

7.1 General Results

A&HC's principal investigator and soils scientist John Stiteler walked the entirety of the APE several times during October 27-30, 2008. Contact was made with landowners Eric Rush, Ruth Hobson, and Welfare Foundation Property Manager Elizabeth Hook. The Welfare Foundation owns much of the APE to the northeast of Boyds Corner Road. Ms. Hook provided maps and contact information for tenant farmers who lease fields they own.

Soils throughout the APE were silt loam to sandy loam with low to nil rock fragment content in most areas. Scattered cobbles (one per several hundred m²) were observed in some areas. Distinctly higher concentrations were seen at a few localities, mostly near the southwest end of the APE. As indicated above, these cobble concentrations probably derive from the underlying Columbia Formation. They may have served as precontact sources of lithic raw material.

An auger probe on a side slope around Sta. 681+50 revealed a standard upland Ap/Bw profile (Ap to 20 cm). Nearby, an auger probe in a 1st order or intermittent drainageway revealed an accreted Ap horizon to a depth of 95 cm, mixed A and Bw material from 95 to 98 cm, and alluvial gravel at 98 cm. Another probe nearby in the same drainageway confirmed the profile.

An auger probe in a poorly drained 2nd order drainageway at Sta. 689+20 encountered an Ab at 95-108 cm beneath historic age deposits, and a second auger in the same setting at Sta. 689+55 revealed a peat-like deposit at 135-170 cm, again beneath historic age material. The peat-like deposit strongly resembles soils seen on the floodplain of Spring Mill Branch (Sta. 497).

Collectively, these auger probes suggest that even in this low relief setting, historic land clearing mobilized much soil. Apparently, at least some small 1st order drainages were filled with historic age alluvium following scouring of their floors, while some 2nd order headwater areas were swamped by runoff, resulting in burial of the precontact surface before it was scoured away. Larger downstream areas such as the main stems of Spring Mill Branch and Scott Run have narrow floodplains, probably developed in historic age sediments that may cover the intact buried precontact surface. Within the APE, at least some drainageways thus have the potential to contain precontact archaeological resources that are currently buried by historic age sediments.

No structures shown on historic maps that are within or near the APE are still extant. Surface inspection of brush covered and wooded areas in the general vicinity of former structures at the Houston/LeCompt Historic High Probability Area, and at the J. LeCompt Historic High Probability Areas 1 and 2 revealed no evidence of foundations or artifacts indicative of historic occupation. Similarly, cultivated fields within the Read/Elliott Historic High Probability Area showed no evidence of an historic occupation. However, the farm lane at this location that is shown on historic maps is still extant. No evidence of the historic structures shown on the 1868 map at the Bowman Tenant Historic High probability Area was found. Additional information on the P./Mrs. Bowman High Probability Area was provided by Ms. Hook of the Welfare Foundation. She reported that their property management office, located in a stand of trees

several hundred meters south of the location of the Bowman dwelling, was built in the 1950s or 1960s. Currently, a modern pole barn and a gravel parking area are at the approximate Bowman dwelling location. A remnant of a concrete structure, perhaps a part of a ramp for a bank barn, is also present there. Ms. Hook also reported that no “old” structures were ever present on the property during her association with the Welfare Fund. However, there was a hand dug well along the driveway near the pole barn that the Welfare Fund filled in. No evidence of this well was found during walkover survey.

7.2 Summary of APE Segments

The following provides a brief description of field conditions encountered in the Purple Section 1 APE, with a brief description of predictive modeling and field survey recommendations. While final segmentation of the APE and assignment of probability values to each APE segment (see Section 8.0) was done after fieldwork was completed, the field results summarized here are organized by the final segmentation scheme for consistency of presentation.

Segment 1 is in a cultivated field and is not proximal to water; it was designated by ADM as low probability for precontact and historic sites, and this designation was retained. This segment will be plowed, disked, and surface surveyed.

Segment 2 is in a cultivated field within 150 m of water; it was designated by ADM as moderate probability for precontact and low probability for historic sites, and this designation was retained. This segment will be plowed, disked, and surface surveyed.

Segment 3 is a wooded riparian zone along a 1st order stream; it was designated by ADM as moderate and high probability for precontact sites and low probability for historic sites. A&HC assigned the entire segment a high probability for precontact sites. This segment will be included in the geomorphological survey and then shovel tested at 15 m intervals with the possibility of supplemental test units.

Segment 4 is in a cultivated field within 150 m of water. It was designated by ADM as moderate probability for precontact sites and low probability for historic sites, and this designation was retained. This segment will be plowed, disked, and surface surveyed.

Segment 5 is in a cultivated field and is not proximal to water. It was designated by ADM as low probability for precontact and historic sites. This was changed to moderate probability for historic sites due to the presence of an ADM historic high probability area approximately 60 m to the northwest of the APE segment. The ADM historic high probability area may correspond with a building shown at this approximate location on the 1931 15' Smyrna USGS quadrangle (see Figure 13). Segment 5 will be plowed, disked, and surface surveyed.

Segment 6 includes cultivated fields and a wooded riparian zone along Spring Mill Branch, a 2nd order stream. It was designated by ADM as having a low probability for historic sites. It was attributed a moderate probability for precontact sites at its eastern and western ends and as high probability for precontact sites proximal to the stream. The segment was elevated to all high probability for precontact sites because of the presence of potential lithic resources (cobbles) at

the surface in fields in conjunction with proximity to water. In this segment, the fields will be plowed, disked, and surface surveyed; the area proximal to water will be included in the geomorphological survey and then shovel tested at 15 m intervals with the possibility of supplemental test units.

Segment 7 is in a cultivated field and is not proximal to water. It was designated by ADM as low probability for historic sites and moderate probability for precontact sites. A&HC designated the entire segment as having a moderate probability for historic sites due to its location within the Bird/Houston Farm (see Section 6.4). This segment will be plowed, disked, and surface surveyed.

Segment 8 includes cultivated fields and a narrow wooded riparian zone along a 1st order (probably intermittent) stream. It was designated by ADM as having a low probability for historic sites and a moderate probability for precontact sites. The segment was assigned a high probability for precontact sites by A&HC because of the presence of potential lithic resources (cobble) at the surface in fields in conjunction with proximity to seasonal water. A&HC also assigned it a moderate probability for historic sites because it was within the Bird/Houston Farm. The fields will be plowed, disked, and surface surveyed. The wooded riparian zone will be included in the geomorphological survey and then shovel tested at 15 m intervals with the possibility of supplemental test units.

Segment 9 is in a cultivated field within 300 m of water. It was designated by ADM as low probability for historic sites and moderate probability for precontact sites. A&HC designated the segment as having a moderate probability for historic sites due to its location within the Bird/Houston Farm. This segment will be plowed, disked, and surface surveyed.

Segment 10 is in a cultivated field and an area of second-growth forest and is not proximal to water. It was designated by ADM as low probability for historic and precontact sites, and this designation was retained. This segment was chosen to be eliminated from further survey due to forest cover.

Segment 11 is in a cultivated field assigned a low probability for precontact sites by ADM. The northern half of the segment contained an ADM high probability area for historic sites. The entire segment was designated high probability for historic sites by A&HC as the Houston/LeCompt Historic High Probability Area (see Section 6.3). It also was designated as moderate probability for historic sites due to the proximity of Boyds Corner Road. If the school house shown on the Heald map dating to 1820 is in fact somewhere within the projects APE, it would presumably be within Segment 11, along the southern side of Boyds Corner Road. This segment will be plowed, disked, and surface surveyed.

Segment 12 is a brushy, poorly drained area and a small area of cultivated field. Portions of the segment were assigned a low and moderate probability for precontact sites by ADM, and a portion of an ADM high probability area for historic sites was present in the southwest corner. The segment was designated high probability for historic sites by A&HC as J. LeCompt Historic High Probability Area 1. It also was designated as moderate probability for historic sites due to the proximity of Boyds Corner Road. The brushy area and field will be shovel tested at 15 m

intervals. The linear character of the poorly drained area suggests that this may be a spring or seep in-filled by historic slopewash; if so, 15 m interval shovel testing will also provide for the discovery of precontact sites centered on this resource.

Segment 13 is a brushy, poorly drained area assigned a low probability for precontact and historic sites by ADM. It was designated high probability for historic sites by A&HC as J. LeCompt Historic High Probability Area 2. This area will be shovel tested at 15 m intervals.

Segment 14 is in a cultivated field and is not proximal to water. It was designated by ADM as low probability for precontact and historic sites. A&HC designated the entire segment as having a high probability for precontact sites due to cobble concentrations and the presence of a marshy wet area. This area will be plowed, disked, and surface surveyed.

Segment 15 is in a cultivated field and is not proximal to water. It was designated as having a low probability for precontact and historic sites, and this designation was retained. This segment was chosen at random to be eliminated from further survey.

Segment 16 is in a cultivated field within 300 m of water. It was designated as having a low probability for historic sites and a moderate probability for precontact sites by ADM. This designation was retained. This segment will be plowed, disked and surface surveyed.

Segment 17 is in a cultivated field and is not proximal to water. It was designated by ADM as low probability for precontact and historic sites, and this designation was retained. This segment will be plowed, disked, and surface surveyed as a test of the predictive model.

Segment 18 is in a cultivated field. Portions of the area were assigned low and moderate probabilities for precontact sites by ADM, and portions of two ADM areas with a high probability for historic sites extended into the segment. The segment was designated high probability for historic sites by A&HC as the Read/Elliott Historic High Probability Area. It will be plowed, disked, and surface surveyed.

Segment 19 is in cultivated fields not proximal to water. The segment comprises the area for construction of the main line and three ramps associated with the Jamison Corner Road interchange. The fourth ramp associated with the interchange was included in Segment 20 (see below). Segment 19 was designated low probability for precontact and historic sites by ADM, and this designation was retained. Two of the three ramps (Ramps 2 and 3) in Segment 19 were selected at random to be eliminated from survey. The third ramp (Ramp 4) will be plowed, disked, and surface surveyed as a test of the predictive model.

Segment 20 encompasses Ramp 1 of the Jamison Corner Road interchange. It is in a cultivated field not proximal to water. It was assigned a low probability for precontact sites by ADM; additionally a portion of an ADM area with a high probability for historic sites extended into the segment. The segment was designated as high probability by A&HC as the Bowman Tenant House Historic High Probability Area. It will be plowed, disked, and surface surveyed.

Segment 21 encompasses cultivated fields and yard areas not proximal to water. It was assigned a low probability for precontact sites by ADM, with the exception of a narrow strip of moderate precontact probability along its southern edge. One ADM area of high probability for historic sites extended into the segment, and another was adjacent to its northern edge. The entire segment was designated high probability by A&HC as the P./Mrs. Bowman Historic High Probability Area. This segment will be plowed, disked, and surface surveyed. Yard areas will be shovel tested.

Segment 22 is in a cultivated field and is not proximal to water. It was designated low probability for precontact and historic sites by ADM, and this designation was retained. This segment will be plowed, disked, and surface surveyed as a test of the predictive model.

Segment 23 is in a cultivated field and is proximal to water. It was designated as having a low probability for historic sites and a moderate probability for precontact sites by ADM, and this designation was retained. This segment is partially disturbed along its northern edge. Undisturbed areas will be plowed, disked, and surface surveyed.

Segment 24 is the wooded hollow of Scott Run. It was designated by ADM as high probability for precontact sites, and this designation was retained. An ADM area of high probability for historic sites is adjacent to the segment's northern edge. This segment was designated as high probability for historic sites by A&HC due to the presence of a breached earth dam and possible presence of the Scott's Run Pump Station Site (see Section 6.2). The segment will be included in the geomorphological survey and then shovel tested at 15 m intervals with the possibility of supplemental test units. An area of cultivated field on the upland just to the west has been disturbed by grading and installation of a sewer main and will not be further surveyed.

Segment 25 is a cultivated field on a bluff above Scott Run. It was designated by ADM as having a low probability for historic sites and a moderate probability for precontact sites. A&HC assigned the entire segment a moderate probability for historic sites due to the proximity to Hyetts Corner Road. This segment will be plowed, disked, and surface surveyed.

Segment 26 was assigned a low probability for historic sites and a moderate probability for precontact sites by ADM. However, the entire segment has been disturbed by construction activity and installation of gas pipelines; it was designated by A&HC as having a nil probability for sites and eliminated from further survey.

Segment 27 is in a cultivated field, part of which is not proximal to water and part of which is proximate to water. It was designated as having a low probability for historic sites and a low and moderate probability for precontact sites by ADM. A&HC assigned the entire segment a moderate probability for historic sites due to its proximity to Hyetts Corner Road. This segment will be plowed, disked, and surface surveyed.

Segment 28 is in cultivated fields and the grassy/brushy headwaters area of a stream. The segment was designated as having a low probability for historic sites by ADM. The stream crossing was designated by ADM as high probability for precontact sites, while the adjacent fields were designated as moderate and low probability for precontact sites. A&HC extended the limits of

the high probability area to include several small, flat interfluves between 1st order intermittent tributary streams. Auger probes here showed a potential for intact precontact surfaces beneath historic alluvium in a headwaters hollow. This segment will be included in the geomorphological survey and then shovel tested at 15 m intervals with the possibility of supplemental test units. The open fields (including interfluves) will be plowed, disked, and surface surveyed.

Segment 29 is in a cultivated field and is not proximal to water. It was designated low probability for precontact and historic sites by ADM. An ADM area of high probability for historic sites is situated just to the south of this segment. Although no firm correlation was possible, this high probability area appears to be one of several such areas representing what was probably one building, shown on mid- to late nineteenth century maps and on the 1906 Wilmington 15' USGS quadrangle. All of these maps depict the building in question as being outside the project APE. Therefore, A&HC did not adjust ADM's probability assignment for this segment based on the nearby ADM historic high probability area. This segment was chosen at random to be eliminated from further survey.

Segment 30 is in a cultivated field designated by ADM as having a low probability for historic sites and a moderate probability for precontact sites. This designation was retained. This segment will be plowed, disked, and surface surveyed.

Segment 31 is within the existing US 1 corridor and is entirely disturbed or paved. It was designated as having a nil probability for sites and was eliminated from further survey.