

# **Results of Archaeological Investigation of Two Project Alignments Located in the City of New London, Waupaca and Outagamie Counties, Wisconsin**

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# Management Summary

In April 2007, Great Lakes Archaeological Research Center, Inc. (GLARC) performed archaeological Phase I investigations of two municipal improvement project areas located within the City of New London, Waupaca and Outagamie counties, Wisconsin. The City of New London solicited and authorized GLARC to perform the work as preparation for construction of a segment of the Wolf River Trail and reconstruction of a segment of storm sewer under East Spring Street. Archaeological investigations were required by the Wisconsin DNR to partially fulfill stipulations required by Wisconsin Statutes 44.40 and 157.70. The purpose of the study is to determine whether the municipal projects will impact site 47WP083/BWP173, which encompasses a large part of New London bordering the left bank of the Wolf River, although the exact location of the site is uncertain.

The archaeological investigations consisted of land use background research and a Phase I reconnaissance survey. The Phase I reconnaissance survey of the parcels revealed that each has been disturbed by urban or commercial improvements, and in the case of the trail alignment, inundated by Wolf River floodwaters. In addition, the area along the river is built-up with fill, and a portion is capped by surface remains of a razed commercial lumberyard. The East Spring Street Storm Sewer Reconstruction Project will replace existing segments of sewer running beneath the paved roadway. Soil cores extracted along East Spring Street reveal disturbed deposits. No evidence of site 47WP083/BWP173 was encountered during the archaeological study and cultural resource clearance is recommended for both project areas.



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## Part I: Project Background

### Introduction

In April 2007, Great Lakes Archaeological Research Center, Inc. (GLARC) performed archaeological Phase I investigations of two municipal improvement project areas located within the City of New London, Waupaca and Outagamie counties, Wisconsin (Figure 1.1). The City of New London solicited and authorized GLARC to perform the work as preparation for construction of a segment of the Wolf River Trail and reconstruction of a segment of storm sewer under East Spring Street. Archaeological investigations were required by the Wisconsin DNR to partially fulfill stipulations required by Wisconsin Statutes 44.40 and 157.70. The purpose of the study is to determine whether the municipal projects will impact site 47WP083/BWP173, which encompasses a large part of New London bordering the left bank of the Wolf River, although the exact location of the site is uncertain.

The methods and techniques utilized during archaeological investigations conform to the standards and guidelines set forth by the United States Secretary of Interior in the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716) and the *Guidelines for Public Archeology in Wisconsin, as Revised* (Wisconsin Archaeological Survey Guidelines Committee 1997), jointly endorsed by the Wisconsin Historical Society and the Wisconsin Archaeological Survey. Supporting documentation, field notes and other materials generated during the design and execution of this project are currently on file at Great Lakes Archaeological Research Center, located at 427 East Stewart Street in Milwaukee, Wisconsin.

During the project, personnel from GLARC performed all background research and field investigations. Dr. Michael Gregory performed the archaeological reconnaissance survey, authored the final report, and together with Ms. Katherine Shillinglaw performed project background research.

### Project Area Boundaries and the Area of Potential Effects

The two project tracts are located within an urban setting where one requires new construction and the other entails reconstruction of an existing facility. Both parcels are located within the City of New London (Figure 1.2) where the Wolf River Trail Extension Project borders the left bank of the Wolf River in Waupaca County and the East Spring Street Storm Sewer Project follows East Spring Street and is bisected by the Waupaca/Outagamie County line (USGS New London, Wis. 7.5' Quad 1992). The trail extension parcel (Appendix B) and its APE measures approximately 1440 feet (ft) (439 meters [m]) by 30 ft (9.1 m), encompasses approximately 0.99 acres (0.40 hectares), trends east-west, extends between Pearl and Shawano streets, and falls within the boundary of archaeological site 47WP083/BWP173. A legal description places the parcel within the N1/2 S1/2 SE1/4 of Section 12, Township (T) 22 North (N), Range (R) 14 East (E). Construction of the trail extension requires a paved surface resting upon a prepared bed that will not extend more than 3 ft deep below the ground surface. The project area and APE for the storm sewer project (Appendix B) measures approximately 710 ft (216 m) by 40 ft (12.2 m), encompasses approximately 0.65 acres (0.26 hectares), trends east-west, extends between Lawrence Street and East Wolf River Avenue, and falls within the boundary of 47WP083/BWP173. In legal terms, the site is located within

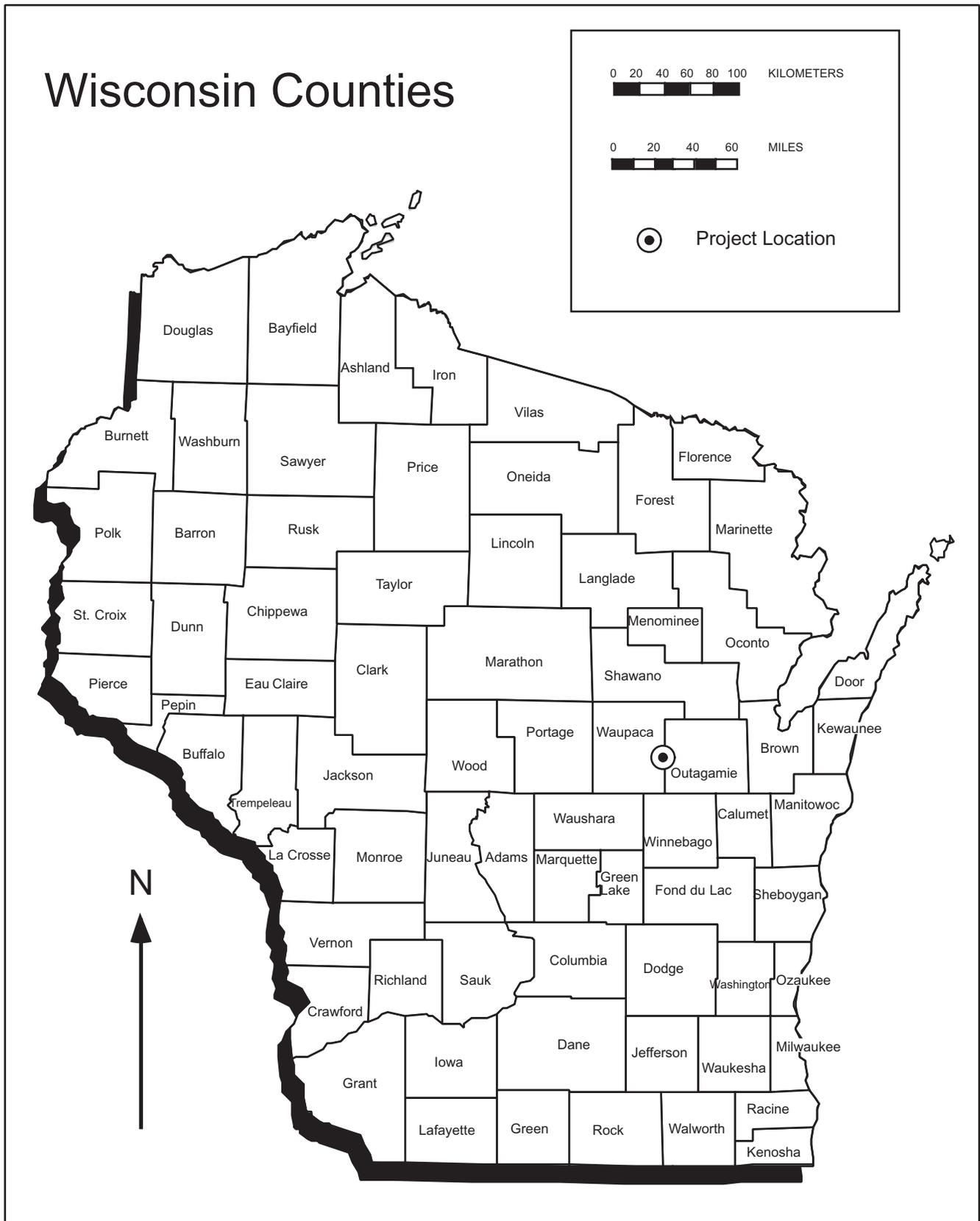


Figure 1.1. Location of the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Rehabilitation Project areas relative to the counties of Wisconsin.



the N1/2 SE1/4 SE1/4 SE1/4 of Section 12, T22N, R14E; and the N1/2 SW1/4 SW1/4 SW1/4 of Section 7, T22N, R15E. Reconstruction of the storm sewer entails removing and replacing the base course material and roadway pavement, and adding new curbs and gutters. In order to remove the existing sewer line and replace it, a 4 ft wide trench will be excavated, and when completed, the trench will measure 10 ft-to-12 ft deep. The trench will not be continuous because no sewer exists to be replaced from the center point of the Spring/Division streets intersection to a point located approximately 120 ft toward the east.

## **Organization of the Report**

The report is divided into five parts and four appendices. Part I is comprised of general background data that justifies the necessity of the study and is followed by descriptions of the area's physical and culture history setting, which comprise Part II. The research methodology and study objectives constitute Part III, which includes discussions about the specific tasks pursued, and the research techniques used. Results of the archaeological Phase I reconnaissance survey, as well as parcel specific cultural resource management recommendations are discussed in Part IV. The final part summarizes the research study by reviewing the results of the study, and restates cultural resources management recommendations. References cited and appendices follow Part V.

## Part II: Environmental and Cultural Setting

### Project Area Environmental Setting

The two study parcels defining the current project area are located within the northeastern portion of the Transitional biotic zone, which is sometimes referred to as the eastern humid or Alleghanian Area. This region is bordered by the Canadian Zone to the north and the Upper Austral Zone to the south (Jackson 1961:9-10). In terms of floral associations, the transitional, or tension zone occurs between the prairie-forest floristic province to the south and the northern hardwoods province to the north (Curtis 1971:15 and 20). As implied by its names, the zone contains a mix of species found in bordering biotic communities; however, certain bordering animal or plant species may not occur within it.

As a result of the unique distribution of faunal and floral species that characterize the zone, prehistoric and later historical groups realized a broad range of plants and animals to exploit. These subsistence resources consisted of home range and migratory animals, especially waterfowl, and competing woodland and prairie plant species. Long term characteristic plant associations probably established themselves as soon as 3500 years ago, and, in the face of a relatively stable climate (Griffin 1997:106-107), persisted until the time of historical settlement. Together the biological resources, coupled with topography, soils, and water courses, offered a wide range of materials and conditions that prehistoric and historical groups exploited for subsistence, trade, and mobility needs.

### *Physiography*

The landscape of east-central Waupaca and west-central Outagamie counties, including the project parcels, is a result of glacial events and subsequent erosional processes, especially the influence of the Wolf River. The study area is located within the Eastern Ridges and Lowlands physiographic province (Figure 2.1) where topographical features are characterized by a series of north-northeast/south-southwest trending cuestas created by the Green Bay Lobe of the Wisconsin glaciation (Martin 1965:209-233). Across the landscape, the dominant feature is the plain (Martin 1965:209); however, topographic relief is added by lowlands and hilly areas. Uplands resulted from the presence of escarpments associated with cuestas. Detailed reconstruction of the physiographic or topographic characteristics of the study area may be reviewed in Chamberlin (1877), Martin (1932, 1965), Curtis (1971), Hole (1976), Paull and Paull (1977) and various Wisconsin Geological and Natural History Survey bulletins.

Moderate relief characterizes the two study parcels, which are relatively level, although the surrounding and intervening areas are marked by elevation differences created by the down cutting of the Wolf River. The study tracts represent a part of the Magnesian Cuestas and are located along the cuestas' western, or back slope. Due to glacial erosion of the crest and the infilling of lowlands, the escarpment shows low relief in the New London and surrounding area (Martin 1965:215-216) where elevation generally decreases as one moves southwest-to-northeast. Within the immediate area of the study, elevations range from approximately 753 ft-to-902 ft (m-to- m) above mean sea level, with the high point being the top of the slope leading down to the Wolf River (Figure 1.2). In addition to the Wolf River, the escarpment is dissected by the Embarrass River, which flows north and east of the study parcels, and Potters Creek, which is located to the south-southwest.

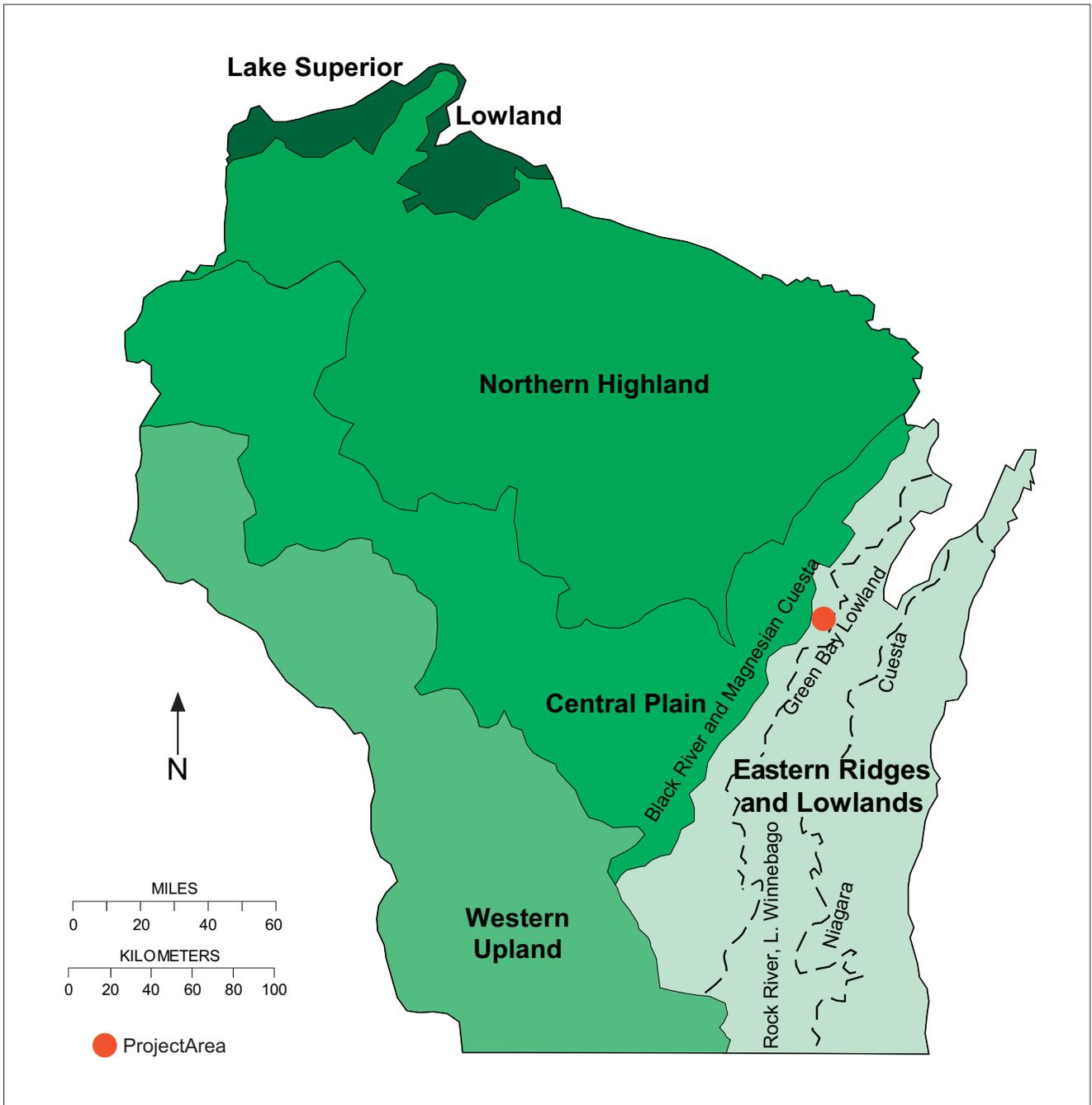


Figure 2.1. Location of the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Rehabilitation Project areas relative to the physiographic divisions of Wisconsin.

Due to the topography of the general study area, travel across the region prior to good roads was difficult in any direction due to marshes, waterways, and glacial features. The easiest path may have been to follow the higher, leveler ground bordering river and creek drainages while weaving one's way around the numerous marshes that mark the landscape. As a result of the presence of the Wolf River, its tributaries, and the uplands, prehistoric groups no doubt established transportation routes through the area and exploited the local subsistence resources as attested to by the numerous prehistoric sites recorded in the region (see Part IV, this volume for a listing of sites located within one mile of the study parcels).

## *Climate*

The climate of eastern Waupaca and western Outagamie counties is marked by very cold winters and short, relatively warm summers (Otter 1984:1). Conditions are not so extreme that agriculture cannot be pursued, and within the area, crops are grown; however, crops are frequently limited to forage, small grains, and hardy vegetables. Annual total precipitation is approximately 30 inches, and of this, 70 percent frequently falls during April through September when most crops are actively growing (Otter 1984:2). If the growing season is marked by the earliest and latest freezes, then it ranges from 116-to-157 days (Otter 1984:113) depending upon the probability of the earliest or latest freeze for a given year. Across the study area, conditions may be wetter, drier, hotter, or colder, depending upon surrounding topographic features; for example cold air collects in valleys. As a result, local topography exerts a strong influence over climatic conditions of an area. Historically, lands surrounding or immediately adjoining New London have been used as crop lands, and to the west and southwest of the city, evidence of prehistoric agriculture has been recorded, for example, at sites 47WP014, 47WP036, 47WP092, 47WP095, 47WP152, and 47WP153 ([www.wisahrd.org](http://www.wisahrd.org), 10 April 2007).

## *Soils*

Each of the two study parcels are associated with a distinct soil type (Otter 1984:Map 66). The trail alignment crosses Menasha silty clay, which is poorly drained, subject to long periods of ponding, and susceptible to slight erosion (Otter 1984:28-29). The soil map (Otter 1984:Map Sheet 66) indicates that the area has been intentionally raised with fill, which is supported in part by several soil borings revealing approximately 1 ft-to-5.5 ft of fill cover the area bound by Wyman Street, Smith Street, and West Wolf River Avenue (Omni Associates 2004). This fill rests on alluvium. Further toward the south-southeast, the storm sewer project area is associated with Oshkosh silty clay loam on 2-to-6 percent grades (Otter 1984:32-33). This soil is well drained, supports farm crops, and is only slightly susceptible to erosion. In the past, the Oshkosh silty clay loam may have been farmed in the vicinity of the storm sewer project if the boundary of archaeological site 47WP083/BWP173, which is interpreted as a historical Native American site with corn hills/garden beds, is accurately plotted. The storm sewer tract and the proposed trail alignment overlap the site.

## *Presettlement Vegetation*

Several presettlement plant associations mark the New London area, and the study parcels are characterized by a single suite of wetland vegetation (Curtis 1971; Finley 1976). This wetland association is composed of lowland hardwoods consisting of willow, soft maple, box elder, ash, elm, cottonwood, and

river birch. Bordering this vegetation to the south was a small area of swamp conifers consisting of white cedar, black spruce, tamarack, and hemlock; and a limited stand of deciduous forest composed of sugar maple, basswood, red oak, white oak, and black oak.

During the historical period, pre-settlement vegetative associations experienced extensive modification. This took place as a result of extensive land clearance arising from agricultural activities and other land improvements, which Euro-Americans pursued. More recently, residential and commercial development has modified plant associations by introducing exotic plantings, completely removing plant cover, and maintaining domestic landscapes.

Prior to historical modification, the forest and wetlands produced seeds, fruits, nuts, bulbs, and other plant parts that yielded food supplies for wildlife and human populations. As a result, the region supported a variety of mammals (deer, rabbit, squirrel, woodchuck, fox, beaver, and muskrat), birds (various species of migratory water fowl, passenger pigeons, and other game fowl), reptiles, and amphibians. In addition, local water courses and bodies served as home to various species of fish. Throughout the seasons, the study tracts and surrounding area offered cultural groups and animal populations numerous natural food resources.

### ***Potential Cultural Exploitation of Natural Resources***

The availability of natural resources made the general study area an appealing locale to prehistoric peoples and early Euro-Americans. Close to sources of game and riverine resources, and possessed of a high diversity of plant species, inhabitants realized a wealth of natural resources that served subsistence needs, and provided materials for shelter and finished goods. During the historical period, natural conditions encouraged farmland improvement and timbering, which contributed to the destruction of pre-settlement vegetation.

### ***Current Land Use***

Evidence of historical land use activities is present across the study tracts. Past and present land use is exemplified by residential dwellings, urban improvements, and commercial establishments, all of which exist within or immediately outside of the two study tracts.

## Cultural Setting

Occupation or use of the general study area spans the prehistoric through historical periods; however, the use of the area during either period is known only in general terms. Prehistoric people inhabited the area as evidenced by numerous sites recorded during prior archaeological activities pursued in Waupaca and Outagamie counties, Wisconsin. These remains span the Paleoindian through the late historical periods. Similarly, earlier studies provide evidence of historical modification of the landscape, resulting from urban and commercial improvements dating from the nineteenth through twentieth centuries. Despite completed research, a scarcity of synthesized cultural studies about the general project area and its immediate environs leaves one able only to discuss the local prehistoric and historical occupation in general or regional terms.

### *Prehistory*

#### **Paleoindian Tradition: 13,400 B.P. – 10,500 B.P.**

The earliest inhabitants of central Wisconsin are known as Paleoindians, a group that subsisted on a variety of faunal and floral species as it pursued a nomadic hunting-gathering lifestyle. The exploitation of Pleistocene mammals, such as mammoth, mastodon, bison, and caribou characterizes the tradition's subsistence base; however, limited contextual evidence combined with ethnographic data about extant hunter-gatherer groups (Cleland 1966:49) suggests that the diet also included significant proportions of plant foods and a variety of smaller mammals, reptiles, birds, and fish. Currently, the Paleoindian tradition is subdivided into Early and Late components. The temporal division separating the stages is based upon a transition from fluted-to-non-fluted, lanceolate points (Mason 1981:111-112, 1986:192, and 1997:98). Frequent indicators of Paleoindian use of an area are isolated finds of distinctive projectile point styles: Clovis, Folsom, Eden, Scottsbluff, and Agate Basin.

Based upon the low quantity of such projectile point finds associated with the study region, archaeologists are not in a position to discuss regional subsistence, settlement, or land use practices in detail. While some evidence of a local Paleoindian presence exists in the immediate vicinity of New London, for example, 47OU236, which is located less than two-and-a-half miles toward the southeast, data about a regional occupation is better documented east and west of the project areas at two sites. The Pope site (Ritzenthaler 1972) is recorded in southwestern Waupaca County, while the Aebischer site (Stoltman 1991) is located in central Calumet County. Other sites and isolated finds are known from more distant counties located toward the northeast, north, southeast and southwest (Mason 1997:80). Although few Paleoindian data sets exist or are published for the area, the distribution of sites and tools across the state suggests Paleoindians probably traversed or skirted the New London area as they moved through the region.

#### **Archaic Tradition (10,500 B.P. - 2500 B.P.)**

The Archaic tradition followed that of the Paleoindian, and is marked by a subsistence shift toward the exploitation of smaller game and a broader range of plant species. Archaeologically, Archaic sites are often defined by the absence of ceramic vessels; the occurrence of burials in natural knolls, or flat cemeteries as opposed to man-made mounds; and the recovery of faunal and floral remains representing a more generalized subsistence base (Stoltman 1986 and 1997). Changes in, or the broadening of the subsistence base is linked to climatic conditions, which became more moderate as glaciers retreated. This shift in resource utilization is frequently reflected in stone tool assemblages. Several noted trends are a greater diversity of point styles; and increased proportions of groundstone, woodworking, and seed/nut processing implements. In addition,

more emphasis is placed on fishing and the harvesting of shellfish. Finally, copper objects become more common. To facilitate discussion of these changes and the Archaic lifestyle in general, the tradition is often divided into three temporal components: the Early Archaic (10,500-7500 B.P.), the Middle Archaic (7500-5000 B.P.), and the Late Archaic (5000-2500 B.P.).

Evidence of the Archaic tradition in east-central Wisconsin is well documented through numerous surface finds of diagnostic projectile point styles and copper artifacts, and the excavation of one archaeological site. The Reigh site in Winnebago County (Ritzenthaler et al. 1957) represents a Middle Archaic burial site, which yielded numerous stone and copper artifacts that are characteristic of the tradition. In contrast, the Early and Late Archaic periods are not well understood because these periods are represented primarily by surface finds. Across Wisconsin, the Early Archaic period is associated almost exclusively with surface materials recorded from the southern half of the state (Stoltman 1997:116). The late Archaic stage is known primarily from rock shelter contexts excavated in the southwestern part of the state (Stoltman 1997:134). Published Archaic site reports for Waupaca and Outagamie counties do not exist, although materials representing the tradition have been reported in or near the New London area, for example, sites 47WP085, 47OU056, and 47OU104. Similar to Paleoindian peoples, those of the Archaic tradition probably recognized the subsistence potential of the study area, and if they did not exploit parts of it, at the very least, they traversed or skirted the area as they moved about the region.

### **Woodland Tradition (2800 B.P. – 800 B.P.)**

Adaptations characterizing the Archaic tradition carried into the early period of the Woodland tradition, and subsequently developed into a variety of behaviors responding to environmental, subsistence, and social conditions (Stevenson et al. 1997). Well defined traits marking the tradition are the presence of ceramics, the construction of earthen mounds for burials, and the cultivation of plants. Throughout the span of the tradition, population size increased, exotic goods reflecting extensive exchange networks occurred more frequently, and burial practices became more elaborate. Material culture reflects these changes with new projectile point types, distinctive ceramic forms, a greater variety of trade goods, and increased decorative elements. While subsistence practices initially remained tied to hunting and gathering cycles, with time, horticulture became progressively more important as cultigens played a larger role in subsistence strategies. Coupled with this shift toward cultigens came a movement away from seasonal nomadic settlement patterns as people began to occupy large, semi-permanent villages in addition to seasonal resource procurement camps. Similar to the Archaic tradition, the Woodland tradition may be divided into components designated Early (2800 B.P. - 2200 B.P.), Middle (2200 B.P. – 1600 B.P.), and Late (1600 B.P. - 800 B.P.) Woodland.

In east-central Wisconsin, evidence of the Woodland tradition is poorly understood due to the lack of excavated and reported sites. While numerous surface finds of diagnostic projectile point styles, and effigy mound sites have been reported, these resources do not provide adequate data upon which to base detailed discussions about subsistence, settlement, or land use practices. The nearest reported Woodland sites, which are less than one mile from the project tracts are 47WP275/BWP144, 47OU056, 47OU057, 47OU058, 47OU100, 47OU102, and 47OU103, which together represent all Woodland periods (see Part IV, Figure 4.1 and Table 4.1 this volume for additional site information). Unfortunately, few published descriptions of Woodland sites and materials for Waupaca and Outagamie counties exist, making interpretation of recorded sites difficult in terms of social, economic, and subsistence behaviors. Similar to preceding prehistoric traditions, Woodland people probably recognized the potential of the natural resources of the area and exploited them as evidenced by the presence of the previously listed Woodland sites.

### **Mississippian Tradition (1000 B.P. - 400 B.P.)**

Late prehistoric horticulturists occupying the Midwest and Southeast, who trace their cultural development and practices to the Woodland tradition, are assigned to a period termed the Mississippian. In order to further distinguish peoples of this tradition, groups are identified as either Middle Mississippian, those who lived south of St. Louis, Missouri and occupied the fertile alluvial lands of the Mississippi River and its tributaries; or Upper Mississippian—including the Oneota—who occupied the northern portion of the Mississippi River drainage above St. Louis. Middle Mississippian groups exhibit the following traits:

1. heavy reliance on horticulture, especially the cultivation of maize in riverine settings;
2. hierarchical grouping of planned communities, including ceremonial centers and resource extraction localities;
3. general increases in local population densities;
4. development of complex social-political systems in which people serve multiple roles and engage in a variety of status relations;
5. use of an elaborate complex of iconography, which represents a widespread integrative symbolic system; and
6. participation in an extensive trade network with extra-regional partners of sources of material (Griffin 1985:63).

With the exception of Aztalan, a village site located in Jefferson County, Wisconsin, which is south of the current study area, evidence or sites securely affiliated with the Middle Mississippian culture are poorly documented in Wisconsin. While general agreement exists that a genetic affinity links Oneota/Upper Mississippian and Middle Mississippian groups, the precise nature of this tie is disputed (Hall 1986; Overstreet 1989).

A late Middle Mississippian presence is proposed for east-central Wisconsin; however, it is not well understood due to the scarcity of known sites and a reliance on surface collected data (Green 1997:214). One Middle Mississippian site, 47OU102, also referred to as the Tews site, is located within one mile of the study parcels. In addition, two potential Middle Mississippian sites, the Lautenbach/Hah and Pumpkin Seed Creek sites are recorded in northwestern Winnebago County, which is south of the current study parcels. These sites are located along the Lake Poygan/Wolf River waterway, which extends west and north of New London. A potential Middle Mississippian site—the Watasa Lake Swamp site (Green 1997:214)—is located further north in Menominee County and is associated with the same river drainage. If all these sites are actually affiliated with the Middle Mississippian tradition, they suggest that Middle Mississippian people possessed a familiarity with the subsistence/resource potential of the study area. Whether they actually exploited this potential or simply traversed the area on the way to some other area remains unknown.

Oneota sites of the Upper Mississippian tradition are distributed throughout the upper Midwest. In Wisconsin, the Oneota occupied a variety of sedentary and semi-sedentary settlements located throughout much of the state; however, the heaviest concentration occurs in the state's southern half (Gibbon 1970, 1982; Glenn 1974; Overstreet 1978). The Oneota are characterized as village farmers who pursued a subsistence economy based on maize horticulture, supplemented by fishing and hunting (Hall 1962).

Within the general study region, Oneota sites are more numerous than are potential Middle Mississippian sites. Many of the regionally known Oneota sites are located in Winnebago County, which adjoins the southern borders of Waupaca and Outagamie counties. While much of the regional understanding of the Oneota comes from Winnebago county sites, several such sites are reported for Waupaca and Outagamie counties, for example 47WP039, 47WP216, and 47OU225. Similar to preceding prehistoric peoples, those of the Oneota tradition probably recognized the potential subsistence value of the general research area and exploited it.

## ***Historical Period***

### **Native Americans (400 B.P. - Present)**

Oneota culture appears to have persisted into the historical period based on excavations at the Astor site in modern Green Bay; however, the ethnic affiliations of the late Oneota communities have not yet been established. Based upon their geographic location and material culture, the eastern Classic Oneota as described by early Europeans match that for the “Ouinipigou” (Winnebago/Ho-Chunk). Further complicating the prehistoric/historical link between groups is the recognition that Oneota populations had declined by historical contact (presumably due to epidemic disease and an increase in regional conflict) and the arrival of Mesquakie, Potawatomi and other groups in Wisconsin as a result of disturbances resulting from Euro-American colonization (Hall 1960 and 1962; Overstreet 1997) blurred cultural distinctions among resident groups. In addition, these disturbances, coupled with an increasing reliance on items of European manufacture, resulted in a cessation of pottery and stone tool manufacture. As a result, it is very difficult in most cases to link historical residents of Wisconsin to prehistoric cultural complexes. The association of the Ho-Chunk with the eastern Oneota, though tentative, still remains the strongest to date.

Regardless of the link between the Oneota and historical Wisconsin Native American communities, east-central Wisconsin served the Menominee and Ho-Chunk (Winnebago) at various times during the historical period. In addition, more easterly groups, who were pushed westward as a result of conflicts arising as a result of the fur trade, settled in Wisconsin and made incursions into the general study region from time-to-time. Occasionally two or more groups cohabitated it, while at other times a particular group dominated. The fur trade with the social and economic conditions it fostered during the 17th through 18th centuries frequently dictated the nature of the occupation, as did regional political claims by French, British, or American interests. By the mid-nineteenth century, the primary Native American residents were the Menominee, who by treaty ceded the land to the United States. Historical documentary evidence provides the strongest evidence for the historical use of the region by Native Americans, although a number of unaffiliated historical Native American sites are recorded for the area including and surrounding New London, for example 47WP083/BWP173, which encompasses both project tracts, 47WP036, 47WP094, 47OU44, and 47OU088. A number of these types of sites are reported by Charles Brown (1910:181) and George Fox (1916:12-14).

### **Euro-American Settlement and Development**

Waupaca and Outagamie counties became political units during 1851, when each unit was carved from surrounding counties. By the early 1850s, much of the prime land in each county had been claimed by Euro-Americans who occupied lands before and after General Land Office (GLO) completed the Public Land Survey of the area during the early 1840s. Early settlers claiming land or working local industries came

primarily from France, Germany, Holland, Ireland, and New England (Otter 1984:3). While agriculture eventually played a significant role in the development of the counties, the lumber industry figured heavily in the early prosperity of each (Otter 1984:2-3; U.S. Department of Agriculture 1978:125). Waupaca County became a center for the industry, and New London with its sawmills and access to the Wolf River, became a logging industry hub (Otter 1984:3). The Wolf River, as well as other streams, provided access to timber stands in Outagamie County, while the Fox River, marking the eastern edge of the county accommodated sawmills and later industrial development (U.S. Department of Agriculture 1978:125).

The City of New London straddles the Waupaca/Outagamie County line at the mouth of the Embarrass River where it flows into the Wolf River. Here as early as 1848, a trading post existed. By 1852, Ira Millerd acquired the trading post, while a year earlier Lucius Taft had claimed much of the land that would become the town. In 1853, Taft secured his claim to the land from the government, and thereafter he and Millerd developed the town site (Ware 1917). In the following years, the Outagamie County portion of the city, which defines much of the city's high ground rising gradually from the Wolf River, accommodated residential development where many residents established the "most attractive residence districts of New London". Business and industrial interests laid claim to more level tracts bordering and extending back from the rivers, which at times were jammed with logs from the Wolf River pineries destined for area sawmills.

This development is in part captured by Sanborn Fire Insurance Maps produced for the years 1892, 1898, 1904, 1913, 1926, and 1926-1939. In regards to the current study tracts, these maps show the gradual improvements to the two project areas. Along the river front between Pearl and Shawano streets, the only segment improved by 1892 is the segment between Smith and Pearl streets where two structures are shown (Sanborn Map Company 1892:Sheet 4). Six years later, several new structures, probably residences are depicted, but in 1904, the eastern half of the block between Smith and Wyman streets is developed, possibly for an electrical generating plant (Sanborn Map Company 1898:Sheet 4; Sanborn Map Company 1904:Sheet 4), which continues to exist in 1913, although by then a rail spur passes south of the business and ends further toward the west, near the river bank (Sanborn Map Company 1913:Sheet 4). The next map of the area appears in 1926 and shows the entire river front between Pearl and Shawano streets improved. At the eastern end are several residences and businesses while west of Smith Street, in order are the City Emergency Electric Lighting Plant, the American Plywood Corporation, and the Borden Condensed Milk Company, all of which fill the river front (Sanborn Map Company 1926:Sheets 2 and 5). The 1926-1939 maps, the last ones depicting the area, show a similar arrangement of commercial and residential improvements (Sanborn Map Company 1926-1939:Sheets 2 and 5). As the river front was developed, owners no doubt artificially raised the area to accommodate construction and decrease the chances of flooding. Based upon soil cores recently extracted from the area between Smith and Wyman streets, approximately 1 ft-to-5.5 ft of fill has been deposited over the area (Omni Associates 2004).

In contrast to the river front, the segment of East Spring Street between Lawrence Street and East South Water Street (current East Wolf River Avenue) shows no improvements and is not mapped during 1892; however, by 1898, a limited number of residential dwellings are shown on both sides of the street between Division and S. Water streets (Sanborn Map Company 1892; Sanborn Map Company 1898:Sheet 1). This did not change during 1904, but by 1913, both sides of East Spring Street show dwelling between Lawrence and S. Water streets (Sanborn Map Company 1904:Sheet 1; 1913:Sheets 5 and 7). In subsequent years, vacant lots bordering this street segment were improved with dwellings, and as of April 2007, the entire segment of Spring Avenue between Lawrence Street and East Wolf River Avenue is lined with occupied dwellings (Sanborn Map Company 1926:Sheets 8 and 11; 1926-1939:Sheets 8 and 11).

As the timber industry waxed and waned, going into decline during 1870s, only to be revived for a

few decades more before all but ending during the early 20th century, agriculture increased beginning during the 1870s, and thereafter flourished (Otter 1984:3). Potato and wheat crops dominated during the 1880s, but were soon surpassed by dairy farming, and the production of hay, small grains, and corn. Today agriculture is still important in the counties; however, recreation and industry are challenging it. Populations in both counties are denser than those of other agrarian based counties, and this is attributed to recent industrial and recreational development (U.S. Department of Agriculture 1978:126 and 1984:3)

## Part III: Research Techniques and Methodology

### Research Methodology

The study utilized a variety of investigative techniques organized into structured and flexible research methods composing the research methodology. The methods are presented as three general research stages: (1) pre-fieldwork archives and literature research, (2) field conditions evaluation and cultural resources documentation activities, and (3) laboratory analysis and data interpretation/organization. Specific methods, techniques, and sources contributing to the methodology are detailed in the following paragraphs.

### Archives and Literature Search

Prior to initiating field studies, staff from GLARC performed a literature and archival search of materials related to the project area and its environs. This task consisted of reviewing published and unpublished materials archived at repositories in Milwaukee and Madison, Wisconsin. Reviewed documentary sources and their locations are as follows:

- 1) The Wisconsin Archeologist, issues available at GLARC in Milwaukee, Wisconsin;
- 2) various state and county histories, available at the Milwaukee Public Library and the Marquette University Library in Milwaukee, Wisconsin;
- 3) the Wisconsin Site Codification File, maintained by the Office of the State Archaeologist, Wisconsin Historical Society, in Madison, and available on-line at <http://www.wisahrd.org>;
- 4) General Land Office (GLO) survey field notes and plats, available on-line at <http://images.library.wisc.edu:8080/imgeserver/1711.d1/SurveyNotes>;
- 5) the Trygg map files, available at GLARC in Milwaukee, Wisconsin;
- 6) miscellaneous archives/files/collections, available through the Wisconsin Historical Society, in Madison; and
- 7) electronic copies of Sanborn Fire Insurance Maps available on-line through the University of Wisconsin-Milwaukee Library electronic databases web page.

Two important map files that researchers reviewed are the Charles E. Brown Archaeological Atlas, and local plat/deed maps. The Charles E. Brown Archaeological Atlas uses county plat maps to show locations of prehistoric and historical camps, villages, mounds, springs, rock art, workshops, quarries, cemeteries, trails, and various other types of archaeological manifestations reported to Brown during his tenure as Secretary of the Wisconsin Archeological Society and as employee of the Wisconsin Historical Society.

The General Land Office (GLO) records consist of plats and survey notes providing information about pre-settlement vegetation, topography, and aquatic features; each an important variable when attempting to determine potential site locations. In addition, depending on the interests of a land surveyor, cultural

information such as the locations of Indian trails, camps, villages, and maple sugar processing stations or “sugar bushes”; pioneer settlements; early industrial improvements such as mills and roads; and early dwellings and farmsteads may be noted.

Reviewed manuscript files include the Charles E. Brown collection, and the Museum Division, Wisconsin Historical Society’s county files. The Brown collection consists of 50 years of notes, correspondence, sketches, maps, and other data relating to historical and prehistoric archaeological sites. The county files include reports (unpublished), photographs, sketch maps, letters, and information derived from the Museum’s highway archaeology program.

## **Field Methods**

Project related Phase I field methods, techniques, and procedures facilitated the recovery of data necessary to determine if sites are present within the APE, and if so, to evaluate the significance of each. The methodology followed during the Phase I study is comprised of visual reconnaissance or pedestrian survey, soil coring, and data management. These methods or techniques are discussed in the following sections.

### ***Visual Reconnaissance/Pedestrian Survey***

Prior to performing intensive surface and sub-surface investigations, researchers completed a visual, pedestrian inspection of the APE. This procedure reveals eroded, disturbed, and capped areas; potential artifact concentrations, stands of vegetation, topographic forms, and cultural features. Based on visual observations, the appropriate surface collecting and subsurface investigative techniques are determined as are the data management strategies to employ.

### ***Manual Soil Coring***

In order to quickly confirm assumptions about the nature and extent of disturbed subsurface deposits across a project area, manually extracted soil cores using an Oakfield corer may be taken. The corer is extended as far as possible into subsurface deposits or until the B horizon stratum is encountered. Upon extraction, sampled soil strata are described in terms of composition, color, and origins. Once a core is extracted, the material is placed back in the hole if possible, or dispersed on the surface in the general area. If required, extensions can be added to the shaft of the corer, and cores may be manually extracted to 10 ft or more.

### ***Field Data Management***

A variety of records are generated as part of the Phase I archaeological documentation process. This documentation is comprised of daily field notes describing field conditions, research activities, and cultural resources. General and detailed maps of parcels and sites are drafted or adapted to show associated natural and human made features, as well as to record field coverage techniques. Additional documentation is

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comprised of soil sequences, sketches, photographs, and various logs. If recovered, artifactual materials are recorded with their provenience data and a unique identifying number, both of which are marked on the bag into which an artifact(s) is placed for transport and storage. Upon completion of the fieldwork, all field documentation and artifacts are reviewed at GLARC's archaeological lab for processing, analysis, and interpretation.

### ***Laboratory Procedures and Data Interpretation/Organization***

A variety of activities take place in GLARC's laboratory and office facilities after completion of the fieldwork. In the lab, artifacts are inventoried, sorted, washed, labeled, analyzed, and interpreted. Analyses of prehistoric ceramic and lithic materials follow conventional typologies, while historical items are identified using standard references, for example, Lehner (1988) and Toulouse (1969 and 1971); and hardware catalogues, for example, Isreal (1968). Analyses based upon widely cited typologies and references insure that materials are described in terms that are comparable with existing data, and will be understood by other researchers. In addition to artifact analyses, post-field work tasks included film processing, verifying photographic logs, reviewing notes and maps, and preparing a final report of investigations for publication. The current account of the study represents the report of investigations for the recent archaeological Phase I work completed for the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Reconstruction Project in the City of New London, Waupaca and Outagamie counties, Wisconsin.



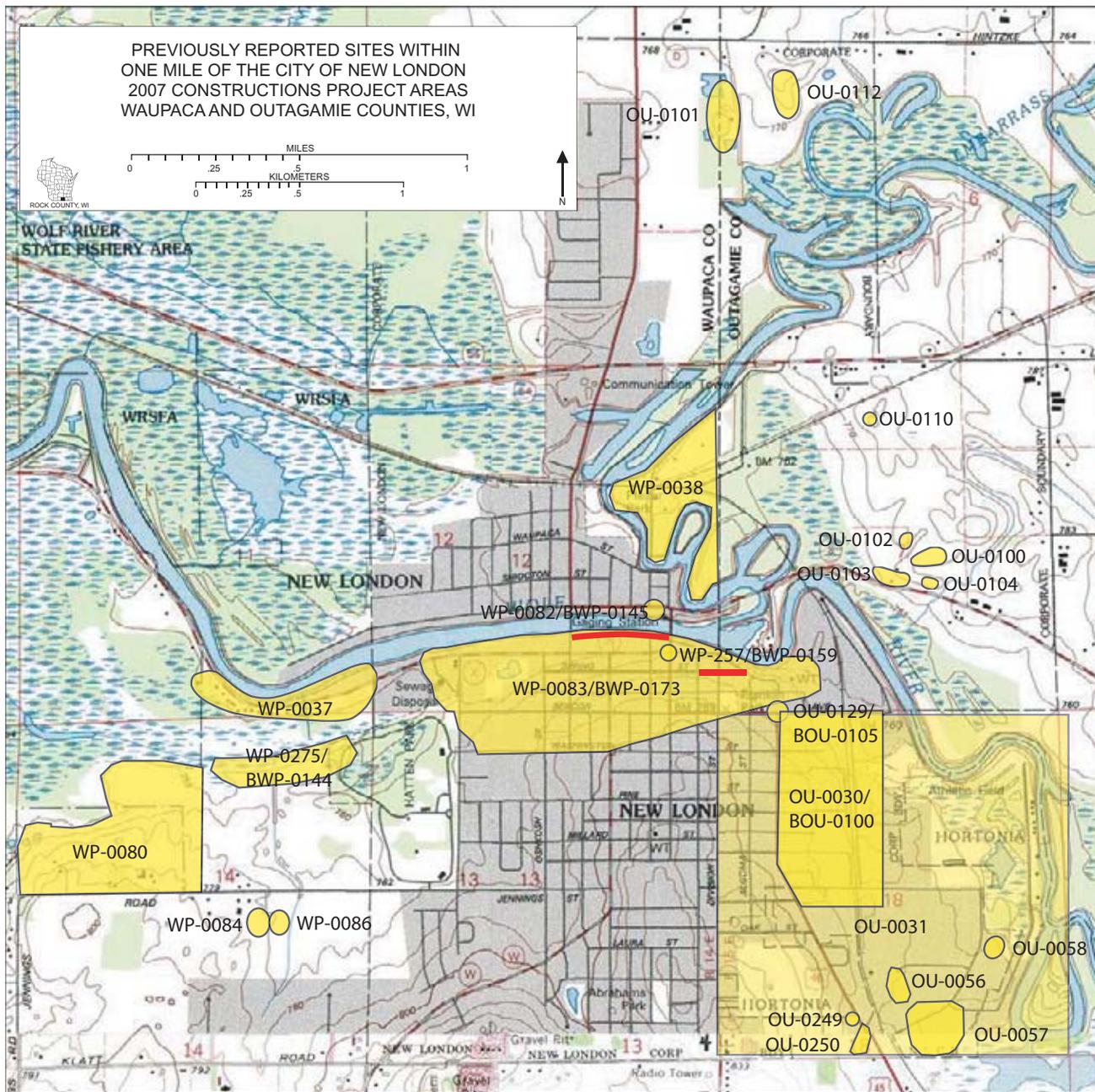
## Part IV: Results of Archaeological Phase I Study

### Introduction

During the current Phase I archaeological survey study, background research revealed that both project tracts are located within the defined boundaries of previously recorded archaeological/burial site 47WP083/BWP173, which is located on the left bank of the Wolf River in New London although the site's exact location is uncertain and may actually be located on the opposite bank of the Wolf River on a point of land created by the juncture of the Wolf and Embarrass rivers (Figures 4.1, Table 4.1). Initially reported during 1906 by Charles E. Brown, site 47WP083/BWP173 is identified as a historical site probably affiliated with the Menominee and is interpreted as a village site comprised of burials, corn hills/garden beds, possible mounds, and camps. Much of the site area has been developed for commercial and residential purposes, and at the time Brown reports its existence only small undeveloped portions remained.

In addition to the previously reported site that is directly associated with the study parcels, archival and literature research identified 23 other cultural resources located within a one-mile radius of the project tracts (Figure 4.1, Table 4.1). This suite of cultural resources is comprised of eighteen archaeological sites, and five archaeological sites that are also assigned burial site numbers (Table 4.1). The archaeological sites variously date to the prehistoric (n = 13) and historical (n = 2) eras, although due to a lack of diagnostic artifacts, the remaining eight sites cannot be assigned to a temporal period. Similarly, four of the prehistoric sites cannot be assigned to a more specific temporal tradition due to the absence of diagnostic artifacts. However, the remaining nine sites can be assigned to one or more traditions: Late Archaic (47OU056, 47OU104, and 47OU110), Woodland (47OU056 and 47OU058), Early Woodland (47OU103), Middle Woodland (47OU057), and Late Woodland (47WP275/BWP144, 47OU100, 47OU102, and 47OU103). The prehistoric or unknown sites mark isolated find (n = 1), campsite/village (n = 11), lithic scatter (n = 1), corn hill/garden bed (n = 2), mound (n = 2), mounds and cemetery/burial (n = 2), and cemetery/burial (n = 2) locations. Of the four mound sites, only 47WP275/BWP144 is assigned a cultural affiliation and it is identified as a Late Woodland site comprised of effigy and conical mounds. The two historical sites are affiliated with Euro-Americans and define a brickyard (47OU101) and trash scatter (47OU249). Together the prehistoric and historical sites recorded overlapping or near the study parcels suggest the type of sites that one may have expected to encounter during recent archaeological survey of the proposed Wolf River Trail and East Spring Street storm sewer project tracts.

Upon completion of the Phase I archaeological reconnaissance survey, sufficient data existed to determine that the portions of 47WP083/BWP173 overlapped by the project parcels have been greatly disturbed by commercial and urban development to the extent that if portions of the site once existed within their boundaries, they would now be greatly disturbed or removed. This determination is discussed in greater detail in the following sections, which describe Phase I archaeological field work, which included the visual inspection of the parcels and the manual extraction of a limited number of soil cores from the Spring Avenue study parcel.



**Figure 4.1. Previously reported archaeological and burial sites located within one-mile of the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Rehabilitation Project parcels in Waupaca and Outagamie counties, Wisconsin.**

**Table 4.1 Previously reported archaeological and burial sites located within one mile of the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Rehabilitation Project parcels in Waupaca and Outagamie counties, Wisconsin.**

Site #/Burial Code	Site Name	Site Type	Cultural Study Unit	TRS
WP-0037	Unnamed Site	1. Campsite/village	1. Unknown Prehistoric	22, 14, E, 11 22, 14, E, 14
WP-0038	Unnamed Site	1. Campsite/village		22, 14, E, 12
WP-0083/ BWP-173	Unnamed Site	1. Mound(s) - Other/Unk 2. Campsite/village 3. Cemetery/burial 4. Corn hills/garden beds	1. Historic Indian	22, 14, E, 12 22, 14, E, 13
WP-0082/ BWP-145	Unnamed Site	1. Mound(s) - Conical 2. Cemetery/burial	1. Unknown	22, 14, E, 12
WP-0080	Unnamed Site	1. Corn hills/garden beds	1. Unknown	22, 14, E, 14
WP-0084	Unnamed Site	1. Corn hills/garden beds	1. Unknown	22, 14, E, 14
WP-0086	Unnamed Site	1. Campsite/village	1. Unknown	22, 14, E, 14
WP-0257/ BWP-159	ODDFELLOWS	1. Cemetery/burial	1. Unknown	22, 14, E, 12
WP-0275/ BWP-144	Hatten Park	1. Mound(s) - Effigy 2. Mound(s) - Conical	1. Late Woodland	22, 14, E, 14
OU-0030/ BOU-100	Unnamed Site	1. Mound(s) - Other/Unk 2. Cemetery/burial	1. Unknown	22, 15, E, 18
OU-0056	LYONS PARK #1	1. Campsite/village	1. Late Archaic 2. Woodland	22, 15, E, 18
OU-0057	LYONS PARK #2	1. Campsite/village	1. Middle Woodland	22, 15, E, 18
OU-0058	LYONS PARK #3	1. Campsite/village	1. Woodland	22, 15, E, 18
OU-0100	DOWSER	1. Campsite/village	1. Late Woodland	22, 15, E, 7
OU-0101	ZERRENER BRICKYARD	1. Other	1. Historic Euro-American	22, 14, E, 1 22, 15, E, 6
OU-0102	TEWS	1. Campsite/village	1. Late Woodland 2. Middle Mississippian	22, 15, E, 7
OU-0103	CABBAGE PATCH	1. Campsite/village	1. Early Woodland 2. Late Woodland	22, 15, E, 7
OU-0104	CLEO'S	1. Campsite/village	1. Late Archaic	22, 15, E, 7
OU-0112	REED #1	1. Campsite/village	1. Unknown Prehistoric	22, 15, E, 6
OU-0110	MILLARD ISOLATED FIND	1. Isolated finds	1. Late Archaic	22, 15, E, 7
OU-0129/ BOU-105	MECH	1. Cemetery/burial	1. Unknown Prehistoric	22, 15, E, 7 22, 15, E, 18
OU-0031	Unnamed Site	1. Mound(s) - Other/Unk		22, 15, E, 18
OU-0249	Beckert Road	1. HCM concentration	1. Historic Euro-American	22, 15, E, 18
OU-0250	Leaping Fawn	1. Lithic scatter	1. Unknown Prehistoric	22, 15, E, 18

## **Phase I Archaeological Investigations**

### ***The Wolf River Trail Extension Project Parcel***

The proposed alignment for the trail extension measures approximately 1440 ft (439 m) by 30 ft (9.1 m), encompasses approximately 0.99 acres (0.40 hectares), runs roughly east-west between Pearl and Shawano streets across heavily disturbed properties, and falls within the boundary of archaeological site 47WP083/BWP173 (Figure 4.1). Due to the presence of concrete and asphalt, or gravel capping most if not all of the project parcel, the entire alignment was walked and visually inspected. This inspection confirmed that the area has been raised by the addition of intentional fill, and without it, the Wolf River would flood the area, and possibly leaving ponded water for extended periods as suggested by the area's association with Menasha silty clay soil (Otter 1984:28-29).

Review of boring logs that describe cores taken from the area between Smith and Wyman streets, reveals that approximately 1 ft-to-5.5 ft of fill covers much of the area. Construction of the trail requires that at most 3.0 ft of fill be removed along the alignment in order for a base of gravel to be placed under the trail for support. Given the depth of excavation required for trail construction, it seems unlikely, based upon the visual inspection and the boring log data, that the fill will be penetrated and underlying alluvium disturbed. In addition, given the location of the trail alignment near the river, the potential of encountering intact or significant remains of site 47WP083/BWP173 is evaluated as low. In the past, prior to placement of intentional fill, the area was susceptible to flooding and would not have been an attractive place to occupy when more accommodating locations were available away from the river on higher, better drained land. More recently, the area has been disturbed by urban and commercial development.

Based upon documentary research and field observations, the Wolf River Trail Extension Project area does not warrant further study. As a result, archaeological clearance is recommended for the tract.

### ***The East Spring Street Storm Sewer Reconstruction Project Tract***

The proposed alignment for the storm sewer project measures approximately 710 ft (216 m) by 40 ft (12.2 m), encompasses approximately 0.65 acres (0.26 hectares), trends east-west, is located between Lawrence Street and E. Wolf River Avenue where most of the tract is paved, and falls within the boundary of archaeological site 47WP083/BWP173 (Figure 4.1). East Spring Street is paved, and as a result, much of the study parcel could only be visually inspected, although six soil cores were manually extracted from the south side of the street between the curb and sidewalk. Documentary research suggests that portions of the roadway have been disturbed by the installation of utilities, and this was confirmed during field work, which also revealed that gas and lateral water lines exist. In addition, the visual inspection documented that the study tract is relatively level, that some areas along the north side of East Spring Street have been artificially raised, and that the street surface exists approximately 8 inches below the bordering ground surface due to the presence of curbs.

Based upon the documentary data and visual inspection, it was likely that the entire study tract is not disturbed; however, in order to confirm this assumption, six soil cores were manually extracted along the length of the southern side of the tract. The southern side was selected due to the presence of a sidewalk suggesting that the city has jurisdiction of the grassy area between the curb and walk, and therefore no property owners would have to be contacted. A gas line extends along this area.

The six soil cores show that bordering deposits are disturbed. The first core was extracted near the southeastern corner of Spring and Lawrence streets, extended approximately 52 cm below the ground surface, and revealed three strata: a 21 cm thick, very dark grey (10YR 3/1) loose sandy loam defining a fill horizon resting on a 29 cm thick, pale brown or light yellowish brown (10YR 6/3.5) sand over a weak red or reddish brown (2.5Y 5/3) clay. A second core was taken mid-block between Lawrence and Division streets, measured approximately 60 cm deep, and consisted of two strata: a 40 cm thick, very dark grey (10YR 3/1) clay loam defining a fill horizon resting on a more sandy, gravelly mottled loam that is interpreted as a disturbed deposit. The third core was located near the southwestern corner of Spring and Division streets, measured approximately 57 cm thick, and revealed three strata: a 20 cm thick, very dark grey (10YR 3/1) loose sandy loam defining a fill horizon resting on a 9 cm thick, dark yellowish brown (10YR 3/7) sandy clay over a yellowish brown (10YR 5/4) stiff clay. The next core was taken near the southeast corner of Spring and Division streets, measured approximately 45 cm long, and consisted of two strata: a 37 cm thick, very dark grey (10YR 3/1) loose clay silt marking an A horizon over a clay sand mix. Core No. 5 was taken mid-block between Division Street and Wolf River Avenue, extended approximately 45 cm below ground surface, and revealed a stratigraphic sequence similar to Core No. 4. The last or sixth core was taken near the southwestern corner of East Spring Street and Wolf River Avenue, extended approximately 40 cm below ground surface, and revealed two strata: a 36 cm thick, very dark grey (10YR 3/1) loose clay silt resting on reddish brown or yellowish red (5YR 4/5) clay.

Across the tract, the stratigraphy revealed by the cores suggest that when East Spring Street was paved, the roadbed was prepared by scraping down to sterile, natural deposits upon which the bed was prepared and laid. Once paved, the bordering yards were backfilled with topsoil, which has continued to accumulate. East Spring Street has existed since the late nineteenth century and its construction and use has destroyed or greatly modified any archaeological deposits representing site 47WP083/BWP173 that may have existed in the current study tract (Sanborn Map Company 1892).

Based upon study data derived from documentary research and field observations, the potential of the East Spring Street Storm Sewer Reconstruction Project area to yield significant archaeological data is considered very low, and the tract does not warrant further study. As a result of this determination, archaeological clearance is recommended for the tract as it is currently defined.

## **Summary of Phase I Archaeological Investigations**

The areas defined by the trail and storm sewer project tracts are marked by urban, residential, and commercial features; and are located within the boundary of previously recorded archaeological site 47WP083/BWP173 (Figures 1.2 and 4.1). As result of extensive amounts of concrete, asphalt, or gravel capping the surfaces of the parcels, each could be visually inspected; however, only limited subsurface investigation was possible, and consisted of manually extracting several shallow soil cores along the storm sewer study tract. In addition, documentary research was performed about each tract. Data derived from documentary and field studies suggest that the project tracts are disturbed or buried beneath 1 ft-to-5.5 ft of intentional fill and have a low potential to yield significant archaeological deposits related to 47WP083/BWP173. As a result, neither parcel warrants further study and archaeological clearance is recommended for each project as it is currently defined.



## Part V: Summary and Recommendations

### Summary

In April 2007, Great Lakes Archaeological Research Center, Inc. (GLARC) performed archaeological Phase I investigations of two municipal improvement project areas located within the City of New London, Waupaca and Outagamie counties, Wisconsin. The City of New London solicited and authorized GLARC to perform the work as preparation for construction of a segment of the Wolf River Trail and reconstruction of a segment of storm sewer under East Spring Street. Archaeological investigations were required by the Wisconsin DNR to partially fulfill stipulations required by Wisconsin Statutes 44.40 and 157.70. The purpose of the study is to determine whether the municipal projects will impact site 47WP083/BWP173, which encompasses a large part of New London bordering the left bank of the Wolf River, although the exact location of the site is uncertain.

The methods and techniques utilized during archaeological investigations conform to the standards and guidelines set forth by the United States Secretary of Interior in the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716) and the *Guidelines for Public Archeology in Wisconsin, as Revised* (Wisconsin Archaeological Survey Guidelines Committee 1997), jointly endorsed by the Wisconsin Historical Society and the Wisconsin Archaeological Survey. Supporting documentation, field notes and other materials generated during the design and execution of this project are currently on file at Great Lakes Archaeological Research Center, located at 427 East Stewart Street in Milwaukee, Wisconsin.

Based upon documentary data collected about each parcel, researchers determined that each is located within the current boundary defined for archaeological/burial site 47WP083/BWP173, which may be plotted incorrectly. During the field study, no evidence of the site was observed; however, only limited subsurface excavation or sampling of deposits was possible because the project tracts are extensively capped by concrete, asphalt, or gravel. As a result, much of the evaluation of each parcel is based upon documentary research and observations made during pedestrian survey of each. Both research methods reveal that each tract has been disturbed. In the case of the proposed trail extension, commercial development has greatly modified the former landscape and resulted in approximately 1 ft-to-5.5 ft of fill being placed over the proposed trail route. In addition, prior to the placement of the fill, the area was susceptible to flooding by the Wolf River and probably experience ponded waters covering all or parts of it for extended periods of time.

While in the past, the area bordering the Wolf River appears to have been less accommodating for human occupation, if people did use it, the duration of use was probably short, and evidence of this occupation has probably been greatly modified if not destroyed by river floods, and commercial and residential development of the area beginning during the late 1880s or early 1890s. As a result, the potential for the trail area to yield significant archaeological deposits related to 47WP083/BWP173 is considered low. Based upon this determination, archaeological clearance is recommended for the Wolf River Trail Extension Project.

Similarly, archaeological clearance is recommended for the East Spring Street Storm Sewer Reconstruction Project. Reconstruction of the storm sewer entails removing the existing street pavement

and sewer line and laying the new line in the old footprint, after which the roadway will be repaved. This work will not greatly disturb deposits that have not already been modified by prior roadway and utility line work. Documentary research, visual reconnaissance, and manual extraction of six soil cores yielded data suggesting that the project tract is disturbed, has a low potential to yield significant archaeological deposits related to 47WP083/BWP173, and warrants no further archaeological study.

## Recommendations

Based upon the results of the Phase I archaeological reconnaissance study of the two parcels identified for the Wolf River Trail Extension Project and the East Spring Street Storm Sewer Reconstruction Project, cultural resources clearance is recommended for each parcel as it is currently defined. In addition, if cultural resources management issues are the only stipulations preventing the issuance of Construction Site Storm Water Discharge Permits for each project, issuance of the permits is recommended based upon the results of the current study.

Finally, current conventional archaeological survey techniques are inadequate to determine the absolute presence of deeply buried archaeological or paleontological deposits. While the probability of encountering such remains during the trail and storm sewer projects is unlikely, should deeply buried or even unexpected shallow archaeological/paleontological deposits be encountered, all construction in the area of the discovery should be halted in order to protect the discovery while construction personnel consult with Wisconsin Department of Natural Resources cultural resources managers. This will insure compliance with S.44.40 of Wisconsin Statutes, all of which may be obtained by contacting:

The Compliance Section-Historic Preservation Division

Wisconsin Historical Society

Phone Number: (608) 262-2970

In the event that human remains are encountered, work in the vicinity of the discovery should cease immediately, the remains should not be collected, and the discovery should not be disturbed or investigated further until it is evaluated by a member of the Burial Sites Preservation Office. Following these procedures will ensure compliance with S.157.70 of the Wisconsin Statutes. The Burial Sites Preservation Office is part of the Historic Preservation Division of the Wisconsin Historical Society and may be reached via phone by dialing 800-324-7834 or 608-264-6502.

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## **Appendix A: Project Correspondence**





State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Ronald W. Kazmierczak, Regional Director

Northeast Region Headquarters  
2984 Shawano Ave., P.O. Box 10448  
Green Bay, Wisconsin 54307-0448  
Telephone 920-662-5100  
FAX 920-662-5413  
TTY Access via relay - 711

February 7, 2007

Certified Mail  
In Reply Refer to Site # 36058

CITY OF NEW LONDON  
Attn: Jeffrey Bodoh  
215 North Shawano Street  
New London, WI 54961

Subject: Additional Information for the Notice of Intent for Storm Water Discharges Associated with Land-Disturbing Construction Activities, 2007 Street Reconstruction (Jennings and E. Spring Streets) Project  
Location: T22N, R14E, S13, NW of SW1/4 (Jennings); T22N, R14E, S12, SE of SE1/4 (E. Spring St - Waupaca); T22N, R15E, S7, SW of SW1/4 (E. Spring St - Outagamie); City of New London, Waupaca County  
FIN: #36058

Dear Mr. Jeff Bodoh:

Thank you for submitting the Notice of Intent (NOI) for the project identified above. This letter is to inform you that the Wisconsin Department of Natural Resources (Department) **will not be conferring coverage** under the Construction Site Storm Water Discharge Permit WPDES # 0067831-3, **within 14 working days** after the Department received your Notice of Intent (February 6, 2007). Major archaeological concerns present on the *E. Spring Street* section of the project require *additional supporting documentation* in order to complete a thorough project review and issue coverage.

Please make sure to submit the following so that we may complete our review:

1. As the project footprint for *E. Spring Street Reconstruction* overlies and/or is immediately proximal to reported archaeological site(s) (WP-0083), the applicant should **consult with a cultural resource management (CRM)** firm to evaluate the project's potential to adversely impact the site(s) and better define site limits and character relative to the area(s) to be impacted by project-related activities.

Recommendations for site avoidance should also be addressed. If impacts to the site are anticipated, the WHS will almost certainly require additional investigations (excavation).

The CRM firm may wish to further consult with the Wisconsin Historical Society (WHS) before proceeding with their investigations. A list of CRM firms is enclosed.

**Three (3) copies of the report of investigations should be sent directly to DNR Archaeologist Mark Dudzik for review (address below). The findings will then be forwarded to WHS for their further review and comment. Reports must include BAR and new/updated ASI forms, and separate copy of BAR/ASI forms also to be submitted.**

Please send the requested information to:

Mark Dudzik - DNR Archaeologist  
Wisconsin Department of Natural Resources  
101 South Webster, LF/6  
Madison, WI 53707-7921  
Ph: (608) 266-3462

**Please note that you should not begin construction activities until you have received permit coverage for storm water discharges.** Violations are enforceable under ch. 283, Wis. Stats., and every day is considered a separate violation. Please call me at 920-662-5470 or your county's Storm Water Specialist, Jennifer Huffman, at 920-832-1803 if you have any questions. Thank you.

Sincerely,



Crystal Schiefelbein  
*Storm Water Intake Specialist*

Enc: List of Archaeological Consultants (updated June 2006)

cc: Jennifer Huffman; file – DNR, Appleton



# GREAT LAKES ARCHAEOLOGICAL RESEARCH CENTER

## PRESERVATION COMPLIANCE RESEARCH OUTREACH

Jeff Bodoh, P.E.  
City of New London  
215 N. Shawano Street  
New London, WI 54961  
(920) 982-8503

March 2, 2007

**RE: Archaeological Investigations for the Wolf River Trail and East Spring Street  
City of New London, Waupaca County, Wisconsin**

Dear Mr. Bodoh,

The following is a scope of work for archaeological investigations for the Wolf River Trail and Spring Street projects in the City of New London, Waupaca County, Wisconsin. The archaeological investigations have been requested by the Wisconsin Department of Natural Resources prior to issuance of a Construction Site Storm Water Discharge Permit for the projects. Both project areas are within the documented boundaries of site 47WP0083, an extensive Native American (Menominee) village. The possibility for intact archaeological deposits to remain within these project areas is unknown, however, human remains were recently recovered from the basement of the IOOF building on South Pearl Street (47WP0287).

### **Archaeological Investigations**

The archaeological study will consist of archives and literature research and field investigations. The methods and techniques used during the study will follow those standards promulgated in the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation*, and the *Guidelines for Public Archeology in Wisconsin, as Revised*. The use of these documents as guides for historic preservation planning is endorsed by the Wisconsin State Historic Preservation Office (SHPO).

The archival research will focus on reviewing the available information pertaining to site WP-0083 and will attempt to more carefully define the site boundaries relative to the area of potential effect (APE). A review of the existing soil boring data from the area of the Wolf River Trail indicates the presence of fill to about 10 feet so that field conditions will not be warranted in this area.

The field investigations for the East Spring Street project will consist of initial visual inspection of the APE and pedestrian survey and/or shovel probe testing where applicable. Machine assisted augering may also be used in some areas.

### **Report**

The results of the archaeological investigations will be documented in a formal Great Lakes Archaeological Research Center Report of Investigations. The Report of Investigations will provide the necessary background of the project and detail the specific tasks pursued, the research methodology, the results of survey, and the specific cultural resource management recommendations. The report will also contain the necessary site update information that will be filed with the Wisconsin Historical Society.

**From:** Bodoh, Jeff J. [mailto:jbodoh@newlondonwi.org]  
**Sent:** Thursday, March 15, 2007 4:37 PM  
**To:** Jennifer Harvey  
**Subject:** RE: scope 3-2-2007revised.doc

Mrs. Harvey,

I have attached a copy of the signed contract for services for the East Spring Street/Wolf River Trail study. Is there a way that the bill could be separated for each of the projects?

Please keep me informed if you need to do the field investigation.

I will mail a printed copy of the contract.

Have a nice day.

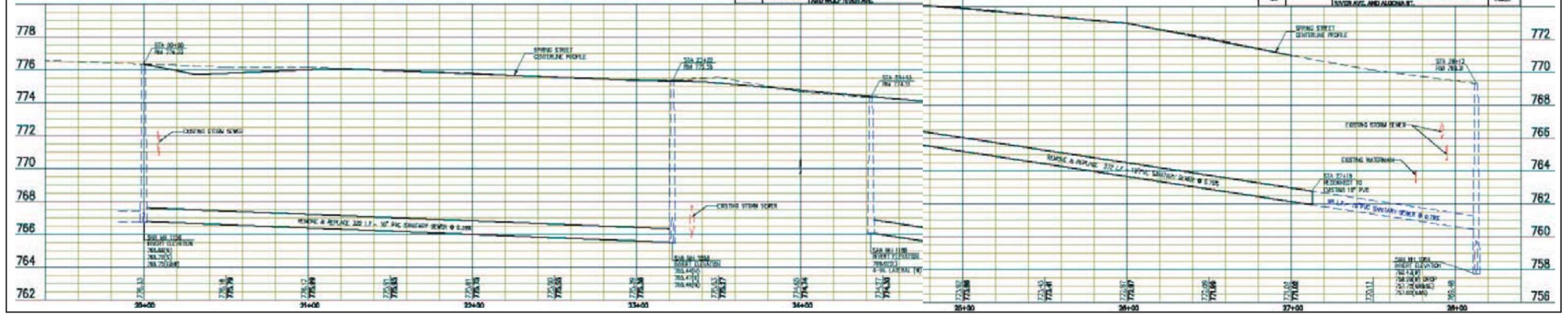
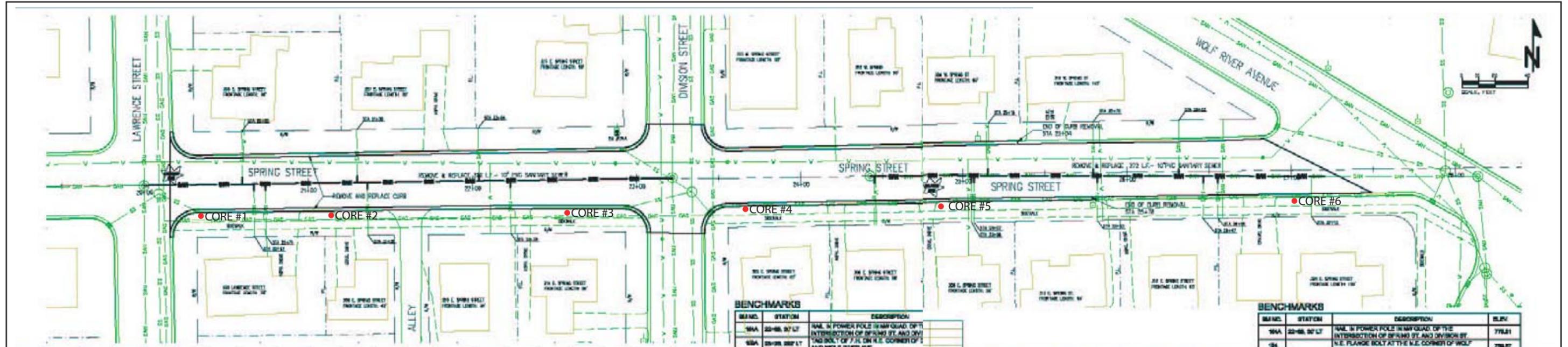
Jeffrey Bodoh, P.E.  
City Engineer  
City of New London  
215 N. Shawano Street  
New London, WI 54961  
Phone: 920-982-8503  
FAX: 920-982-8665

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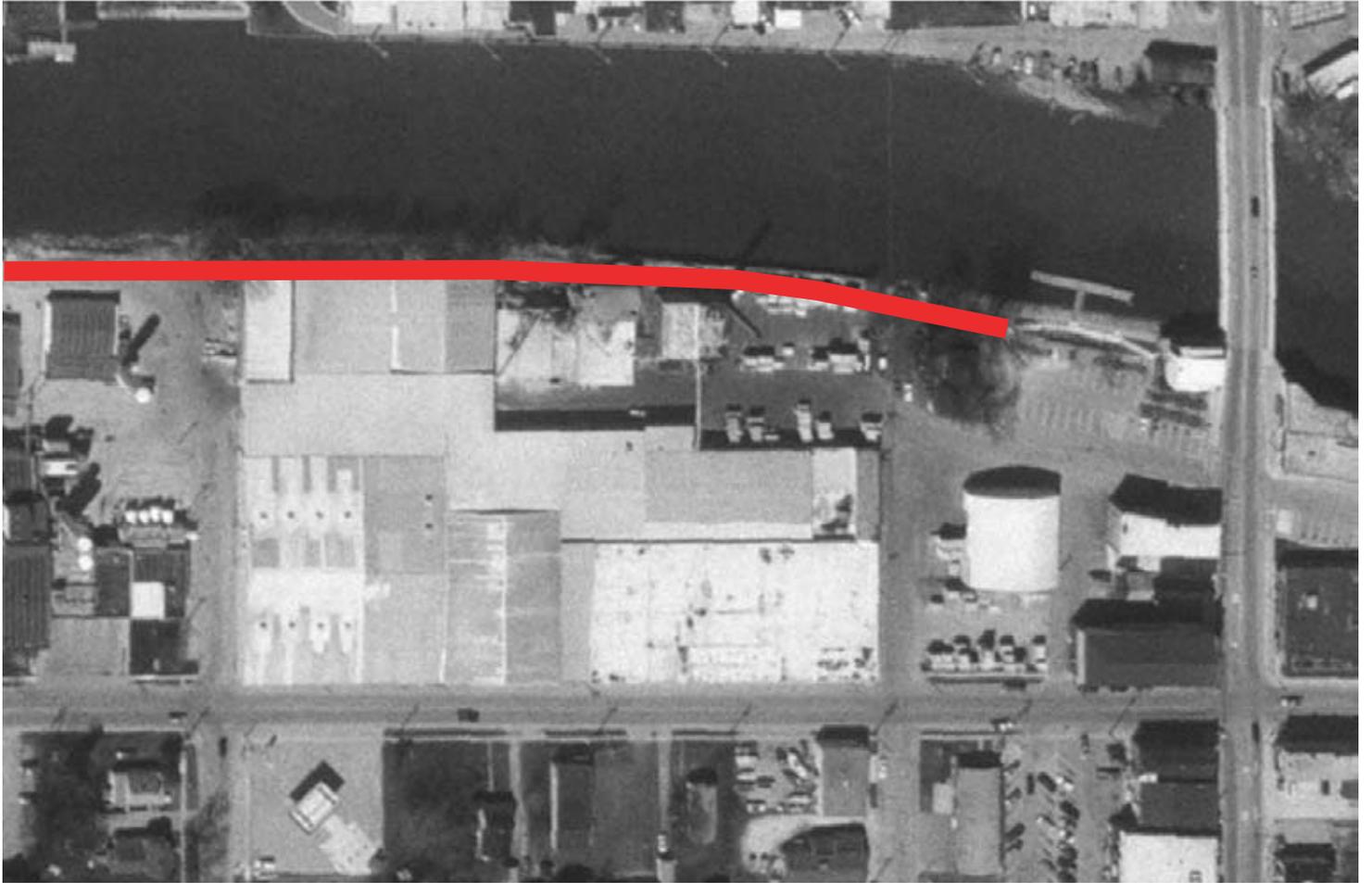
**From:** Jennifer Harvey [mailto:JenniferHarvey@GLARC.com]  
**Sent:** Thursday, March 08, 2007 2:48 PM  
**To:** Bodoh, Jeff J.  
**Cc:** Katherine Shillinglaw  
**Subject:** scope 3-2-2007revised.doc

## **Appendix B: Project Design Plans**









# POTENTIAL WOLF RIVER TRAIL ADDITION

WOLF RIVER

WATER ELEVATION (10/19/06) - 750.3



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**Appendix C: Wisconsin Archaeological Site Update Form  
for 47WP083/BWP173**



# Wisconsin ASI Update Form

Fill in the following information as it is presently recorded: County Waupaca and Outagamie

Site # 47-WP-83 ASI # 007109 Burial Site # 47-BWP-173

Site Name none given Town/Range/Sec. 22/14E/12 & 13 and 22/15E/7

USGS Quad Name New London, WI 7.5' Quad 1992

Please refer to the ASI form and provide the appropriate headings for the correction or new information. Examples of headings are: QUARTER SECTIONS, USGS MAP, and SITE DESCRIPTION. Provide a justification or reference for any new information. When appropriate, attach a sketch map and copy of USGS quad depicting map changes.

HEADING(S) AND NATURE OF CORRECTION/UPDATE: Update.

INVESTIGATION TYPE(S) COMPLETED: (Check all that apply.)

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Avocational Survey             | <input type="checkbox"/> Major excavation               | <input type="checkbox"/> Post hole digger             |
| <input type="checkbox"/> Chance Encounter               | <input type="checkbox"/> Mechanical Stripping           | <input type="checkbox"/> Records/Background           |
| <input type="checkbox"/> Controlled Surface Collection  | <input type="checkbox"/> Monitoring                     | <input type="checkbox"/> Records (pred. model)        |
| <input type="checkbox"/> Faunal Analysis                | <input type="checkbox"/> Osteological analysis          | <input type="checkbox"/> Remote Sensing               |
| <input type="checkbox"/> Floral Analysis                | <input type="checkbox"/> Phase I                        | <input checked="" type="checkbox"/> Soil core         |
| <input type="checkbox"/> Geomorphology                  | <input type="checkbox"/> Phase II                       | <input type="checkbox"/> Surface Survey (int)         |
| <input checked="" type="checkbox"/> Historical Research | <input type="checkbox"/> Phase II-corridor only         | <input type="checkbox"/> Shovel Testing/Probing (Int) |
| <input type="checkbox"/> Interview/informant            | <input type="checkbox"/> Phase III                      | <input type="checkbox"/> Test excavation              |
| <input checked="" type="checkbox"/> Land Use History    | <input type="checkbox"/> Phase III-corridor only        | <input type="checkbox"/> Traditional Knowledge        |
| <input type="checkbox"/> Vandalism                      | <input checked="" type="checkbox"/> Walk Over (Reconn.) | <input type="checkbox"/> Unknown                      |

Other Reviewed soil boring logs taken for engineering purposes.

Site recorded for -

- Compliance SHSW# \_\_\_\_\_ Agency Number \_\_\_\_\_
- State, Non-Compliance SHSW# \_\_\_\_\_
- State Regional Program, Region \_\_\_\_\_ Year \_\_\_\_\_ SHSW# \_\_\_\_\_
- Survey & Planning # \_\_\_\_\_ SHSW # \_\_\_\_\_
- THPO SHSW# \_\_\_\_\_ Burial Sites Regional Program SHSW# \_\_\_\_\_
- Avocational SHSW# \_\_\_\_\_ ISTE/TEA 21: \_\_\_\_\_ SHSW# \_\_\_\_\_
- SMART GROWTH:  SHSW# \_\_\_\_\_ Other \_\_\_\_\_ SHSW# \_\_\_\_\_

SOIL(S): The portion of the site investigated along the left bank of the Wolf River is defined by Menasha silty clay over which intentional fill has been placed, while the site area evaluated along Spring Street between Lawrence Street and Wolf River Avenue is marked by Oshkosh silty clay loam.

DEGREE OF DISTURBANCE (AT LAST UPDATE): (Check one.) For investigation portion of site.

- Minimal(0-25%)  Moderate(25-50%)  Heavy(50-75%)  Completely destroyed  Unknown

BIBLIOGRAPHIC REFERENCES Gregory, Michael M. April 2007. *Results of Archaeological Investigation of Two Project Alignments in the City of New London, Waupaca and Outagamie Counties, Wisconsin*. Report of Investigations No. 644. Great Lakes Archaeological Research Center, Inc., Milwaukee, WI.

Investigator's Recommendation- Check all that apply. [to investigated portion of site. MMG]

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> No recommendation offered    | <input checked="" type="checkbox"/> No Additional Investigation | <input type="checkbox"/> Unknown               |
| <input type="checkbox"/> Additional Background Search | <input type="checkbox"/> Redesign-avoid                         | <input type="checkbox"/> Traditional Knowledge |
| <input type="checkbox"/> Phase I / Field Verify       | <input type="checkbox"/> Catalogue as burial site               | <input type="checkbox"/> Other: _____          |
| <input type="checkbox"/> Phase II                     | <input type="checkbox"/> Protect During Construction            |  |
| <input type="checkbox"/> Phase II-corridor only       | <input type="checkbox"/> Preserve in place                      |  |
| <input type="checkbox"/> Phase III                    | <input type="checkbox"/> Covenant                               |  |
| <input type="checkbox"/> Phase III-corridor only      | <input type="checkbox"/> Floral Analysis                        |  |
| <input type="checkbox"/> Faunal Analysis              | <input type="checkbox"/> Osteological analysis                  |  |
| <input type="checkbox"/> Remote Sensing               | <input type="checkbox"/> Geomorphology                          |  |
| <input type="checkbox"/> Historical research          | <input type="checkbox"/> Monitor                                |  |
| <input type="checkbox"/> Complete NRHP Nomination     | <input type="checkbox"/> Oral History/Informant                 |  |

Comments: Site 47WP083/BWP173 is identified as being located on the left bank of the Wolf River through New London , although the site is later described as being located on a nearby spit of land extending from the northeast and created by the juncture of the Wolf and Embarrass rivers. Recent evaluation of two project parcels located within the site boundary as it is defined south of the Wolf River failed to yield archaeological materials. The two parcels represent a trail extension (Sec. 12, T22N, R14E) segment along the Wolf River between Shawano and Pearl streets, and a segment of storm sewer (Sec. 12, T22N, R14E, and Sec. 7, T22N, R15E) under Spring Street between Lawrence Street and Wolf River Avenue. Both alignments are marked by urban, residential, or commercial improvements that have resulted in concrete, asphalt, or gravel capping much of each parcel's ground surface. Due to these surface conditions, each parcel could be visually inspected; however, only limited subsurface deposits could be investigated and occurred along Spring Street where several, shallow, soil cores were manually extracted. The cores revealed subsurface disturbance attributed to roadway construction. In addition, documentary research reveals each tract has been disturbed, and in the case of the trail extension, at least in part buried beneath 1 ft-to-5.5 ft of intentional fill used to prevent flooding or ponding of river waters. Based upon these determinations, neither parcel warrants further.

Investigator Michael M. Gregory Affiliation Great Lakes Archaeological Research Center Date 14 April 2007

Update submitted by:

Name Michael M. Gregory Affiliation Great Lakes Archaeological Research Center Date 16 April 2007

\*\*\*\*\*

(Leave this section blank-- for SHSW office use)

HP-00-000 (rev. --/--/2000)

CHK'D  GIS Entry  GIS Entry Checked  ENTER \_\_\_\_\_

ENTRY CHK'D

## **Appendix D: Bibliography of Archaeological Report**



# BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # \_\_\_\_\_ COUNTY: Waupaca and Outagamie

AUTHORS: Michael M. Gregory

REPORT TITLE: Results of Archaeological Investigation of Two Project Alignments Located in the City of New London, Waupaca and Outagamie Counties, Wisconsin

DATE OF REPORT (MONTH AND YEAR): April 2007

SERIES/NUMBER: Report of Investigation 644

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]  
T22N, R14E, Section 12; and T22N, R15E, Section 7.

U.S.G.S. QUAD MAP(S): New London, Wis 7.5' Quad 1992

SITE(S) INVESTIGATED: 47WP083/BWP173

ACRES INVESTIGATED: 1.64 acres AGENCY # \_\_\_\_\_

## INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Avocational Survey                        | <input type="checkbox"/> Chance Encounter                      | <input type="checkbox"/> Controlled Surface Collection    |
| <input type="checkbox"/> Faunal Analysis                           | <input type="checkbox"/> Floral Analysis                       | <input type="checkbox"/> Geomorphology                    |
| <input type="checkbox"/> Historical Research                       | <input type="checkbox"/> Interview/Informant                   | <input type="checkbox"/> Land Use History                 |
| <input checked="" type="checkbox"/> Literature Background Research | <input type="checkbox"/> Major Excavation                      | <input type="checkbox"/> Mechanical Stripping             |
| <input type="checkbox"/> Monitoring                                | <input type="checkbox"/> Osteological Analysis                 | <input type="checkbox"/> Phase I-Surface Survey           |
| <input type="checkbox"/> Phase II                                  | <input type="checkbox"/> Phase II-Corridor Only                | <input type="checkbox"/> Phase III                        |
| <input type="checkbox"/> Phase III-Corridor Only                   | <input checked="" type="checkbox"/> Records/Background         | <input type="checkbox"/> Records/Background (Pred. Model) |
| <input type="checkbox"/> Remote Sensing                            | <input type="checkbox"/> Shovel Testing/Probing (Inten)        | <input checked="" type="checkbox"/> Soil Core             |
| <input type="checkbox"/> Surface Survey (Intensive)                | <input type="checkbox"/> Test Excavation                       | <input type="checkbox"/> Traditional Knowledge            |
| <input type="checkbox"/> Vandalism                                 | <input checked="" type="checkbox"/> Walk Over (Reconnaissance) | <input type="checkbox"/> Unknown                          |
| <input type="checkbox"/> Other: _____                              |  |   |

ABSTRACT:  Included in report  Written in space below

