# MEMORANDUM OF AGREEMENT AMONG THE CITY OF JACKSONVILLE, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER REGARDING THE CONSTRUCTION OF RAW WATER MAIN SURGE SUPPRESSION IN SCOTT COUNTY, ILLINOIS (SHPO LOG #008082214)

**WHEREAS**, the City of Jacksonville (City) owns parcel 0112200004 in the Illinois River bottoms north of Naples, Scott County, IL, (Parcel) and plans to construct surge suppression for their raw water transmission main at their existing well wholly within the Parcel; and

WHEREAS, the project will require permits for construction and operation from the Illinois Environmental Protection Agency (IEPA), making it an Undertaking subject to review under the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420) and its implementing rules (17 IAC 4180) (Act); and

WHEREAS, the Illinois State Historic Preservation Office (SHPO) currently resides within the Illinois Department of Natural Resources (DNR), and the Director of DNR is the duly designated State Historic Preservation Officer; and

WHEREAS, the City has consulted with the SHPO, pursuant to the regulations promulgated at 17 IAC 4180 implementing the Act; and

WHEREAS, the Parcel encompasses part or all of the Naples-Abbott Smith Archaeological Site (11ST121) and Naples Archaeological Site (11ST1) (Sites); and

WHEREAS, the Undertaking will disturb portions of the Sites; and

WHERAS, the SHPO has determined that the Undertaking will have an adverse effect on the Sites, which are contributing properties to the Naples Archaeological District that was listed to the National Register of Historic Places (NRHP) on December 22, 1979; and

**NOW, THEREFORE**, the City, IEPA, and SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to mitigate the adverse effects of this Undertaking to the Sites as a result of this project.

## **STIPULATIONS**

## I. MITIGATION

A. The City shall retain an archaeological contractor(s) of its choice (Contractor) who meets the Secretary of the Interior's Qualifications (36 CFR 61) to complete the mitigation measures described below. The City has retained the Public Service

Jacksonville Surge Suppression MOA SHPO log #008082214 Archaeology and Architecture Program, University of Illinois. The Contractor must consult with the SHPO prior to the initiation of the work to ensure that expectations are understood.

- B. The Contractor must conduct Phase III archaeological mitigation in the portions of the Sites that will be disturbed by the Undertaking, as required by the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys/Reports, as revised. The portions of the Sites that will be disturbed by the Undertaking are shown in Figure 4 of Appendix A.
- C. Excavations shall be guided by the research questions and data recovery plan that are included in Appendix A.
- D. Upon completion of the fieldwork portion of the Mitigation, the Contractor must submit in writing to the SHPO a Letter Report of Findings. When the SHPO accepts in writing the Letter Report, construction of the Undertaking may commence.
- E. The Contractor must consult with the Illinois State Museum (ISM) to identify and resolve curation procedures for the accession of the materials recovered during excavations. If the ISM declines accession, the Contractor must consult with the SHPO.
- F. The Contractor shall submit 95% draft report of investigations in writing to the SHPO for review and comment.
- G. When the SHPO accepts in writing the 95% report, the City and the Contractor will complete the final report of investigations.
- H. The final report of investigation must be submitted to the SHPO within one (1) year after completion of the fieldwork portion of the Mitigation.
- I. Concurrent with the submission of the final report of investigations to the SHPO, the Contractor must submit all archaeological materials recovered during excavations, as well as field notes and other documentary records to the ISM.

## II. DURATION

This agreement will be null and void if its stipulations are not carried out within two (2) years from the date of its execution. Prior to such time, the signatories may consult to reconsider the terms of the agreement and amend it in accordance with Stipulation V AMENDMENTS below.

## III. POST-REVIEW DISCOVERIES

If potential historic properties are discovered or unanticipated effects on historic

properties found, the City shall consult with the SHPO immediately and make reasonable efforts to avoid, minimize, or mitigate adverse effects to such properties. In the event of an unanticipated discovery of human remains or burials, the City understands and agrees that they must immediately stop work within the area of discovery, notify the SHPO, and comply with the Human Skeletal Remains Protection Act (20 ILCS 3440) as administered by DNR, which provides that no human skeletal remains shall be disturbed without a permit issued by DNR.

## IV. DISPUTE RESOLUTION

Should any signatory to this agreement object at any time to any actions proposed or the manner in which the terms of this agreement are implemented, the signatories shall consult to resolve the objection. If the signatories cannot agree regarding a dispute, procedures provided in 20 ILCS 3420/4e shall be utilized.

## V. AMENDMENTS

This agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy is signed by all of the signatories.

## VI. TERMINATION

If any signatory to this agreement determines that its terms become impossible to carry out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulations IV and V above. If within thirty (30) days an amendment cannot be reached, any signatory may terminate the agreement upon written notification to the other signatories.

## VII. COUNTERPARTS; FACSIMILE OR .PDF SIGNATURES

This Agreement may be executed in counterparts, each of which shall be considered an original and together shall be one and the same Agreement. A facsimile or .pdf copy of this Agreement and any signatures thereon will be considered for all purposes as an original.

## VIII. EFFECTIVE DATE

This Agreement is effective on the date signed by the City.

EXECUTION of this Memorandum of Agreement and implementation of its terms evidences that the City and IEPA have afforded the SHPO an opportunity to comment on the effects of the Undertaking in compliance with the Act.

[Signature Pages to follow]

Jacksonville Surge Suppression MOA SHPO log #008082214

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# MEMORANDUM OF AGREEMENT AMONG THE CITY OF JACKSONVILLE, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER REGARDING THE CONSTRUCTION OF RAW WATER MAIN SURGE PROTECTION IN SCOTT COUNTY, ILLINOIS (SHPO LOG #008082214)

## SIGNATORY

City of Jacksonville

Signature:	and Eal	Date:
Name:	ANDY EZARD	
Title:	Mayor	

Jacksonville Surge Suppression MOA SHPO log #008082214

Jon. 30, 2019

# MEMORANDUM OF AGREEMENT AMONG THE CITY OF JACKSONVILLE, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER REGARDING THE CONSTRUCTION OF RAW WATER MAIN SURGE PROTECTION IN SCOTT COUNTY, ILLINOIS (SHPO LOG #008082214)

## SIGNATORY

Illinois Environmental Protection Agency

Signature:	Date:
Name:	
Title:	5

# MEMORANDUM OF AGREEMENT AMONG THE CITY OF JACKSONVILLE, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER REGARDING THE CONSTRUCTION OF RAW WATER MAIN SURGE PROTECTION IN SCOTT COUNTY, ILLINOIS (SHPO LOG #008082214)

## SIGNATORY

Illinois State Historic Preservation Officer

By: Date:

Colleen Callahan, Director and State Historic Preservation Officer Illinois Department of Natural Resources

APPROVED FOR EXECUTION Date: Legal Counsel

### **APPENDIX** A

# JACKSONVILLE TRANSMISSION MAIN SURGE SUPPRESSION MEMORNADUM OF AGREEMENT, SHPO LOG #008082214

# DATA RECOVERY PLAN FOR 11ST121 AND A PORTION OF 11ST1 WITHIN THE NAPLES ARCHAEOLOGICAL DISTRICT IN SCOTT COUNTY, ILLINOIS

For Submission To:

Mr. Adam Fox, Benton & Associates, Inc. 1970 West Lafayette Avenue Jacksonville, Illinois 62650

and

Mr. Jeffery Kruchten Chief Archaeologist Illinois Historic Preservation Office Illinois Department of Natural Resources 1 Natural Resources Way Springfield, Illinois 62702-1271

## By:

Mr. Gregory R. Walz and Dr. Kevin P. McGowan Public Service Archaeology & Architecture Program Department of Anthropology 1707 South Orchard Street University of Illinois at Urbana-Champaign Urbana, Illinois 61801

19 September 2018

## DATA RECOVERY PLAN FOR 11ST121 AND A PORTION OF 11ST1 WITHIN THE NAPLES ARCHAEOLOGICAL DISTRICT IN SCOTT COUNTY, ILLINOIS

This is a data recovery plan to mitigate adverse affects to 11ST121, a multicomponent Middle Woodland and Terminal Late Woodland site and a portion of 11ST1, the Naples site which consists of a series of Hopewellian Middle Woodland burial mounds and associated activity areas located on a terrace above the Illinois River near the Town of Naples in Scott County, Illinois (Figure 1). These sites will be impacted by construction of a proposed City of Jacksonville municipal raw water main surge protection project. Site 11ST121 is located wholly within the limits of 11ST1, both of which are listed on the National Register of Historic Places (NRHP) and which are contributing resources to the NRHP Naples Archaeological District (NRHP#79000869). The proposed data recovery procedures are in accordance with the need to recover data from portions of 11ST1 and 11ST121 to be affected by the proposed project utilizing procedures previously accepted by the Illinois State Historic Preservation Office (SHPO) and are intended to satisfy several stipulations presented in a draft Memorandum Of Agreement between the City of Jacksonville, Illinois, the Illinois Environmental Protection Agency (IEPA) and the Illinois State Historic Preservation Office (SHPO). The MOA addresses the mitigation of effect on archaeological resources present at 11ST1 and 11ST121 within the area of disturbance by the proposed water system improvements and further addresses the issue of human remains. In the event of an unanticipated discovery of human remains or burials, the Scott County coroner and SHPO must be notified. The Human Skeletal Remains Protection Act (20 ILCS 3440) as administered by the SHPO, provides that no human skeletal remains shall be disturbed without consultation with and permission of SHPO.

The proposed City of Jacksonville raw water main surge protection project includes the construction of a new facility adjacent to the location of an existing water well within 11ST1 and partly within the limits of 11ST121. The Naples site (11ST1) was initially surveyed and described by J. G. Henderson following a field visit in 1876 as consisting of 16 mounds, 14 of which were located within and near the Town of Naples in Sections 12 and 13 of Township 15 North, Range 14 West, and two additional mounds which were located near Valley City in Pike County on the west side of the Illinois River (Figure 2) (Henderson 1884). Site 11ST121, the Smith site, was identified in 1970 as a surface scatter of lithic and ceramic artifacts just north of a fenced compound which encloses a City of Jacksonville water well. Material recovered from the surface included diagnostic ceramic and lithic artifacts attributed to a Middle Woodland component, and two ceramic sherds identified as Jersey Bluff and attributed to a Terminal Late Woodland component.

The 11ST1 and 11ST121 data recovery project will be carried out with personnel from the Public Service Archaeology & Architecture Program, Department of Anthropology, University of Illinois at Urbana–Champaign with Dr. Kevin P. McGowan serving as Principal Investigator. Mr. Gregory Walz will supervise the field investigations and the report preparation.

#### Site Description

Site 11ST1 was initially described as a group of 16 mounds occupying alluvial terraces on the east and west banks of the Illinois River (Henderson 1884). The original Illinois Archaeological Survey 1950 site form for 11ST1 indicates the site type to be "Mounds" and that the culture is "Hopewell" and further states that the site evidence included "...side and corner notched projectile points, scrapers, fragments of sheet copper, pottery sherds", and also indicates that surface collections included "Havana Ware sherds, dentate stamp decoration, flake knives". Mounds 13 and 16 were tested by the University of Illinois in 1928. At this time, Mound 13 was described as having been significantly eroded and cut into by the east bank of the river, and Mound 16 was described as being located "directly on the bank of a bayou" (Lower Smith Lake) and that the mound fill had been truncated by its removal for levee fill (Baker, Griffin, Morgan, Neumann and Taylor 1941). A 1982 update to the 11ST1 site form clarifies that the 11ST1 site area includes only six (mounds #10, 11, 12, 13, 15 and 16) of the 16 mounds identified by Henderson and describes several of the mounds in greater detail based upon sketch maps prepared by Farnsworth in 1970 for the Lower Illinois Valley Archaeological Survey project. Investigations undertaken by Northwestern University during the 1960s and 1970s resulted in the identification of five new sites (11ST118, 11ST119, 11ST120, 11ST121 and 11ST122) within the limits of 11ST1 which include both mound and habitation locations. Illinois Archaeological Survey site forms were submitted for these sites in 1982. As presently mapped, 11ST1 extends 1,300 meters north to south and maximally 420 meters east to west. The site is located between Lower Smith Lake to the north and extends into the Town of Naples on the south (Figure 3). Site 11ST1 is located within an area mapped as having Sparta loamy sand, 1 to 6 percent slopes, rarely flooded; Hoopeston silt loam, 0 to 2 percent slopes, rarely flooded; Onarga fine sandy loam, 2 to 5 percent slopes, rarely flooded; Plainfield sand, 7 to 15 percent slopes, and Ambraw clay loam, 0 to 2 percent slopes, occasionally flooded soils (Natural Resources Conservation Service 2017a).

Site 11ST121, the Smith site was delineated by Farnsworth in 1970 and recorded with the Illinois Archaeological Survey in 1982. The site is described as being located immediately northeast of a utilities compound and about 20 meters east of the east bank of the Illinois River. The site area is reported extending 52 meters north to south by 64 meters east to west on a sandy ridge and north-facing gentle slope above a swale (Figure 3). A surface reconnaissance identified artifacts and lithic debris on the surface and a timed, representative collection resulted in an assemblage of 111 lithic and ceramic artifacts being collected. The ceramic assemblage includes 72 Havana sherds, one Hopewell sherd, eight Pike sherds, one Pike/Baehr sherd, 17 Middle Woodland sherds, and two Jersey Bluff sherds. The collected lithic artifacts include two Gibson projectile points, one bifacial tool, one unifacial tool, five lamellar flakes and one sandstone abrader. Based on the surface collected materials, 11ST121 is interpreted as a Middle and Late Woodland habitation area located between Mounds 15 and 16 and nearby to sites 11ST120, the White Towers habitation site and 11ST122, the Tabbycat habitation site. 11ST121 is located within an area mapped as having Sparta loamy sand, 1 to 6 percent slopes, rarely flooded soils (Natural Resources Conservation Service 2017a).

Over the course of five field days between 11 January and 06 March 2018, the Public Service Archaeology & Architecture Program surveyed 31.57-hectares which included a large portion of the 11ST1 site area. Given the inclusion of 11ST1 within the Naples Archaeological District and its association with burials, no subsurface tests were conducted within the 11ST1 site limits, with the exception of a single shovel test within the limits of 11ST121 to assess soil conditions. The survey resulted in the recovery of both prehistoric and historic period artifacts and the expansion of the 11ST1 site area to the east. The survey also recovered prehistoric materials from the single shovel test excavated within the 11ST121 site limits. At the time of survey, the 11ST121 site area was vegetated in pasture grasses and had limited surface visibility. The shovel test resulted in the recovery of four ceramic sherds and six lithic debris flakes, including two tertiary chert flakes and four broken chert flakes. Two of the recovered sherds are grit-tempered and one of these is identified as a Havana type sherd. One sand and limestone tempered sherd is also identified as a Hopewell Middle Woodland sherd, while one grit tempered and one sand tempered sherd were not able to be further identified. The recovery of diagnostic ceramic sherds conform with the previously defined Middle Woodland component at 11ST121, and the recovery of artifacts from subsurface contexts suggest that the site likely contains subsurface deposits and/or cultural features related to its period of occupation during the Middle and Late Woodland periods of Illinois prehistory (Walz, Balek and Green 2018).

Site 11ST1, the Naples site, is listed on the NRHP as a contributing portion of the Naples Archaeological District. Site 11ST121 which occurs within the previously defined limits of 11ST1, while not having been directly evaluated for the NRHP, would be considered *Eligible*, as well, given the site's location within the larger 11ST1 site area and within the Naples Archaeological District.

#### **Research Potential**

Archaeological mitigation of portions of 11ST1 and 11ST121 offers the potential to address several interrelated research issues pertaining to the Middle and Late Woodland occupation of the lower Illinois River valley. The cultural context for the Middle and Late Woodland periods in the lower Illinois River and adjacent regions demonstrates the continuation of several trends previously identified in earlier periods and also witnesses the florescence of the Hopewellian phenomenon and the "Mississippianization" of Late Woodland societies.

#### Middle Woodland Period

The Middle Woodland Period is characterized by the inception and expansion of the Hopewell cultural phenomenon. The Hopewell phenomenon is known from data collected primarily from the lower Illinois River valley and the Scioto and central Ohio River valleys of southern Ohio. The trends of the preceding time periods continue with increasing sedentism, population growth, horticultural intensification, and investment in mortuary ceremonialism involving mound construction and a diverse assemblage of exotic ceremonial artifacts (Brose and Greber 1979).

The settlement-subsistence patterns for Middle Woodland cultures were oriented toward selected environments for settlement that are sandy, well-drained, in proximity to nut-bearing trees, and near areas of extensive floodplains featuring swamps, marsh, and backwater lakes-settings which are characteristic of the lower Illinois River valley and of the Naples site.

Plant cultivation of the starchy seed complex consisting of knotweed (*Polygonum erectum*), goosefoot (*Chenopodium berlandieri*), and maygrass (*Phalaris caroliniana*) and very likely little barley (*Hordeum pusillum*) was intensified during this period. Two domesticated oily seeds (marsh elder and sunflower), two cucurbits (squash and bottle gourd), and tobacco (*Nicotiana* sp.) were also cultivated. The degree to which populations began to depend on the cultivation of starch and weedy native annuals shows some regional variation across the Midwest with populations living within the larger drainages such as the Illinois and Mississippi valleys exhibiting a higher degree of reliance on such plants, while populations residing away from the larger alluvial valleys and in upland areas appear to have a continuing reliance on nut masts and a lower reliance on cultivated native plant taxa. Corn (*Zea mays*) has been postulated have constituted a very minor cultigen (Asch and Asch 1985; O'Brien 1987:183; Riley, Walz, Bareis, Fortier, and Parker 1994); however, more recent investigations have not supported the supposition that maize was present in Illinois during the Middle Woodland and instead suggest that the plant was not significantly cultivated until about A.D. 900 (Simon 2017). Increased native plant husbandry and cultivation likely provided greater efficiency and stability of the subsistence economy thereby reinforcing the trend toward sedentary village life.

The Middle Woodland occupants of Illinois were active participants in the Hopewell Interaction Sphere (Caldwell 1964) as indicated by the presence of mica from the Appalachians, galena, platform pipes (some perhaps made from northwestern Illinois flint clay), exotic cherts (e.g., Burlington-Crescent chert from the lower Illinois Valley and Meramec Valley in eastern Missouri and Cobden/Dongola chert from southern Illinois), limestone-tempered trade vessels, copper pan pipes, and marine shells. The ceramic vessel decorative motifs indicate that the Middle Woodland phenomenon here was part of the Havana Hopewell tradition (Brown 1964:111; Griffin 1952a, 1952b; Faulkner 1972:54; Mangold 1981:271). Havana Hopewell manifestations (2070-1700 years B.P.) are known primarily from the lower and central Illinois River valley and represent a widespread Middle Woodland culture, extending from the confluence of the Illinois and Mississippi rivers to the Upper Great Lakes. Cultural interaction appears to have largely occurred as a system of reciprocal feasting and ceremonial exchange for world renewal where spiritual, economic, and social needs could be satisfied.

The chipped-stone tool assemblage could include lamellar flake blades and end scrapers on blades, side scrapers, bifacial knives, drills, perforators, gravers, wedges, adzes, gouges, blade cores, and a variety of hammerstones, grinding stones, and whetstones. Other ground-stone tools include full-grooved axes, pitted cobbles, celts, and pestles. Diagnostic Middle Woodland point types are of a corner-notched style including Snyders, Affinis Snyders, Gibson, Manker, and Norton (Justice 1987; Reber, Boles, Emerson, Evans, Loebel, McElrath, and Nolan 2017).

In contrast to the preceding Early Woodland period, the Middle Woodland period sites indicate a major increase in population in the lower Illinois valley with settlements located along the valley margins, particularly near the entrance of tributary stream valleys such as Smiling Dan, Macoupin, and Apple Creek. Analysis of settlement patterns suggests that Middle Woodland populations maintained territories that correlate with large floodplain mound groups which are spaced at 12 to 30-kilometer intervals. These centers are also correlated with differences in ceramic styles which may also be indicators of social borders. Smaller mound groups located on blufftops appear to reflect the territories of smaller population groups. The large floodplain mound centers such as Peisker and Mound House may have functioned as intraregional exchange centers in addition to their mortuary-ceremonial roles in the lower Illinois valley (Buikstra 1976; Charles, Buikstra and Konigsberg 1986; Fie 2008; Houart 1975; McGimsey and Wiant 1986; Stafford and Sant 1985; Struever and Houart 1972). The Mound House phase, 2,050-1,750 B.P. has been proposed for the lower Illinois valley Middle Woodland period.

#### Late Woodland Period

Late Woodland Period groups have been termed the "good grey cultures" (Williams 1963) because they were supposedly overshadowed by the former Hopewellian and subsequent Mississippian cultural climaxes. However, the Late Woodland is now understood as a time when important technological innovations were developed and settlement-subsistence patterns changed. Advances in cooking vessel technology (i.e., thinner walls) for preparing food can be correlated with a rapid increase in the economic importance of native-annual seeds that, in turn, may have increased population growth rates. Studies of faunal assemblages from Late Woodland sites in the American Bottom and lower Illinois Valley indicate localization and intensification in aquatic-resource procurement (O'Brien 1987).

Late Woodland sites are more evenly distributed across the landscape than the previous Early and Middle Woodland periods, indicating that people were moving into bluff top, low-order tributary, and upland habitats perhaps to intensify the use of traditional first-line resources in the face of population growth (Markman 1991:69; Munson 1988:9; Roper 1979; Styles 1981). Markman (1991:71) notes a significant increase in the frequency of sites on the moraines surrounding Lake Michigan in northeastern Illinois suggesting overcrowding in the bottomlands of the large and medium-sized valleys during the early Late Woodland Period (O'Brien 1987:193).

Terrestrial animals (deer, turkey, raccoon, squirrel), mast resources (particularly hickory nuts), aquatic and wetland species (fish, waterfowl, turtles, freshwater mussels, and various aquatic and semi-aquatic plants), and horticultural products (maygrass, goosefoot, knotweed, little barley, squash, sumpweed, and

sunflower) comprise the Late Woodland diet (Munson 1988:9). Considerable variation in subsistence strategies is seen across the Midwest during the Late Woodland period especially with regard to the role of native cultigens within a subsistence-settlement system. While some of the variability may be attributed to the availability of suitable soils for cultivation, forest cover, and climatic variability-especially when viewed from north to south (eg. Johannessen 1993), social choice may be a larger contributing factor in the timing and degree to which native cultigens become integrated into a subsistence regime in the Midcontinent (Simon 2000). Maize appears to have constituted only a minor subsistence resource during much of the time period, perhaps becoming important sometime after A.D. 800 (Asch and Asch 1985; Munson 1988:10; Simon 2017).

A variety of projectile point types is present during the Late Woodland. Small projectile point types suggest the adoption of bow-and-arrow technology at approximately A.D. 600–700. The bow and arrow permitted more efficient hunting in forested areas and proved important in raiding activities. Small, sometimes crude shallow-notched forms of the Scallorn Cluster, Jack's Reef, and Raccoon Notched, and triangular un-notched types such as Madison and Hamilton Incurvate are common during this time period. Stemmed types such as Steuben, Lowe Flares, Ancell and Mund-Raymond which likely functioned as spear or dart points are also common in Illinois Late Woodland assemblages (Justice 1987; Reber et al. 2017).

In the lower Illinois valley, the White Hall phase, 1,550-1,350 B.P., represents the initial Late Woodland phase and reveals continuity in subsistence strategies with the preceding Middle Woodland period in the region. Small sites located in a variety of ecological zones are the basis of the Late Woodland settlement system, with several sites located in the uplands and secondary drainages in Pike (Axedantal/Elledge, Pittsfield Prison, Stillwell)) and Adams (John Roy) counties (Connor 1985; Studenmund 2000; Styles 1981). Studenmund (200:330-331) postulates that the upland ridges between the Mississippi and Illinois valleys may have been utilized primarily as hunting territory by small groups of Late Woodland peoples with residential origins in the central and lower Illinois valley, and in the Sny Bottom region of the Mississippi valley. Identified Late Woodland sites in this interfluvial upland region are aceramic, lack substantial storage or processing pits and were apparently occupied for short periods by hunting or foraging groups. The White Hall phase is succeeded by the Early Bluff (1,400-1,200 B.P.) and Late Bluff/Jersey Bluff (1,200-1,000 B.P.) phases. The Early Bluff phase documents an increase in the number, size and complexity of sites in the lower Illinois valley and also witnesses the introduction of the bow and arrow into the region. Maize horticulture is a hallmark of the Late Bluff phase, which also reveals a gradual stylistic shift in ceramic styles and subsistence pursuits that will come to mark the succeeding Mississippian period and suggests that local Late Woodland populations gradually became "Mississippianized".

Based on the cultural context, sites 11ST1 and 11ST121 appear to have the potential to address a number of research issues related to the Middle and Late Woodland periods in the lower Illinois River valley.

• Mitigation of the project area offers the potential to obtain radiocarbon dates from features which may be present at the sites. The recovery of dateable organic materials and radiocarbon assays will allow for the absolute dating of the site's occupation within a local chronological framework and can also assist in refining the regional chronology of the prehistoric occupations in this portion of the Illinois River valley. The key to this research is the collection of dateable samples from features to obtain a suite of dates.

- Source analysis of lithic artifacts and debris may shed light on lithic procurement strategies and the degree to which the site occupants relied upon locally available lithic resources such as glacial till gravels and local chert outcrops, versus obtaining raw materials from more distant sources via exchange with non-local groups within a regional exchange network. The key to this research is examining the recovered assemblage to determine likely source locations.
- The recovery of archaeobotanical and archaeofaunal materials from cultural features excavated at the site may permit an analysis of the seasonality of the site's occupation; may provide important data regarding strategies of plant and animal resource acquisition and utilization; and may also provide data pertaining to the role of native cultigens and horticulture in the subsistence base. The key to this research is collecting and analyzing animal and plant remains from features.
- The recovery and analysis of lithic, ceramic and other categories of materials may permit a deeper understanding of the nature of the activities which occurred at the sites. Analysis of the number and types of materials present can illuminate how Middle and or Late Woodland occupants at 111ST1 and 11ST121 may have undertaken differing ranges of activities. For instance, the presence of a wide variety of artifact types, lithic reduction debris and quantities of fire-crack rock might indicate a more residential-type occupation; while an artifact assemblage composed of a limited variety of items and/or by the presence of non-local or exotic materials such as quantities of copper, non-local cherts or other items such as cut canid mandibles, bear canines and mica artifacts, might indicate that the sites were occupied for more specifically mortuary or ritual purposes. Similarly, if discrete deposits or features are present that can be attributed to either a Middle Woodland or Late Woodland occupation, distinction may be drawn between how the site function may have evolved from the Havana Hopewell Middle Woodland to the subsequent Late Woodland period.

One observation is that very little is known about the Naples site beyond the early investigations into mortuary activities. The data recovery from 11ST1 and 11ST121 provides an opportunity to learn more about the people who lived here and how they structured their lives.

#### Site Treatment Plan and Excavation Strategy

The mitigation of portions of 11ST1 and 11ST121 will be carried out in six sequential stages. Each stage is described below.

Stage 1 – Data Recovery Plan Approval: The Data Recovery Plan will be submitted to the Illinois Historic Preservation Office comment and approval as directed under the terms of the Memorandum Of Agreement between the City of Jacksonville, the Illinois Environmental Protection Agency and the Illinois State Historic Preservation Office. This process will establish expectations and obligations for the recovery process and the initiation of construction in the site area.

Stage 2 - Surface Documentation: The area of mitigation (Figure 4), extending approximately 10-x-16meters and encompassing approximately 1,600 meters<sup>2</sup> will be examined for the presence of surface artifacts. Prior research indicates the site has been plowed. The site will then be examined with a 2-meter interval pedestrian survey to locate and identify surface artifacts. Any artifacts identified will be individually piece-plotted with a total station. Additional screened shovel tests will be excavated the mitigation area to evaluate the depth of plow zone. All materials and shovel test locations will be mapped during the topographic and site mapping process. Stage 3 - Once the controlled surface collection and supplemental shovel testing has been completed, the mitigation area of the proposed construction will be excavated. An estimated 1,600 meters<sup>2</sup> of unexcavated deposits are present within the proposed project location. Mechanical stripping of the entire plow zone will be undertaken to determine if intact features or midden deposits are present from 100 percent of the construction work space that impacts 11ST1 and 11ST121 (Figure 4). Any such features will be mapped using a total station and plotted on a topographic map of the general site area. All features will be documented in plan view with digital photographs and scaled line drawings prior to excavation. Each feature will then be bisected by hand excavation. The first half will be excavated by cultural stratigraphy, if present or by 10-centimeter levels if no internal stratigraphy is apparent. All material from the initial half will be screened through 6.35-millimeter hardware mesh to recover artifacts and organic remains. The resulting profile of each feature will be documented with digital photographs and scaled drawings prior to the second half being excavated. The second half of features will be excavated entirely and all material retained. This second half will be excavated by cultural stratigraphy, if present or in 10centimeter levels if no such stratigraphy is present. All material from the second half will be screened through 6.35-millimeter hardware mesh. Additionally, 10-liter soil samples will be collected from all nonpostmold features for flotation processing to recover small-scale artifacts, faunal material, and archaeobotanical remains. If cultural stratigraphy is present, a flotation sample will be collected from each zone identified within the feature.

Stage 4 - Laboratory Investigation: Following the completion of field work, all recovered materials will be processed at the laboratory facilities of the Public Service Archaeology & Architecture Program at the University of Illinois at Urbana–Champaign. Material will be washed, sorted, and cataloged as appropriate and identified according to material, manufacture, and functional attributes. The material analyses will be conducted and the materials categorized in a manner consistent with Midwestern sites. Potentially diagnostic artifacts will be further analyzed and illustrated as part of the site evaluation process. The materials will be prepared for permanent curation at the Illinois State Museum.

Stage 5 - Report Preparation: Based on the total complement of background, field, and laboratory research, a report will be prepared describing the research undertaken, the results and the data recovery at 11ST1 and 11ST121. The report will be prepared for submission to the Illinois Historic Preservation Office.

Stage 6 – Public Presentation: In addition to the compliance report detailing the mitigation and material analyses at11ST1 and 11ST121, an article for the general public will also be prepared. The journal of the Illinois Association for the Advancement of Archaeology, *Illinois Antiquity* or Illinois Archaeological Survey Journal *Illinois Archaeology* will provide an outlet for interested members of the public and the professional archaeological community in Illinois.

## **Key Personnel**

Kevin P. McGowan, RPA (Principal Investigator and Assisting Archaeologist): Ph.D. (1990) Anthropology (Archaeology), University of Illinois at Urbana–Champaign; secretary, Illinois Archaeological Survey; member, Register of Professional Archaeologists; more than 25 years of archaeological experience in the Midwest region of the United States including Illinois, Wisconsin, Indiana, Missouri, and Kansas. Dr. McGowan has served as Principal Investigator and Supervisor for a wide range of archaeological projects including Phase I surveys, Phase II test excavations, and Phase III mitigation projects.

Gregory R. Walz, RPA (Supervisory Archaeologist): M.A. (1991) Anthropology (Archaeology), Western Michigan University; more than 25 years of archaeological experience in the Midwest region of the

United States including Illinois, Wisconsin, Missouri, Kansas, Indiana, and Michigan. Mr. Walz has served as a Supervisor for a wide range of archaeological projects including Phase I surveys, Phase II test excavations, and Phase III mitigation projects.

#### **Project Schedule**

The Phase III data recovery from 11ST1 and 11ST121 will be conducted by Dr. Kevin McGowan (Principal Investigator), with assistance from a research team of six individuals. Team members will provide field, laboratory, and report assistance. It is currently anticipated that a Data Recovery Plan will be prepared and submitted during September 2018 for review and comment by the Illinois State Historic Preservation Office. Field work will be scheduled following the acceptance of the Data Recovery Plan by the Illinois Historic Preservation Office. The archaeological mitigation of 11ST1 and 11ST121 will require additional archival research, field excavations, artifact processing and analysis, report preparation, and agency and client review. It is anticipated that fieldwork, including mapping, machine excavation, and feature/midden excavations and documentation will be completed in 5 (8 to 10 hour) working days, weather permitting. A Management Summary report detailing the results of the mitigation efforts will be prepared for submission to appropriate parties within 14 days of completion of fieldwork. Agency review of the Management Summary should be completed within 30 days of receipt of that document. Archival research should be completed within 1 month and will focus on reviewing comparable archaeological assemblages. A draft report of the excavations, detailing the methods employed, results of the artifacts and specialized analyses, and conclusions, is expected to be finished within four months of the completion of fieldwork. Agency review of the draft report should be completed within 30 days of its receipt. A final report, if necessary, will be submitted within one month of receipt of reviewer comments. It is estimated that this entire project will require seven months to complete.

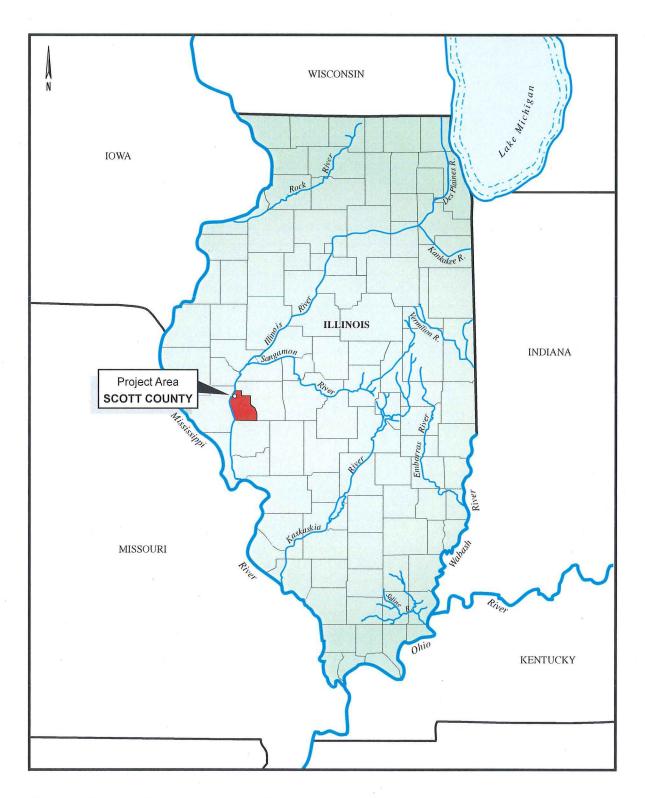


Figure 1. Location of the project area in Illinois.

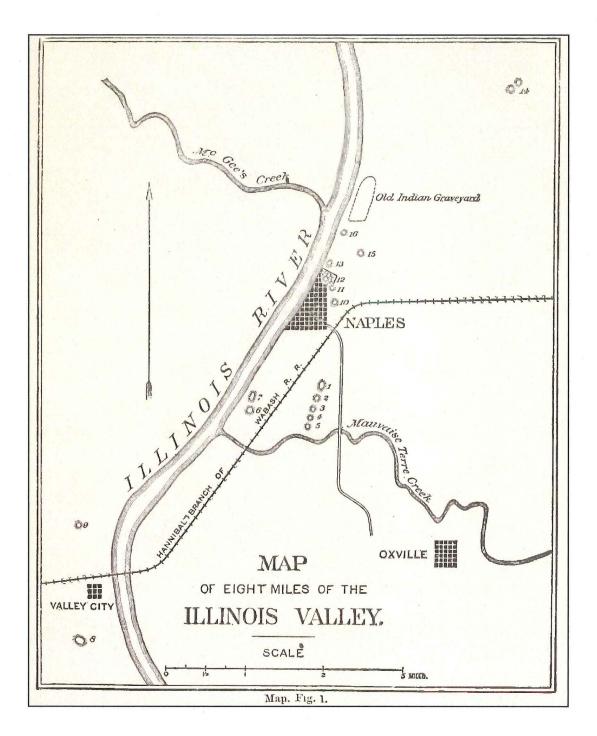


Figure 2. Map from 1882 Aboriginal Remains Near Naples, Illinois by John G. Henderson.

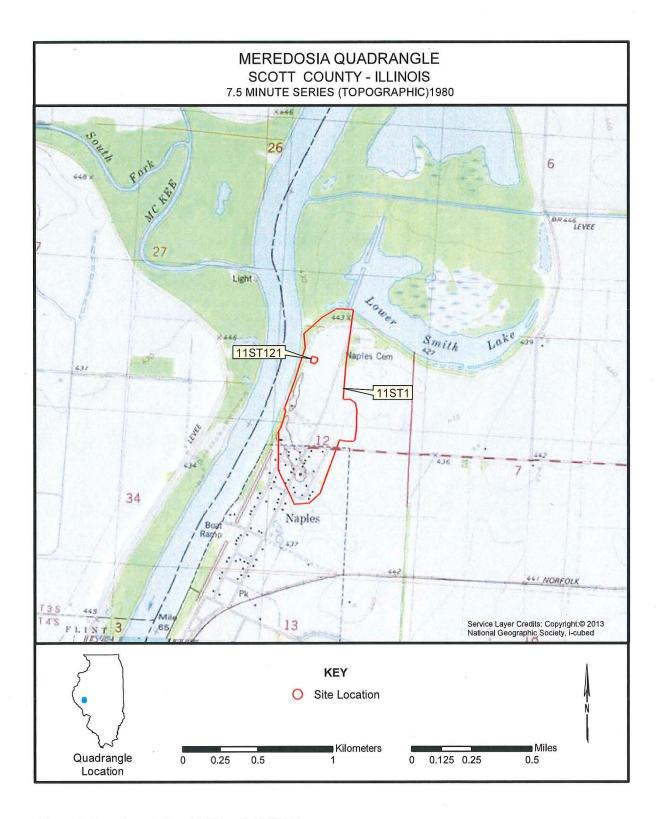


Figure 3. Location of sites 11ST1 and 11ST121.

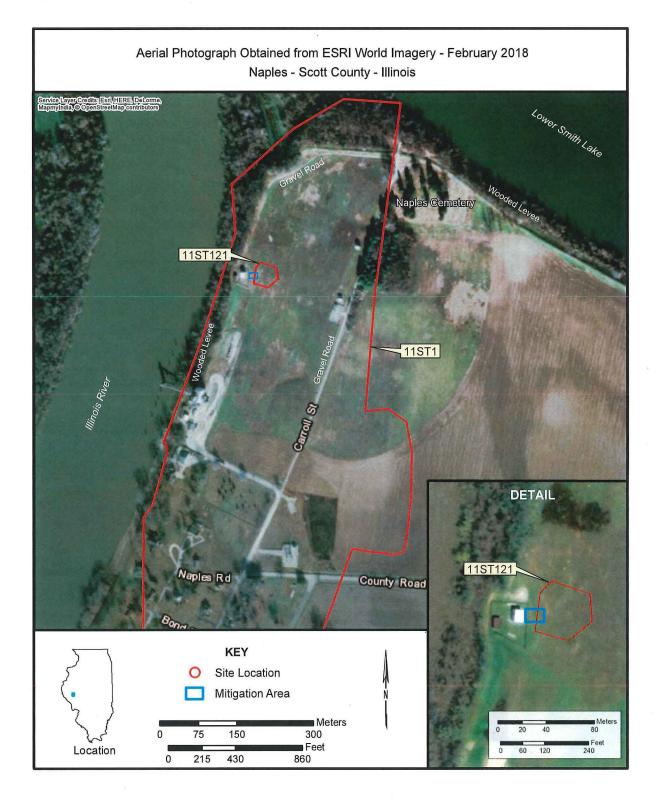


Figure 4. Mitigation area at 11ST1 and 11ST121.

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