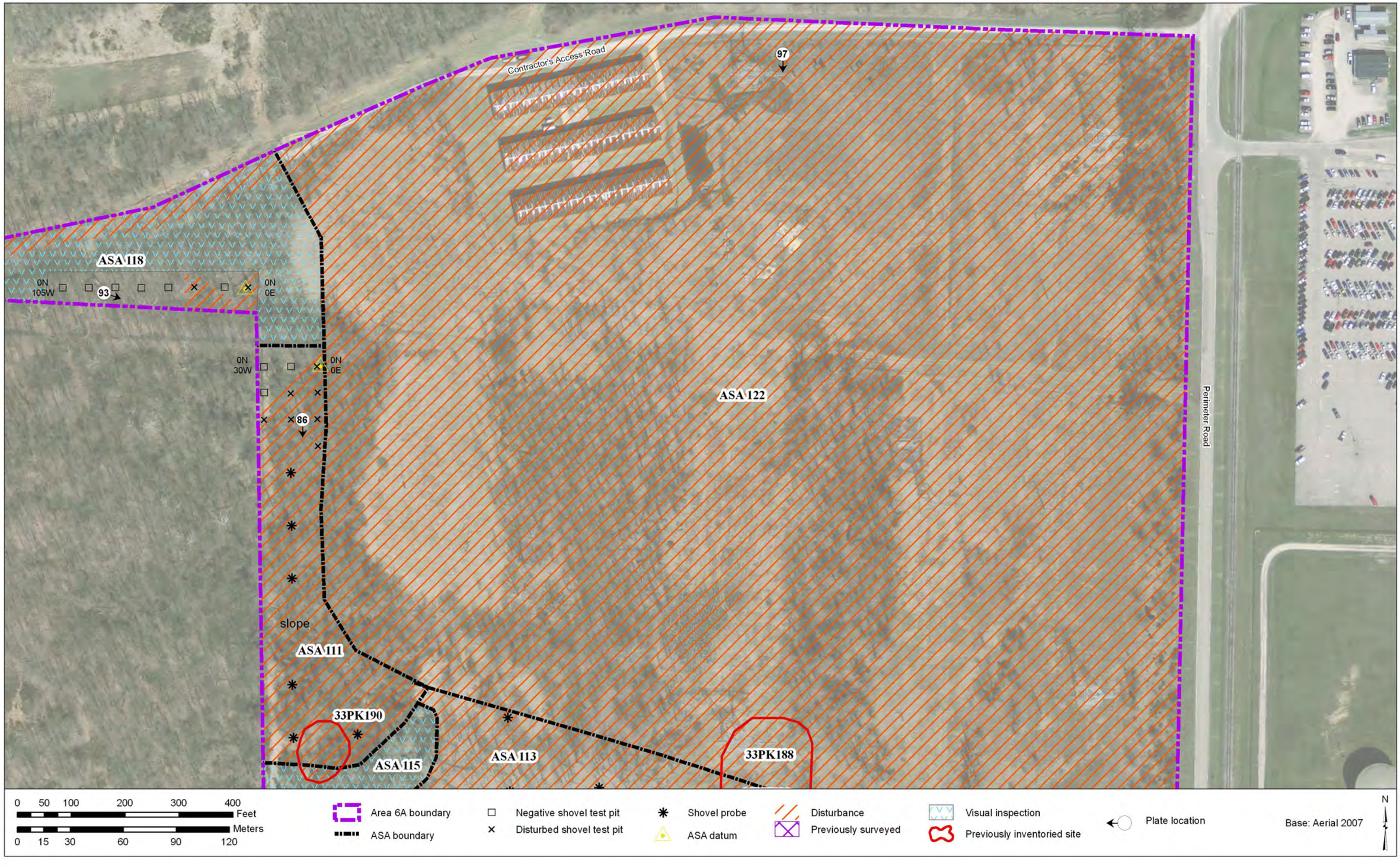

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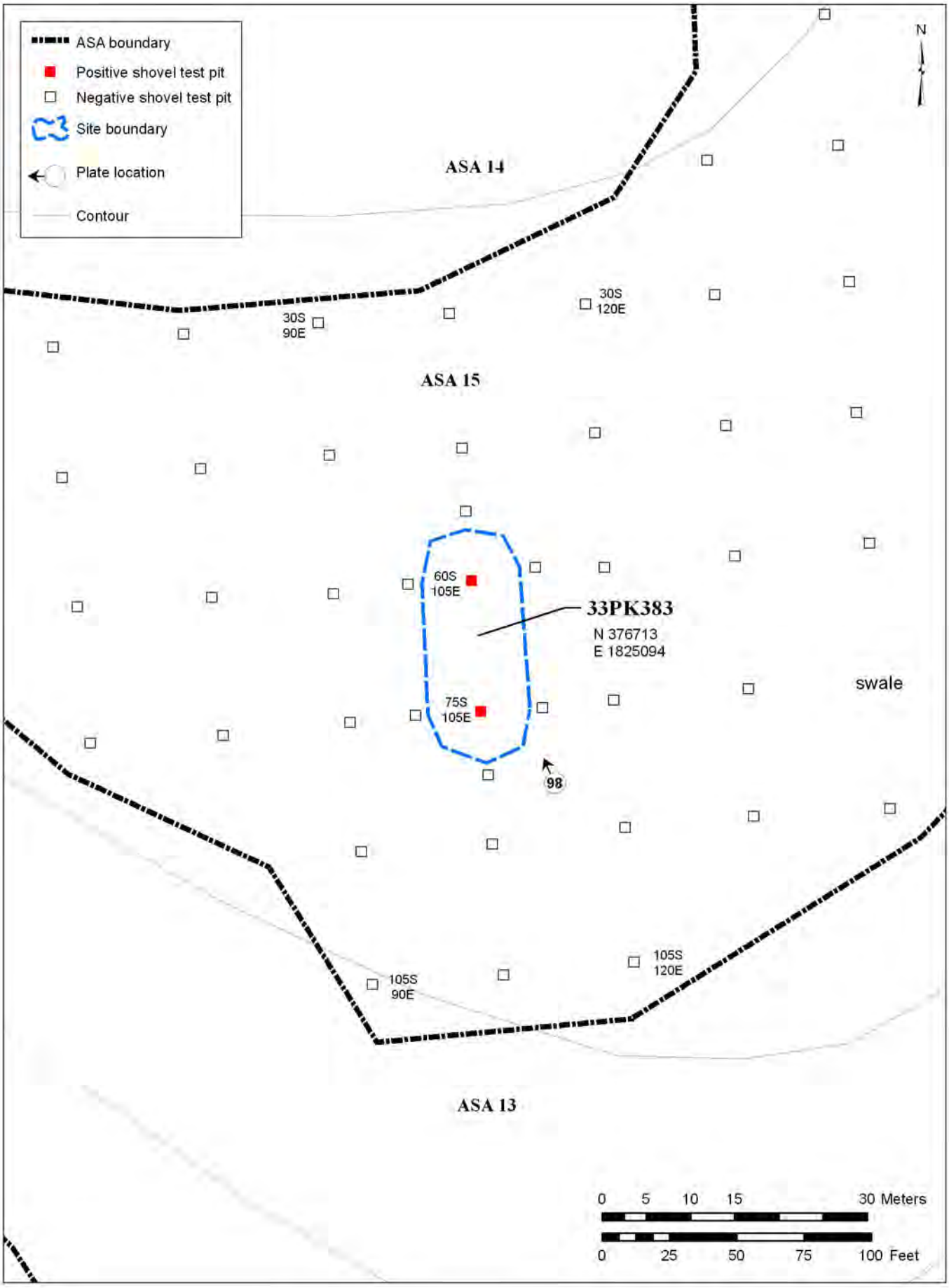

Figure 12. Schematic of 33PK383.

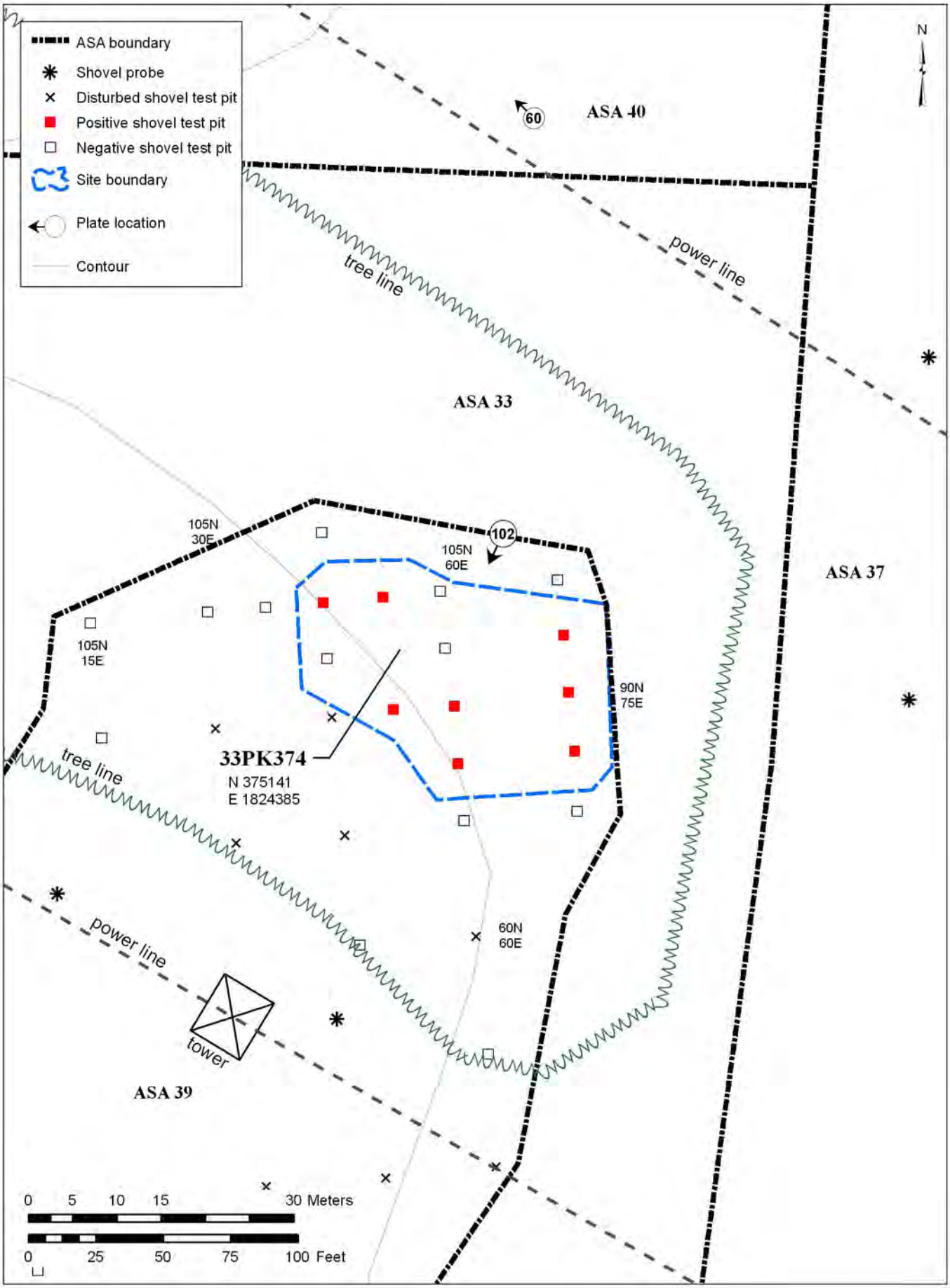

Figure 13. Schematic of 33PK374.

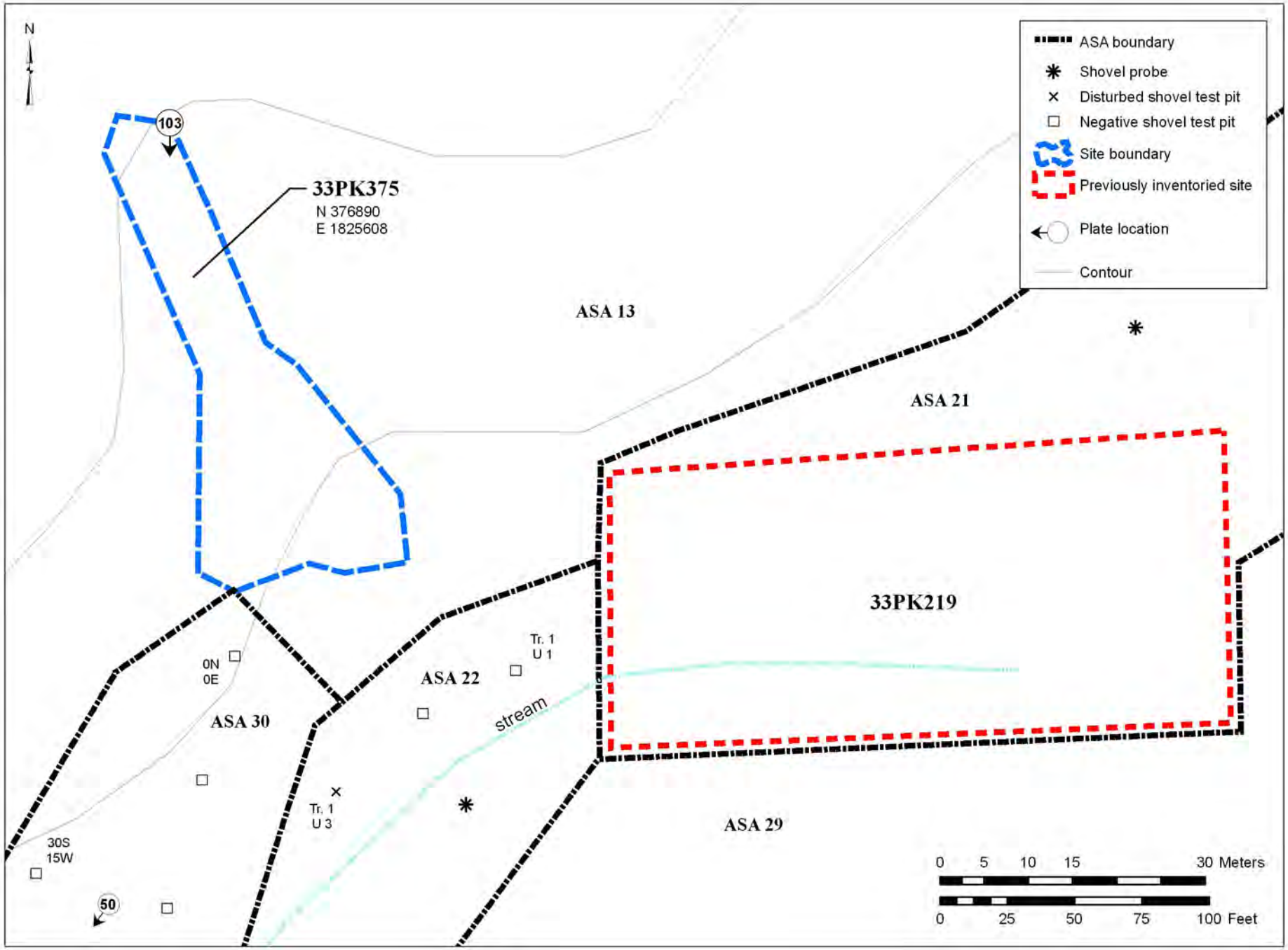

Figure 14. Schematic of 33PK375.

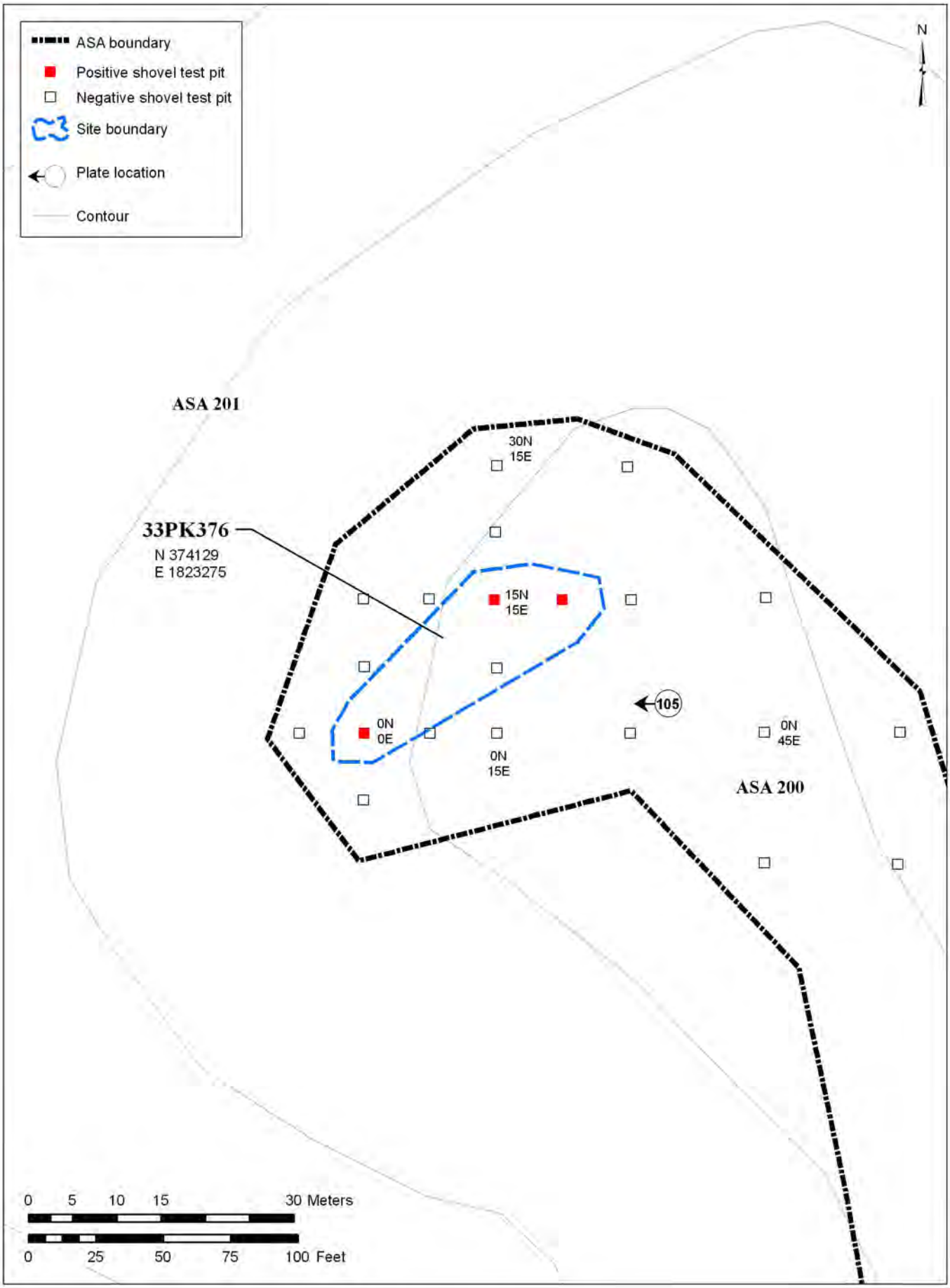

Figure 15. Schematic of 33PK376.

APPENDIX B: TABLES

Table 1. Sites Documented by Schweikart et al. (1997).

OAI No.	Temporal Affiliation	Site Type	Site Size (m)	Landform	Comments
33PK184	ca. 1820–present	Farmstead	70 x 65	Hill/ridgetop	Further work recommended
33PK185	ca. 1900–present	Farmstead	70 x 35	Hill/ridgetop	Further work recommended
33PK186	Unassigned prehistoric	Lithic Scatter	15 x 145	Hill/ridgetop	Point fragment recovered
33PK187	ca. 1915–1951	Farmstead	10 x 23	Hill/ridgetop	Highly disturbed
33PK188	post–1952	Worker's barracks	140 x 85	Hill/ridgetop	Highly disturbed, plant related
33PK189; PIK-206-9	Unassigned prehistoric; historic ca. 1790–present	Isolated Find, Cemetery, Tower platform	55 x 50	Hilltop	Preservation recommended (for Cemetery and Chapel)
33PK190	post–1952	Radio tower	30 x 18	Hilltop	Highly disturbed, plant related
33PK191	ca. 1830s–present	Open dump	6 x 30	Intermittent stream bed	
33PK192	ca. 1900–present	Open dump	43 x 53	Hill/ridgetop	
33PK193	ca. 1820–present	Farmstead	55 x 135	Side slope/bench, intermittent stream bed	Further work recommended
33PK194	ca. 1820–present	Farmstead	110 x 150	Ridgetop	Further work recommended
33PK195	ca. 1820–present	Farmstead	73 x 55	Ridgetop	Further work recommended
33PK196	ca. 1952–present	Culvert and drain pipes	8 x 1	Intermittent steam bed	Plant Related
33PK197	ca. 1951	Farmstead	35 x 30	First terrace	Further work recommended
33PK198	Unassigned Prehistoric	Isolated Find	1 x 1	Preglacial terrace	
33PK199	ca. 1820–present	Isolated Find	1 x 1	Preglacial terrace	
33PK200	ca. 1820–present	Historic Scatter	1 x 1	Preglacial terrace	
33PK201	ca. 1890–present	Isolated Find	1 x 1	Preglacial terrace	
33PK202	ca. 1934–present	Historic Scatter	15 x 15	First terrace	
33PK203	ca.1820–present	Farmstead	140 x 150	First terrace	Further work recommended
33PK204	Unassigned Prehistoric	Isolated Find	1 x 1	Ridgetop	
33PK205	Unassigned Prehistoric	Isolated Find	1 x 1	Ridgetop	
33PK206	Unassigned Prehistoric, 1820–present	Lithic Scatter, Farmstead	120 x 172	First terrace	Further work recommended
33PK207	Unassigned Prehistoric	Isolated Find	1 x 1	Side slope, first terrace	

Table 1. Sites Documented by Schweikart et al. (1997).

OAI No.	Temporal Affiliation	Site Type	Site Size (m)	Landform	Comments
33PK208	Unassigned Prehistoric	Isolated Find	1 x 1	Ridgetop	Biface recovered
33PK209	1933–1964	Historic Scatter	1 x 1	Ridgetop	
33PK210	Unassigned Prehistoric	Lithic Scatter	15 x 15	Ridgetop	Further work recommended
33PK211	ca. 1890–1964	Farmstead	90 x 130	Ridgetop	Further work recommended
33PK212	ca.1931–present	Farmstead	152 x 76	First terrace	Further work recommended
33PK213	ca. 1820–present	Farmstead	14 x 9	Terrace and toe ridge	Further work recommended
33PK214 (PIK-207-12)	ca. 1877–mid 20th century	Cemetery	55 x 40	Hilltop	Preservation Recommended
33PK215	ca. 1820–present	Open Dump	12 x 6	Ridgetop	
33PK216	ca. 1879–present	Open Dump	6 x 5	Ridgetop	
33PK217	ca. 1820–present	Farmstead (Dairy)	185 x 85	Preglacial terrace and toe ridge	Further work recommended
33PK218 (PIK-205-12)	ca. 1820–present	Farmstead	155 x 75	Toe ridge	Further work recommended
33PK219	post–1952	Old Firing Range	70 x 75	Side slope and artificial bench	Plant-related site that is highly disturbed

Table 2. Phase I Archaeology Survey Methods Table.

Archaeological Survey Area/ Plate No.	PORTS Area	Landform	Land Use	Surface Visibility	Survey Method/Interval	No. of Units	Resources Identified
1/Plate 20	5B	Glacial lakebed	Forestland, transportation	0–10 percent	Cursory inspection	-	
2/Plate 21	5B	Terrace, floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	8	
3/Plate 22	5B	Glacial lakebed	Forestland, rangeland	0–10 percent	Shovel probe at <50 m	4	
4/Plates 23, 24	5B	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	4	33PK322
5/Plate 25	5B	Glacial lakebed	Rangeland, utilities	0–10 percent	Shovel probe at <50 m	17	
6/Plate 26	5B	Hillside	Forestland	0–10 percent	Visual inspection at 15 m	-	
7/Plate 27	5B	Glacial lakebed, ravine	Forestland	0–10 percent	Shovel test pit at 15 m	55	
8/Plate 28	5B	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	76	
9/Plate 29	5B	Glacial lakebed	Utilities	0–10 percent	Shovel probe at <50 m	8	
10/Plate 30	5B	Glacial lakebed	Rangeland	0–10 percent	Shovel test pit at 15 m	5	
11/Plate 31	5B	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	65	
12/Plate 32	5B	Ridgetop	Forestland	0–10 percent	Cursory inspection	-	
13/Plates 33, 103	5B	Hillside, ravine	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	33PK375
14/Plate 34	5B	Toe	Forestland	0–10 percent	Cursory inspection	-	
15/Plates 35, 98	5B	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	74	33PK383
16/Plate 36	5B	Ravines, toes	Forestland	0–10 percent	Cursory inspection	-	
17/Plate 37	5B	Glacial lakebed	Transitional	0–10 percent	Cursory inspection	-	
18/Plate 38	5B	Glacial lakebed	Forestland, utilities	0–10 percent	Shovel probe at <50 m	6	
19/Plate 39	5B	Hillside	Forestland	0–10 percent	Visual inspection at 15 m	-	
20/Plate 40	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	6	
21/Plate 41	5B	Floodplain	Forestland, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	25, 2	
22/Plate 42	5B	Floodplain, terrace	Forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	17 and 5	
23/Plate 43	5B	Floodplain	Forestland, rangeland	0–10 percent	Shovel test pit at 15 m	10	
24/Plate 44	5B	Floodplain, terrace	Forestland	0–10 percent	Shovel test pit at 15 m	60	
25/Plate 45	5B	Bench	Forestland	0–10 percent	Shovel test pit at 15 m	3	
26/Plate 46	5B	Bench	Forestland	0–10 percent	Cursory inspection	-	
27/Plate 47	5B	Bench	Forestland	0–10 percent	Shovel test pit at 15 m	15	

Table 2. Phase I Archaeology Survey Methods Table.

Archaeological Survey Area/ Plate No.	PORTS Area	Landform	Land Use	Surface Visibility	Survey Method/Interval	No. of Units	Resources Identified
28/Plate 48	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	9	
29/Plate 49,	5B	Hillside	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	
30/Plate 50	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	10	
31/Plate 51	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	18	
32/Plate 52	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	8	
33/Plate 53	5B	Hillside, ridgetop	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	
34/Plates 54, 99	5B	Ridgetop	Forestland	0–10 percent	Shovel test pit at 15 m	12	33PK384
35/Plate 55	5B	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	8	
36/Plate 56	5B	Toe	Forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	7 and 8	
37/Plate 57	5B	Glacial lakebed	Rangeland, utilities	0–10 percent	Shovel probe at <50 m	14	
38/Plate 58	5B	Saddle	Forestland, utilities	0–10 percent	Shovel test pit at 15 m	33	
39/Plates 59, 100, 102	5B	Toe	Forestland, rangeland, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	46 and 2	33PK373, 33PK374
40/Plate 60	5B	Glacial lakebed	Industrial, utilities	0–10 percent	Cursory inspection	-	
41/Plate 61	5B	Floodplain	Forestland	0–10 percent	Shovel probe at <50 m	4	
42/Plate 62	5B	Floodplain	Forestland, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	63 and 2	
43/Plate 63	5B	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	53 and 2	
44/Plate 64	5B	Hillside	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	
45/Plate 65	5B	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	6	
46/Plate 66	5B	Glacial lakebed	Transportation, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	28 and 1	
47/Plate 67	5B	Hillside, ravine	Forestland	0–10 percent	Visual inspection at 15 m	-	
48/Plate 68	5B	Glacial lakebed	Rangeland	0–10 percent	Shovel probe at <50 m	20	
49/Plate 69	5B	Glacial lakebed	Rangeland	0–100 percent	Cursory inspection	-	
50/Plate 70	5B	Glacial lakebed	Rangeland, Forestland	0–10 percent	Cursory inspection	-	
51/Plate 71	5B	Glacial lakebed	Rangeland, industrial, utilities	0–10 percent	Cursory inspection	-	
52/Plate 72	5B	Glacial lakebed	Industrial	0–10 percent	Shovel probe at <50 m	12	

Table 2. Phase I Archaeology Survey Methods Table.

Archaeological Survey Area/ Plate No.	PORTS Area	Landform	Land Use	Surface Visibility	Survey Method/Interval	No. of Units	Resources Identified
53/Plate 73	5B	Glacial lakebed	Industrial, forestland, utilities	0–10 percent	Cursory inspection	-	
54/Plate 74	5B	Glacial lakebed	Forestland, rangeland, utilities	0–10 percent	Cursory inspection	-	
100/Plate 75	6A	Hillside	Transportation	0–10 percent	Visual inspection at 15 m	-	
101/Plate 76	6A	Hillside, floodplain	Forestland, utilities	0–10 percent	Visual inspection at 15 m, shovel test pit at 15 m	9	
102/Plate 77	6A	Floodplain	Forestland, utilities	0–10 percent	Shovel test pit at 15 m	22	
103/Plate 78	6A	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	3	
104/Plate 79	6A	Hillside	Forestland utilities	0–10 percent	Visual inspection at 15 m	-	
105/Plate 80	6A	Ravine	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	
106/Plate 81	6A	Glacial lakebed	Utilities	0–10 percent	Shovel probe at <50 m	8	
107/Plate 82	6A	Dune	Utilities	0–10 percent	Shovel test pit at 15 m	66	
108/Plate 83	6A	Dune	Forestland	0–10 percent	Cursory inspection	-	
109/Plate 84	6A	Dune, bluff, terrace	Transportation	0–10 percent	Visual inspection at 15 m, shovel test pit at 15 m	13	
110/Plate 85	6A	Terrace	Wetland	0–10 percent	Visual inspection at 15 m	-	
111/Plate 86	6A	Dune	Forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	10 and 6	
112/Plate 87	6A	Ravine	Reservoirs	0–10 percent	Cursory inspection	-	
113/Plate 88	6A	Glacial lakebed	Utilities, forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	8 and 90	
114/Plate 89	6A	Bench	Forestland	0–10 percent	Shovel test pit at 15 m	22	
115/Plate 90	6A	Hillside, bluff, terrace	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	
116/Plate 91	6A	Dune	Forestland	0–10 percent	Cursory inspection	-	
117/Plate 92	6A	Dune	Forestland	0–10 percent	Shovel test pit at 15 m	10	
118/Plate 93	6A	Dune, ravine	Forestland	0–10 percent	Visual inspection at 15 m, shovel test pit at 15 m	8	
119/Plate 94	6A	Glacial lakebed	Rangeland, utilities	0–10 percent	Shovel test pit at 15 m	36	
120/Plate 95	6A	Dune	Forestland	0–10 percent	Shovel test pit at 15 m	34	
121/Plate 96	6A	Glacial lakebed	Utilities	0–10 percent	Shovel probe at <50 m	6	
122/Plate 97	6A	Glacial lakebed	Industrial, utilities	0–10 percent	Cursory inspection	-	

Table 2. Phase I Archaeology Survey Methods Table.

Archaeological Survey Area/ Plate No.	PORTS Area	Landform	Land Use	Surface Visibility	Survey Method/Interval	No. of Units	Resources Identified
200/Plates 1, 105	5A	Ridgetop	Forestland, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	29 and 3	33PK376
201/Plate 2	5A	Hillside, toes, ridgetop, ravine	Forestland, utilities	0–10 percent	Visual inspection at 15 m, shovel test pit at 15 m	22	
202/Plate 3	5A	Glacial lakebed	Forestland, utilities	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	20 and 1	
203/Plates 4, 106	5A	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	12	33PK377
204/Plate 5	5A	Glacial lakebed	Utilities	0–10 percent	Shovel probe at <50 m	4	
205/Plates 6, 107	5A	Toe	Forestland, utilities	0–10 percent	Shovel test pit at 15 m	24	33PK378
206/Plate 7	5A	Toe, floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	28	
207/Plate 8	5A	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	41	
250/Plate 9	5A	Bluff edge	Utilities	0–10 percent	Shovel probe at <50 m	3	
251/Plate 10	5A	Terrace	Forestland	0–10 percent	Shovel test pit at 15 m	6	
252/Plate 11	5A	Hillside	Transportation, utilities	0–10 percent	Visual inspection at 15 m	-	
253/Plate 12	5A	Glacial lakebed	Utilities	0–10 percent	Shovel probe at <50 m	49	
254/Plate 13	5A	Ridgetop	Forestland	0–10 percent	Shovel test pit at 15 m	31	
255/Plate 14	5A	Ridgetop	Forestland	0–10 percent	Shovel test pit at 15 m, shovel probe at <50 m	30 and 23	
256/Plate 15	5A	Ridgetop	Forestland, utilities	0–10 percent	Shovel probe at <50 m	18	
257/Plate 16	5A	Ridgetop	Forestland	0–10 percent	Shovel test pit at 15 m	13	
258/Plate 17	5A	Glacial lakebed, ridgetop, hillside	Industrial, utilities	0–10 percent	Cursory inspection	-	
259/Plate 18	5A	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	35	
260/Plate 19	5A	Hillside, ridgetop	Forestland, utilities	0–10 percent	Visual inspection at 15 m	-	

Table 3. Phase I Archaeology Resources Table.

OAI No.	UTM (NAD27) meters	State Plane (NAD83) US survey ft	Cultural Periods	Cultural Material	Depositional Context	Resource Type	Landform and Soil Phase	Investigation Type and Surface Visibility	Site Dimensions	Recommendation
33PK383	Z 17 N 4322159 E 326455	Ohio South (3402) N 376713 E 1825094	Unassigned prehistoric	1 Columbus-Delaware chert shatter, 1 Columbus-Delaware chert whole flake	Ap horizon	Unknown	Bluff edge; Omulga silt loam, 8 to 15 percent slopes	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	1 m x 15 m 3 ft x 50 ft	No further work
33PK384	Z 17 N 4321926 E 326054	Ohio South (3402) N 375928 E 1823790	Unassigned prehistoric	1 unidentified chert medial flake fragment	A horizon	Unknown	Ridgetop; Shelocta-Latham association, steep	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK373	Z 17 N 4321612 E 326187	Ohio South (3402) N 374904 E 1824242	Unassigned prehistoric	1 Columbus-Delaware chert unidentified stemmed projectile point base fragment	Ap horizon	Unknown	Toe; Omulga silt loam, 3 to 8 percent slopes	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK374	Z 17 N 4321683 E 326232	Ohio South (3402) N 375141 E 1824385	Late-nineteenth to mid-twentieth century	1 Brick fragment, 1 Burned ceramic sherd, 9 Decorated whiteware sherds, 1 Iron nail fragment, 1 Milkglass button, 2 Redware flower pot fragments, 2 Stoneware sherds, 16 Whiteware sherds, 2 Window glass fragments	Ap horizon	Unknown	Toe; Omulga silt loam, 3 to 8 percent slopes	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	22.5 m x 30 m 74 ft x 98 ft	No further work

Table 3. Phase I Archaeology Resources Table.

OAI No.	UTM (NAD27) meters	State Plane (NAD83) US survey ft	Cultural Periods	Cultural Material	Depositional Context	Resource Type	Landform and Soil Phase	Investigation Type and Surface Visibility	Site Dimensions	Recommendation
33PK375	Z 17 N 4322213 E 326611	Ohio South (3420) N 376890 E 1825608	Late-nineteenth to mid-twentieth century	1 .38 caliber bullet (fired), 2 Glass bottle fragments, 14 Glass jar fragments, 1 Iron wire fragment, 1 Ironstone tea cup fragment, 1 Leather shoe fragment, 14 Milkglass canning jar lid liners, 2 Milkglass canning jar lid liner fragments, 1 Milkglass cosmetic jar, 1 Milkglass pill bottle, 1 Pressed milkglass decorative vessel fragment, 9 Stoneware sherds, 2 Whiteware sherds	stream bed	Unknown	Swale; Latham-Wharton silt loams, 15 to 25 percent slopes	Photo-documentation; Visual inspection at 15-m intervals, 0–10% visibility	15 m x 50 m 25 ft x 164 ft	No further work
33PK376	Z 17 N 4321381 E 325888	Ohio South (3402) N 374129 E 1823275	Unassigned prehistoric	1 unidentified chert shatter, 1 Upper Mercer chert whole flake, 1 Vanport chert shatter	Ap horizon	Unknown	Ridgetop; Coolville silt loam, 1 to 8 percent slopes	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	15 m x 22.5 m 50 ft x 74 ft	No further work
33PK377	Z 17 N 4321474 E 325949	Ohio South (3402) N 374439 E 1823471	Unassigned prehistoric	1 Columbus-Delaware chert shatter	Ap horizon	Unknown	Toe; Coolville silt loam, 1 to 8 percent slopes	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK378	Z 17 N 4321524 E 325522	Ohio South (3402) N 374579 E 1822066	Unassigned prehistoric	1 unidentified chert unidentified projectile point tip fragment	A horizon	Unknown	Toe; Shelocta-Latham association, steep	Photo-documentation; Shovel test pit at 15-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work

Table 4. Cultural Materials Provenience Table.

Provenience	Cultural Materials Collected	Total
33PK383: ASA 15; STP 60S,105E; Level 1 (Ap Horizon)	Columbus-Delaware chert whole flake	1
33PK383: ASA 15; STP 75S,105E; Level 2 (Ap Horizon)	Columbus-Delaware chert shatter	1
33PK384: ASA 34; STP 0N,45E; Level 1 (A Horizon)	Unidentified chert medial flake fragment	1
33PK373: ASA 39; STP 15N,0E; Level 1 (Ap Horizon)	Columbus-Delaware chert unidentified stemmed projectile point base fragment	1
33PK374: ASA 39; STP 105N,45E; Level 2 (Ap Horizon)	Iron nail fragment	1
33PK374: ASA 39; STP 105N,52.5E; Level 1 (Ap Horizon)	Brick fragment	1
	Decorated whiteware sherd	1
	Whiteware sherd	1
	Window glass	1
33PK374: ASA 39; STP 105N,52.5E; Level 2 (Ap Horizon)	Decorated whiteware sherd	1
33PK374: ASA 39; STP 82.5N,60E; Level 1 (Ap Horizon)	Whiteware sherd	1
33PK374: ASA 39; STP 82.5N,75E; Level 1 (Ap Horizon)	Burned ceramic sherd	1
	Decorated whiteware sherd	1
33PK374: ASA 39; STP 90N,52.5E; Level 1 (Ap Horizon)	Decorated whiteware sherd	5
	Milkglass button	1
	Redware flower pot fragment	2
	Whiteware sherd	11
33PK374: ASA 39; STP 90N,60E; Level 1 (Ap Horizon)	Decorated whiteware sherd	1
	Whiteware sherd	3
	Window glass	1
33PK374: ASA 39; STP 90N,75E; Level 1 (Ap Horizon)	Stoneware sherd	1
33PK374: ASA 39; STP 97.5N,75E; Level 1 (Ap Horizon)	Stoneware sherd	1
33PK375: ASA 15; Surface (stream bed)	.38 caliber bullet (fired)	1
	Glass bottle fragment	2
	Glass jar fragment	14
	Iron wire fragment	1
	Ironstone tea cup fragment	1
	Leather shoe fragment	1
	Milkglass canning jar lid liner	14
	Milkglass canning jar lid liner fragment	2
	Milkglass cosmetic jar	1
	Milkglass pill bottle	1
	Pressed milkglass decorative vessel fragment	1
	Stoneware sherd	9
	Whiteware sherd	2
33PK376: ASA 200; STP 0N,0E; Level 1 (Ap Horizon)	Unidentified chert shatter	1
33PK376: ASA 200; STP 15N,15E; Level 1 (Ap Horizon)	Vanport chert shatter	1
33PK376: ASA 200; STP 15N,22.5E; Level 1 (Ap Horizon)	Upper Mercer chert whole flake	1
33PK377: ASA 203; STP 45S,15W; Level 1 (Ap Horizon)	Columbus-Delaware chert shatter	1
33PK378: ASA 205; STP 75S,15E; Level 1 (A Horizon)	Unidentified chert unidentified projectile point tip fragment	1

APPENDIX C: PLATES

Plate 1. Overview of Archaeological Survey Area 200; facing north-northwest.

Plate 2. Overview of Archaeological Survey Area 201; facing south-southwest.

Plate 3. Overview of Archaeological Survey Area 202; facing southeast.

Plate 4. Overview of Archaeological Survey Area 203; facing southwest.

Plate 5. Overview of Archaeological Survey Area 204; facing north.

Plate 6. Overview of Archaeological Survey Area 205; facing southwest.

Plate 7. Overview of Archaeological Survey Area 206; facing southeast.

Plate 8. Overview of Archaeological Survey Area 207; facing south-southeast.

Plate 9. Overview of Archaeological Survey Area 250; facing north.

Plate 10. Overview of Archaeological Survey Area 251; facing west.

Plate 11. Overview of Archaeological Survey Area 252; facing west.

Plate 12. Overview of Archaeological Survey Area 253; facing northwest.

Plate 13. Overview of Archaeological Survey Area 254; facing north-northeast.

Plate 14. Overview of Archaeological Survey Area 255; facing southwest.

Plate 15. Overview of Archaeological Survey Area 256; facing southeast.

Plate 16. Overview of Archaeological Survey Area 257; facing northeast.

Plate 17. Overview of Archaeological Survey Area 258; facing northwest.

Plate 18. Overview of Archaeological Survey Area 259; facing south-southeast.

Plate 19. Overview of Archaeological Survey Area 260; facing east.

Plate 20. Overview of Archaeological Survey Area 1; facing south-southeast.

Plate 21. Overview of Archaeological Survey Area 2; facing west-northwest.

Plate 22. Overview of Archaeological Survey Area 3; facing southeast.

Plate 23. Overview of Archaeological Survey Area 4; facing southeast.

Plate 24. Overview of HMBL 4 showing the edge of the concrete milk barn foundation remnant; facing north-northwest.

Plate 25. Overview of Archaeological Survey Area 5, facing northwest.

Plate 26. Overview of Archaeological Survey Area 6; facing northeast.

Plate 27. Overview of Archaeological Survey Area 7, facing southeast.

Plate 28. Overview of Archaeological Survey Area 8; facing southeast.

Plate 29. Overview of Archaeological Survey Area 9; facing south-southeast.

Plate 30. Overview of Archaeological Survey Area 10; facing southeast.

Plate 31. Overview of Archaeological Survey Area 11; facing north.

Plate 32. Overview of Archaeological Survey Area 12; facing southeast.

Plate 33. Overview of Archaeological Survey Area 13; facing north-northeast.

Plate 34. Overview of Archaeological Survey Area 14; facing east.

Plate 35. Overview of Archaeological Survey Area 15; facing east.

Plate 36. Overview of Archaeological Survey Area 16; facing northwest.

Plate 37. Overview of Archaeological Survey Area 17; facing south.

Plate 38. Overview of Archaeological Survey Area 18; facing northeast.

Plate 39. Overview of Archaeological Survey Area 19; facing north-northeast.

Plate 40. Overview of Archaeological Survey Area 20; facing east-northeast.

Plate 41. Overview of Archaeological Survey Area 21; facing north.

Plate 42. Overview of Archaeological Survey Area 22; facing north-northeast.

Plate 43. Overview of Archaeological Survey Area 23; facing west.

Plate 44. Overview of Archaeological Survey Area 24; facing northeast.

Plate 45. Overview of Archaeological Survey Area 25; facing east-northeast.

Plate 46. Overview of Archaeological Survey Area 26; facing west.

Plate 47. Overview of Archaeological Survey Area 27; facing southeast.

Plate 48. Overview of Archaeological Survey Area 28; facing north.

Plate 49. Overview of Archaeological Survey Area 29; facing northeast.

Plate 50. Overview of Archaeological Survey Area 30; facing southwest.

Plate 51. Overview of Archaeological Survey Area 31; facing east-southeast.

Plate 52. Overview of Archaeological Survey Area 32; facing southeast.

Plate 53. Overview of Archaeological Survey Area 33; facing south-southeast.

Plate 54. Overview of Archaeological Survey Area 34; facing northwest.

Plate 55. Overview of Archaeological Survey Area 35; facing northwest.

Plate 56. Overview of Archaeological Survey Area 36; facing southeast.

Plate 57. Overview of Archaeological Survey Area 37; facing west.

Plate 58. Overview of Archaeological Survey Area 38; facing south.

Plate 59. Overview of Archaeological Survey Area 39; facing north-northeast.

Plate 60. Overview of Archaeological Survey Area 40; facing northwest.

Plate 61. Overview of Archaeological Survey Area 41; facing north.

Plate 62. Overview of Archaeological Survey Area 42; facing east.

Plate 63. Overview of Archaeological Survey Area 43; facing northwest.

Plate 64. Overview of Archaeological Survey Area 44; facing southeast.

Plate 65. Overview of Archaeological Survey Area 45; facing southwest.

Plate 66. Overview of Archaeological Survey Area 46; facing east-northeast.

Plate 67. Overview of Archaeological Survey Area 47; facing east.

Plate 68. Overview of Archaeological Survey Area 48; facing northwest.

Plate 69. Overview of Archaeological Survey Area 49; facing north.

Plate 70. Overview of Archaeological Survey Area 50; facing north-northwest.

Plate 71. Overview of Archaeological Survey Area 51; facing north.

Plate 72. Overview of Archaeological Survey Area 52; facing southwest.

Plate 73. Overview of Archaeological Survey Area 53; facing east.

Plate 74. Overview of Archaeological Survey Area 54; facing northeast.

Plate 75. Overview of Archaeological Survey Area 100; facing west-southwest.

Plate 76. Overview of Archaeological Survey Area 101; facing south.

Plate 77. Overview of Archaeological Survey Area 102; facing east-northeast.

Plate 78. Overview of Archaeological Survey Area 103; facing southwest.

Plate 79. Overview of Archaeological Survey Area 104; facing west-northwest.

Plate 80. Overview of Archaeological Survey Area 105; facing west-southwest.

Plate 81. Overview of Archaeological Survey Area 106; facing east.

Plate 82. Overview of Archaeological Survey Area 107; facing west.

Plate 83. Overview of Archaeological Survey Area 108; facing northwest.

Plate 84. Overview of Archaeological Survey Area 109; facing east.

Plate 85. Overview of Archaeological Survey Area 110; facing east.

Plate 86. Overview of Archaeological Survey Area 111; facing south.

Plate 87. Overview of Archaeological Survey Area 112; facing southeast.

Plate 88. Overview of Archaeological Survey Area 113; facing south-southwest.

Plate 89. Overview of Archaeological Survey Area 114; facing south-southwest.

Plate 90. Overview of Archaeological Survey Area 115; facing northeast.

Plate 91. Overview of Archaeological Survey Area 116; facing north-northeast.

Plate 92. Overview of Archaeological Survey Area 117; facing northeast.

Plate 93. Overview of Archaeological Survey Area 118; facing east-southeast.

Plate 94. Overview of Archaeological Survey Area 119; facing southwest.

Plate 95. Overview of Archaeological Survey Area 120; facing southwest.

Plate 96. Overview of Archaeological Survey Area 121; facing southwest.

Plate 97. Overview of Archaeological Survey Area 122; facing south.

Plate 98. Overview of 33PK383 in Archaeological Survey Area 15; facing north-northwest.

Plate 99. Overview of 33PK384 in Archaeological Survey Area 34; facing north-northwest.

Plate 100. Overview of 33PK373 in Archaeological Survey Area 39; facing north-northeast.

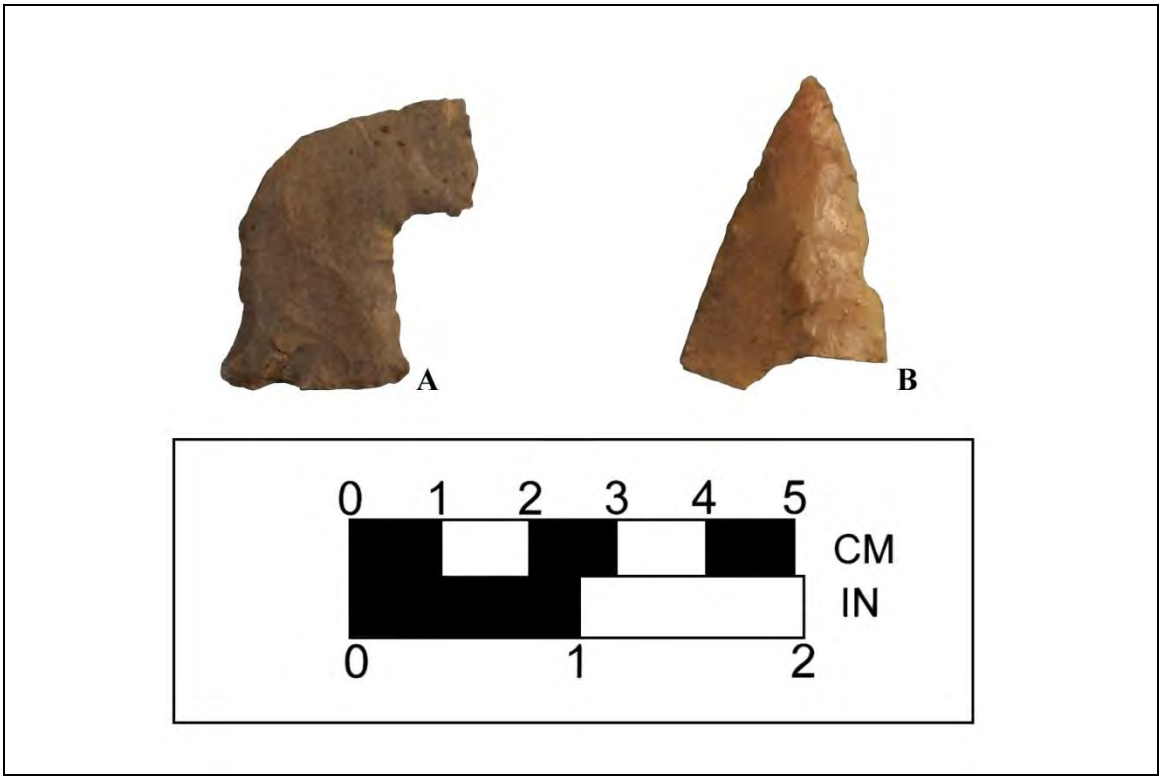

Plate 101. Selected prehistoric artifacts recovered during the Phase I survey: A) an unidentified stemmed projectile point base fragment of Columbus-Delaware chert recovered from 33PK373; B) an unidentified projectile point tip fragment of unidentified chert recovered from 33PK378.

Plate 102. Overview of 33PK374 in Archaeological Survey Area 39; facing south-southwest.

Plate 103. Overview of 33PK375 in Archaeological Survey Area 13; facing south.

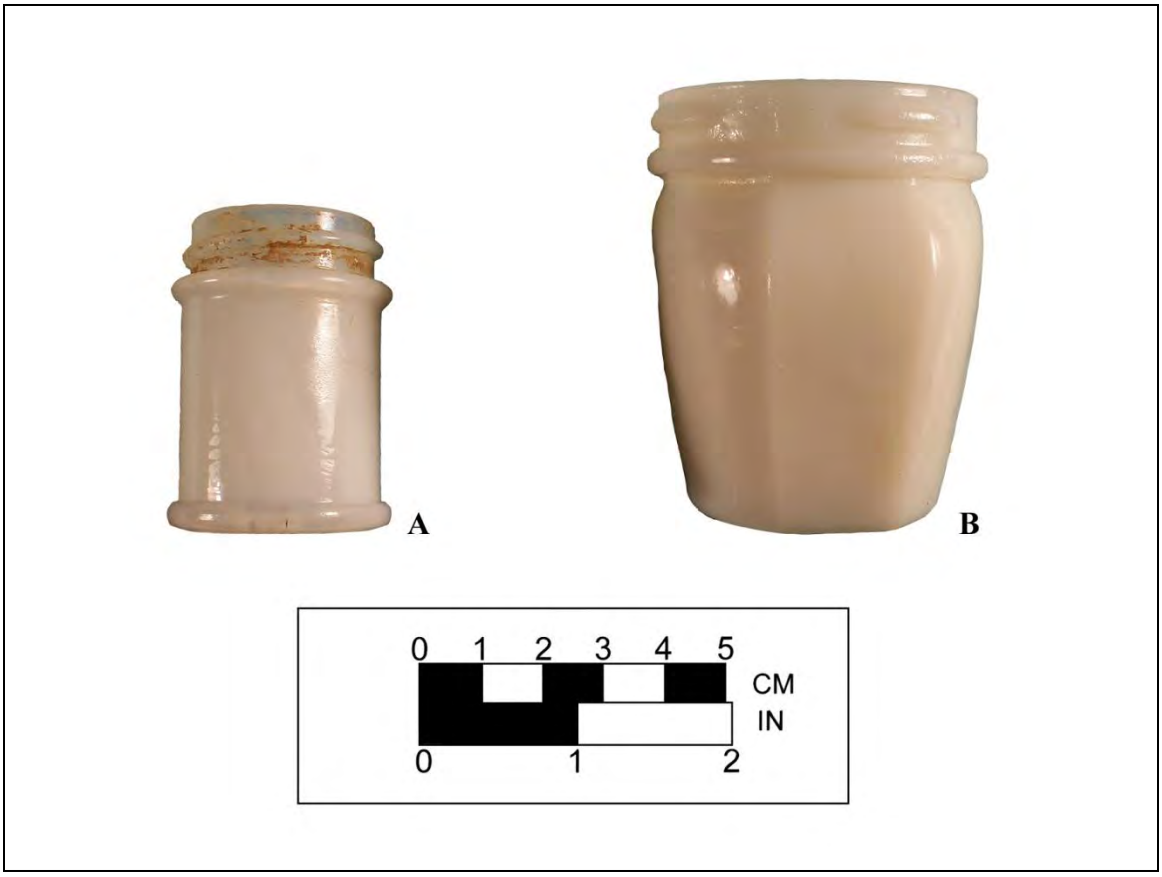

Plate 104. Selected historic artifacts recovered from 33PK375 during the Phase I survey: A) milkglass pill bottle with a threaded screw-top closure; B) milkglass cosmetics jar with screw-top closure.

Plate 105. Overview of 33PK376 in Archaeological Survey Area 200; facing west.

Plate 106. Overview of 33PK377 in Archaeological Survey Area 203; facing east-northeast.

Plate 107. Overview of 33PK378 in Archaeological Survey Area 205; facing north-northeast.

APPENDIX D: ARTIFACT ANALYSIS

OAI No.	Field Site	PORTS Area	Archaeological Survey Area	Northing	Easting	Stratum	Description	Raw Material	Cortex	Platform Surface	Platform Edge Trim	Platform Edge Grinding	Flake Termination	Heat Altered	Count	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Temporal or Cultural Affiliation	Plate No.
33PK383	1	5B	15	75S	105E	Ap	Shatter	Columbus-Delaware	P	N/A	N/A	N/A	N/A	Yes	1	22.2	27.7	25.1	22.4	Unassigned prehistoric	
33PK383	1	5B	15	60S	105E	Ap	Flake, whole	Columbus-Delaware	<50%	Cortical	A	A	Hinged	No	1	5.8	29.8	26.8	8.3	Unassigned prehistoric	
33PK384	2	5B	34	0N	45E	A	Flake, medial fragment	unidentified	0%	N/A	N/A	N/A	N/A	No	1	0.1	*12.7*	13.1	1.5	Unassigned prehistoric	
33PK373	3	5B	39	15N	0E	Ap	Projectile point, base fragment, stemmed, unidentified type	Columbus-Delaware	A	N/A	N/A	N/A	N/A	Yes	1	6.2	*31.8*	*28.0*	7.7	Unassigned prehistoric	101 A
33PK376	200	5A	200	0N	0E	Ap	Shatter	unidentified	A	N/A	N/A	N/A	N/A	No	1	0.7	17.8	11.1	5.7	Unassigned prehistoric	
33PK376	200	5A	200	15N	15E	Ap	Shatter	Vanport	P	N/A	N/A	N/A	N/A	No	1	34.6	26.1	29.2	31.7	Unassigned prehistoric	
33PK376	200	5A	200	15N	22.5E	Ap	Flake, whole	Upper Mercer	A	I	I	I	Feathered	Yes	1	0.1	9.5	7.6	2.0	Unassigned prehistoric	
33PK377	201	5A	203	45S	15W	Ap	Shatter	Columbus-Delaware	P	N/A	N/A	N/A	N/A	No	1	35.1	35.5	39.9	20.8	Unassigned prehistoric	
33PK378	202	5A	205	75S	15E	A	Projectile point, tip fragment, unidentified type	unidentified	A	N/A	N/A	N/A	N/A	Yes	1	4.2	*34.7*	*22.5*	*6.4*	Unassigned prehistoric	101 B

Key: I = Indeterminate; A = Absent; P = Present. *Italic* measurements indicate measurement of a fragmentary piece.

Appendix D: Historic Artifact Analysis

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK374	4	5B	39	105N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Rim sherd	Annular banding, brown	1	ca. 1830–present	Florida Museum of Natural History 2011	
33PK374	4	5B	39	82.5N	75E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd	Hand-painted, underglaze, blue	1			
33PK374	4	5B	39	82.5N	75E	Ap	Kitchen	Ceramic	Unidentified	Unidentified	Body sherd, burned		1			
33PK374	4	5B	39	105N	45E	Ap	Architectural	Metal	Iron	Misc. hardware	Nail, unid. type		1			
33PK374	4	5B	39	105N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd		1	ca. 1820–present	Miller et al. 2000	
33PK374	4	5B	39	105N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd	Hand-painted, underglaze, blue	1			
33PK374	4	5B	39	105N	52.5E	Ap	Architectural	Ceramic	Architectural	Brick	Fragment		1			
33PK374	4	5B	39	105N	52.5E	Ap	Architectural	Glass	Window	Colorless	Fragment, New Broad Glass (cylinder glass)		1			
33PK374	4	5B	39	90N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherds		11			
33PK374	4	5B	39	90N	52.5E	Ap	Furniture	Ceramic	Refined Earthenware	Redware (terra cotta)	Flower pot body sherds		2			
33PK374	4	5B	39	90N	52.5E	Ap	Clothing	Glass	Button	Milkglass	Four-hole		1			

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK374	4	5B	39	90N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherds	Transfer-print, blue	2	ca. 1820–present	Magid 1984	
33PK374	4	5B	39	90N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd	Hand-painted, underglaze, red (floral)	1	ca. 1820–present	Magid 1984	
33PK374	4	5B	39	90N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd	Hand-painted, underglaze, green (floral)	1	ca. 1820–present	Magid 1984	
33PK374	4	5B	39	90N	52.5E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Rim sherd	Annular banding, brown	1	ca. 1830–present	Florida Museum of Natural History 2011	
33PK374	4	5B	39	97.5N	75E	Ap	Kitchen	Ceramic	Stoneware	Buff-bodied	Body sherd, burned		1			
33PK374	4	5B	39	90N	75E	Ap	Kitchen	Ceramic	Stoneware	Gray-bodied	Body sherd with handle attachment		1			
33PK374	4	5B	39	82.5N	60E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd		1	ca. 1820–present	Miller et al. 2000	
33PK374	4	5B	39	90N	60E	Ap	Architectural	Glass	Window	Colorless	Fragment		1			
33PK374	4	5B	39	90N	60E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherds		3	ca. 1820–present	Miller et al. 2000	
33PK374	4	5B	39	90N	60E	Ap	Kitchen	Ceramic	Refined Earthenware	Whiteware	Rim sherd	Transfer-print, green (urn & willow?)	1			

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK375	5	5B	15			Surface	Weapons	Metal	Lead alloy	Bullet (fired)	.38 caliber (ca. .355" dia., 146 gr. retained weight)		1			
33PK375	5	5B	15			Surface	Miscellaneous Hardware	Metal	Iron	Misc. hardware	Wire fragment		1			
33PK375	5	5B	15			Surface	Kitchen	Glass	Lid liner	Milkglass	Fragments	"Genuine zinc….For Ball…"; and "….Cap……For Mason Jars" embossed on edge	2			
33PK375	5	5B	15			Surface	Kitchen	Glass	Lid liner	Milkglass	Complete		2			
33PK375	5	5B	15			Surface	Kitchen	Glass	Lid liner	Milkglass	Complete	"Genuine Zinc Cap For Mason Ball Jars" embossed on edge	5			
33PK375	5	5B	15			Surface	Kitchen	Glass	Lid liner	Milkglass	Complete	"Boyd's Genuine Porcelain Lined Cap"; "Boyd's Genuine Porcelain Lined Cap 5 V 5"; and "Genuine Boyd Cap For Mason Jars" embossed on edge	7			

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Refined Earthenware	Whiteware	Base sherds with foot rims, burned; plates		2	ca. 1820-present	Miller et al. 2000	
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Refined Earthenware	Ironstone	Body sherd with rim and foot ring; tea cup		1	1842-present	Magid 1984; Miller et al. 2000	
33PK375	5	5B	15			Surface	Clothing	Faunal	Leather	Shoe part	Inner sole or fragment of shoe/boot lower		1			
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Stoneware	Buff-bodied	Rim and body sherds; crock	Bristol slipped interior and exterior	2	ca. 1890-1940	Stelle 2001	
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Stoneware	Buff-bodied	Rim and body sherds; crock	Albany slipped interior, Bristol slipped exterior	3	ca. 1890-1940	Stelle 2001	
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Stoneware	Buff-bodied	Base and body sherd; crock	Albany slipped interior, salt glazed exterior	1	1825-ca. 1910	Stelle 2001	
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Stoneware	Buff-bodied	Body sherds; crock	Albany slipped interior and exterior	2	1825-ca. 1910	Stelle 2001	
33PK375	5	5B	15			Surface	Kitchen	Ceramic	Stoneware	Gray-bodied	Rim and body sherd; crock	Rilled interior, everted rim, splotches of lead glaze on exterior	1			

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK375	5	5B	15			Surface	Furniture	Glass	Furniture	Milkglass	Rim, body, and base fragment	Press-molded floral panels on exterior	1			
33PK375	5	5B	15			Surface	Personal	Glass	Bottle/jar	Milkglass	Pill bottle or apothecary jar, threaded screw top closure		1			104 A
33PK375	5	5B	15			Surface	Personal	Glass	Bottle/jar	Milkglass	Cosmetics bottle/jar, likely cold cream (Ponds'?); screw top closure		1			104 B
33PK375	5	5B	15			Surface	Kitchen	Glass	Bottle	Amber	Neck and finish, cork closure, machine tooled finish.		1			
33PK375	5	5B	15			Surface	Kitchen	Glass	Bottle	Amber	Body fragment		1			
33PK375	5	5B	15			Surface	Kitchen	Glass	Jar	Colorless	Body fragments		6			

OAI No.	Field Site No.	PORTS Area	Archaeological Survey Area (ASA)	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Count	Date Range	Reference	Plate No.
33PK375	5	5B	15			Surface	Kitchen	Glass	Jar	Colorless	Rim and closure fragment, screw threaded closure; mason jar		1			
33PK375	5	5B	15			Surface	Kitchen	Glass	Jar	Aqua	Body fragments; Ball mason jar	Script "…all" and block print "…ECT" embossed on largest fragment	5			
33PK375	5	5B	15			Surface	Kitchen	Glass	Jar	Aqua	Rim, closure, and shoulder, screw-threaded closure; Ball mason jar		1			
33PK375	5	5B	15			Surface	Kitchen	Glass	Jar	Aqua	Jar base, Owen's suction scar on bottom; Ball mason jar	Ampersand and embossed line/dash on bottom	1			

APPENDIX E: LITHIC FLAKE AND TOOL ATTRIBUTES AND IDENTIFIED CHERT TYPES

Definitions of Lithic Flake Variables and Variable States

Lithic raw material: Flakes are macroscopically inspected to determine the most likely geological sources of raw materials employing the chert reference collection in the ASC Group artifact laboratory. This variable monitors procurement activities, selectivity in the use of different chert types for different technological purposes, and serves as a means estimating mobility and exchange networks.

Dorsal surface cortex: Cortex is defined as any exterior piece of a lithic material that does not exhibit a humanly induced fracture scar. Cortex may occur in a wide variety of forms, including weathered, discolored or stained surfaces, joint planes, patination, or adhering geological matrix (Ahler 1987). This definition contrasts cortex with the non-cortical surface which is any humanly induced fracture surface (Ahler 1987; Odell and Henry 1989:241).

Flakes and flake fragments are categorized by the extent of cortical coverage. Those with none are indicated (coded 0 percent), those with cortex are distinguished as having cortex on less than one-half of the extant dorsal surface (coded <50 percent), or as having extensive cortical coverage, operationally defined as covering 50 percent or more of the extant dorsal surface (coded ≥50 percent) or having cortex covering the entire dorsal surface (coded 100 percent). Dorsal surface cortex may be indeterminate in cases of severe heat-spalling of the dorsal flake surface.

The presence of cortex on dorsal flake surfaces indicates that flakes were detached from the outer surfaces of raw materials that had little prior modification. Assemblages dominated by flakes lacking cortex represent flake production from cores or tools that were extensively modified prior to their introduction to a site or assemblages in which raw materials were being extensively shaped. The maintenance of existing tools, for example, should result in the deposition of few, if any, cortical flakes.

Striking platform surface: Three variable states are distinguished for the character of the surface of the striking platform remnant.

1) Cortical: Platform is unaltered and exhibits cortex;
2) Flat: A single, flat, concave, convex, or undulating surface not covered with cortex;
3) Complex: Presence of two or more flake scars.

The striking platform is the surface of the core to which force is applied to detach a flake. The geometry of the striking platform surface and its angular relationship to the proximal portion of the core face is an important variable in controlled flake detachment. The striking platform surface and the adjacent core face must often be shaped to accept the application of flaking force. Careful platform preparation is especially critical for the detachment of thin flakes where the blow must be placed near the edge of the striking platform.

In general, cortical platforms are most common on unprepared or minimally prepared flake cores or on raw materials in the initial stages of tool shaping. Bifaces have complex edges, and flakes from bifacial cores or tools commonly exhibit multi-faceted platform remnant surfaces.

Platform edge trim: Platform edge trimming is denoted on the flake by the presence of small flake scars on the dorsal face of the flake emanating from the edge of the platform surface. These small scars are the result of rasping or crushing off the overhang above the concavities of previous bulbar scars on the core face and contouring the core face to a convex surface immediately adjacent to the striking platform edge. Core face trimming is coded as present or absent.

Platform edge trimming is not a necessary platform preparation procedure if the flaking blow is to be aimed at a non-marginal portion of the core's striking platform. Non-marginally applied force is used to detach thick flakes from a core. The detachment of thin flakes from a core requires that the flaking blow be applied to the margin of the striking platform and that the core face is convex, both along the axis of flake removal and perpendicular to that axis. Core face trimming will therefore be prevalent whenever thin flakes are to be detached and whenever it is desired to thin a tool surface without markedly narrowing the striking platform.

Platform edge grinding: Grinding is denoted by the abrasive rounding of the platform edge, particularly of small protrusions along the edge. Abrasion of the striking platform edge removes minor edge profile irregularities and strengthens the edge to prevent the collapse of the platform under force application. Platform edge grinding is not a necessary step in platform preparation if force application is to be applied to a non-marginal platform surface, but is particularly useful if long, thin flakes are to be detached from thin core edges, as in bifacial tool shaping. Platform edge grinding is coded as present or absent.

Flake termination: Four variable states are distinguished for the character of the distal end of a flake.

1) Feathered: Distal end exhibiting a sharp edge resulting from the smooth termination of force that gradually shears the flake from the objective piece;
2) Stepped: Distal end exhibiting a 90 degree angle with the ventral surface resulting from abrupt termination of force that causes the flake to snap;
3) Hinged: Distal end that is rounded or blunt resulting from the force used to create the flake rolls away from the objective piece;
4) Plunging: Distal end that curves in toward the ventral surface resulting from the force used to create the flake curving in toward the objective piece.

Heat treatment: Purposeful heat treatment is a highly controlled process designed to reduce the tensile strength of the chert (typically by 40–70 percent) to improve chert fracturing properties and reduce the amount of force required to fracture the stone, thereby increasing the knapper's control over the fracturing process. Heat treatment is often difficult to detect, but heat-treated cherts usually exhibit more vitreous fracture surfaces than those of non-heat-treated surfaces and may exhibit distinctive color changes as a consequence of oxidized iron impurities. Heat treatment is coded as present or absent. Where indeterminate or ambiguous, it is coded as absent.

Length, width, and thickness. Maximum dimensions of these variables measured to the nearest 0.1 mm.

Weight. Weight of the artifact is measured to the nearest 0.1 gram.

Flake sizes vary with the size of the core and with the purposes of flake removal. Relatively large, thick flakes may be created in order to use the flakes as tools or when flakes are to be used as blanks for highly shaped tools; relatively large, thick flakes may also be produced in the process of shaping a core or in the initial stages of tool-shaping. Flakes will tend to decrease in size through the production stages of a tool. Flake weight is also a useful measure of overall flake size.

Identified Lithic Tool Types

projectile point: "bifacially flaked artifacts with hafting modifications and a pointed tip opposite the hafting area" (Boisvert et al. 1979:137).

Identified Chert Types

Columbus-Delaware Chert: While there are separate Columbus and Delaware formations, the cherts in these formations are often difficult to distinguish from one another. Therefore, for the purposes of analysis, both types are treated as one. The chert-bearing Delaware formation is within the marine limestones and dolomites of the Devonian system. This formation extends north in a narrow band from western Pickaway County through Franklin, Delaware, Marion, Wyandot, Crawford, Seneca, Huron, Sandusky, and Erie counties, and is also present in northwest Ohio in Lucas, Wood, Henry, Defiance, Putnam, and Paulding counties. Delaware chert is tan to dark gray in color with relatively large lighter colored areas that create a mottled appearance, and often exhibits tiny ostracod inclusions (Stout and Schoenlaub 1945; Vickery 1983).

The chert-bearing Columbus formation is within the marine limestones and dolomites of the Devonian system. This formation extends in a narrow band from western Pickaway County to the north through Franklin, Delaware, Marion, Wyandot, Lucas, Wood, Henry, Defiance, Putnam, and Paulding counties. The flint ranges in color from light mottled gray to brown (Stout and Schoenlaub 1945; Vickery 1983).

Upper Mercer Chert: The Upper Mercer member of the Pennsylvania system stretches across the state from Columbiana and Mahoning counties in northeastern Ohio to Scioto and Lawrence counties on the Ohio River (Converse 1972; Stout and Schoenlaub 1945). It is tabular in primary deposits and subrectangular in secondary stream deposits (Shott et al. 1990). Although Upper Mercer is typically black, glossy, and fossiliferous, it may also be milky, straw-colored, and pinkish (Flint 1951). Additionally, there are bluish black, mottled, and dull gray varieties of this chert (Converse 1972; Morgan 1929; Stout and Schoenlaub 1945). Used synonymously with the term Upper Mercer chert are the terms Coshocton, Nellie, and Nellie Blue (Tankersley 1989). The bulk of Coshocton chert is glossy black or gray-black with gray or cream-colored mottling.

Nellie chert is dull gray with dark gray streaks resembling wood grain. A high-quality variety of Coshocton chert is a lustrous, translucent gray chert that may be banded with streaks of white or yellow and is often mistaken for Vanport chert (Converse 1972). Boggs chert is also black to bluish in color and may be confused with Upper Mercer chert (Morton and Carskadden 1972). Zaleski chert may be confused for Coshocton chert,

particularly in the case of smaller artifacts (Converse 1972). As there is much overlapping between all of these descriptions, and since only macroscopic, visual attributes were used, the general term of Upper Mercer chert was arbitrarily selected to encompass all of the these varieties.

Vanport Chert: The Pennsylvanian-age Vanport member extends northward from Scioto and Lawrence counties on the Ohio River to Stark County. The most notable chert deposit within this member occurs in its central portion in Licking and Muskingum counties and is known as Flint Ridge flint. This high-grade chalcedony was used extensively throughout prehistory, as evidenced by numerous aboriginal quarry pits on Flint Ridge itself, and by the fact that artifacts diagnostic for all of the different prehistoric temporal periods were fashioned from it. It occurs in a vast array and mottling of colors, is sometimes banded, and is of high lustrous quality (DeWert 1980; Stout and Schoenlaub 1945).

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 373

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 373
4. Site Name(s)
5. Project Site Number Site 3
6. Other State Site Number
7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 6 1 9 0
Northing 4 3 2 1 6 1 0
2. Latitude ____° ____' ____"
Longitude ____° ____' ____"
*3. Township 4 N Range 22 W Not Applicable ____
Section 6 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto
*4. Quadrangle Name Piketon 1 9 ___ ___
*5. Quadrangle Date 1979
*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000
2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)
*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

_____

_____

_____

_____

_____

_____

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
Stemmed point base fragment	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture __X__ Historic Construction __X__ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed and eroded portion of a power-line easement

_____

*8. Current Dominant Land Use (see manual):

Utilities ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 201 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Toe

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 3 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE __X__ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify)

*20. Horizontal Distance to Closest Water Source ___285___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify)
_____ Chemical Analysis (specify)
_____ Unrecorded _____ Other (specify)

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Grass

*6. Site Area (square meters) 1

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/03

14. Time Spent at Site

15. Weather Conditions Warm and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK373 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK373 is a prehistoric site situated in a grassy area with 0–10 percent visibility on a toe at the top of a ravine. The adjacent ravine cuts into the glacial lakebed down to the Little Beaver Creek Valley. This area is sloping to the east with a gradient of 2 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 10 cm deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Most of the area surrounding the site is disturbed and the small area of relatively intact plow zone the site lies within is largely eroded. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of a single Columbus-Delaware chert projectile point base fragment. The hafting element is a stem and the point had fairly square shoulders, but the portion of it that was recovered is too fragmentary to confidently determine its point type so it is not temporally diagnostic. A minimum site size of 1 m x 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has suffered from plowing and erosion of the toe. The OAI site type for 33PK373 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

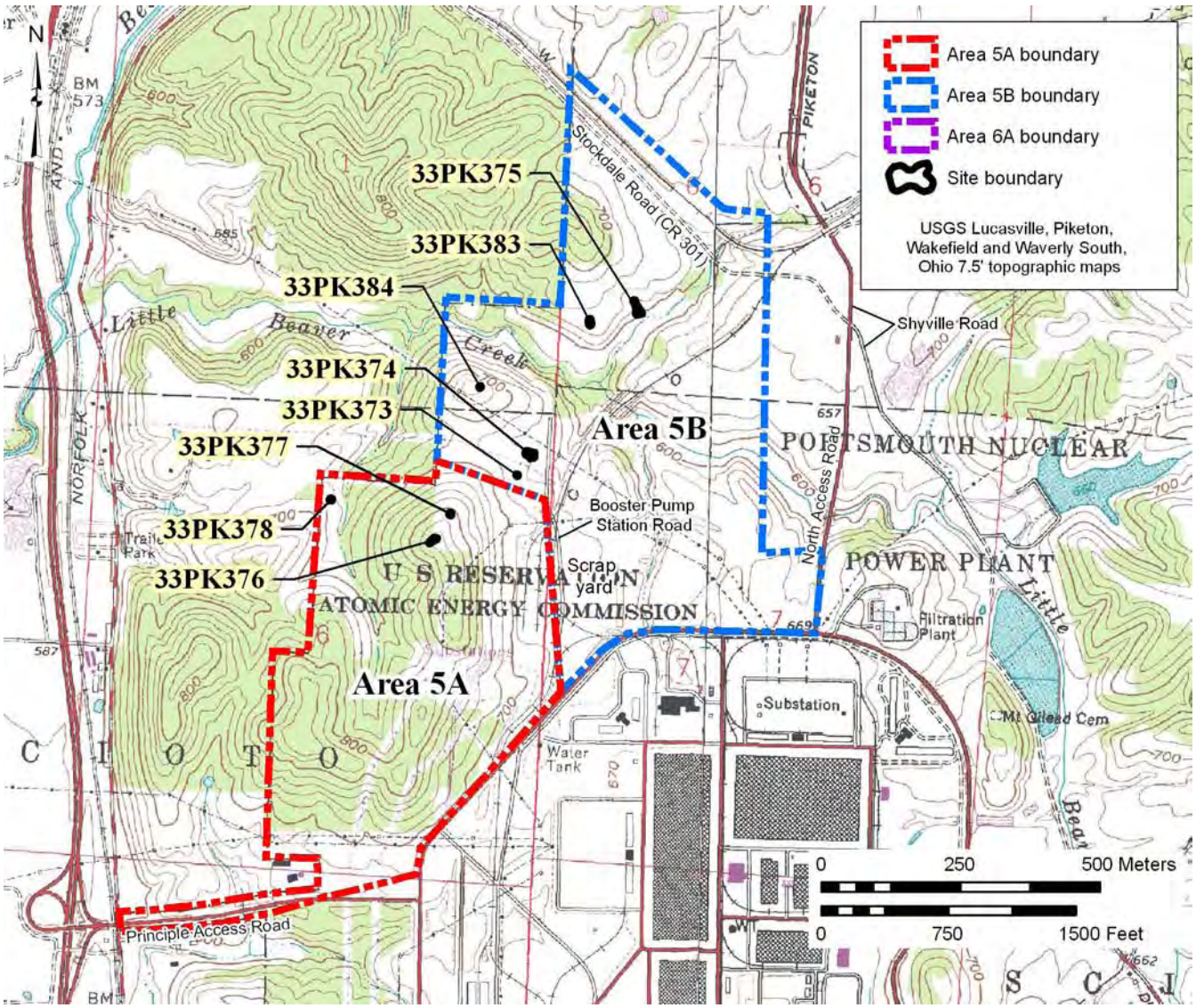
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 374

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 374

4. Site Name(s)

5. Project Site Number Site 4

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 6 2 3 0
Northing 4 3 2 1 6 8 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 22 W Not Applicable ____
Section 6 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto

*4. Quadrangle Name Piketon

*5. Quadrangle Date 1979

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):

____ Private (single)	____ Private (multiple)	____ Local Govt.
____ State Govt.	X Federal Govt.	____ Multiple Govt.
____ Mixed-Govt./Private	____ Unknown	

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):

____ Prehistoric	X Historic	____ Prehistoric and Historic
____ Unknown	____ Unrecorded	

*Site No. 33- PK - 374
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

_____ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented _____

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) _____

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

_____

_____

_____

_____

_____

_____

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

_____ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal __X__ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. __X__ 19th Century

m. __X__ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented 1 ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

__X__ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

__X__ Kitchen	__X__ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
__X__ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
__X__ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___
_____ Other (specify) _____			___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count
Brick fragment	1	Whiteware sherds	16
Burned ceramic sherd	1	Window glass fragments	2
Decorated whiteware sherds	9		
Iron nail fragment	1		
Milk glass button	1		
Redware flower pot fragments	2		
Stoneware sherds	2		

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: _____ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded __X__ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction __X__ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed and eroded landform

_____

*8. Current Dominant Land Use (see manual):

Rangeland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 204 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Toe

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 3 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
__X__ N _____ NW _____ NE _____ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify)

*20. Horizontal Distance to Closest Water Source ___370___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify)
_____ Chemical Analysis (specify)
_____ Unrecorded _____ Other (specify)

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*2. Surface Collection Strategy (select as many as appropriate):

__x__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __x__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Scrub

*6. Site Area (square meters) 739

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

_____ Guessed _____ Historic Maps _____ Aerial Photograph __x__ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __x__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/03

14. Time Spent at Site

15. Weather Conditions Warm and overcast

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)
    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK374 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.

2.

3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK374 is a historic period site situated in an area of scrub brush with 0–10 percent visibility on a toe at the top of a ravine. The adjacent ravine cuts into the glacial lakebed down to the Little Beaver Creek Valley. No buildings are indicated at this location on early cartographic sources. This area is sloping to the north with a gradient of 2 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 10 cm–20 cm deep, dark brown (10YR 3/3) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. Most of the area south and west of the site is disturbed and the small area of relatively intact plow zone the site lies within is largely eroded. The area north of the site is a swale on the adjacent hillside and it is low and wet to east of the site. Eight of the shovel test pits excavated in the vicinity of the site were positive (i.e., produced artifacts). Nine radial shovel test pits were excavated at 7.5-m intervals, five of which were positive. The assemblage is composed of 35, mostly domestic, artifacts. Kitchen Group ceramics (n=28) made up the bulk of the material recovered, but it also included four Architectural Group items, one milk glass button, and two flowerpot fragments. The whiteware sherds date from ca. 1820–present. (Continued)

*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

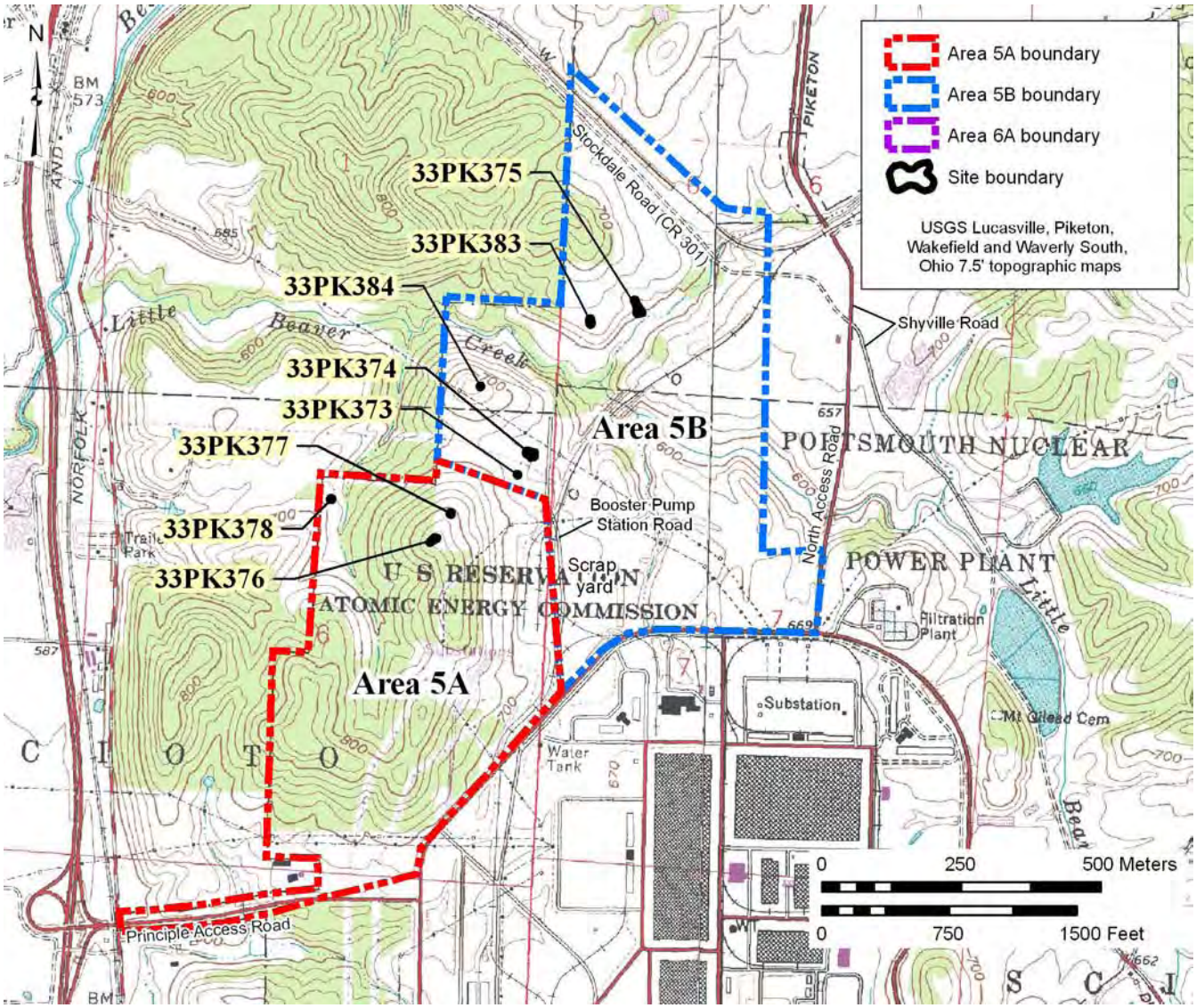
J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

(Continued from I-1)

Inspection of the toe and the area surrounding this landform failed to identify any remains of buildings or structures associated with the site. Although some of the artifact types have established manufacture dates, the size of the assemblage is small and lacking other evidence it is not possible to determine precisely when the artifacts were deposited. Based on the ceramics the site has been assigned a late-nineteenth–mid-twentieth century temporal affiliation. The limits of the site were delineated based on the extent of the artifact scatter. It is irregularly shaped and measures about 22.5 m x 30 m with an area of about 739 sq m. The site is relatively intact, but has suffered from plowing and erosion of the toe. The OAI site type for 33PK3374 is unknown. It can best be described as an artifact scatter from the late-nineteenth–mid-twentieth century.

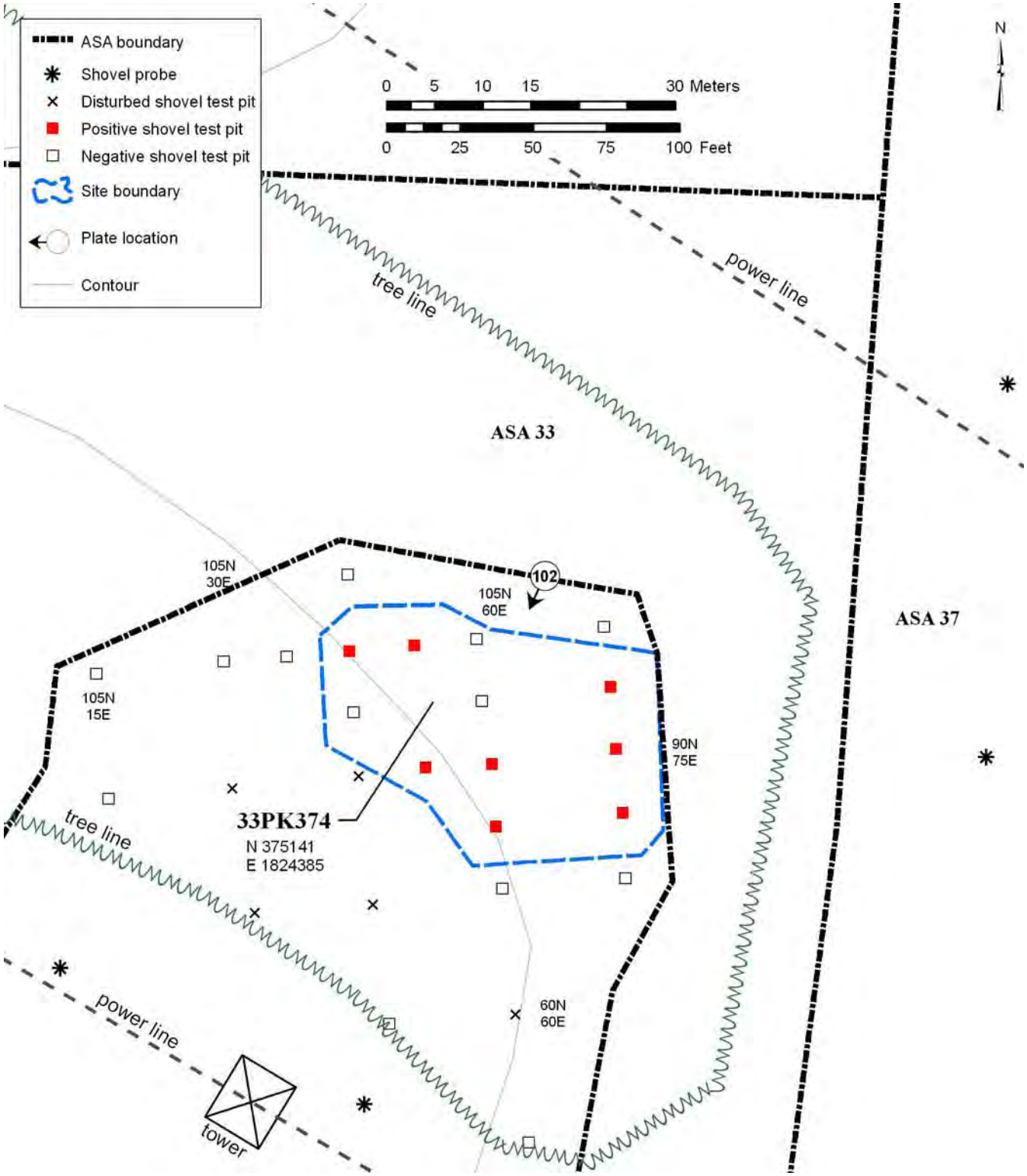
*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Continuation Sheet: Specify Section & Item (use additional Continuation Sheets if necessary)



Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 375

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 375

4. Site Name(s)

5. Project Site Number Site 5

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 6 6 1 0
Northing 4 3 2 2 2 1 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 21 W Not Applicable ____
Section 6 1/4 Section: X SW ____ SE ____ NW ____ NE
Township Name Seal

*4. Quadrangle Name Piketon 1 9 ___ ___

*5. Quadrangle Date 1997

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
____ Prehistoric X Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 375
Plotted ☐

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

_____ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented _____

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) _____

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

_____

_____

_____

_____

_____

_____

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

_____ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal __X__ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. __X__ 19th Century

m. __X__ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented 1

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

__x__ Diagnostic Artifacts _____ Diagnostic Architectural Remains

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition

_____ Unrecorded _____ Other (specify) _____

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

__x__ Kitchen	__x__ Furniture	__x__ Personal
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial
_____ Military	__x__ Weapons	_____ Transportation
_____ Architectural	__x__ Misc. Hardware	_____ Const./Manufacturing Tools
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains
__x__ Clothing	_____ Unrecorded	_____ Unknown

_____ Other (specify) _____

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count
.38 caliber bullet (fired)	1	Canning jar lid liner fragments	2
Glass bottle fragments	2	Milk glass cosmetic jar	1
Glass jar fragments	14	Milk glass pill bottle	1
Iron wire fragment	1	Glass decorative vessel frag	1
Ironstone tea cup fragment	1	Stoneware sherds	9
Leather shoe fragment	1	Whiteware sherds	2
Milk glass canning jar lid liners	14		

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

17. Affiliated Ohio Historic Inventory Site Number and Name:

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: _____ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded __X__ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent _____ Agriculture _____ Historic Construction __X__ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Artifacts are washing down the swale.

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 183 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
__X__ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Latham-Wharton silt loams, 15 to 25 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All _____ Flat
__X__ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___70___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___40___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection __X__ Surface Collection
_____ Auger/Soil Corer _____ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded __X__ Other (specify) Visual inspection

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*2. Surface Collection Strategy (select as many as appropriate):

_____ Not Applicable __X__ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 709

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

_____ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

__X__ Other (specify) GPS

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/03

14. Time Spent at Site

15. Weather Conditions Mild and overcast

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK375 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.

2.

3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK375 is a historic period site situated in a wooded area with 0–10 percent visibility in a swale on a hillside. The swale contains a seasonal stream that has cut into the bluff of the Little Beaver Creek Valley. No buildings are indicated at this location on early cartographic sources. This area is sloping to the south with a gradient of 70 percent. The site was identified through visual inspections. The hillside is fairly steep at the site and there were no reasonably level areas to excavate shovel test pits. All of the artifacts were recovered from the surface in the streambed. They are scattered down the swale, spreading out at the bottom of the hill where they are slightly more concentrated. The assemblage is composed of 50, mostly domestic, artifacts. Kitchen Group glass and ceramics (n=44) made up the bulk of the material recovered, but it also included a leather shoe fragment, a pressed milk glass decorative vessel fragment, an iron wire fragment, a milk glass pill bottle, and a milk glass cosmetic jar. A spent .38 cal bullet was also recovered, but it is presumed to be related to the adjacent shooting range (33PK219). Manufacture dates for some of the ceramics are available and range from the early-nineteenth century to the mid-twentieth century and to the present. (Continued)

*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

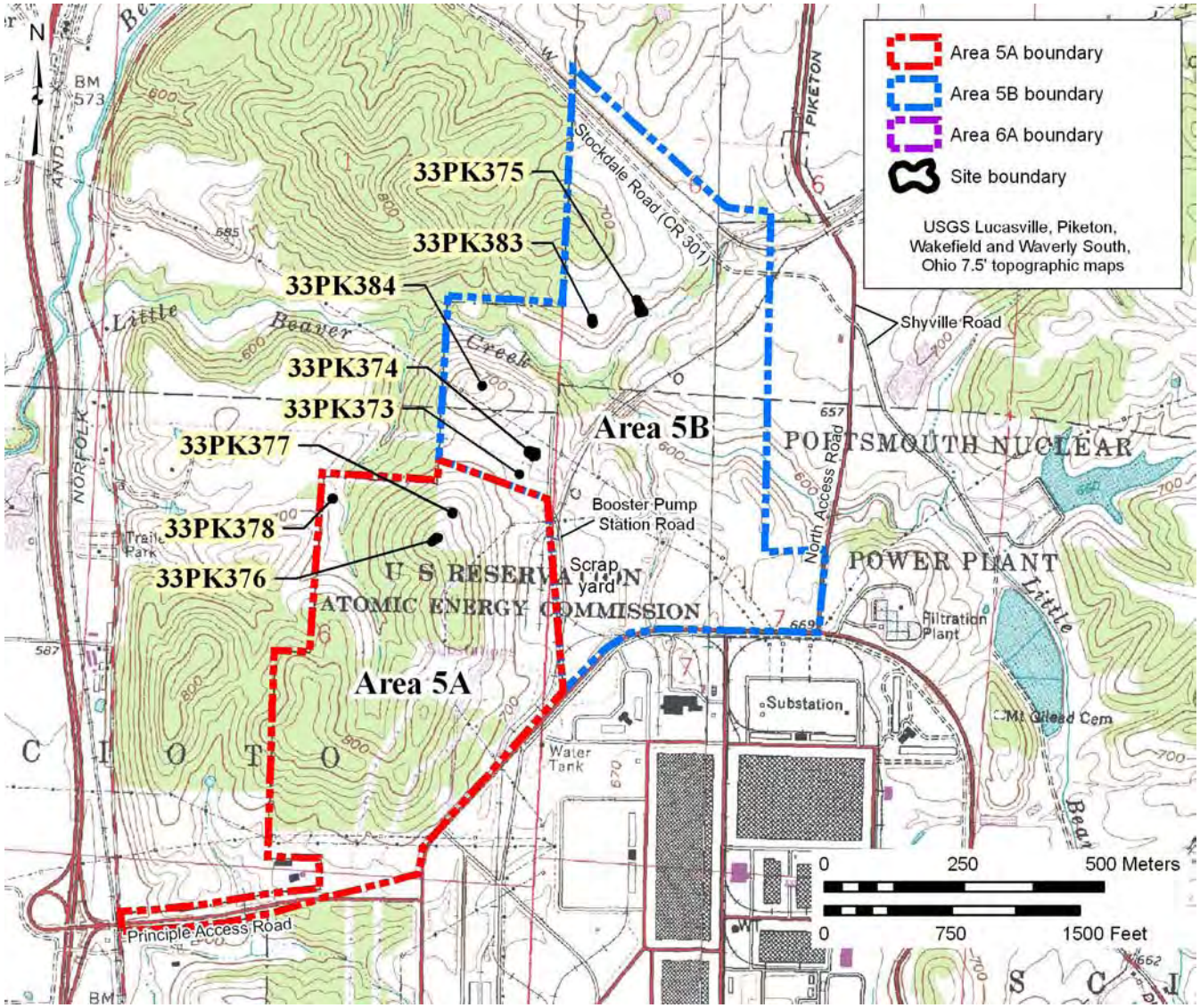
J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

(Continued from I-1)

The whiteware sherds date from ca. 1820–present, Ironstone dates from 1842–present, and various types of stoneware date from between ca. 1890 and 1940. Inspection of the hillside and the area surrounding this landform failed to identify any remains of buildings or structures associated with the site. There is a disturbed area along the hillside north of the site but there are no indications that a building or structure once stood there or that there are any historic deposits that might be related to 33PK375. Although some of the artifact types have established manufacture dates, the size of the assemblage is small and lacking other evidence it is not possible to determine precisely when the artifacts were deposited. Based on the ceramics the site has been assigned a late-nineteenth–mid-twentieth century temporal affiliation. The limits of the site were delineated based on the extent of the artifact scatter. It is irregularly shaped and measures about 15 m x 50 m with an area of about 709 sq m. The site is relatively intact, but has suffered from erosion in the swale. The OAI site type for 33PK3375 is unknown. It can best be described as a dump from the late-nineteenth–mid-twentieth century.

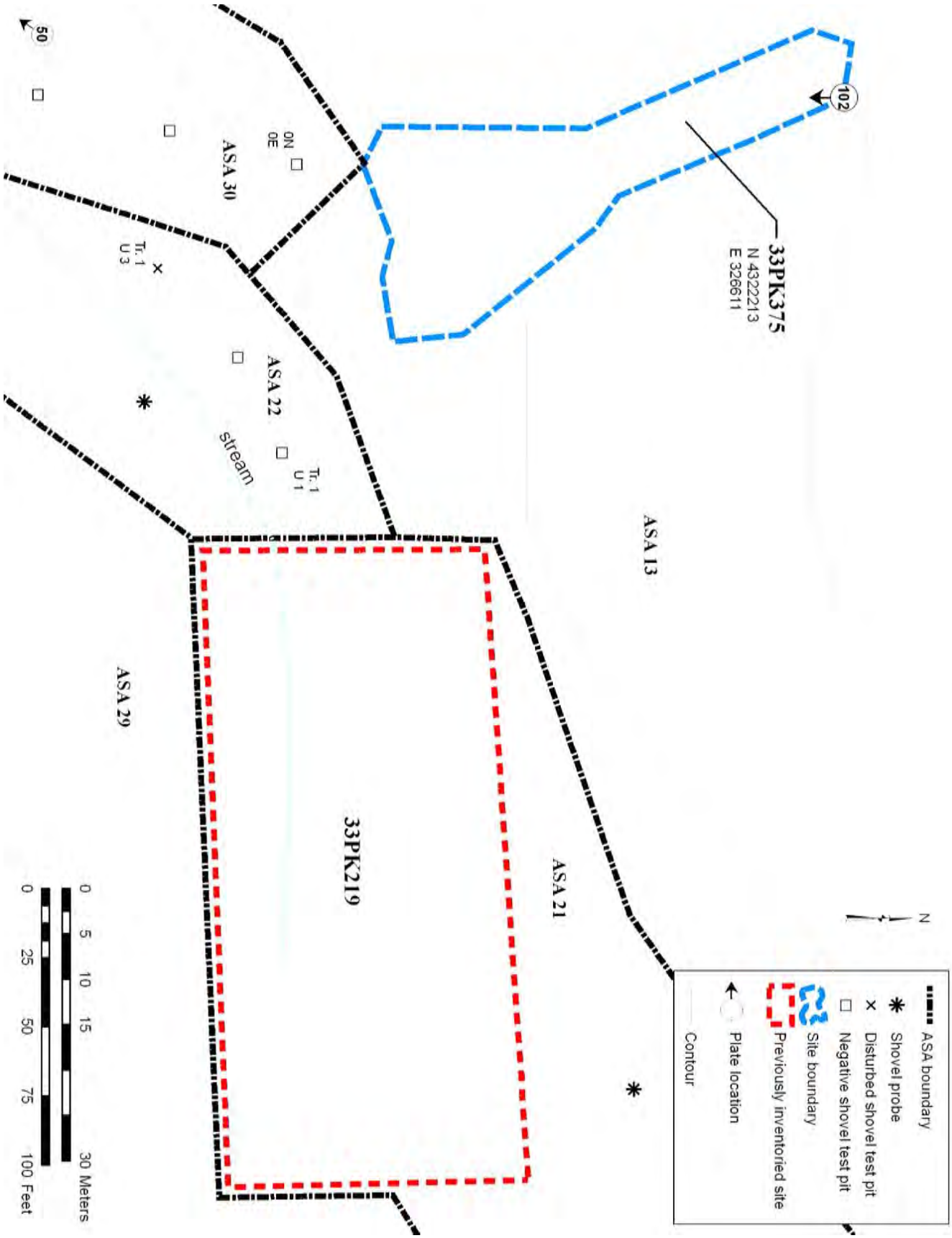
*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Continuation Sheet: Specify Section & Item (use additional Continuation Sheets if necessary)



Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 376

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 376

4. Site Name(s)

5. Project Site Number Site 200

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 5 8 9 0
Northing 4 3 2 1 3 8 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 22 W Not Applicable ____
Section 6 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto

*4. Quadrangle Name Piketon 1 9 ___ ___

*5. Quadrangle Date 1979

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 376
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
Shatter	2		
Whole flake	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 256 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle __X__ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Coolville silt loam, 1 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All __X__ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___0___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___325___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__x__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __x__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 327

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

_____ Guessed _____ Historic Maps _____ Aerial Photograph __x__ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __x__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/03

14. Time Spent at Site

15. Weather Conditions Mild and overcast

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)
    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK376 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
   2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK376 is a prehistoric site situated in a wooded area with 0–10 percent visibility north end of a narrow section of ridgetop. This area is flat with a slope gradient of 0 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 15 cm–20 cm deep, dark yellowish brown (10YR 3/4) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. A few of the shovel test pits on the ridgetop were partly or entirely eroded (i.e., had subsoil near or at the surface). Three of the shovel test pits excavated in the vicinity of the site were positive (i.e., produced an artifact). Eight radial shovel test pits were excavated at 7.5-m intervals, one of which was positive. The assemblage is composed of two pieces of shatter, one is Vanport chert and the other is unidentified chert, and one whole flake of Upper Mercer chert. They are not temporally diagnostic. The limits of the site were delineated based on the extent of the artifact scatter. It measures 15 m x 22.5 m with an area of 327 sq m. The site is relatively intact, but has suffered from plowing and erosion of the ridgetop. The OAI site type for 33PK376 is unknown. It can best be described as a lithic scatter from an unassigned prehistoric period.

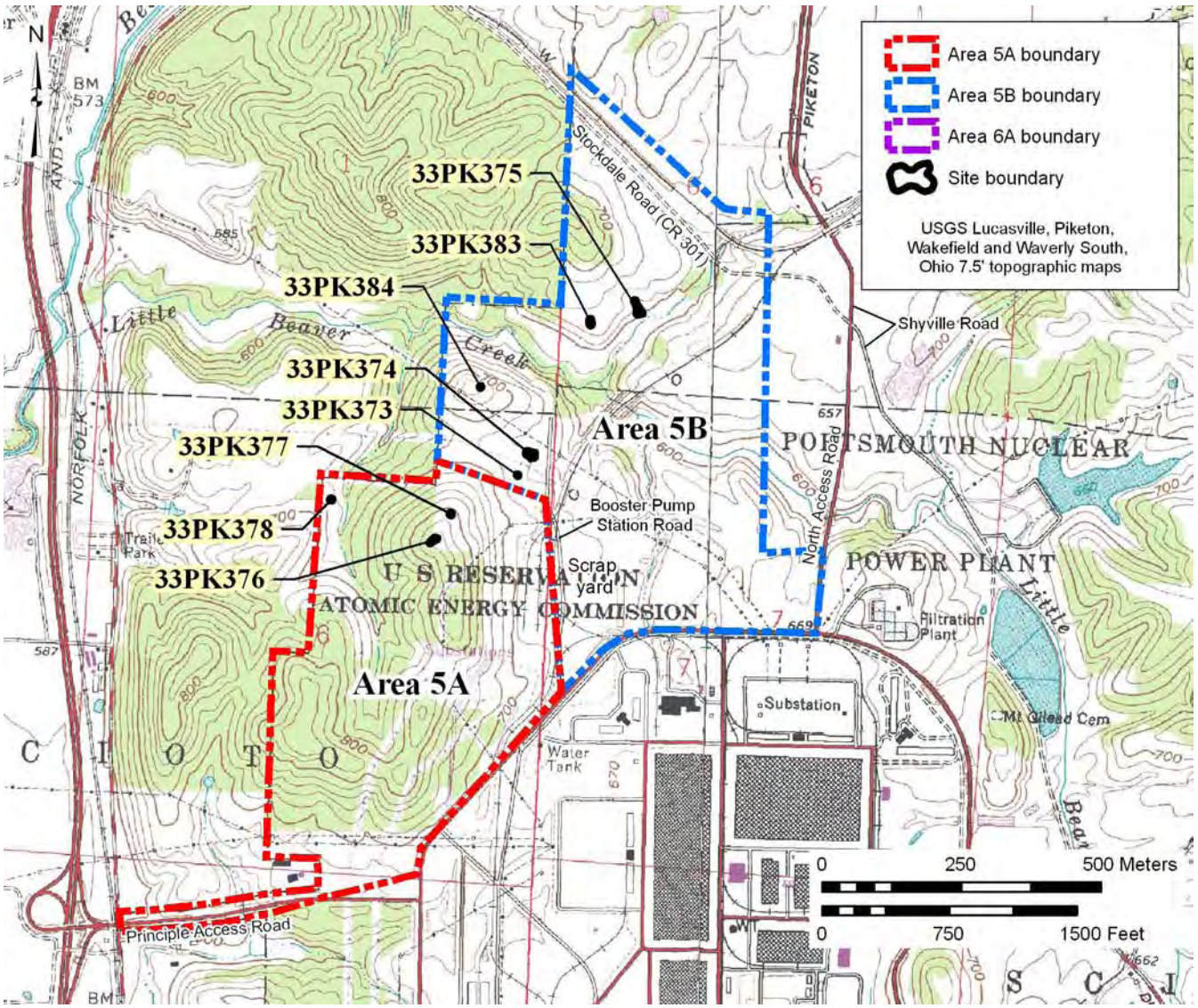
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

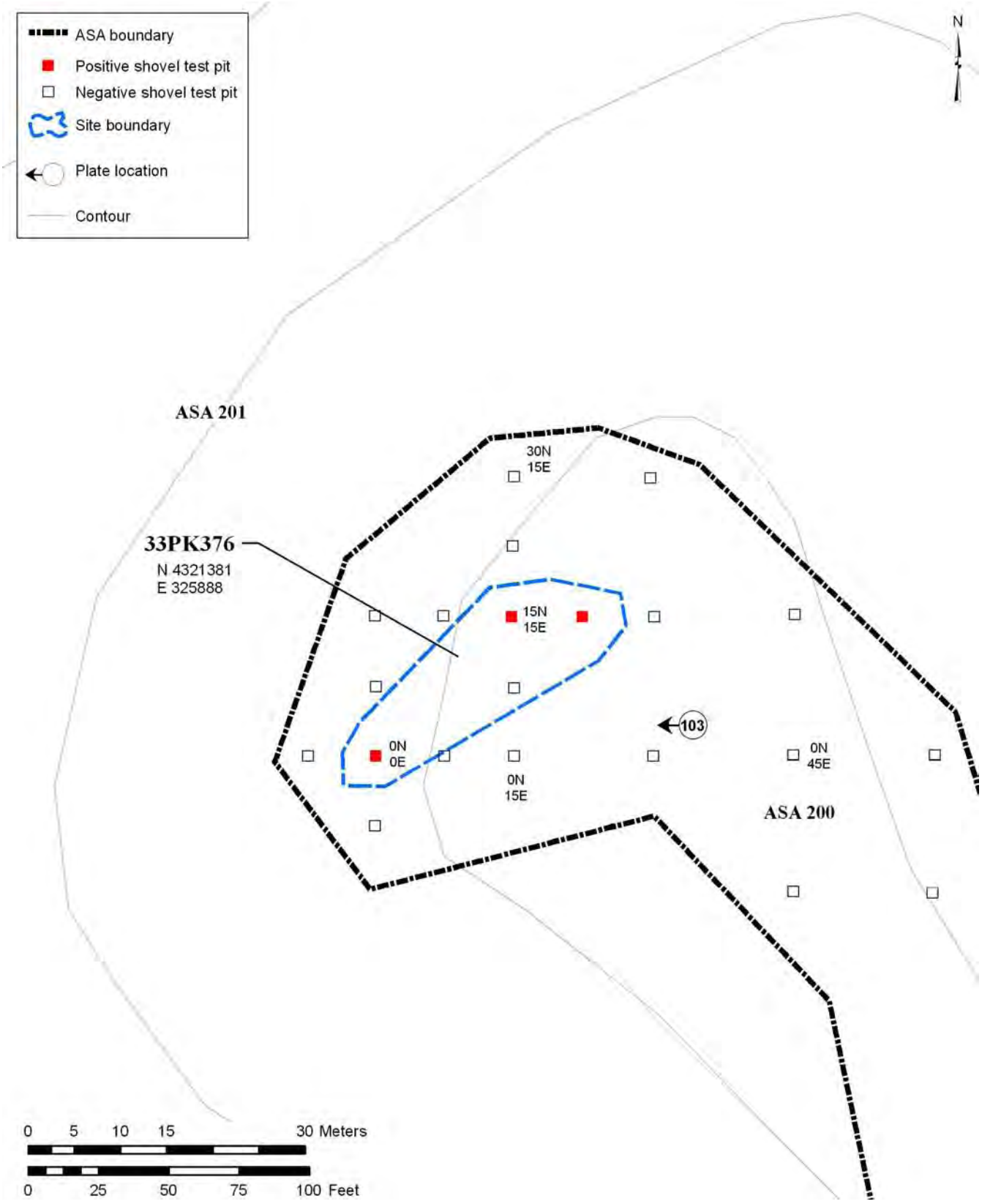
*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Continuation Sheet: Specify Section & Item (use additional Continuation Sheets if necessary)



Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 377

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 377
4. Site Name(s) ____
5. Project Site Number Site 201
6. Other State Site Number ____
7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 5 9 5 0
Northing 4 3 2 1 4 7 0
2. Latitude ____° ____' ____"
Longitude ____° ____' ____"
*3. Township 4 N Range 22 W Not Applicable ____
Section 6 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto
*4. Quadrangle Name Piketon
*5. Quadrangle Date 1979
*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000
2. Tenant (if any) ____
Address ____
City/Town, State, Zip ____
Phone (____) ____
*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 377
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

_____

_____

_____

_____

_____

_____

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
Shatter	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

for official use only

E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction __X__ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed and probably eroded landform

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 244 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Toe

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Coolville silt loam, 1 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW __X__ NE _____ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___350___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 1

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/03

14. Time Spent at Site

15. Weather Conditions Mild and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK377 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
   2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK377 is a prehistoric site situated in a wooded area with 0–10 percent visibility on a toe along a steep hillside. The toe is off the north end of a ridgetop about 12 m down the hill. This area is sloping to the northeast with a gradient of 2 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 25 cm deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of a single piece of Columbus-Delaware chert shatter. It is not temporally diagnostic. A minimum site size of 1 m x 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has suffered from plowing and probably erosion of the toe. The OAI site type for 33PK377 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

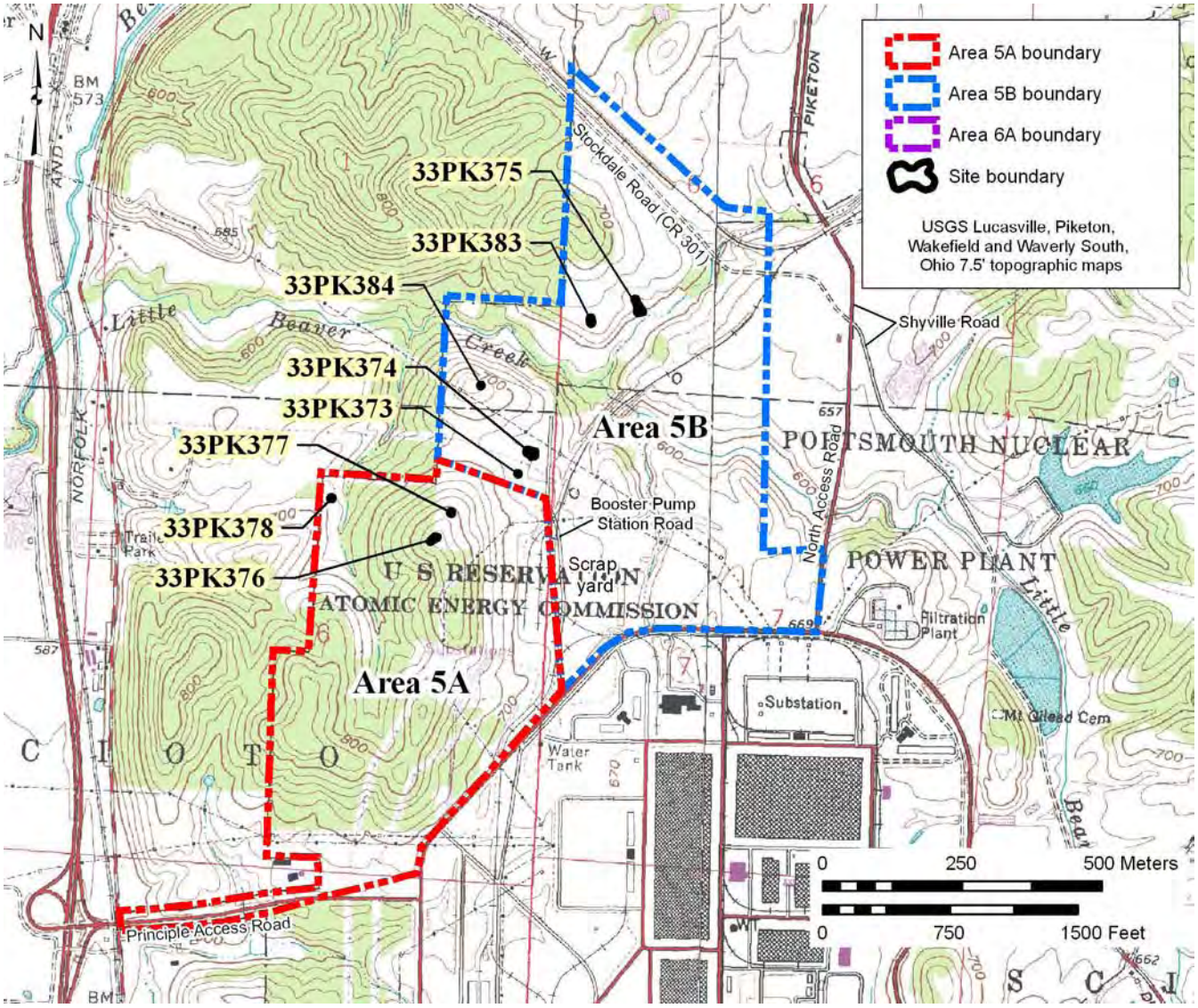
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 378

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 378
4. Site Name(s) ____
5. Project Site Number Site 202
6. Other State Site Number ____
7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 5 5 2 0
Northing 4 3 2 1 5 2 0
2. Latitude ____° ____' ____"
Longitude ____° ____' ____"
*3. Township 4 N Range 22 W Not Applicable ____
Section 6 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto
*4. Quadrangle Name Piketon
*5. Quadrangle Date 1979
*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000
2. Tenant (if any) ____
Address ____
City/Town, State, Zip ____
Phone (____) ____
*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 378
Plotted ☐

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
projectile point tip fragment	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

__X__ Undisturbed _____ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

__X__ None Apparent _____ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

_____

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 204 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Toe

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Shelocta-Latham association, steep
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE __X__ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___55___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 1

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/05

*13. Field Date (year/month) 12/04

14. Time Spent at Site

15. Weather Conditions Mild and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK378 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
   2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK378 is a prehistoric site situated in a wooded area with 0–10 percent visibility on a toe along the side of a ravine. The adjacent ravine is along an unnamed tributary of Little Beaver Creek. This area is sloping to the east with a gradient of 2 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 20 cm deep, brown (10YR 4/3) silt loam A horizon at the site, from which the artifact was recovered. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of a single unidentified chert projectile point tip fragment. The portion of it that was recovered is too fragmentary to confidently determine its point type so it is not temporally diagnostic. A minimum site size of 1 m x 1 m with an area of 1 sq m is assigned to the site. The site appears to be intact. The OAI site type for 33PK378 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

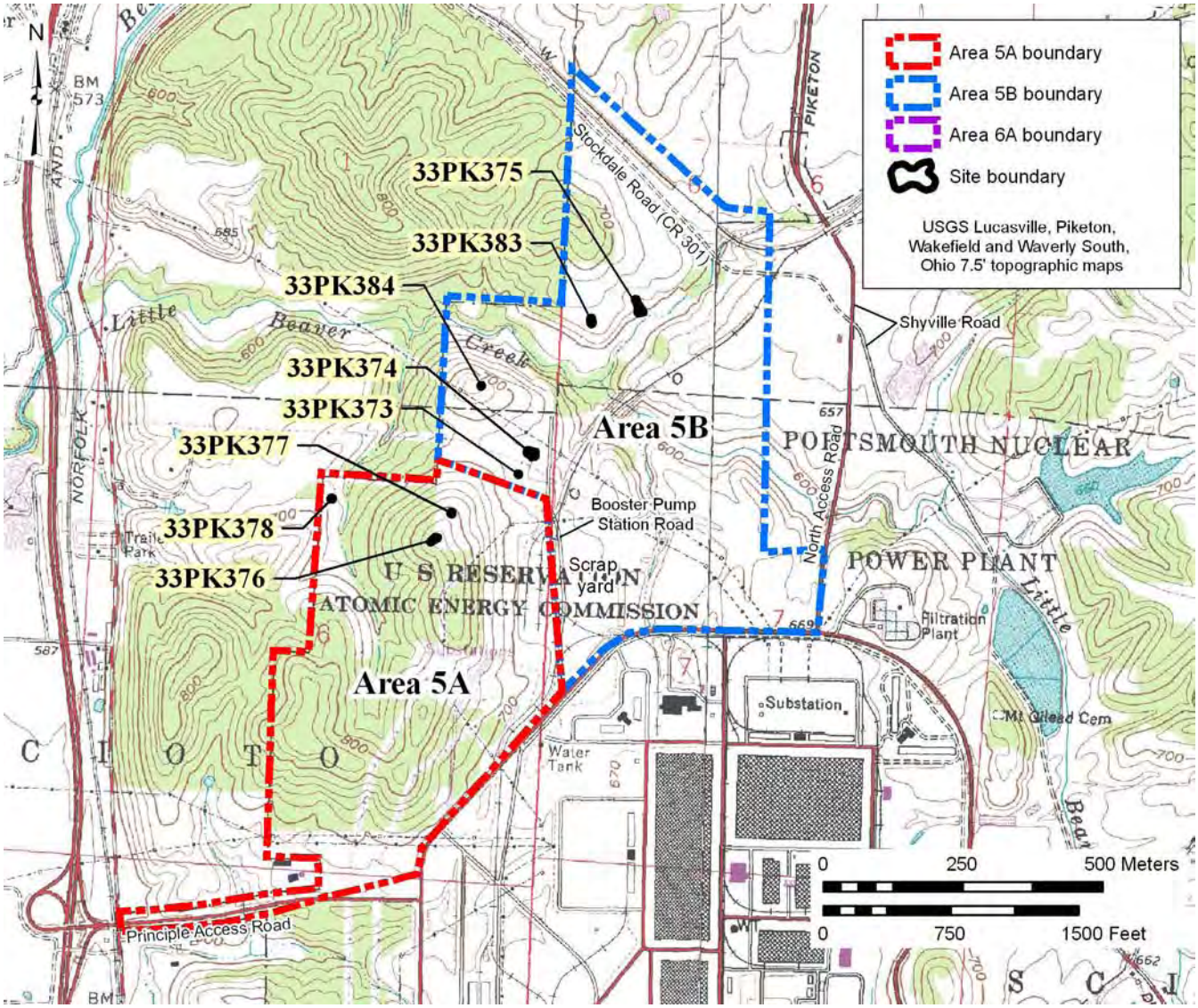
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 383

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data
2. County Pike *3. Trinomial State Site Number 33- PK - 383
4. Site Name(s) ____
5. Project Site Number Site 1
6. Other State Site Number ____
7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 6 4 6 0
Northing 4 3 2 2 1 6 0
2. Latitude ____° ____' ____"
Longitude ____° ____' ____"
*3. Township 4 N Range 21 W Not Applicable ____
Section 6 1/4 Section: X SW ____ SE ____ NW ____ NE
Township Name Seal
*4. Quadrangle Name Piketon
*5. Quadrangle Date 1979
*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000
2. Tenant (if any) ____
Address ____
City/Town, State, Zip ____
Phone (____) ____
*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
Shatter	1		
Whole flake	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 198 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base __X__ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 8 to 15 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All _____ Flat
_____ S _____ SW __X__ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___130___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__x__ Not Applicable _____ Grab Sample _____ Diagnostics ___ ___ ___

_____ Controlled-Unknown _____ Controlled-Total ___ ___

_____ Controlled-Sample _____ Unrecorded ___ ___

_____ Other (specify)_____ ___

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __x__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 15 ___ ___ ___ ___

___ ___ ___ ___

Unrecorded _____ ___

*7. Basis for Site Area Estimate (select only one, as appropriate):

_____ Guessed _____ Historic Maps _____ Aerial Photograph __x__ Paced ___

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify)_____

*8. Confident of Site Boundaries: __x__ No _____ Yes _____ Unrecorded ___

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____ ___ ___ ___

*10. Name of Form Preparer Chuck Mustain ___ ___ ___

*11. Institution ASC Group, Inc. ___ ___ ___

*12. Date of Form (year/month) 12/05 2 0 ___ ___/___ ___

*13. Field Date (year/month) 12/03 2 0 ___ ___/___ ___

14. Time Spent at Site _____

15. Weather Conditions Mild and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy ___ ___ ___

___ ___ ___

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK383 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
   2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK383 is a prehistoric site situated in a wooded area with 0–10 percent visibility on the bluff edge above the confluence of Little Beaver Creek and one of its unnamed tributaries. This area is sloping to the southeast with a gradient of 2 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 20 cm–30 cm deep, dark yellowish brown (10YR 4/4) silt loam Ap horizon (plow zone) at the site, from which the artifacts were recovered. Two of the shovel test pits excavated in the vicinity of the site were positive (i.e., produced an artifact). Six radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of one piece of shatter and one whole flake, which are both Columbus-Delaware chert. They are not temporally diagnostic. The limits of the site were delineated based on the extent of the artifact scatter. It is linear and measures 1 m x 15 m with an area of about 15 sq m. The site is relatively intact, but has been plowed and probably suffered from erosion of the bluff edge. The OAI site type for 33PK383 is unknown. It can best be described as a lithic scatter from an unassigned prehistoric period.

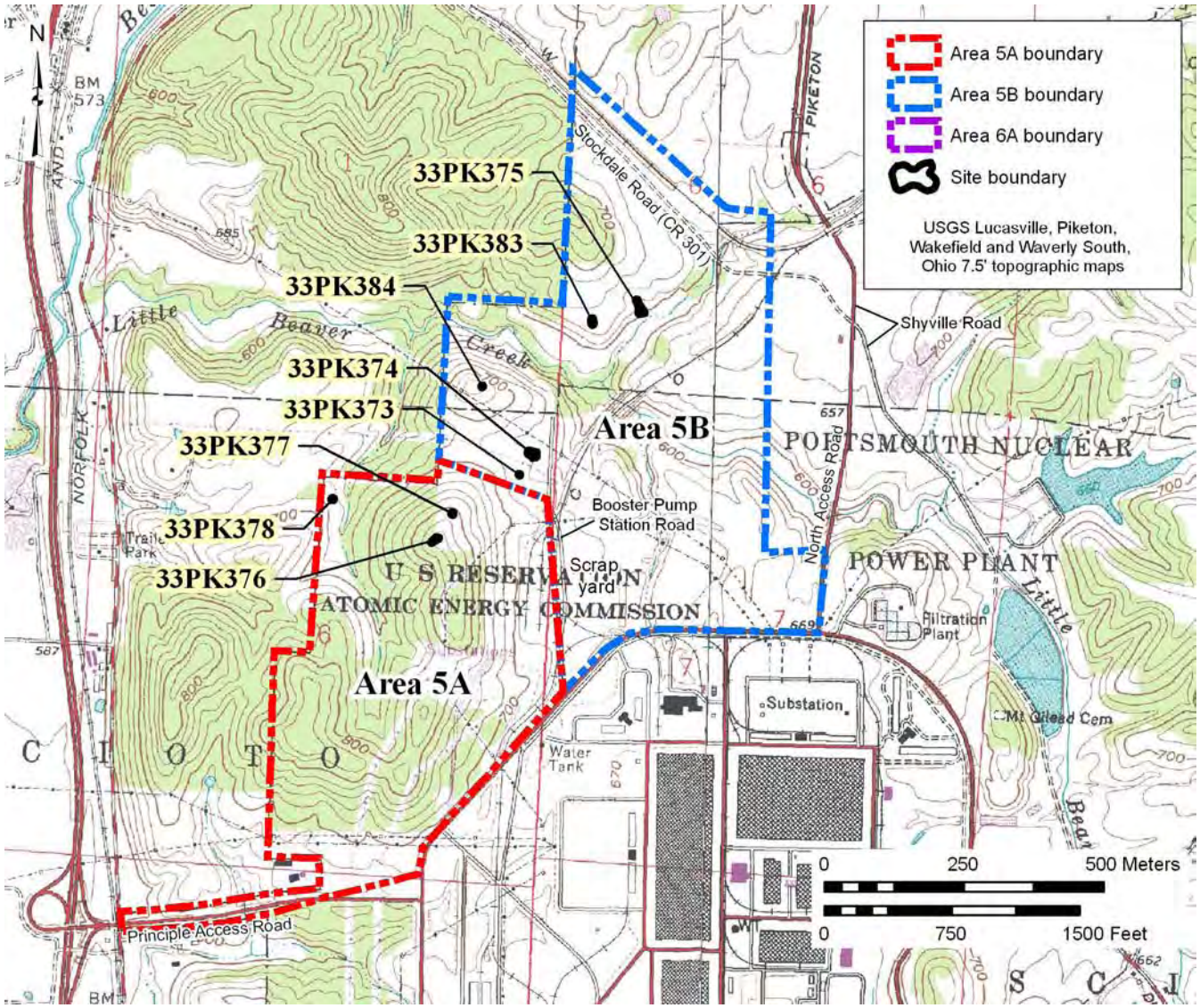
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

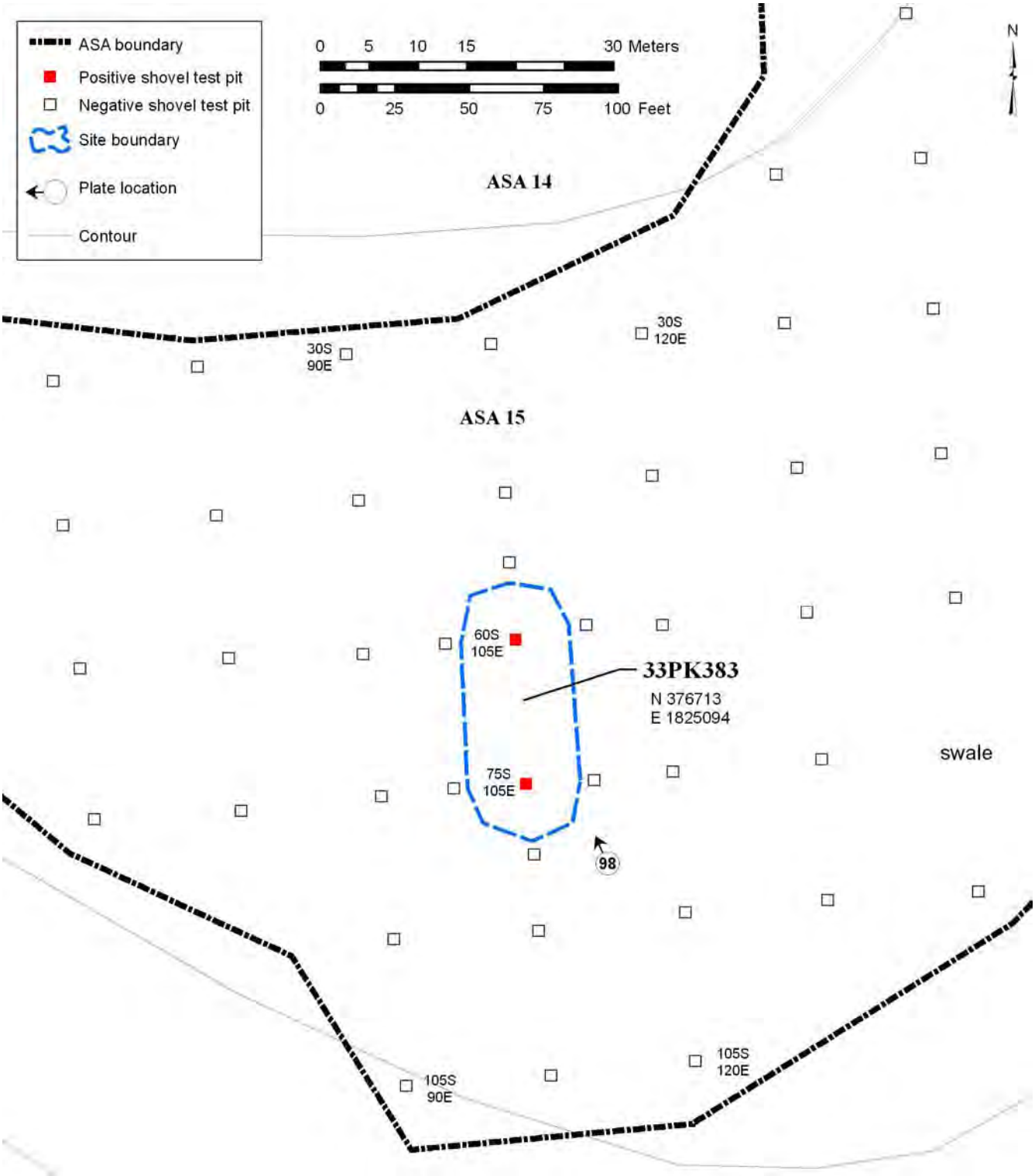
*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Continuation Sheet: Specify Section & Item (use additional Continuation Sheets if necessary)



Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 384

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 384

4. Site Name(s)

5. Project Site Number Site 2

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2031-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 6 0 5 0
Northing 4 3 2 1 9 3 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 22 W Not Applicable ____
Section 1 1/4 Section: ____ SW X SE ____ NW ____ NE
Township Name Seal

*4. Quadrangle Name Piketon

*5. Quadrangle Date 1979

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 384
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
Medial flake fragment	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___

_____ Unrecorded _____ Other (specify) _____ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___
_____ Military	_____ Weapons	_____ Transportation	___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___
_____ Clothing	_____ Unrecorded	_____ Unknown	___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent _____ Agriculture _____ Historic Construction __X__ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Eroded landform

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 226 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle __X__ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Shelocta-Latham association, steep
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW __X__ NE _____ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___4___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___180___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics ___ ___ ___

_____ Controlled-Unknown _____ Controlled-Total ___ ___

_____ Controlled-Sample _____ Unrecorded ___ ___

_____ Other (specify)_____ ___

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

Woods

*6. Site Area (square meters) 1 ___ ___ ___ ___

___ ___ ___ ___

Unrecorded _____ ___

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced ___

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify)_____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded ___

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____ ___ ___ ___

*10. Name of Form Preparer Chuck Mustain ___ ___ ___

*11. Institution ASC Group, Inc. ___ ___ ___

*12. Date of Form (year/month) 12/05 2 0 ___ ___/___ ___

*13. Field Date (year/month) 12/03 2 0 ___ ___/___ ___

14. Time Spent at Site _____

15. Weather Conditions Warm and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy ___ ___ ___

___ ___ ___

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK384 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck, and David Lamp
   2012 Phase I Archaeological Survey of Areas 5A, 5B, and 6A at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK384 is a prehistoric site situated in a wooded area with 0–10 percent visibility on a ridgetop above Little Beaver Creek. This area is sloping to the northeast with a gradient of 4 percent. The site was identified through shovel test pit excavations that indicated there is a ca. 10 cm deep, brown (10YR 4/3) silt loam A horizon at the site, from which the artifact was recovered. The habitable portion of the ridgetop is a small knob most of which was somewhat sloping. Several of the shovel test pits excavated on it were completely eroded (i.e., had subsoil at the surface). Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). There was no room on top of the landform to the northeast of the site, but radial shovel test pits were excavated at 7.5-m intervals in the other thee directions, none of which were positive. The assemblage is composed of a single medial flake fragment of unidentified chert. It is not temporally diagnostic. A minimum site size of 1 m x 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has suffered from erosion of the ridgetop. The OAI site type for 33PK384 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

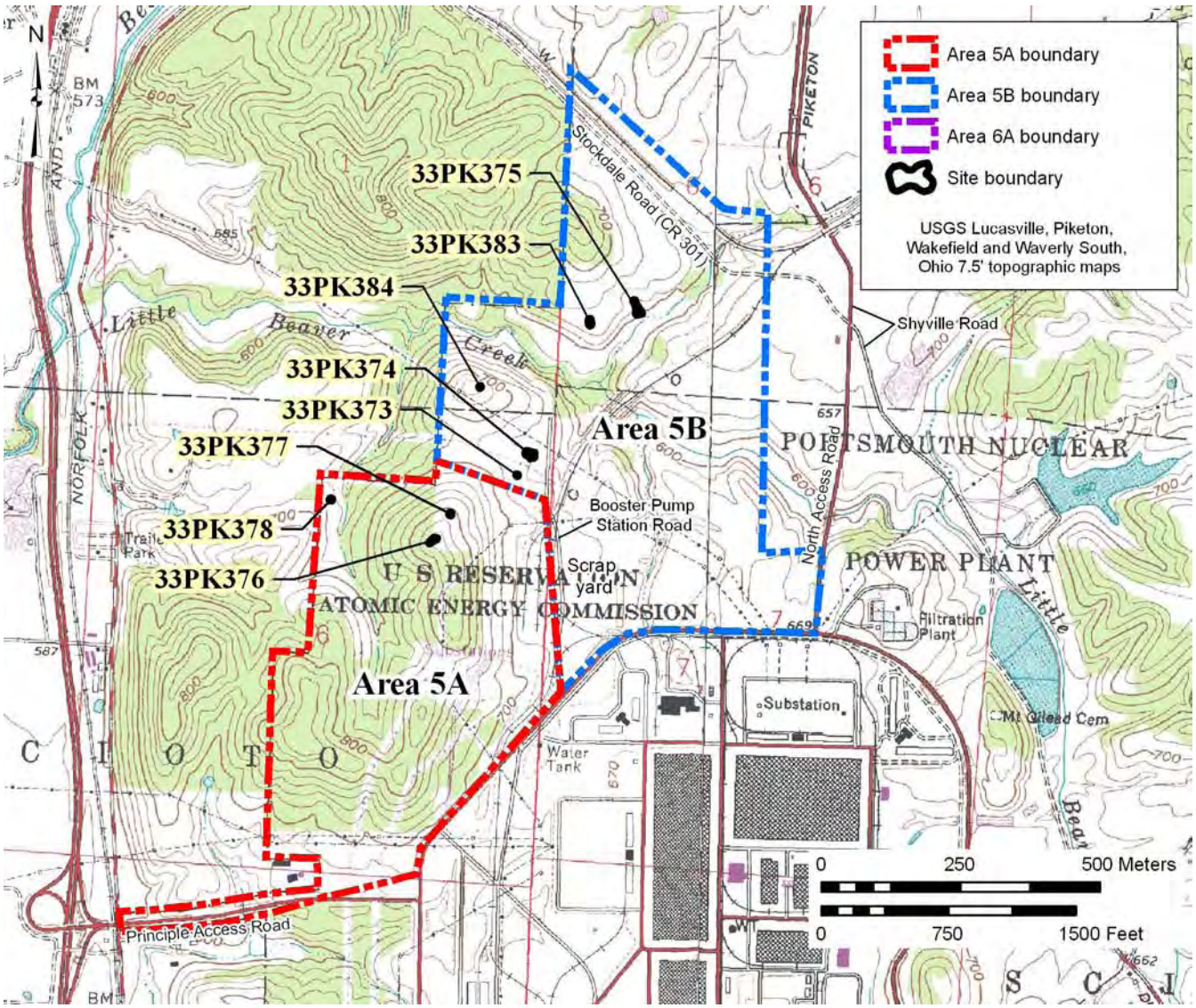
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of eight sites (six prehistoric and two historic) inventoried during a Phase I survey of Areas 5A, 5B, and 6A of the PORTS property. There is no known relationship between any of these sites or any of the other sites in the vicinty or the project area.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio

By

Chuck Mustain

Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio

By

Chuck Mustain

Submitted By:

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Submitted To:

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Piketon, Ohio 45661
740.897.2822

Lead Agency: United States Department of Energy

June 13, 2012

ABSTRACT

ASC Group, Inc. conducted Phase I archaeological investigations of a portion of the non-secured area on the Portsmouth Gaseous Diffusion Plant property in Scioto and Seal townships, Pike County, Ohio. The project area for the survey, designated as Area 1 in the Request for Proposal, is about 1,200 m–1,600 m (4,000 ft–5,200 ft) north-south and 1,200 m (4,000 ft) wide, encompassing 129.7 ha (320.35 ac) of dry glacial lakebed and adjacent unglaciated uplands. This area is just east of the Scioto River Valley along the edge of a pre-glacial river valley that contained Pre-Illinoian Lake Tight. Little Beaver Creek, which flows through Area 1, has cut across the glacial lakebed and into the bedrock. Area 1 contains wooded, scrubby, and grassy areas and is located along the northern periphery of the Portsmouth Gaseous Diffusion Plant property on either side of Shyville Road and the northern access road and northwest of a dammed ravine that now contains a sludge pond.

The archaeological investigation is being completed largely without a specific undertaking driving it. Rather, in light of several possible projects related to the remediation and re-use of the Portsmouth Gaseous Diffusion Plant, the United States Department of Energy is attempting to proactively evaluate and manage the cultural resources within the Portsmouth Gaseous Diffusion Plant property. The current research is intended to augment an earlier Phase I survey that was completed in 1997. Several recent studies by ASC Group, Inc., Ohio Valley Archaeology, Inc., and Gray & Pape, Inc., have focused on historic period sites on the Portsmouth Gaseous Diffusion Plant property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

Five soil types were defined in the Request for Proposal for the project. Two of them did not require testing because of extensive post-1952 disturbance associated with Portsmouth Gaseous Diffusion Plant activities or previous Phase II level archaeological testing. Cursory inspections of these areas were performed and they were photographed. The remaining portions of Area 1 were tested through cursory inspections of previously tested areas and a combination of visual inspection, shovel probe excavation, and shovel test pit excavation. Although large areas of slope are present along the edges of the glacial valley and the Little Beaver Creek Valley and a great deal of Area 1 has been disturbed, a substantial portion of Area 1 contains relatively undisturbed, dry, and generally level landforms. All of these landforms within Area 1 that had not been previously tested at the required interval were tested by digging shovel test pits at 15-m (50-ft) intervals.

Five sites (33PK339–33PK343) were documented in Area 1. Site 33PK340 is a small historic scatter and the other four sites are prehistoric isolated finds. None of the sites could be placed in their historic contexts and do not appear capable of yielding data sufficient to be judged significant. Therefore, they are not recommended eligible for inclusion in the National Register of Historic Places. With two exceptions —potential forthcoming recommendations for the treatment of historic sites documented in recent studies and a geomorphological investigation of the Little Beaver Creek floodplain and that of its major tributary in Area 1—no further work is recommended within Area 1 of the Portsmouth Gaseous Diffusion Plant property or at 33PK339–33PK343 if they are impacted by a future undertaking.

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INTRODUCTION

Under contract with Fluor-B&W Portsmouth, LLC, ASC Group, Inc. (ASC), completed Phase I archaeological investigations of a portion of the non-secured area at the Portsmouth Gaseous Diffusion Plant (PORTS) property in Scioto and Seal townships, Pike County, Ohio (Figure 1). The current research is intended to augment an earlier Phase I survey completed by Schweikart et al. (1997). Recent studies by ASC, Ohio Valley Archaeology, Inc. (OVAI), and Gray & Pape, Inc. (G&P), have focused on historic period sites on the PORTS property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

The project area for the survey, designated as Area 1 in the Request for Proposal (RFP), is located along the northern periphery of the PORTS property on either side of Shyville Road and the northern access road and northwest of a dammed ravine that now contains a sludge pond (Figure 2). Containing wooded, scrubby, and grassy areas, it is about 1,200 m–1,600 m (4,000 ft–5,200 ft) north-south and 1,200 m (4,000 ft) wide with an area of 129.7 ha (320.35 ac). Area 1 is situated along the edge of a pre-glacial river valley. The valley floor is the dry glacial lakebed of Pre-Illinoian Lake Tight and the edges of the valley are uplands in the unglaciated Allegheny Plateaus (Brockman 1998; Pavey et al. 1999). Little Beaver Creek, which flows through Area 1, has cut across the glacial lakebed and into the bedrock.

The purpose of this investigation is to provide information for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended. The archaeological investigation is being completed largely without a specific undertaking driving it. Rather, in light of several possible projects related to the remediation and re-use of PORTS, the United States Department of Energy (DOE) is attempting to proactively evaluate and manage the cultural resources within the PORTS property. Five soil types were defined in the RFP for the project (Figure 3), two of which did not require testing because of extensive disturbance or previous Phase II archaeological testing. Survey efforts for the project focused on the areas containing the other three types of soils.

The survey was completed in accordance with *Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines* (Federal Register 1983). The federal standards are supplemented by the Ohio Historic Preservation Office (OHPO) [1994] *Archaeology Guidelines*. The goals of this survey were to identify and document archaeological

resources in area that have not been inventoried by previous studies, and, if possible, to determine if any of the identified resources might be eligible for inclusion in the National Register of Historic Places (NRHP). The evaluation of eligibility followed the NRHP criteria for evaluation (Andrus 1997).

Chuck Mustain supervised the fieldwork for the Phase I archaeological testing, which was conducted January 10–February 3, 2012. The field technicians were Margit Gitti Bertalan, Dale Castor, Arthur Ramcharan, Charlie Rose, Chase Searles, and Scott Shupe. The weather was variable with periods that were unseasonably warm and occasional snow and rain. Although some of the rain was heavy enough to halt fieldwork, the weather did not unduly hamper the survey or affect its results. The principal investigator and project director was David Klinge, MA, RPA. This report outlines the methods and results of this Phase I cultural resources survey.

RESEARCH DESIGN

RESEARCH GOALS

The primary goal of a typical Phase I survey is to locate and identify archaeological resources within a study area. If possible, a secondary goal is to collect sufficient data to make a preliminary determination of any identified resource's eligibility for inclusion in the NRHP. As such, it is difficult to link the Phase I study with a specific research design outside of the basic goals of anthropological and historical research. These goals include the construction of cultural chronologies, the reconstruction of past lifeways, and the search for the processes of cultural change.

Recent efforts have been taken to document historic period sites on the PORTS property. However, the results of much of the most recent research are not presently available and will not be addressed in any detail in this report. Although previously undocumented historic sites encountered during this survey are being inventoried, the focus of the current investigation is to locate and document prehistoric sites. If possible, sufficient information will be collected to offer an opinion about whether any documented cultural resources are eligible for listing in the NRHP. The current survey is designed to complement a Phase I survey of the PORTS property conducted by Schweikart et al. (1997) that documented 36 sites, taking into account as much of the recent archaeological testing as possible based on the limited information that is available at this time.

BACKGROUND RESEARCH

To conduct an effective archaeological survey, it is necessary to have an understanding of the environmental setting as well as the prehistoric and historic setting of a study area. Additionally, it is beneficial to be aware of the previous archaeological research that has been conducted in the vicinity. With this information it is possible to develop a general understanding of the prehistoric settlement patterns and systems and historic development in the region. This understanding can guide field investigations and inform the interpretation of any cultural remains that are encountered. In this instance, a great deal of environmental and cultural background data has already been gathered about the PORTS property.

Environmental Setting[1]

It is generally accepted that human occupation in the eastern United States started between 11,000 and 13,000 years ago, depending on the particular dates that are accepted (Lepper 1986). The environmental data for the period are incomplete, but preliminary studies based on the pollen record suggest that the period from 12,000 to 7000 B.C. was a time of major vegetation and climatic change (Shane 1994). Warming trends in the late postglacial periods resulted in the replacement of spruce forests and spruce woodlands with coniferous-deciduous forests. By approximately 8000 B.C., the environment had begun to resemble the present-day environment. Data recorded by early Euro-American settlers in the region along with environmental information derived from recorded archaeological and geological data can be utilized to approximate the environment in which the prehistoric people of Ohio lived.

Pike County is situated within the unglaciated Allegheny Plateaus Section of the Appalachian Province (Brockman 1998). Beyond the broad Scioto River valley, the terrain is hilly and cut by narrow, steep-sided tributaries. Upland elevations range between 171 m (560 ft) and 360 m (1,180 ft) above mean sea level (AMSL) with elevations averaging 168 m (550 ft) AMSL in the Scioto River valley (Fenneman 1938). Bedrock in the vicinity of the project area consists of a complex mix of Lower Mississippian and Upper Devonian sandstones, limestones, and shales in the uplands and along pre-glacial valley trains (Slucher 2006). The Scioto River flows through a deeper, glacial valley that has cut through these layers into the Upper Devonian Ohio Shales (Slucher 2006; United States Department of Agriculture, Soil Conservation Service [USDA, SCS] 1990). According to Stout and Schoenlaub (1945), no flint sources are known within the county, excluding glacial chert cobbles in the river and stream valleys.

Almost all of Pike County is drained by the Scioto River and its tributaries, such as Beaver Creek, Little Beaver Creek, and Big Run, which drain the northern and southern portions of the PORTS property. Drainage is generally good, except for occasional flooding that can occur in the spring (USDA, SCS 1990). Below 165 m (540 ft) AMSL of elevation, the active floodplain has been altered by the meandering of the Scioto River.

Upland areas east of the Scioto River, including portions of the PORTS property, have been affected by the pre-glacial Teays River that drained much of the southeastern United States.

[1] Adapted from Mustain and Klinge (2011a).

This abandoned valley is filled with sands, silts, and old alluvium, along with various lacustrine clays and local colluvium, alluvium, and loess. Glaciers blocked the Teays channel and formed Lake Tight. Most of the PORTS property is located on the dry bed of this Pre-Illinoian glacial lake (Pavey et al. 1999; USDA, SCS 1990).

During early glacial advances the Newark River cut a channel through what was to become the Scioto River valley in Pike County. This channel was deeper than the pre-glacial Teays River and the channel of the Scioto River today. Furthermore, smaller tributary streams also cut deeper into side valleys that were later filled with local colluvium and alluvial sediments. Outwash terraces formed of meltwater sediments deposited during the Wisconsinan and earlier Illinoian periods are present in the Scioto River valley west of PORTS. Glacial till deposits are restricted to the extreme northwestern corner of the county along Massie Run in Perry Township and exist in very small areas along the glacial boundary (Pavey et al. 1999; USDA, SCS 1990).

The PORTS property encompasses pre-glacial valleys that contained a glacial lake and moderate to steeply sloped and dissected uplands that are correlated with two soil areas: Olmulga soils in and along the edges of the glacial lakebed in the valley and Shelocta-Latham soils in the adjacent uplands. Soils in the Olmulga map unit are described as deep and moderately well-drained soils on slight rises at the head of drainageways, high saddles, and on side slopes in pre-glacial valleys. They formed in loess, colluvium, and old alluvium. Soils in the Shelocta-Latham map unit are described as deep and moderately deep, strongly sloping to steep; well-drained and moderately well-drained, and formed in colluvium and residuum derived from shale, siltstone, and sandstone on hillsides and ridgetops in the uplands (USDA, SCS 1990).

Prior to widespread Euro-American settlement in the region, uplands (including the western portions of the PORTS property) were covered by Mixed Mesophytic forest, which included associations of oak-chestnut-tulip tree, oak-hickory-tulip tree, white oak-beech-maple, and hemlock-beech-chestnut-red oak. Mixed Mesophytic forests prefer moister and more shaded areas that are often on north-facing slopes or in narrow valleys or hollows (Gordon 1969).

The eastern portions of the PORTS property were once covered by Mixed Oak forests, which included associations of white oak-black oak-hickory, white oak-black oak-chestnut, and oak-chestnut types. Mixed Oak forests occurred on the drier south-facing slopes or other areas prone to late summer drought in unglaciated areas (Gordon 1969).

In the adjacent Scioto River valley, extensive bottomland forests covered the valley floor. Depending upon differences in elevation, wetness, and underlying soils within the valley, bottomland hardwood associations include such trees as beech-white oak, beech-maple, beech-elm-ash-yellow buckeye, elm-sycamore-river birch-red maple, and sweet gum-river birch (Gordon 1966).

Within the PORTS property, understory growth would have been composed of numerous small shrubs and trees with natural openings in the forest filled with seed and wild berry colonizers. Sedges, cattails, and other marshy plants would have been available in wet marshy areas along Little Beaver Creek and other wetland areas.

Archaeological investigations at the nearby Madeira Brown site (33PK153), located just north of PORTS on a terrace of the Scioto River near the intersection of US 23 and SR 32, yielded evidence of prehistoric utilization of hickory, hazelnut, walnut, acorn, and squash during the Late Archaic period. Features dating to the Middle Woodland period yielded economically important seed species such as goosefoot, amaranth, *Mollugo*, *Galium*, pokeberry, raspberry, and maygrass, indicating that both domesticated and wild plants were utilized prehistorically in the vicinity (Church 1995).

The fauna in southern Ohio has been greatly affected by modern patterns of land use. Many species that were adapted to forest environments faced habitat loss when these original forests were cleared, and have to varying degrees re-established themselves in areas allowed to revert to forest growth.

By post-Pleistocene times, the faunal component of the landscape would have included most of the species noted by early Euro-American explorers and settlers. Animal species included large mammals such as elk, white-tailed deer, bear, and wolf, a variety of medium-sized animals like raccoon, woodchuck, bobcat, dog, red fox, gray fox, coyote, beaver, muskrat, opossum, and skunk, as well as a number of small mammals including gray and fox squirrels, ground squirrels, chipmunks, wood rats and field mice. Avian species included flocks of wild turkey, bobwhite, quail, passenger pigeon, and a wide variety of migratory fowl. Reptilian species present in the region included a variety of snakes (poisonous and nonpoisonous species), turtles, as well as numerous amphibian, piscean, and molluscan species in the Scioto River, tributary streams, ponds, and marshy areas. Faunal resources utilized by the Late Archaic

prehistoric inhabitants of the nearby Madeira Brown site (33PK153) included white-tailed deer and turtle, as well as small avian and molluscan species (Church 1995).

To summarize, seasonal resources in the vicinity of PORTS were many and varied. Probably the prime season of natural abundance, as elsewhere in the Eastern Woodlands, would have been from late summer into late fall, when wild seeds and berries were ripening, nut mast was produced, animals were at their fattest, and herds and flocks of migratory species were congregating. For prehistoric and historic inhabitants involved in food production activities, the pre-glacial valleys and terraces of the PORTS property would have served as productive areas for crop or livestock production with convenient access to the Scioto River and routes for interregional communication and exchange.

Cultural Overview

The intent of this section is to develop broad overview for the region containing the project area that can be used for predicting the locations and types of sites and for interpreting the significance of cultural resources documented during the field reconnaissance. The prehistoric and historic settings are basic in scope yet specific enough to encompass variation in land-use and settlement patterns.

Prehistoric Setting[2]

It is estimated that the occupation of Ohio would have been possible approximately 13,000 to 13,500 B.C. By this time the glaciers that had once covered the northwestern two-thirds of Ohio had retreated to Ontario (Seeman and Prufer 1982). The Paleoindians, the first known prehistoric population to occupy Ohio, were highly mobile, small-band hunters moving on a seasonal basis in order to more fully exploit the available natural resources (Dragoo 1976). Although probably in pursuit of herd animals, the Paleoindians opportunistically utilized a broad spectrum of animal and plant resources.

Data pertinent to the content of Paleoindian sites in Ohio is extremely rare. Information concerning the distribution of Paleoindian sites in Ohio was documented by Prufer and Baby (1963) and subsequently updated by Seeman and Prufer (1982). Seeman and Prufer (1982) attributed the low density of fluted points in Pike County to ecological factors relating to a poor habitat in the area for the large herbivores the Paleoindian preyed on. In contrast to this

[2] Adapted from Klinge and Mustain (2011) and Schweikart et al. (1997).

interpretation, more recent studies by Lepper (1983) suggest that the low frequency of Paleoindian points in the unglaciated plateau is attributable both to the low population of individuals in these areas who would search for and report these finds, and to the limited acreage under agricultural production. The latter characteristic is a measure of potential exposure of prehistoric artifacts. Lepper (1983) suggests that there may have been a larger Paleoindian population within the unglaciated plateau than is currently reflected by fluted point distributions.

The Archaic era has been subdivided into three separate temporal periods. Traditional interpretations suggest that during the Early Archaic period (9000 B.C. to 6000 B.C.), small mobile groups gradually became more geographically restricted. Seasonally oriented hunting-and-gathering activities were focused on smaller, well-exploited territories; this orientation is seen as a direct link to the expansion of the deciduous forests that produced a more favorable habitat for game species (Chapman 1975). Although hunting was a major subsistence activity, a narrow spectrum of nutritious plant foods was also utilized (Chapman 1975; Cleland 1966). This transition is marked in the material culture by a change from lanceolate spear points to a series of notched and stemmed points (Broyles 1971).

During the Middle Archaic period (6000 B.C. to 3000 B.C.), the economy became more diffuse as a wider selection of plant foods was exploited, but the major emphasis was still on hunting (Cleland 1966). The broadening economy is reflected in the material culture as well. Specifically, plant-processing tools appear in artifact assemblages. Most of these implements were ground stone rather than chipped stone, indicating the need for durable surfaces and edges. These types of tools included grooved axes, pestles, metates, and nutting stones. Atlatl weights are also noted (Broyles 1971; Lewis and Lewis 1961).

During the Late Archaic period (3000 B.C. to 900 B.C.), the expansion of the deciduous forest reached its northernmost limit, and the climate was warmer than the present day (Cleland 1966). An increase in territorial permanence is suggested by the appearance of regional adaptations (Chapman 1977; Vickery 1980). These adaptations are characterized by a variety of projectile point styles that exhibit stylistic ties with the eastern states, such as the Brewerton and Ashtabula point types (Ritchie 1961; Witthoft 1953), and areas to the south, such as the Buffalo Stemmed points (Broyles 1971). This hypothesized increase in territorial permanence is supported by the appearance of regional adaptations which differentiated southern Ohio from other areas in the Ohio Valley (Winters 1968). Furthermore, this period in general shows a more

efficient and broad-based exploitation of local animal and plant resources, evidenced by the recovery of charred botanical remains of a variety of nutshells, including acorn, hazelnut, hickory, and black walnut. Fruit was also becoming an important food resource as documented by the diversity of fruit seeds such as grape, blueberry, raspberry, and strawberry (Dye 1977; Yarnell 1974).

Archaic projectile point finds are common in southern Ohio; however, few sites have contained in situ cultural deposits, and thus may represent only single, short-term occupations. One important exception to this is the identification of Late Archaic features and associated artifacts at the Madeira Brown site (33PK153), which is located 3.2 km (2 mi) north of PORTS in Seal Township, Pike County, Ohio (Church 1995).

Earlier research drew a distinction between the Archaic and Woodland periods based on the introduction of agriculture, elaborate burial ceremonialism, and the appearance of ceramics. However, more recent evidence has demonstrated a continuum from the end of the Archaic through the Middle Woodland period for the intensification of horticulture and the formalization and elaboration of mortuary practices (Dragoo 1976). The innovation and adaptation of these traits by the different human groups was not uniform, but occurred at different rates in different regions. The introduction and use of these traits had to be synchronized with the perceived biological and social needs of the different human groups. Consequently, the rate of change in subsistence and mortuary practices varies from region to region, with some local groups maintaining Late Archaic lifestyles through the Late Woodland, while other groups, primarily those along the main river valleys like the Scioto River valley, underwent rapid transformations.

In central and southern Ohio, the local Early Woodland expression from around 900 B.C. to 100 B.C. is called the Adena culture, and is noted for the manufacture of Fayette Thick, Adena Plain, and Montgomery Incised ceramics, and the use of conical burial mounds for interment (Greenman 1932; Webb and Baby 1957). In addition to the above-mentioned ceramic types and conical-shaped mounds, several projectile point forms are diagnostic of the Early Woodland period, including Adena Stemmed, Cresap, and Robbins (Converse 1973; Dragoo 1963). The production of these materials and associated activities could well represent a continuation and elaboration of local Late Archaic lifeways, particularly in terms of mortuary ritual. Early Woodland period mounds seem to have functioned as the focus for community identity, being constructed during a number of building episodes that occasionally culminated in very large

earthworks such as the Miamisburg mound in southwestern Ohio and the Cotiga and Grave Creek mounds in West Virginia. However, in marked contrast, the few Adena habitations that have been investigated in the region appear to have been generally small, possibly seasonally-occupied residences of small groups or family units dispersed within defined territories which may have shared ritual facilities with adjacent groups (Clay and Niquette 1989; Schweikart 1997).

There is considerable evidence for Early Woodland occupation in the lower Scioto Valley as indicated by numerous conical mounds, many of which are probably Adena in origin. However, corresponding Early Woodland habitation sites have been far less conspicuous in the region (Prufer 1975a).

The Middle Woodland period in central and southern Ohio lasted from around 100 B.C. to A.D. 500 and was characterized by the construction of elaborate geometric earthworks, enclosures, and mounds that were often associated with multiple burials, and a diverse assemblage of exotic artifacts (Brose and Greber 1979). For this region, the term "Hopewell" has become synonymous with the Middle Woodland period. Ceremonially, Hopewell appears to have developed out of the local Adena culture in the Scioto Valley, albeit on a more expanded and spectacular scale (Greber 1991; Prufer 1964). Hopwellian trade networks were extensive, and raw materials for ceremonial objects were obtained from across much of North America (Seeman 1979). Like the preceding Adena culture, most of the early research on the Hopewell focused on the earthworks and their contents. It was not until late in the twentieth century that efforts were made to investigate the domestic sphere and to reevaluate interpretations of economic, ceremonial, social and political aspects of the Hopewell culture (cf. Brose 1979; Church 1984; Ford 1979; Greber 1979; Pacheco 1988; Prufer 1965; Seeman 1979; Wymer 1992; Yerkes 1990).

Prufer (1975b) interpreted the Middle Woodland period in Ohio as a dual tradition. One level or tradition was the Hopewell culture, which consisted of vacant ceremonial centers surrounded by dispersed agricultural communities, while the second tradition consisted of local Middle Woodland traditions that did not participate in the Hopewell tradition. Pacheco (1988, 1992) and Dancey and Pacheco (1992) developed the "Vacant Ceremonial Center Model" or "Hamlet Hypothesis," which suggested that Hopewell habitations represent dispersed sedentary agricultural hamlets associated with major unoccupied earthwork complexes. A growing body of

data from excavated Middle Woodland habitation sites from across the region has shown that there is significant variability in the expression of Hopewell habitations which may require modifications to the original model (Aument 1992; Church and Ericksen 1997; Genheimer 1992).

During the Middle Woodland period, the Scioto River valley in southern Ohio was one of the largest and most elaborate Hopewell culture centers. Numerous extensive earthworks were constructed, some of which, like the Piketon Mounds (33PK1) and Scioto Township Works I (33PK22), are or were either in the vicinity of or adjacent to PORTS.

The Late Woodland period in Ohio (approximately A.D. 500 to A.D. 900) has often been viewed as a prehistoric "dark age" following the disappearance of the elaborate earthworks and evidence of mortuary ceremonialism that came to define the Hopewell period in the region. However, investigation of several Late Woodland sites in central and southern Ohio and elsewhere (e.g., Church 1987, 1991, 1992, 1996; Nass et al. 1990; Shott et al. 1990) has identified nucleated and sometimes strategically located settlements (Dancey 1992; Seeman 1980), refinements in ceramic technology (Braun 1988), and evidence for increasing effects on the local environment resultant from horticultural dependence (Wymer 1992, 1996). This research has largely changed the prevailing view of the Late Woodland as a period of cultural stagnation (Rafferty 1985; Railey 1984, 1992).

During the early part of the Late Woodland period in central and southern Ohio, sites consisted of small nucleated settlements frequently located on bluff edges along major streams or rivers with encircling ditches or low embankments (Church 1987). Ceramics and point types appear to have developed out of earlier utilitarian Middle Woodland forms, with the notable exception of the blade core industry, which appears to have ended with the Middle Woodland period (Odell 1994). During the latter part of the Late Woodland, the appearance of the bow and arrow and a developing reliance upon maize after A.D. 800 coincides with nucleated settlements giving way to smaller, more dispersed settlements located on terraces or floodplains, and—with higher frequency—in the uplands (Church 1987; Shott et al. 1990). Furthermore, these late Late Woodland sites begin to develop traits indicative of early Late Prehistoric assemblages (Church 1987).

While a number of sites in the region contain Late Woodland components, major investigations of Late Woodland sites near PORTS are lacking. Two Late Woodland sites that

have been investigated in the region include the Harness 28 site (33RO186) near Chillicothe (Skinner 1986) and the Bentley site (15GP15), which is located south of the Ohio River in Greenup County, Kentucky, across from Portsmouth (Henderson and Pollack 1985).

The Late Prehistoric period in Ohio extends from approximately A.D. 900 to A.D. 1600. In southern Ohio the Fort Ancient culture emerged out of local Late Woodland cultures. The development of Fort Ancient was stimulated by a growing reliance on maize agriculture, increased sedentism, and an influx of southern Mississippian influences (Brose et al. 1978; Church 1987; Essenpreis 1978). Ceramic attributes were probably the earliest influences to enter the Ohio Valley with the appearance of shell-tempered pottery (Brose et al. 1978).

The Fort Ancient subsistence economy was based on the cultivation of maize, beans, and squash, with supplemental hunting. Settlements were occupied year round and were concentrated along the major rivers (Essenpreis 1978). During the middle of the Late Woodland period, circular palisades were often associated with Fort Ancient villages (Brose et al. 1978). Griffin (1943) has identified four distinctive areas for the expression of Fort Ancient culture in southern Ohio that were centered on different parts of the major river valleys. Within the vicinity of PORTS, two of these phases are most relevant: the Baum phase in the Chillicothe area and the Feurt phase near the mouth of the Scioto River.

The Baum phase is known from excavations at the Baum site and other related village sites which are primarily located in Ross County (Prufer and Shane 1970). These sites generally date from A.D. 1000 to A.D. 1500. These Baum phase sites show a clear continuity with earlier Late Woodland occupations (Griffin 1978).

The Feurt phase is perhaps the least known of the Fort Ancient phases, and is named for the Feurt site in Scioto County, Ohio. The mortuary regimen and pottery complex at these village sites differ from the other phases, but show an early connection with the Baum phase (Griffin 1978).

Only a few Late Prehistoric components have been identified in and around Pike County and little can be said conclusively about them. However, PORTS sits nearly equidistant between the center for the Baum phase to the north and the Feurt phase to the south. The Pike County area may represent a transitional zone between these two Late Prehistoric cultural expressions.

Around A.D. 1550, Late Prehistoric groups in western Pennsylvania procured materials that indicate indirect contact with European settlers (Herbstritt 1983). These materials include

wire-wound beads, copper tinklers, and native-manufactured artifacts such as triangular glass and metal pendants made from imported European goods. In contrast to later sites, there is no change in intrasite patterning or subsistence procurement strategy. Recognition of protohistoric sites is based solely on the occasional occurrence of European trade items (Skinner and Brose 1985). This influx of trade items is documented in the Middle Ohio Valley approximately A.D. 1650 to A.D. 1750 at two contact period sites in Greenup County, Kentucky (Pollack and Henderson 1983). The difficulty in recognizing these sites given the limited changes in the material culture undoubtedly has resulted in the lack of proper protohistoric designations. No known sites of this period have been documented in Pike County.

Historic Setting[3]

Intensive Euro-American occupation in Pike County can be traced to the mid-1790s, when the first permanent settlers moved into the region from Pennsylvania and Virginia. Those first settlers established themselves on the Pee Pee Prairie northeast of Waverly and approximately 13.6 km (8.5 mi) north of Area 1 (Howe 1902). During the first decade of the nineteenth century, settlement was slowed by rising tensions with western and northern Native Americans and British forces in Canada, culminating in the War of 1812. After the conclusion of that conflict, the pace of settlement in Pike County increased greatly (Howe 1902).

Pike County was established from portions of Ross, Highland, Adams, Scioto, and Jackson counties, all of which had been established in the preceding decades. The county is roughly bisected by the Scioto River, and the western half falls within the Virginia Military District (VMD). The VMD was a reservation of 1,701,561 ha (4,202,856 ac) between the Little Miami and Scioto rivers that was set aside for the Virginia soldiers of the Revolutionary War. The part of Pike County east of the Scioto River is located in an original Ohio land subdivision called the Congress Lands. This was surveyed in 1798 to 1802 under the regulations of the Land Ordinance of 1796, which specified the rectangular method of surveying. This method called for dividing the land into square townships, arranged into north-south ranges. The townships were composed of 36 one-mile square sections that are 259 ha (640 ac). Each section was divided by "quarter lines" into 64.75-ha (160-ac) quarter sections, which, after the Land Act of 1800, were the smallest units of land sold by the government, at $2.00 per acre (Bond 1941). Whereas many

[3] Adapted from Mustain and Klinge (2011a).

of the earliest settlers within the VMD hailed from Virginia, present-day West Virginia, and Kentucky, many of the first settlers in rest of Pike County came from Pennsylvania, with a significant number of German immigrants settling in the eastern half of the county after approximately 1825 (Howe 1902).

With the exception of broad river valleys surrounding the Scioto River and Beaver Creek and a handful of smaller valleys formed by lesser watercourses, Pike County is largely covered by hills that can be steeply sloped. Contrary to anticipated patterns of settlement in similar geographic regions, many of the first generation of settlers in Pike County did not clear and settle along the river bottoms, but rather established their farms along the side slopes of the many hills. The river bottoms were reportedly so densely overgrown that clearing the open woods along the hills was easier for the small labor force that typically accompanied an immigrating family (Howe 1902). However, the Upland South settlement pattern that originated in Appalachia suggests the use of marginal uplands rather than more fertile lowlands may be connected to the cultural origins of the settlers (Smith 1993). Although the valley bottoms are well-developed and productive farmland today, this pattern of hillside subsistence persisted throughout the development of Pike County and culturally connects the region to other portions of Appalachia. This settlement pattern persisted in the region despite changes in the immigrant base and the rise of other patterns as the region became more settled (Schweikart and Coleman 2003).

Although Pike County includes part of the rich Scioto Valley, most of the county is much less productive. The Scioto Valley in Pike County shares many characteristics with Ross County, while the remainder of the hilly and dissected county is more typical of other portions of Appalachian Ohio. Agriculture was the primary industry of the initial settlers in Pike County. Subsistence was provided by cultivating crops or raising livestock to feed the family and to sell locally for cash, or to barter for necessary items. Although new settlers were largely self-sufficient out of necessity, they still had to trade for basic supplies such as coffee, tea, salt, sugar, hardware, farm implements, and cloth, dispelling the myth of the entirely self-reliant first generation settler that pervades our popular understanding of American history.

During the first generations of settlement, farm life and labor was largely egalitarian in that all members of a household participated in the family economy. Gender-based labor divisions were diminished, as the all available labor was employed to clear fields, plant crops, tend livestock, and harvest/store foodstuffs. This egalitarianism tended to fade as settlement

progressed and the thrust of agriculture moved away from household consumption and toward a professionalized, market-based activity (Hartgen Archeological Associates 2004). The average settler family cleared only 2 ha to 3 ha (5 ac to 7 ac) of their land per year. Generally, they used a small portion of land (approximately 4 ha [10 ac]) for crops and reserved plenty for pasture for animals and forest for firewood and hogs.

Corn was the most important crop of the initial settlers. It was grown primarily to be consumed on the farm by the family and by the livestock, particularly since the method of cattle feeding depended on the corn crop. It was invariably the first crop planted by the initial settlers as it did relatively well regardless of topography or soil conditions and was of benefit to the settlers during their first year (Jones 1983). However, the soils and topography of Pike County were not, and are not, suited for large scale crop farming, and cattle raising was an important early industry brought by the settlers from western Virginia, Pennsylvania, and Kentucky. Early cattle needed a minimum of care and were generally free range year-round. Milk and meat were sold locally (Jones 1983).

Hog production developed simultaneously with the cattle feeding industry as pigs require as little, if not less, care during the first years of settlement. Initially allowed to roam free as were the cattle, the South Branch method of feeding cattle and hogs in feedlots came to dominate the raising of these creatures in the nineteenth century. Hog raising emerged as a significant agricultural practice in the Scioto Valley starting in 1840, and the region was the third most productive for hogs in Ohio by the 1850s and 1860s. Fattened hogs were usually driven to pork-packing centers like Cincinnati, Chillicothe, and Marietta (Jones 1983). The ability to drive livestock to market alive was important to the region in the mid-nineteenth century, as a transportation network capable of quickly delivering perishable goods did not exist at the time.

In the second quarter of the nineteenth century, the Ohio and Erie Canal brought some measure of prosperity to the farms of the area and connected inland portions of eastern and central Ohio with national markets (Jones 1983). At the time, corn remained the most important crop in the Scioto Valley, but wheat production rose as ground flour was readily shipped to markets along the Mississippi River and the Eastern Seaboard through the canals. Higher wheat production resulted in an expansion of the milling industry within the county. Starting in the mid-nineteenth century, the railroad made for faster transport to eastern markets and the price of

corn rose based on demand from these additional markets. The rising cost of corn limited the raising cattle and hogs, which were dependent on inexpensive feed (Jones 1983).

In 1887, Pike County had about 25,000 ha (61,000 ac) of woodland, 24,000 ha (60,000 ac) of cultivated land, 20,000 ha (50,000 ac) of pasture and 2,400 ha (6,000 ac) unused. The major agricultural products were about 17,619 m^3 (500,000 bushels) of corn, 4,757 m^3 (135,000 bushels) of wheat, and 2,960 m^3 (84,000 bushels) of oats. Other products included rye, buckwheat, hay, potatoes, tobacco, butter, sorghum, maple syrup, eggs, grapes, wine, sweet potatoes, apples, peaches, pears, and wool (Howe 1902).

The agricultural economy continued to flourish after industrialization. Industrialization brought about innovations in agricultural implements, increasing the efficiency of farm production. Farm acreage continued to increase into the 1910s (Noble and Korsok 1975). This era saw most counties within Ohio shifting to manufacturing and other industries that developed, in large part, as a result of industrialization. One of the major demographic impacts of industrialization was the rapid and widespread growth of urban centers in the late nineteenth and early twentieth centuries. Pike County, however, remained almost entirely rural.

Agricultural production collapsed during the Depression in the 1930s. As a result, many rural workers migrated to urban centers to find work. Agricultural production experienced a slight boost in production after the Second World War, which also saw the rise of large mono-crop farms in place of the smaller farms with more a more diversified crop yield that characterized much of the region prior to the war (Kiefer 1972; Noble and Korsok 1975). Farming practices changed after World War II, from farms that traditionally fielded several crops on smaller amounts of acreage to farms that fielded a single crop on a larger amount of acreage.

After the initial period of settlement, transportation infrastructure played an important role in the historical economic development of Pike County, as it did elsewhere. Types of transportation included rivers, trails, roads and railroads. The use, construction and improvement of these transportation methods altered the pattern of settlement and farming. Settlers entered the area on the transportation routes that were available, and typically preferred to live near a means of transportation. Easier access to markets provided material benefits in delivering goods as well as securing goods and materials that were not produced at home. Improvements to transportation routes provided markedly easier market access, which in turn provided the impetus to farmers to increase their cultivated land and their income (Noble and Wilhelm 1995).

The Scioto River was a significant navigable natural waterway in Pike County, which drew early settlers to enter the area. Before the Ohio and Erie Canal was built, most Scioto Valley produce was rafted down the Scioto River to the Ohio and Mississippi rivers and then to southern markets (Howe 1902). The Scioto River probably fell out of use when the canal became operational. Overland routes used by the settlers were Native American trails, which often dictated the first settlement locations. Ohio possessed a network of trails weaving through the forests and prairies and complementing the system of waterways. A few were of transcontinental importance, and some were of regional importance, and many were minor trails connecting one obscure Native American village to another. Mapping and descriptions of these trails tend to be ambiguous and conflicting, with early roads often confused with the older and somewhat different trails. The importance of some trails has been exaggerated or obscured simply because one was recorded and another was not. Various trails were in different levels of use at different times, as dictated by the location of Native American towns, availability of open land, and warfare (Conway 1965).

Four distinct trails are indicated in Pike County. The first and most important was the Scioto Trail or Warrior's Path, running through the Scioto Valley and connecting the Ohio River at the mouth of the Scioto with Lake Erie at Sandusky Bay. This was one of the most important north-south trails in the Ohio Country, connecting to trails feeding southward into Cherokee territory. The Scioto Trail in Pike County ran along the west side of the Scioto River. At what is now Waverly, it headed northward toward Chillicothe and cut across a low divide, bypassing the eastward swing of the Scioto River. This route is approximated by US 23 north of Waverly and SR 104 south of Waverly (Conway 1965; Hulbert 1900; Lewis and Dawley ca. 1902; Mills 1914). The second distinct trail is an unnamed route running east-west through what is now Piketon. It is approximated by Beaver Road, Zahns Corner Road, probably Prairie Road, and farther west by SR 220 and SR 124. It primarily connected Pee Pee, the early settlement near Piketon, to the salt works at what is now Jackson, Ohio (Conway 1965; Lewis and Dawley ca. 1902).

Two other distinct trails were in the western part of Pike County. One was the Pickawillany Trail, running northwestward. Another was the route followed by Colonel Robert Todd in a military expedition in 1787, and later improved by Ebenezer Zane as Zane's Trace (Conway 1965; Lewis and Dawley ca. 1902; Schneider and Stebbins 1973). In 1796, a year after

the Greenville Treaty made most of Ohio safe for settlement, Congress contracted Ebenezer Zane to open a road between Wheeling, West Virginia, and Maysville, Kentucky. Known as Zane's Trace, this road extended through the western part of Pike County, running through what is now Morgantown and Latham. This trace represented the first attempt to open a public thoroughfare through the interior of the Northwest Territory. Although it was at first only a horse trail and not a wagon road, with its opening the settlement of the region increased rapidly and Zane's Trace became an important part of the Ohio road system. In 1798, it was designated as a post road and United States mail was carried on the road on horseback. In 1804, the trace was improved into a 6.1-m (20-ft) wide road (Bond 1941; Schneider and Stebbins 1973).

However, early roads were virtually impassable when the spring rains arrived and required significant maintenance to remain in serviceable condition. In the first decades of the nineteenth century, state legislators realized that if they were to induce more people to come to Ohio, they would have to ensure that these prospective settlers had reliable and affordable market access. The resulting canal system was largely constructed between 1825 and the 1840s. The system consisted of two main canals and many public and private branch canals, totaling nearly 1,600 km (1,000 mi) of waterways with almost 30 different names (Canal Society of Ohio 1975:4; Gieck 1992).

The Ohio and Erie Canal, the easternmost of the two main canals, ran from Lake Erie at Cleveland through Akron, Newark, and Circleville to the Ohio River at Portsmouth, passing through Waverly in Pike County (Canal Society of Ohio 1975; Huntington and McClelland 1905). In late 1832, it was opened to traffic and within a year it revolutionized the economy of the Scioto Valley. Waverly grew in population because of its favorable location on the canal and a significant number of Irish and German immigrants, who were often drawn to the area as canal construction workers, remained in the area (Evans 1987; Gieck 1992; Grabb 1985).

Within decades, however, the canal system began to yield to railroads. After a peak in 1853, canal revenues decreased rapidly. Over the next 30 years, general lack of maintenance and design flaws of the Newark Summit led to the disuse of the entire southern part of the Ohio and Erie Canal by the late 1880s. In 1911, the state officially abandoned the canal from the Dresden Side Cut to Newark and from Columbus to Portsmouth. The flood of 1913, the worst in the state's history, severely damaged or destroyed much of what remained. Afterward, the state

abandoned the entire canal system of Ohio and began selling off the land (Canal Society of Ohio 1975).

Three railroads were built through Pike County. The north-south Scioto Valley Railroad was built from Portsmouth to Columbus, and first operated in Pike County in 1877–1878. It ran on the east side of the Scioto Valley to Piketon, and crossed over to the west side near Waverly. The Scioto Valley Railroad made a connection with the Norfolk and Western Railway in 1892, and soon became a part of the Norfolk and Western Railway. Apparently during construction of PORTS in 1952, a spur was built from the Norfolk and Western Railway to the north side of the federal reservation to ship in materials and connect with the Chesapeake and Ohio. In 1982, the Norfolk and Western Railway became Norfolk Southern. This railroad line is still active (Drury 1985; Sheldon 1924).

The second railroad, the Scioto, Jackson and Pomeroy, ran east-northwest through the county in 1878–1879. It extended through the south side of Waverly and eastward after crossing the Scioto River. In 1905, it became the Detroit, Toledo and Ironton. The line was abandoned after becoming a part of the Grand Trunk Western Railroad in the early 1980s. The third railroad was built into the county in 1917 by the Chesapeake and Ohio Railway. It was designed to avoid towns and road crossings and had a limited influence on the local economy (Drury 1985; Sheldon 1924).

In the early twentieth century, the surface road system consisted of largely unpaved paths between individual farmer's parcels. Railroads dominated the shipping of goods and passengers. The push for a paved national highway system occurred in the first three decades of the twentieth century. At first the automobile was seen as a means of short-distance leisure transportation for the well-to-do. But by the eve of the First World War, both longer-distance passenger driving and the early use of motorized trucking led to the organization of movements for publicly financed hard-surface roads. These roads, the supporters believed, should be linked in a systematic manner that would tie distant points together much like the existing rail network.

As early as 1910, the state began thinking in terms of a road network oriented toward the automobile. That year the Highway Department published a bound set entitled *Highway Maps of Ohio* that showed, county by county, the condition of the sectional roads. In 1911, state roads were designated with numbers, and state funds were made available for their maintenance. As an important state road, the Columbus and Portsmouth Road was probably paved and improved in

the 1910s or 1920s, allowing improved transportation. In 1925, it was designated US 23, running from Portsmouth through Columbus and Toledo to Mackinac, Michigan. US 23 was one of 16 roads in Ohio that were considered of primary importance for interstate or continental traffic (Aumann 1954; Ohio Department of Highways 1930).

Literature Review

In 1997, an archaeological literature review was completed for the entire PORTS property as a part of a site-wide Phase I investigation (Schweikart et al. 1997). That literature review was designed to examine a sufficient geographic area to develop a predictive model of site type and location within the PORTS property. As such, it identified all documented archaeological resources within a 6-km (4-mi) radius of PORTS. This is far in excess of typical literature review search areas, which are generally constrained to 0.8 km (0.5 mi) or 1.6 km (1 mi). In all, 71 documented archaeological sites were found within that radius. Rather than restate the results of that literature review here, the following will summarize both the results of that survey as well as recent archaeological investigations that have occurred on the PORTS property.

The 1997 Phase I investigation resulted in the identification of 36 archaeological sites within the boundary of the PORTS property (Schweikart et al. 1997) [Table 1]. Thirteen of the sites were determined to represent historic farmsteads, seven were identified as historic period open refuse dumps or artifact scatters, two are historic period isolated finds, four are sites associated with PORTS, one is a historic period cemetery, five are prehistoric isolated finds, two are prehistoric lithic scatters, and two sites had both prehistoric and historic period elements., Schweikart et al. (1997) recommended further work on 33PK210, a prehistoric lithic scatter overlooking the Scioto Valley with a high potential to contain subsurface archaeological remains. This site has since been the subject of a Phase II investigation. It was found to extend south of the PORTS property, but was recommended not eligible for inclusion in the NRHP (Hazel and Foss 2003). Site 33PK214 (PIK-207-12) and the historic component of 33PK189 (PIK-206-9) are two cemeteries on the PORTS property that Schweikart et al. (1997) recommended be preserved in place, along with two cemeteries adjacent to the PORTS property. The 13 historic farmsteads were recommended as potentially eligible for inclusion in the NRHP and it was recommended that a sample of those sites be subjected to Phase II site evaluations. Each was identified as at least one "architectural cluster" that consisted of either building rubble,

exposed building foundations, driveways, or other evidence of cisterns, wells, and similar structures, and a scattering of artifacts above the ground surface. Limited shovel testing was completed at a handful of the sites, but each was identified as a farmstead dating from the late-nineteenth to mid-twentieth centuries. They were recommended as potentially eligible based on their potential to contain data regarding changes in settlement patterns and subsistence systems over time in this rural area (Schweikart et al. 1997).

In 2010 and 2011, ASC and OVAI completed Phase II investigations of each of the 13 farmstead sites (Klinge 2010; Klinge and Mustain 2011). Sites 33PK184, 33PK185, 33PK193–33PK195, 33PK197, 33PK203, 33PK206, 33PK211, 33PK212, 33PK213, 33PK217, and 33PK218 were subjected to close-interval shovel testing and test unit excavation, and some level of geophysical work was conducted at all but two. None of the 13 sites was recommended eligible for inclusion in the NRHP. Sites 33PK193, 33PK195, and 33PK197 were determined to be elements of larger farmsteads that were not subjected to Phase II level work, rather than individual farms themselves. Accordingly, insufficient data was collected to determine whether or not those sites meet NRHP eligibility criteria. The remaining sites, however, were recommended as not eligible for the NRHP by the report authors.

In 2011, OVAI identified an additional 51 historic period sites within the PORTS boundary through a review of historic cartographic sources and aerial photographs that predated the construction of PORTS (Burks 2011). Each of those sites was assigned a Historic Map Building Location (HMBL) number and each was investigated during preliminary assessments conducted in late summer (Mustain and Klinge 2011b). A handful of the 51 HMBLs were identified as schools, churches, or other structure types based on the map data, but most were identified as either residences or farmsteads. The preliminary assessment was designed to confirm the location of sites in the field, document visible site elements, and evaluate each site's condition. Several sites were documented in areas of excessive disturbance associated with the PORTS construction or land use, and many others were documented in the peripheral portions of the property beyond the plant.

The goal of the preliminary assessment was to determine which of the 51 HMBLs are archaeological sites and to evaluate their suitability for Phase I testing. Of 12 HMBLs that ASC reviewed, three were selected for Phase I testing. Site 33PK322 (HMBL 4) was identified as a series of stone footers and a stone and concrete stoop for a house. Site 33PK323 (HMBL 5) was

identified as the location of a school house that had likely been impacted by demolition. Site 33PK324 (HMBL 50) was identified as the remnants of a large farmstead with numerous foundation remnants, all of which were made of poured and cast concrete (Mustain and Klinge 2011b). These three sites were selected for Phase I study as the first two are types that were not well documented by previous investigations, and the last showed a greater degree of integrity than has been found at similar sites on the PORTS property (Klinge 2010; Klinge and Mustain 2011). Similar research addressing the other HMBLs was completed by OVAI and G&P, but the results of these studies were not available at the time this report was written.

The Phase I testing at 33PK322, 33PK323, and 33PK324 was undertaken in the fall of 2011. Similar studies were completed at this time by OVAI and G&P but the results of these studies were not available at the time this report was written. 33PK322 was found to contain the remains of additional outbuildings that were not identified during the preliminary assessment. The site has been razed, but much of the ground surface was relatively intact. During that investigation, the maximum depth of excavation was limited to 30.5 cm (12 in) based on guidance from Fluor B&W Portsmouth, LLC, and it was determined possible that sealed archaeological deposits may have persisted that could provide important data. Mustain and Klinge (2011a) could not make a determination as to the significance of the site (i.e., whether it meets NRHP eligibility criteria) and recommended additional testing, including excavations that exceeded 30.5 cm (12 in). The site was later subjected to a geophysical investigation that detected extensive modern disturbance across the site limits and did not detect shaft features or other archaeological contexts below the disturbed soil. Accordingly, the site was determined not eligible for inclusion in the NRHP (Klinge 2012). The school house (33PK323) has been completely destroyed and was recommended not eligible for the NRHP (Mustain and Klinge 2011a). Site 33PK324 has suffered significant post-occupation disturbance, with bulldozer ruts and a large push pile at the edge of the site. Although many of the foundations of the farm buildings are readily discernable, little information about activities at the site remain and it was not possible to confirm the location of the house. Mustain and Klinge (2011a) concluded that the site lacked sufficient integrity and recommended it not eligible for inclusion in the NRHP.

METHODS

ARCHAEOLOGICAL FIELD METHODS

Four methods of investigation were utilized during the Phase I archaeological survey: cursory inspection, visual inspection, shovel probe excavation, and shovel test pit (STP) excavation. Five soil types were defined in the RFP for the project (Figure 3), two of which did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II archaeological testing. Cursory inspection is not a survey method, per se, but is a simple visual examination of an area to confirm that it is disturbed as described in the RFP or to determine the extent of the previous survey and how much of a landform had been tested.

Visual inspection consists of a formal walkover of areas along transects spaced at 15-m (50-ft) intervals. Areas were visually inspected to identify readily visible archaeological resources, such as mounds, earthworks, and building or structure remnants, and to identify areas of disturbance or small habitable landforms. It is the only method used to examine the non-habitable portions of Area 1 of the PORTS property.

Shovel probes are excavated to document suspected disturbance that could not be conformed through visual inspection. No fixed interval is used for their placement; however, they are spaced no more than 50 m (164 ft) apart. Typically, the shovel probes are excavated 5 cm to 25 cm (2 in to 10 in) deep and measure approximately 25 cm (10 in) square. Their locations are recorded on a map but no notes are taken.

STP excavation is a subsurface testing strategy utilized to determine the presence of archaeological resources in intact and relatively level areas where the surface visibility is less than 50 percent. The STPs are excavated at 15-m (50-ft) intervals either along transects that follow narrow landforms or on a grid in larger areas. All intervals are paced. Units are 50 cm (20 in) square in size and are typically excavated a minimum of 5 cm (2 in) into the subsoil. For this survey, the maximum depth of STPs was 30.5 cm (12 in), following guidance from Fluor B&W Portsmouth, LLC. In general, this was sufficient to expose subsoil in Area 1. However, it must be noted that it was not possible to penetrate some alluvial deposits along Little Beaver Creek and an unnamed tributary. Soil from the STPs is screened through 0.62-cm (0.25-in) hardware cloth to facilitate the recovery of artifacts. Notes are taken on each STP, recording soil characteristics and the presence of cultural material.

Additional field notes are also kept recording information including field conditions, methods of investigation, site locations, photographs, shovel probes, STPs, etc. Similar notes are taken for the encountered sites, recording location, method of investigation, physiographic setting, etc. All artifacts collected are placed in paper bags marked with the site number and provenience. Each bag is numbered and entered into a bag-log. Photographs of the project area are taken as deemed appropriate. A record of the photographs is kept in a photo-log. The locations of datum points for STP grids or sites are recorded using a Trimble ProXRS Global Positioning System (GPS) unit. The locations of shovel probes, STPs excavated along transects, the photographs, and the boundaries of the sites and Archaeological Survey Areas are also recorded with the GPS unit.

ARTIFACT ANALYSIS

All artifacts were sent to the ASC archaeological laboratory for processing and analysis. Artifacts were washed, dried, and analyzed during this stage of work.

Prehistoric Material

Lithic materials are the most durable artifacts collected on prehistoric sites and generally represent the largest portion of an assemblage. Another important category of prehistoric artifacts is ceramics, the forms and decorations of which are key temporal and cultural indicators. Faunal and botanical remains can provide a wide variety of information and generally require specialized comparative analysis. Only lithic material was recovered during this survey.

Lithic Analysis

Although prehistoric peoples utilized many organic materials, lithic material is often the only evidence of prehistoric activity to survive. The primary technique used in the manufacture of lithic tool is chipped stone. Lithic materials from archaeological sites are divided into two general categories: debitage and tools. Additional categories of lithic artifacts include but are not limited to ground stone and fire-cracked rock (FCR).

Debitage Analysis[4]

The debitage analysis consists of sorting the material into two broad categories: shatter and flakes or fragments thereof. Shatter is defined as debitage that is usually blocky or angular in appearance and exhibits no obvious dorsal or ventral surfaces. Attributes recorded for shatter

[4] Adapted from Cowan and Weinberger (2004).

are limited to raw material, presence or absence of cortex, evidence of heat alteration, and weight.

Flakes are identified as either bipolar (exhibiting points of applied force at opposing ends of the flake) or whole. Flake fragments are identified as proximal fragments, distal fragments, or medial fragments. The following attributes (if present) are recorded for flakes and flake fragments: raw material, amount of dorsal surface cortex (none, less than 50 percent, 50 percent or more but less than 100 percent, and 100 percent), platform surface (cortical, flat, or complex), presence of platform edge trim (present, absent, or indeterminate), platform edge grinding (present, absent, or indeterminate), flake termination (feathered, stepped, hinged, or plunging), evidence for heat alteration, length, width, thickness, and weight. These attributes are defined and explained in Appendix E.

Tool Analysis

The tool analysis consisted of classifying the tools based on their nominal attributes. The classification of a tool is based upon the presumed primary function of the tool or, if the particular function of a tool cannot be determined, is descriptive in nature. The classification of some tools, in particular projectile points, allows a determination of temporal or cultural affiliation. Tool analysis involves recording the metric attributes (length, width, and thickness) of the tools, if possible, along with raw material, presence or absence of cortex, and the presence or absence of heat alteration. Two types of tools were identified during this survey: utilized flakes and gravers. Definitions of those types are found in Appendix E.

Lithic Raw Material Identification

Efforts to identify the sources of the lithic raw materials utilized at archaeological sites is often problematic, due to the fact that there can be great variations of attributes between chert samples taken from the same source, and there are similarities in the attributes of cherts from different sources (Odell 2003). For example, it can be difficult to distinguish Columbus from Delaware chert.

The lithic artifacts recovered during this survey were manufactured from three different types of chert: Cedarville-Guelph, Columbus-Delaware, and unidentified. Unidentified cherts refer to cherts with attributes that cannot be found in the literature or type collection, or that exhibit attributes that are too similar to two or more types to permit an accurate determination. Descriptions of the other chert types are found in Appendix E.

Historic Material

Historic cultural material is identified according to various accepted typographies. These included *The Development and Application of a Chronology for American Glass* (Deiss 1981), Gillio et al.'s (1980) *Some Common Artifacts Found at Historical Sites*, Magid's (1984) Ceramic Code Book, *Nail Chronology as an Aid to Dating Old Buildings* (Nelson 1968), the Florida Museum of Natural History (2011) Digital Type Collection, Telling Time for Archaeologists (Miller et al. 2000), and *An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin, Central Illinois, U.S.A*. (Stelle 2001).

The ceramic artifacts were initially sorted by function and ware type. Ware types are distinguished on the basis of paste color, paste texture, glaze, and decoration; attributes generally recognized as temporal indicators for historic ceramics. Architectural brick was also included in the ceramic material type.

Glass artifacts were assigned to functional categories, when that could be determined. Categories include window, bottle, drinking, and a broad category of "vessel" glass when a more refined category could not be determined. Window glass was analyzed for production-related diagnostic attributes. During the nineteenth century, window glass was most often manufactured as either crown glass, improved broad glass, or plate glass, and each manufacturing method can leave diagnostic markers on glass fragments. The manufacture of bottle glass had remained technologically static for thousands of years, but underwent a revolution during the nineteenth century. The introduction of bottle molds, lipping tools, snap-cases, press-molding machines, and other advances resulted in identifiable and diagnostic attributes and markings on many bottle fragments from the nineteenth and twentieth centuries. These manufacturing characteristics and their respective temporal ranges were identified for bottle, jar, tableware, window, and miscellaneous glass, if possible.

Metal artifacts were first identified by type of material (e.g., iron, steel, brass, copper, lead, etc.) and function (wagon hardware, tools, nails, etc.). Where possible, the technique of manufacture was identified, especially in the classification of nail types (e.g., machine-cut versus wire). However, metal objects are often oxidized to the point that their original shape and function cannot be established. In those instances, metal objects were cataloged as unidentified.

CURATION

All maps, notes, photographs, and artifacts associated with the archaeological survey conducted in Area 1 of the PORTS property will be returned to the proper DOE authorities for final disposition. OAI forms documenting the archaeological resources encountered during this research were completed and will be submitted to OHPO upon release by DOE.

RESULTS AND CONCLUSIONS

PORTS is located about 5 km (3 mi) south of Piketon in Scioto and Seal townships, Pike County Ohio and is situated along the west edge of the Scioto Valley (Figures 1 and 2). Area 1 is located along the northern periphery of the PORTS property on either side of Shyville Road and the northern access road and northwest of a dammed ravine that now contains a sludge pond. It encompasses approximately 129.7 ha (320.35 ac) along the edge of a pre-glacial river valley. The valley floor contains a Pre-Illinoian glacial lakebed and the edges of the valley are uplands in the unglaciated Allegheny Plateau (Brockman 1998; Pavey et al. 1999). Little Beaver Creek, which flows through Area 1, has cut across the glacial lakebed and into the bedrock below the lacustrine sediments and deposited alluvial material that is a mix of the residuum eroded from the adjacent uplands, as most of the clay from the lakebed has washed away (USDA, NRCS 2010, 2011). Although some conflicting information exists, comparing current and early topographic representations of the area (Ohio Department of Natural Resources, Division of Geologic Survey [ODNR, DGS] 2003a, 2003b; USGS 7.5′ topographic maps, 1979 Piketon and 1992 Waverly South quadrangles; USGS 15′ topographic maps, 1917 Piketon and 1908 Waverly quadrangles), quaternary geology maps (ODNR, DGS 2005; Pavey et al. 1999), and soil survey data (USDA, NRCS 2010, 2011) indicate that the edge of the glacial lakebed runs along the bottom of the hill to the northeast of Shyville Road and extends northeastward south of the railroad tracks along the north edge of the PORTS property (Figure 4).

Five soil types were defined in the RFP for the project (Figure 3). Two of them (Types 4 and 5) did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II level archaeological testing respectively. Cursory inspections of these areas were performed and they were photographed. Except in areas that Schweikart et al. (1997) tested at 15-m (50-ft) intervals or Mustain and Klinge (2011a) tested at 5-m (15-ft) intervals, which were also subjected to cursory inspections and photographed, habitable landforms (i.e., relatively level) in Area 1 defined as containing Types 1–3 soils were tested with shovel probes (to document disturbance) or STPs (to search for archaeological deposits in intact areas). The remaining portions of Area 1 with Types 1–3 soils, primarily hillsides, were visually inspected along transects spaced at 15-m (50-ft) intervals (cf. Figures 3 and 4).

ARCHAEOLOGICAL SURVEY AREA DESCRIPTIONS

Area 1, as defined in the RFP, was divided into 45 smaller Archaeological Survey Areas (ASA) to facilitate record keeping and organize the fieldwork (Figure 4). Factors such as ground cover, landform, and method of investigation were the main considerations in delineating the ASA. Some areas were designated based on the soil types defined in the RFP and others based on where previous archaeological testing had been completed. All portions of Area 1 were examined at some level and each ASA was photographed and its limits recorded with the GPS data recorder.

ASA 1

ASA 1 is located on a ridgetop in the uplands of Area 1 east of Shyville Road (Figure 5, Sheet 5; Table 2). It is a large area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). A cursory inspection of the area confirmed this disturbance. ASA 1 was photographed (Plate 1) and its boundary was recorded. No other testing was performed.

ASA 2

ASA 2 is located on the glacial lakebed in Area 1 along the east side of Shyville Road (Figure 5, Sheets 3 and 5; Table 2). It is part of a large grassy field (Plate 2) and is generally level and largely undisturbed. That is to say that it does not appear to have been impacted by post-1952 activities that may have compromised the soil and any archaeological sites that it may contain. To investigate this ASA, a total of 82 STPs spaced at 15-m (50-ft) intervals were excavated in the ASA, 34 of which documented subsurface disturbance. It is bounded to the north by an access road to the cut-and-fill area designated ASA 1 and to the west by Shyville Road. The area to the south and east of ASA 2 is disturbed and most of the disturbed STPs are along these edges of the ASA. There is a push pile in the northwest corner of the ASA where no STPs were excavated.

ASA 3

ASA 3 is located on the glacial lakebed in Area 1 between the north access road and Shyville Road (Figure 5, Sheets 1, 3, and 5; Table 2). It is a large area of planted pines (Plate 3) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 234 STPs spaced at 15-m (50-ft) intervals were excavated, 12 of which documented subsurface disturbance. The east and west edges of the ASA are bounded by the roads. Except in its

southeast corner where it is bounded by a previously surveyed area, the ASA's southern boundary follows the bluff edge above Little Beaver Creek. The south edge of the ASA extends a short distance beyond the planted pines into the adjacent woods along the bluff. Some portions of ASA 3 had thick underbrush primarily consisting of briers, honeysuckle bush, and multiflora rose. The roadsides, which are included in ASA 3, are grassy and have ditches. Almost all the STPs excavated in the grassy areas between the ditches and the pine trees were intact.

ASA 4

ASA 4 is located on the glacial lakebed in Area 1 west of Shyville Road and the north access road (Figure 5, Sheets 3 and 5; Table 2). It is a large landfill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). A cursory inspection of the area confirmed this disturbance. ASA 4 was photographed (Plate 4) and its boundary was recorded. No other testing was performed.

ASA 5

ASA 5 encompasses a terrace in Area 1 between the north access road and Shyville Road (Figure 5, Sheet 1; Table 2). It is a small wooded area (Plate 5) that is generally level and largely undisturbed so STPs were excavated to test it. Seventeen STPs spaced at 15-m (50-ft) intervals were excavated. The northeast edge of ASA 5 is bounded by a previously surveyed area. The ASA's eastern, southern, and southwestern boundaries follow the edge of the terrace, which is above a wet and scoured area along Little Beaver Creek. The northwest edge is the sloping bluff that extends up to the lakebed to the north and down to the creek separating ASA 5 from another nearby terrace (ASA 6) to the west.

ASA 6

ASA 6 encompasses a terrace in Area 1 between the north access road and Shyville Road (Figure 5, Sheet 1; Table 2). It is a small wooded area (Plate 6) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 14 STPs spaced at 15-m (50-ft) intervals were excavated. The ASA's southern boundary follows the edge of Little Beaver Creek. The other edges are the sloping bluff which extends up to the lakebed to the north and down to the creek separating ASA 6 from another nearby terrace (ASA 5) to the east.

ASA 7

ASA 7 is located on the glacial lakebed in Area 1 along the west side of Shyville Road (Figure 5, Sheet 1; Table 2). It is the location of 33PK217, and is identified in the RFP as a

previously surveyed area where a Phase II investigation had been completed and did not require testing (Figure 3). A cursory inspection of the area confirmed the presence of the site and identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 7 was photographed (Plate 7) and its boundary was recorded. No other testing was performed.

ASA 8

ASA 8 encompasses a floodplain in Area 1 along the west side of Shyville Road (Figure 5, Sheet 2; Table 2). It is a mostly grassy area with some scrub brush (Plate 8) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 48 STPs were excavated, one of which documented subsurface disturbance. Site 33PK339 was identified in a scrubby area at the north end of ASA 8. Three radial units were excavated at the site, spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The disturbed STP is at the south end of the ASA. It is in an area disturbed by road construction that extends along the edge of ASA 8 where its boundary follows Shyville Road. An unnamed tributary to Little Beaver Creek passes through the northern part of the ASA, separating the scrubby northern section where 33PK339 is located from the mostly grassy portion of the floodplain between the creek and road. The north edge of the ASA is at the base of the bluff between the valley floor and the glacial lakebed above it to the north.

ASA 9

ASA 9 is located on the glacial lakebed in Area 1 west of Shyville Road (Figure 5, Sheets 5 and 7; Table 2). It is an area of cut and fill containing road and railroad beds identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). A cursory inspection of the area confirmed this disturbance. The northern edge of the area outlined in the RFP contained some intact landforms partially tested by Mustain and Klinge (2011a) that were not included in this ASA. ASA 9 was photographed (Plate 9) and its boundary was recorded. No other testing was performed. The highly disturbed remains of what Burks (2011) designated HMBL 54 were observed along the base of the railroad bed on ASA 9's southern boundary with ASA 26. This site was presumably documented and inventoried in one or more of the recent studies of the historic sites on the PORTS property, but the results of the studies were not available at the time this report was written and the OAI number of the site is unknown.

ASA 10

ASA 10 encompasses a terrace and floodplain in Area 1 between the north access road and Shyville Road (Figure 5, Sheet 2; Table 2). It is a wooded area (Plate 10) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 56 STPs were excavated, one of which documented subsurface disturbance. Site 33PK340 was identified in the wooded area at the south end of ASA 10. Four radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were excavated at 15-m (50-ft) intervals. The ASA is bounded by Little Beaver Creek and the sloping hillside to the south. This hillside is the bluff between the creek bottom and a rise on the glacial lakebed. There are two terraces, one in the ASA's southwest corner and another in its northwest half above the floodplain along much of the ASA's west boundary. The ASA contains a linear sloping area between the terraces and the floodplain as well as some wet, scoured areas along the creek.

ASA 11

ASA 11 encompasses a toe in Area 1 between the north access road and Shyville Road (Figure 5, Sheet 1; Table 2). It is a small wooded area (Plate 11) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 10 STPs spaced at 15-m (50-ft) intervals were excavated. A few of the STPs at the northern end of the toe were excavated at slightly smaller intervals because the 15-m (50-ft) grid points did not fall on top of the landform. The ASA's southern boundary is where the toe meets the sloping hillside that is bluff between Little Beaver Creek and a rise on the glacial lakebed to the south. The other edges were along the break in the topography between toe and hillside separating it from a terrace and floodplain (ASA 12) just below it.

ASA 12

ASA 12 encompasses a terrace and floodplain in Area 1 between the north access road and Shyville Road (Figure 5, Sheet 1; Table 2). It is a wooded area (Plate 12) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 33 STPs spaced at 15-m (50-ft) intervals were excavated. Seven of the STPs were along a transect that followed the shape of the floodplain in the eastern part of the ASA. The rest of the STPs were excavated on a grid across the terrace. The ASA is bounded by Little Beaver Creek and the sloping hillside to the south. This hillside is the bluff between the creek bottom and a rise on the glacial lakebed. Part of it is around the edge of the toe designated as ASA 11. This ASA contains a linear sloping

area between the terrace and the floodplain as well as some wet, scoured areas along the creek. The west end of ASA is bounded by fill along the north access road. Several small, steeply sided and deeply incised swales are located at the west end of ASA 12.

ASA 13

ASA 13 encompasses a sloping hillside in Area 1 between the north access road and Shyville Road (Figure 5, Sheets 1 and 2; Table 2). It is a primarily wooded area (Plate 13) that consists of the bluff between the bottomland along Little Beaver Creek and a rise on the glacial lakebed. There are grassy areas along an easement for an electrical line and an aboveground pipeline. No portions of the bluff are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 1 to the south and Shyville Road and the north access road to the east and west, respectively. The northern boundary is the base of the slope and extends around the edge of the toe located at the base of the bluff that was designated as ASA 11 and tested separately. There are some disturbed areas along the roadsides at both ends of the ASA and some additional disturbance by PORTS-related construction of an aboveground pipeline near the east end of the ASA.

ASA 14

ASA 14 encompasses a terrace in Area 1 east of Shyville Road (Figure 5, Sheet 2; Table 2). It is a small wooded area (Plate 14) that is generally level and largely undisturbed so STPs were excavated to test it. Seven STPs spaced at 15-m (50-ft) intervals were excavated. The ASA is bounded by Little Beaver Creek to the southwest and the edge of Area 1 to the southeast. The north boundary is along edge of an area disturbed by PORTS-related construction of an aboveground pipeline. Part of the ASA was wet and two of the STPs filled with water and could not be completely excavated.

ASA 15

ASA 15 is located on the glacial lakebed and also encompasses some sloping hillside in uplands of Area 1 between Shyville Road and the sludge pond (Figure 5, Sheet 2; Table 2). It is a primarily grassy area (Plate 15) that is a modified ravine on the edge of the glacial lakebed. No portions of the ravine are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 1 to the northeast and southeast, Shyville Road to the west, and the spillway for the sludge pond to

the north. Most of the area is a rolling grassy ravine below the dam for the sludge pond. Because it is not level no shovel probes were excavated, but it is likely that this area is disturbed. It also includes areas disturbed by PORTS-related construction of an aboveground pipeline, a small water catchment in the southern part of the ASA, and a spillway and adjacent access road for the sludge pond along its north edge. There are some wooded areas along the hillside that appeared intact, but were sloping. There is a small wooded area adjacent to Shyville Road where the bulldozed remains of Ferree Church (designated HMBL 17 by Burks [2011]) were observed among many push piles. This site was presumably documented and inventoried in one or more of the recent studies of the historic sites on the PORTS property, but the results of the studies were not available at the time this report was written and the OAI number of the site is unknown.

ASA 16

ASA 16 encompasses a sloping hillside in the uplands of Area 1 east of Shyville Road and north of the sludge pond (Figure 5, Sheets 4 and 6; Table 2). It is a primarily wooded area, but there are grassy areas along easements for electrical lines and some small areas of scrub brush and planted pines (Plate 16). Three small toes along the hillside were relatively level so STPs were excavated to test them. A total of 15 STPs spaced at 15-m (50-ft) intervals were excavated, four of which documented subsurface disturbance. All STPs were excavated along transects that followed the landforms. The remaining portion of ASA 16 is not level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The east boundary and most of the south boundary is the edge of Area 1. Some of the southern boundary is along the base of the slope above a toe (ASA 30) and a short section is along the spillway for the sludge pond. The rest of the southern boundary and the western boundary are along the base of the slope above the glacial lakebed (ASAs 17 and 33). The northern boundary is the along the edge of the ridgetop and the northern edge of a power line easement. The power line easements are likely disturbed, but they are sloping and no shovel probes were excavated to confirm this. There is also a small area of disturbance associated with the sludge pond and along an access road, but most of the hillside appears intact.

ASA 17

ASA 17 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheet 4; Table 2). It is a scrubby area (Plate 17) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 28 STPs spaced at 15-m (50-ft) intervals were excavated.

Most of the north edge of the ASA is bounded by the base of the adjacent hillside. There is a swale and small intermittent drainage along the northwest boundary. The southern boundary is along the spillway for the sludge pond. An easement for a power line crosses the northwest corner of the ASA, but it does not appear to have significantly disturbed the soils, although much of this area contains the swale and intermittent drainage where no STPs were excavated.

ASA 18

ASA 18 is located on the glacial lakebed in Area 1 between Shyville Road and the sludge pond (Figure 5, Sheet 2; Table 2). It is a grassy area (Plate 18) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 57 STPs were excavated, 12 of which documented subsurface disturbance. Sites 33PK341 and 33PK342 were identified along the west edge of ASA 18. Six radial units were excavated at the sites spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The north edge of the ASA is along the access road for the sludge pond. The western boundary is along Shyville Road and the southern boundary is along the now abandoned Barlow Road. The east boundary is along the edge of the level area. Most of the edge was disturbed and appears to be fill, but in the southeast corner it is bounded by a swale. There is also some disturbance near the underground utilities along Shyville Road.

ASA 19

ASA 19 is located on the glacial lakebed in Area 1 west of the north access road (Figure 5, Sheet 1; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. The southern edge of the ASA is in an area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). However, there is no distinct edge to the disturbance so it is included in ASA 19. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. A power line easement takes up most of the ASA. ASA 19 was photographed (Plate 19) and its boundary was recorded. No other testing was performed.

ASA 20

ASA 20 encompasses glacial lakebed and sloping hillside in Area 1 west of the north access road (Figure 5, Sheets 1 and 3; Table 2). It is a primarily wooded area, but, there are areas of scrub brush on the lakebed in the south of the ASA and grassy areas along a power line

easement and the north access road (Plate 20). The hillsides are the bluffs along the edge of the Little Beaver Creek Valley. The ASA is bounded by the north access road to the east and the bluff edge to the north. The west and south boundaries surround floodplains along the creek (ASAs 22 and 23) and two previously surveyed areas (ASAs 19 and 21) and otherwise follow the boundary of Area 1. The southern edge of the ASA is in an area of cut and fill identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing (Figure 3). However, there is no distinct edge to the disturbance so it is included in ASA 20 and was visually inspected and shovel probed. There are two level areas of disturbance: one between ASAs 19 and 21, and the other along the north access road in the ASA's northeast corner. Five shovel probes spaced no more than 50 m (164 ft) apart were excavated in these areas to confirm the disturbance. The ASA also includes a disturbed portion of floodplain where Little Beaver Creek passes through a culvert under the north access road and steeply sloped road fill across the valley on both sides of the culvert. The rest of the ASA is sloping hillsides that are not level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals, as was the small portion of wet and disturbed floodplain on the valley floor. The power line easement is likely disturbed, but it is sloping and no shovel probes were excavated to confirm this.

ASA 21

ASA 21 is located on the glacial lakebed in Area 1 west of the north access road (Figure 5, Sheet 1; Table 2). It is an area that Schweikart et al. (1997) tested this area with STPs spaced at 15-m (50-ft) intervals so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. The area Schweikart et al. (1997) reported as being tested extended down over the bluff edge. The portion of the previously surveyed area on the hillside is included in ASA 20. Much of the area above the bluff appeared to be disturbed. ASA 21 was photographed (Plate 21) and its boundary was recorded. No other testing was performed.

ASA 22

ASA 22 encompasses a floodplain in Area 1 west of the north access road (Figure 5, Sheet 1; Table 2). It is a small wooded area (Plate 22) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 18 STPs spaced at 15-m (50-ft) intervals were excavated, five of which documented subsurface disturbance. The ASA is

bounded by Little Beaver Creek to the north and the bluff to the south and west. The east boundary of the area is at the edge of a disturbed wet section of floodplain where the creek passes through a culvert under the north access road. The disturbed STPs are along the edge of this disturbed area, most of which is in ASA 20.

ASA 23

ASA 23 encompasses a floodplain in Area 1 west of the north access road (Figure 5, Sheet 1; Table 2). It is a grassy and wooded area (Plate 23) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 28 STPs spaced at 15-m (50-ft) intervals were excavated, 14 of which documented subsurface disturbance. The ASA is bounded by Little Beaver Creek to the south, the bluff to the north, and the edge of Area 1 to the west. The creek has been modified at the west end of the ASA, presumably for erosion control, and most of the disturbed STPS were in this grassy area. An old farm lane runs along the base of the bluff. Most of the rest of the disturbance is associated with this two-track road.

ASA 24

ASA 24 is located on the glacial lakebed in Area 1 west of North Access Road (Figure 5, Sheet 3; Table 2). It is an area of planted pines and scrub (Plate 24) that is generally level. However, very little of it was undisturbed, so a combination STPs and shovel probes were excavated to test it. A total of 54 STPs were excavated, 45 of which documented subsurface disturbance. Site 33PK343 was identified in the scrub brush along the bluff edge in the partially intact south part of ASA 24. Four radial units were excavated at the site spaced at 7.5-m (25-ft) intervals. The rest of the STPs were spaced at 15-m (50-ft) intervals. The northern part of the ASA is disturbed and 10 shovel probes spaced no more than 50 m (164 ft) apart were excavated to confirm this disturbance. The southern boundary of ASA 24 is along the roadside disturbance in ASA 20. The western boundary is along the bluff edge above Little Beaver Creek. The north edge is bounded by the landfill (ASA 4) and the east edge is along North Access Road. A ditch has disturbed the area along the west side of the road.

ASA 25

ASA 25 encompasses a sloping hillside and floodplain in Area 1 between the north Access Road and Shyville Road (Figure 5, Sheet 1; Table 2). It is a primarily wooded area (Plate 25). The ASA also includes sloping, grassy areas of fill along Shyville Road and the north access road. The hillside is the bluffs along the edge of the Little Beaver Creek Valley. The

ASA is bounded by North Access Road to the west and Shyville Road to the east. Except where it encompasses the roadsides and skirts a terrace (ASA 5), the northern boundary is along the bluff edge. The southern boundary is partly along the bottom of the bluff and partly along Little Beaver Creek. It includes a wet and scoured floodplain and excludes two terraces (ASAs 5 and 6). The sloping hillsides in ASA 25 are not level enough to be considered habitable so they were visually inspected along transects spaced at 15-m (50-ft) intervals, as was the wet and scoured floodplain on the valley floor. The roadsides are disturbed, but they are sloping and no shovel probes were excavated to confirm this.

ASA 26

ASA 26 is located on the glacial lakebed in Area 1 west of Shyville Road (Figure 5, Sheet 5; Table 2). It is a large grassy field with a line of pines along the road (Plate 26) that is generally level but disturbed, so shovel probes were excavated to test it. Nine shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the east by Shyville Road and to the north and southwest by a railroad bed (ASA 9) and landfill (ASA 4) identified in the RFP as post-1952 disturbance associated with PORTS activities. The entire ASA is disturbed and is crossed by a power line easement. The highly disturbed remains of what Burks (2011) designated HMBL 54 were observed along the base of the railroad bed on ASA 26's northern boundary with ASA 9. This site was presumably documented and inventoried in one or more of the recent studies of the historic sites on the PORTS property, but the results of the studies were not available at the time this report was written and the OAI number of the site is unknown.

ASA 27

ASA 27 encompasses a terrace and floodplain in Area 1 along the west side of Shyville Road and north of the railroad bed (Figure 5, Sheet 7; Table 2). It is a wooded area (Plate 27) that was mostly within an area along the railroad bed identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing. However, a cursory inspection indicated that it was part of a landform investigated by Mustain and Klinge (2011a) that is generally level and largely undisturbed, so STPs were excavated to test it. A total of 25 STPs spaced at 15-m (50-ft) intervals were excavated two of which documented subsurface disturbance. The ASA is bounded to the north by the edge of Area 1 and to the south by the fill along the railroad bed. The east boundary is the Shyville Road along its current alignment and

the western boundary is the roadbed for the old alignment of Shyville Road. The ASA includes some wet and scoured areas of floodplain and the sloping sides of a small unnamed tributary to Little Beaver Creek. The western end of ASA is wet and has been disturbed by road and railroad construction. Because the area was wet or sloping no shovel probes were excavated to confirm this disturbance.

ASA 28

ASA 28 encompasses a terrace and floodplain in Area 1 west of Shyville Road and north of the railroad bed (Figure 5, Sheet 7; Table 2). It is a wooded area (Plate 28) that was mostly within an area along the railroad bed identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing. It is an area Mustain and Klinge (2011a) tested with STP spaced at 5-m (15-ft) intervals so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 28 was photographed and its boundary was recorded. No other testing was performed.

ASA 29

ASA 29 encompasses a hillside and floodplain in Area 1 west of Shyville Road and north or the railroad bed (Figure 5, Sheet 7; Table 2). It is a small wooded area (Plate 29), a portion of which is generally level and largely undisturbed so STPs were excavated to test it. Four STPs spaced at 15-m (50-ft) intervals were excavated. The ASA is bounded by the edge of Area 1 to the north and west, the roadbed for the old alignment of Shyville Road to the east, and an unnamed tributary to Little Beaver Creek to the south. Most of the area is taken up by the hillside along the drainage, but there is a small section of floodplain, which is where the STPs were excavated.

ASA 30

ASA 30 encompasses a toe in the uplands of Area 1 on the northeast of the sludge pond (Figure 5, Sheet 4; Table 2). It is a small wooded area (Plate 30) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 32 STPs spaced at 15-m (50-ft) intervals were excavated, seven of which documented subsurface disturbance. The ASA is bounded by the edge of Area 1 to the south and west, which is the shore of the sludge pond. The eastern edge is along the base of the slope above the toe and the northern edge is along a swale in the adjacent hillside. The area along the edge of pond was sloping and eroded.

ASA 31

ASA 31 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheet 7; Table 2). It is a small area of scrub brush (Plate 31) that is generally level and partly undisturbed so STPs were excavated to test it. A total of 23 STPs spaced at 15-m (50-ft) intervals were excavated, 10 of which documented subsurface disturbance. The ASA is bounded by the edge of Area 1 to the north, Shyville Road to the west, and an unnamed tributary to Little Beaver Creek to the southeast. The drainage, much or all of which had been channelized, separated the ASA from in a cut and fill area identified in the RFP as post-1952 disturbance associated with PORTS activities (ASA 45) to the south. The western end of ASA 31 is disturbed by a roadside ditch and there is a wet area along the drainage at the eastern end of the ASA where no STPs were excavated. Much of the area was thickly overgrown with briers and multiflora rose.

ASA 32

ASA 32 is located on a ridgetop in the uplands of Area 1 east of Shyville Road (Figure 5, Sheets 4 and 6; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals, so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 32 was photographed (Plate 32) and its boundary was recorded. No other testing was performed.

ASA 33

ASA 33 encompasses a terrace and floodplain in Area 1 along the east side of Shyville Road (Figure 5, Sheet 4; Table 2). It is a small area of scrub brush (Plate 33) that is generally level and largely undisturbed t so STPs were excavated to test it. A total of 13 STPs spaced at 15-m (50-ft) intervals were excavated, six of which documented subsurface disturbance. The ASA is bounded by Shyville Road to the southwest, a disturbed area of fill in a power line easement to the northwest, the base of the adjacent hillside to the northeast, and an unnamed tributary to Little Beaver Creek and a swale to the southeast. The drainage runs through the ASA and STPs were excavated on both sides of it. There are wet and scoured areas of floodplain and eroded areas in the swale where no STPs were excavated.

ASA 34

ASA 34 encompasses a terrace and floodplain in Area 1 east of Shyville Road (Figure 5, Sheets 4 and 6; Table 2). It is a narrow wooded area (Plate 34) that is generally level and largely

undisturbed so STPs were excavated to test it. A total of 113 STPs spaced at 15-m (50-ft) intervals were excavated, one of which was disturbed. STPs were placed on both sides of the drainage. In the wider, southern part of the ravine they were on a grid and at the upper end of the ravine, where it narrowed and curved, STPs were excavated along transects that followed the landform. The ASA is along the floor of a ravine containing an unnamed tributary to Little Beaver Creek and is primarily bounded by adjacent hillsides. At the northeast end of the ASA it is bounded by the edge of Area 1. The southern end of the ravine has been disturbed and the south edge of the ASA coincides with the edge of the fill. The fill continues along the western boundary, making up much of the slope along that edge of the ravine. The stream meanders significantly and there are areas of the ravine floor that are wet and scoured where no STPs were excavated. The STPs were excavated on terraces and dry portions of the floodplain. These landforms became less distinguishable from each other higher up the ravine.

ASA 35

ASA 35 encompasses a sloping hillside in the uplands of Area 1 east of Shyville Road (Figure 5, Sheets 4 and 6; Table 2). It is a wooded area (Plate 35) along the side of a ridge above a ravine containing an unnamed tributary to Little Beaver Creek. No portions of the hillside are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by a power line easement to the south, the edge of Area 1 to the north, the ravine bottom to the west, and the ridgetop to the east.

ASA 36

ASA 36 is located on a ridgetop in the uplands of Area 1 and extends down onto the glacial lakebed east of Shyville Road (Figure 5, Sheets 3 and 5; Table 2). It is part of a large grassy field (Plate 36) and is generally level but disturbed so shovel probes were excavated to test it. A total of 28 shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. The southern boundary is Shyville Road. It is bounded to the north by an access road and the cut-and-fill area designated as ASA 1 identified in the RFP as post-1952 disturbance associated with PORTS activities. The western boundary of ASA 36 is along the disturbed east and south edges of ASA 2. The eastern boundary is along the intact portions of the ravine to the east of ASA 36. The entire ASA is disturbed and is crossed by a power line easement. The fill extends into the bottom of the adjacent ravine and continues along the eastern boundary, making up much of the slope along that edge of the ravine. The fill is

sloping along the side of the ravine and on the west side of the ridgetop above the glacial lakebed. No shovel probes were excavated in these sloping areas to confirm the disturbance.

ASA 37

ASA 37 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheets 5 and 8; Table 2). It is part of a large grassy field that contains a few areas of scrub brush (Plate 37) and is generally level and largely undisturbed so STPs were excavated to test it. It also included some small areas of disturbance where shovel probes were excavated instead of STPs. A total of 433 STPs spaced at 15-m (50-ft) intervals were excavated, 90 of which documented subsurface disturbance. Ten shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the east by Shyville Road, to the north by an access road along the railroad tracks in a cut and fill area identified in the RFP as post-1952 disturbance associated with PORTS activities (ASA 45), fencing along the south side of the driveway to the firing range, and to the south by an access road to the cut-and-fill area designated ASA 1, which was identified in the RFP as post-1952 disturbance associated with PORTS activities. The eastern boundary is along the edge of the disturbance in ASA 1 and the base of the hillside to the east of ASA 37. There is a deep, 15-m (50-ft) wide ditch along part of the northern boundary and a large pile of what is presumably backdirt from the ditch in the ASA's northwest corner. No STPs or shovel probes were excavated in the ditch and eight of the shovel probes documented subsurface disturbance associated with the ditch and backdirt. There is also some disturbance along the edge of ASA 1 that was documented with two shovel probes. Several small drainages and swales are in the scrubby northeastern part of the ASA. Several STPs were skipped because of wet areas in this part of the ASA.

ASA 38

ASA 38 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheet 8; Table 2). It is a primarily wooded area (Plate 38) that is generally level and appeared mostly undisturbed so STPs were excavated to test it. A small area of grass and planted pines is located in its southeast corner. The ASA also included some areas of disturbance where shovel probes were excavated instead of STPs. A total of 68 STPs spaced at 15-m (50-ft) intervals were excavated, 34 of which documented subsurface disturbance. Six shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm disturbance. The ASA is bounded to the north by an access road along the railroad tracks in a cut and fill area identified in

the RFP as post-1952 disturbance associated with PORTS activities (ASA 45), to the southwest by a small, partially channelized intermittent drainage, and to the east by the edge of Area 1. There is a deep, 15-m (50-ft) wide ditch along the northern boundary and a large, approximately 2-m (6-ft) high, linear pile of what is presumably backdirt from the ditch in the ASA's northeast corner. No STPs or shovel probes were excavated in the ditch and shovel probes documented subsurface disturbance associated with the ditch and backdirt. Most of the southeastern part of the ASA is disturbed. There is a wetland south of the backdirt pile in which no STPs or shovel probes were excavated.

ASA 39

ASA 39 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheet 8; Table 2). It is a grassy field (Plate 39) that is generally level but disturbed so shovel probes were excavated to test it. Eight shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. It is bounded to the southwest by fencing along the south side of the driveway that leads to the firing range and on the northeast by a small, partially channelized intermittent drainage. The entire ASA is disturbed.

ASA 40

ASA 40 is located on a ridgetop in the uplands of Area 1 east of Shyville Road (Figure 5, Sheet 8; Table 2). It is an area that Schweikart et al. (1997) tested with STPs spaced at 15-m (50-ft) intervals so no additional STPs were excavated. A cursory inspection of the area identified the habitable (i.e., relatively level) portions of the landform that were surveyed. ASA 40 was photographed (Plate 40) and its boundary was recorded. No other testing was performed.

ASA 41

ASA 41 is located on a ridgetop in the uplands of Area 1 east of Shyville Road (Figure 5, Sheet 8; Table 2). It is a wooded area (Plate 41) that is generally level and largely undisturbed so STPs were excavated to test it. A total of 14 STPs spaced at 15-m (50-ft) intervals were excavated. STPs were excavated along transects that followed the landform. The ASA is bounded to the west by an area that was previously surveyed, to the east by the edge of Area 1, and to the north and south by the slope along the sides of the ridgetop.

ASA 42

ASA 42 encompasses a sloping hillside in the uplands of Area 1 east of Shyville Road (Figure 5, Sheets 6 and 8; Table 2). It is a wooded area (Plate 42) along the side of a ridge above

a ravine containing an unnamed tributary to Little Beaver Creek. No portions of the hillside are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 1 to the northeast and the ravine bottom to the southeast. Most of the northwest boundary follows the edge of the ridgetop. There is an area of disturbed fill (ASA 36) adjacent to ASA 42. The fill extends into the bottom of the adjacent ravine and continues along westernmost part of ASA 42's northwestern boundary making up much of the slope along that edge of the ravine. ASA 42 contains the intact portions of the hillside below the fill and up to the part of the ridgetop that has not been disturbed.

ASA 43

ASA 43 encompasses a sloping hillside in the uplands of Area 1 east of Shyville Road (Figure 5, Sheets 6 and 8; Table 2). It is a partially wooded area with some scrub brush (Plate 43) along the side of a ridge above the glacial lakebed. The ASA also contains a small area of planted pines. No portions of the hillside are level enough to be considered habitable so it was visually inspected along transects spaced at 15-m (50-ft) intervals. The ASA is bounded by the edge of Area 1 to the northeast, the base of the hill to the northwest, and the edge of the ridgetop to the southeast. The southern boundary is the edge of an area of cut and fill designated as ASA 1 and identified in the RFP as post-1952 disturbance associated with PORTS activities.

ASA 44

ASA 44 is a small saddle located on a ridgetop in the uplands of Area 1 east of Shyville Road (Figure 5, Sheet 6; Table 2). It is an area of scrub brush (Plate 44) and is generally level but disturbed so shovel probes were excavated to test it. Two shovel probes spaced no more than 50 m (164 ft) apart were excavated in the ASA to confirm the disturbance. The southern boundary is the cut-and-fill area designated as ASA 1 and identified in the RFP as post-1952 disturbance associated with PORTS activities. The northern boundary is a previously surveyed area and the east and west boundaries are the edges of the ridgetop. The ASA has been completely disturbed.

ASA 45

ASA 45 is located on the glacial lakebed in Area 1 east of Shyville Road (Figure 5, Sheet 7; Table 2). It is an area of cut and fill containing road and railroad beds that was identified in the RFP as post-1952 disturbance associated with PORTS activities that did not require testing

(Figure 3). A cursory inspection of the area confirmed this disturbance. ASA 45 was photographed (Plate 45) and its boundary was recorded. No other testing was performed.

SITE DESCRIPTIONS

Five sites were documented within Area 1 of the PORTS property: four prehistoric isolated finds (33PK339 and 33PK341–33PK343) and one historic scatter (33PK340) [Figure 2; Table 3]. All were found on elevated landforms near Little Beaver Creek. None of the prehistoric artifacts are temporally diagnostic and the remains of the historic site are insufficient to date it. These five sites are discussed individually below.

Site 33PK339

Site 33PK339 is a prehistoric site located in ASA 8 (Figure 5, Sheet 2; Table 3; Plate 46). The site is situated in an area of scrub brush with 0–10 percent visibility on a floodplain above Little Beaver Creek. This area is flat with a slope gradient of 0 percent. The site was identified through STP excavation. Excavations indicated that there is approximately 15 cm–30 cm (6 in–12 in) deep, brown (10YR 4/3) silt loam A horizon at the site, from which the artifact was recovered. Several of the STPs on the floodplain had soils deeper than the 30-cm (12-in) excavation limit for this survey. It is an alluvial area near the confluence of a small unnamed tributary to Little Beaver Creek. Only one of the STPs excavated in the vicinity of the site was positive (i.e., produced an artifact). There was no room toward the creek, but radial STPs were excavated at 7.5-m (25-ft) intervals in the other thee directions, none of which were positive. The assemblage is composed of a single tiny Cedarville-Guelph chert whole flake (Table 4). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m by 1 m (3 ft by 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively intact, but has possibly suffered from erosion of the floodplain or could even be a secondary deposit in the alluvium. As an isolated find, the site type (i.e., habitation, resources extraction, camp, village, etc.) for 33PK339 is unknown, as defined in the Ohio Archaeological Inventory (OAI). It can best be described as an isolated find from an unassigned prehistoric period.

Site 33PK340

Site 33PK340 is a historic period site located in ASA 10 (Figure 5, Sheet 2; Table 3; Plate 47). No buildings are indicated at this location on early cartographic sources (Burks 2011; Schweikart et al. 1997). The site is situated in a wooded area with 0–10 percent visibility on a

terrace above Little Beaver Creek. This area is sloping to the east with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is an approximately 15 cm–20 cm (6 in–8 in) deep, dark brown (10YR 3/3) silt loam A horizon at the site from which the artifacts were recovered. The terrace is at the base of the adjacent hillside and the soils are likely a combination of alluvial and colluvial deposition. Three of the STPs excavated in the vicinity of the site were positive (i.e., produced artifacts) [Figure 6], including two of the four radial STPs were excavated at 7.5-m (25-ft) intervals. The assemblage is composed of five whiteware sherds, two cut nails, one glass bottle fragment, and one piece of window glass (Table 4). A detailed analysis of the historic artifacts is included in Appendix D. Three of the whiteware sherds fit together into a single piece that has flow blue decoration. Miller et al. (2000) indicates that flow blue decorated whiteware dates to 1845–present and that whiteware in general dates to approximately 1820–present. The peak production of cut nails is approximately 1790–1890s (Gillio et al. 1980; Nelson 1968).

Several small patches of daffodils are present along the edge of the terrace 10 m–15 m (33 ft–50 ft) east and southeast of the artifacts. Daffodils can be remnants of decorative plantings or landscape modifications and thus can indicate historic site locations. But inspection of the terrace and adjacent floodplain and hillside failed to identify any remains of buildings or structures associated with the site. Although some of the artifact types have established manufacture dates, the size of the assemblage is small, and lacking other evidence it is not possible to determine when the artifacts were deposited. The limits of the site were delineated based on the extent of the artifact scatter and adjacent daffodils. It is irregularly shaped and measures about 15 m x 20 m (50 ft x 66 ft) with an area of about 125 m^2 (1,350 ft^2). The site is relatively intact, but has probably suffered from erosion of the terrace. The site type for 33PK340 is unknown, as defined in the OAI, but it is most appropriately defined as an artifact scatter from an unassigned historic period.

Site 33PK341

Site 33PK341 is a prehistoric site located in ASA 18 (Figure 5, Sheet 2; Table 3; Plate 48). The site is situated in a grassy area with 0–10 percent visibility on the glacial lakebed above Little Beaver Creek and one of its unnamed tributaries. This area is flat with a slope gradient of 0 percent. The site was identified through STP excavation. Excavations indicated that there is an approximately 25-cm (10-in) deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the

site from which the artifact was recovered. Only one of the STPs excavated in the vicinity of the site was positive (i.e., produced an artifact). There was no room toward Shyville or Barlow roads, but radial STPs were excavated at 7.5-m (25-ft) intervals in the other two directions, neither of which were positive. The assemblage is composed of a single unidentified chert utilized flake (Table 4). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m by 1 m (3 ft by 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively intact, but has been disturbed by plowing. As an isolated find, the site type (i.e., habitation, resources extraction, camp, village, etc.) for 33PK339 is unknown, as defined in the Ohio Archaeological Inventory (OAI). It can best be described as an isolated find from an unassigned prehistoric period.

Site 33PK342

Site 33PK342 is a prehistoric site located in ASA 18 (Figure 5, Sheet 2; Table 3; Plate 49). The site is situated in a grassy area with 0–10 percent visibility on the glacial lakebed above Little Beaver Creek and one of its unnamed tributaries. This area is sloping to the south with a gradient of 2 percent. The site was identified through STP excavation. Excavations indicated that there is an approximately 25-cm (10-in) deep, brown (10YR 4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Only one of the STPs excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of a Cedarville-Guelph chert graver (Table 4). The graver is little more than a modified flake with a small barb on it that could be used to engrave or incise lines in soft materials such as wood, clay, bone, etc. (Plate 50). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m by 1 m (3 ft by 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It is relatively intact, but has been disturbed by plowing. As an isolated find, the site type (i.e., habitation, resources extraction, camp, village, etc.) for 33PK339 is unknown, as defined in the Ohio Archaeological Inventory (OAI). It can best be described as an isolated find from an unassigned prehistoric period.

Site 33PK343

Site 33PK343 is a prehistoric site located in ASA 24 (Figure 5, Sheet 3; Table 3; Plate 51). The site is situated in an area of scrub brush with 0–10 percent visibility on the bluff edge above Little Beaver Creek. This area is sloping to the southwest with a gradient of 2 percent.

The site was identified through STP excavation. Excavations indicated that there is an approximately 20-cm (8-in) deep, dark yellowish brown (10YR4/4) silt loam Ap horizon (plow zone) at the site from which the artifact was recovered. Almost all of the glacial lakebed along the bluff edge and beyond it to the northeast is disturbed. The site is in an approximately 30-m (100-ft) long, 10-m (33-ft) wide section of the bluff edge that was intact. Only one of the STPs excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial STPs were excavated at 7.5-m (25-ft) intervals, none of which were positive. The assemblage is composed of a heat-altered Columbus-Delaware chert distal flake fragment (Table 4). It is not temporally diagnostic. A detailed analysis of the prehistoric artifacts is included in Appendix D. A minimum site size of 1 m by 1 m (3 ft by 3 ft) with an area of 1 m^2 (9 ft^2) is assigned to the site. It has been disturbed by plowing. It is possible that the site once extended into the adjacent disturbed area, but no evidence of this was found. As an isolated find, the site type (i.e., habitation, resources extraction, camp, village, etc.) for 33PK339 is unknown, as defined in the Ohio Archaeological Inventory (OAI).It can best be described as an isolated find from an unassigned prehistoric period.

CONCLUSIONS

Sites 33PK339, 33PK340, 33PK341, 33PK342, and 33PK343 are located along Little Beaver Creek. Two are on the valley floor and three are on or near the bluff edge above it. All are within the limits of the glacial lakebed. No sites were found in the unglaciated uplands portion of Area 1 where few habitable landforms are present. The largest habitable area, i.e., relatively level landform, is a wide, slightly rolling area of glacial lakebed east of the north access road and Shyville Road and south of the railroad tracks in the central and northeast part of Area 1 (Figure 4). More than 800 STPs were excavated in this area and no sites were encountered. Although five sites is too small a sample to draw conclusions from, this data appears to reinforce the notion that proximity to a permanent water source (Little Beaver Creek) was a factor in land use decisions. As a group or individually, these sites do little to improve the current understanding of the prehistory and history of the region.

NRHP Criterion D (has yielded or may yield important information) is the only criteria or criteria consideration under which these sites are potentially eligible. However, the historic contexts of the sites could not be established. In each case the archaeological remains are insufficient to date them more precisely than to unassigned prehistoric or historic periods or

indicate the sites' functions. The small size of the assemblages suggests it is unlikely there are archaeological deposits at any of the sites substantial enough to provide data capable of dating them or indicating the sites' functions. Because they cannot be placed in their historic contexts they are not considered to be significant sites. Sites 33PK339–33PK343 are recommended not eligible for inclusion in the NRHP.

CULTURAL RESOURCE MANAGEMENT RECOMMENDATIONS

All of the intact, habitable landforms in Area 1 of the PORTS property have been tested through the excavation of STPs at 15-m (50-ft) intervals or less during this survey effort, by Schweikart et al. (1997), by Mustain and Klinge (2011a), or during Phase II archaeological testing at 33PK217. All of the remaining disturbed or sloping areas have also been surveyed through a combination of cursory inspections of areas with extensive post-1952 disturbance associated with PORTS activities identified in the RFP, visual inspection along transects spaced at 15-m (50-ft) intervals in sloping areas, and excavation of shovel probes spaced no more than 50 m (164 ft) apart to confirm disturbance in relatively level disturbed areas.

Five archaeological sites (33PK339–33PK343), including four prehistoric isolated finds and one historic artifact scatter, were encountered within Area 1 of the PORTS property during this Phase I archaeological survey. None of these sites meet the NRHP evaluation criteria because they cannot be placed in their historic contexts and are unlikely to contain sufficient remains to yield data that would allow them to be placed in their historic contexts through further research. No further work is recommended for any of these five sites.

In general, no further archaeological investigations are recommended for Area 1 with two exceptions. At the time of this writing, the results from recent preliminary assessments and Phase I investigations of historic sites within Area 1 are not available. The general recommendations for Area 1 in this report do not preclude or overwrite any site-specific recommendations that may be forthcoming from other consultants, as those properties were not included in this survey. It was also not possible to confirm that buried prehistoric archaeological resources do not exist in areas of deeper alluvium along Little Beaver Creek and an unnamed tributary in ASA 34. Discontinuous pockets of alluvium that exceeded the 30.5-cm (12-in) depth guidelines for the survey are present along both waterways. Inspection of the eroded banks along the waterways indicated that these soils may extend more than 50 cm (19 in) in some instances. Although the geologic history of Area 1 indicates that it is highly unlikely that NRHP-eligible archaeological resources are buried in these relatively discrete alluvial deposits, ASC recommends a geomorphological study of the Little Beaver Creek floodplain and that of its major tributary in Area 1. This study can determine if those deposits have the potential to contain deeply buried archaeological resources.

SUMMARY

ASC conducted Phase I archaeological investigations of a portion of the non-secured area at the PORTS property in Scioto and Seal townships, Pike County, Ohio (Figures 1 and 2). The project area for the survey, designated Area 1 in the RFP, is about 1,200 m–1,600 m (4,000 ft–5,200 ft) north-south and 1,200 m (4,000 ft) wide, encompassing 129.7 ha (320.35 ac) of dry glacial lakebed and adjacent unglaciated uplands. This area is just east of the Scioto River Valley along the edge of a pre-glacial river valley that contained Pre-Illinoian Lake Tight. Little Beaver Creek, which flows through Area 1, has cut across the glacial lakebed and into the bedrock. Area 1 contains wooded, scrubby, and grassy areas and is located along the northern periphery of the PORTS property on either side of Shyville Road and the northern access road and northwest of a dammed ravine that now contains a sludge pond.

The current research is intended to augment an earlier Phase I survey efforts completed by Schweikart et al. (1997). Several recent studies by ASC, OVAI, and G&P have focused on historic period sites on the PORTS property. This study, while not ignoring undocumented historic sites, focuses on prehistoric archaeological sites.

Five soil types were defined in the RFP for the project. Two of them did not require testing because of extensive post-1952 disturbance associated with PORTS activities or previous Phase II level archaeological testing. Cursory inspections of these areas were preformed and they were photographed. The remaining portions of Area 1 were tested through cursory inspections of previously tested areas and a combination of visual inspection, shovel probe excavation, and STP excavation. Although large areas of slope are present along the edges of the glacial valley and the Little Beaver Creek Valley and a great deal of Area 1 has been disturbed, a substantial portion of Area 1 contains relatively intact, habitable landforms. All of the relatively intact, habitable landforms within Area 1 of the PORTS property were tested by digging STPs at 15-m (50-ft) intervals.

Five sites (33PK339–33PK343) were documented in Area 1. Site 33PK340 is a small historic scatter and the other four sites are prehistoric isolated finds. None of the sites could be placed in their historic contexts. Because of this and that the sites do not appear capable of yielding data sufficient to place them in their historic contexts, they are not significant and therefore are not recommended eligible for inclusion in the NRHP. With two possible exceptions—forthcoming recommendations for the treatment of historic sites documented in

recent studies and a possible geomorphological investigation of the Little Beaver Creek floodplain and that of its major tributary in Area 1—no further work is recommended within Area 1 of the PORTS property or at 33PK339–33PK343 if they are impacted by a future undertaking.

REFERENCES

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APPENDIX A: FIGURES

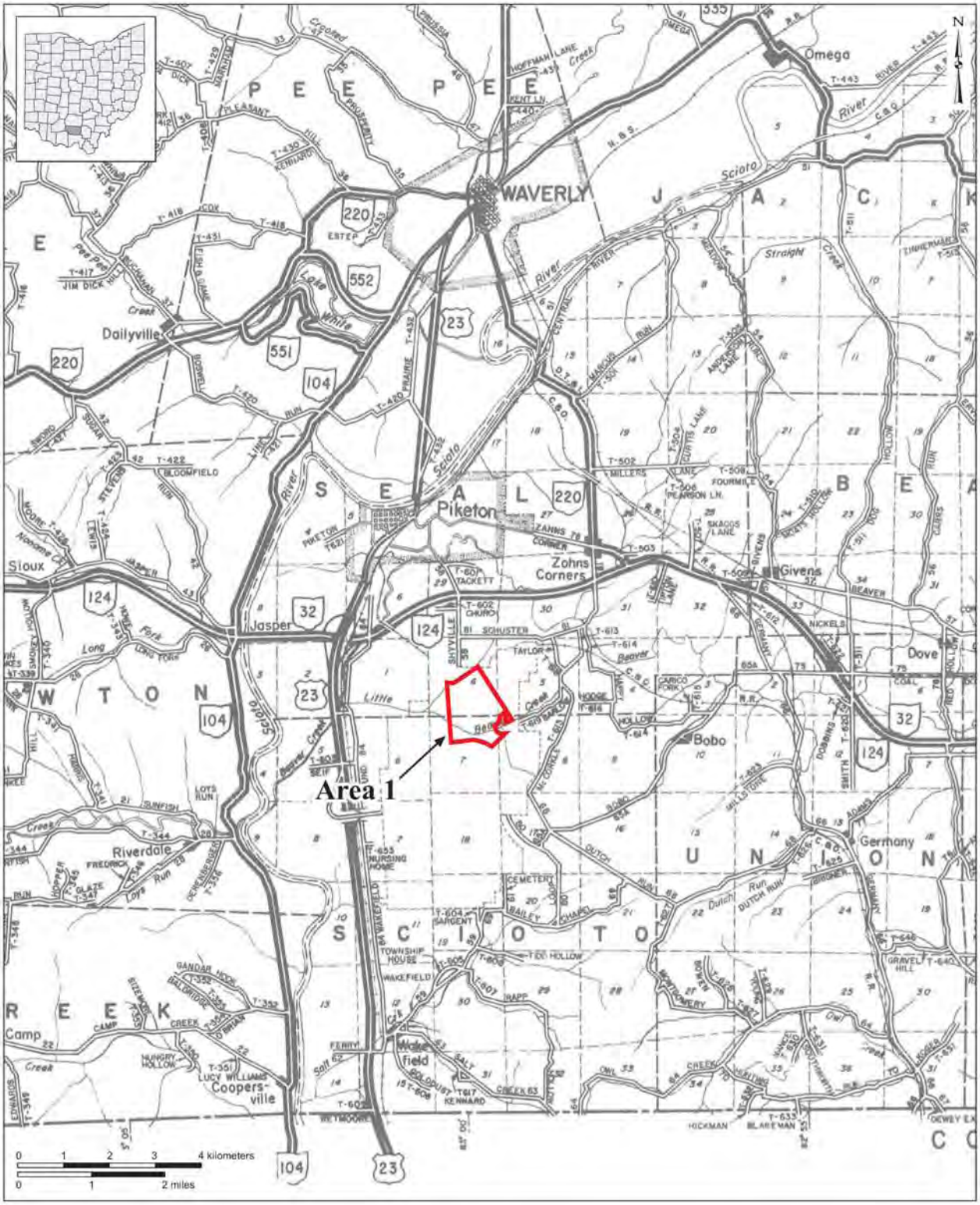


Figure 1. Portion of the ODOT Pike County highway map showing the vicinity of Area 1.

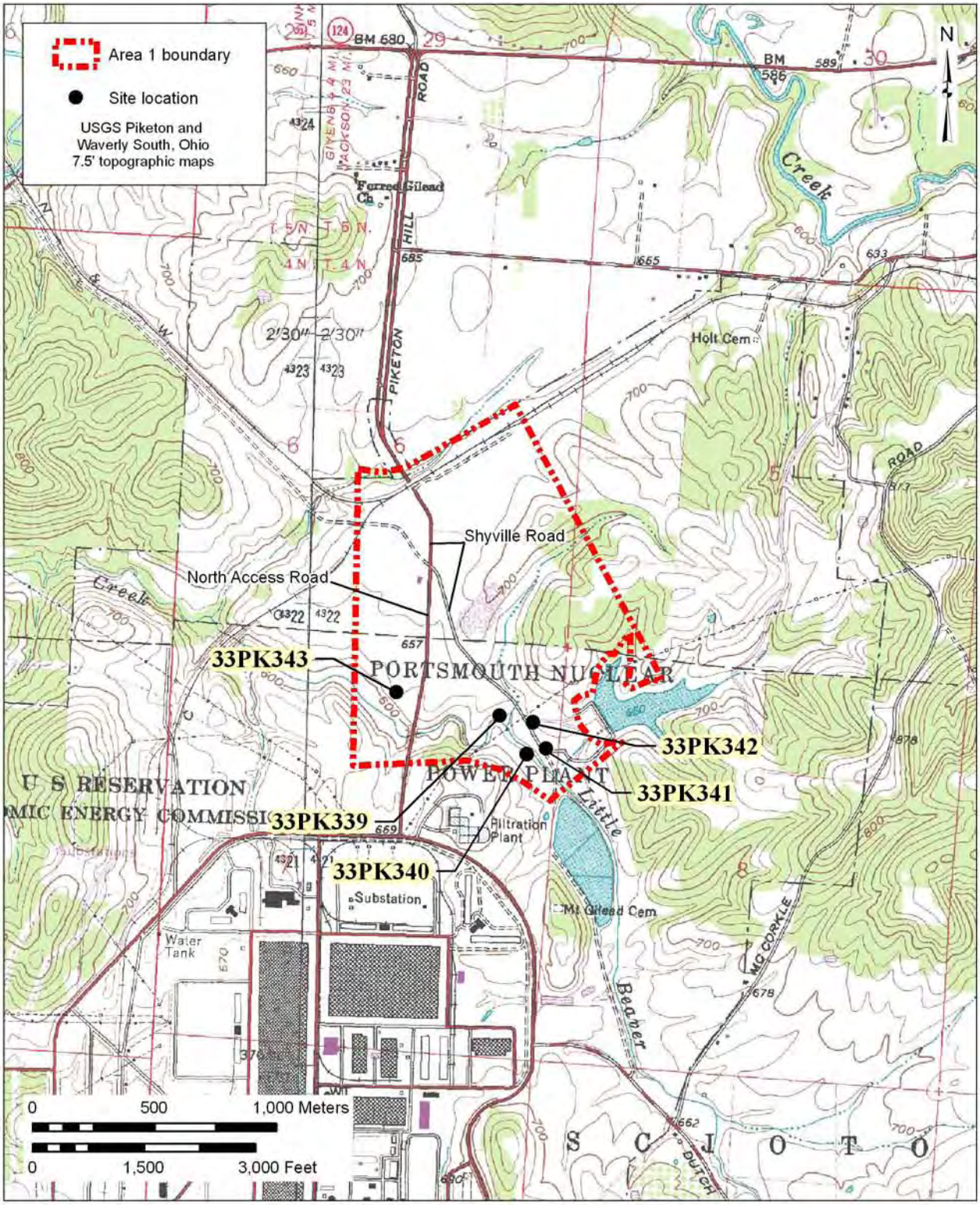


Figure 2. Portions of the 1979 Piketon and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing the inventoried cultural resources within Area 1.

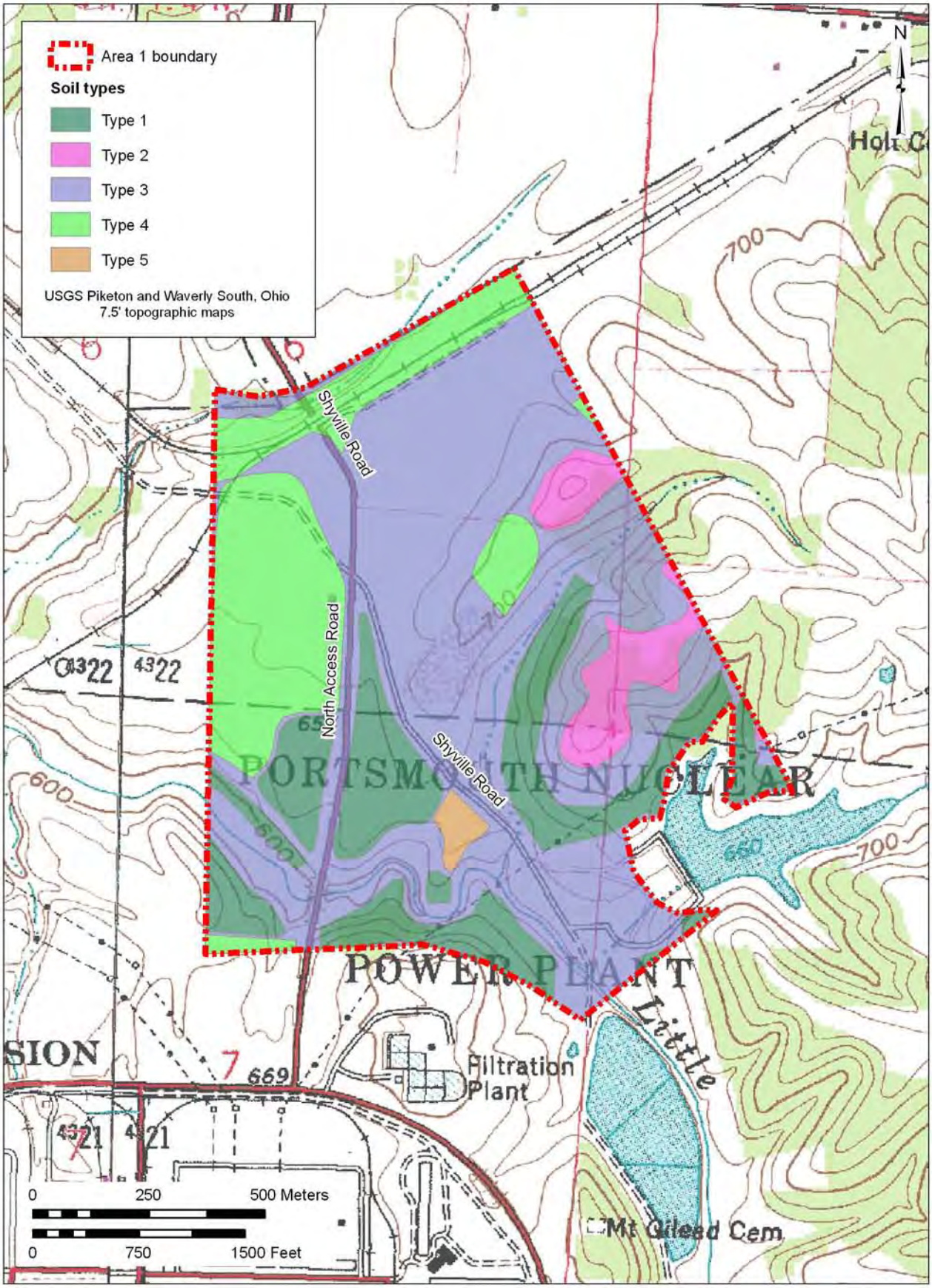


Figure 3. Portions of the 1979 Piketon and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing the five soil types within Area 1 of the PORTS property as defined in the request for proposal.

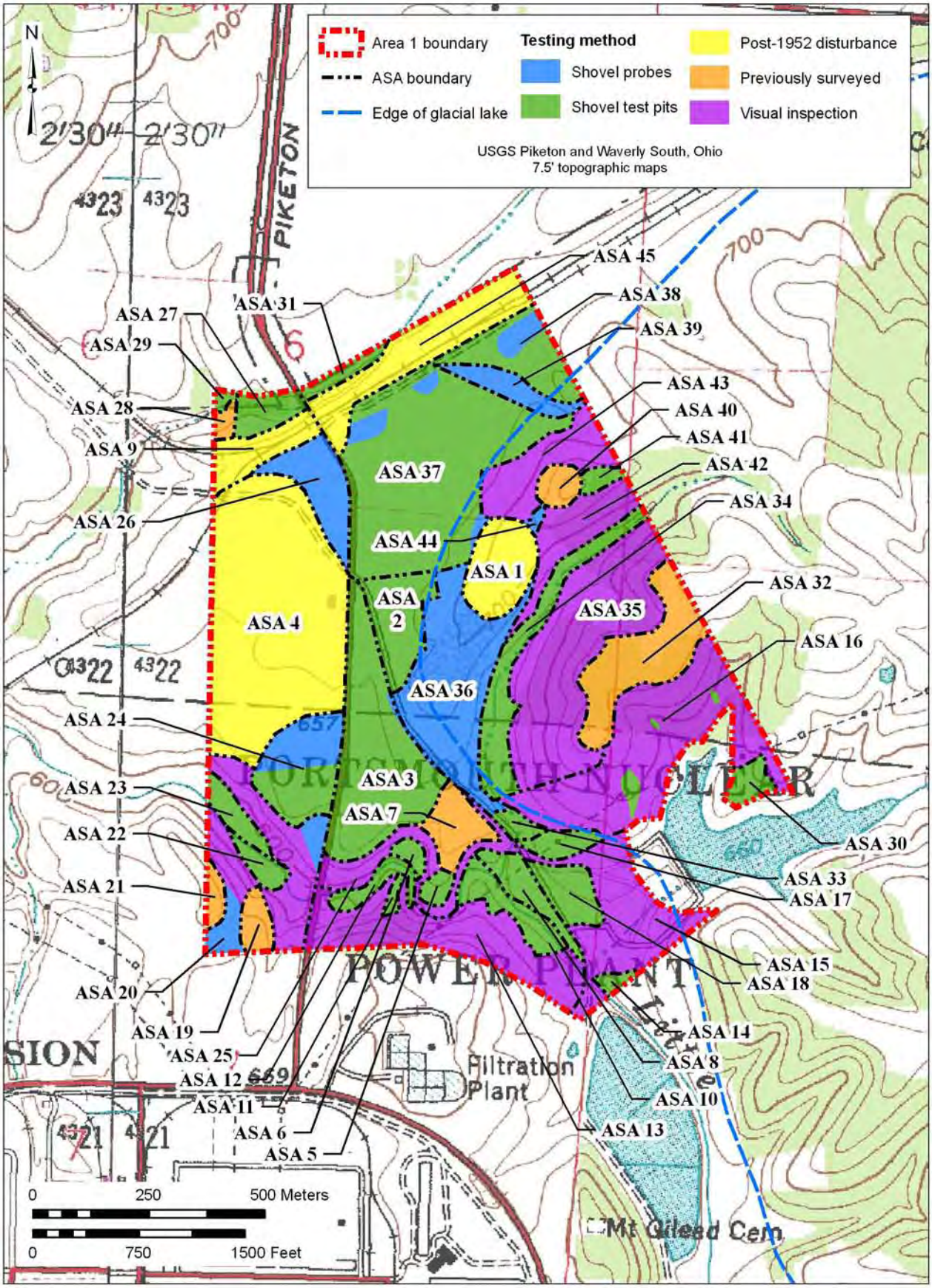


Figure 4. Portions of the 1979 Piketon and 1992 Waverly South quadrangles (USGS 7.5' topographic maps) showing archaeological survey areas and testing methods used in Area 1 of the PORTS property.

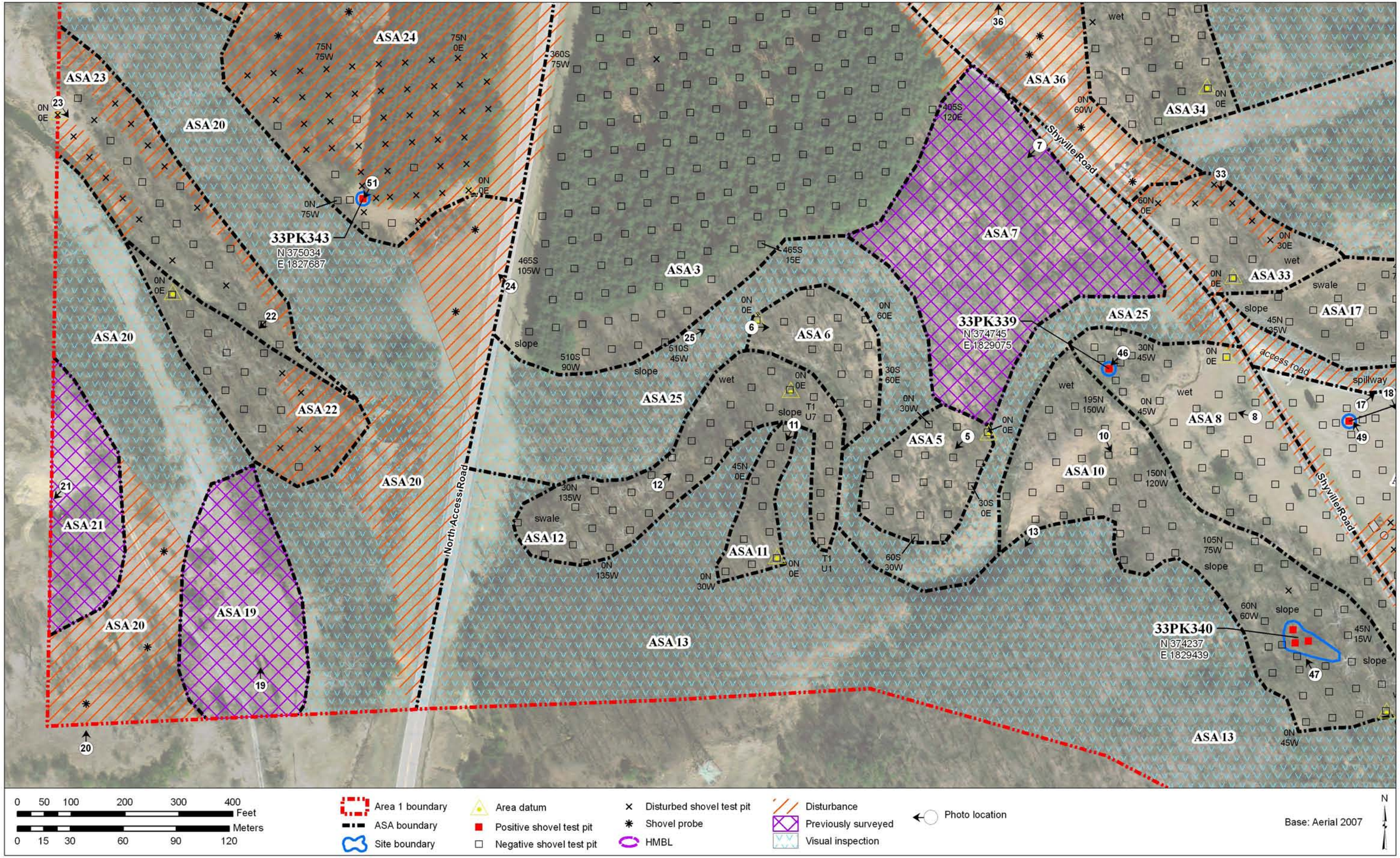
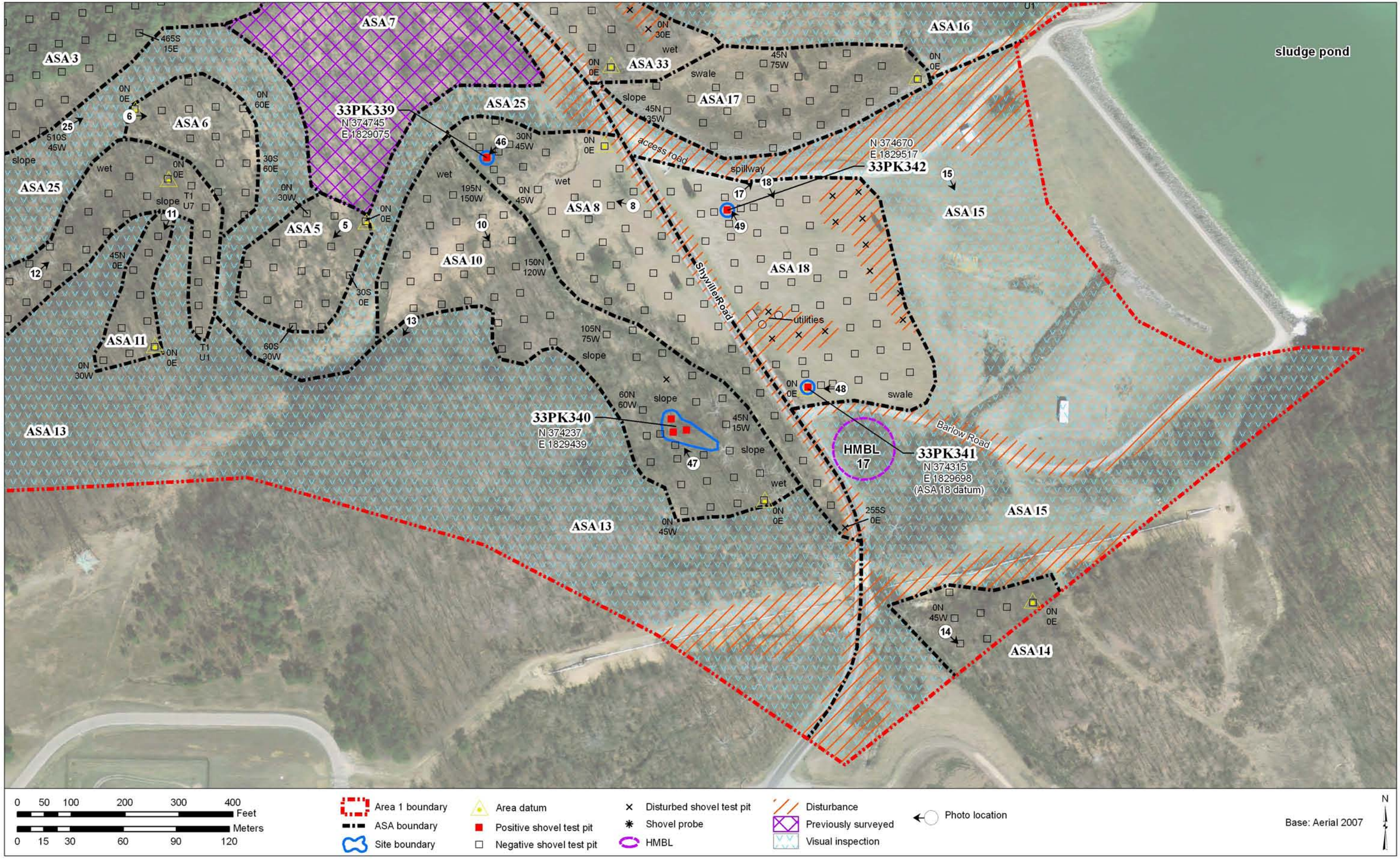


Figure 5. Project map detailing the archaeological investigation in Area 1 of the PORTS property and keyed to the plates. (8 Sheets)



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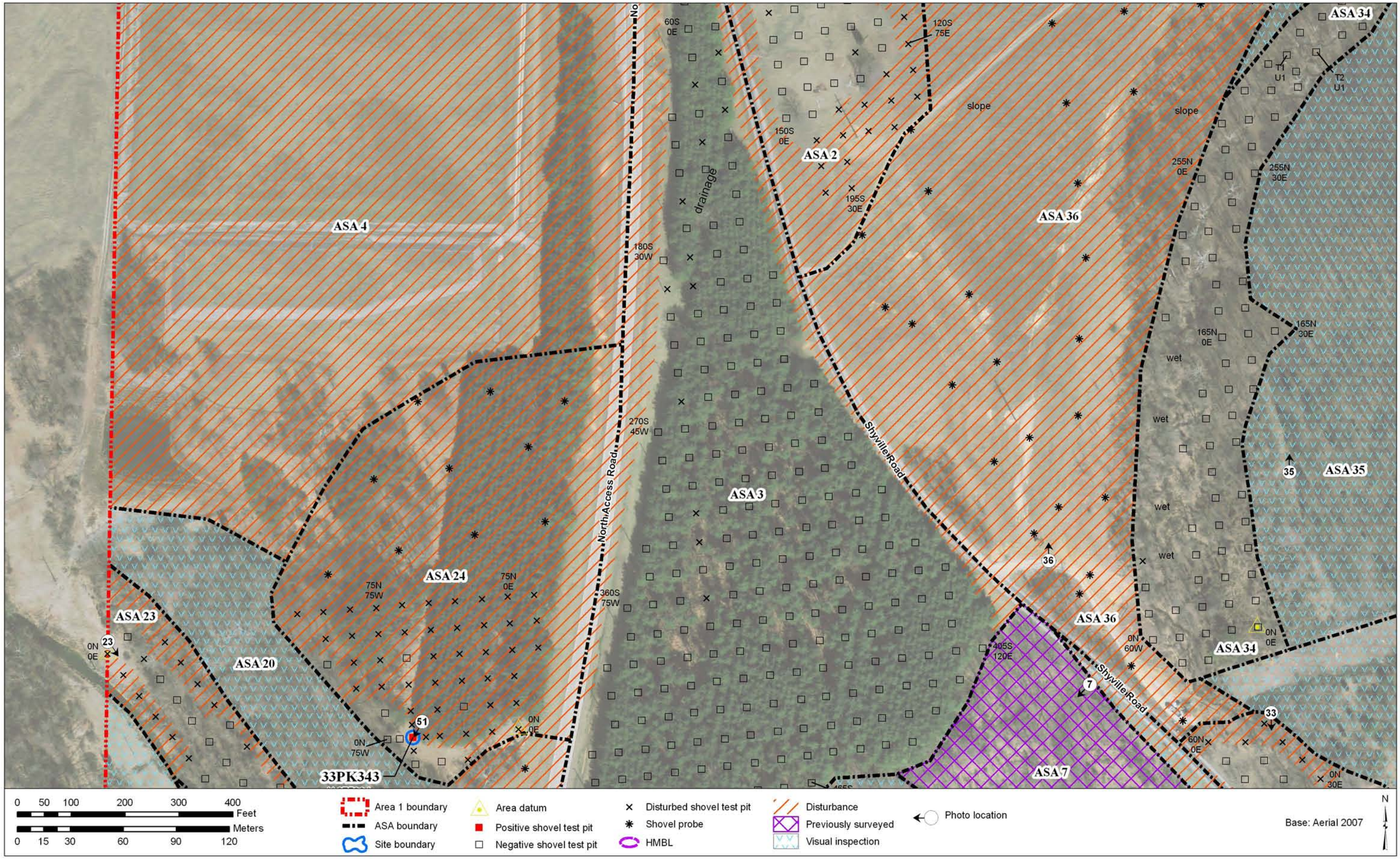

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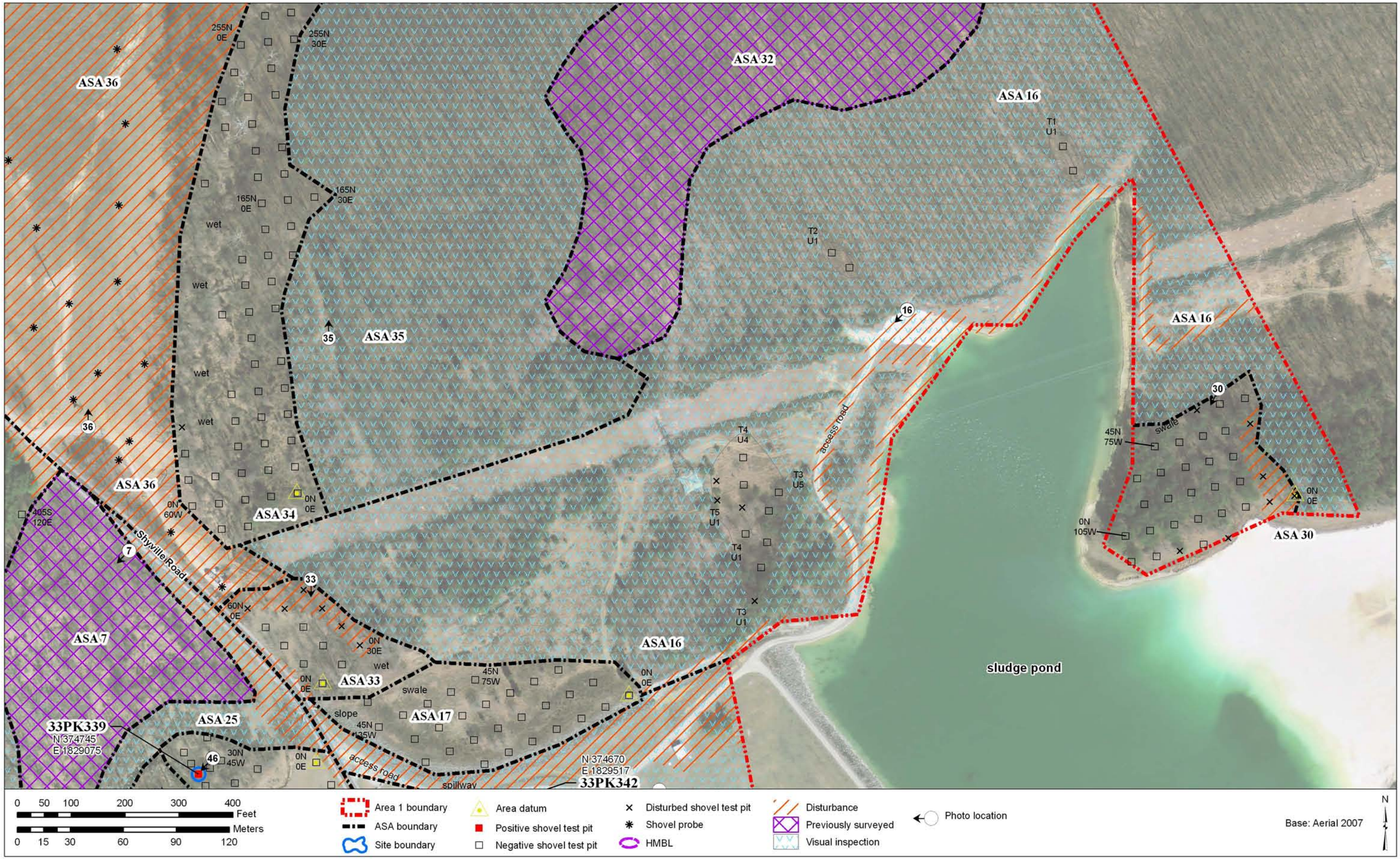

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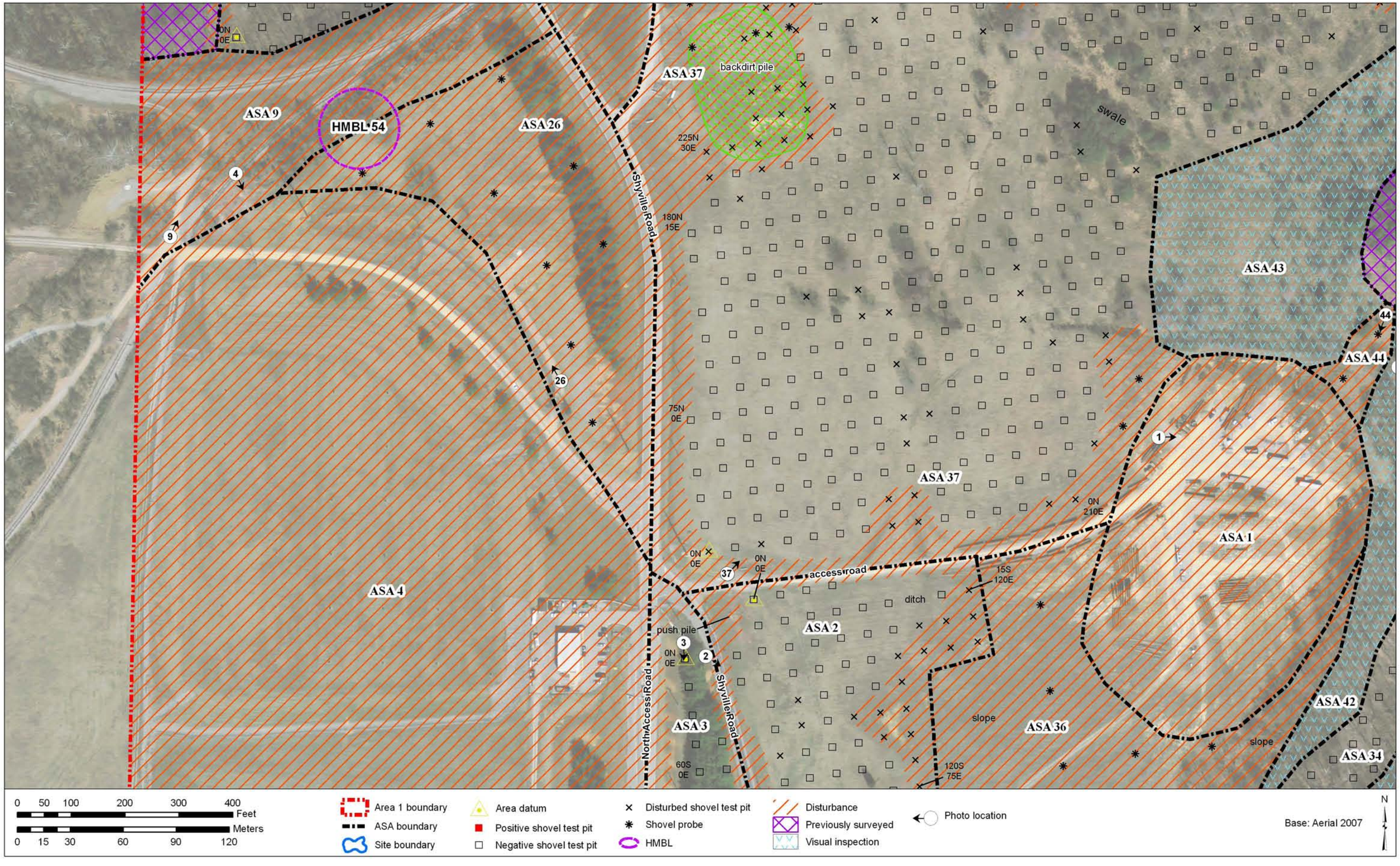
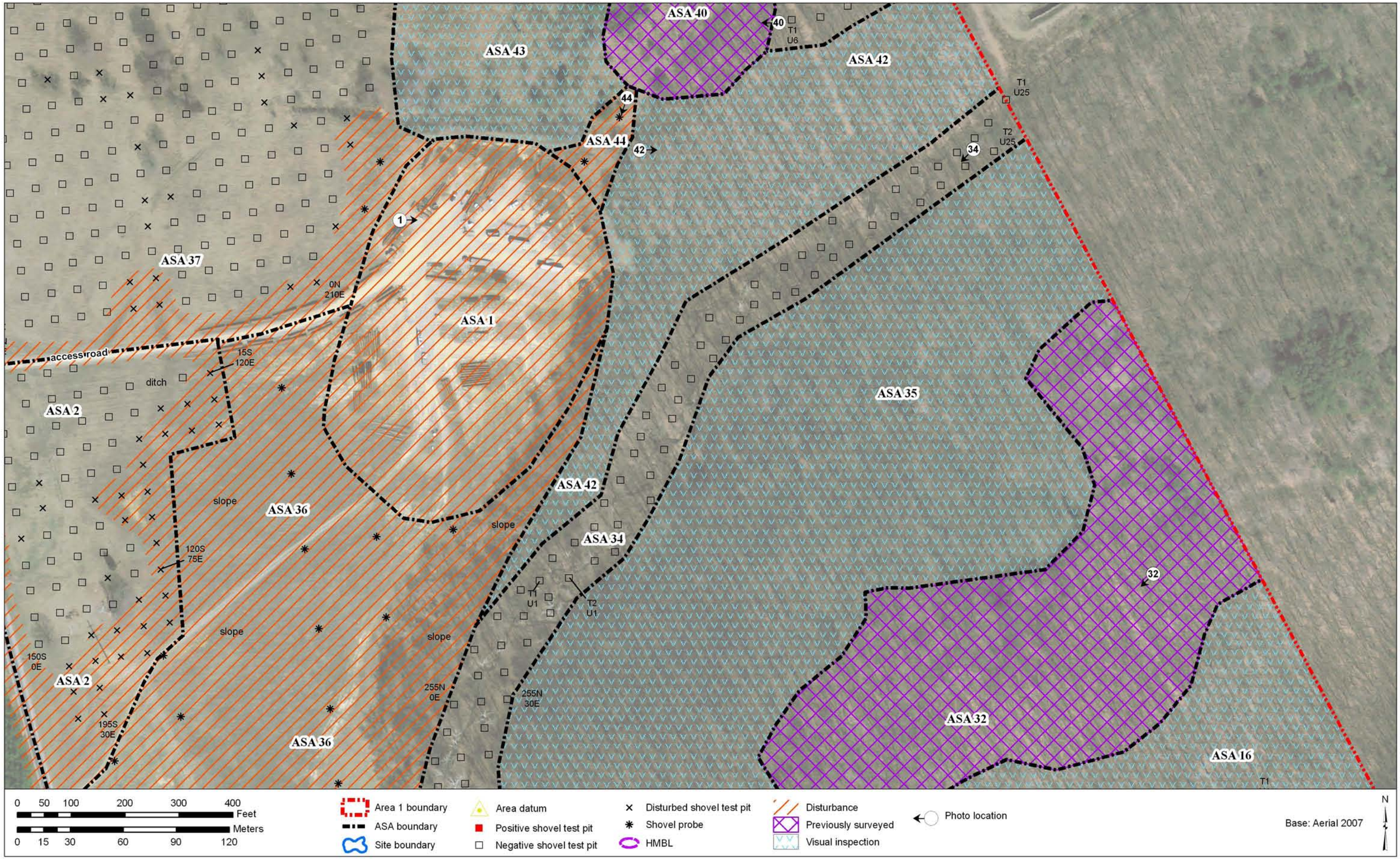


Figure 5. Project map detailing the archaeological investigation in Area 1 of the PORTS property and keyed to the plates. (8 Sheets)



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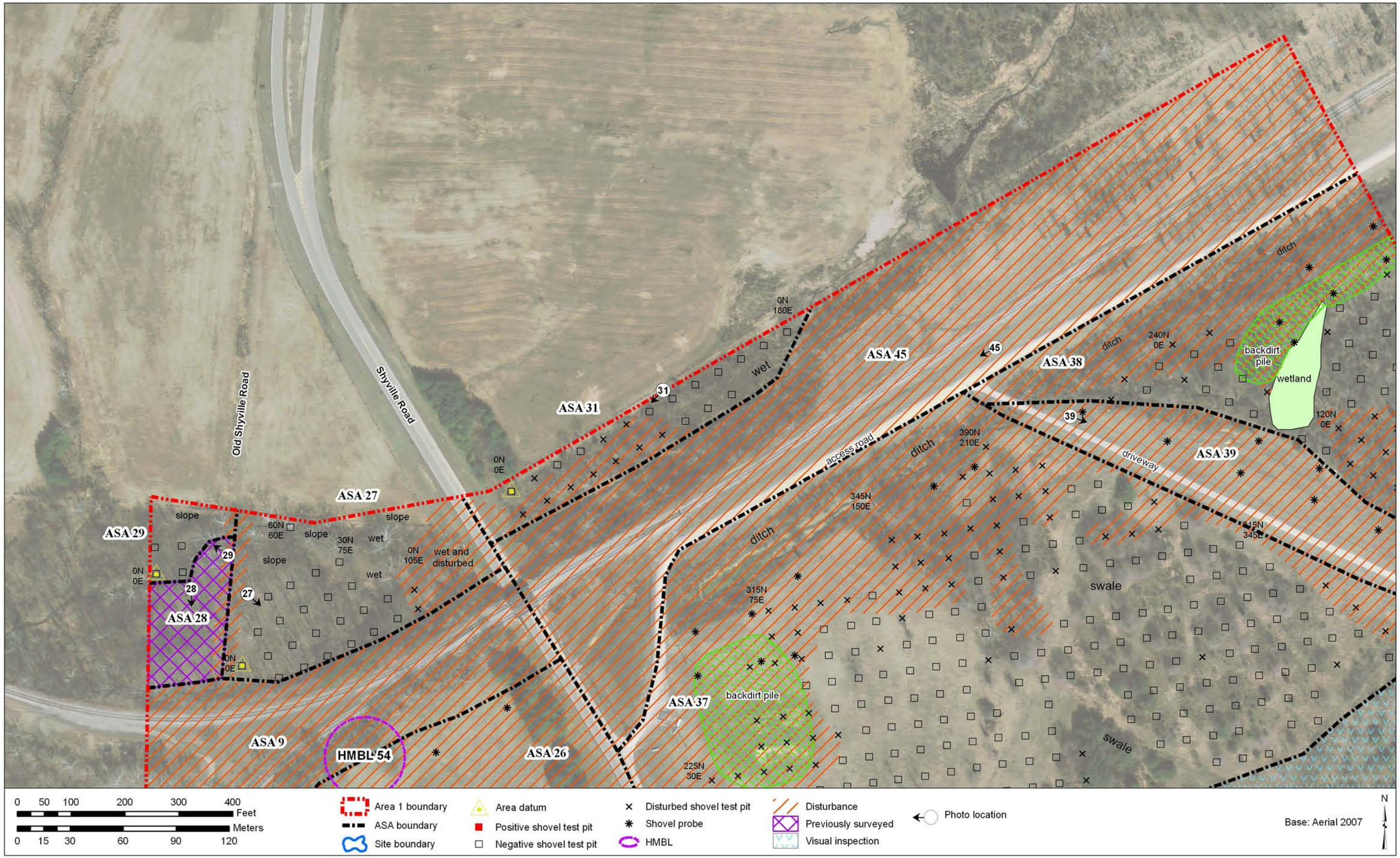

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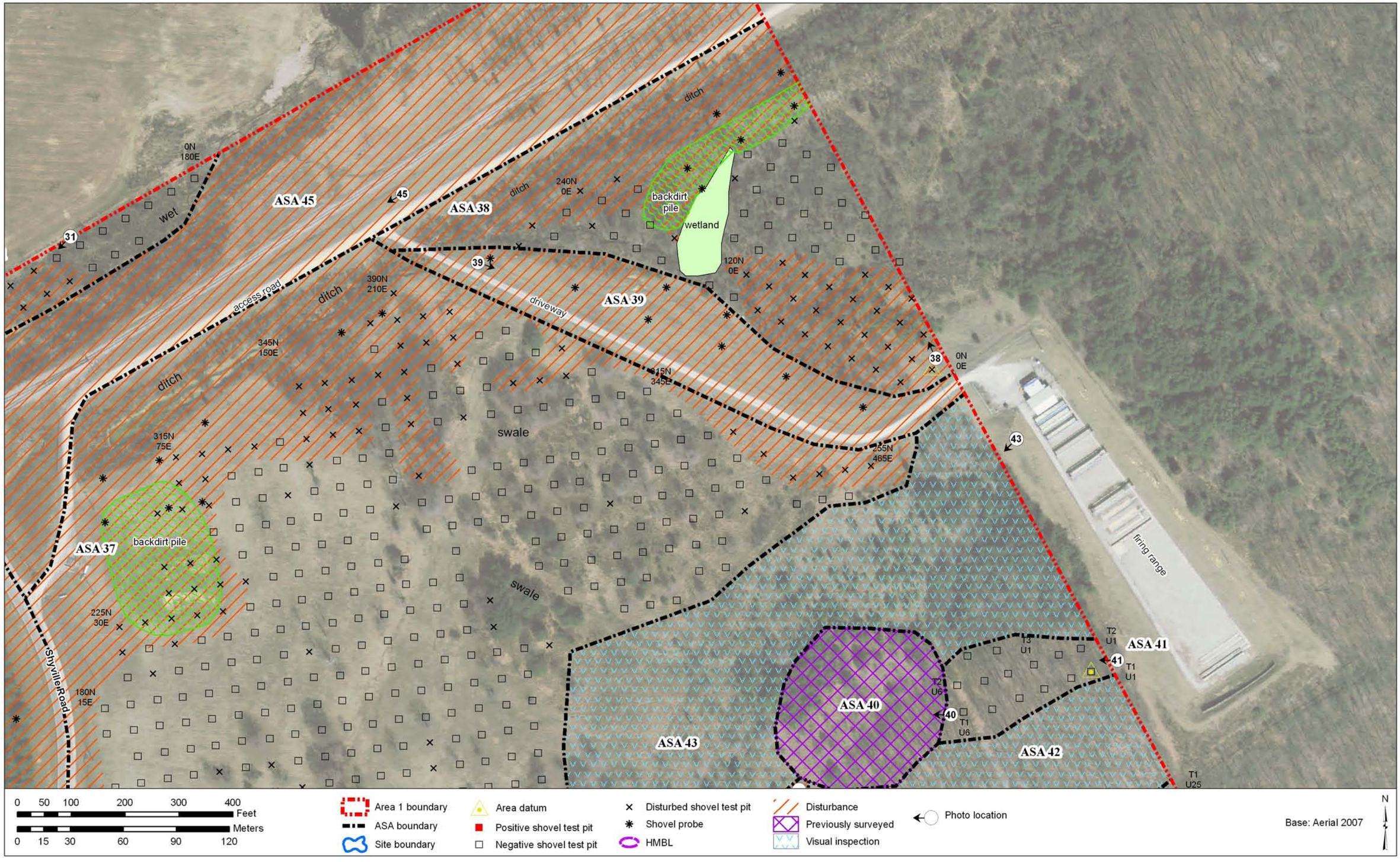

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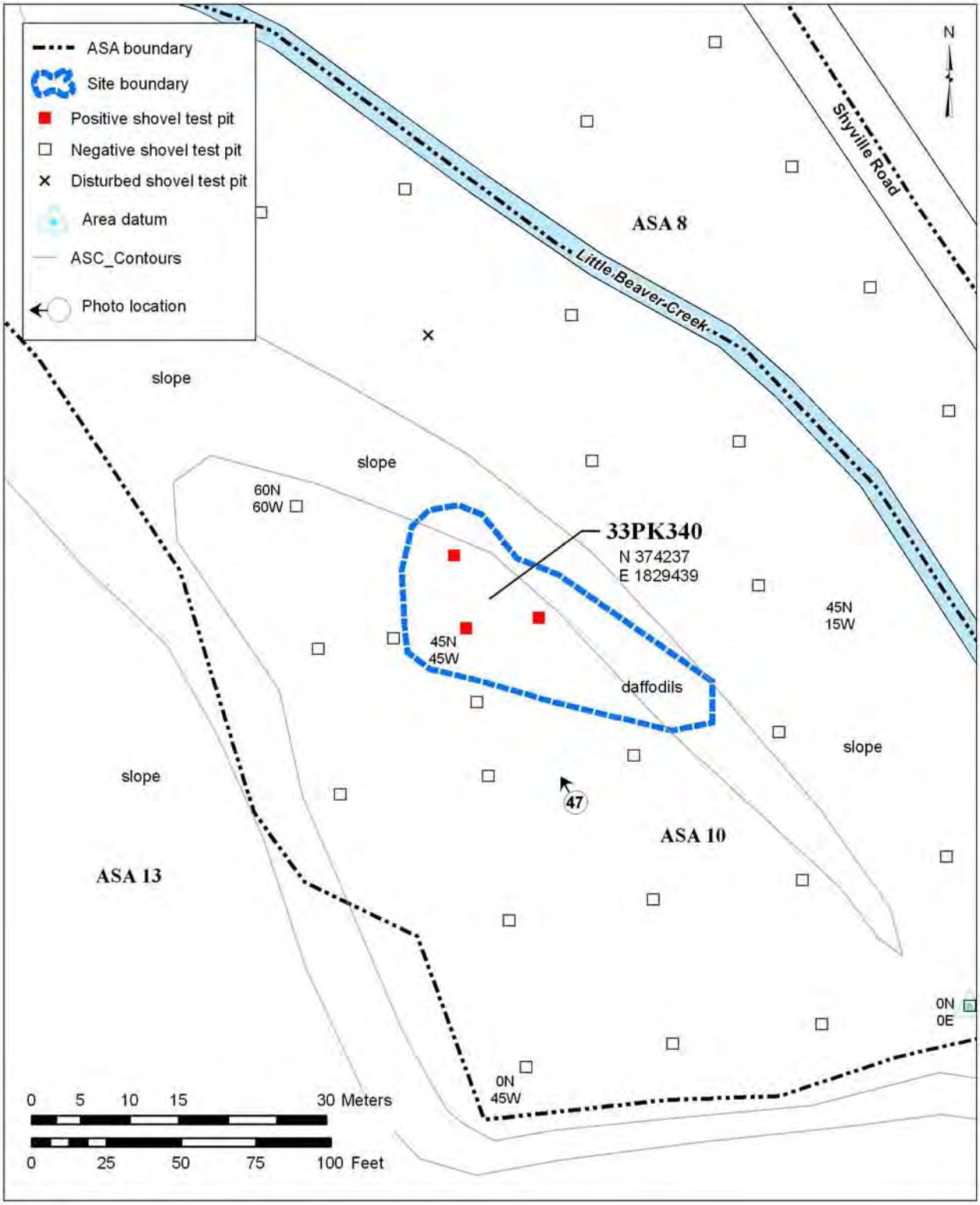

Figure 6. Schematic of 33PK340.

APPENDIX B: TABLES

Table 1. Sites Documented by Schweikart et al. (1997).

OAI No.	Temporal Affiliation	Site Type	Site Size (m)	Landform	Comments
33PK184	approximately 1820-present	Farmstead	70 by 65	Hill/ridgetop	Further work recommended
33PK185	approximately 1900-present	Farmstead	70 by 35	Hill/ridgetop	Further work recommended
33PK186	Unassigned prehistoric	Lithic Scatter	15 by 145	Hill/ridgetop	Point fragment recovered
33PK187	approximately 1915-1951	Farmstead	10 by 23	Hill/ridgetop	Highly disturbed
33PK188	post-1952	Worker's barracks	140 by 85	Hill/ridgetop	Highly disturbed, plant related
33PK189; PIK-206-9	Unassigned prehistoric; historic approximately 1790-present	Isolated Find, Cemetery, Tower platform	55 by 50	Hilltop	Preservation recommended (for Cemetery and Chapel)
33PK190	post-1952	Radio tower	30 x 18	Hilltop	Highly disturbed, plant related
33PK191	approximately 1830s-present	Open dump	6 x 30	Intermittent stream bed	
33PK192	approximately 1900-present	Open dump	43 x 53	Hill/ridgetop	
33PK193	approximately 1820-present	Farmstead	55 x 135	Side slope/bench, intermittent stream bed	Further work recommended
33PK194	approximately 1820–present	Farmstead	110 by 150	Ridgetop	Further work recommended
33PK195	approximately 1820–present	Farmstead	73 by 55	Ridgetop	Further work recommended
33PK196	approximately 1952–present	Culvert and drain pipes	8 by 1	Intermittent steam bed	Plant-Related
33PK197	approximately 1951	Farmstead	35 by 30	First terrace	Further work recommended
33PK198	Unassigned Prehistoric	Isolated Find	1 by 1	Pre-glacial terrace	
33PK199	approximately 1820–present	Isolated Find	1 by 1	Pre-glacial terrace	
33PK200	approximately 1820–present	Historic Scatter	1 by 1	Pre-glacial terrace	
33PK201	approximately 1890–present	Isolated Find	1 by 1	Pre-glacial terrace	
33PK202	approximately 1934–present	Historic Scatter	15 by 15	First terrace	
33PK203	approximately1820 –present	Farmstead	140 by 150	First terrace	Further work recommended
33PK204	Unassigned Prehistoric	Isolated Find	1 by 1	Ridgetop	
33PK205	Unassigned Prehistoric	Isolated Find	1 by 1	Ridgetop	

Table 1. Sites Documented by Schweikart et al. (1997).

OAI No.	Temporal Affiliation	Site Type	Site Size (m)	Landform	Comments
33PK206	Unassigned Prehistoric, 1820–present	Lithic Scatter, Farmstead	120 by 172	First terrace	Further work recommended
33PK207	Unassigned Prehistoric	Isolated Find	1 by 1	Side slope, first terrace	
33PK208	Unassigned Prehistoric	Isolated Find	1 by 1	Ridgetop	Biface recovered
33PK209	1933–1964	Historic Scatter	1 by 1	Ridgetop	
33PK210	Unassigned Prehistoric	Lithic Scatter	15 by 15	Ridgetop	Further work recommended
33PK211	approximately 1890–1964	Farmstead	90 by 130	Ridgetop	Further work recommended
33PK212	approximately1931 –present	Farmstead	152 by 76	First terrace	Further work recommended
33PK213	approximately 1820–present	Farmstead	14 by 9	Terrace and toe ridge	Further work recommended
33PK214 (PIK-207-12)	approximately 1877–mid 20th century	Cemetery	55 by 40	Hilltop	Preservation Recommended
33PK215	approximately 1820–present	Open Dump	12 by 6	Ridgetop	
33PK216	approximately 1879–present	Open Dump	6 by 5	Ridgetop	
33PK217	approximately 1820–present	Farmstead (Dairy)	185 by 85	Pre-glacial terrace and toe ridge	Further work recommended
33PK218 (PIK-205-12)	approximately 1820–present	Farmstead	155 by 75	Toe ridge	Further work recommended
33PK219	post–1952	Old Firing Range	70 by 75	Side slope and artificial bench	Plant-related site that is highly disturbed

Table 2. Phase I Archaeology Survey Methods Table.

Area Designation and Photo No.	Landform	Land Use	Surface Visibility	Survey Method and Interval	No. of Units	Resources Identified
1; Plate 1	Ridgetop	Industrial	0–10 percent	Cursory inspection	-	
2; Plate 2	Glacial lakebed	Rangeland	0–10 percent	Shovel test pit at 15 m	82	
3; Plate 3	Glacial lakebed	Forestland	0–10 percent	Shovel test pit at 15 m	234	
4; Plate 4	Glacial lakebed	Industrial	0–10 percent	Cursory inspection	-	
5; Plate 5	Terrace	Forestland	0–10 percent	Shovel test pit at 15 m	17	
6; Plate 6	Terrace	Forestland	0–10 percent	Shovel test pit at 15 m	14	
7; Plate 7	Glacial lakebed	Forestland	0–10 percent	Cursory inspection	-	
8; Plates 8, 46	Floodplain	Rangeland	0–10 percent	Shovel test pit at 15 and 7.5 m	48	33PK339
9; Plate 9	Glacial lakebed	Transportation	0–10 percent	Cursory inspection	-	
10; Plates 10, 47	Terrace and floodplain	Forestland, rangeland	0–10 percent	Shovel test pit at 15 and 7.5 m	56	33PK340
11; Plate 11	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	10	
12; Plate 12	Terrace and floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	33	
13; Plate 13	Hillside	Forestland	0–10 percent	Visual inspection at 15 m	-	
14; Plate 14	Terrace	Forestland	0–10 percent	Shovel test pit at 15 m	7	
15; Plate 15	Glacial lakebed, hillside	Industrial, forestland	0–10 percent	Visual inspection at 15 m	-	
16; Plate , 16	Hillside, toes	Forestland, utilities	0–10 percent	Visual inspection, shovel test pit at 15 m	15	
17; Plate 17	Glacial lakebed	Utilities, rangeland	0–10 percent	Shovel test pit at 15 m	28	
18; Plates 18, 48, 49	Glacial lakebed	Industrial	0–10 percent	Shovel test pit at 15 and 7.5 m	57	33PK341, 33PK342
19; Plate 19	Glacial lakebed	Utilities, rangeland	0–10 percent	Cursory inspection	-	
20; Plate 20	Glacial lakebed, hillside, floodplain	Forestland, rangeland, utilities	0–10 percent	Visual inspection, shovel probes at 15, <50 m	5	
21; Plate 21	Glacial lakebed	Rangeland	0–10 percent	Cursory inspection	-	
22; Plate 22	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	18	
23; Plate 23	Floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	28	
24; Plates 24,51	Glacial lakebed	Forestland	0–10 percent	Shovel test pits, shovel probes at 15 and 7.5, <50 m	54, 10	33PK343
25; Plate 25	Hillside, floodplain	Forestland	0–10 percent	Visual inspection at 15 m	-	
26; Plate 26	Glacial lakebed	Industrial, utilities	0–10 percent	Shovel probe at <50 m	9	

Table 2. Phase I Archaeology Survey Methods Table.

Area Designation and Photo No.	Landform	Land Use	Surface Visibility	Survey Method and Interval	No. of Units	Resources Identified
27; Plate 27	Terrace and floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	25	
28; Plate 28	Terrace and floodplain	Forestland	0–10 percent	Cursory inspection	-	
29; Plate 29	Hillside, floodplain	Forestland	0–10 percent	Shovel test pit at 15 m	4	
30; Plate 30	Toe	Forestland	0–10 percent	Shovel test pit at 15 m	32	
31; Plate 31	Glacial lakebed	Rangeland	0–10 percent	Shovel test pit at 15 m	23	
32; Plate 32	Ridgetop	Forestland	0–10 percent	Cursory inspection	-	
33; Plate 33	Terrace and floodplain	Rangeland	0–10 percent	Shovel test pit at 15 m	13	
34; Plate 34	Terrace and floodplain	Rangeland, forestland	0–10 percent	Shovel test pit at 15 m	113	
35; Plate 35	Hillside	Forestland	0–10 percent	Visual inspection at 15 m	-	
36; Plate 36	Ridgetop, glacial lakebed	Rangeland, utilities	0–10 percent	Shovel probe at <50 m	28	
37; Plate 37	Glacial lakebed	Rangeland	0–10 percent	Shovel test pits, shovel probes at 15, <50 m	433, 10	
38; Plate 38	Glacial lakebed	Forestland	0–10 percent	Shovel test pits, shovel probes at 15, <50 m	68, 6	
39; Plate 39	Glacial lakebed	Industrial	0–10 percent	Shovel probe at <50 m	8	
40; Plate 40	Ridgetop	Forestland	0–10 percent	Cursory inspection	-	
41; Plate 41	Ridgetop	Forestland	0–10 percent	Shovel test pit at 15 m	14	
42; Plate 42	Hillside	Forestland	0–10 percent	Visual inspection at 15 m	-	
43; Plate 43	Hillside	Forestland, rangeland	0–10 percent	Visual inspection at 15 m	-	
44; Plate 44	Ridgetop/saddle	Industrial	0–10 percent	Shovel probe at <50 m	2	
45; Plate 45	Glacial lakebed	Transportation	0–10 percent	Cursory inspection	-	

Table 3. Phase I Archaeology Resources Table.

OAI No.	UTM (NAD27) (m)	State Plane (NAD83) US survey (ft)	Cultural Periods	Cultural Material	Depositional Context	Resource Type	Landform and Soil Phase	Investigation Type and Surface Visibility	Site Dimensions	Recommendation
33PK339	Z 17 N 4321539 E 327659	Ohio South N 374745 E 1829075	Unassigned prehistoric	1 Cedarville-Guelph chert whole flake	A horizon	Unknown	Floodplain; Latham-Wharton silt loams, 15 to 25 percent slopes	Visual inspection; Photo-documentation; Shovel test pit at 15 and 7.5-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK340	Z 17 N 4321383 E 327767	Ohio South N 374237 E 1829439	Historic	5 whiteware sherds, 2 cut nails, 1 glass bottle fragment, 1 piece of window glass	A horizon	Unknown	Terrace; Latham-Wharton silt loams, 15 to 25 percent slopes	Visual inspection; Photo-documentation; Shovel test pit at 15 and 7.5-m intervals, 0–10% visibility	15 m x 20 m 50 ft x 66 ft	No further work
33PK341	Z 17 N 4321405 E 327846	Ohio South N 374315 E 1829698	Unassigned prehistoric	1 unidentified chert utilized flake	Plow zone	Unknown	Glacial lakebed; Omulga silt loam, 3 to 8 percent slopes	Visual inspection; Photo-documentation; Shovel test pit at 15 and 7.5-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK342	Z 17 N 4321514 E 327793	Ohio South N 374670 E 1829517	Unassigned prehistoric	1 Cedarville-Guelph chert graver	Plow zone	Unknown	Glacial lakebed; Omulga silt loam, 3 to 8 percent slopes	Visual inspection; Photo-documentation; Shovel test pit at 15 and 7.5-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work
33PK343	Z 17 N 4321634 E 327237	Ohio South N 375034 E 1827687	Unassigned prehistoric	1 Columbus-Delaware chert distal flake fragment	Plow zone	Unknown	Bluff Edge above Little Beaver Creek; Omulga silt loam, 0 to 3 percent slopes	Visual inspection; Photo-documentation; Shovel test pit at 15 and 7.5-m intervals, 0–10% visibility	1 m x 1 m 3 ft x 3 ft	No further work

Table 4. Cultural Materials Provenience Table.

Provenience	Cultural Materials Collected	Total
33PK339: ASA 8; STP 30N,60W; Level 1 (A Horizon)	Cedarville-Guelph chert whole flake	1
33PK340: ASA 10; STP 45N,45W; Level 1; (A Horizon)	Whiteware body sherd	1
	Cut nail	1
33PK340: ASA 10; STP 45N,37.5W; Level 1; (A Horizon)	Whiteware rim sherds with flow blue decoration	3
	Whiteware body sherd	1
	Cut nail	1
	Window glass fragment	1
33PK340: ASA 10; STP 52.5N,45W; Level 1; (A Horizon)	Aqua glass bottle fragment	1
33PK341: ASA 18; STP 0N,0E; Level 1 (Ap Horizon)	Unidentified chert utilized flake	1
33PK342: ASA 18; STP 105N,30W; Level 1 (Ap Horizon)	Cedarville-Guelph chert graver	1
33PK343: ASA 24; STP 0N,60W; Level 1 (Ap Horizon)	Columbus-Delaware chert distal flake fragment	1

APPENDIX C: PLATES

Plate 1. Overview of Archaeological Survey Area 1; facing east.

Plate 2. Overview of Archaeological Survey Area 2; facing southeast.

Plate 3. Overview of Archaeological Survey Area 3; facing south.

Plate 4. Overview of Archaeological Survey Area 4; facing south-southeast.

Plate 5. Overview of Archaeological Survey Area 5; facing southwest.

Plate 6. Overview of Archaeological Survey Area 6; facing east.

Plate 7. Overview of Archaeological Survey Area 7; facing southwest.

Plate 8. Overview of Archaeological Survey Area 8; facing northwest.

Plate 9. Overview of Archaeological Survey Area 9; facing north-northeast.

Plate 10. Overview of Archaeological Survey Area 10; facing south-southeast.

Plate 11. Overview of Archaeological Survey Area 11; facing south-southwest.

Plate 12. Overview of Archaeological Survey Area 12; facing northeast.

Plate 13. Overview of Archaeological Survey Area 13 showing the sloping hillside; facing south-southwest.

Plate 14. Overview of Archaeological Survey Area 14; facing southeast.

Plate 15. Overview of Archaeological Survey Area 15; facing south-southeast.

Plate 16. Overview of Archaeological Survey Area 16 showing disturbance; facing southwest.

Plate 17. Overview of Archaeological Survey Area 17; facing northeast.

Plate 18. Overview of Archaeological Survey Area 18; facing southeast.

Plate 19. Overview of Archaeological Survey Area 19; facing north.

Plate 20. Overview of Archaeological Survey Area 20; facing north.

Plate 21. Overview of Archaeological Survey Area 21; facing southwest.

Plate 22. Overview of Archaeological Survey Area 22; facing southwest.

Plate 23. Overview of Archaeological Survey Area 23; facing south-southeast.

Plate 24. Overview of Archaeological Survey Area 24; facing northwest.

Plate 25. Overview of Archaeological Survey Area 25; facing northeast.

Plate 26. Overview of Archaeological Survey Area 26; facing north-northwest.

Plate 27. Overview of Archaeological Survey Area 27; facing southeast.

Plate 28. Overview of Archaeological Survey Area 28; facing south.

Plate 29. Overview of Archaeological Survey Area 29; facing northwest.

Plate 30. Overview of Archaeological Survey Area 30; facing south-southwest.

Plate 31. Overview of Archaeological Survey Area 31; facing southwest.

Plate 32. Overview of Archaeological Survey Area 32; facing southwest.

Plate 33. Overview of Archaeological Survey Area 33; facing south.

Plate 34. Overview of Archaeological Survey Area 34; facing southwest.

Plate 35. Overview of Archaeological Survey Area 35; facing north.

Plate 36. Overview of Archaeological Survey Area 36; facing north.

Plate 37. Overview of Archaeological Survey Area 37; facing northeast.

Plate 38. Overview of Archaeological Survey Area 38; facing north-northwest.

Plate 39. Overview of Archaeological Survey Area 39; facing east-southeast.

Plate 40. Overview of Archaeological Survey Area 40; facing west.

Plate 41. Overview of Archaeological Survey Area 41; facing west.

Plate 42. Overview of Archaeological Survey Area 42; facing east.

Plate 43. Overview of Archaeological Survey Area 43; facing southwest.

Plate 44. Overview of Archaeological Survey Area 44; facing south-southwest.

Plate 45. Overview of Archaeological Survey Area 45; facing southwest.

Plate 46. Overview of 33PK339 in Archaeological Survey Area 8; facing southwest.

Plate 47. Overview of 33PK340 in Archaeological Survey Area 10; facing northwest.

Plate 48. Overview of 33PK341 in Archaeological Survey Area 18; facing west.

Plate 49. Overview of 33PK342 in Archaeological Survey Area 18; facing north-northwest.

Plate 50. Cedarville-Guelph chert graver recovered from 33PK342.

Plate 51. Overview of 33PK343 in Archaeological Survey Area 24; facing west-southwest

APPENDIX D: ARTIFACT ANALYSIS

Appendix D: Prehistoric Artifact Analysis.

OAI No.	Field Site	Archaeological Survey Area	Northing	Easting	Stratum	Description	Raw Material	Cortex	Platform Surface	Platform Edge Trim	Platform Edge Grinding	Flake Termination	Heat Altered	Count	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Temporal or Cultural Affiliation	Plate
33PK339	1	8	30N	60W	A	Flake, whole	Cedarville-Guelph	0%	Flat	A	A	Feathered	No	1	0.1	4.2	5.1	1.0	unassigned prehistoric	
33PK341	3	18	0N	0E	Ap	Flake, utilized	unidentified	≥50%	Cortical	P	I	Plunging	No	1	9.8	48.3	22.8	8.6	unassigned prehistoric	
33PK342	4	18	105N	30W	Ap	Graver	Cedarville-Guelph	<50%	Complex	A	A	Feathered	No	1	4.8	37.2	22.6	7.6	unassigned prehistoric	50
33PK343	5	24	0N	60W	Ap	Flake, distal fragment	Columbus-Delaware	0%	N/A	N/A	N/A	Hinged	Yes	1	1.2	*23.6*	18.2	9.4	unassigned prehistoric	

Key: I = Indeterminate; A = Absent; P = Present. *Italic* measurements indicate measurement of a fragmentary piece.

Appendix D: Historic Artifact Analysis.

OAI No.	Field Site	Archaeological Survey Area	Northing	Easting	Stratum	Functional Group	Material	Type	Subtype	Description	Decoration	Mend	Count	Date Range	Reference
33PK340	2	10	45N	45W	A	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd			1	approximately 1820-present	Miller et al. 2000
33PK340	2	10	45N	45W	A	Architectural	Metal	Iron	Hardware	Nail, cut			1	approximately 1790-1890s (peak production)	Gillio et al. 1980; Nelson 1968
33PK340	2	10	45N	37.5W	A	Kitchen	Ceramic	Refined Earthenware	Whiteware	Rim sherds	Flow blue	3 pieces	3	1845-present	Miller et al. 2000
33PK340	2	10	45N	37.5W	A	Kitchen	Ceramic	Refined Earthenware	Whiteware	Body sherd			1	approximately 1820-present	Miller et al. 2000
33PK340	2	10	45N	37.5W	A	Architectural	Metal	Iron	Hardware	Nail, cut			1	approximately 1790-1890s (peak production)	Gillio et al. 1980; Nelson 1968
33PK340	2	10	45N	37.5W	A	Architectural	Glass	Window	Colorless	Fragment			1		
33PK340	2	10	52.5N	45W	A	Kitchen	Glass	Bottle	Aqua	Body fragment			1		

APPENDIX E: LITHIC FLAKE AND TOOL ATTRIBUTES AND IDENTIFIED CHERT TYPES

Definitions of Lithic Flake Variables and Variable States

Lithic raw material: Flakes are macroscopically inspected to determine the most likely geological sources of raw materials employing the chert reference collection in the ASC Group artifact laboratory. This variable monitors procurement activities, selectivity in the use of different chert types for different technological purposes, and serves as a means estimating mobility and exchange networks.

Dorsal surface cortex: Cortex is defined as any exterior piece of a lithic material that does not exhibit a humanly induced fracture scar. Cortex may occur in a wide variety of forms, including weathered, discolored or stained surfaces, joint planes, patination, or adhering geological matrix (Ahler 1987). This definition contrasts cortex with the non-cortical surface which is any humanly induced fracture surface (Ahler 1987; Odell and Henry 1989:241).

Flakes and flake fragments are categorized by the extent of cortical coverage. Those with none are indicated (coded 0 percent), those with cortex are distinguished as having cortex on less than one-half of the extant dorsal surface (coded <50 percent), or as having extensive cortical coverage, operationally defined as covering 50 percent or more of the extant dorsal surface (coded ≥50 percent) or having cortex covering the entire dorsal surface (coded 100 percent). Dorsal surface cortex may be indeterminate in cases of severe heat-spalling of the dorsal flake surface.

The presence of cortex on dorsal flake surfaces indicates that flakes were detached from the outer surfaces of raw materials that had little prior modification. Assemblages dominated by flakes lacking cortex represent flake production from cores or tools that were extensively modified prior to their introduction to a site or assemblages in which raw materials were being extensively shaped. The maintenance of existing tools, for example, should result in the deposition of few, if any, cortical flakes.

Striking platform surface: Three variable states are distinguished for the character of the surface of the striking platform remnant.

1) Cortical: Platform is unaltered and exhibits cortex;
2) Flat: A single, flat, concave, convex, or undulating surface not covered with cortex;
3) Complex: Presence of two or more flake scars.

The striking platform is the surface of the core to which force is applied to detach a flake. The geometry of the striking platform surface and its angular relationship to the proximal portion of the core face is an important variable in controlled flake detachment. The striking platform surface and the adjacent core face must often be shaped to accept the application of flaking force. Careful platform preparation is especially critical for the detachment of thin flakes where the blow must be placed near the edge of the striking platform.

In general, cortical platforms are most common on unprepared or minimally prepared flake cores or on raw materials in the initial stages of tool shaping. Bifaces have complex edges, and flakes from bifacial cores or tools commonly exhibit multi-faceted platform remnant surfaces.

Platform edge trim: Platform edge trimming is denoted on the flake by the presence of small flake scars on the dorsal face of the flake emanating from the edge of the platform surface. These small scars are the result of rasping or crushing off the overhang above the concavities of previous bulbar scars on the core face and contouring the core face to a convex surface immediately adjacent to the striking platform edge. Core face trimming is coded as present or absent.

Platform edge trimming is not a necessary platform preparation procedure if the flaking blow is to be aimed at a non-marginal portion of the core's striking platform. Non-marginally applied force is used to detach thick flakes from a core. The detachment of thin flakes from a core requires that the flaking blow be applied to the margin of the striking platform and that the core face is convex, both along the axis of flake removal and perpendicular to that axis. Core face trimming will therefore be prevalent whenever thin flakes are to be detached and whenever it is desired to thin a tool surface without markedly narrowing the striking platform.

Platform edge grinding: Grinding is denoted by the abrasive rounding of the platform edge, particularly of small protrusions along the edge. Abrasion of the striking platform edge removes minor edge profile irregularities and strengthens the edge to prevent the collapse of the platform under force application. Platform edge grinding is not a necessary step in platform preparation if force application is to be applied to a non-marginal platform surface, but is particularly useful if long, thin flakes are to be detached from thin core edges, as in bifacial tool shaping. Platform edge grinding is coded as present or absent.

Flake termination: Four variable states are distinguished for the character of the distal end of a flake.

1) Feathered: Distal end exhibiting a sharp edge resulting from the smooth termination of force that gradually shears the flake from the objective piece;
2) Stepped: Distal end exhibiting a 90 degree angle with the ventral surface resulting from abrupt termination of force that causes the flake to snap;
3) Hinged: Distal end that is rounded or blunt resulting from the force used to create the flake rolls away from the objective piece;
4) Plunging: Distal end that curves in toward the ventral surface resulting from the force used to create the flake curving in toward the objective piece.

Heat treatment: Purposeful heat treatment is a highly controlled process designed to reduce the tensile strength of the chert (typically by 40–70 percent) to improve chert fracturing properties and reduce the amount of force required to fracture the stone, thereby increasing the knapper's control over the fracturing process. Heat treatment is often difficult to detect, but heat-treated cherts usually exhibit more vitreous fracture surfaces than those of non-heat-treated surfaces and may exhibit distinctive color changes as a consequence of oxidized iron impurities. Heat treatment is coded as present or absent. Where indeterminate or ambiguous, it is coded as absent.

Length, width, and thickness. Maximum dimensions of these variables measured to the nearest 0.1 mm.

Weight. Weight of the artifact is measured to the nearest 0.1 gram.

Flake sizes vary with the size of the core and with the purposes of flake removal. Relatively large, thick flakes may be created in order to use the flakes as tools or when flakes are to be used as blanks for highly shaped tools; relatively large, thick flakes may also be produced in the process of shaping a core or in the initial stages of tool-shaping. Flakes will tend to decrease in size through the production stages of a tool. Flake weight is also a useful measure of overall flake size.

Identified Lithic Tool Types

utilized flake: expedient tools consisting of unmodified flakes with macroscopic use ware (Hanton and Davis 2010). They typically have a series of small flake scars along one or more edge caused by scraping and are distinguished by these tiny chips along a damaged edge as opposed to purposeful edge trimming on a modified flake.

graver: also referred to as a burin, this is typically a flake (although bifaces can be used) that has been modified by notching an edge to create a small, sharp, beveled spike extending beyond the tool's body that could be used to engrave or incise.

Identified Chert Types

Cedarville-Guelph Chert: Stout and Schoenlaub (1945) state that due to the similarities between the two formations, chert from the Cedarville and Guelph dolomites should be considered together as Cedarville-Guelph chert. In general, this material is "very nearly a typical dolomite" (Stout 1941:150) derived from a Silurian formation. Cedarville-Guelph chert occurs near Caesar Creek in Greene County, Ohio, and other nearby counties. This material is coarse to nearly porcelaneous and ranges from white to light gray, grading into grainy white patches. The chert often contains numerous white or light bluish gray fossils that are frequently replaced by semi-translucent chalcedony or quartz (Kagelmacher 2001:47–48).

Columbus-Delaware Chert: While there are separate Columbus and Delaware formations, the cherts in these formations are often difficult to distinguish from one another. Therefore, for the purposes of analysis, both types are treated as one. The chert-bearing Delaware formation is within the marine limestones and dolomites of the Devonian system. This formation extends north in a narrow band from western Pickaway County through Franklin, Delaware, Marion, Wyandot, Crawford, Seneca, Huron, Sandusky, and Erie counties, and is also present in northwest Ohio in Lucas, Wood, Henry, Defiance, Putnam, and Paulding counties. Delaware chert is tan to dark gray in color with relatively large lighter colored areas that create a mottled appearance, and often exhibits tiny ostracod inclusions (Stout and Schoenlaub 1945; Vickery 1983).

The chert-bearing Columbus formation is within the marine limestones and dolomites of the Devonian system. This formation extends in a narrow band from western Pickaway County to the north through Franklin, Delaware, Marion, Wyandot, Crawford, Seneca, Huron, Sandusky, and Erie counties, and is also present in northwest

Ohio in Lucas, Wood, Henry, Defiance, Putnam, and Paulding counties. The flint ranges in color from light mottled gray to brown (Stout and Schoenlaub 1945; Vickery 1983).

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 339

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form _____ Revised Form _____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 339

4. Site Name(s)

5. Project Site Number Site 1

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2020-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone _____ 16 or X 17
Easting 3 2 7 6 6 0
Northing 4 3 2 1 5 4 0

2. Latitude _____° _____' _____"
Longitude _____° _____' _____"

*3. Township 4 N Range 21 W Not Applicable _____
Section 7 1/4 Section: _____ SW _____ SE _____ NW X NE
Township Name Scioto

*4. Quadrangle Name Waverly South

*5. Quadrangle Date 1992

*6. Confident of Site Location X Yes _____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (_____)

*3. Ownership Status (select only one, as appropriate):
_____ Private (single) _____ Private (multiple) _____ Local Govt.
_____ State Govt. X Federal Govt. _____ Multiple Govt.
_____ Mixed-Govt./Private _____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric _____ Historic _____ Prehistoric and Historic
_____ Unknown _____ Unrecorded

*Site No. 33- PK - 339
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
tiny whole flake	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

__X__ Undisturbed _____ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

__X__ None Apparent _____ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

_____

_____

*8. Current Dominant Land Use (see manual):

Rangeland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 189 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee __X__ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Latham-Wharton silt loams, 15 to 25 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All __X__ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___0___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___5___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

*6. Site Area (square meters) 1

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/03

*13. Field Date (year/month) 12/01

14. Time Spent at Site

15. Weather Conditions Cold and overcast with light snow

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK339 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck
   2012 Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK339 is a prehistoric site situated in an area of scrub brush with 0–10 percent visibility on a floodplain above Little Beaver Creek. This area is flat with a slope gradient of 0 percent. The site was identified through shovel test pit excavation. Excavations indicated that there is a ca. 15 cm–30 cm deep, brown (10YR4/3) silt loam A horizon at the site, from which the artifact was recovered. Several of the shovel test pits on the floodplain had soils deeper than 30 cm. It is an alluvial area near the confluence of a small unnamed tributary to Little Beaver Creek. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). There was no room toward the creek, but radial shovel test pits were excavated at 7.5-m intervals in the other thee directions, none of which were positive. The assemblage is composed of a single tiny Cedarville-Guelph chert whole flake. It is not temporally diagnostic. A minimum site size of 1 m by 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has possibly suffered from erosion of the floodplain or could even be a secondary deposit in the alluvium. The OAI site type for 33PK339 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

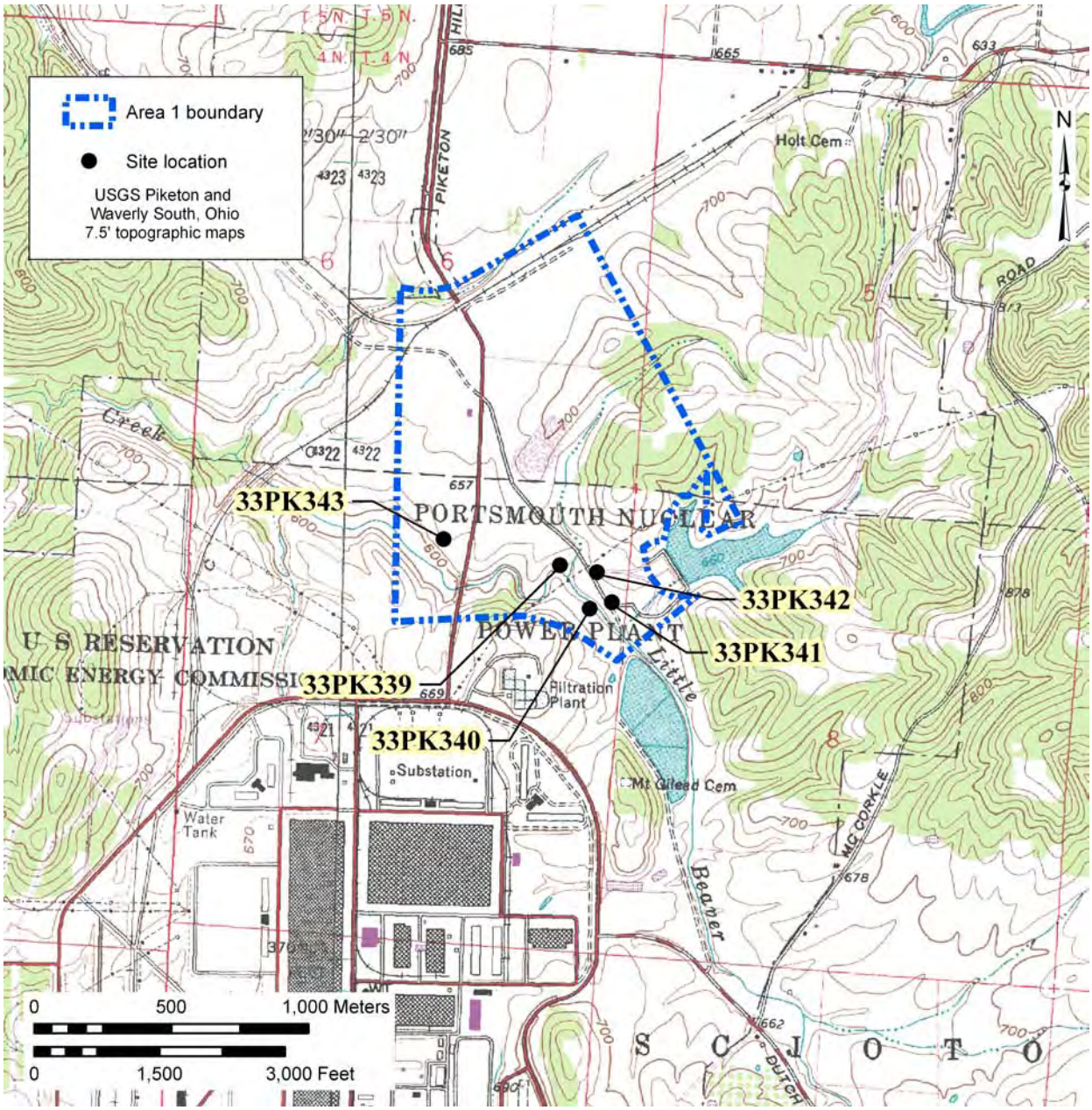
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of five sites inventoried during a Phase I survey of Area 1 of the PORTS property. There is no known relationship between any of these sites.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 340

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form _____ Revised Form _____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 340

4. Site Name(s)

5. Project Site Number Site 2

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2020-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone _____ 16 or X 17
Easting 3 2 7 7 7 0
Northing 4 3 2 1 3 8 0

2. Latitude _____° _____' _____"
Longitude _____° _____' _____"

*3. Township 4 N Range 21 W Not Applicable _____
Section 7 1/4 Section: _____ SW _____ SE _____ NW X NE
Township Name Scioto

*4. Quadrangle Name Waverly South 1 9 ___ ___

*5. Quadrangle Date 1992

*6. Confident of Site Location X Yes _____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (_____)

*3. Ownership Status (select only one, as appropriate):
_____ Private (single) _____ Private (multiple) _____ Local Govt.
_____ State Govt. X Federal Govt. _____ Multiple Govt.
_____ Mixed-Govt./Private _____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
_____ Prehistoric X Historic _____ Prehistoric and Historic
_____ Unknown _____ Unrecorded

*Site No. 33- PK - 340
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

_____ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented _____

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) _____

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

_____

_____

_____

_____

_____

_____

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

_____ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal __X__ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. __X__ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented 1 ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

__x__ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___

_____ Unrecorded _____ Other (specify) _____ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

Plain and flow blue decorated whiteware and cut nails

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

__x__ Kitchen	_____ Furniture	_____ Personal	___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___
_____ Military	_____ Weapons	_____ Transportation	___
__x__ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___
_____ Clothing	_____ Unrecorded	_____ Unknown	___
_____ Other (specify) _____			___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count
whiteware sherds	5		
cut nails	2		
glass bottle fragment	1		
piece of window glass	1		

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

17. Affiliated Ohio Historic Inventory Site Number and Name:

_____ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: _____ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded __X__ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

__X__ Undisturbed _____ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

__X__ None Apparent _____ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

_____

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 189 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: __X__ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Latham-Wharton silt loams, 15 to 25 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE __X__ E _____ All _____ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___40___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

*6. Site Area (square meters) 125

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

_____ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

__X__ Other (specify) GPS

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/03

*13. Field Date (year/month) 12/01

14. Time Spent at Site

15. Weather Conditions Cold and overcast with light snow

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK340 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck
   2012 Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies
2. on file at the Ohio Historic Preservation Office, Columbus.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK340 is a historic period site. No buildings are indicated at this location on early cartographic sources. The site is situated in a wooded area with 0–10 percent visibility on a terrace above Little Beaver Creek. This area is sloping to the east with a gradient of 2 percent. The site was identified through shovel test pit excavation. Excavations indicated that there is a ca. 15 cm–20 cm deep, dark brown (10YR3/3) silt loam A horizon at the site, from which the artifacts were recovered. The terrace is at the base of the adjacent hillside and the soils are likely a combination of alluvial and colluvial deposition. Three of the shovel test pits excavated in the vicinity of the site were positive (i.e., produced artifacts). Four radial shovel test pits were excavated at 7.5-m intervals, two of which were positive. The assemblage is composed of five whiteware sherds, two cut nails, one glass bottle fragment, and one piece of window glass. Several small patches of daffodils are present along the edge of the terrace 10 m–15 m east and southeast of the artifacts. Daffodils can be remnants of decorative plantings or landscape modifications and thus are often indicators of houses, but inspection of the terrace and adjacent floodplain and hillside failed to identify any remains of buildings or structures associated with the site. (Continued)

*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of five sites inventoried during a Phase I survey of Area 1 of the PORTS property. There is no known relationship between any of these sites.

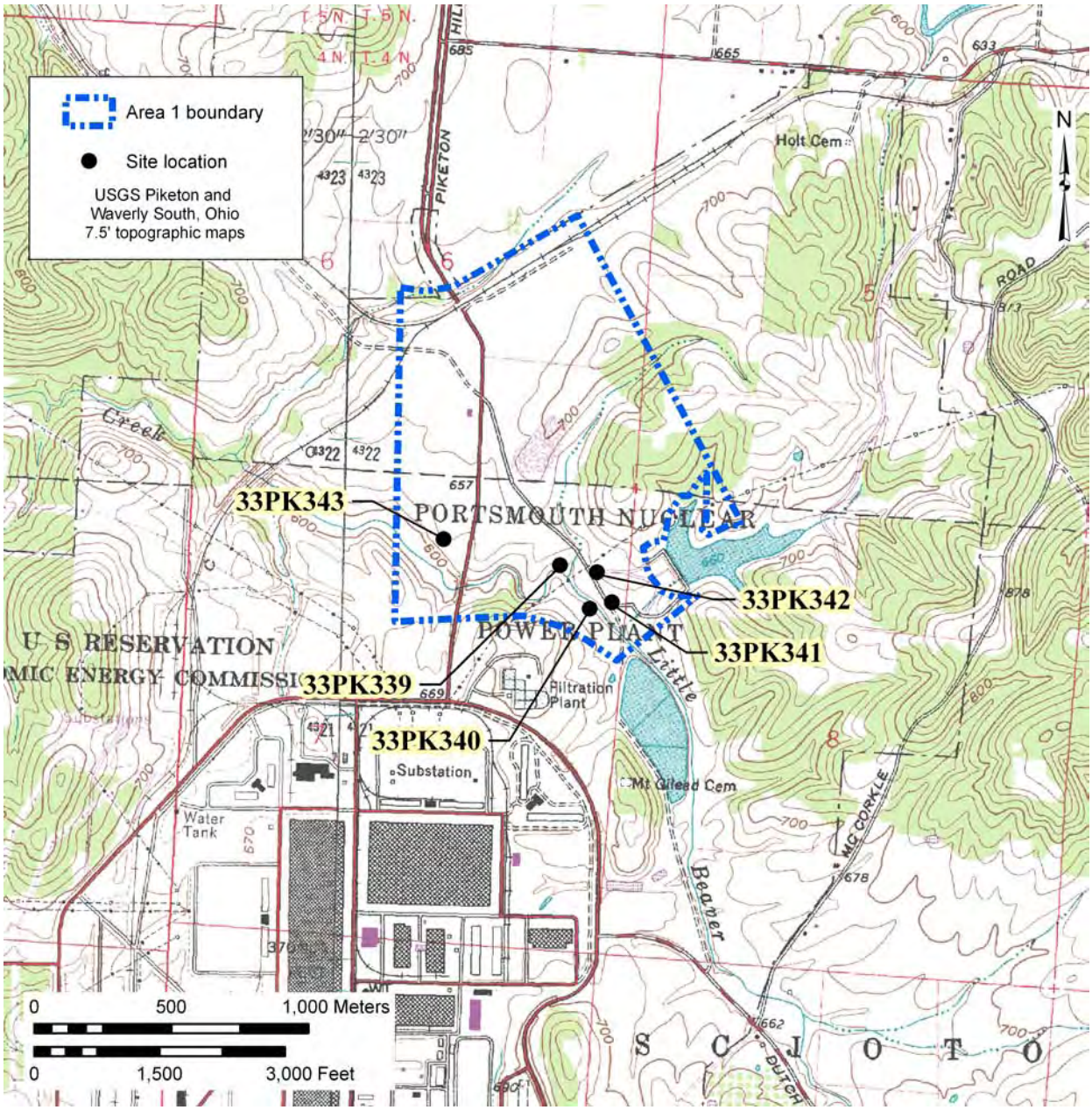
J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

(Continued from I-1)

Although some of the artifact types have established manufacture dates, the size of the assemblage is small and lacking other evidence it is not possible to determine when the artifacts were deposited. The limits of the site were delineated based on the extent of the artifact scatter and adjacent daffodils. It is irregularly shaped and measures about 15 m x 20 m with an area of 125 sq m. The site is relatively intact, but has probably suffered from erosion of the terrace. The OAI site type for 33PK340 is unknown. It can best be described as an artifact scatter from an unassigned historic period.

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 341

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___

Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form _____ Revised Form _____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 341

4. Site Name(s)

5. Project Site Number Site 3

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2020-01_PORTS Prehistoric Phase I

B. Location

*1. UTM Zone _____ 16 or X 17
Easting 3 2 7 8 5 0
Northing 4 3 2 1 4 1 0

2. Latitude _____° _____' _____"
Longitude _____° _____' _____"

*3. Township 4 N Range 21 W Not Applicable _____
Section 7 1/4 Section: _____ SW _____ SE _____ NW X NE
Township Name Scioto

*4. Quadrangle Name Waverly South

*5. Quadrangle Date 1992

*6. Confident of Site Location X Yes _____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (_____)

*3. Ownership Status (select only one, as appropriate):
_____ Private (single) _____ Private (multiple) _____ Local Govt.
_____ State Govt. X Federal Govt. _____ Multiple Govt.
_____ Mixed-Govt./Private _____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric _____ Historic _____ Prehistoric and Historic
_____ Unknown _____ Unrecorded

*Site No. 33- PK - 341
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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
utilized flake	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed

_____

*8. Current Dominant Land Use (see manual):

Industrial ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 192 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Glacial lakebed

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 3 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All __X__ Flat
_____ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___0___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify)

*20. Horizontal Distance to Closest Water Source ___30___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify)
_____ Chemical Analysis (specify)
_____ Unrecorded _____ Other (specify)

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics

_____ Controlled-Unknown _____ Controlled-Total

_____ Controlled-Sample _____ Unrecorded

_____ Other (specify) _____

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

*6. Site Area (square meters) 1

Unrecorded _____

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify) _____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____

*10. Name of Form Preparer Chuck Mustain

*11. Institution ASC Group, Inc.

*12. Date of Form (year/month) 12/03

*13. Field Date (year/month) 12/01

14. Time Spent at Site

15. Weather Conditions Cold and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK341 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck
   2012 Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies
2. on file at the Ohio Historic Preservation Office, Columbus.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK341 is a prehistoric site situated in a grassy area with 0–10 percent visibility on the glacial lakebed above Little Beaver Creek and one of its unnamed tributaries. This area is flat with a slope gradient of 0 percent. The site was identified through shovel test pit excavation. Excavations indicated that there is a ca. 25 cm deep, brown (10YR4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). There was no room toward Shyville or Barlow roads, but radial shovel test pits were excavated at 7.5-m intervals in the other two directions, neither of which were positive. The assemblage is composed of a single unidentified chert utilized flake. It is not temporally diagnostic. A minimum site size of 1 m by 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has been disturbed by plowing. The OAI site type for 33PK341 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

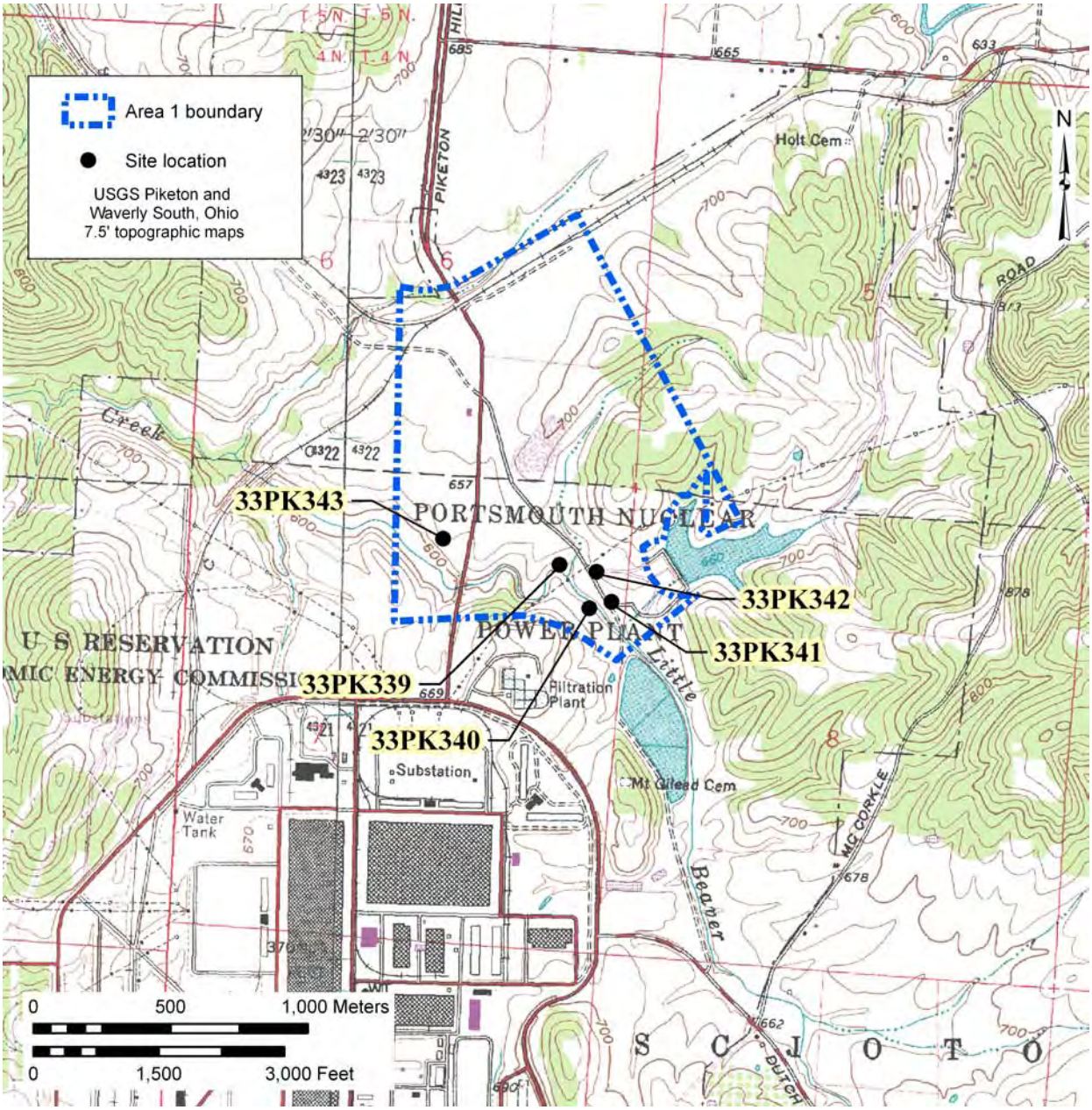
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of five sites inventoried during a Phase I survey of Area 1 of the PORTS property. There is no known relationship between any of these sites.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 342

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

for official use only

Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 342

4. Site Name(s)

5. Project Site Number Site 4

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2020-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 7 7 9 0
Northing 4 3 2 1 5 1 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 21 W Not Applicable ____
Section 7 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto

*4. Quadrangle Name Waverly South 1 9 ___ ___

*5. Quadrangle Date 1992

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 342
Plotted ☐

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
graver	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed

_____

*8. Current Dominant Land Use (see manual):

Industrial ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 195 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base _____ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded __X__ Other (specify) Glacial lakebed

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 3 to 8 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All _____ Flat
__X__ S _____ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Unnamed tributary to Little Beaver Creek
_____ Permanent Stream _____ Lake/Pond __X__ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___80___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics ___ ___ ___

_____ Controlled-Unknown _____ Controlled-Total ___ ___

_____ Controlled-Sample _____ Unrecorded ___ ___

_____ Other (specify)_____ ___

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%

_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

*6. Site Area (square meters) 1_____ ___ ___ ___ ___

___ ___ ___ ___

Unrecorded _____ ___

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced ___

_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded

_____ Other (specify)_____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded ___

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____ ___ ___ ___

*10. Name of Form Preparer Chuck Mustain ___ ___ ___

*11. Institution ASC Group, Inc. ___ ___ ___

*12. Date of Form (year/month) 12/03 2 0 ___ ___/___ ___

*13. Field Date (year/month) 12/01 2 0 ___ ___/___ ___

14. Time Spent at Site _____

15. Weather Conditions Cold and sunny

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy ___ ___ ___

___ ___ ___

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK342 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

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***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck
   2012 Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK342 is a prehistoric site situated in a grassy area with 0–10 percent visibility on the glacial lakebed above Little Beaver Creek and one of its unnamed tributaries. This area is sloping to the south with a gradient of 2 percent. The site was identified through shovel test pit excavation. Excavations indicated that there is a ca. 25 cm deep, brown (10YR4/3) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of a Cedarville-Guelph chert graver. It is not temporally diagnostic. A minimum site size of 1 m by 1 m with an area of 1 sq m is assigned to the site. It is relatively intact, but has been disturbed by plowing. The OAI site type for 33PK342 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

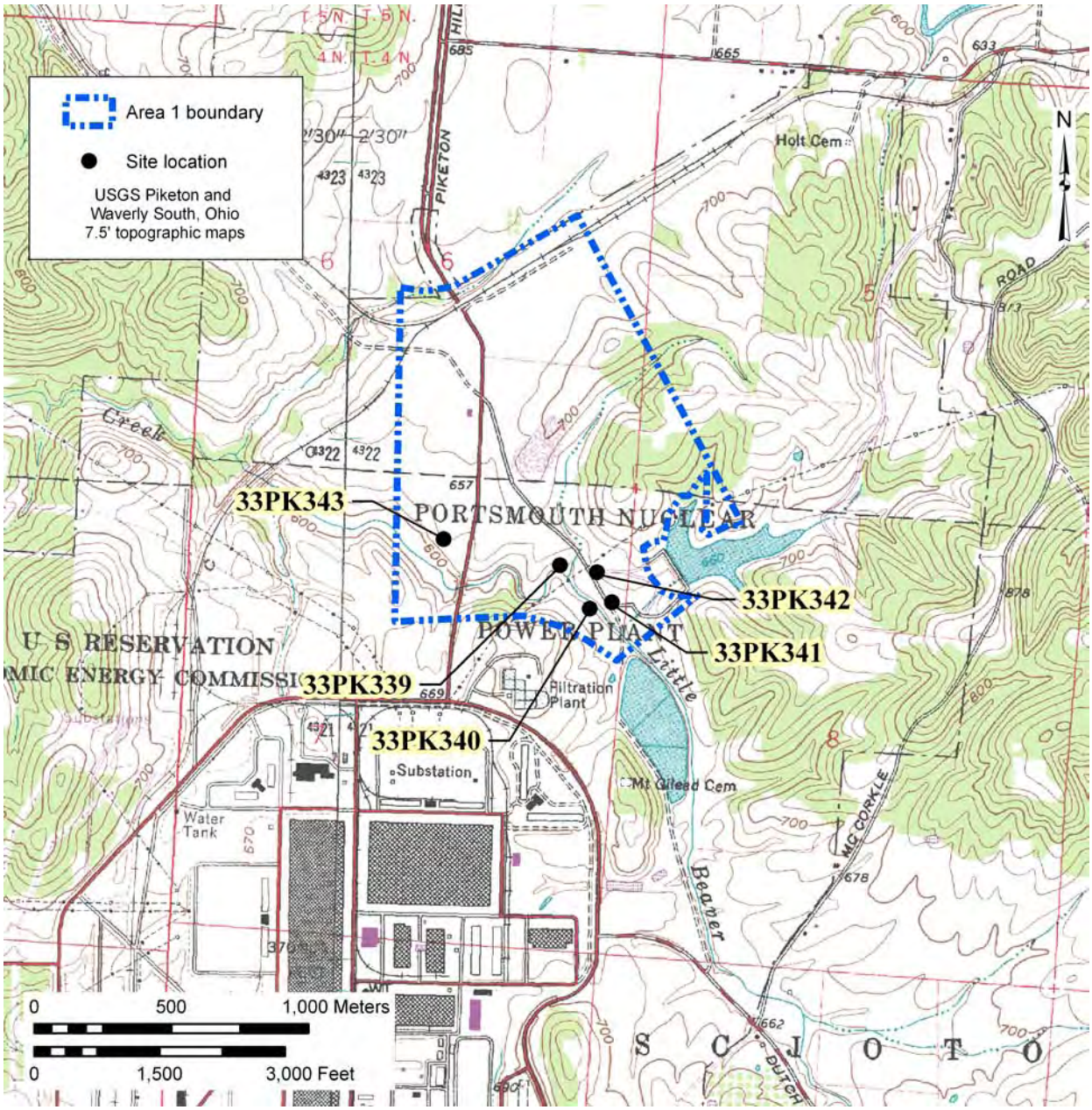
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of five sites inventoried during a Phase I survey of Area 1 of the PORTS property. There is no known relationship between any of these sites.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/298-2000
Fax: 298-2037

OHIO HISTORICAL SOCIETY
SINCE 1885

*Site No. 33- PK - 343

OHIO ARCHAEOLOGICAL INVENTORY

*Response required for acceptance of form

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Coder ___ ___ ___
Date ___ ___ ___ ___

A. Identification

*1. Type of Form (select as many as appropriate):
X New Form ____ Revised Form ____ Transcribed Data

2. County Pike *3. Trinomial State Site Number 33- PK - 343

4. Site Name(s)

5. Project Site Number Site 5

6. Other State Site Number

7. Source (of Item A.5. and/or A.6.) ASC Group, Inc. 2012 Project Number 2020-01 PORTS Prehistoric Phase I

B. Location

*1. UTM Zone ____ 16 or X 17
Easting 3 2 7 2 4 0
Northing 4 3 2 1 6 3 0

2. Latitude ____° ____' ____"
Longitude ____° ____' ____"

*3. Township 4 N Range 21 W Not Applicable ____
Section 7 1/4 Section: ____ SW ____ SE ____ NW X NE
Township Name Scioto

*4. Quadrangle Name Waverly South

*5. Quadrangle Date 1992

*6. Confident of Site Location X Yes ____ No

C. Ownership

*1. Name(s) United States Department of Energy
Address 1000 Independence Ave., SW
City/Town, State, Zip Washington, DC 20585
Phone (202) 586-5000

2. Tenant (if any)
Address
City/Town, State, Zip
Phone (____)

*3. Ownership Status (select only one, as appropriate):
____ Private (single) ____ Private (multiple) ____ Local Govt.
____ State Govt. X Federal Govt. ____ Multiple Govt.
____ Mixed-Govt./Private ____ Unknown

D. Temporal Affiliations

*1. Affiliations Present (select only one, as appropriate):
X Prehistoric ____ Historic ____ Prehistoric and Historic
____ Unknown ____ Unrecorded

*Site No. 33- PK - 343
Plotted ☐

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Prehistoric

*2. Prehistoric Temporal Period(s) Represented (select as many as appropriate)

__X__ Unassigned Prehistoric _____ Paleoindian

Archaic: _____ Unassigned _____ Early _____ Middle _____ Late

Woodland: _____ Unassigned _____ Early _____ Middle _____ Late

_____ Late Prehistoric _____ Protohistoric _____ Other (specify) _____

*3. Minimum Number of Prehistoric Temporal Periods Represented 1

*4. Basis for Assignment of Prehistoric Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Features _____ Radiometric

_____ Unrecorded _____ Other (specify) N/A

5. Prehistoric Cultural Component(s) Represented (see manual):

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

6. Describe how Prehistoric Temporal Period(s) and Cultural Component(s) were determined (list diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features please specify Prehistoric Cultural Component(s) by using letter designations from Item D.5.

Researcher _____

*7. Categories of Prehistoric Materials Present at Site (select as many as appropriate)

__X__ Lithics _____ Ceramics _____ Metal _____ Faunal Remains _____ Floral Remains

_____ Human Skeletal Remains _____ Unrecorded _____ Other (specify) _____

8. Specific Prehistoric Cultural Materials Collected:

Type	Count	Type	Count
distal flake fragment	1		

Historic

*9. Affiliation Present (select only one, as appropriate):

_____ Aboriginal _____ Non-Aboriginal _____ Both _____ Undetermined

*10. Historic Temporal Period(s) Represented (select as many as appropriate):

a. _____ Pre-1795 b. _____ 1796-1829 c. _____ 1830-1849

d. _____ 1850-1879 e. _____ 1880-1899 f. _____ 1900-1929

g. _____ 1930-1949 h. _____ 1950-1974 i. _____ 1975-2000

j. _____ Historic k. _____ 18th Century l. _____ 19th Century

m. _____ 20th Century n. _____ Historic Aboriginal

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*11. Minimum Number of Historic Temporal Periods Represented _____ ___ ___

*12. Basis for Assignment of Historic Temporal Period(s) (select as many as appropriate):

_____ Diagnostic Artifacts _____ Diagnostic Architectural Remains ___ ___

_____ Diagnostic Features _____ Documentary Evidence _____ Oral Tradition ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

13. Describe how Historic Temporal Period(s) were determined (list any diagnostic architectural remains, diagnostic artifacts and/or features; include type names, attach photographs and/or illustrations, and identify researcher). When listing artifacts and/or features specify Historic Temporal Period(s) by using letter designations from Item D.10.

_____

_____

_____

_____

_____

_____

Researcher _____

*14. Functional Categories of Historic Materials Present at Site (select as many as appropriate):

_____ Kitchen	_____ Furniture	_____ Personal	___ ___ ___
_____ Toys & Games	_____ Printed Matter	_____ Religious/Ceremonial	___ ___ ___
_____ Military	_____ Weapons	_____ Transportation	___ ___ ___
_____ Architectural	_____ Misc. Hardware	_____ Const./Manufacturing Tools	___ ___ ___
_____ Agricultural	_____ Fuel/Energy	_____ Food Remains	___ ___ ___
_____ Clothing	_____ Unrecorded	_____ Unknown	___ ___ ___

_____ Other (specify) _____ ___

15. Specific Historic Cultural Materials Collected:

Type	Count	Type	Count

General

16. Describe Prehistoric and/or Historic Cultural Materials observed but not collected. State reason(s) for not collecting.

_____

_____

_____

_____

_____

_____

_____

17. Affiliated Ohio Historic Inventory Site Number and Name:

___ ___ ___ ___ ___ ___ ___ ___ ___ _____ ___ ___ ___

___ ___ ___ ___ ___ ___

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E. Physical Description

*1. Archaeological Setting (select only one, as appropriate):

_____ Rockshelter/Cave __X__ Open _____ Unrecorded _____ Unknown ___

_____ Submerged _____ Other (specify) _____

*2. Prehistoric Site (select as many as appropriate):

Habitation: _____ Camp _____ Village _____ Hamlet _____ Unspecified Habitation ___ ___ ___ ___

Extractive: _____ Quarry _____ Workshop ___ ___

Ceremonial: _____ Unspecified Mound _____ Earth Mound _____ Stone Mound ___ ___ ___

_____ Effigy Mound _____ Mound Group _____ Hilltop Enclosure ___ ___ ___

_____ Geometrical Earthwork _____ Cemetery _____ Isolated Burial(s) ___ ___ ___

_____ Petroglyph/Pictograph ___

Other: __X__ Unknown _____ Unrecorded _____ Other (specify) _____ ___ ___ ___

*3. Historic Site Type (select as many as appropriate):

_____ Residential _____ Commercial _____ Social _____ Government ___ ___ ___ ___

_____ Religious _____ Educational _____ Mortuary _____ Recreation ___ ___ ___ ___

_____ Subsistence _____ Industrial _____ Health Care _____ Military ___ ___ ___ ___

_____ Transportation _____ Unrecorded _____ Unknown ___ ___ ___

_____ Other (specify) _____ ___

4. State the bases on which site type assignment(s) were made.

_____

_____

_____

_____

_____

*5. Site Condition (select only one, as appropriate):

_____ Undisturbed __X__ Disturbed - Extent Unknown _____ Fully Disturbed ___

_____ Destroyed _____ Unrecorded _____ Unknown

*6. Dominant Agent(s) of Disturbance (select as many as appropriate):

_____ None Apparent __X__ Agriculture _____ Historic Construction _____ Water ___ ___ ___ ___

_____ Transportation _____ Archaeological Excavation _____ Mining _____ Vandalism ___ ___ ___ ___

_____ Unrecorded _____ Other (specify) _____ ___ ___

7. Nature of Disturbance/Destruction:

Plowed

_____

*8. Current Dominant Land Use (see manual):

Forestland ___ ___

9. Land Use History:

_____

_____

_____

_____

*10. Site Elevation 195 Meters A.M.S.L. (elevation to be taken from UTM point) ___ ___ ___ ___

*11. Physiographic Setting of Site (select only one, as appropriate):

_____ Lake Plain _____ Lexington Peneplain __X__ Unglaciated Plateau ___

_____ Till Plain _____ Glaciated Plateau _____ Unrecorded

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*12. Glacial Geomorphology (select only one, as appropriate):
_____ Not Applicable _____ Wisconsin End/Lateral Moraine
_____ Kansan Ground Moraine _____ Wisconsin Kame/Kettle/Esker/Drumlin
_____ Illinoian Ground Moraine _____ Wisconsin Lacustrine Deposit
_____ Illinoian Outwash _____ Post Wisconsin Lacustrine Deposit
_____ Wisconsin Ground Moraine _____ Wisconsin Outwash
_____ Unrecorded __X__ Other (specify) Pre-Illinoian Lacustrine Deposits

*13. Regional Geomorphological Setting (select only one, as appropriate):
__X__ Stream Valley _____ Upland Hill Slope _____ Beach Ridge
_____ Hill or Ridge Top _____ Lake Plains Interfluvial Zone _____ Unrecorded

*14. Local Environmental Setting (select only one, as appropriate):
Terrace: _____ Unknown _____ T-1 _____ T-2 _____ T-3 _____ T-4
_____ Beach Ridge _____ Terrace Remnant _____ Natural Levee _____ Floodplain
_____ Low Rise on Floodplain _____ Alluvium _____ Island _____ Kame _____ Drumlin
_____ Esker _____ Moraine _____ Glacial Hummock _____ Wetland Hummock
_____ Bluff _____ Bluff Base __X__ Bluff Edge _____ Saddle _____ Hill or Ridge Top
_____ Closed Depression _____ Unrecorded _____ Other (specify) _____

*15. Soils:
Soil Association Omulga
Soil Series-Phase/Complex Omulga silt loam, 0 to 3 percent slopes
Reference USDA, Natural Resources Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/)

*16. Down Slope Direction (select only one, as appropriate):
_____ N _____ NW _____ NE _____ E _____ All _____ Flat
_____ S __X__ SW _____ SE _____ W _____ Unrecorded

*17. Slope Gradient (percent) ___2___ Unrecorded _____

*18. Drainage System (see manual):
Major Drainage Ohio River
Minor Drainage Scioto River

*19. Closest Water Source (select only one, as appropriate):
Name: Little Beaver Creek
__X__ Permanent Stream _____ Lake/Pond _____ Ephemeral Stream
_____ Permanent Spring _____ Swamp/Bog _____ Intermittent Spring/Seep
_____ Slough/Oxbow Lake _____ Artificial Lake/Pond (historic sites only)
_____ Artificial Stream/Ditch (historic sites only) _____ Unrecorded
_____ Other (specify) _____

*20. Horizontal Distance to Closest Water Source ___100___ (meters from UTM point)

21. Elevation Above Closest Water Source _____ (meters A.M.S.L. from UTM point)

F. Reporting Information

*1. Investigation Type (select as many as appropriate):
_____ Reported _____ Examination of Collection _____ Surface Collection
_____ Auger/Soil Corer __X__ Shovel Test(s) _____ Test Pit(s) _____ Test Trench(es)
_____ Deep Test(s) _____ PZ or Humus Removal _____ Testing/Excav. (strategy unknown)
_____ Mitigation/Block Excavation _____ Aerial Photograph
_____ Remote Sensing (specify) _____
_____ Chemical Analysis (specify) _____
_____ Unrecorded _____ Other (specify) _____

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*2. Surface Collection Strategy (select as many as appropriate):

__X__ Not Applicable _____ Grab Sample _____ Diagnostics ___ ___ ___
_____ Controlled-Unknown _____ Controlled-Total ___ ___
_____ Controlled-Sample _____ Unrecorded ___ ___
_____ Other (specify)_____ ___

3. If surface collection strategy is Controlled-Total, Controlled-Sample, or Other, describe methodology and percentage.

4. Surface Visibility (select only one, as appropriate):

_____ None __X__ Less than 10% _____ 11-50%
_____ 51-90% _____ 91-100% _____ Unrecorded

5. Describe surface conditions.

*6. Site Area (square meters) 1 ___ ___ ___ ___ ___ ___ ___ ___

Unrecorded _____ ___

*7. Basis for Site Area Estimate (select only one, as appropriate):

__X__ Guessed _____ Historic Maps _____ Aerial Photograph _____ Paced ___
_____ Taped _____ Transit/Alidade _____ Range Finder _____ Unrecorded
_____ Other (specify)_____

*8. Confident of Site Boundaries: __X__ No _____ Yes _____ Unrecorded ___

9. Estimated Percentage of Site Excavated _____ Unrecorded _____ Unknown _____ ___ ___ ___

*10. Name of Form Preparer Chuck Mustain ___ ___ ___

*11. Institution ASC Group, Inc. ___ ___ ___

*12. Date of Form (year/month) 12/03 2 0 ___ ___/___ ___

*13. Field Date (year/month) 12/01 2 0 ___ ___/___ ___

14. Time Spent at Site _____

15. Weather Conditions Cool and overcast

16. Name(s), Address(es), Phone Number(s) of Local Informants

*17. Artifact Repository (ies) US Department of Energy ___ ___ ___
___ ___ ___

18. Name(s), Address(es), Phone Number(s) of Owners of Collections From Site (attach inventories of private collections).

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19. Photographs (select as many as appropriate):
    No. of Slides _____ No. of Prints _____
    Aerials: _____ Black/White _____ Color _____Infrared
20. Name and Address of Institution Where Photos Are Filed (include photo log number if available)

    _____

    _____

    _____

*21. National Register Status (select only one, as appropriate):
    _____ National Register Property† ___
    _____ Determined Eligible for National Register†
    __X__ National Register Status Not Assessed
    _____ Removed from National Register†
    _____ Determined Not Eligible†
    †Determination made by Keeper of the National Register (date) _____
22. State Registry Status (select only one, as appropriate)
    _____ State Registry Listed† ___
    __X__ Not Assessed for State Registry
    _____ Removed from State Registry†
    _____ Determined Not Eligible†
    †Determination made by Ohio Historical Society (date) _____
23. Discuss the potential significance of the site (does it meet National Register and/or State Registry criteria of significance in your opinion? Why or why not? Upon what evidence have you based your opinion?)

    NRHP Criterion D (important information yield) is the only criteria or criteria consideration under which the site is potentially eligible. However, the site's historic context could not be established. Site 33PK343 does not meet the NRHP evaluation criteria because it cannot be placed in its historic context and is unlikely to contain sufficient remains to yield data that would allow it to be placed in its historic context through further research.

*24. Special Status (select only one, as appropriate):

__X__ None	_____ Wilderness Area	_____ Wildlife Preserve	___ ___
_____ Park	_____ Scenic River	_____ Nature Preserve	
_____ Forest	_____ Military Installation	_____ Archaeological Preserve	
_____ Archaeological District		_____ Unknown	

_____ Other (specify) _____

for official use only

***G. References** - List Primary Documentary References (see manual):

1. Mustain, Chuck
2012 Phase I Archaeological Survey of Area 1 at the Portsmouth Gaseous Diffusion Plant (PORTS) in Scioto and Seal Townships, Pike County, Ohio. ASC Group, Columbus, Ohio. Submitted to Fluor-B&W Portsmouth, LLC, Piketon, Ohio. Copies on file at the Ohio Historic Preservation Office, Columbus.
2.
3.

H. Radiometric Dates

1. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
2. Material(s) Dated _____
   Date (uncorrected C14 years) _____ ___ ___ ___ ___ ___
   Laboratory _____ ___ ___ ___ ___
   Sample # _____ ___ ___ ___ ___ ___
   Reference(s) _____
3. Additional Radiometric Dates Yes _____ No _____ ___
   (use Continuation Section to list other dates)

I. Description of Site

*1. State physical description of the site and its setting, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

Site 33PK343 is a prehistoric site situated in an area of scrub brush with 0–10 percent visibility on the bluff edge above Little Beaver Creek. This area is sloping to the southwest with a gradient of 2 percent. The site was identified through shovel test pit excavation. Excavations indicated that there is a ca. 20 cm deep, dark yellowish brown (10YR4/4) silt loam Ap horizon (plow zone) at the site, from which the artifact was recovered. Almost all of the glacial lakebed along the bluff edge and beyond it to the northeast is disturbed. The site is in a ca. 30 m long, 10 m wide section of the bluff edge that was intact. Only one of the shovel test pits excavated in the vicinity of the site was positive (i.e., produced an artifact). Four radial shovel test pits were excavated at 7.5-m intervals, none of which were positive. The assemblage is composed of a heat-altered Columbus-Delaware chert distal flake fragment. It is not temporally diagnostic. A minimum site size of 1 m by 1 m with an area of 1 sq m is assigned to the site. It has been disturbed by plowing. It is possible that the site once extended into the adjacent disturbed area, but no evidence of this was found. The OAI site type for 33PK343 is unknown. It can best be described as an isolated find from an unassigned prehistoric period.

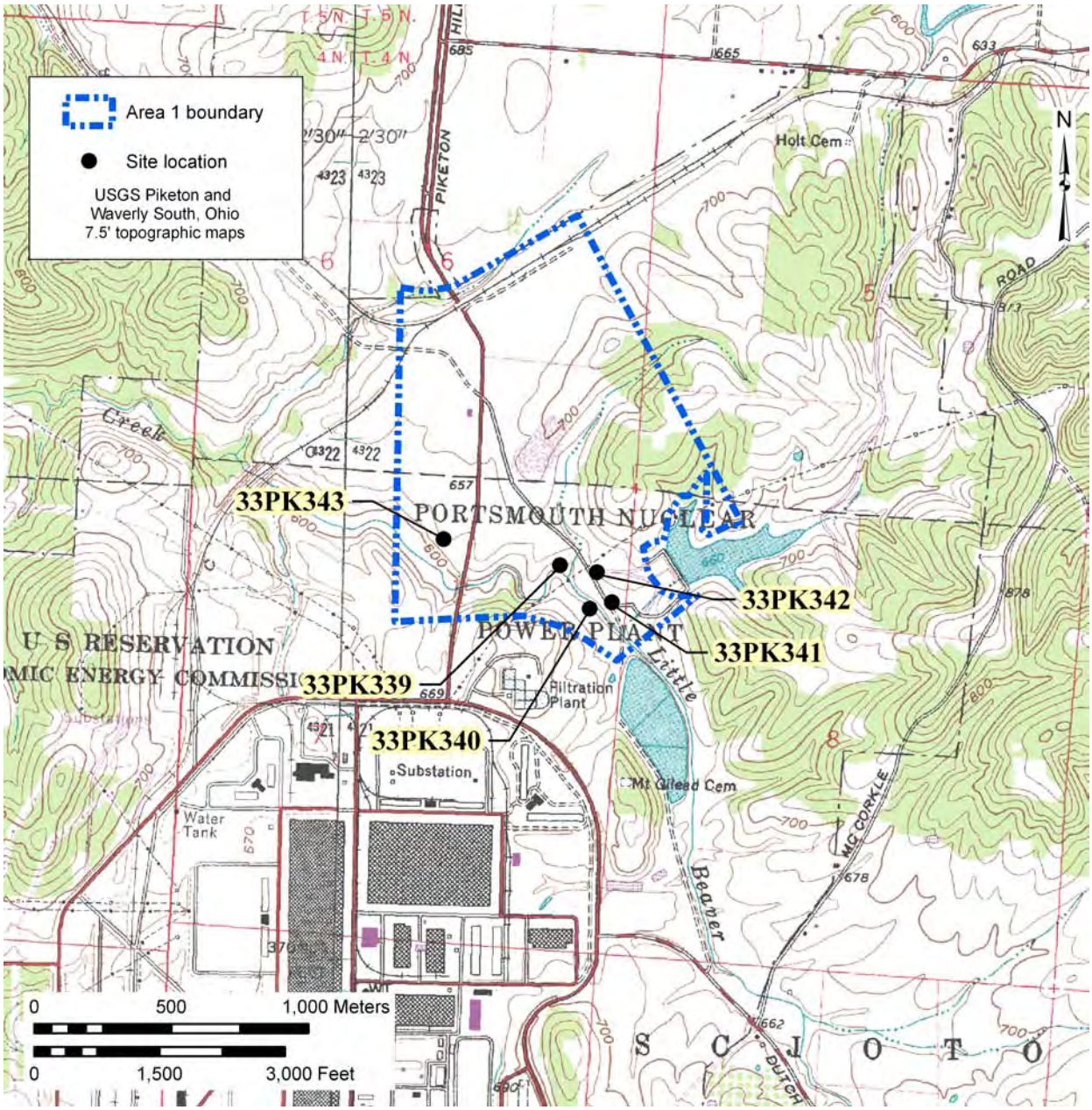
*2. Discuss the relationship between the site and other known sites in the area in terms of location, physical characteristics, size, etc.

This is one of five sites inventoried during a Phase I survey of Area 1 of the PORTS property. There is no known relationship between any of these sites.

J. Continuation Section: Specify Section & Item (use additional Continuation Sheet(s) if necessary)

*K. Sketch Map or Copy of Project Map of Site

Include north arrow and scale. Attach a Xeroxed section of the appropriate U.S.G.S. quadrangle on a separate sheet. Outline total area surveyed and include locations of all identified sites on the Xerox of the quadrangle.



*Site Location Permanent Feature	Distance (m)	Direction/Bearing from Site to Terrain Feature