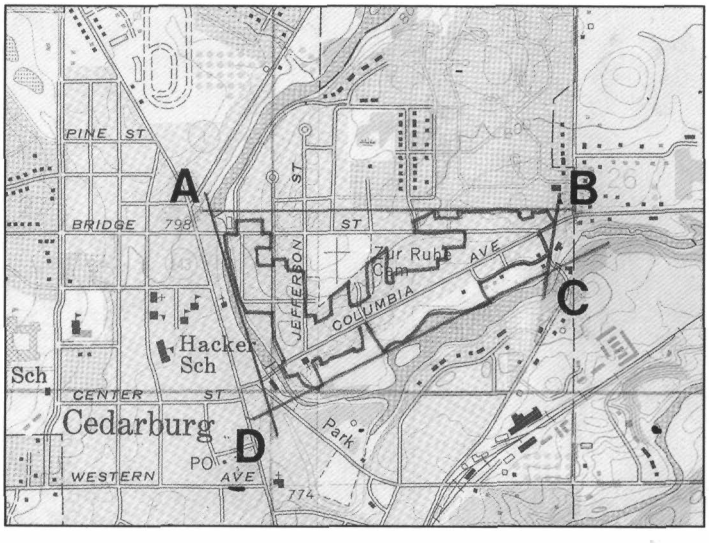
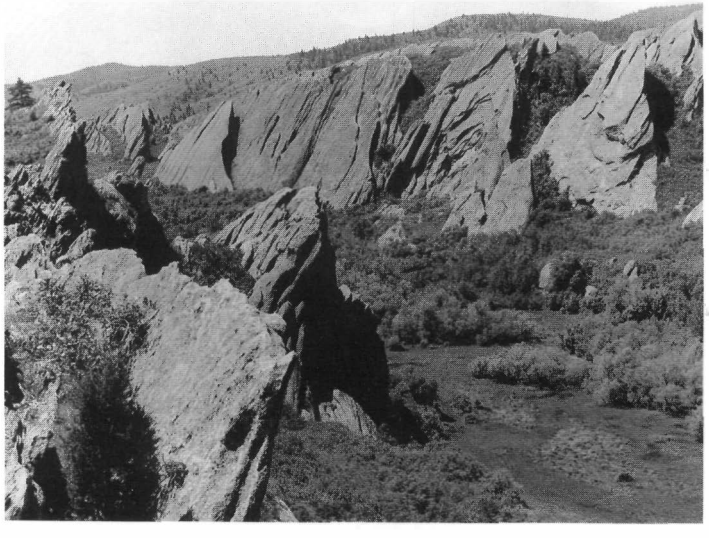
NATIONAL REGISTER BULLETIN

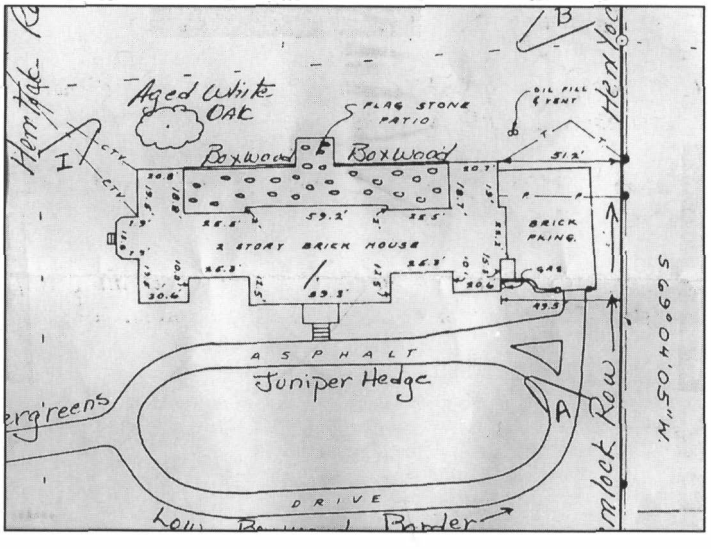
Technical information on the the National Register of Historic Places:
survey, evaluation, registration, and preservation of cultural resources

U.S. Department of the Interior
National Park Service
Cultural Resources
National Register, History and Education

DEFINING BOUNDARIES FOR NATIONAL REGISTER PROPERTIES







The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes.

This material is partially based upon work conducted under a cooperative agreement with the National Conference of State Historic Preservation Officers and the U.S. Department of the Interior.

Cover:

(Top Left) Detail of USGS map showing the National Register boundaries of the Columbia Historic District in Cedarburg, Wisconsin.

(Top Right) View of Architect Marcel Breuer's International Style home in Lincoln, Massachusetts. (Ruth Williams)

(Bottom Left) View of the Roxborough State Park Archeological District near Waterton, Colorado. (William Tate)

(Bottom Right) Detail of a 1987 land survey map defining the property boundaries of Gunston Hall in Buncombe County, North Carolina. (Blue Ridge Land Surveying, Inc.)

NATIONAL REGISTER BULLETIN

DEFINING BOUNDARIES FOR NATIONAL REGISTER PROPERTIES

BY
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including
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U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER OF HISTORIC PLACES
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PREFACE

The National Register of Historic Places is the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. National Register properties have significance in the prehistory or history of their community, State, or the nation. The National Register is maintained by the National Park Service on behalf of the Secretary of the Interior.

National Register Bulletins provide guidance on how to identify, evaluate, document, and register significant properties. This bulletin is designed to help preparers properly select, define, and document boundaries for National Register listings and determinations of eligibility. It includes basic guidelines for selecting boundaries to assist the preparer in completing the National Register Registration Form. Examples of a variety of property types are presented. These examples illustrate several ways to address boundary issues.

This bulletin was prepared by Donna J. Seifert, archeologist, under a cooperative agreement between the National Conference of State Historic Preservation Officers and the National Park Service.

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CREDITS AND ACKNOWLEDGMENTS

This bulletin addresses issues originally presented in *National Register Bulletin: Definition of Boundaries for Historic Units of the National Park System* and *National Register Bulletin: How to Establish Boundaries for National Register Properties*. Both were prepared before *National Register Bulletin: How to Complete the National Register Registration Form* was revised. This revised bulletin complements the guidelines on boundaries in *How to Complete the National Register Registration Form* and provides a variety of case studies to assist nomination preparers.

This bulletin benefited from the suggestions offered by the staff members of the National Register of Historic Places, who shared their opinions and expertise. Critical guidance was provided by Carol D. Shull, Antoinette J. Lee, and Jan Townsend; Beth Savage provided an important case study, which was included in the bulletin. John Byrne of the National Register staff, prepared lists of properties to consider in the selection of the case studies, and Tanya M. Velt of the National Conference of State Historic Preservation Officers provided research assistance.

Comments and contributions from the following individuals were particularly valuable: Paul Alley, Western Regional Office, National Park Service; David Banks, Interagency Resources Division, National Park Service; Robin K. Bodo, Delaware Historic Preservation Office; Carol Burkhart, Alaska Regional Office, National Park Service; William R. Chapman, Historic Preservation Program, University of Hawai'i at Manoa; Rebecca Conard, Tallgrass Historians L.C.; Dan G. Diebler, Pennsylvania Historical and Museum Commission; Jim Draeger, Wisconsin Division of Historic Preservation; Audry L. Entorf, General Services Administration; Betsy Friedberg, Massachusetts Historical Commission; Bruce Fullem, New York State Office of Parks, Recreation and Historic Preservation; Elsa Gilbertson, Vermont Division for Historic Preservation; Susan L. Henry, Interagency Resources Division, National Park Service; Gerri Hobdy, Louisiana Office of Cultural Development; Thomas F. King, Silver Spring, Maryland; John Knoerl, Interagency Resources Division, National Park Service; Paul Lusignan, Interagency Resources Division, National Park Service; Kirk F. Mohney, Maine Historic Preservation Commission; David L. Morgan, Kentucky Heritage Council; Bruce Noble, Interagency Resources Division, National Park Service; William W. Schenk, Midwest Regional Office, National Park Service; and Robert E. Stipe, Chapel Hill, North Carolina.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. *Defining Boundaries for National Register Properties* was developed under the general editorship of Carol D. Shull, Keeper, National Register of Historic Places. Antoinette J. Lee, historian, was responsible for publications coordination, and Tanya M. Velt provided editorial and technical support. Comments on this publication may be directed to Keeper of the National Register of Historic Places, National Park Service, 1849 C Street, NW, Washington, D.C. 20240.

I. DEFINING BOUNDARIES FOR NATIONAL REGISTER PROPERTIES

The preparer of a National Register nomination collects, evaluates, and presents the information required to document the property and justify its historical significance. Among the decisions the preparer must make is the selection of the property's boundaries: in addition to establishing the significance and integrity of a property, the physical location and extent of the property are defined as part of the documentation. Boundary information is recorded in Section 10, Geographical Data, on the National Register Registration Form. This bulletin is designed to assist the preparer in selecting, defining, and documenting boundaries for National Register properties. The bulletin addresses the factors to consider and includes examples that illustrate properly defined boundaries for a variety of property types.

WHY BOUNDARIES ARE IMPORTANT

Carefully defined boundaries are important for several reasons. The boundaries encompass the resources that contribute to the property's significance. Boundaries may also have legal and management implications. For example, only the area within the boundaries may be considered part of the property for the purposes of Federal preservation tax incentives and charitable contributions. State and local laws that require consideration of historic resources may also refer to boundaries in the application of implementing regulations or design controls. National Register boundaries, therefore, have legal implications that can affect the property's future. Under Federal law, however, these considerations apply only to government actions affecting the property; National Register listing does not limit the private owner's use of the property. Private property owners can do anything they wish with their property, provided no Federal license, permit, or funding is involved.

Under Section 106 of the National Historic Preservation Act of 1966, as amended, Federal agencies must take into account the effect of their actions on historic properties (defined as properties in, or eligible for, the National Register of Historic Places) and give the Advisory Council on Historic Preservation the opportunity to comment. To be in compliance with the act, Federal agencies must identify and evaluate National Register eligibility of properties within the area of potential effect and evaluate the effect of the undertaking on eligible properties. The area of potential effect is defined as the area in which eligible properties may be affected by the undertaking, including direct effects (such as destruction of the property) and indirect effects (such as visual, audible, and atmospheric changes which affect the character and setting of the property).

The area of potential effect may include historic properties that are well beyond the limits of the undertaking. For example, a Federal undertaking outside of the defined boundaries of a rural traditional cultural property or an urban historic district can have visual, economic, traffic, and social effects on the setting, feeling, and association of the eligible resources.

Large properties present special problems. For example, an undertaking in a narrow corridor, such as a pipeline, may affect part of a large archeological site, traditional cultural property, or rural historic district. Such properties may extend far beyond the area of potential effect or access may be denied in areas beyond the undertaking. It is always best to consider the entire eligible property, but it may not be possible or practical to define the full extent of the property. In such cases, reasonable, predicted, estimated, or partial boundaries encompassing resources within the area of potential effect may be the only way to set the limits of contributing resources when the entire property cannot be observed or evaluated from historic maps or other documents (as in the case of subsurface archeological resources). Consider all available information and select boundaries on the basis of the best information available. When defining boundaries of large resources extending beyond the area of potential effect, it is advisable to consult the State historic preservation office.

GETTING HELP

In addition to the guidance in this bulletin, assistance is also available from State Historic Preservation Officers, Federal Preservation Officers, and the staff of the National Register of Historic Places. These professionals can help preparers with general questions and special problems. For assistance with specific questions or for information on how to contact the appropriate State Historic Preservation Officer or Federal Preservation Officer, contact the National Register of Historic Places, National Register, History and Education, National Park Service, 1849 C Street, NW, Washington, D.C. 20240.

Several other National Register publications are also available to assist preparers. *National Register Bulletin: How to Complete the National Register Registration Form* provides the basic instructions for boundary selection and documentation. The following instructions, which are consistent with those in *How to Complete the National Register Registration Form*, provide additional assistance for the preparer. The following discussion addresses many property types by considering the special boundary problems associated with each type and providing case studies to assist the preparer in dealing with such issues. Bulletins that deal with specific property types may also be useful (see the list of National Register Bulletins at the end of this publication).

GUIDELINES FOR SELECTING BOUNDARIES: ALL PROPERTIES

(summarized from *How to Complete the National Register Registration Form*, p. 56)

- Select boundaries to encompass but not exceed the extent of the significant resources and land areas comprising the property.
- Include all historic features of the property, but do not include buffer zones or acreage not directly contributing to the significance of the property.
- Exclude peripheral areas that no longer retain integrity due to alterations in physical conditions or setting caused by human forces, such as development, or natural forces, such as erosion.
- Include small areas that are disturbed or lack significance when they are completely surrounded by eligible resources. "Donut holes" are not allowed.
- Define a discontiguous property when large areas lacking eligible resources separate portions of the eligible resource.

DECIDING WHAT TO INCLUDE

Selection of boundaries is a judgment based on the nature of the property's significance, integrity, and physical setting. Begin to consider boundaries during the research and data-collection portion of the nomination process. By addressing boundary issues during the field and archival research, the preparer can take into account all the factors that should be considered in selecting boundaries. When significance has been evaluated, reassess the boundaries to ensure appropriate correspondence between the factors that contribute to the property's significance and the physical extent of the property.

Select boundaries that define the limits of the eligible resources. Such resources usually include the immediate surroundings and encompass the appropriate setting. However, exclude additional, peripheral areas that do not directly contribute to the property's significance as buffer or as open space to separate the property from surrounding areas. Areas that have lost integrity because of changes in cultural features or setting should be excluded when they are at the periphery of the eligible resources. When such areas are small and surrounded by eligible resources, they may not be excluded, but are included as noncontributing resources of the property. That is, do not select boundaries which exclude a small noncontributing island surrounded by contributing resources; simply identify the noncontributing resources and include them within the boundaries of the property.

Districts may include noncontributing resources, such as altered buildings or buildings constructed before or after the period of significance. In situations where historically associated resources were geographically separated from each other during the period of significance or are separated by intervening development and are now separated by large areas lacking eligible resources, a discontiguous district may be defined. The boundaries of the discontiguous district define two or more geographically separate areas that include associated eligible resources.

FACTORS TO CONSIDER

There are several factors to consider in selecting and defining the boundaries of a National Register property. Compare the historic extent of the property with the existing eligible resources and consider integrity, setting and landscape features, use, and research value.

- **Integrity:** The majority of the property must retain integrity of location, design, setting, feeling, and association to be eligible. The essential qualities that contribute to an eligible property's significance must be preserved. Activities that often compromise integrity include new construction or alterations to the resource or its setting. Natural processes that alter or destroy portions of the resource or its setting, such as fire, flooding, erosion, or disintegration of the historic fabric, may compromise integrity. For example, an abandoned farmhouse that has been exposed to the elements through years of neglect may have lost its integrity as a building; however, it may retain integrity as an archeological site.
- **Setting and Landscape Features:** Consider the setting and historically important landscape features. Natural features of the landscape may be included when they are located within the district or were used for purposes related to the historical significance of the property. Areas at the margins of the eligible resources may be included only when such areas were historically an integral part of the property. For example, a district composed of farmsteads along a creek may include the creek if it runs through the district, if the creek was important in the original siting of the farmsteads, or if the creek was a source of water power or natural resources exploited by the farmsteads. Consult *National Register Bulletin: Guidelines for Evaluating and Documenting Rural Historic Landscapes* for additional guidance in selecting boundaries for rural historic landscapes.

- **Use:** Consider the historic use of the property when selecting the boundary. The eligible resource may include open spaces, natural land forms, designed landscapes, or natural resources that were integral to the property's historic use. Modern use may be different, and some modern uses alter the setting or affect built resources. The effect of such uses must be assessed in identifying resources that retain integrity. For example, a Hopewell mound archeological site now used as a golf course may retain integrity where the form of the prehistoric earthworks has been preserved, but construction of sand traps or other landscaping that altered landforms would compromise integrity. A marsh that provides plant materials for traditional basketmakers may retain integrity where it remains in its natural wetland condition, but may have lost integrity where it has been drained and cultivated.
- **Research Potential:** For properties eligible under Criterion D, define boundaries that include all of the resources with integrity that have the potential to yield important information about the past. Such information is defined in terms of research questions to which the information pertains, and the property should include the components, features, buildings, or structures that include the information. For example, an eligible prehistoric longhouse site should include longhouse features as well as associated pit features, middens, and hearths. Geographically separate but historically associated activity areas may also be included in the property even when they are not adjacent to the main concentration of eligible resources. For example, lithic procurement and processing loci that were historically associated with a village site but geographically separated from it may be included in a discontiguous district. Remember that many properties eligible under other criteria include contributing archeological resources that may yield important information about the property. Consider the extent of associated archeological resources when selecting boundaries.

SELECTING BOUNDARIES

Identify appropriate natural or cultural features that bound the eligible resource. Consider historical and cartographic documentation and subsurface testing results (for archeological resources) in addition to existing conditions. Some boundaries can be directly observed by examining the property; others must be identified on the basis of research. Take into account the modern legal boundaries, historic boundaries (identified in tax maps, deeds, or plats), natural features, cultural features, and the distribution of resources as determined by survey and testing for subsurface resources.

Owner objections may affect the listing of the entire property, but not the identification of the boundaries. If the sole private owner of a property or the majority of the private owners (for properties with multiple owners) objects to listing, the property (with boundaries based on an objective assessment of the full extent of the significant resources) may be determined eligible for the National Register but not listed.

Boundaries should include surrounding land that contributes to the significance of the resources by functioning as the setting. This setting is an integral part of the eligible property and should be identified when boundaries are selected. For example, do not limit the property to the footprint of the building, but include its yard or grounds; consider the extent of all positive subsurface test units as well as the landform that includes the archeological site; and include the portion of the reef on which the vessel foundered as well as the shipwreck itself.

- **Distribution of Resources:** Use the extent of above-ground resources and surrounding setting to define the boundaries of the property. For archeological resources, consider the extent of above-ground resources as well as the distribution of subsurface remains identified through testing when defining the boundaries of the property.
- **Current Legal Boundaries:** Use the legal boundaries of a property as recorded in the current tax map or plat accompanying the deed when these boundaries encompass the eligible resource and are consistent with its historical significance and remaining integrity.
- **Historic Boundaries:** Use the boundaries shown on historic plats or land-ownership maps (such as fire insurance or real estate maps) when the limits of the eligible resource do not correspond with current legal parcels.
- **Natural Features:** Use a natural feature, such as a shoreline, terrace edge, treeline, or erosional scar, which corresponds with the limit of the eligible resource.
- **Cultural Features:** Use a cultural feature, such a stone wall, hedgerow, roadway, or curb line, that is associated with the significance of the property, or use an area of modern development or disturbance that represents the limit of the eligible resource.

Selecting boundaries for some properties may be more complicated, however. Consider and use as many features or sources as necessary to define the limits of the eligible resource. In many cases, a combination of features may be most appropriate. For example, the National Register boundaries of a property could be defined by a road on the south, a fence line on the west, the limits of subsurface resources on the north, and an area of development disturbance on the east. Consider map features or reasonable limits when obvious boundaries are not appropriate.

- **Cartographic Features:** Use large-scale topographic features, contour lines, or section lines on United States Geographical Survey maps to define the boundaries of large sites or districts.
- **Reasonable Limits:** Use reasonable limits in areas undefined by natural or cultural features. For example, define the boundary of a property as 15 feet or 5 meters from the edge of the known resources, or define a straight line connecting two other boundary features. If a surveyed topographic map is available, select a contour line that encompasses the eligible resources. Reasonable limits may also be appropriate for a rural property when there is no obvious house lot or natural or cultural feature to use. Be sure that an appropriate setting is included

within arbitrary boundaries, however, and explain how the limits were selected.

REVISING BOUNDARIES

Boundaries for listed properties need to be revised when there are changes in the condition of the resources or the setting. If resources or setting lose integrity and no longer contribute to the significance of the property, it is appropriate to revise the boundaries. Revisions may also be appropriate for nominations prepared in the early years of the National Register program, when nominations had limited or vague boundary documentation. Follow the guidance presented in this bulletin when revising boundary documentation.

II. DOCUMENTING BOUNDARIES

COMPLETING SECTION 10, GEOGRAPHICAL DATA

Section 10 of the National Register Registration Form is the portion of the form where boundaries of the nominated property are documented. The documentation requirements are discussed in *National Register Bulletin: How to Complete the National Register Registration Form;* the information presented here is consistent with that discussion. The information requirement in Section 10 of the registration form includes acreage of the property, Universal Transverse Mercator (UTM) references, a verbal boundary description, and a boundary justification. In addition, nomination preparers should submit a USGS map that shows the location of the property and plotted UTM coordinates and at least one detailed map or sketch map for districts and for properties containing a substantial number of sites, structures, or buildings.

THE VERBAL BOUNDARY DESCRIPTION AND BOUNDARY JUSTIFICATION

The verbal boundary description describes the physical extent of the nominated property. A verbal boundary description or a scale map precisely defining the property

SECTION 10, GEOGRAPHICAL DATA

(summarized from *How to Complete the National Register Registration Form*, pp. 54-55)

Acreage: Calculate the acreage of the property to the nearest whole acre; calculate fractions of acres to the nearest one-tenth acre. For small properties, record "less than one acre." For large properties (over 100 acres), use a United States Geological Survey (USGS) acreage estimator or digitizer to calculate acreage.

UTM Reference: Use Universal Transverse Mercator (UTM) grid references to identify the exact location of the property. For a small property, use a single UTM reference; for larger properties, use a series of UTM references (up to 26) to identify the boundaries. Even when natural or cultural features are used to define the boundaries, use UTM grid references to define a polygon which encloses the boundaries of the property and identifies the *vicinity* of the property.

Determine UTM references by using a UTM template and USGS quadrangle maps (see Appendix VIII in *How to Complete the National Register Registration Form* and *Using the UTM Grid System to Record Historic Sites* for assistance in determining UTM references).

Verbal Boundary Description: Describe the boundaries verbally, using one of the following:

- a map may be substituted for a narritive verbal boundary description
- legal parcel number
- block and lot number
- metes and bounds
- dimensions of a parcel of land, reckoning from a landmark, such as a natural or cultural feature

Boundary Justification: Provide a concise explanation of the reasons for selecting the boundaries, based on the property's historic significance and integrity. Discuss the methods used to determine the boundaries. Account for irregular boundaries and areas excluded because of loss of integrity. For archeological properties, discuss the techniques used to identify the limits of the eligible resource, including survey procedures and the extent and distribution of known sites.

boundaries must be given for all properties regardless of their classification category or acreage. The verbal boundary description need not be complicated or long, but it must clearly describe (or show) the limits of the resources to ensure that a Federal agency, State historic preservation office, city planning office, planning agency, or property owner can identify the limits of a National Register property.

A map drawn to a scale of at least 1 inch to 200 feet may be used in place of a verbal description. When using a map in place of a verbal description, note under the verbal boundary description that the boundaries are indicated on the accompanying map. The map must be clear and accurate. Be sure the map clearly indicates the boundaries of the property in relationship to standing structures or buildings, natural features, or cultural features. Include a drawn scale and north arrow on the map.

When the boundary is the same as a legally recorded boundary, refer to that legal description of the property in the verbal boundary description. Citation of the legal description (beyond parcel number or block and lot number) and deed book reference are optional. When natural or cultural features are used in defining boundaries, identify these features (such as street names, property lines, geographical features, or other lines of convenience) to designate the extent of the property. Begin at a fixed reference point and follow the perimeter of the property, including dimensions and directions, in the verbal boundary description.

The verbal boundary description may refer to a large-scale map (such as 1 inch to 200 feet) which shows the property boundaries. Large-scale maps that show streets, rights-of-ways, property lines, and building footprints are often available from the local planning agency or tax assessor's office. For large rural properties, a small-scale topographic map, such as a USGS map, may be used. If such a map is not available, draw a sketch map to scale (preferably 1 inch to 200 feet) and show the location of the resources relative to the boundary and surrounding features. Include a north arrow, drawn scale, and date on the map.

The verbal boundary description is followed by a justification of the selected boundaries. Explain how the boundaries were selected. Clarify any issues that might raise questions, such as excluding portions of the historic property because of lost integrity.

UNIVERSAL TRANSVERSE MERCATOR (UTM) REFERENCES

Universal Transverse Mercator (UTM) references are required to indicate the location of the property. Generally, the UTM coordinates do not define the property boundaries, but provide precise locational information. Plot a single UTM reference on a 7.5 minute series USGS map for a small property; plot three or more UTM references that define the vertices of a polygon encompassing the area to be registered for properties over 10 acres. UTM references may also be used to define boundaries (for example, large rural properties lacking appropriate cultural or natural features to define boundaries). When UTM references define boundaries, the references must correspond exactly with the property's boundaries. For additional guidance, see *National Register Bulletin: How to Complete the National Register Registration Form* and *National Register Bulletin: Using the UTM Grid System to Record Historic Sites.*

GLOBAL POSITIONING SYSTEM (GPS)

The Global Positioning System (GPS) technology now can be used to define boundaries for National Register properties. GPS technology records (digitizes) the location of lines, points, or polygons on the earth's surface using trilateration from satellites orbiting the earth. The locational accuracy of the data varies between 2 and 5 meters (when using differential correction). Thus, districts and archeological sites can be digitized as polygons, and historic trains or roads, as lines. The result is a potential National Register boundary. With GPS, the UTM references are automatically calculated along with any other type of descriptive data, such as condition, materials, intrusions, and integrity. Data from GPS is generally entered into a Geographic Information System (GIS). Using GIS, boundary data can be combined with data on cultural and natural features, such as roads, rivers, and land cover, to yield a composite map suitable for inclusion with the registration form.

III. CASE STUDIES

Many kinds of property types are eligible for inclusion in the National Register, and different property types have different boundary issues to be considered. To illustrate a variety of appropriate boundaries, examples are given for several property types. For each property type, the general guidelines are presented. Appropriate examples are provided to illustrate the issues and solutions. The summary information is abstracted from registration forms of properties listed in the National Register or documentation from properties determined eligible for the National Register. The verbal boundary descriptions and boundary justifications are quotations of Section 10 of the registration forms. For some properties, such as archeological sites, locational information is restricted to protect the property. Examples drawn from such properties are edited to omit or alter locational information.

GUIDELINES FOR SELECTING BOUNDARIES: BUILDINGS

(summarized from *How to Complete the National Register Registration Form*, p. 56)

- Select boundaries that encompass the entire resource, including both historic and modern additions. Include surrounding land historically associated with the resource that retains integrity and contributes to the property's historic significance.
- Use the legally recorded parcel number or lot lines for urban and suburban properties that retain their historic boundaries and integrity.
- For small rural properties, select boundaries that encompass significant resources, including outbuildings and the associated setting.
- For larger rural properties, select boundaries that include fields, forests, and open range land that is historically associated with the property and conveys the property's historic setting. The areas included must have integrity and contribute to the property's historic significance.

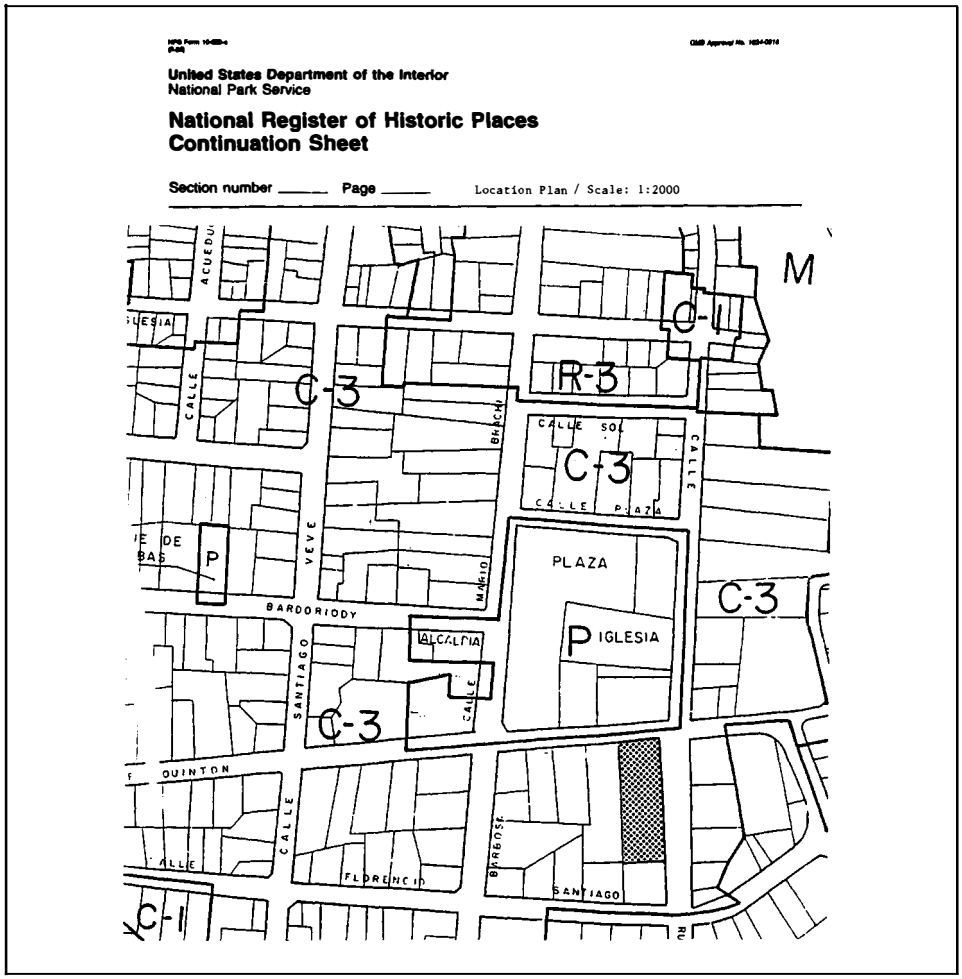
BOUNDARIES FOR BUILDINGS

Buildings are constructions created principally to shelter any form of human activity. The National Register use of the term "building" also refers to historically and functionally related units, such as a courthouse and jail. Buildings include houses, barns, churches, schools, hotels, theaters, stores, factories, depots, and mills. Remember that many buildings have associated contributing landscape and archeological features. Consider these resources as well as the architectural resources when selecting boundaries and evaluating significance of buildings.

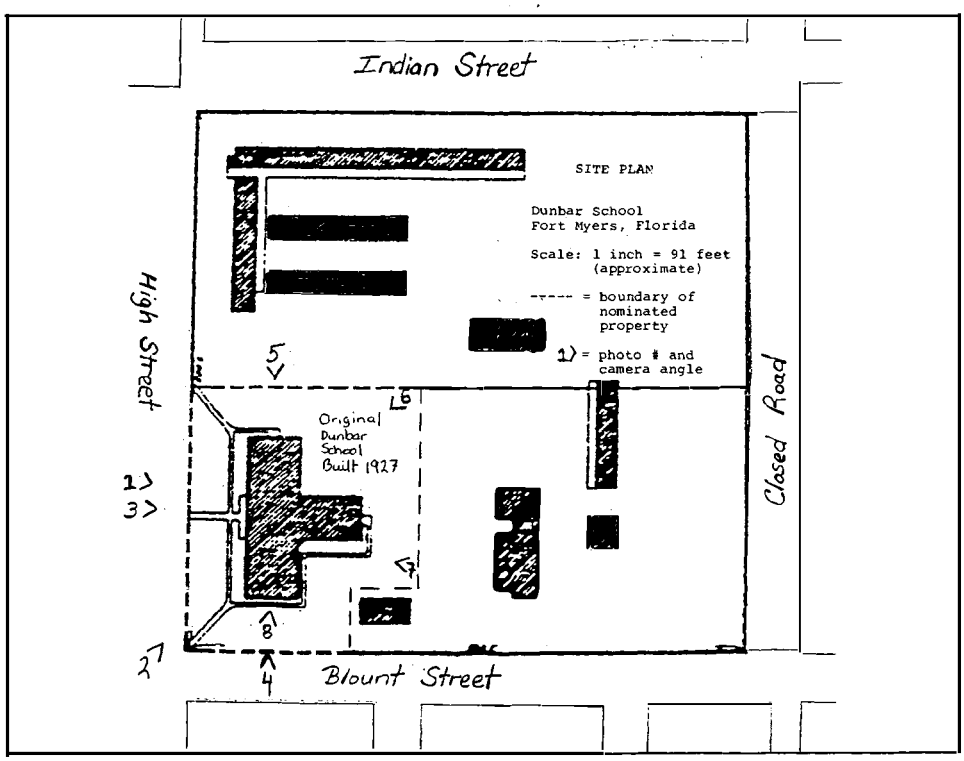
The verbal boundary descriptions and boundary justifications cited in the following case studies provide examples of boundaries for several types of buildings in a variety of settings. In a few cases, the preparer has elected to provide a large-scale map (such as a tax map) that shows the boundaries in lieu of a verbal boundary description.

Buildings in Urban Settings

La Casa Blanca, Coamo, Puerto Rico, is a Spanish Creole vernacular house constructed in 1865. Characteristics of this style include a raised, wooden construction; main living core with rear service wing (*martillo*), forming an L-shaped plan with an interior courtyard; full-length frontal balcony or veranda; and hipped or side-gabled, usually high-pitched roof covered with corrugated zinc. La Casa Blanca includes these characteristics, except that the *martillo* opens into the grounds at the southeast corner of the lot and not into an interior courtyard. The house is located at 17 José I. Quinton Street, the corner of Quinton and Ruiz Belvis streets. The boundaries of the National Register property follow the legal lot boundaries. **Verbal boundary description:** The house is bounded in the north by José Quinton Street; south, No. 18 Federico Santiago Street; east, Ruiz Belvis Street; and west, No. 19 José Quinton Street. **Boundary justification:** The boundary includes the entire city lot that has been historically and is currently associated with the property.



La Casa Blanca, Coamo, Puerto Rico. City plan showing the National Register boundaries (shaded lot).

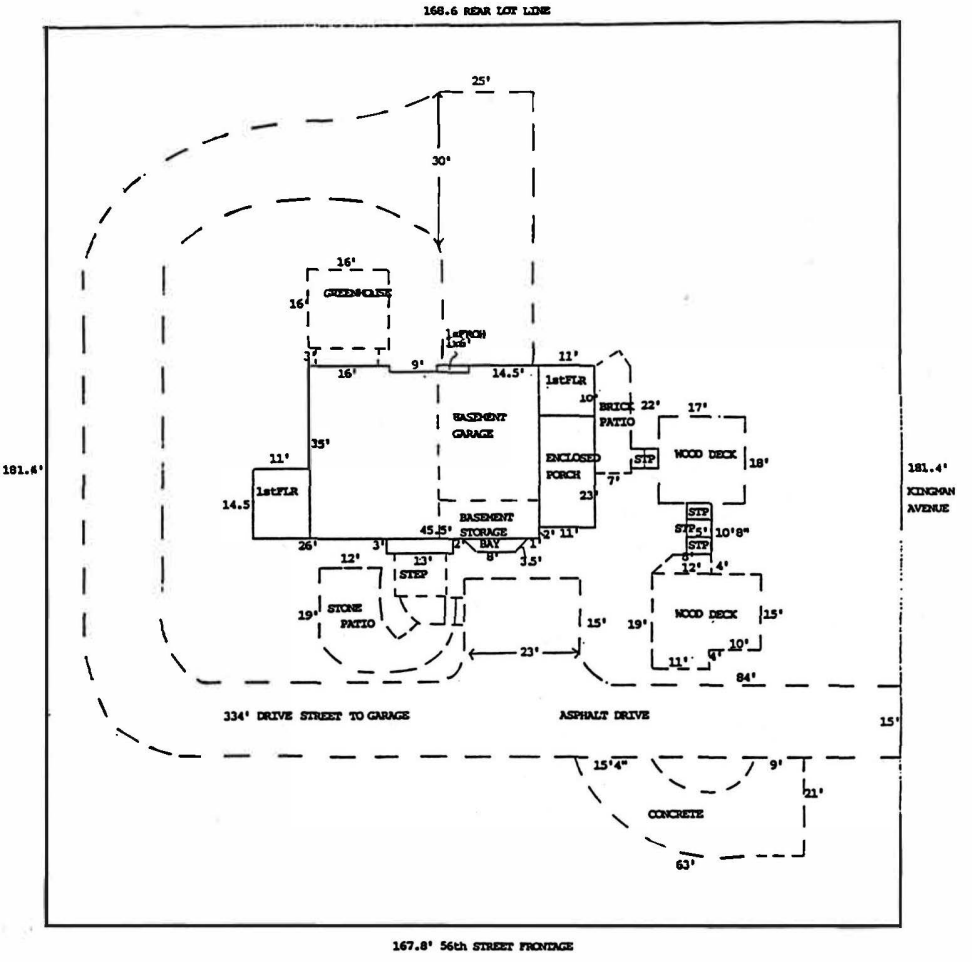


Paul Lawrence Dunbar School, Fort Myers, Florida. Plan showing the National Register boundaries.

Paul Lawrence Dunbar School, Fort Myers, Lee County, Florida, is a two-story, T-shaped, Mission-style building built in 1927. The school was built as the first high school for African American students in Lee County. The original building has undergone few alterations and still serves its original function as a public school. The present school complex includes several buildings constructed in the 1950s, which are excluded from the nomination. The Paul Lawrence Dunbar School is significant for its association with African American community life and education in the Fort Myers, Florida, area. This property illustrates boundaries including the historic core of a property but excluding peripheral, noncontributing buildings. **Verbal boundary description:** The boundary for the Dunbar School is shown as the dotted line on the accompanying scale map entitled "Site Plan, Dunbar School." **Boundary justification:** The boundary includes the building and immediately adjacent grounds historically associated with Dunbar School and excludes that part of the original site now occupied by new construction.

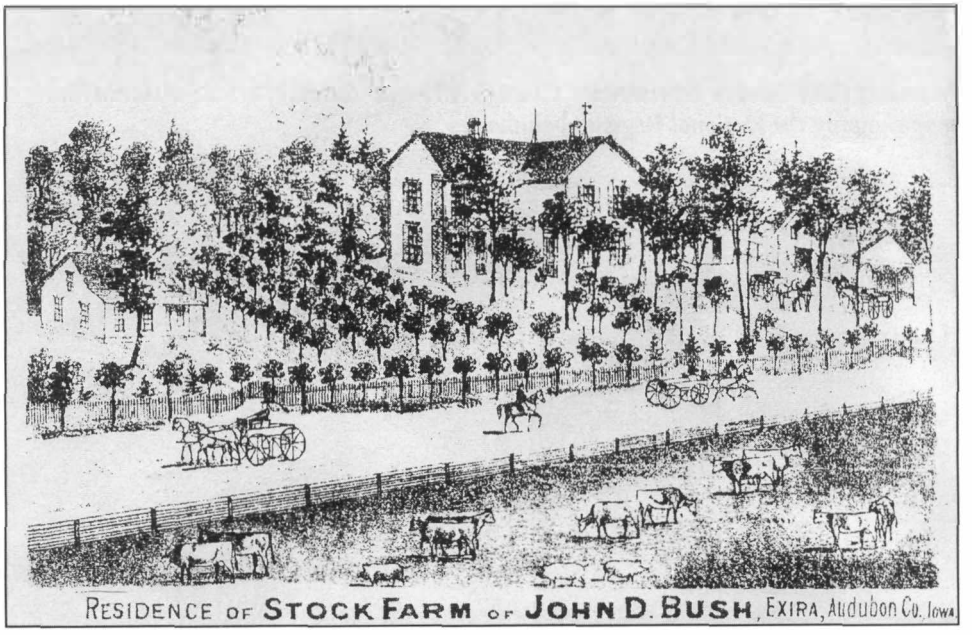
Thomas I. Stoner House, Des Moines, Polk County, Iowa, is an early 20th century Spanish Eclectic style house. The Stoner house is significant as a rare example of its style, displaying high artistic values and properly expressed design principles associated with the style, particularly the detailed stonework and balanced massing with side wings. The house is located on an irregular corner lot, overlooking Waveland Golf Course. The boundary for this property is limited to area that continues to be associated with the house and excludes areas historically separated from the house. **Verbal boundary description:** The nominated property occupies the eastern 31.4 feet of lot 53 and all of lots 54, 55, and 56 in Waveland Hills in Des Moines and is roughly 168 x 181 feet in size. **Boundary justification:** The boundary includes the immediate grounds that have historically been associated with the property and that maintain historic integrity. At the time of construction, the owner also owned lots 52 and 57-60, property that was later subdivided and therefore is excluded from this nomination.

John D. Bush House, Exira, Audubon County, Iowa, is a two-story frame house built for John Bush by Danish immigrant carpenter Jens Uriah Hansen in the 1870s. When it was built, the house was on the outskirts of town and was part of a larger holding, which included Bush's stock farm. The town expanded and now encompasses the Bush property within a residential area. Through the years, the Bush holding has been subdivided and the large lot on which the house is situated is all that remains intact of the original Bush holding. The property is significant as the best surviving example of the early Danish immigrant dwellings built by Hansen, who was the first Dane to settle in Audubon County and was responsible for the construction of several of the early buildings, homes, and outbuildings in the Exira area. The legal property boundary was used to define the National Register property boundary. **Verbal boundary description:** The nominated property is bounded by the legal description as recorded in the Audubon County Recorder's Office: Part of Lot 14, Subdivision of Original Lot 9, Town of Exira, Section 4, T78N, R35W. **Boundary justification:** The boundary of the nominated property is the remnant of the original parcel historically associated with the property.

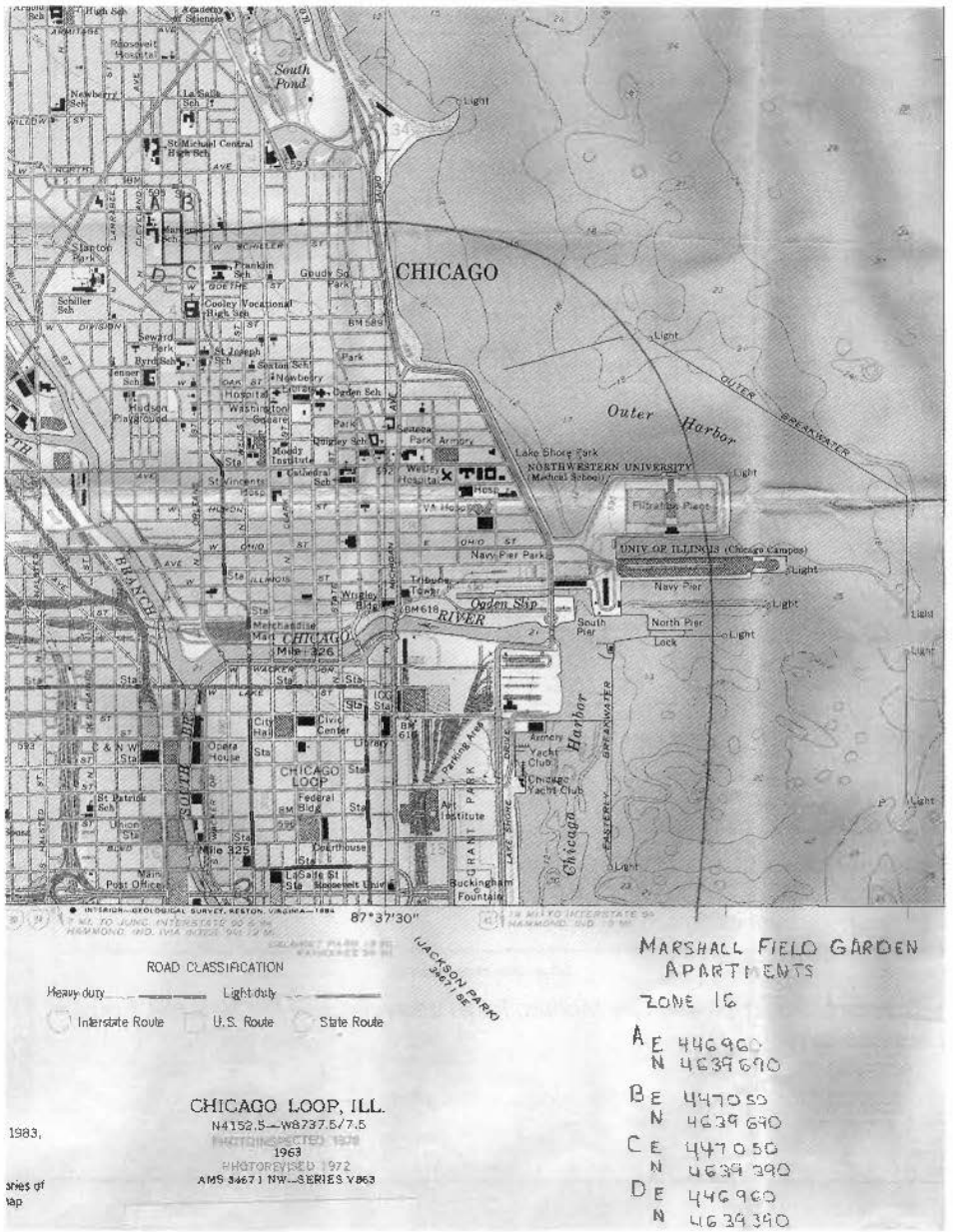


Thomas I. Stoner House, Des Moines, Iowa. Plan showing the National Register boundaries.

Marshall Field Garden Apartments, Chicago, Cook County, Illinois, include ten buildings surrounding a spacious interior garden court, built in 1928-1929. The complex occupies two city blocks. The buildings are oriented toward Sedgwick Street, the busiest of the streets bordering the complex: twenty storefronts and offices face this street. The central interior courtyard runs the length of the complex, with the small inside courtyards of the eight H-shaped buildings opening on to the central courtyard. The two end buildings extend the length of the block. The complex is a notable example of early privately funded, moderate-income housing in Chicago. The limits of the two city blocks occupied by the apartments define the boundaries of the National Register property. **Verbal boundary description:** The area bounded by Sedgwick, Evergreen, Hudson, and Blackhawk streets, starting at the northwest corner of Blackhawk and Sedgwick,



John D. Bush House, Exira, Iowa. Drawing of the house from the 1875 Illustrated Historical Atlas of the State of Iowa: Eighth Congressional District *(Andrea Atlas Company).*



Marshall Field Garden Apartments, Chicago, Illinois. Detail of USGS quadrangle map showing the National Register boundaries.

extending south 938'9" to Evergreen Street, extending west 263'9" to Hudson Street, extending north 938' to Blackhawk Street and back east 263' to the northwest corner of Blackhawk and Sedgwick. These dimensions are measured from the masonry edges of the buildings. **Boundary justification:** This acreage has historically been associated with the Marshall Field Garden Apartments.

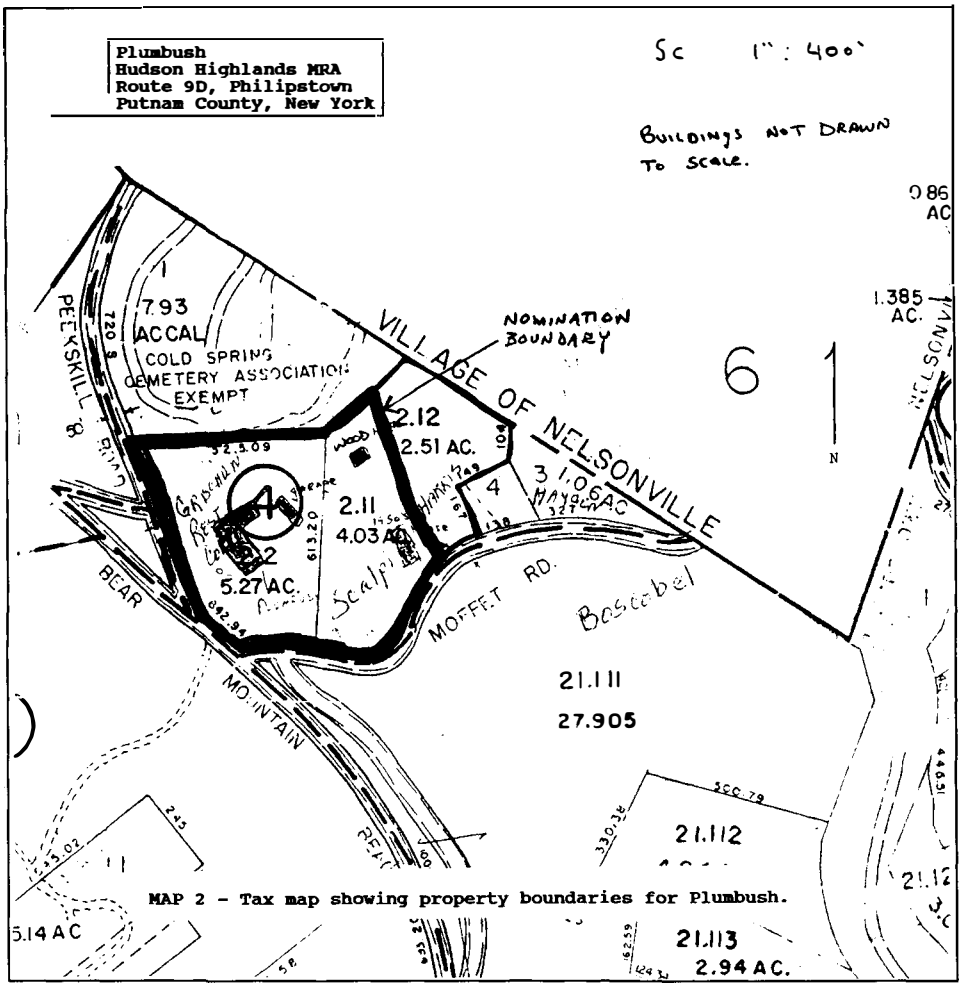
Minto School, Minto, Walsh County, North Dakota, was built in 1895. The property includes the school building with attached rear additions and six noncontributing elements moved to the site in the past 20 years and associated with the school building's present use as the Minto Museum, operated by the Walsh County Historical Society. The moved structures are arranged to the south and west (rear) of the school grounds, where they do not affect the integrity of the school's original setting. The National Register boundaries include the 12 adjacent lots comprising the north half of the city block occupied by the school and its newly associated buildings. **Verbal boundary description:** The north half of block 11, Original Townsite, Minto, North Dakota, comprising lots 1-12. **Boundary justification:** The boundary includes the north half of block 11 (lots 1-12), which has been historically and is currently associated with the property.

Buildings in Rural Settings

Theophilus Jones House, Newhaven County, Wallingford, Connecticut, is an 18th century farmstead, which includes a house, barn, carriage house, carpentry shop, woodshed, pigeon house, icehouse, and well with washing terrace. The house was constructed ca. 1740. The property retains the character and feeling of its period, because the property is bounded on the south by open land and the arrangement of the outbuildings blocks the view of more recent residential construction to the north and east. The house faces Jones Road, originally a farm road serving only the house, which is now a residential street. The immediate neighborhood is mostly residential, although there are farms and orchards in the vicinity. The property is significant for its association with Wallingford's origins as an agricul-

tural community; its association with prominent 20th century resident and scholar of American decorative arts, Charles F. Montgomery; and its embodiment of distinctive characteristics of Connecticut domestic architecture of the 1740s and 1750s. The National Register boundary corresponds to the legal block and lot description of the property. **Verbal boundary description:** The nominated property includes the house, outbuildings, and associated lot known as 40 Jones Road, shown as Map 085, Block 003, Lot 017 in the Wallingford Assessor's records and recorded in the land records in Volume 544, page 476. **Boundary justification:** The boundary includes the farm house, outbuildings, and farm yard that have historically been part of the Jones farm and that maintain historical integrity. Adjoining parcels of the original farm have been excluded because they have been subdivided and developed into a residential neighborhood.

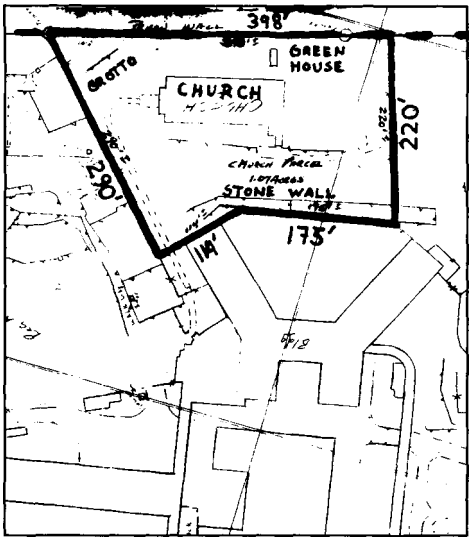
Chris Poldberg Farmstead, Shelby County, Iowa, includes a house, barn, hog house, poultry house, machine shed, cob house, granary, and metal grain bin. The farmstead was established in the early 20th century by Danish immigrants. The house is situated on the south side of the cluster of farmstead buildings and structures, with the cob house situated off the rear of the house within the yard. The west side of the cluster consists of the poultry house, machine shed, and barn, with the grain bin, granary, and hog house forming the north side of the cluster. A dirt lane extends into the farmstead from the gravel road, bisecting the cluster between north and south halves. Historically, the entire area west, south, and east of the house had a dense tree cover. The property's section, township, and range description is used to locate the property; reasonable limits and cultural features (roads) are used to define the National Register boundaries. **Verbal boundary description:** The topographic location of the nominated property is as follows according to the USGS quadrangle map, Prairie Rose Lake, Iowa 1978: E 1/4, SE 1/4, SE 1/4, NE 1/4 of Section 27, T79N, R37W, Jackson Township, Shelby County, Iowa. The specific property boundary is described as follows: Beginning at a point 10 feet north of the hog house and starting at the west



Plumbush, Philipstown, New York. Tax map showing the National Register boundaries.

edge of the gravel road proceed west 300 feet, turn south for 300 feet, turn east for 300 feet to the west edge of the road, and turn north for 300 feet to the point of beginning. **Boundary justification:** The boundary of the nominated property includes that portion of the historic farm holdings that encompasses all of the buildings and structures of the farmstead itself.

Plumbush, Putman County, New York, consists of two contributing buildings, a mid-19th century farmhouse and an associated wood house. The original carriage house has been extensively remodeled for use as a garage and is, therefore, noncontributing, as is a modern two-story house, which is separated from Plumbush by a wooded area. The surrounding neighborhood is rural, with few residences located nearby. The property is bounded on the north, northeast, and south by the Cold Spring Cemetery; on the west by Route 9D; on the south by Moffet Road; and on the east by private property. Much of the original 65-acre farm has been subdivided, and extensive infill has destroyed the historical integrity and setting of the larger farm. The limits of the tax parcel that includes the eligible resources define the boundaries of the National Register property. **Verbal boundary description:** Plumbush is located on the east side of Route 9D between the intersections of Peekskill and Moffet roads. The nominated property includes two adjacent tax parcels which comprise 9.3 acres as shown on accompanying tax map. **Boundary justification:** Historically, Plumbush was part of a 65-acre farm owned by Robert Parker Parrott. Over time, much of the property was subdivided and sold off. Extensive modern infill on the original farm acreage has destroyed the historical integrity and setting of the larger farm. The 9.3-acre nominated property is all that remains of the original farm associated with the house.



The Church of Saint Dismas, The Good Thief, Dannemora, New York. Detail of tax map showing the National Register boundaries.

Church of St. Dismas, The Good Thief, Dannemora, Clinton County, New York, is a large, stone chapel on the grounds of the Clinton Correctional Facility. The chapel, which was completed in 1941, was built on the site of the abandoned prison farm building along the north edge of the prison grounds within the walls; 1.07 acres were set aside for the building, and the boundary of the nominated property coincides with the lot lines drawn around the 1.07 acres when the church was built. The boundary encompasses three additional historic features directly associated with the chapel: a greenhouse, a terraced stone wall, and a grotto. The remainder of the Clinton Correctional Facility, established in 1845, had not been surveyed at the time the chapel nomination was prepared nor evaluated for National Register eligibility; therefore, only the chapel and its grounds are included in the nominated property. **Verbal boundary description:** Heavy black outline on attached county tax map defines boundary of nominated property. **Boundary justification:** The boundary is drawn to coincide with the 1.07-acre parcel which was delineated when the prison farm was abandoned and the church was constructed.

BOUNDARIES FOR HISTORIC DISTRICTS

A historic district possesses a significant concentration or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. Districts may include several contributing resources that are nearly equal in importance, as in a neighborhood, or a variety of contributing resources, as in a large farm, estate, or parkway. Noncontributing resources located among contributing resources are included within the boundaries of a district. When visual continuity is not a factor of historic significance, when resources are geographically separate, and when the intervening space lacks significance, a historic district may contain discontiguous elements. (See *National Register Bulletin: How to Complete the National Register Registration Form* for further discussion about defining a district.)

GUIDELINES FOR SELECTING BOUNDARIES: HISTORIC AND ARCHITECTURAL DISTRICTS

(summarized from *How to Complete the National Register Registration Form*, pp. 56-57)

Select boundaries that encompass the single area of land containing the significant concentration of buildings, sites, structures, or objects making up the district. The district's significance and historic integrity should help determine the boundaries. Consider the following factors:

- **Visual barriers** that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character.
- **Visual changes** in the character of the area due to different architectural styles, types or periods, or to a decline in the concentration of contributing resources.
- **Boundaries at a specific time** in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch.
- **Clearly differentiated patterns** of historic development, such as commercial versus residential or industrial.

A historic district may contain **discontiguous** elements only under the following circumstances:

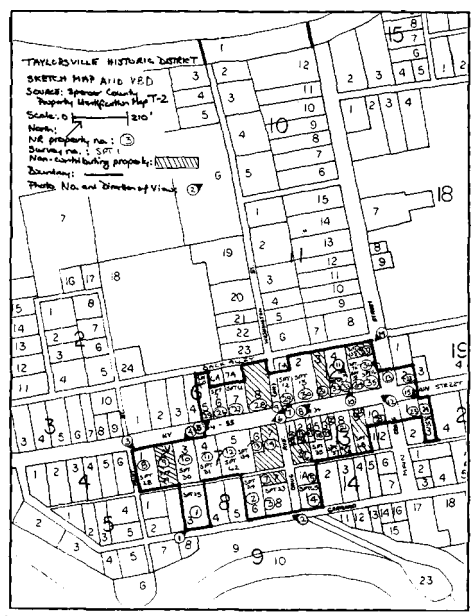
- When **visual continuity is not a factor of historic significance**, when **resources are geographically separate**, and when the **intervening space lacks significance**: for example, a cemetery located outside a rural village may be part of a discontiguous district.
- When **cultural resources are interconnected by natural features** that are excluded from the National Register listing: for example, the sections of a canal system separated by natural, navigable waterways.
- When **a portion of a district has been separated by intervening development** or highway construction and when the separated portion has sufficient significance and integrity to meet the National Register Criteria.

National Register properties classified as districts include college campuses, business districts, commercial areas, residential areas, villages, estates, plantations, transportation networks, and landscaped parks. Historic districts often include contributing archeological resources that should be considered when evaluating significance and selecting boundaries. Examples of such properties are included in the discussions of districts in rural settings. Examples of archeological districts are presented in the discussion of archeological sites.

Boundaries of historic districts are often difficult to describe verbally. Consider using a scale map instead of a narrative verbal boundary description to define the boundaries.

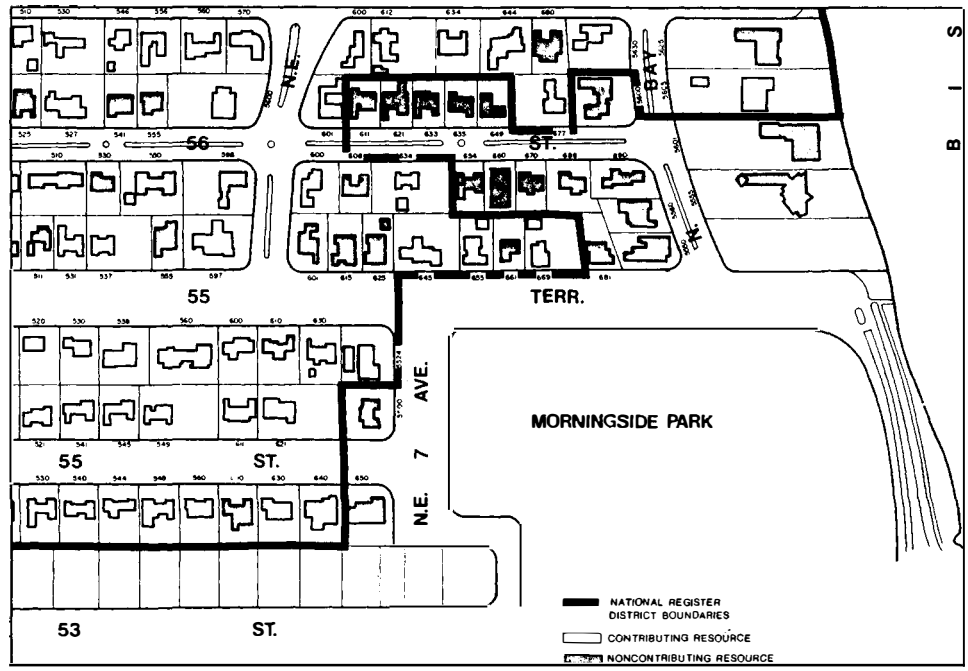
Contiguous Districts in Urban Settings

Taylorsville Historic District, Taylorsville, Spencer County, Kentucky, encompasses 34 contributing buildings and 2 contributing sites in the center of the town. The district includes the contiguous, intact, historic resources at the center of the community, which comprise the residential, commercial, governmental, and religious resources that document the development of Taylorsville from its early days through the 1930s. These buildings, along with the streets, alleys, and lots on which they are located, provide an excellent picture of the development of Taylorsville from 1818, the date of the earliest extant house, to 1938, the construction date of the most recent historic building in the district. The district is eligible under Criterion A because it reflects the effects of a number of key events in the town's history, including designation in 1824 as the seat of newly formed Spencer County and the destruction and rebuilding of its commercial area and courthouse after fires in 1898, 1899, and 1913. The district also reflects gradual trends, such as changing patterns in siting and housing types and styles and the development of the community into a commercial and supply center for the surrounding agricultural county. The district is also significant for its representation of community planning and development: the streets, lots, and buildings in the district document Taylorsville's growth from a tiny, early 19th century settlement to an antebellum government center and into a small early 20th century county seat. Legal lot descriptions and a reasonable limit were used to define the boundaries of the National Register district. **Verbal boundary description:** The district is clearly delineated on the accompanying sketch map. With one exception, it follows the rear property lines of the properties included in the district. At the Enoch Holsclaw House on Garrard Street (#1), the western 50 feet of the property where a 1980s house is located have been excluded. **Boundary justification:** Excluded from the district are other areas of historic Taylorsville where small pockets of historic buildings and individual buildings have been isolated from the district by nonhistoric construction. The historic development along Main Cross Street north of Main Street was considered for inclusion in the district but determined ineligible. Although the area contains a number of historic and contributing buildings including the Taylorsville Public Library, All Saints Church, and some historic houses, the large percentage of nonhistoric and other noncontributing buildings along the street makes it a poor representation of the historic character of the town. Two other collections of historic buildings have also been considered for National Register listing but considered ineligible. Along Reasor Street and Maple Avenue, in an area developed beginning in 1899 as "Reasor's Addition," is a collection of small, modest houses dating from about 1900 through the 1940s. A large number of these houses have been seriously altered by the addition of new siding, major changes to front porches, and lateral additions that alter the form of the house. They no longer constitute an intact historic district. At the east end of Main Street, east of Railroad Street, is another collection of 12 historic houses. Although many of these houses retain a significant number of their identifying features, it was determined that they were too disparate a group, with no theme to unite them, to justify a district. Ten historic buildings in Taylorsville have been determined to be individually eligible for the National Register and will be nominated as part of the current project. The district encompasses the contiguous intact historic properties along Main Street and Garrard Street that help to document the district's area of significance—community planning and development. The district boundaries are determined by concentrations of nonhistoric properties that surround the district on all sides. To the east are nonhistoric and noncontributing commercial buildings. To the south is the 1948 flood wall. To the west, a few remaining historic houses are interspersed with several nonhistoric governmental buildings, including a post office and Spencer County School office and a number of late 1940s infill houses. To the north along Washington Street and Main Cross Street, a number of historic houses at the north ends of the streets are separated from the district by a 1950s church and single-family houses and apartments, all dating from the late 1940s through the 1980s.



Taylorsville Historic District, Taylorsville, Kentucky. Detail of Spencer County Property Identification Map T-2 showing contributing and noncontributing resources, photo views, and National Register boundaries.

Bay Shore Historic District, Miami, Dade County, Florida, includes 201 single-family residences and 70 outbuildings. The district, which is located about 3 1/2 miles north of downtown Miami, represents a wide variety of early 20th century architectural styles, including Mediterranean Revival, Art Deco, Colonial Revival, Mission, and Masonry Vernacular. The 90-acre district is roughly bounded by N.E. 55th Street on the south, Biscayne Boulevard on the west, N.E. 60th Street on the north, and Biscayne Bay on the east. The Bay Shore Historic District is significant at the local level under Criterion A as one of Miami's most intact historic neighborhoods and the city's best extant example of a planned, Boom-era suburb that continued to develop in the years prior to World War II. The district is also significant under Criterion C for its wealth of Mediterranean Revival, Art Deco, and Masonry Vernacular style houses that reflect the diversity and evolution of architectural design in South Florida during the 1920s and 1930s. The National Register boundaries, defined on a map, are based on assessments of historic boundaries and modern setting. **Verbal boundary description:** The boundary of the Bay Shore Historic District is shown as the heavy line on the accompanying map entitled "Bay Shore Historic District." **Boundary justification:** The boundaries of the Bay Shore Historic District have been drawn to generally follow those of the original Bay Shore subdivisions, platted between 1922 and 1924, and the Bay Shore Plaza subdivision, platted in 1936. Excluded from the district are those portions of the Bay Shore subdivisions located west of Biscayne Boulevard, which is now a major commercial area. The proposed boundaries encompass those portions of the present Bay Shore neighborhood that contain a predominance of buildings constructed between 1922 and 1942. The plan and period of significance clearly set the Bay Shore Historic District apart from its surroundings. The boundaries of the district are based on boundaries at a specific time in history, visual changes, and visual barriers. N.E. 60th Street was selected as the northern boundary because it is the northern limit of the earliest Bay Shore subdivision. Furthermore, the area north of this street contains few historic buildings and is of a different character, containing a number of multi-family buildings. On the east, Biscayne Bay and Morningside Park form natural physical boundaries, as well as significant historic boundaries. The bayfront lots help to define the character of the district, and their presence was a major factor in the district's development. Morningside Park is not included because it was not opened until 1951, although the northern portion was acquired by the city in 1935. The rear property lines between N.E. 55th Street and N.E. 53rd Street were chosen as the southern boundary because they delineate the southern limit of the Bay Shore Plaza subdivision. In addition, the majority of houses south of this line were constructed after 1942. Finally, Biscayne Boulevard was selected as the rough western boundary because a majority of the development on Biscayne Boulevard is of a different character. Since the mid-1960s, Biscayne Boulevard has developed into a major thoroughfare with office zoning, and many of the newer buildings are large-scale office or residential structures. Several historic structures do remain, however, and these have been converted into office use. That portion of the original Bay Shore subdivision west of Biscayne Boulevard was excluded because it no longer contains a concentration of historic buildings.



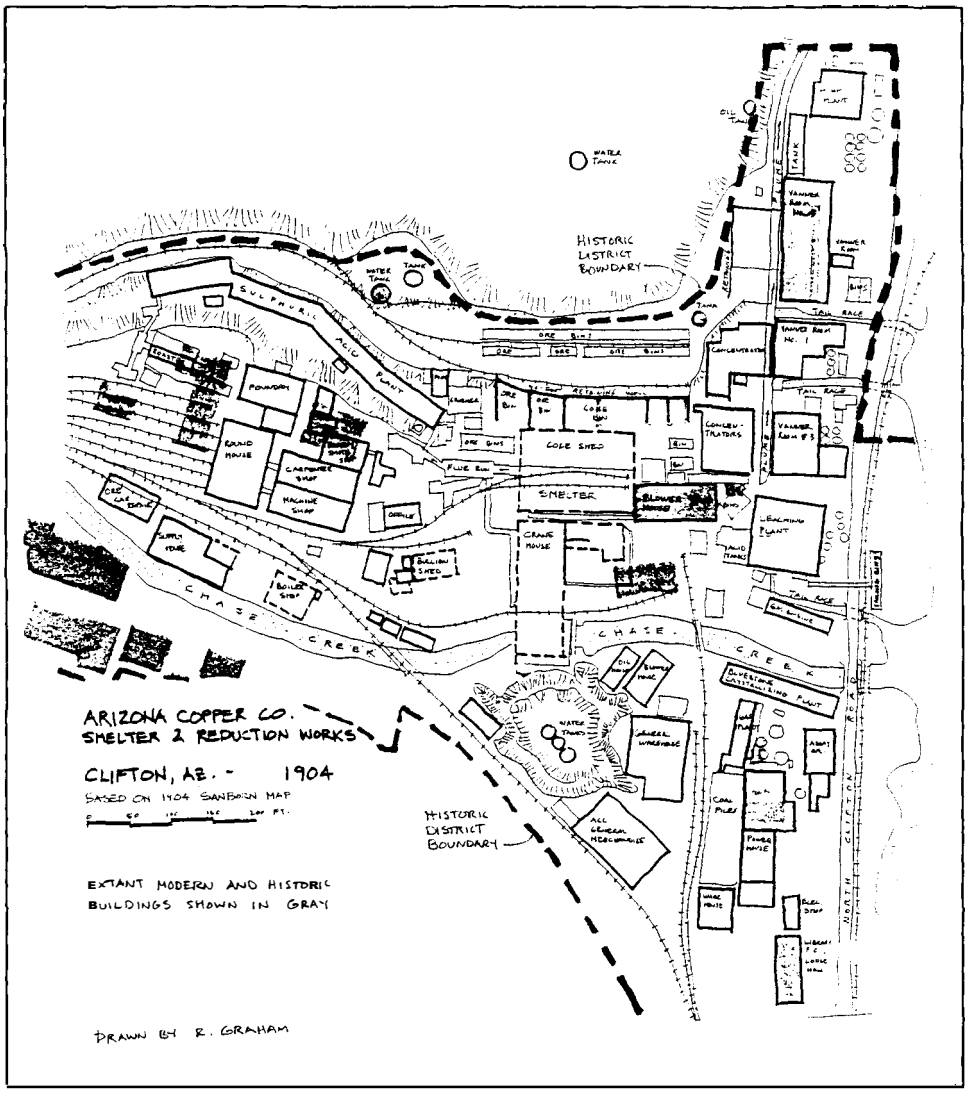
Bay Shore Historic District, Miami, Florida. Detail of map showing a portion of the district's National Register boundary.

Clifton Townsite Historic District, Clifton, Greenlee County, Arizona, clearly defines an intact grouping of buildings of various types dating from the early years of Clifton's development, 1871-1920. These resources lie within the bottom of the canyon formed by the San Francisco River at its intersection with Chase Creek. This low-lying location, while giving the town a visual boundary, has subjected it to periodic flooding. This has had the greatest impact along Park Avenue where many buildings have been washed away in the past. Many aspects of Clifton are represented by the various buildings and structures: residential, commercial, industrial, transportation, religious, and governmental buildings are included as well as character-defining engineering works such as bridges and flood-control features. Remaining buildings represent a variety of late 19th and early 20th century styles. The physical setting in the canyon along the San Francisco River as well as the relative proximity and visual continuity of the structures unifies the district. The general architectural integrity of the district is good, although many properties are abandoned and have fallen into disrepair: 32 of the 86 resources are noncontributing. The district is significant under Criterion A for its association with the early copper mining and smelting operations in that region and with the

town that grew to support those operations. The district is additionally significant under Criterion C for its intact examples of architecture typical of Arizona's mining towns. Two sites within the district, the smelter ruins and a commercial building ruin, are significant under Criterion D as above-ground remnants which reveal important information about significant aspects of the district. The district's period of significance begins with the construction of the earliest remaining structure in 1874 and ends when the copper smelter moved to Morenci in 1937. The National Register boundaries are defined on a map; natural and cultural features were used to define the property.

Verbal boundary description: The boundary of Clifton Townsite Historic District is shown as the dashed line on the accompanying map entitled "Clifton Townsite Historic District."

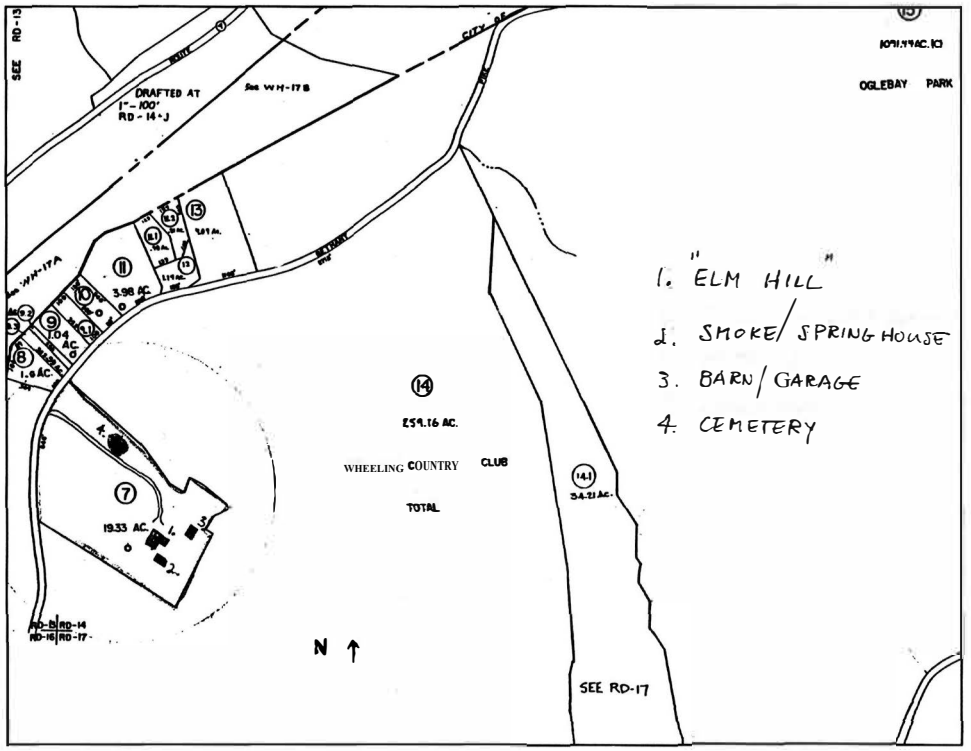
Boundary justification: The boundary includes the properties within an area in central Clifton that retain integrity and are associated with the functioning of Clifton as a major copper smelting center. The boundary excludes, where possible, properties that have lost integrity and/or have no significance. Beginning at the northwest boundary of the district, the cliffs form a natural and well-defined limit encompassing the visible remnants of the smelter and associated structures. Proceeding clockwise, the northern limit of the district is marked by the transition from industrial uses to a residential area that contains modern and historic houses of poor integrity. At the point at which the floodwalls appear at the east bank of the San Francisco River, the boundary includes the riverbed and floodwall. The northeast boundary may be divided into two parts: at the north end, geographic limits of the cliffside define the boundary, no further structures being visible uphill; to the south, the slope becomes less steep and additional structures, either modern or of poor integrity, appear uphill from Park Avenue. Properties one-lot-width uphill from Park Avenue are included within the district, because all properties, even noncontributors, are an important part of the Park Avenue Steetscape. At the southernmost end of Park Avenue, no structures exist at the northeast side of the street and the boundary is drawn to exclude this open land. The boundary continues



Clifton Townsite Historic District, Clifton, Greenlee County, Arizona. Map showing the National Register boundaries.

south, excluding open land, but including the east floodwall south to its end. The southern boundary is defined by a line connecting the southernmost ends of the formally constructed floodwalls at both sides of the San Francisco River (slag-rubble walls continue to the south through much of the town). This location coincides with a construction in the width of the canyon, a bend in the river, and a break in continuity of development from the remainder of the town to the south. The boundary continues northwest along the western floodwall, excluding the site of the former freight depot (now demolished). The boundary then is drawn to include the passenger depot, following the geographic boundary of the cliffside, which firmly delineates the boundary at this location. At the point where the canyon of Chase Creek and the San Francisco River meet, the boundary is drawn at the edge of U.S. Route 666 to exclude an area of intruded properties that step up the cliffside, which is not as steep at this point. At the south side of the Chase Creek commercial area, the property line or street curbline and the cliffside largely coincide to define the edge of development in Clifton. The westernmost termination of the district at Chase Creek is drawn at the end of the area of dense commercial character of Chase Creek and at the westernmost extant of the stone retaining wall at the cliffs north of Chase Creek. This location coincides with a restriction in the width of the canyon and a corresponding pause in the continuity of development sites from development further west.

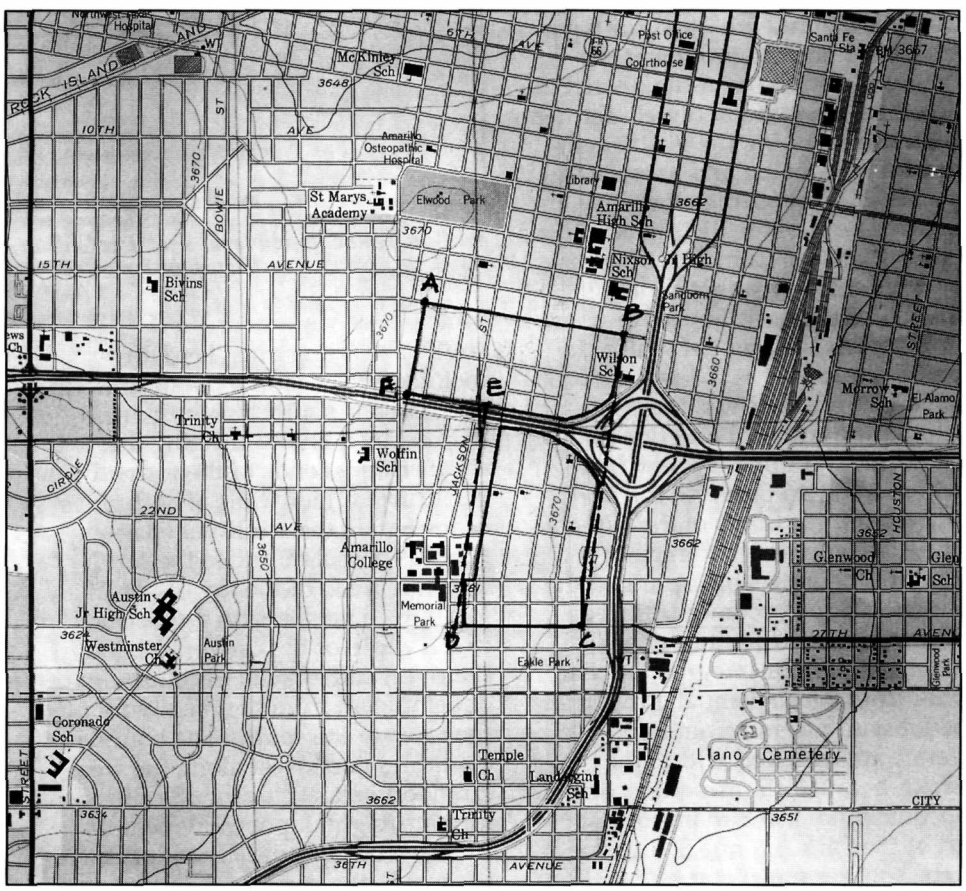
Elm Hill, Wheeling, Ohio County, West Virginia, is a mid-19th century Greek Revival mansion on a secluded esplanade. The area, which was historically farmland, is now part of suburban Wheeling. The grounds are landscaped lawn with shade trees, evergreens, and shrubs. The associated brick springhouse/smokehouse, barn/garage, and cemetery are contributing resources. The legal property description was used to define the National Register boundaries of the property. **Verbal boundary description:** The nominated property is inclusive of the 19.33-acre tract identified as parcel #7, surrounded by acreage of the Wheeling Country Club, on Ohio County assessor's Map RD-14, Richland District, February 1960, Wheeling, West Virginia. **Boundary justification:** The property is inclusive of broad lawns and open areas that form a significant setting between Bethany Pike and the rear property lines. Within this green space stand the house, smokehouse/springhouse, barn, and cemetery.



Elm Hill, Wheeling, West Virginia. Tax map showing the National Register boundaries.

Discontiguous Districts in Urban Settings

Plemons—Mrs. M. D. Oliver-Eakle Additions Historic District, Amarillo, Potter County, Texas, includes about 40 blocks of residential development originally platted as the Plemons Addition (1890) and the Mrs. M. D. Oliver-Eakle Addition (1903). The district is characterized by an eclectic mix of modestly scaled dwellings representing architectural styles of the early 20th century. The historic landscaping reinforces the neighborhood's cohesiveness. Despite the intrusion of a major arterial highway (which separates the district into two discontiguous parts), the historic district retains a high level of its historic integrity, with 357 of 535 resources classified as contributing elements. The district is one of Amarillo's most intact early 20th century residential neighborhoods. The design, scale, and materials of the building stock reflect the cyclical development of Amarillo's economy from the turn of the century to the beginning of World War II. The predominant Prairie School and Craftsman-influenced bungalow styles reflect Amarillo's growth from the 1910s through the 1930s as regional discoveries of oil and natural



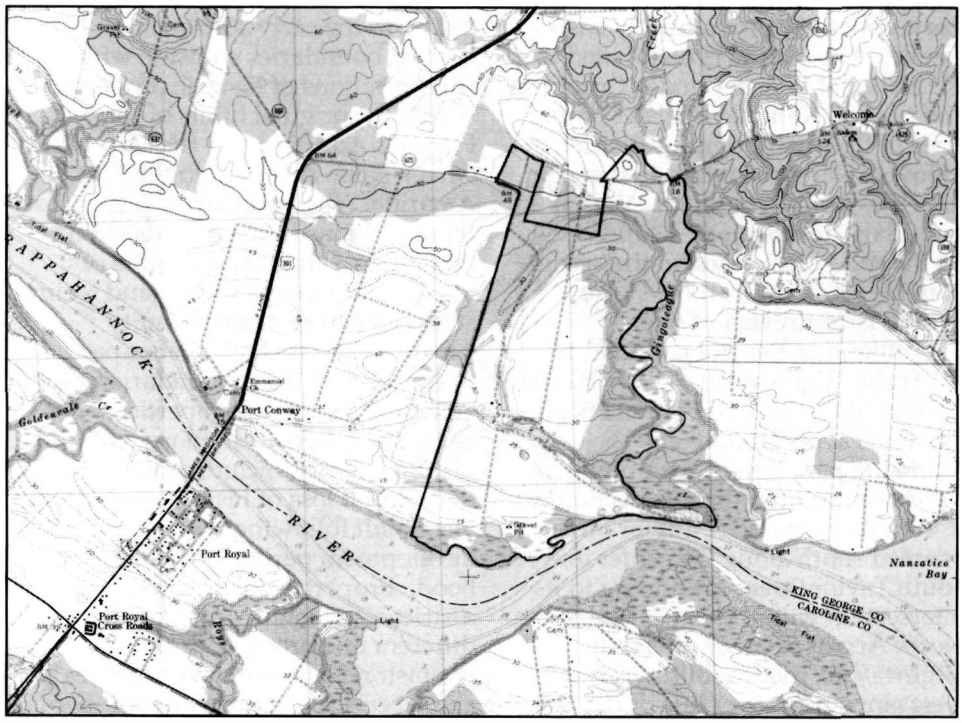
Plemons—Mrs. M. D. Oliver-Eakle Additions Historic District, Amarillo, Texas. Detail of USGS map showing the National Register district boundaries and UTM references.

gas augmented agriculturally based wealth. The district is nominated to the National Register under Criteria A and C. The National Register boundaries of this discontiguous district follow existing roadways that encompass the eligible resources. **Verbal boundary description:** As indicated by the solid black lines on the accompanying USGS map, the historic district is comprised of two discontiguous elements divided by Interstate Highway 40. The northern portion of the historic district encompasses 86 acres bounded by the following parameters: Beginning at the center point of the intersection of E. 16th Avenue and S. Taylor Street, proceed south along the center line of South Taylor Street continuing to its intersection with the center line of the North Access Road of Interstate Highway 40; thence southwest and west along the center line of the North Access Road of Interstate Highway 40 to its intersection with the center line of the alley west of S. Madison Street; thence north through the alley along its center line to its intersection with the center line of W. 16th Avenue; thence east along the center line of 16th Avenue until reaching the point of beginning. The southern portion of the historic district encompasses 94 acres bounded by the following parameters: Beginning at the center point of the intersection of S. Taylor Street and E. 26th Avenue, proceed west along the center line of 26th Avenue continuing to the point of its intersection with the alley west of S. Van Buren Street; thence north through the alley along the center line to its point intersection with W. 24th Avenue; thence east along the center line of W. 24th Avenue to its point of intersection with S. Van Buren Street; thence north along the center line of S. Van Buren Street to its intersection with the center line of the South Access Road of Interstate Highway 40; thence east and southeast along the center line of the South Access Road of Interstate Highway 40 to the point of its intersection with S. Taylor Street; thence south along the center line of S. Taylor Street until reaching the point of beginning. **Boundary justification:** Consisting of two discontiguous elements currently divided by the incursion of Interstate Highway 40, the Plemons—Mrs. M. D. Oliver-Eakle Additions Historic District encompasses a cohesive collection of residential properties dating to the early 20th century. District boundaries coincide with concentrations of historic properties within the original limits of the Plemons Addition and the Mrs. M. D. Oliver-Eakle Addition to the City of Amarillo. The boundaries encompass those portions of the neighborhood that retain a significant degree of integrity of historic setting and feeling strengthened by the continuity provided by historic streetscapes. Areas beyond these boundaries generally consist of properties whose character differs from those within the historic district, including residences that exhibit loss of historic integrity or were built following the historic development period of the neighborhood. Properties outside the historic district also include functionally different resources, such as nonhistoric commercial properties and large-scale institutional properties. Changes in the historic residential character of the neighborhood establish the boundaries on all sides. The northern boundary along 16th Avenue demarcates the transition between the commercial and institutional character of Amarillo's central business district and the residential neighborhoods in the southern reaches of the city. The eastern boundary along Taylor Street coincides with the dissolution of historic residential character prompted by the incursion of Interstate Highway 27. Numerous noncontributing commercial and residential properties compromise the integrity of the area east of this boundary. The southern boundary along 26th Avenue occurs at the point of transition between residential properties developed during the early 20th century and those developed in the 1940s, 1950s, and 1960s. On the west, the district boundary coincides with the limits of residential development with the Mrs. M. D. Oliver-Eakle Addition, as the campus of Amarillo College hems in the neighborhood along this boundary. Interstate Highway 40, which obliterated portions of the historic neighborhood between 18th and 19th Avenues, is excluded from the historic district and divides it into discontiguous components. North of Interstate Highway 40, the western boundary falls along the alley west of Madison, which separated historic residential development from noncontributing commercial development along Washington Street.

Contiguous Districts in Rural Settings

Woodlawn Historic and Archaeological District, King George County, Virginia, is a 899-acre historic riverfront plantation along the north bank of the Rappahannock River and the west bank of Gingoteague Creek. Woodlawn is among the oldest plantations in the county and retains essentially the same boundaries it had when the land was first consolidated in the late 18th century. The property includes 21 buildings, sites, and structures: the planation house, dating from ca. 1790, and its early to mid-19th century ancillary buildings, with major additions and renovations to the plantation house ca. 1841, 1934, and 1982. There are 6 contributing buildings, including the plantation house and two antebellum outbuildings and slave quarters and an early 20th century barn and implement shed. The 10 contributing archeological and landscape sites include 5 prehistoric sites, a historic domestic site, a ditch network, the field system, the farm road network, and a springhouse foundation site. There are 3 noncontributing buildings, 1 noncontributing site, and 1 noncontributing structure. Periods of significance are represented by contributing prehistoric Native American resources and the historic resources of the 17th century and of the late 18th century through 1937. Woodlawn Historic and Archaeological District is eligible under Criteria A, C, and D at the state and local levels. The well-preserved plantation house is one of a number of important and interrelated houses built along the Rappahannock River between 1760 and the 1850s. In addition to its architectural significance, the district also represents the historical influence of agriculture and transportation on the settlement and economy of the Northern Neck of Virginia. Woodlawn is also significant for its association with the Turner family, whose history in Virginia dates to the mid-17th century and whose occupation of Woodlawn lasted into the 1920s. The Turners were members of an extended family of prominent landowners who left an important architectural legacy in the area. The social and cultural values of the antebellum planter class are reflected in the architectural traditions of Woodlawn. The patterns of residential, agricultural, and wood lot

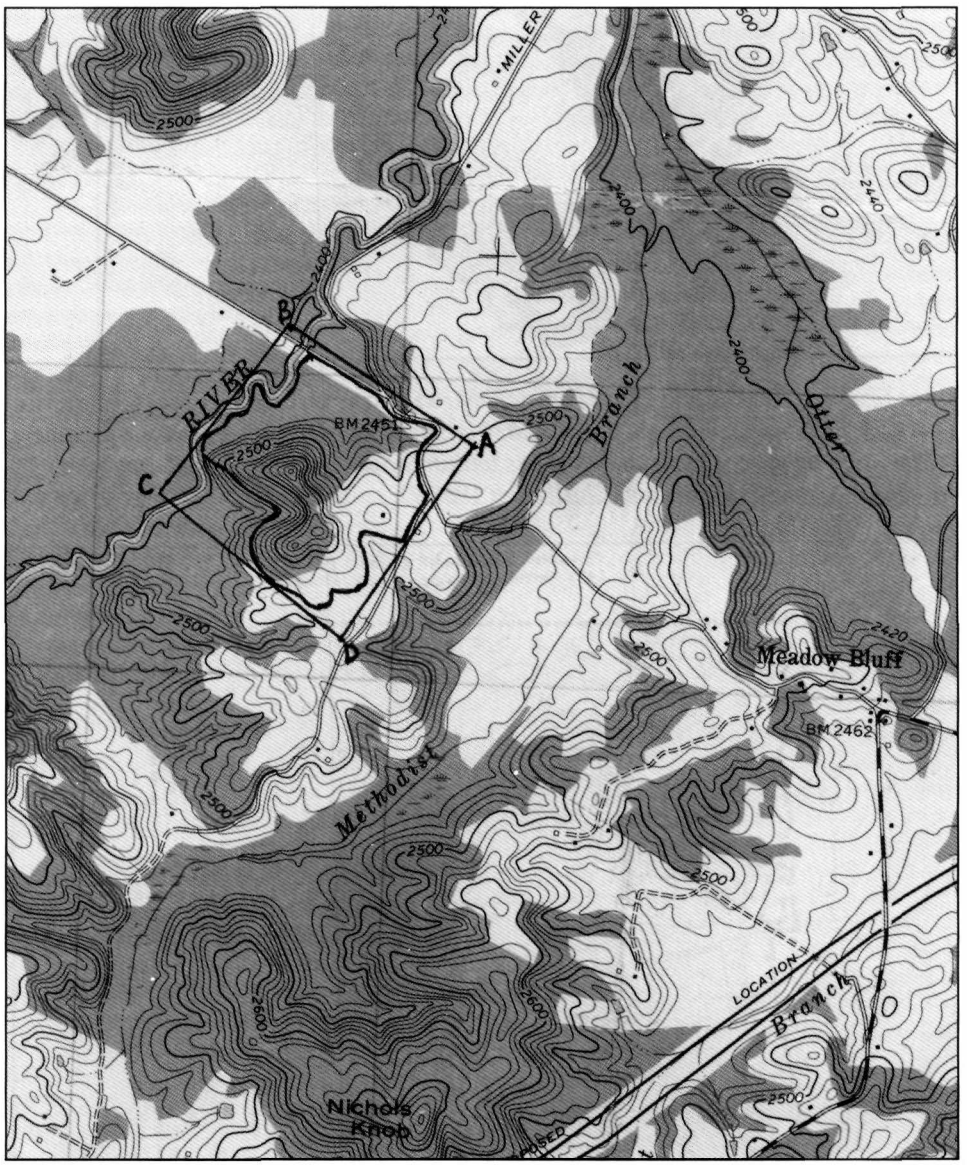
land use persist today. Field patterns, vegetation, and drainage ditches dating from the period of significance survive. Natural and cultural features and reasonable limits were used to define the National Register boundaries of this large rural property. **Verbal boundary description:** The boundary of Woodlawn Historic and Archaeological District begins at the northern bank of the Rappahannock River at UTM 18 309780 4226640; and continues north/northeast until it intersects the drainage ditch (Archeological Site 44KG94) at UTM 18 309910 4227160; and continues north/northeast along the western edge of the ditch until it intersects a tributary of Gingoteague Creek at UTM 18 310380 4228360; and continues north/northeast until it intersects a dirt road at UTM 18 310560 4228890; and follows the western edge of the dirt road until it intersects State Route 625 to UTM 18 310645 4229165; and continues west along the northern edge of State Route 625 to UTM 18 310645 4229240; and continues north/northeast to UTM 18 310600 4229520; and continues east until it intersects the northern edge of State Route 625 at UTM 18 310730 4229430; and crosses State Route 625 and follows the southern edge of State Route 625 to UTM 18 310830 4229380; and continues south/southwest to UTM 18 310675 4228845; and continues east to UTM 18 311220 4228820; and continues north/northeast to the southern edge of State Route 625 at UTM 18 311300 4229240; and continues west along the southern edge of State Route 625 to UTM 18 311240 4229240; and continues northeast, crossing State Route 625, to UTM 18 311490 4229495; and continues southeast to UTM 18 311520 4229430, east to UTM 18 311560 4229450, southeast to UTM 18 311610 4229325, east to UTM 18 322735 4229270, and southeast, crossing State Route 625, to the southern edge of State Route 625 at UTM 18 311760 4229220; and continues east along the southern edge of State Route 625 until it intersects the Gingoteague Creek at UTM 18 311830 4229230; and continues south along the center of the Gingoteague Creek until it intersects the Rappahannock River at UTM 18 312045 422660; and continues east along the northern bank of the Rappahannock River to UTM 18 309780 4226640. **Verbal boundary justification:** The boundary chosen for the Woodlawn Historic and Archaeological District corresponds to traditional and current property lines. Significant contributing historic and archeological resources are contained within these boundaries.



Woodlawn Historic and Archaeological District, King George County, Virginia. Detail of USGS map showing contributing resources and the National Register boundaries.

Dietz Farm, Greenbrier County, West Virginia, is a 96-acre property, occupying a high knoll with gently sloping pastures and adjacent woodlands at Meadow Bluff, overlooking the historic Kanawha and James River Turnpike. During the Civil War, the house served as temporary Confederate and Union headquarters and hospital, and winter quarters were constructed near the house. The brick farm house, two outbuildings, and a noncontributing barn make up the farm complex. On two knolls several hundred meters due west of the house are the earthwork remains of Confederate fortifications. In a depression between the knolls are the unmarked graves of an unknown number of Confederate soldiers who died in the house during the time that it served as a hospital. The burial area is a contributing site. South of the turnpike is a third contributing Confederate earthwork. The National Register boundaries follow cultural features, natural features, and a contour line, defining the extent of the contributing resources and their setting. **Verbal boundary description:** Beginning at a point where County Route 60/25 meets State Route 28; thence approximately 750 feet northeast along the west side of Route 60/25; thence in a line approximately 1,600 feet due northwest along the southern side of Route 60/25 to where said route begins to cross Meadow River; thence in a slightly meandering fashion following the east bank of Meadow River for approximately 2,500 feet southwest to where the major contour line meets the east side of Meadow River; thence following the principal 2,500-foot contour line (as lined in red on the accompanying USGS topographic map) in an eastward direction; thence south eastward; thence north for approximately 2,000 feet until the line meets the east side of State Route 28; thence in a line northwest for approximately 500 feet along the west side of State Route 28 to the point of beginning, encompassing approximately 96 acres. **Boundary justification:** The boundary is drawn so as to include the principal area immediately around the Dietz House/Headquarters that served as outdoor bivouac for soldiers of both sides during the time the property

was used for military purposes. On the north and west the boundaries are drawn so as to include the major Confederate trenches along the east side of the Meadow River and the defensive earthworks on the two principal rises that were constructed in anticipation of Federal assault down Route 60 from the northwest. The boundaries also include the burial sites of Confederate soldiers who died while the property was being used as a field hospital.

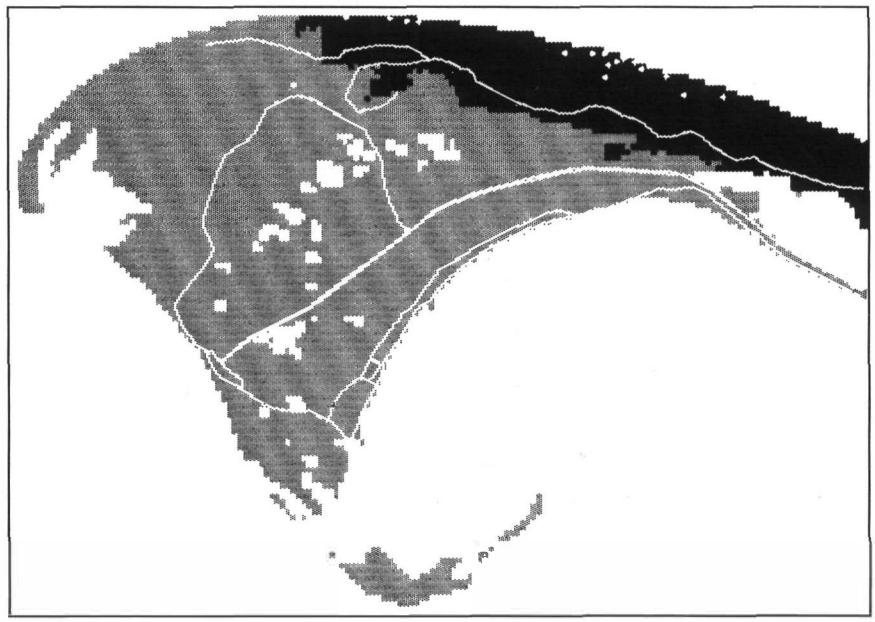


Dietz Farm, Greenbrier County, West Virginia. Topographic map showing the National Register boundaries and UTM reference points.

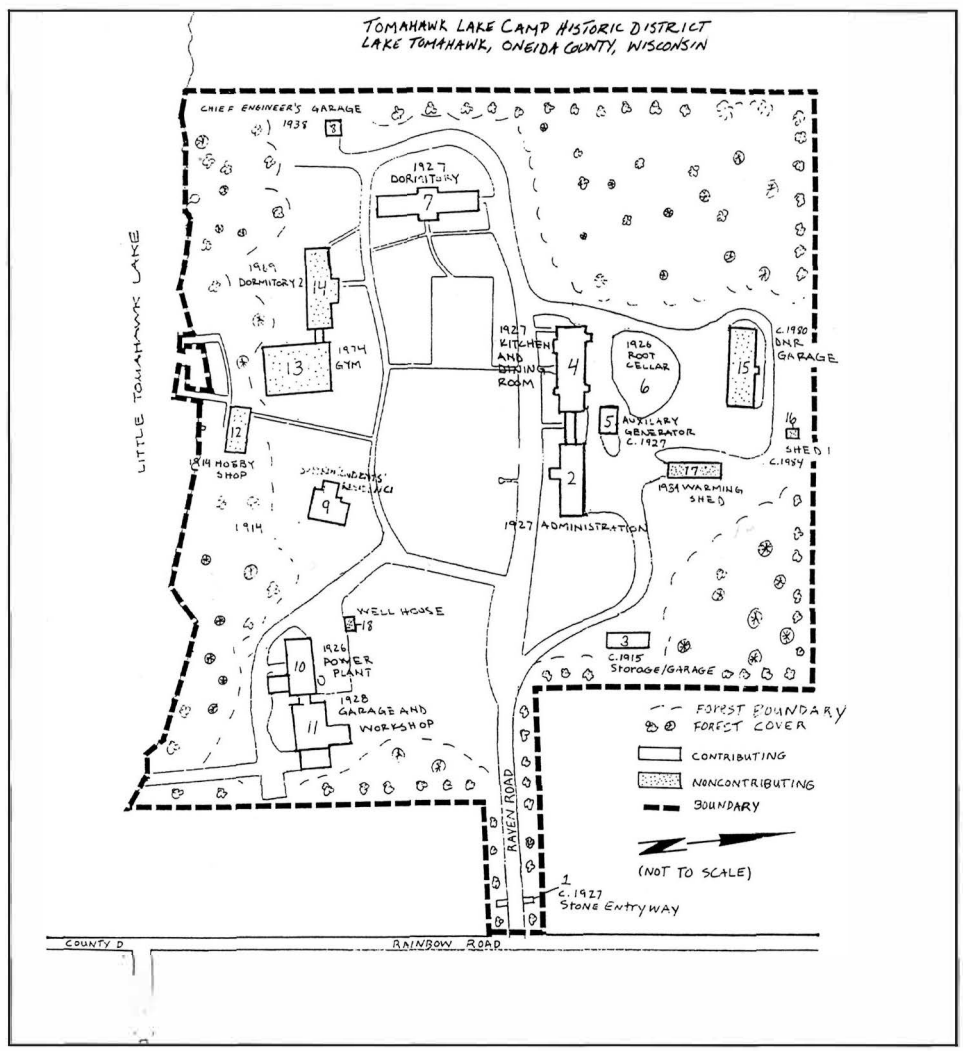
Dune Shacks of Peaked Hill Bars Historic District, Cape Cod, Barnstable County, Massachusetts, is located within Cape Cod National Seashore, on Cape Cod peninsula. The dune shacks, which have been determined eligible for the National Register as a historic district, are scattered along a three-mile stretch of unvegetated dunes in view of the Atlantic Ocean. The shacks were historically used as summer retreats by members of a colony of artists, writers, poets, actors, journalists, bohemians, and socialites from the 1920s to 1960s. The dune shacks and the natural landform of the dunes form a unique historic cultural landscape. The eligible property includes 17 shacks and the surrounding dune landscape. Because the natural landscape served as setting and inspiration for the inhabitants, the appropriate boundary includes the collective extent of the visible landscape for all the dune shacks in the district. Geographic Information System (GIS) analysis techniques were used to analyze the viewshed for the purpose of defining the district boundaries. Natural features, cultural features, and viewsheds were used to define the National Register boundaries of the property. **Verbal boundary description:** The boundary for the Dune Shacks of Peaked Hill Bars Historic District encompasses approximately 1,500 acres and is described as follows: the shoreline to the north, the crest of the second dune line away from the shore south of the second jeep trail delineated on the accompanying USGS map, the viewshed line of the cluster of shacks F, A, I, and D on the west, and the crest of the first dune ridge to the east of shack B. These boundaries are demarcated on the attached map of the area. **Boundary justification:** This boundary encompasses all of the dune shacks and the area incorporating the entirety of the historically significant cultural landscape and associated important viewsheds as seen from the dune shacks. This boundary is supported by the written documentation and by the attached GIS viewshed analysis. The shifting characteristics of the dune landscape are recognized; for this reason this boundary is a close approximation. In light of dune movement, the boundary may move in some locations some degree, but the basic principles underlying its justification

shall remain constant. Allowing for this movement, the boundary shall continue to include the dune shacks and the extent of the landscape to the crest of the second dune ridge, wherever that may occur.

Tomahawk Lake Camp Historic District, Oneida County, Wisconsin, is a 20th century tuberculosis rehabilitation camp. The 17 buildings and one structure are located on a site surrounded by forest reserve on Little Tomahawk Lake. The camp was established in response to advances in the treatment of tuberculosis and the perceived need to reforest the cut-over region of northern Wisconsin. At the camp, infected patients were isolated from general hospital patients and benefitted from the curative effects of open space for exercise and fresh air. Natural features, cultural features, and reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** Beginning at the intersection with the south edge of Rainbow Road and a north-northwest line extending 200 feet south of Raven Road, commence north-northwest along that line 500 feet to the intersection of a north-south line extending 200 feet east of the garage and workshops to Little Lake Tomahawk; commencing south along that line to the intersection of the Little Lake Tomahawk shoreline, then northwest along the lake shore to the intersection of a north-south line extending 150 feet west of the garage, then commencing north along that line to the intersection of a west-east line extending 150 feet north of the shed and commencing east along that line to the intersection of a north-northwest line extending 200 feet north of Raven Road and commencing along that line to the intersection of County Highway D, then running south along the west side of County Highway D to the point of beginning. **Boundary justification:** The Tomahawk Lake Camp boundary was drawn to encompass all historic and nonhistoric resources in the complex. It also includes the surrounding landscape features that provide the northwoods setting. This includes the wooded area around the Raven Road entrance and the woods surrounding the buildings. The northwoods environment was a very important part of the camp's outdoor, health-conscience philosophy that was advertised to



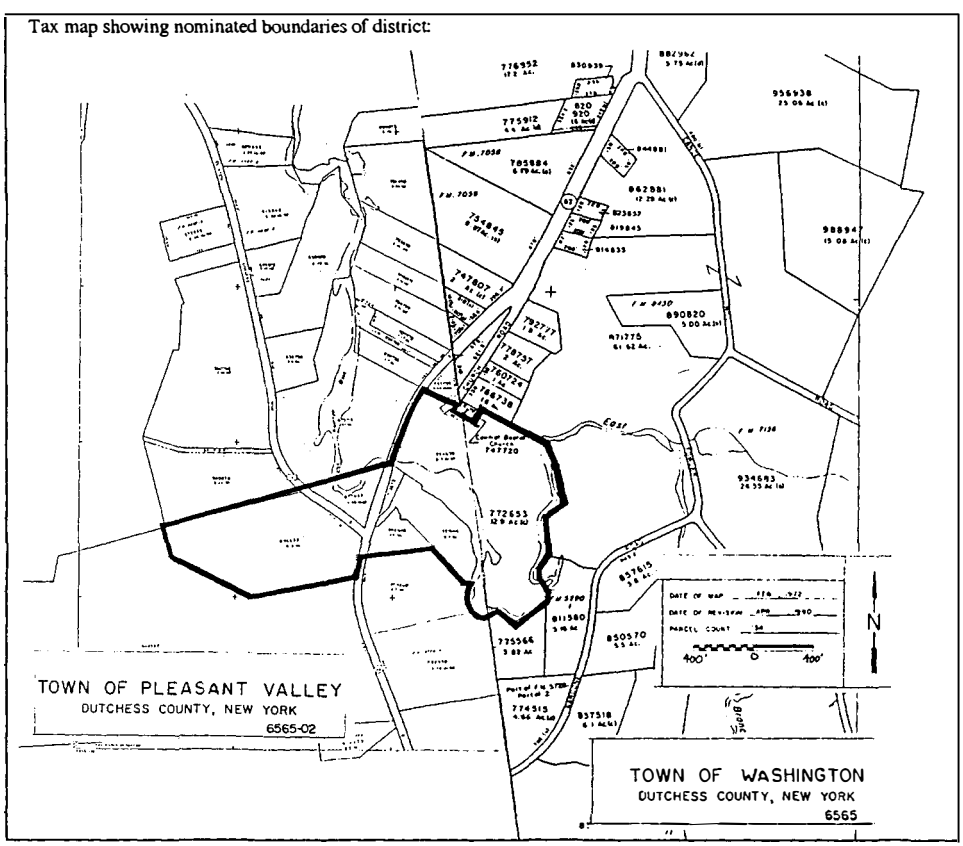
Dune Shacks of Peaked Hill Bars Historic District, Barnstable County, Massachusetts. This GIS viewshed analysis map shows the National Register-eligible historic district in black and the dune shacks as white dots within the district; roads, trails, and lakes are shown in white (Knoerl and Chittenden 1990:7).



Tomahawk Lake Camp Historic District, Lake Tomahawk, Oneida County, Wisconsin. Sketch map showing the National Register boundaries.

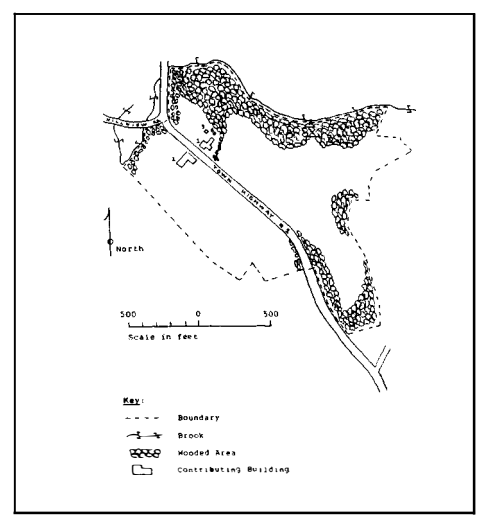
prospective patients. The site includes 21 acres of the former 536-acre site. Acreage not included in the district is heavily wooded and does not contribute to the historic significance of the complex.

Bloomvale Historic District, Dutchess County, New York, is a small industrial site, established in the mid-18th century. The district's eleven contributing resources include the Bloom house and well, the Bloomvale mill, a worker's house, the mill's water system, the old highway and bridge abutments, four mill complex building sites, and the district's archeological remains. The agricultural function of the Bloom farm declined; farm buildings are gone and the agricultural fields are overgrown. However, the industrial history of Bloomvale is well represented, and the Bloom house and the industrial complex remain sufficiently intact to preserve the setting of the mill site and the visual and functional interrelationships of its components. Thus, the industrial history of the site is the focus of the district's significance. The boundaries of the district were selected to include the present-day parcels containing the significant historic resources. National Register boundaries correspond to tax parcel boundaries. **Verbal boundary description:** See attached site map and boundary map composed from local tax maps. **Boundary justification:** The boundaries of the district were determined by the present-day parcels containing the significant historic components identified on the site map. Today, the house and the mill are owned separately. The Bloom house and its lot were divided from the mill site and two northern farm lots in the 1860s. Those farm lots were subsequently sold off and have since been further subdivided. The agricultural function of the Bloom farm declined over the years to the point where the farm buildings have disappeared and the agricultural fields reforested. Conversely, the industrial history of Bloomvale is well represented and the Bloom house and the industrial complex remain sufficiently intact to preserve the setting of the mill site and the visual and functional interrelationships of its components. Thus, it is the industrial history of the site that is the focus of the district's significance.



Bloomvale Historic District, Dutchess County, New York. Tax map showing the National Register district boundaries.

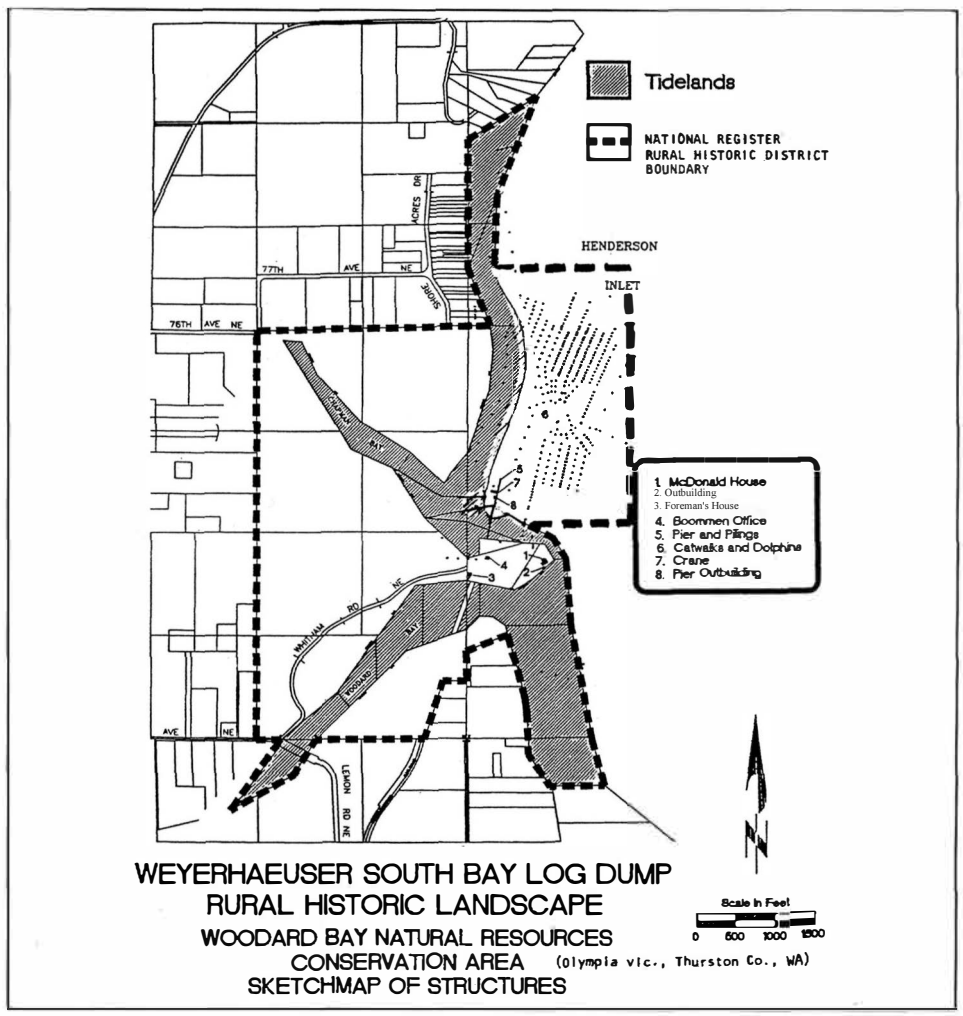
Martin M. Bates Farmstead, Richmond, Chittenden County, Vermont, is a 45-acre property including a 19th century Italianate farmhouse and associated barn, ice house, and chicken house surrounded by hay fields and forested hills. The farmstead contributes to understanding the development of dairy farming in the region; therefore, the intact open farm fields around the farm buildings are also important components of the farmstead. Although the farm is no longer in operation, the fields continue to be hayed. Natural features, tax parcel boundaries, and reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** The Bates Farmstead includes land on both sides of Richmond Town Highway #1. The boundary above the road is formed by the southern edge of a brook that drains into the Huntington River and the eastern line of tax parcel number 11-51.1. The boundary below the road follows the southern line of tax parcel number 11-50 to a point approximately 500 feet from the edge of the road. From that point, the boundary extends in a straight line parallel with the road to the brook, which it touches south of Hillview Road. The boundary thence follows the brook downstream to Hillview Road and continues along the edge of that road to the town highway. **Boundary justification:** The boundary includes all buildings and the surrounding open fields historically associated with the Bates Farmstead.



Martin M. Bates Farmstead, Richmond, Vermont. Plan map showing the National Register boundaries, which include buildings and associated fields and woods.

Rocky Butte Scenic Drive Historic District, Portland, Multnomah County, Oregon, includes the viewpoint on the crest of Rocky Butte, the scenic drive approaches to the viewpoint, and Joseph Wood Hill Park, also on the crest. Rocky Butte Scenic Drive is a serpentine automobile roadway that climbs with three switchbacks and a final girdling loop to the summit of Rocky Butte. Contributing features include the roadways and accompanying historic structures, the crest viewpoint structure, and the historic aircraft beacon. The district's original association was with recreational driving and scenic views, although residential development has encroached on the lower portions of the roadway; nevertheless, the viewpoint still offers a scenic vista over the Columbia River plain in all directions. The road right-of-way and tax parcel boundaries were used to define the National Register boundaries of the property. **Verbal boundary description:** The nominated area is located in Sections 21 and 28, Township 1N, Range 2E, Willamette Meridian in Portland, Multnomah County, Oregon. It is a lineal, serpentine district consisting of the entire 50-foot-wide right of way of Rocky Butte Road and approach sections of NE 92nd Avenue from Halsey Street on the south and NE Fremont Street from 82nd Avenue on the west to include all historic developed features of the scenic parkway and Joseph Wood Hill Park at the crest of Rocky Butte, encompassing in all 21.48 acres, more or less, in the corporate limits of the city of Portland. The total number of contributing features (14) includes the road system, its retaining walls, two tunnels, drainage structures, stone fenders, stone bollards, the park, a stone outlook with lamp posts, a stone staircase, a viewfinder, a commemorative monument, and the historic aircraft beacon. **Boundary justification:** The district is located in Township 1 North, Range 2 East, Sections 21 and 28. The district is bounded by the 50-foot-wide right of way as measured from the center lines of Rocky Butte Road, and of 92nd Avenue from Halsey Street to Rocky Butte Road South, and along Fremont Street from 82nd Avenue to Rocky Butte Road North. Tax Lot 47 of Section 28 is located within the confines of Rocky Butte Road as it circumnavigates the crest of the butte. The district comprises an approximate total of 21.48 acres. This includes 2.38 acres which is the Joseph Wood Hill portion of the district, Tax Lot 47. Because the district comprises approach drives and a viewpoint located within the confines of approach drives, it was felt that the road right of ways would appropriately bound the district. The approach drives pass through residential areas at the butte's foot and then wind through newer residential areas as they climb the butte. Houses cluster along portions of the roads on the butte. Other portions of the roads are still in natural woodland.

Weyerhaeuser South Bay Log Dump Rural Historic Landscape, Thurston County, Washington, encompasses 260 acres of uplands and 190 acres of tideland along the Henderson Inlet of southern Puget Sound. Twin estuaries of Woodard and Chapman Bays on Henderson Inlet intersect the property forming north, south, and central peninsulas of land. The property reflects a continuity of land uses and the evolution of functional relationships between wooded land and water in the south Puget Sound region through prehistoric and historic periods. Use of the property by successive groups—Native Americans, Euro-American settlers, loggers, oyster growers, and the Weyerhaeuser log transport operation—reflects historic waterfront activities on lower Puget Sound over thousands of years. The use of the site for log dumping and booming by Weyerhaeuser Corporation since 1926 has forestalled encroachment of modern subdivision development typical of adjacent areas, thus preserving evidence of the land-use patterns of earlier eras. Evidence of prehistoric and 20th century land use is still evident, and natural landscape features survive as well. The area was occupied by prehistoric Native Americans, who gathered



Weyerhaeuser South Bay Log Dump Rural Historic District, Thurston County, Washington. Plan map showing the National Register boundaries.

shellfish and plant foods and hunted there. European-American settlers arrived in the mid-19th century, and logging began in the 1880s. The area was purchased by Weyerhaeuser in the mid-1920s for log transshipment. Tax parcel boundaries were used to define the National Register boundaries of this property. **Verbal boundary description:** Boundaries as described in parcel numbers 11918100000, 11918410000, 11918430000, 11917320000, 11917320100, 11917330100, 11917220000, 93006700000, 93006800000, 93006900000, 93007000000, 93007100000, 93007200000, 93007300000, 93007400000, 93007500000, 93007600000, 93007700000, and 93007800000 on file at the Thurston County Assessor's Office and illustrated in the attached map. **Boundary justification:** The nominated property includes all land in the historic Weyerhaeuser ownership.

Discontiguous Districts in Rural Settings

(See also Discontiguous Archeological Districts)

Crockett Canyon/Coyote Ranch Archeological District, Southwest, [location restricted], contains 16 discontiguous sites associated with prehistoric cultures. The sites are located among the cliffs and canyons of the Ardra Plateau, approximately 20 miles northeast of Fort Sickles. The sites were nominated as a district because they document an extensive, diverse, and well-preserved assemblage of prehistoric artwork; they define distinct stylistic traditions among petroglyph and pictograph groups; and they identify long-term aboriginal habitation directly associated with the rock art. The sites are related by artistic style, artifact groupings, and geologic setting. Individual site boundaries are based on the extent of surface features and artifacts. **Verbal boundary description:** The Crockett Canyon/Coyote Ranch Archeological District consists of 16 significant areas of aboriginal rock art, shelters, and campsites. The accompanying topographic maps show the location and configuration of each nominated site by using labeled points and UTM grid coordinates. Crockett Canyon sites are: [excerpted site example] 33GG111: This site contains approximately 1.5 acres and is found on the USGS 7.5' Crockett Canyon topographical sheet. From point 1 (UTM coordinates QQQ/RRR), follow the 2,400-foot contour southward to point 2 (UTM coordinates SSS/TTT), a distance of about 197 feet (60 m). Continue to the NE for approximately 197 feet (60 m) to point 3 (UTM coordinates UUU/VVV), and then to the NW about 262 feet (80 m) to point 4 (UTM coordinates WWW/XXX). Proceed southward along the 2,400-foot contour approximately 197 feet (60 m) back to point 1. The State owns this site, which is located in Section 4, Township 2S, Range 4W. **Boundary justification:** All 16 sites in the district are culturally linked by similar artifactual and pictographic design styles. The boundaries of the discontiguous district correspond to the boundaries of the 16 individual segments (sites). Individual site boundaries were determined by mapping the extent of surface-visible cultural features and artifacts. All of the sites are fairly discrete locations of cultural activity, with artifacts concentrated near the petroglyph panels, shelters, and fire-cracked rock hearths that comprise the most significant features at each locus. Areas of low-density scattered artifacts or features (less than approximately 1 artifact per 50 square meters) were not included within the site boundaries. The data the sites present jointly is more important and convincing than when presented in isolation. Taken together, these data overlap and succeed each other, documenting over 7,000 years of occupation and the change in subsistence from hunting and gathering to agriculture. Reflecting this economic change is a rich and varied body of artistic expression that spans the entire period of occupation.

Parks as Districts

Local, State, and national parks may also include National Register properties. Boundaries for National Register properties within parks are limited to eligible resources; therefore, the National Register boundaries may differ from park boundaries. Special provisions apply to historic and cultural units of the National Park System (as discussed below). In selecting boundaries, consider the extent of the eligible resources and their setting. Do not include buffer zones or large areas that lack contributing resources.

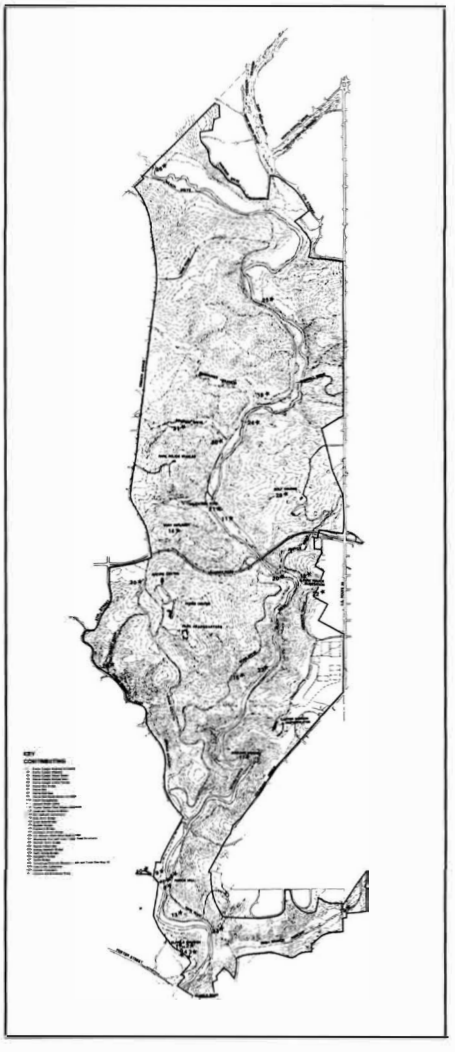
Each historic and cultural unit of the National Park System is automatically listed in the National Register on the date its authorization is signed into law. During the interim period before the National Park Service has defined the extent of the areas of historic value, the National Register boundaries are those defined in the National Park Service authorizing legislation, regardless of ownership. Congress may authorize for the National Park System, with no requirement of notice, land areas not yet acquired as well as those never to be acquired in fee, including those to be controlled by easement acquisition.

For each historic or cultural unit, the National Park Service will evaluate the entire authorized (listed) area, prepare a nomination form, and precisely define the boundaries to encompass the resources that have historic significance. If the proposed National Register boundaries coincide substantially with the park boundaries, the documentation is forwarded to the Keeper of the National Register, and a courtesy copy is sent to the State Historic Preservation Officer. When the Keeper signs the nomination form, the boundaries of the property considered to be listed in the National Register are thus defined by the documentation.

If the proposed National Register boundaries differ from the area authorized, the documentation is submitted to the State Historic Preservation Officer for comment within 45 days. In some cases, the area documented and subsequently listed may be less than the area authorized to exclude nonhistoric buffer zones. The listed area may include privately owned areas, but only to the extent that they have been authorized by Congress.

Rock Creek Park Historic District, Washington, D.C., is a 1,754.62-acre property in the northwest quadrant of the District of Columbia. The property is legally defined as Reservation 339 and its boundaries are roughly defined as Sixteenth Street on the east, Oregon Avenue and Branch Road on the west, Klingle Road on the south, and the District of Columbia line and Parkside Drive on the north. Rock Creek Park is a natural reserve within a heavily urbanized area. The park is surrounded by commercial and residential development, and it has

only two modern areas of concentrated recreational and administrative activity. Otherwise, Rock Creek Park Historic District retains a high degree of integrity that well reflects the development of this public landscape between 1791 and 1941. Andrew Ellicott's 1791 survey recorded the topography of the property and shows the location of the District of Columbia boundary at the northwest corner of the park. **Verbal boundary description:** The boundary of Rock Creek Park Historic District is shown as the bold black line on the accompanying map entitled "Rock Creek Park Historic District, 1990." This tract of land is legally defined as Reservation 339. **Boundary justification:** The boundaries of this district were determined by both legal and historical considerations. Reservation 339 was the land set aside by Congress as Rock Creek Park in 1890 with approximately 100 acres of related boundary rectifications and additions. The Piney Branch Parkway was acquired by the government in 1907 and was extended in the 1920s. It was included in this district because it is legally a part of Reservation 339. Furthermore, there is also historical justification for the parkway's inclusion in Rock Creek Park Historic District because this land area was surveyed and included in the 1918 Olmsted comprehensive plan for Rock Creek Park. The plan was prepared in 1917-1918 by the famous Brookline, Massachusetts, landscape architecture firm of Frederick Law Olmsted, Jr., and his half-brother John C. Olmsted. Their plan for Rock Creek Park was adopted in 1919 and has remained a vital management document ever since. As an administrative unit, Rock Creek Park presently contains many other urban parks that are not contiguous to Reservation 339, including the Rock Creek and Potomac Parkway, the Normanstone Parkway, and the Soapstone and Klingle valleys. These areas were acquired and integrated into Washington's park system between 1913 and 1950 as access routes and a means of preserving the watershed of the Rock Creek valley. Although the Melvin Hazen Park and Pinehurst Parkway are contiguous to Rock Creek Park, they were acquired and consolidated as park land within the recent past and do not share the Piney Branch Parkway's early legal or historical associations to Reservation 339.



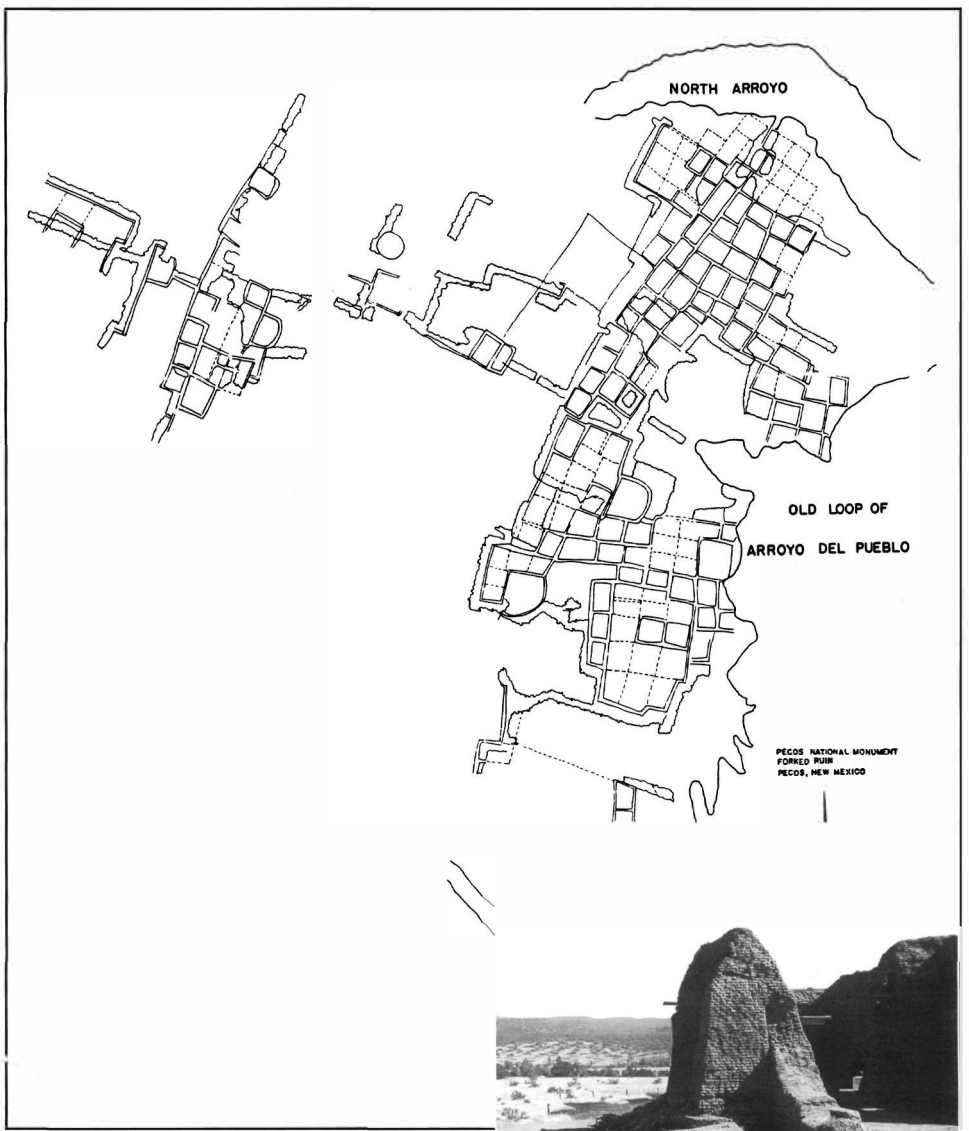
Rock Creek Park Historic District, Washington, D.C.. Plan map showing the National Register boundaries.

Pecos National Historical Park, San Miguel County, New Mexico, is strategically located at the mountain gateway between the Southern Great Plains And the Rio Grande valley. The boundaries of the 384.8-acre archeological district are coterminous with Pecos National Historical Park. The history of the upper Pecos River valley, as represented by the archeological and historic sites within the archeological district, demonstrates a succession of attempts to exploit the natural and cultural resources of the Southwest. The 96 archeological sites within the property represent a complex of pueblos inhabited by ancestors of the Pecos Indians from A.D. 800 to 1838 and a series of Spanish Franciscan mission churches and secular buildings constructed during the 17th and 18th centuries. Adolph Bandelier mapped ruins at Pecos in 1881, and archeologists including Edgar Hewett, Kenneth Chapman, A.V. Kidder, Stanley Stubbs, and Bruce Ellis conducted investigations at various sites on the property during the first half of the 20th century. **Verbal boundary description:** Pecos National Historical Park is surrounded by private ranch holdings, almost all of which are owned by the Fogelsons. The nominated district boundaries are coterminous with the National Historical Park boundaries. **Boundary justification:** Pecos National Histori-

Rock Creek Park Historic District, Washington, D.C.. Southeast view of Boulder Bridge (ca. 1901-1902). (William Bushong)

cal Park was established in 1965 and added to in the 1980s by land donations from the Fogelsons.

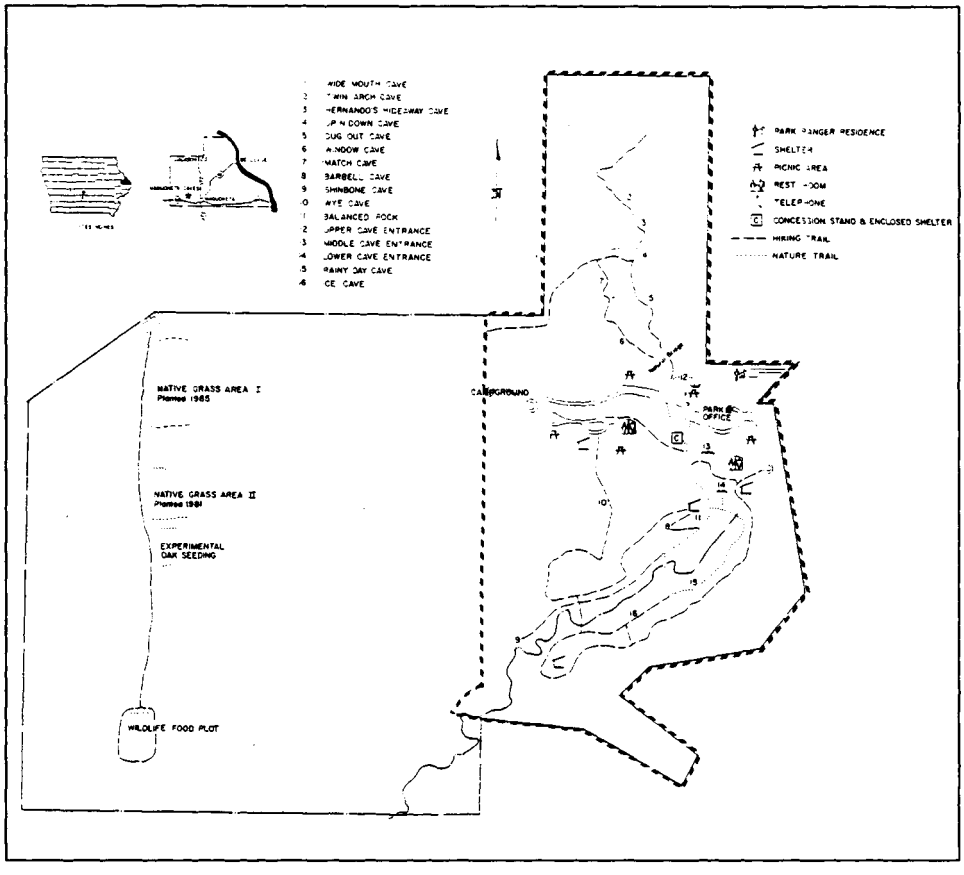
Maquoketa Caves State Park Historic District, Jackson County, Iowa, includes 111 acres of land acquired in three parcels between 1921 and 1940. These parcels constitute the eastern portion of the park and include all of the park structures, most of which were built between 1932 and 1939. Between 1961 and 1981, 161 acres were added west of the historic park area as a nature preserve; this acreage is not included in the National Register historic district. In the center of the park is a steep ravine with sheer limestone cliffs ranging from 10 to 75 feet high. Foot trails snake around the tops of the cliffs to overlooks, which offer views of the valley and caves below. Other trails lead to cave entrances which are connected by underground passages. Nine of the fifteen structures in the park are associated with the 1932-1939 development period and are contributing resources. The district is significant as one of the first parks established in Iowa, selected because of the property's limestone caves. The property in included in two multiple property submissions, "The Conservation Movement in Iowa, 1857-1942," and "CCC Properties in Iowa State Parks, 1933-1942." Because of the related periods of significance, the 1940 boundaries are appropriate. **Verbal boundary description:** The historic portion of Maquoketa Caves State Park comprises three separate [adjoining] parcels which form an irregular tract of 111.08 acres located in Section 6, T-84N, R-1E. This acreage covers approximately half of the park on the east side. The tract is bounded on the west by newer park lands and on the north, east, and south by privately owned farmland. **Boundary justification:** These boundaries represent the extent of park holdings as of 1942.



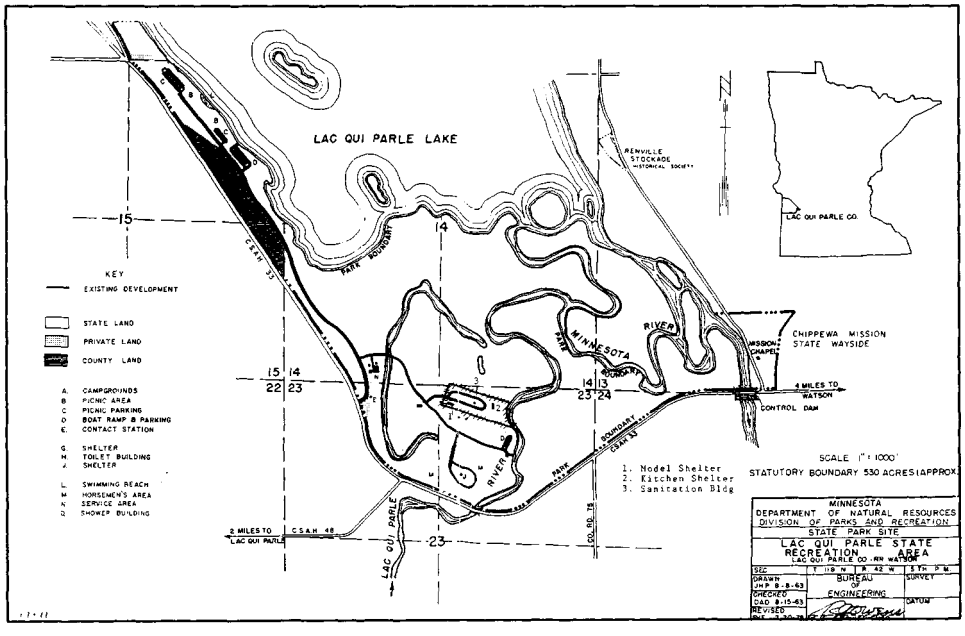
Pecos National Historical Park, San Miguel County, New Mexico. Plan map of the Forked Lightning Ruin, adapted from A. V. Kidder's field maps from 1926, 1927, and 1929.

Pecos National Historical Park, San Miguel County, New Mexico. Ruins of the 17th century church. (Pecos National Monument)

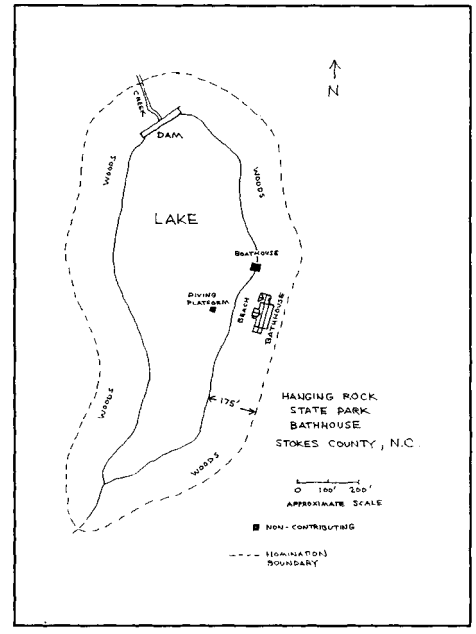
Hanging Rock State Park Bathhouse, Stokes County, North Carolina, is the largest and most distinctive facility constructed in North Carolina by the Civilian Conservation Corps (CCC). The building is significant for its architecture (Criterion C) as the most prominent example of CCC-constructed rustic park facilities in North Carolina. Included in the nomination are the adjacent 12-acre Hanging Rock Lake and its concrete stone dam, which were built concurrently with the bathhouse. These resources are also eligible for their associations with the CCC program in North Carolina. The building and its setting embody the ideals of park design that emphasized harmony with the natural landscape through sensitive siting and the use of native building materials and rustic architectural forms. The lake and shoreline, which are included as a contributing site, constitute the historic setting, which is integral to the historic character and function of the bathhouse. A reasonable limit of 175 feet from the lakeshore was used to define the National Register boundaries.



Maquoketa Cave State Park Historic District, Jackson County, Iowa. Plan map showing the park boundaries and the National Register district boundaries.



Lac qui Parle State Park WPA/Rustic Style Historic District, Lac qui Parle County, Minnesota. Plan map showing the National Register boundaries.



Hanging Rock State Park Bathhouse, Stokes County, North Carolina. Plan map showing the National Register boundaries.

Verbal boundary description: The nominated area includes the 12-acre Hanging Rock Lake and 12 acres of surrounding land defined by a line running 175 feet from the high-water edge of the lake on all sides. **Boundary justification:** The nominated area incorporates the bathhouse and its immediate historic setting of lake and surrounding woodland essential to its historic function and character, including the dam that forms the lake.

Lac qui Parle State Park WPA/ Rustic Style Historic District, Lac qui Parle County, Minnesota, includes three buildings in the public-use area of the park, located adjacent to the Lac qui Parle River. Architects for these projects were from the National Park Service and the Design Office within the Department of Conservation. The district is significant for its association with the social, political, and economic impact of the Great Depression and the subsequent development of the Federal relief programs that were responsible for the construction of the contributing buildings. The buildings are outstanding examples of rustic style/split stone construction. The boundaries were selected to include a limited setting around the three contributing buildings. **Verbal boundary description:** The boundary for Lac qui Parle State Park WPA/ Rustic Style Historic District is shown

as the heavy, cross-hatched line on the accompanying map entitled "Lac qui Parle State Recreation Area." It is defined by the land immediately encompassing three historic buildings. **Boundary justification:** The boundary includes the buildings developed by the WPA that have been historically associated with the park and that maintain historic integrity.

BOUNDARIES FOR PARTICULAR PROPERTY TYPES

Traditional Cultural Properties

A traditional cultural property is a building, structure, site, object, or district that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. Defining boundaries for traditional cultural properties can be challenging. Carefully consider the traditional uses of the property. For example, where a property is used for contemplative purposes, viewsheds are important and must be considered. In an urban district significant for its association with a specific social group, consider the limits of residence or use by the group. Consider changes in time, as well. For example, archeological evidence may contribute information on past use areas, which may differ from present use areas. Select boundaries that encompass the area associated with the traditional use or practice and document the factors that were considered in the boundary justification. For further assistance, consult *National Register Bulletin : Guidelines for Evaluating and Documenting Traditional Cultural Properties*, the appropriate State historic preservation office, any concerned Indian tribal preservation program, and the traditional group or community that ascribes values to the property.

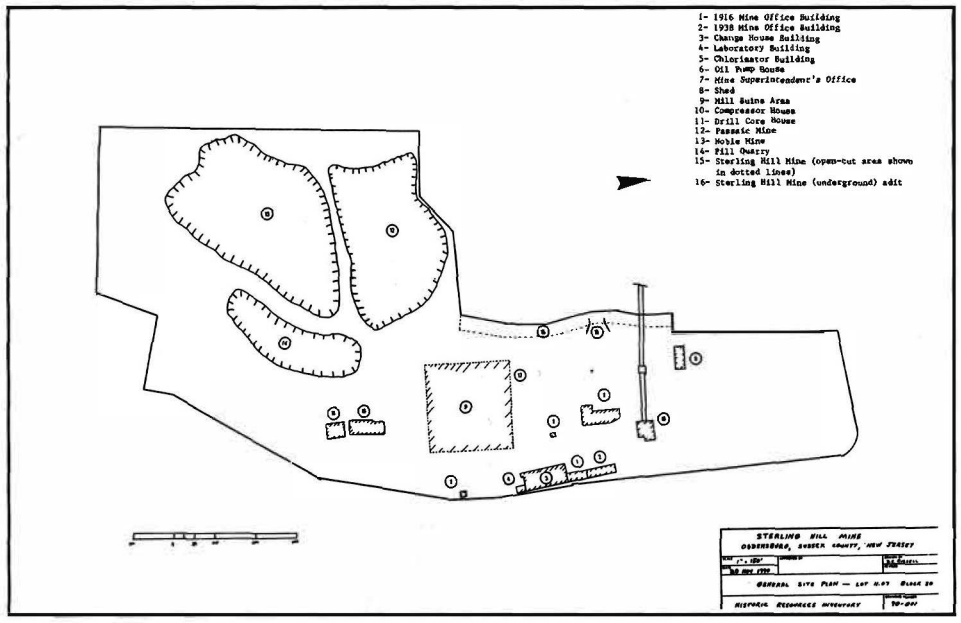
Kuchamaa (Tecate Peak), Tecate, San Diego County, California, is a sacred mountain to the Kumeyaay Indians of southern California and northern Baja California, Mexico. Although there are modern intrusions (a road and communications facilities on the summit), the mountain is important to the Kumeyaay community's belief system. The peak is a special place, marking the location for the acquisition of knowledge and power by Kumeyaay shamans. Oral tradition records the use of Kuchamaa as the place where several important shamans instructed their initiates and the sacred place of vision quests and purification ceremonies. Contemporary Native Americans continue to use Kuchamaa during the full moon and at equinoxes, when they pray for renewal of Earth Mother and peace. Kuchamaa is significant under Criterion A for its association with Native American cultural history. A contour line and a legal boundary were used to define the National Register boundaries of the property. **Verbal boundary description:** Kuchamaa is 3,885 feet above mean sea level. The nominated area includes all land from the 3,000-foot contour level up to and including the peak. On the north it drops abruptly to Highway 94. The western flank consists of several dissected subpeaks and the eastern aspect is an upland spine. The southern boundary conforms to the international border [between the United States and Mexico]. This is a total of 510 acres, 320 to the west and 190 to the east. **Boundary justification:** Kuchamaa was and remains important to southern California Native Americans as a structural unit. If the mountain lacked its physical proportions and regional position, then it is quite possible that the peak would not have been revered. The physical stature of Kuchamaa constitutes one reason that it was used as a place of spiritual learning and worship. During a visit to Kuchamaa to evaluate a development proposal, Native Americans identified a sphere of spiritual influence extending for several miles from the mountain. This constitutes one zone of spirituality; approachable by both Kwisiyai (shamans) and ordinary people. Actual Native American use of Kuchamaa provides guidelines for establishing boundaries. This nomination includes that portion of the mountain located above an elevation of 3,000 feet above mean sea level. According to current data, this area is considered sacrosanct. In the ethnographic and prehistoric past, the summit was used for arcane rituals and approached only by shamans and their initiates. Cultural taboos prohibited common folk from ascending beyond a spring known as God's Tear. The location of God's Tear Spring has not been verified, but best estimates place it as the spring located just above the 3,000-foot level. Finally, according to Rosalie Pinto Roberston [granddaughter of the last traditional chief of the Kumeyaay], the high mountain slopes hold burials of cremated Kwisiyai. As with the spring, none of these has been verified. Their presence above the 3,000-foot level requires the use of the contour line as the boundary for the National Register district. The nominated portion of Kuchamaa includes 510 acres, with the eastern segment, consisting of public lands, containing 190 acres. The western, state-owned parcel is demarcated by north-south section lines. This area contains 320 acres. The southern boundary conforms to the international border. Private lands occupy a large portion of the lower slopes of the mountain below the 3,000-foot contour line.

Mining Properties

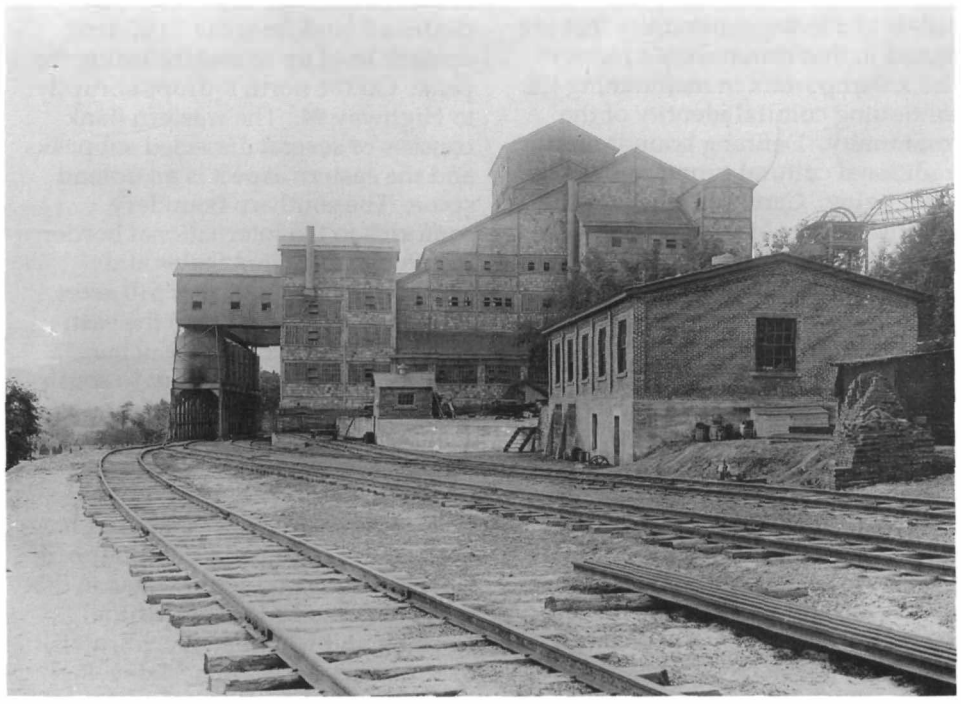
Sterling Hill Mine, Ogdensburg Borough, Sussex County, New Jersey, is located on a 33-acre tract that includes five mines (open-cut, open-pit, and underground types), nine contributing buildings, one noncontributing building, and the ruins of a structure. Primary construction periods were 1830-1897 and 1916-1938. The property is located on the west side of Plant Street and the south side of Passaic Avenue, about one-half mile from the municipal center of the Borough of Ogdensburg. The property was divided among three heirs in the early 19th century. The parcels were not commonly owned until the end of the 19th century, when all three parcels were purchased by the New Jersey Zinc Company. Mining on the property ceased in 1986, and the property was converted into a museum dedicated to the history of the Sterling Hill Mine, mining history, and mineralogy of the Sterling Hill ore body. The legal description of the lot that includes the eligible resources was used to define the National Register boundaries. **Verbal boundary description:** The boundary of the site consists of the entire parcel of land known as Block 31, Lot 11.07 lying and being within

the Borough of Ogdensburg, Sussex County, New Jersey. **Boundary justification:** The boundary includes the entire municipal lot that has been historically associated with mining activities at Sterling Hill during the period 1830-1940.

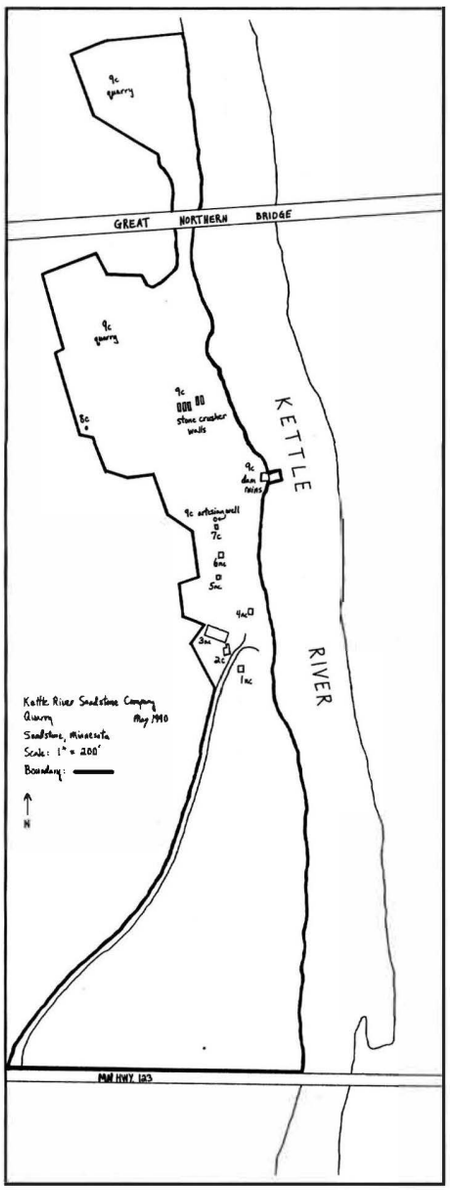
Kettle River Sandstone Company Quarry, Sandstone Township, Pine County, Minnesota, is located along the Kettle River on the east edge of the city of Sandstone in east-central Minnesota. The property includes the abandoned quarry site, the pumping station, the artesian well control building, and derrick mast. The quarry, which was active from 1885-1919, was designated a city park in 1960. The quarry was the source of high-quality sandstone which was used in buildings throughout the United States. Cultural features, natural features, and reasonable limits were used to define the boundaries of the National Register property. **Verbal boundary description:** The nominated property is roughly bounded by Minnesota Highway 123 to the south, on the north by a point 600 feet north of the Great Northern Railroad bridge, the Kettle River to the east, and the former quarry walls to the west, as shown on the accompanying map entitled "Kettle River Sandstone Company Quarry, May 1990." **Boundary justification:** The boundary encompasses all of the abandoned quarry site including those buildings, structures, and ruins that have historically been part of the Kettle River Sandstone Company and that maintain historic integrity. Within the boundary is city-owned Robinson Park and the recently constructed park shelters and buildings located toward the south end of the quarry.



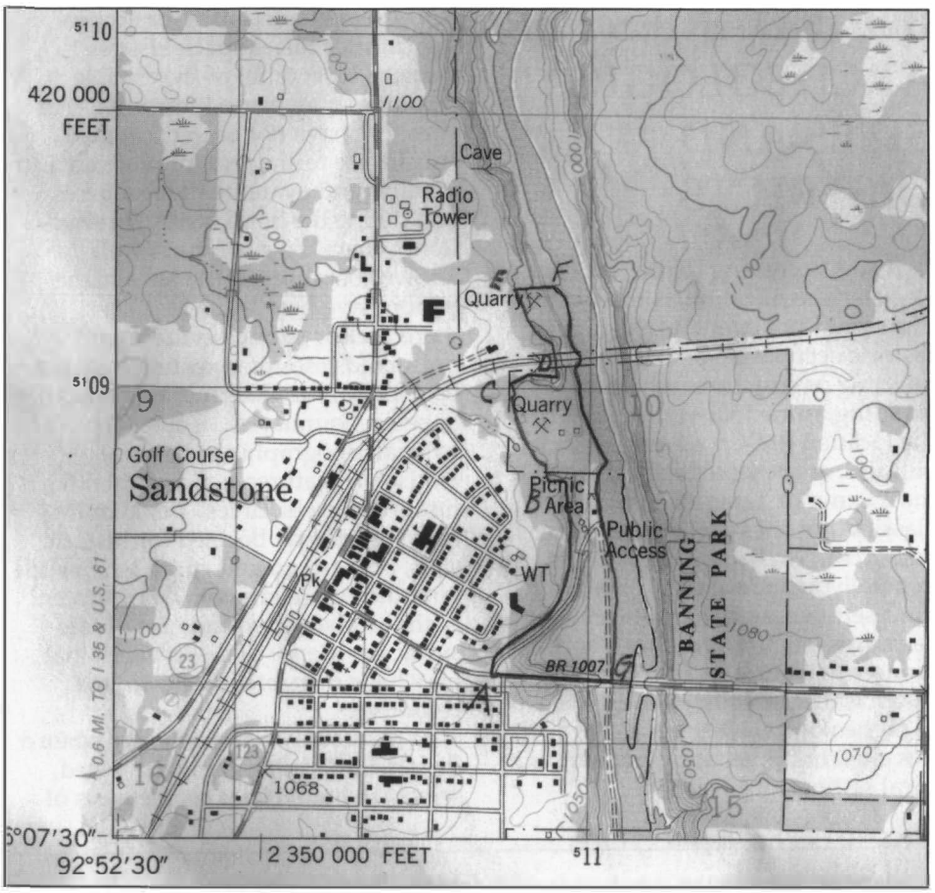
Sterling Hill Mine, Ogdensburg, Sussex County, New Jersey. Plan map of the National Register boundaries and resources.



The Sterling Hill property as it appeared in 1918. (Gary Grenier)



Kettle River Sandstone Company Quarry, Sandstone, Minnesota. Plan map (ca. 1990) showing the National Register boundaries and resources.



Kettle River Sandstone Company Quarry, Sandstone, Minnesota. Detail of USGS quadrangle map showing the location and boundaries of the National Register property.

Kettle River Sandstone Company Quarry, Sandstone, Minnesota. View of the quarry facing south. (Michael Koop)

BOUNDARIES FOR ARCHEOLOGICAL SITES AND DISTRICTS

A site, according to the National Register classification, is the location of a significant event, prehistoric or historic occupation or activity, or building or structure (whether standing, ruined, or vanished) where the location itself possesses historic, cultural, or archeological value. The most common types of resources classified as sites are archeological resources. Archeological districts generally include several sites and their settings, as well as other types of resources (such as structures and landscape features). For examples of districts that include buildings as well as archeological sites, see the properties cited in the sections on districts in rural settings.

Defining boundaries for archeological sites raises special issues because most or all of the eligible resources may be underground. For sites that have not been excavated, subsurface testing can provide data to identify and evaluate the resources and define the boundaries. In situations where the site type is well known (because similar sites in the region have been excavated) and there is clear surface evidence of preserved resources, testing may not be necessary to determine significance or select boundaries. Consider natural topographic or cultural landscape features that indicate the limits of the resources. Legal or lot boundaries may be used for historic sites, both urban and rural, when such boundaries are know to be consistent with the historic boundaries. Note surface evidence of disturbance that may have disrupted or destroyed resources.

When access is restricted or when a deeply buried site cannot be tested, select the boundaries on the basis of predictions (based on topographic setting and site type). Describe the limitations of the data and support the predictions with a discussion, demonstrating the reliability of the predictions in the context of known local and regional site types.

For all archeological properties, include a large-scale map (preferably 1 inch to 200 feet) to document the property boundaries, along with a USGS map locating the property. The large-scale map may be used in place of a verbal boundary description.

It is difficult to provide a range of examples of boundaries from listed properties because locational information is routinely restricted to protect the resources from vandalism. Location and boundary information is recorded in the documentation but is not released to the public. The boundary descriptions that follow are drawn from documented sites, but most descriptions are altered and edited to omit critical locational information: direction, distance, and landmark information in the original

GUIDELINES FOR SELECTING BOUNDARIES: ARCHEOLOGICAL SITES AND DISTRICTS

(summarized from *How to Complete the National Register Registration Form*, p. 57)

The selection of boundaries for archeological sites and districts depends primarily on the scale and horizontal extent of the significant features. A regional pattern or assemblage of remains, a location of repeated habitation, a location of a single habitation, or some other distribution of archeological evidence all imply different spatial scales. Although it is not always possible to determine the boundaries of a site conclusively, a knowledge of local cultural history and related features, such as a site type, can help predict the extent of a site. Consider the property's setting and physical characteristics along with the results of archeological survey to determine the most suitable approach.

Obtain evidence through one or several of the following techniques:

- **Subsurface testing**, including test excavations, core and auger borings, and observation of cut banks.
- **Surface observation** of site features and materials that have been uncovered by plowing or other disturbance or that have remained on the surface since deposition.
- **Observation of topographic or other natural features** that may or may not have been present during the period of significance.
- **Observation of land alterations** subsequent to site formation that may have affected the integrity of the site.
- **Study of historic or ethnographic documents**, such as maps and journals.

If the techniques listed above cannot be applied, set the boundaries by conservatively estimating the extent and location of the significant features. Explain the basis for selecting the boundaries in the boundary justification.

If a portion of a known site cannot be tested, the boundaries may be drawn along the legal property lines of the portion that is accessible, provided that portion by itself has sufficient significance to meet the National Register Criteria and the full extent of the site is unknown.

Archeological districts may contain **discontiguous elements** under the following circumstances:

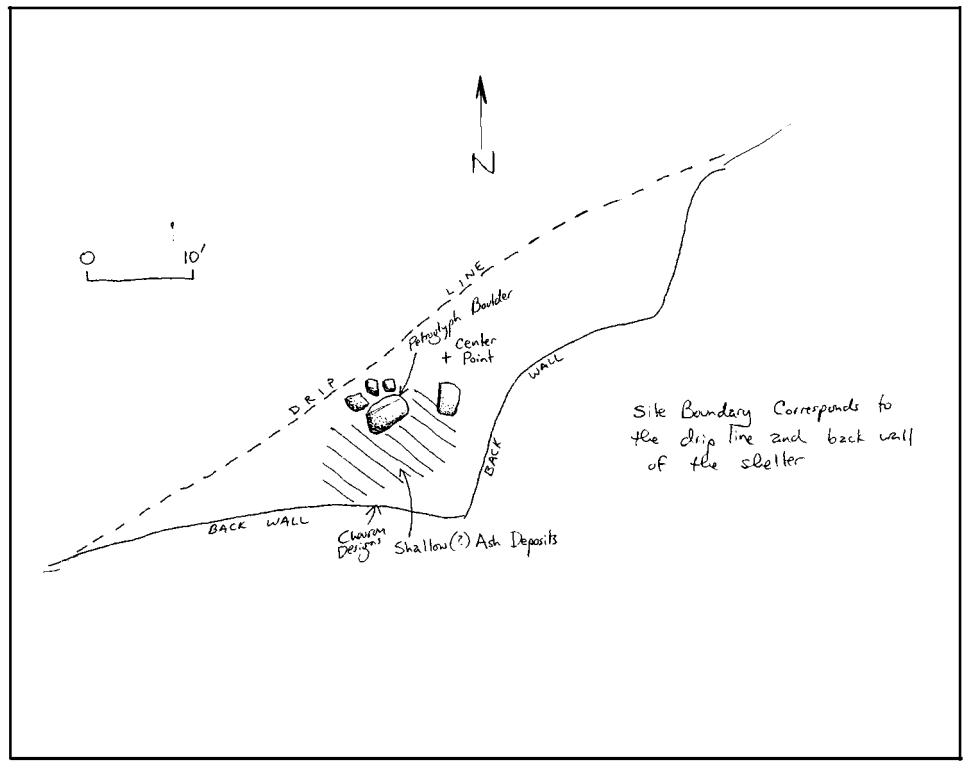
- When one or several outlying sites has a direct relationship to the significance of the main portion of the district, through common cultural affiliation or as related elements of a pattern of land use, and
- When the intervening space does not have known significant resources.

Geographically separate sites not forming a discontiguous district may be nominated together as individual properties within a multiple property submission.

documentation is not included. Sites are identified by type and region, not by name and specific location. For further assistance, see *Appendix: Definition of National Register Boundaries for Archeological Properties; National Register Bulletin: Guidelines for Evaluating and Registering Historical Archeological Sites and Districts;* or contact the appropriate State Historic Preservation Officer, Federal Preservation Officer, or the National Register to speak with an archeologist.

Archeological Sites

Rockshelter Petroglyphs, Upper South [location restricted], includes two petroglyphs components, one on a boulder at the mouth of the shelter and a second on a ledge. The designs are well preserved examples of prehistoric rock art in the region. No other archeological resources have been identified in the immediate vicinity of the rockshelter. Natural features were used to define the National Register boundaries. **Verbal boundary description:** The nominated property includes the entire rockshelter, the petroglyph boulder, and that portion of the sandstone ledge containing the chevron-like designs. The boundary for the site is indicated on the sketch map. The center point shown on the sketch map corresponds to the UTM coordinate on the USGS quadrangle. **Boundary justification:** The rockshelter houses the petroglyphs and is an integral element of this rock art site. The shelter probably served as a temporary or extended habitation and focus of ritual activities associated with the execution of the petroglyphs. As a conspicuous natural feature of cultural importance, the rockshelter may also have been ascribed mythological identification in connection with the rock art.



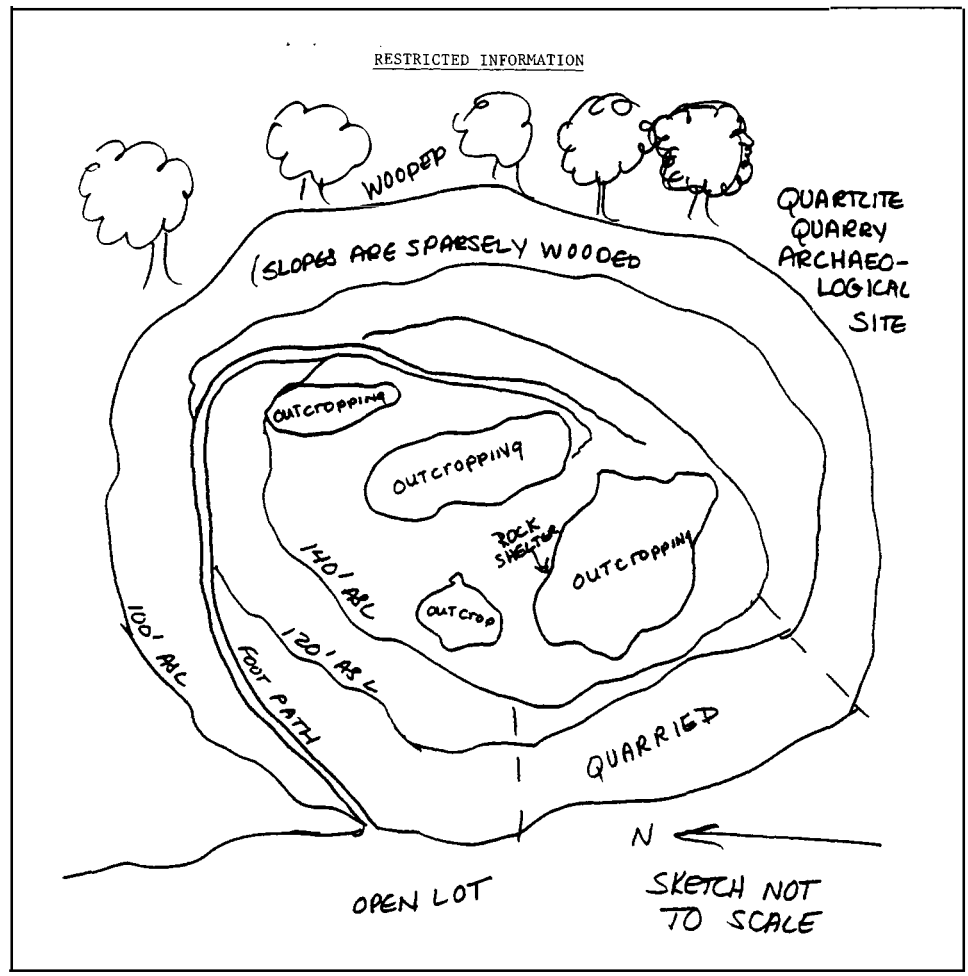
Rockshelter Petroglyphs, Upper South. Sketch map showing the National Register boundaries.

Historic Trading Company Warehouse and Clerk's House Site, Pacific Northwest [location restricted], are located on a natural river levee, parallelling the south bank of a major river. By the early 1840s, the trading company established a grain warehouse on the site adjacent to the south bank of the river. The warehouse and an associated clerk's house were erected to maintain the company's monopoly on trade in the region by purchasing agricultural produce from residents of the river valley. A flood in 1861 destroyed other development in the area and moved the warehouse about 50 yards; it was never used again. The site is significant for its role in the early settlement and trade in the region. Archeological excavations indicated that cultural strata were mixed as a result of 20th century recreational use of the site. However, artifacts are plentiful above the 100-foot contour line, and horizontal integrity remains to generally define building locations and differential functions of structures within the site. A contour line and a reasonable limit were used to define the National Register boundaries. **Verbal boundary description:** The nominated property is located in the NW 1/4 SW 1/4 Section 4, Township 2S, Range 4W, in a state park. The boundaries of the property encompass 1.03 acres of the 100-foot contour levee of a flood plain that contains the site of the trading company warehouse and its associated archeological features, including the clerk's house site. The north, south, and west boundaries follow the 100-foot contour line; the east boundary is defined by a reasonable line crossing the levee and intersecting a granite monument. The monument and a park pavilion are included within the boundaries as noncontributing resources. **Boundary justification:** The bounds of the site were determined by surface observation, informant testimony, and subsurface excavation.

Prehistoric Quartzite Quarry Archeological Site, Middle Atlantic [location restricted], consists of several large outcroppings of quartzite and sandstone. Surface evidence suggests that the lithic source may have been used by prehistoric Native Americans as early as the Middle Archaic period. Archeological sites in the region often include debitage thought to be from this quarry source. There has been no subsurface testing at the site; evaluation is based on surface evidence and knowledge of associated sites in the vicinity. The site is significant for the information it may provide about the extraction of lithic resources in the region. The National Register property boundaries are based on the extent of the natural feature quarried by Native Americans. **Verbal boundary description:** Boundaries for the site are determined by the natural topography of the area. The site is located within the confines of the hill on which the outcropping of quartzite occurs [as shown on the accompanying map]. The base of the hill is the site boundary. **Boundary justification:** The boundary for the site is

tion: The boundary for the site is established by the limits of the natural outcropping of rock. The site was utilized solely as an extractive or procurement site; therefore, the limits of the site are set by the limits of the availability of the lithic resource.

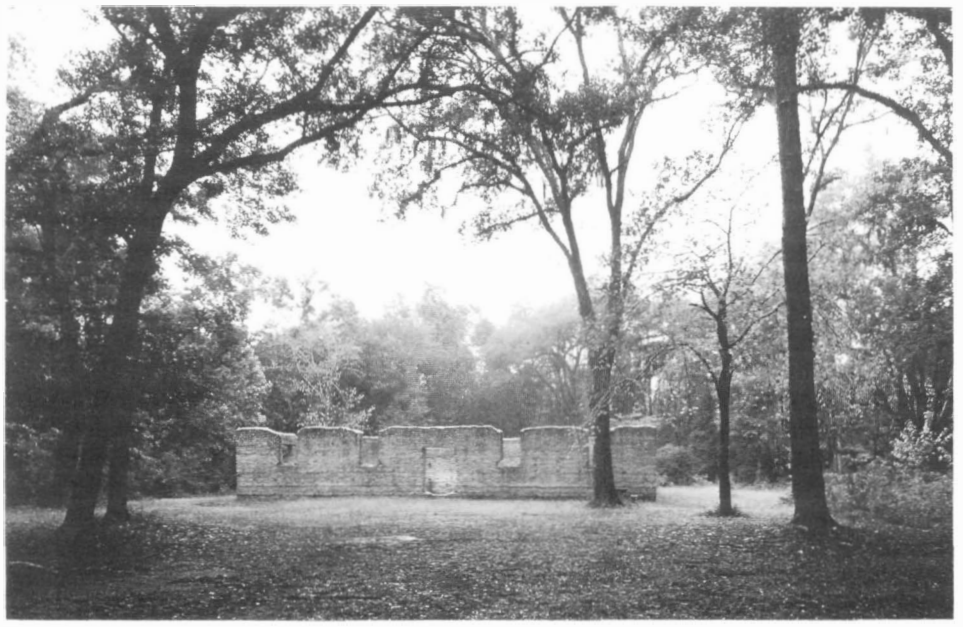
Prehistoric Camp and Habitation Archeological Site, Western Mountains [location restricted], is a multicomponent camp and habitation site with at least five occupations, ranging in time from 5050 B.C. to A.D. 750. Three of the occupations reflect short-term camp or special activity uses. Two long-term occupations are represented by pit house ruins and associated materials, dated to the Early Archaic period. The site is at an elevation of ca. 7,000 feet, about 1/2 mile from the area's major river. Test and data recovery excavations revealed buried resources including pit houses, lithic tools, ceramics, and faunal remains. Road construction has affected the site; however, excavations were conducted in association with recent construction, and the upgraded road was realigned to avoid the pit houses. The distribution of archeological resources (surface artifacts) and natural features were used to define the National Register boundaries. **Verbal boundary description:** The southern, southeastern, and western boundaries are determined by a sharp reduction in surface artifact density; the northern boundary is at the topographic drop-off into the adjacent gulch, and the eastern boundary is along the east side of a tributary arroyo to the gulch. **Boundary justification:** The boundaries of the Prehistoric Camp and Habitation Archeological Site have been determined from a combination of natural, topographic, and archeological evidence. Western, southeastern, and southern limits have been drawn on the basis of surface artifact density evidence, after careful surface reconnaissance found a clear decline in the number of visible chipped stone artifacts in this area. A portion of the western boundary at the adjacent ranch house and outbuildings shows such a decline in surface artifact density due to ground disturbances from ranch building construction and occupation, as well as limited ground visibility in an adjacent pasture. The southeastern and southern limits, where surface artifact density is also quite low, are in relatively rocky terrain with good ground visibility but very little soil accumulation. Archeological survey and excavation data have been used to determine the eastern site boundary, drawn on the east side of a tributary arroyo of the gulch. Burned rock, charcoal-stained soil, and sparse artifacts exposed in the east cut bank of the arroyo led to investigation of the Feature 14 locus, where artifact density at the present ground surface is otherwise very low. The arroyo becomes an entrenched feature only north of the road, then joins a large tributary wash just upstream of where the latter drainage flows into the gulch. The east boundary of the site is drawn along the east side of the arroyo system to include the Feature 10 locus, although no test excavations have been done farther east beyond Feature 10 to search for other buried remains on the interfluvial flat where no surface artifacts are visible. The northern boundary is topographically defined at the south bank of the gulch, beyond which any archeological remains would have been long since eroded away. The 30-acre site area depicted on the topographic map does not include a continuous scatter of surface artifacts, although at least a light scatter of chipped stone, ground stone, and/or ceramic artifacts is visible in most areas. Excavations have been conducted in the southern third of the site; the evidence from these excavations, in combination with subsurface exposures in nearby washes, the arroyo, and several road cuts, demonstrates that much of the Prehistoric Camp site resources remain buried.



Prehistoric Quartzite Quarry Archeological Site, Middle Atlantic. Sketch map showing the National Register boundaries, defined by geological and topographic features.

John Houstoun McIntosh Sugarhouse, Camden County, Georgia, built in the early 19th century as a cane-processing facility, consists of an extensive ruin with associated archeological resources. The ruin was constructed of tabby, a

coastal building material made by mixing equal parts of oyster shell, lime, and water. The sugarhouse was a rectangular building with three large rooms, two porches, and several door and window openings. The west room was the milling room; the middle room was the boiling room; and the east room was the curing room. The tabby-paved area north of the milling room was probably an unloading area. In 1934, archeologist James Ford visited the site and concluded that it was not the remains of the Spanish Mission Santa Maria (as it had been previously identified), but the remains of a sugarhouse. Although Ford may have conducted some excavation at the site, no such excavations were reported. In 1981 the University of Florida's Department of Anthropology investigated the site to define the nature, condition, distribution, and significance of the archeological resources at the site. Archeological investigations focused on the sugarhouse ruins and immediate area of the site. The site is significant for its association with the 19th century sugar manufacturing industry and for its research potential. The National Register boundaries are based on the extent of above-ground and below-ground resources. **Verbal boundary description:** The boundary includes the sugarhouse, two depressions, and the property surrounding them. The property is marked on the enclosed sketch map. It consists of one acre of land centered on the sugarhouse. **Boundary justification:** The one acre is inclusive of the sugarhouse and contiguous areas of activity identified by reported archeological investigations. At such time in the future if the locations of associated buildings and/or areas of activity are identified, an appropriate boundary expansion will be proposed.



John Houstoun McIntosh Sugarhouse, Camden County, Georgia. The tabby wall ruins of the sugarhouse, facing west. (James R. Lockhart)

Contiguous Archeological Districts

Sinarboles Archeological District, Southwest [location restricted], located on a broad lava flow at an elevation of ca. 6,000 feet, includes 39 prehistoric sites occupied between A.D. 800 and A.D. 1300. The sites were exposed as a result of a juniper-eradication project. The surface was disturbed, but subsurface resources retain integrity, although several sites have been looted in the past. Archeological investigations during the late 1930s addressed several sites. In the late 1980s, an intensive archeological survey of the district was conducted to define the boundaries of the prehistoric community. Factors considered in defining the boundaries included topography, community organization, and the known archeological resources. Survey indicated that site density decreased rapidly north and east of the edge of the lava flow; therefore, the north and east boundaries follow the edge of the flow. West and south boundaries define the limits of the inferred community based on survey data; site density decreases beyond this limit. The district represents the archeological expression of the prehistoric community. The sites represent a wide variety of types, including artifact scatters, specialized activity areas, and large sites with structures, representing several stages of community development. **Verbal boundary description:** The Sinarboles Archeological District is a 4,000-by-5,125-foot rectangle defined by the edge of a remnant lava flow on the north and east side with straight lines drawn to the south and west boundaries. **Boundary justification:** The district is defined by site density and clustering as well as topographic features on the north and east side.

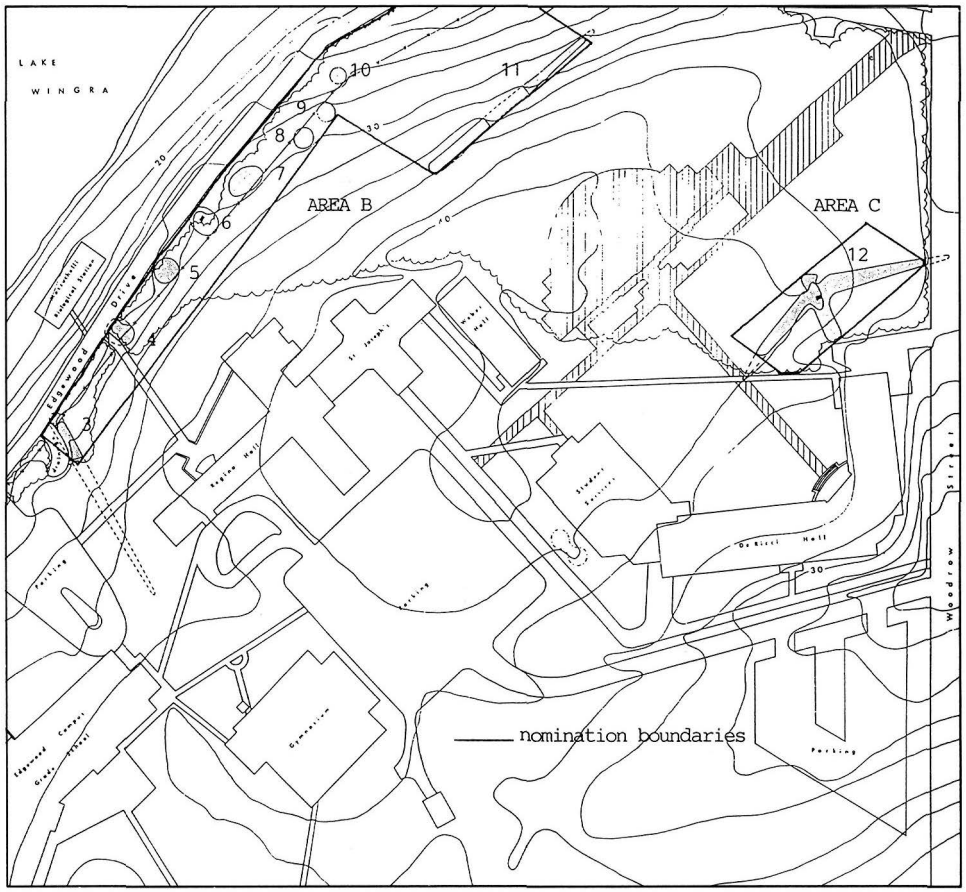
Harbor Island Historic and Archeological District, New England [location restricted], is composed of an entire island of about 45 acres located in the harbor of a New England city. The island is half a mile long and irregular in shape. The district includes 22 contributing archeological sites, structures, and buildings representing an extensive period of human occupation, beginning in the Middle Archaic 8,000 years ago and continuing today. Activities associated with that human occupation are related to a number of important themes in North American, State, and local prehistory and history, particularly the exploitation of the marine ecology, the development of a historic maritime economy, and the changing cultural uses assigned to coastal areas. Contributing historical archeological sites, structures, and buildings are associated with the Coast Guard, a school, and historic residences. Noncontributing resources include modern roads, recreational structures, and residences. These intrusions have had little impact on the island's archeological and historic integrity. Tax parcel boundaries define the National Register district. **Verbal boundary description:** The Harbor Island Historic and Archeological District boundaries are indicated on the attached Assessors Maps. Boundaries correspond to the island's shoreline, indicated on the assessors maps as a dotted line. **Boundary justification:** The nominated boundaries include all the land historically and currently known as Harbor Island; an island of about 45 acres.

Discontiguous Archeological Districts

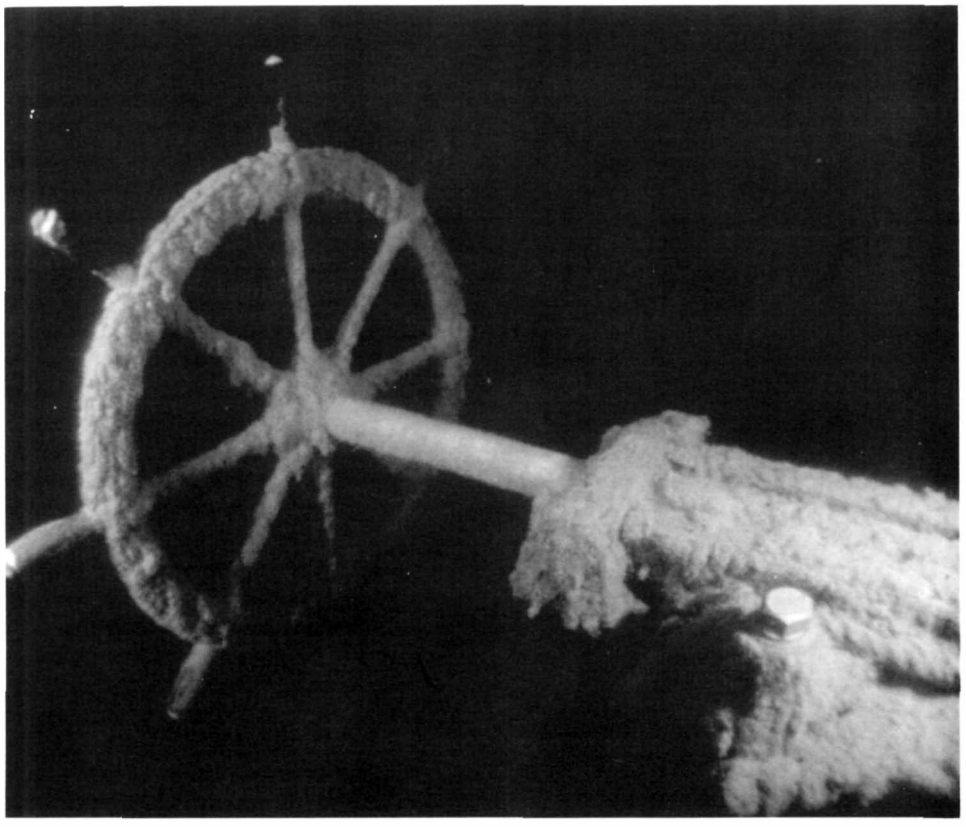
Midwest Prehistoric Cave and Rock Shelter Sites Discontiguous Archeological District, Central Midwest [location restricted], includes 20 archeological sites in the watershed of Mule, Goose, and Broad creeks. Archeological sites in rock shelters and caves represent an important part of the settlement pattern of prehistoric hunters and gatherers of the region. Sheltered sites were used as temporary camps, lithic-knapping sites and resource-processing stations, and base camps. Reoccupation and sedimentation has left a deep, stratified record of prehistoric human activities. The 20 sites in the district are a representative sample of the best preserved shelter deposits in the three creek drainages. The district is significant under Criterion D for the sites' potential to contribute important information on prehistoric life in the region. Sheltered sites preserve the remains of special uses as well as the activities of daily life. **Verbal boundary description:** [The verbal boundary description for this district consists of township, range, section references as well as UTM references for each of the 20 sites. The sites are also marked on accompanying maps of the three drainages. Because this information is restricted, it is not reproduced here]. **Boundary justification:** This district consists of 20 cave and shelter archeological sites located within the drainage basins of Mule, Goose, and Broad creeks. The archeological sites are specific points within the three drainage basins and are defined by UTM coordinates. In the future, other cave and shelter sites within the basins may be determined significant and added to the district.

Plantation Cemeteries Archeological District, Deep South [location restricted], consists of two separate but historically associated African American cemeteries dating from the early 1800s to 1929. Both were established as slave cemeteries on adjoining sugar plantations. The land was purchased by the U.S. government in 1929 for construction of a flood-control project. There are no surface indications of the cemeteries due to extensive modern landscape modifications. Archeological investigations, however, demonstrated a high degree of integrity. Investigations included magnetometer survey, topographic survey, excavation of five 1-by-2-meter units, backhoe trenching, and augering. All cultural remains were left in place. Portions of each cemetery were affected during excavation of water-control ditches; however, damage was limited. Based on identified grave sites and density predictions, each cemetery is estimated to include between 100 and 150 graves. The district is significant for its association with African American plantation populations of the antebellum and postbellum periods and for its research potential. The boundaries of the two cemeteries are based on cultural features and reasonable limits beyond known resources, as determined by survey and testing. **Verbal boundary description:** The nominated district consists of two discontiguous historic cemeteries. The first cemetery is delineated by a polygon whose vertices are marked by UTM references A, B, C, and D [listed in registration form and marked on accompanying USGS map]. The second cemetery is delineated by the polygon whose vertices are marked by UTM references A, B, C, and D [listed in the registration form and marked on the accompanying USGS map]. **Boundary justification:** The fieldwork determined a total site size of ca. 3,000 square meters (under 1 acre) for the first cemetery. The western, northern, and southern boundaries were extended 10 meters beyond confirmed burials. This was considered necessary due to the limited amount of fieldwork and the irregular and elusive nature of this type of archeological resource. No topographic, vegetative, or other natural markers remain to help define the site boundaries. The discovery of burials 10 and 11 in a backhoe trench excavated beyond the previously identified limits of the site illustrated the need to expand the site boundaries beyond the confirmed burials. The eastern boundary is defined by the haul road which abuts the site. Magnetometer survey did not indicate any burials under the road; however, this boundary is problematic since further archeological investigation was precluded in the road bed. The boundaries described above provide a reasonable estimate of the extent and location of burials at the site. The field work determined a total site size of 3,300 square meters (less than one acre) for the second cemetery. The site boundaries include a 10-meter extension beyond confirmed burials on the eastern and southern margins of the site and a 20-meter zone along the northern and western margins. As with the first cemetery, these extended boundaries were required due to the inconclusive nature of the limited fieldwork.

Woodland Mounds Archeological District, Upper Midwest [location restricted], is a group of prehistoric mounds located on the grounds of a school. The district originally included 15 mounds; 12 survive, including conical, linear, and bird effigy forms. The mounds date to the Late Woodland Period (ca. A.D. 650-1300). The district is composed of three discontiguous areas (A, B, and C), with modern buildings and landscaping separating the areas. Several mound groups in the vicinity were mapped in the late 19th and early 20th centuries, including the Woodland Mounds groups, and in the 1930s, three of the mounds were excavated. Remnants of damaged mounds have been identified, but the seriously compromised mounds have not been included in the district. Since the early 20th century, efforts have been made to protect the surviving mounds. Intact deposits probably survive in several of the mounds. The district is significant for its potential to yield information on the Late Woodland period. Research questions are focused on information that can be obtained through non-invasive means, such as location and arrangement, geographical distribution, and proximity to resources. Cultural features were used to define the National Register boundaries. **Verbal boundary description:** The site is divided into three areas [boundaries of which are shown on the accompanying map]. Area A includes UTM reference C and is a small, less-than-1-acre parcel whose east boundary is Mound 1 and west boundary is Mound 2. Area B includes UTM reference B and is an L-shaped 1-acre parcel. Area B is bounded on the north by Mound 11 and on the south by Oak Drive. UTM reference B is the easternmost point of Area B and is the point where Mound 3 intersects with Oak Drive. UTM point A is the westernmost point of the district an is located in Area C. It is the point where Mound 12 intersects Maple Drive. **Boundary justification:** The



Woodland Mounds Archeological District, Upper Midwest. Detail of plan map showing the locations of two discontiguous areas in the district.



Lake Huron Shipwreck Site, Upper Midwest. Underwater view of the ship's wheel and steering gear.

boundaries were drawn to include only the mounds and area between them known to be relatively undisturbed by modern construction. Areas A, B, and C are unconnected and are deemed to be the site portions where the integrity of the mound group is most intact.

Shipwreck Sites

Lake Superior Shipwreck Site, Upper Great Lakes [location restricted], includes the remains of a three-masted schooner constructed in 1869 and wrecked in 1896 against a breakwater. The vessel represents the type constructed in the late 1860s and 1870s for the shipment of iron ore. The vessel was in tow of a steamer when the two vessels encountered a storm. The steamer threw off the schooner's line. The schooner dropped anchor, but continued to drift and hit the breakwater. The vessel sank with the crew seeking refuge in the rigging, from which they were rescued the following morning. Rigging and masts may have been salvaged, but machinery was left in place. Although thousands of ships have moved through the waters where the wreck lies, the resources have seen relatively little disturbance. The site is significant for its role in local maritime history, the structural integrity of the vessel, and the research potential of the site. The National Register boundaries were defined by reasonable limits around the vessel remains. **Verbal boundary description:** The area included in the shipwreck is a rectangle extending 200 feet southeast and 65 feet on either side of a centerline extending southeast and beginning at a point that is 150 feet from the monument located on the northwestern end of the breakwater. **Boundary justification:** The Lake Superior Shipwreck Site is about 70 percent intact. The boundary for the site is based on the debris field associated with the wreck. This was determined from information obtained by divers during mitigation activities.

Lake Huron Shipwreck Site, Upper Great Lakes [location restricted], includes the remains of a two-masted wooden schooner completed in 1856. The vessel transported iron ore and pig iron between Lake Huron and Lake Erie ports. During a storm on Lake Huron in 1868, the

vessel collided with another schooner near Piney Point. The other schooner managed to make it to port, but this vessel was abandoned by its crew and sank. The shipwreck site was discovered and surveyed in the late 1980s. The wreck of the schooner rests in an upright position on a sandy bottom in 150 feet of water. The vessel is nearly intact, and major equipment is still in place. The schooner site is significant for the vessel's role in Great Lakes shipping, the naval architecture of the vessel, and the research potential of the site. The National Register boundaries were defined by reasonable limits around the vessel remains, selected to include the area likely to contain rigging. **Verbal boundary description:** The Lake Huron Shipwreck Site is located 2 statute miles west and 1.5 miles north of Piney Point at the intersection of Loran C coordinates XXX and YYY. The area included in the site is a square 1,000 feet on a side; the geographical center being the charted vessel's position. **Boundary justification:** The Lake Huron Shipwreck is the site of a relatively intact vessel with structural damage primarily to the rigging only, based on diver assessments and videotape evidence of the site. Little noticeable deterioration has been evident on the vessel in terms of subsequent deposition on the site, ice damage, erosion, or other environmental factors with the exception of anchor damage to the hull. The boundary is based on the probability of locating major rigging elements lying near the hull as a result of the wreck drifting and sinking slowly after the collision. The wreck's depth has prevented a thorough evaluation of the total extent of the site away from the hull itself.

BOUNDARIES FOR HISTORIC SITES

Locations of significant events or activities where the location possesses historic or cultural value may be classified as National Register sites. Cemeteries, battlefields, and natural and cultural landscapes where historic events took place are examples of historic sites.

GUIDELINES FOR SELECTING BOUNDARIES: HISTORIC SITES

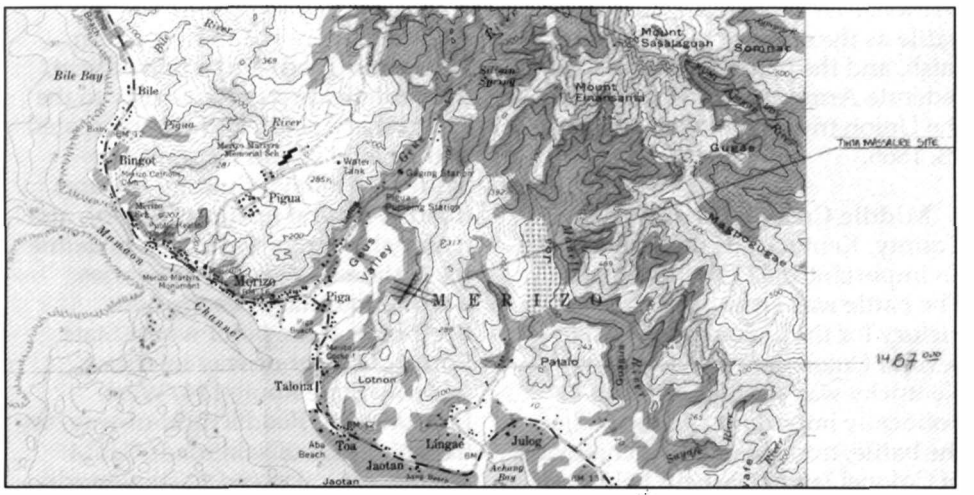
(summarized from *How to Complete the National Register Registration Form*, p. 56)

- Select boundaries that encompass the area where the historic events took place. Include only portions of the site retaining historic integrity and documented to have been directly associated with the event.

Denis Julien Inscription, Grand County, Utah, consists of historic inscriptions on a sandstone block in a side canyon of Green River, in the mouth of Hell Roaring Canyon. There are two inscription panels. The first bears the name *D. Julien,* the date *3 mai 1863,* and a sunburst design and a one-masted boat. The second panel includes five names of early surveyors from the U.S. Reclamation Service with 20th century dates. Denis Julien, an American fur trapper of French descent, etched his name and date along waterways in eastern Utah at least eight time between 1831 and 1844. In this location, he also inscribed the one-masted boat, suggesting his mode of travel. The site is significant for its association with fur trading and exploration, conservation and reclamation, and mining. Reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** The site is located within the NE 1/4, NW 1/4, SW 1/4, NW 1/4, Section 6 (unsurveyed), T26S, R18E. USGS 7.5 minute series, Mineral Canyon, Utah, quadrangle, 1988. Boundaries of the actual parcel included in the nomination can be described as a circle with a radius of 30 feet centered on the inscription rock. **Boundary justification:** The description provided above includes the rock upon which the historic inscriptions are located and additional amount of surrounding property deemed sufficient to convey some sense of the site's surroundings.

Tinta Massacre Site, Merizo, Guam, is the place where soldiers of the Japanese Imperial Army killed sixteen people of the village of Merizo in 1944. During the last days of the Japanese occupation, soldiers marched a group of thirty men and women from the village to an area called Tinta at the foot of a hill west of the village. The soldiers herded the villagers into a dugout cave, lobbed hand grenades through the opening, and attacked survivors with their sabres. Fourteen people survived the attack. The massacre site is located at the base of the hills on the eastern edge of the Geus Valley. The site is marked only by a wooden cross in the overgrown gully, which is what remains of the dugout cave. Reason-

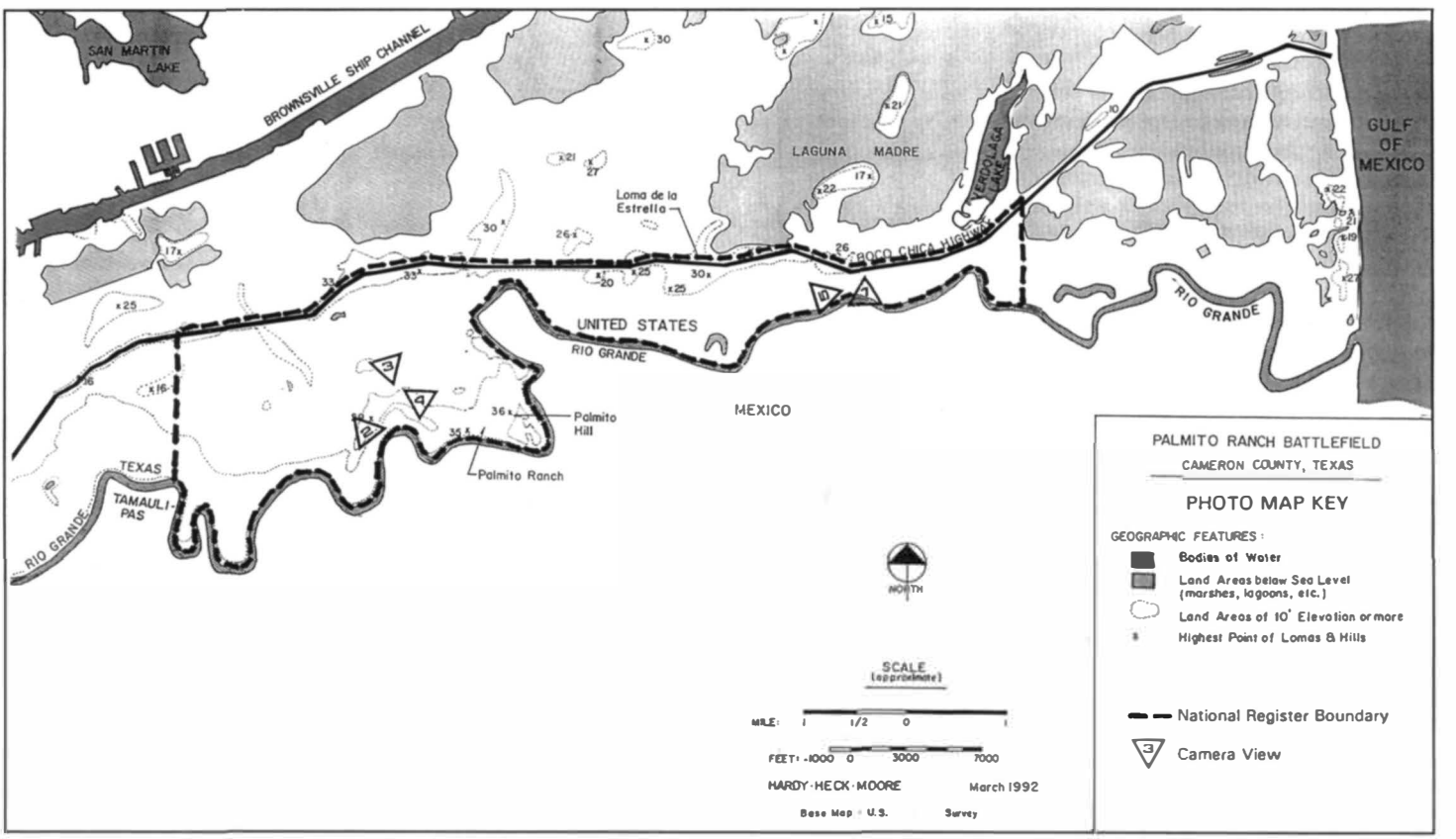
Denis Julien Inscription, Grand County, Utah. This ca. 1909 photograph shows the inscription and its environs. (Utah Historical Society)



Tinta Massacre Site, Merizo County, Guam. Detail of USGS map showing the National Register boundaries.

able limits were used to define the boundaries of the National Register property. **Verbal boundary description:** Boundary lines are as indicated on the accompanying USGS map. **Boundary justification:** The boundary of one-half acre is set to protect the integrity and the setting of the massacre site.

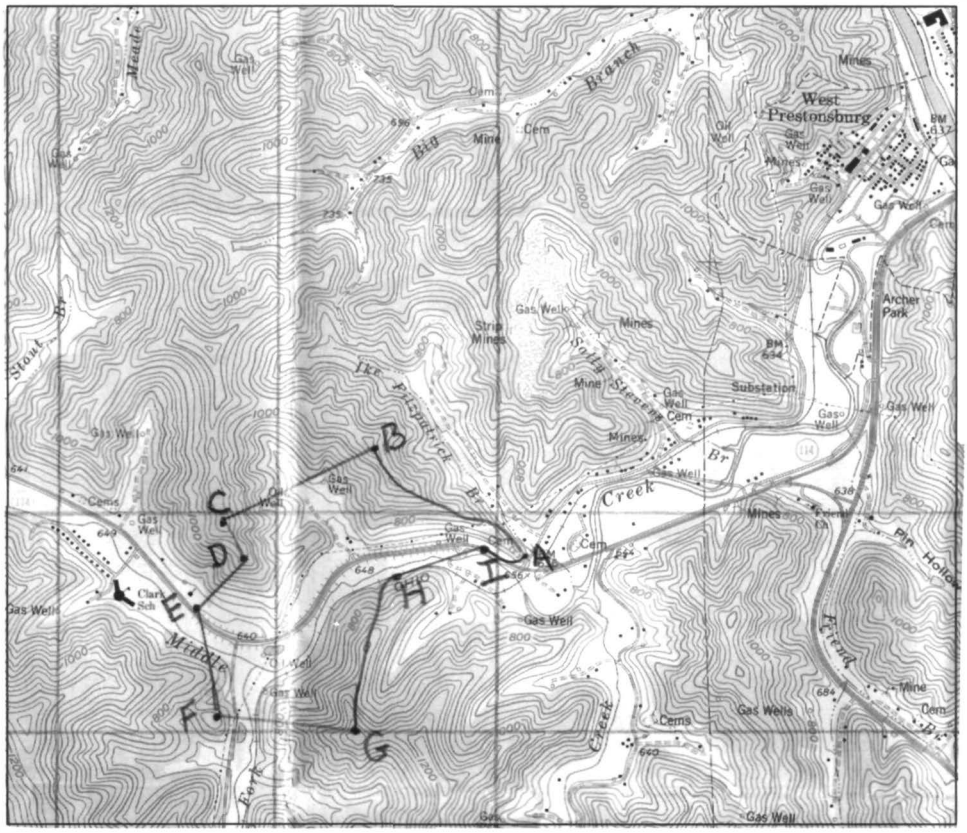
Palmito Ranch Battlefield, Cameron County, Texas, is the site of the final land engagement of the Civil War. Concentrated military action occurred here on May 12-13, 1865, more than a month after Confederate forces under General Robert E. Lee surrendered at Appomattox Courthouse, Virginia. The battle, a series of sharp skirmishes, took place across an approximately five-mile area halfway between Brownsville and Brazos Island. Federal troops initially pressed the Confederates as far west as Tulosa Ranch before Confederate reinforcements under the command of Col. John S. (Rip) Ford arrived and drove the Union army back to their base at Brazos Island. The battlefield lies on a windswept plain at the southernmost tip of Texas on sparse land characterized by marsh and chaparral with a few scattered hillocks. The land's virtually unchanged physical features still convey the battlefield's appearance during the Civil War. National Register boundaries were organized according to natural topographic features, cultural features, archeological evidence, and reasonable limits based on historical research. **Verbal boundary description:** Refer to the accompanying USGS map for a precise depiction of the boundaries of Palmito Ranch Battlefield. The battlefield is bordered on the north by the Boca Chica



Palmito Ranch Battlefield, Cameron County, Texas. Map showing the National Register boundaries.

Highway and on the south by the current course of the Rio Grande River. On the east, the nominated area extends to a point immediately east of Tarpon Bend and immediately west of Stell-Lind Banco No. 128. The western border follows a line from the Loma del Muerto southward to the Rio Grande. Beginning at a point on the United States bank of the Rio Grande immediately south of Loma del Muerto, proceed due north approximately one mile to the intersection of the Boca Chica Highway and Loma del Muerto. Then proceed east along the Boca Chica Highway, approximately 4.5 miles, to a point on the Rio Grande. Then proceed along the U.S. bank of the Rio Grande approximately 4.5 miles to the point of origin. **Boundary justification:** Boundaries for Palmito Ranch Battlefield encompass the large expanse of land where the most intense fighting of the conflict took place. Since the battle consisted of a series of moving skirmishes, the battlefield itself covers a large area approximately five miles long. The southern boundary follows the current path of the Rio Grande, since the river formed one border for all fighting. Also, the river is the international boundary line between the United States and Mexico. The western boundary roughly follows a line extending from the Loma del Muerto southward to the Rio Grande. The line approximates the point at which Confederate reinforcements arrived at the scene of the battle on the afternoon of May 13, 1865. The boundary also approximates the position of "San Martin Ranch," referred to by officers of both armies in written accounts of the battle. The Boca Chica Highway forms the northern boundary of the battlefield. Although some scattered fighting may have taken place north of this line, most of the conflict was concentrated much closer to the Rio Grande. The placement of the boundary at the highway allows for the inclusion of a broad area north of the river, providing an accurate demarcation of the large area in which the running battle occurred. The battlefield's eastern boundary roughly extends from the westernmost tip of Verdolaga Lake southward to a point on the Rio Grande just east of Tarpon Bend and just west of Stell-Lind Banco No. 128, as shown on the accompanying map. This line marks the approximate location of a small levee referred to in written, first hand accounts of the battle as the scene of the final skirmish, and the place where the Confederate Army ceased its pursuit of the Union troops on the eve of May 13, 1865.

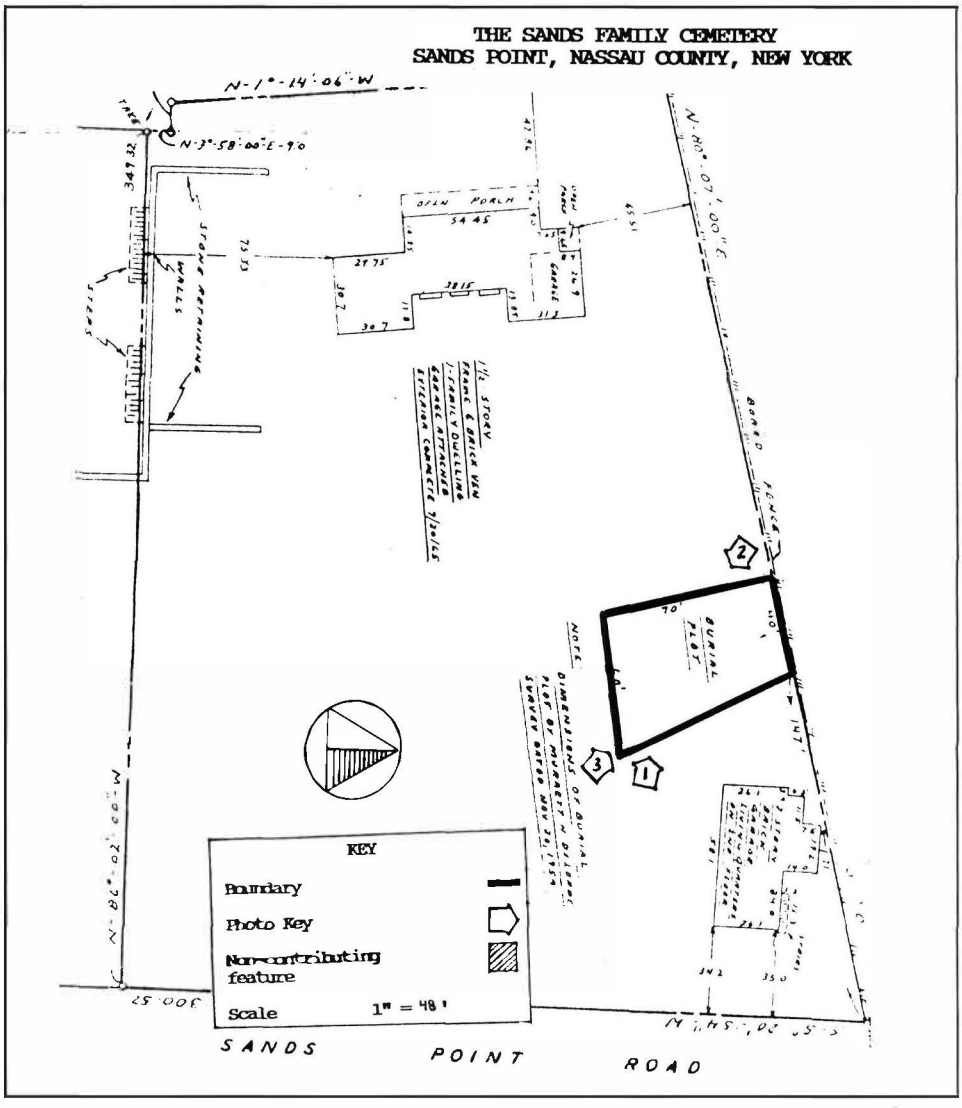
Middle Creek Battlefield, Floyd County, Kentucky, is the location of an important 1862 Civil War battle. The battle was an important early victory for the Union army. After several Union defeats, victory in Kentucky was strategically and politically important. At the end of the battle, troops under the command of Colonel James Garfield held the battlefield, putting the Union in control of eastern Kentucky. The battlefield is located along a series of ridges that surround the confluence of the Right and Left forks of Middle Creek. The eastern part of the battlefield is a cemetery located on a ridge (north of State Route 114). The western boundary is a ridge above a gorge near the mouth of the Left Fork of Middle Creek. The land occupied by Union troops and the location of the engagement is characterized by steep uplands, over 600 feet above the floodplain of the creek. The ridges are bisected by several drainages. Although there are a few modern intrusions (roads and a power line), the battlefield retains integrity to the extent that a soldier who participated in the battle would recognize the battlefield today. Cultural features (roads), natural features (ridges), and reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** Beginning at the point where State Route 114 right-of-way intersects with old State Route 114/West Prestonsburg Road's right-of-way, on the north side of said roads (UTM reference A); proceed northwesterly with Grave Yard Point, approximately 750 meters to a point (UTM reference B); proceed southwesterly approximately 750 meters, across an unnamed hollow to a point (UTM reference C); proceed southeasterly approximately 200 meters to a point (UTM reference D); proceed southwesterly approximately 350 meters, down the ridge to State Route 114's right-of-way, (UTM reference E); proceed southeasterly across State Route 114's right-of-way, 450 meters to a point (UTM reference F); proceed east across State Route 404 right-of-



Middle Creek Battlefield, Floyd County, Kentucky. Detail of USGS quadrangle showing the National Register boundaries.

way, the Left Fork of Middle Creek and the CSX railroad right-of-way, approximately 650 meters to a point (UTM reference G); proceed north approximately 650 meters to a point (UTM reference H); proceed northeasterly across the CSX railroad right-of-way, crossing State Route 114's right-of-way approximately 500 meters to a point (UTM reference I); following State Route 114's right-of-way approximately 100 meters to the point of origin. **Boundary justification:** The boundary includes the ridges, stream, and the floodplain of that stream on and around which the Battle of Middle Creek took place. A recent site visit produced no earthworks or artifacts that would help determine the exact site limits. The boundary is based upon historic maps, manuscripts, and other documentation both primary and secondary.

The Sands Family Cemetery, Sands Point, Nassau County, New York includes twelve rows of 18th and 19th century gravestones, situated on a wooded knoll. The cemetery was established ca. 1711 when John Sands set aside one acre of his estate as a family burying ground. The 86 well-preserved sandstone and marble gravestones include winged death's heads, skull and crossbones, soul effigies, and plain tripartite sandstone tablets of the 18th century and Neoclassical motifs popular during the 19th century. The progression of motifs and epitaphs on the gravestones reflects the changes in religious beliefs and social customs during the period of interments. The cemetery is surrounded by private property. It is flanked on the east by a modern garage, private road and field; to the west is a private paved drive. The nominated property consists of about one acre of land which is an inholding within a parcel whose boundaries are delineated on the boundaries map. **Verbal boundary description:** The boundary of the Sands Family Cemetery is shown as the solid black line on the accompanying map entitled "The Sands Family Cemetery, Sands Point, Nassau County, New York." **Boundary justification:** The Sands Family Cemetery is situated on the west side of Sands Point Road on a wooded knoll. The cemetery is surrounded by private property. It is flanked on the east by a modern garage, private road, and open field; to the west is a private paved drive that leads to a house northwest of the burial ground. The cemetery property is irregular in shape: The west side is 108.46 feet; the north side bordered by a fence is 56.52 feet long; east side is 73.09 feet, and it is 67.08 feet, on the south side of the property, according to a 1989 survey of the parcel. The nominated property consists of less than one acre of land.



The Sands Family Cemetery, Nassau County, New York. Plan view showing the National Register boundaries.

The Sands Family Cemetery, Nassau County, New York. The gravestone of Robert Sands, d. 1735. (G. Williams)

BOUNDARIES FOR OBJECTS

Objects eligible for listing in the National Register are constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although an object may be movable, an object that is a National Register property is associated with a specific setting or environment. Properties such as sculptures, monuments, boundary markers, statues, and fountains are classified as objects. The boundaries for objects may be limited to the land or water occupied by the resource; however, surroundings may be included when they contribute to the ability of the property to convey its significance.

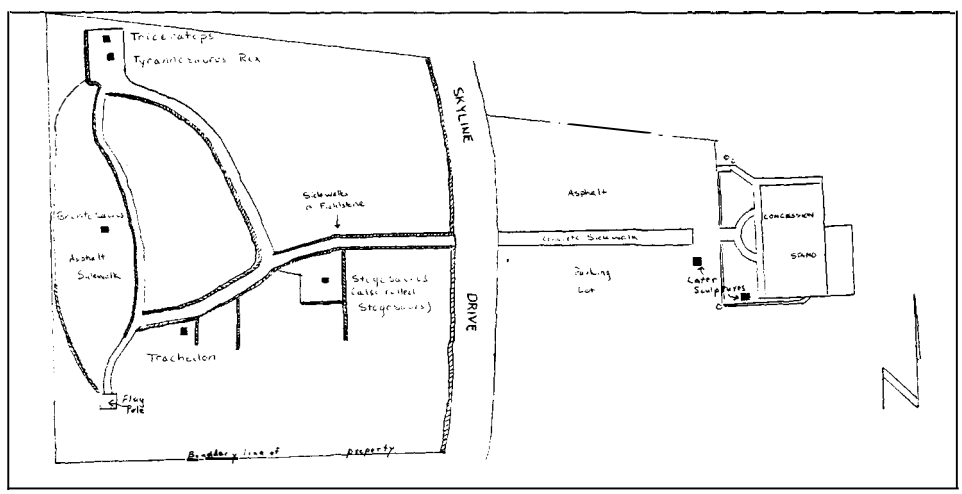
GUIDELINES FOR SELECTING BOUNDARIES: OBJECTS

(summarized from *How to Complete the National Register Registration Form*, p. 56)

- Select boundaries that encompass the entire resource.
- The boundaries for objects may be the land or water occupied by the resource without any surroundings.

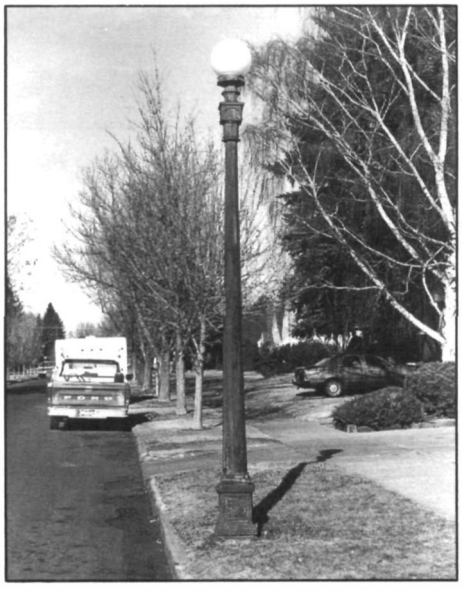
Ebenezer Monument, Mena, Polk County, Arkansas, constructed in 1936 at the rear parking lot of the First Baptist Church, 811 Arthur Street, is a square stone and concrete masonry monument that narrows toward the top and contains a vault designed to hold a time capsule. The monument was erected by the congregation as part of the local effort to expel nearby Commonwealth College, a school with militant socialist and unionist leanings. The monument is significant as the symbol of the anti-Communist sentiment that swept the state after the decision by the administration of Commonwealth College to focus its curriculum exclusively on Marxism and Communism and to advocate militant activism by its students and faculty within the growing southern labor movement. The National Register boundaries are limited to the ground on which the monument sits. **Verbal boundary description:** Beginning at the northern corner of the monument's foundation (located ten feet south of the southern edge of Church Street and sixteen feet west of the eastern edge of Ninth Street), proceed southwesterly to the monument's western corner; thence southeasterly to the monument's southern corner, thence northeasterly to the monument's eastern corner, thence northwesterly to the monument's northern corner and the point of beginning. **Boundary justification:** This boundary includes all the property historically associated with this resource.

Dinosaur Park, Rapid City, Pennington County, South Dakota, is a roadside attraction displaying five concrete and iron pipe sculpted dinosaurs constructed between 1936 and 1938. Skyline Drive bisects the park. The western half includes the five original dinosaur sculptures; the eastern half includes a concession stand, parking lot, and two small dinosaurs constructed after 1938. Designed by Emmit A. Sullivan with assistance from Dr. Barnum Brown of the Smithsonian Institution's American Museum of Natural History, the five original dinosaurs were constructed by WPA workers. The park represents the local residents' growing awareness during the 1930s that the Black Hills had potential as a major tourist attraction. It is one of the most elaborate examples of roadside tourist sculpture in South Dakota and an excellent example of vernacular public art. Operated privately until 1968, Dinosaur Park is now owned by Rapid City. The National Register boundaries are based on cultural features and reasonable limits. **Verbal boundary description:** The nominated property is bounded by a set of imaginary lines that intersect to form a polygon around the original dinosaur sculptures. The eastern boundary line lies along the west edge of Skyline Drive. The southern boundary line extends 270 feet due west from the southernmost point of the retaining wall along Skyline Drive (as shown on the accompanying scaled map of the park). The western boundary line extends 315 feet due north from the western terminus of the southern boundary line. The northern boundary line extends from the northern terminus of the western boundary line to the northernmost point of the retaining wall along Skyline Drive. The property is located in the Northwest Quarter of the Southeast Quarter of the Northwest Quarter of Section 2, Township 1 North, Range 8 East (Black Hills Meridian), in Pennington County, South Dakota. **Boundary justification:** The boundaries of the nominated property have been set to include the original Dinosaur Park sculptures and to specifically exclude the noncontributing concession building, parking lot, and later sculptures, and any public or private roads. Two different, conflicting plats of the park boundaries are recorded at the Pennington County Register of Deeds Office; therefore, it was not possible to use legal descriptions for the boundaries of the nominated property. Rather, the lines were set using the west edge of Skyline Drive and the retaining wall along Skyline Drive for reference points.



Dinosaur Park, Rapid City, Pennington County, South Dakota. Map showing the boundaries of the National Register property.

Lincoln Street Electric Streetlights, Twin Falls, Twin Falls County, Idaho, are ten lights on cast-iron posts along the 100 and 200 blocks of Lincoln Street. Located on the east and west sides of the street in a residential neighborhood, the lights are placed close to the curb so that they have not been obscured by landscaping and thus remain an integral part of the streetscape. The lights were installed prior to 1920, before the Blue Lakes Addition was developed, the first subdivision of Twin Falls, and before electricity was available. The lights were part of developers' efforts to make the subdivision attractive. The National Register boundaries are defined by the legal definition of the city right-of-way for two blocks. **Verbal boundary description:** A rectangular piece of land comprising the city right-of-way for Blocks 1 and 2 of Lincoln Street, bounded by Heyburn Avenue on the north and Addison Avenue on the south as the same appears in the plat of the Blue Lakes Addition to the City of Twin Falls, Book 3 of Plats, page 29, records of the Twin Falls County Recorder. **Boundary justification:** The parcel is one contiguous parcel owned by the City of Twin Falls, being a platted and dedicated right-of-way for a city street, known as Lincoln Street, and constituting part of the land platted in the Blue Lakes Addition to the City of Twin Falls. It is the parcel historically associated with the subject of this nomination.



Lincoln Street Electric Streetlights, Twin Falls, Idaho. Photograph of a representative streetlight and its setting. (Elizabeth Egleston)

Mountain Pass Tree, Pacific Northwest [location restricted], is an inscribed mountain hemlock, located at a pass in the mountains. It is situated in a stand of hemlock and subalpine fir, facing an open meadow. The tree is 86 feet tall and 29.5 inches in diameter about 5 feet above the ground. Mountain Pass Tree is associated with early efforts to develop a transportation route across the mountains. It is the only known resource remaining from the 1893 and 1894 exploration, survey, and construction of a trail. Reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** The area encompassed by a square 200 feet on each side, centered on the tree and having sides oriented to the cardinal directions. **Boundary justification:** This property is located within an unsurveyed area of the public domain, with limited opportunities to establish precise natural or cultural boundaries. The area described includes portions of the adjacent timber and meadow needed to maintain the setting.

BOUNDARIES FOR STRUCTURES

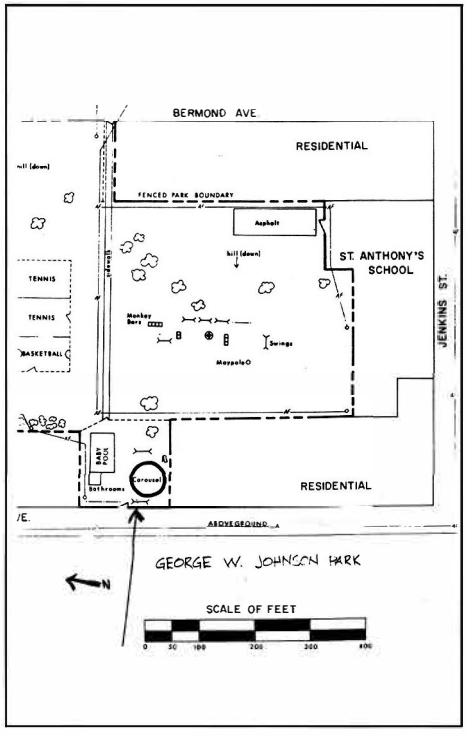
Structures that may be eligible for listing in the National Register are functional constructions designed for purposes other than human shelter. Structures include bridges, tunnels, roadways, systems of roadways and paths, road grades, canals, boats and ships, railroad locomotives and cars, aircraft, gold dredges, kilns, shot towers, fire towers, turbines, dams, power plants, wind mills, corn cribs, silos, grain elevators, mounds, cairns, palisade fortifications, earthworks, bandstands, gazebos, and telescopes.

GUIDELINES FOR SELECTING BOUNDARIES: STRUCTURES

(summarized from *How to Complete the National Register Registration Form*, p. 56)

- The boundaries for structures, such as ships, boats, and railroad cars and locomotives, may be the land or water occupied by the resource without any surroundings.

George W. Johnson Park Carousel, Endicott, Broome County, New York, is a 1934 carousel in a city park. The carousel was donated to the community by George Johnson, the major employer in Endicott. The park that includes the carousel, the surrounding working-class neighborhood, and the factory complex were all developed by the Endicott Johnson Corporation in the 1920s and reflect the company's influence over the history of Broome County. The boundary of the property, a circle with a radius of 28 feet, contains the original 1934 carousel located within the ca. 1934 housing pavilion. The park, the surrounding residential working-class neighborhood, and the nearby factory complex are all located within the designated boundaries of the Endicott Urban Cultural Park District and the Endicott Historic District. **Verbal boundary description:** The nominated boundary encompasses only the carousel and its housing and the ground upon which they stand. **Boundary justification:** The nomination boundary was drawn to include only the carousel itself and its housing. Although the park itself may be eligible, it has not yet been evaluated due to the specific focus of this [Broome County Carousals] theme.

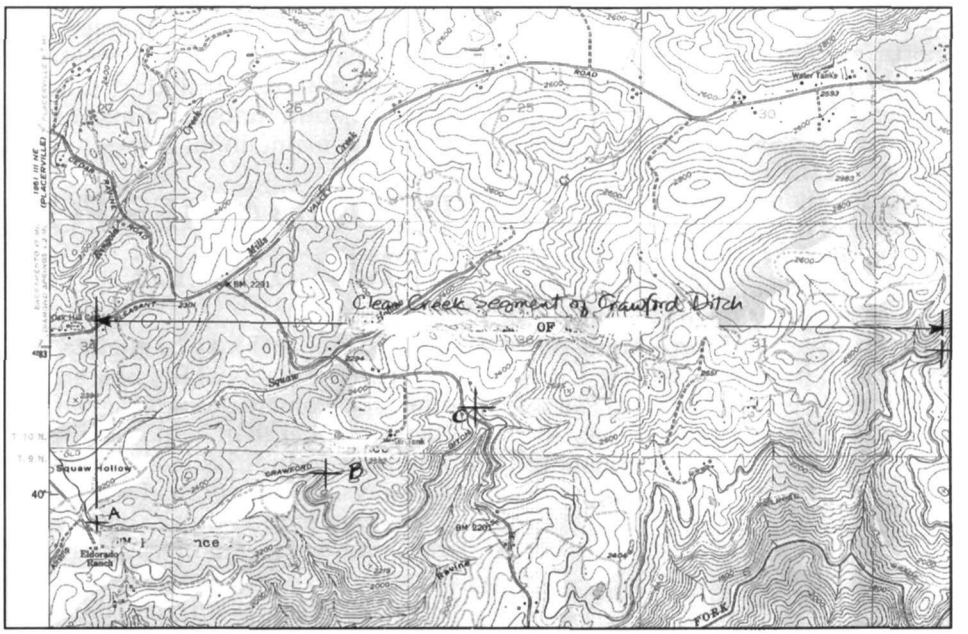


George W. Johnson Park Carousel, Endicott, New York. A sketch plan of the park showing the carousel's National Register boundaries.

George W. Johnson Park Carousel, Endicott, New York. The carousel and its setting. (G. Joseph Socki)

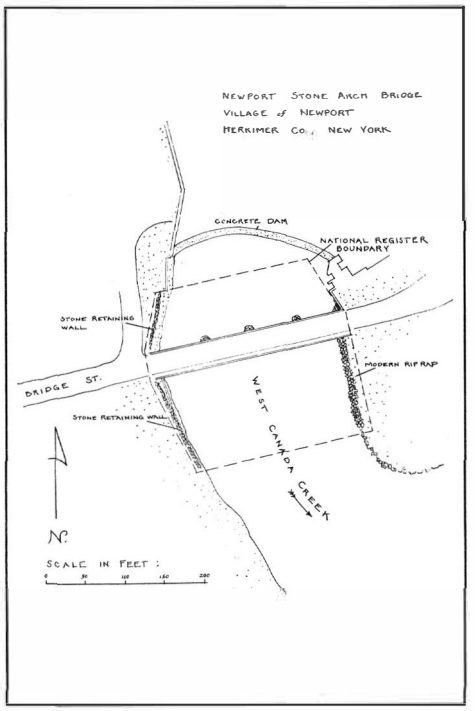
Newport Stone Arch Bridge, Newport, Herkimer County, New York, was built in 1853 to join the older core of the village on the east bank of West Canada Creek with an industrial and residential area on the west bank. The nominated property includes an area of the West Canada Creek and its bank approximately 250 feet in length and 225 feet in width. In addition to the bridge itself, the site includes two contributing stone retaining walls on the west bank of the creek. A concrete dam north of the bridge and a modern power generation facility east of the bridge are excluded from the nominated property. The Newport Stone Arch Bridge is a good example of traditional arched masonry bridge construction and represents a significant

Crawford Ditch, El Dorado County, California, was built in 1852 as the second segment of the Jones, Furman & Company ditch system to provide river water to miners of the Mother Lode Gold Rush. The trough-shaped earthen trench averages 5 feet across between the edge of the up-hill bank and the inner face of the retaining berm. The Crawford Ditch is the last functioning industrial structure in the Pleasant Valley area of El Dorado County. Only the Clear Creek segment of the Crawford Ditch is nominated; the remainder of the ditch has lost its historic integrity. The legal right-of-way of the ditch was used to define the National Register boundaries. **Verbal boundary description:** A 7.5-mile-long ditch with a 50-foot-wide working right-of-way. It falls in that length from the Clear Creek intake weir (near Pleasant Valley) at the 2,285-foot contour to the feeder siphon at the northeast side of the intersection of Hanks Exchange Road and Ranch Road (near the Hanks Exchange community at the 2,245-foot contour). See the accompanying USGS map, Camino Quadrangle, California, 7.5 minute series (topographic), photorevised 1973, the Crawford Ditch. Find the Clear Creek segment per the UTM references noted above, as marked on the map. **Boundary Justification:** The boundaries encompass the one remaining section of the Crawford Ditch that retains sufficient integrity to meet National Register standards. The boundaries encompass the ditch and the right-of-way historically associated with it.



Crawford Ditch, El Dorado County, California. Detail of a USGS map showing the nominated segment of the ditch.

mid-19th century engineering accomplishment in the county. Natural and cultural features and reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** The nominated property is 250 feet in length, east to west, and 236 feet in width, north to south, encompassing the bridge at the center, and including the stone retaining walls at the west bank of the West Canada Creek. Proceeding clockwise, the boundary follows the east bank of the creek to a point 125 feet south of the bridge, where it turns west to follow a line parallel with the bridge to the west bank of the creek. The boundary turns north at the west bank, where it follows stone retaining walls to a point 75 feet north of the bridge before turning east. The northern segment of the boundary parallels the bridge to the point where it intersects the eastern section of the boundary. Refer to the attached site plan. **Boundary justification:** The boundary has been established to isolate the bridge, its ancillary retaining walls, and its immediate setting from adjacent areas that are not directly associated with the history of the bridge.



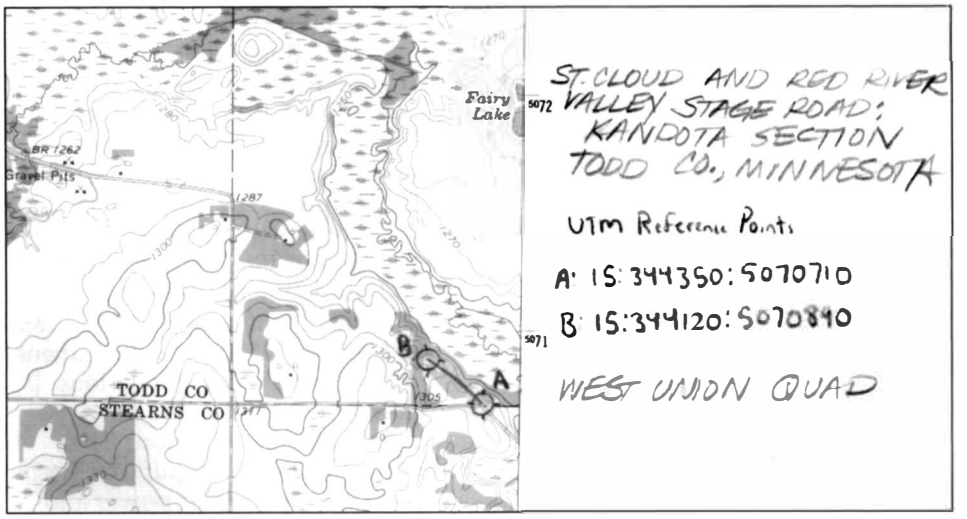
Newport Stone Arch Bridge, Newport, New York. Sketch plan showing the property's National Register boundaries.

Hanford B Reactor, Benton County, Washington, is a plutonium-production reactor that was constructed during World War II as part of the Manhattan Project. Construction of the reactor began in 1943 and the facility produced fissionable material for national defense until its deactivation in 1968. The B Reactor is housed inside the 105-B reactor containment building in the B/C Area of the Hanford Site. The containment building is surrounded by various support structures that are not included in this nomination. The Hanford B Reactor is significant for its association with nuclear power and the Manhattan Project: this reactor produced the plutonium used in the bomb dropped on Nagasaki. A cultural feature (the existing fence) was used to define the National Register boundary. **Verbal boundary description:** The Hanford B Reactor is located in the 100B/C Area of the Hanford Site, .05 mile south of the Columbia River and 3.5 miles east of the point where Washington Highway 240 crosses the Columbia River at Vernita Bridge. The structure and adjoining land lie within a 650-foot-square plot, the center point of which is at the above-referenced UTM coordinate. **Boundary justification:** The boundary includes the structure and space around it as currently defined by fencing.

Lusk Water Tower, Lusk, Niobrara County, Wyoming, is a round water tank about 25 feet in diameter and about 25 feet high, supported by a wood column structure. The water tower is significant for its association with the Chicago and Northwestern Rail Line, a line of major importance in Wyoming's settlement. The water tower was originally located in the center of the town of Lusk, near the depot; the water tower was moved to its present location, north of the Chicago and Northwestern Rail Line, in 1919 when the depot was rebuilt in the center of town. The water tower property, enclosed by a chain-link fence, is less than 1/4 acre in size. The property is bordered by a rail line to the south, pasture to the west and east, and a residential rural subdivision to the north. The move has had little effect on the historic integrity of the structure, as its new setting is associated with the rail line and reflects the continued development of the railroad and its function. The legal description of the parcel was used to define the National Register boundary. **Verbal boundary description:** The 1982 Warranty Deed to the Niobrara County Historical Society states that the Lusk Water Tower site consists of 0.2 acres. This tract of land is in the E 1/2 of Section 8, Township 32 North, Range 63 West of the 6th P.M. USGS Lusk, Wyoming, Quadrangle map, described as follows: From the 1/4 section corner on the east section line of Section 8, Township 32 North, Range 63 West of the 6th P.M. along the 1/4 section line a distance of 1,300 feet to point of beginning. Thence north 69 32' west, a distance of 230 feet; thence south 53 02' east, a distance of 173 feet; thence south 69 32' east, a distance of 94.5 feet; thence north 20 28' east, a distance of 50 feet; thence north 69 32' west, a distance of 32.5 feet to the point of beginning. Containing 0.2 acres, more or less. **Boundary justification:** The boundary is based on the legally recorded boundary lines that encompass the single parcel of land that is occupied by the water tower and its immediate surroundings. This represents the parcel owned and protected by the Niobrara County Historical Society.

Lusk Water Tower, Lusk, Wyoming. (Richard Collier)

Saint Cloud and Red River Valley Stage Road—Kandota Section, Todd County, Minnesota, is the best preserved section of the road built by the Minnesota Stage Company in 1859. The property is significant for its association with the transportation history of Minnesota, as defined in the Overland Staging Industry in Minnesota, 1849-1880, Multiple Property Submission. The property meets the following registration requirements: conforming to the original route; being unimproved, passable, and distinct from the surrounding land; being long enough to evoke a sense of destination or direction; and retaining the wooded setting of the area's condition during the period of significance. The land beyond the northwest end of the nominated property, which has been plowed, bears no signs of the road and is therefore excluded from the nomination. Reasonable limits were used to define the National Register boundaries. **Verbal boundary description:** The property consists of a six-foot-wide strip of land centering on the line delineated on the accompanying map (USGS 7.5 minute series, West Union, Minnesota, Quadrangle). The line connects the following UTM reference points: A 15 344350 5070710, B 15 344120 5070890. **Boundary justification:** The property boundaries encompass the visible roadway as determined through field survey by Robert Hybben, 22 May 1990.



Saint Cloud and Red River Valley Stage Road–Kandota Section, Todd County, Minnesota. Detail of USGS quadrangle map showing location of the National Register property.

Saint Cloud and Red River Valley Stage Road–Kandota Section, Todd County, Minnesota. The stage road trace, facing northwest. (Robert Hybben)

IV. REFERENCES

Knoerl, John, and Betsy Chittenden. *Boundary Analysis of the Dune Shacks of Peaked Hill Bars Historic District, Cape Cod, Massachusetts. Cultural Resources Information Management Series.* Washington, D.C.: Cultural Resources Geographic Information Systems Applications Center, National Park Service, U.S. Department of the Interior, 1990.

McClelland, Linda Flint, J. Timothy Keller, Genevieve P. Keller, and Robert Z. Melnick. *National Register Bulletin: Guidelines for Evaluating and Documenting Rural Historic Districts.* Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1990.

National Register Bulletin: Definition of National Register Boundaries for Archeological Properties. Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1985.

National Register Bulletin: How to Complete the National Register Registration Form. Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1991.

National Register Bulletin: How to Complete the National Register Multiple Property Documentation Form. Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1991.

National Register Bulletin: Using the UTM Grid System to Record Historic Sites. Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1977.

Parker, Patricia L., and Thomas F. King. *National Register Bulletin: Guidelines for Evaluating and Documenting Traditional Cultural Properties.* Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1990.

Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl. *National Register Bulletin: Guidelines for Evaluating and Registering Historical Archeological Sites and Districts.* Washington, D.C.: National Register of Historic Places, National Park Service, U.S. Department of the Interior, 1993.

V. NATIONAL REGISTER CRITERIA FOR EVALUATION

The National Register's standards for evaluating the significance of properties were developed to recognize the accomplishments of all people who have made a contribution to our country's history and heritage. The criteria are designed to guide State and local governments, Federal agencies, and others in evaluating potential entries in the National Register.

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

B. that are associated with the lives of persons significant in our past; or

C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield, information important in prehistory or history.

Criteria considerations: Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a. a religious property deriving primary significance from architecture or artistic distinction or historical importance; or

b. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his or her productive life; or

d. a cemetery that derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or

g. a property achieving significance within the past 50 years if it is of exceptional importance.

VII. NATIONAL REGISTER BULLETINS

The Basics

How to Apply National Register Criteria for Evaluation *

Guidelines for Completing National Register of Historic Places Form
Part A: How to Complete the National Register Form *
Part B: How to Complete the National Register Multiple Property Documentation Form

Researching a Historic Property *

Property Types

Guidelines for Evaluating and Documenting Historic Aids to Navigation *

Guidelines for Identifying, Evaluating and Registering America's Historic Battlefields

Guidelines for Evaluating and Registering Historical Archeological Sites

Guidelines for Evaluating and Registering Cemeteries and Burial Places

How to Evaluate and Nominate Designed Historic Landscapes *

Guidelines for Identifying, Evaluating and Registering Historic Mining Sites

How to Apply National Register Criteria to Post Offices *

Guidelines for Evaluating and Documenting Properties Associated with Significant Persons

Guidelines for Evaluating and Documenting Properties That Have Achieved Significance Within the Last Fifty Years

Guidelines for Evaluating and Documenting Rural Historic Landscapes *

Guidelines for Evaluating and Documenting Traditional Cultural Properties *

Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places

Technical Assistance

Contribution of Moved Buildings to Historic Districts; Tax Treatments for Moved Buildings; and Use of Nomination Documentation in the Part I Certification Process

Defining Boundaries for National Register Properties*

Guidelines for Local Surveys: A Basis for Preservation Planning *

How to Improve the Quality of Photographs for National Register Nominations

National Register Casebook: Examples of Documentation *

Using the UTM Grid System to Record Historic Sites

The above publications may be obtained by writing to the National Register of Historic Places, National Park Service, 1849 C Street, NW, Washington, D.C. 20240. Publications marked with an asterisk (*) are also available in electronic form on the World Wide Web at www.cr.nps.gov/nr, or send your request by e-mail to nr_reference@nps.gov.

APPENDIX: DEFINITION OF NATIONAL REGISTER BOUNDARIES FOR ARCHEOLOGICAL PROPERTIES

Edited by: Barbara J. Little, Beth L. Savage, and John H. Sprinkle, Jr.

TABLE OF CONTENTS

ACKNOWLEDGMENTS

The first version of *National Register Bulletin: Definition of National Register Boundaries for Archeological Properties* was edited by National Register Historian Beth L. Savage and released in 1985. The compilation of that bulletin was the result of the work of numerous individuals. Issues relating to the delineation of boundaries for archeological nominations were identified as a National Register Bulletin topic in the early 1980s by a committee of the National Conference of State Historic Preservation Officers, led by Valerie A. Talmage, former State Historic Preservation Officer of Massachusetts. Earlier work by Bruce MacDougal and Herbert Brito on boundary delineation for National Register properties served as a framework for the bulletin. Yvonne Stewart, Carol Dubie and John Knoerl played integral roles in the bulletin's completion. Helpful suggestions provided by the staff of the National Register and Planning Branches, Interagency Resources Division, and the insightful comments of many State Historic Preservation Offices contributed to the final publication.

Answering an expressed need to provide continuing guidance in the area of delineating boundaries for archeological properties, the National Register reevaluated the usefulness of the original version of *Bulletin 12* in 1994. We thank the following for their comments: Carl Barna (BLM), Colorado Historical Society, John Cornelison (NPS Southeast Archeology Center), Frank R. Finch (Department of the Army), Leland Gilson (Oregon SHPO), J. Bennett Graham (Tennessee Valley Authority), Richard R. Hoffman (FERC), Diane Holliday (State Historical Society of Wisconsin), Elizabeth Horvath (NPS Southeast Archeology Center), Judy McDonough (Massachusetts SHPO, Massachusetts Historical Commission), Arleen Pabon (Puerto Rico SHPO), Gary Shaffer, (Maryland Historical Trust), Herschel Shepard (University of Florida), Robert E. Stipe, Lois Thompson (DOE), Western Regional Office, Valerie Talmage (former Massachusetts SHPO) and Richard Guy Wilson (University of Virginia).

Several reviewers suggested incorporating *National Register Bulletin: Definition of National Register Boundaries for Archeological Properties* into a more broadly applicable boundary bulletin. In 1995, a revised *National Register Bulletin: Defining Boundaries for National Register Properties* was issued. This current reprint of that bulletin incorporates an updated and streamlined version of *National Register Bulletin: Definition of National Register Boundaries for Archeological Properties* as this appendix. John H. Sprinkle, Jr., (Woodward-Clyde Federal Services) wrote most of the new material on site definition and identified new examples. Barbara J. Little (Archeologist, National Register of Historic Places) organized the bulletin into this appendix and deleted redundant examples. Carol D. Shull supervised the revisions. Mary F. McCutchan edited the text and prepared it for publication. Jan Townsend, Antoinette J. Lee, and Beth Savage assisted with various aspects of its preparation.

I. INTRODUCTION

This appendix defines recommended approaches, with illustrations where applicable, to delineating boundaries for archeological properties. Section II defines the concept of an archeological site. How archeologists define the boundaries of archeological sites is outlined in Section III. Section IV presents case studies which address the delineation of archeological site boundaries for a variety of both hypothetical and actual National Register properties. The case studies illustrate the necessary details—including background information, boundary description, approaches used, and boundary justification—with acceptable delineated boundaries which typify situations commonly encountered in preparing nominations.

In each of the examples, the property has already been determined eligible for listing in the National Register. The cases are chosen to illustrate decisions regarding boundaries.

Reflecting the various types of historical associations retained by cultural resources, many historic properties are eligible for inclusion in the National Register under more than one of the four Criteria: A, B, C, or D. However, the National Register recognizes only one boundary for each historic property. A site that is eligible under Criterion D for the important information contained in its buried remains, may also be eligible under Criterion A for its significance to modern Native American groups as a Traditional Cultural Property. Although the physical boundaries of the archeological site may be relatively small, the larger boundaries of the traditional place would be represented in the National Register. Whatever the criteria for eligibility, historic properties should always be delineated by their largest relevant boundary.

One continuing issue with historic properties that happen to be archeological sites is the destructive nature of archeological investigation. The National Register does not, as a rule, list archeological sites that have been the subject of complete excavation. The artifacts, field records, photographs, and other data collected through the process of excavation do not retain integrity of location or setting and thus are not eligible for inclusion. Some sites that were the locations of significant milestones in the history of American archeology are listed after excavation as historic sites.

However, very few archeological sites are completely excavated in today's world where archeological studies are usually conducted as part of cultural resource management activities. Archeological investigation is by definition a process of sampling the buried record of past lives. At most sites, portions of the site remain unexcavated. In addition, in the framework of data recovery, or Phase III excavations, only a portion of the site, that within the "limits of proposed construction" or "area of potential effects" is subject to intensive excavations. Often large portions of archeological sites located outside the "mitigated" areas survive the development process. Care should be given, at the completion of data recovery excavations, to evaluate and nominate the significant surviving portions of the "unmitigated" area of such archeological sites.

For example, in a recent case from a southeastern state, a large multi component archeological site, dating from the Late Archaic and Contact periods, was subject to data recovery excavations in the area slated for construction of a reservoir dam in the late 1980s. Subsequently in the mid 1990s, another portion of the site underwent Phase III excavations as the result of a second federal under-

taking. However, portions of the site located between the two areas of previous data recovery excavations have the potential to contain significant archeological information. Proposed for preservation in place, this surviving parcel is eligible for the National Register although the site as a whole has endured two previous data recovery operations.

Finally, the National Register has long recognized the disproportionate under-representation of archeological sites (approximately 7%) within its approximately 67,000 listed properties. Clearly, many thousands of historic buildings, structures, and districts contain unrecognized archeological components that are equally eligible for the National Register. The National Register has made amending nominations to include the archeological portions of currently listed historic properties, a relatively simple and straightforward process. Nominations may be quickly prepared or amended using the computer-resident nomination forms available from the National Register. Specific procedures for amending nominations can be found in *National Register Bulletin: How to Complete the National Register Registration Form*. Nomination amendments should be used to increase or decrease the boundaries of a property or district, as well as adding or subtracting criteria and areas of significance.

National Register nominations should not be considered static documents. Indeed, as land uses at a site change, or as further information is gathered, it may be desirable to update the nomination to reflect current conditions. Over the years, a National Register nomination may require a certain amount of "information maintenance" in order to reconsider the property's description, contributing elements, period of significance, applicable criteria, and of course, boundaries.

II. WHAT IS AN ARCHEOLOGICAL SITE?

The main text of this bulletin (p.30) defines a site as "the location of a significant event, prehistoric or historic occupation or activity, or building or structure, (whether standing, ruined, or vanished) where the location itself possesses historic, cultural, or archeological value" and goes on to note that "the most common types of resources classified as sites are archeological resources."

Most archeologists practicing their craft today would agree that together with the artifact and the feature, the "archeological site" is one of the fundamental concepts in our discipline. Yet, it is sometimes difficult to find a simple, meaningful definition of what an archeological site is, and what it is not.

Archeologists have always recognized the site as one of the foundations of all research on past cultures. In his 1956 work, *A Short Introduction to Archaeology*, the British archeologist, V. Gordon Childe described how although "antiquities" could be commonly found either on the surface of the ground or through excavation, "such objects in themselves are only potential archeological data." Artifacts only become data "when classified in light of their associations, of the contexts in which they have been found" within archeological sites. Thus, for Childe, a "site" was simply the source of archeological information.

Field manuals for archeologists provide common definitions of archeological sites. A site is "a fairly continuous distribution of the remains of a former single unit of settlement" (Dancey 1981:13).

> An archeological site is usually the scene of past human activity. It may be marked by the scanty remnants of a brief encampment, or by the abundant remains of a settled village. If a site shows evidence of repeated occupation or use, it is still considered a single site, but various levels or periods of use may be distinguished within it (Hester, Heizer, and Graham 1975:13).

> Each archeological site is a unique time capsule. Each has its own distinct character and problems. Sites represent a body of data relevant to their setting and their cultural patterning and must be interpreted in relation to both this local setting and to their function as a link between cultures (Joukowsky 1980:35).

Outlining the mysteries of archeology in an effort to protect sites on private property, National Park Service archeologist Susan Henry (1993:6-7) relates several characteristics of sites:

> The focus of the archeological attentions is the *site*—a place where human activity occurred. An archeological site has horizontal and vertical dimensions. Few archeological sites are simple and straightforward. Most are complex, containing diverse elements, or *components*, each of which may represent a different activity. All site components bear a relationship to one another, and all components, including the buildings and landscapes, need to be studied in order to understand the way of life once carried out at [a site].

Archeologists occasionally have pointed out that the site concept is inadequate because the archeological record often is not clustered. Several researchers have supplemented the site concept with that of "nonsite sites" (for example, Dunnell and Dancey 1983; Lewarch and O'Brien 1981). "Distributional archeology" (Ebert 1992) focuses on surface material rather than sealed sites in order to concentrate on human use of the whole landscape rather than on discrete, rare places. For the purpose of nominating an archeological site to the National Register, there must be clearly defined and justified boundaries. See Cases 15 and 16 for examples of delimiting site boundaries where the artifact record is continuous.

In an attempt to add consistency to the process of cultural resource management, many State Historic Preservation Officers (SHPO) have offered specific statements on the characteristics of archeological sites. For SHPOs, the definition of archeological site is often tied to the process of completing an archeological site form, which forces the regulators to standardize terms and provide guidance for just what is and what is not a site. For example, Virginia's guidelines for archeological survey provide one definition of a site:

> In general terms, an archeological site is defined as the physical remains of any area of human activity greater than 50 years of age for which a boundary can be established. Examples of such resources would include the following: domestic/habitation sites, industrial sites, earthworks, mounds, quarries, canals, roads, shipwrecks, etc. Under the general definition, a broad range of site types would qualify as archeological sites without the identification of any artifacts (VDHR 1996:1).

All archeological sites have some form of physical expression, either through the presence of artifacts or other evidence of modification of the natural world through human agents. It is difficult to think of an archeological site that would have no surviving physical remains. In fact, the National Register generally does not list archeological sites that have been fully excavated, that is, where no physical remains of the site survive, because of the loss of integrity.

The theoretical construct of "site" plays a fundamental role in the ways archeologists view past societies. Concepts regarding archeological sites can be expressed through four phrases:

1. **Methodology Mechanics.** The methods used by archeologists to look for sites influences the sites that are identified. This concept reinforces the traditional scientific and archeological premise that methods and theory fundamentally influence the nature of the recovered information. Thus, a clear definition of how to define the location and boundaries of sites must be an essential part of every archeologist's theoretical and methodological tool kit.
2. **Artifact Axiom.** An archeological site must have some physical evidence of occupation, use, or transformation. This evidence is usually in the form of artifacts, but also includes human alterations to the landscape. Without some form of physical presence it is impossible to define boundaries to archeological sites.
3. **Density Dilemma.** Is the center of the site the place with the most artifacts? The boundary of archeological sites should not be defined solely on the basis of artifact density revealed in an archeological survey. As the remains of past human activities, archeological sites may contain areas where artifact density is relatively low, separating two portions of the same site. In addition, various cultural and natural transformations have fundamentally altered the condition of readily apparent archeological sites. Through time, vegetation may obscure artifacts, plowed areas may blanket subsurface features, and soil movement by a variety of processes may have buried sites. The definition of a site's boundary must consider the land use history of the site as well as artifact density.
4. **Present vs. Past.** How certain are the limits of a prehistoric or historic period site? Obviously, the definition of an archeological site's boundaries is a judgment made in the present. It is molded by the archeologist's training, education, and view of the past. Care should be given to consider how the site may have been perceived in the past. Historic boundaries, if they can be defined or modeled, should be given primacy over modern boundaries.

III. DEFINING THE BOUNDARIES OF ARCHEOLOGICAL SITES

While defining boundaries usually requires some limited excavation, it is also often possible to use nondestructive methods prior to archeological fieldwork to identify the location and extent of suspected subsurface features within archeological properties. Over the years, archeologists have adapted a variety of methods from other disciplines to see beneath the earth. Geophysical prospecting techniques most commonly used by archeologists include electrical resistivity and conductivity (including metal detectors), ground-penetrating radar (GPR), and magnetic prospecting. Analysis of soil chemistry also has been used successfully to identify sites and activity areas within sites. Aerial photography is a well-known technique used extensively to identify sites. Although some types of remote sensing can be executed by archeologists trained in their use, it is common to hire specialists because the techniques and technologies of remote sensing change rapidly.

Advantages to geophysical methods are that they are nondestructive (or minimally destructive) and are relatively fast. However, geophysics is an indirect science which detects "anomalies" which then usually require some level of sub-surface testing to verify as archeological resources.

Remote sensing is particularly useful in underwater archeological endeavors. In the case of one recently listed shipwreck along the eastern seaboard, the site was identified using a towed-array proton precision magnetometer as part of a state-sponsored survey. The 30- by 40-meter boundary of the site was identified by using metal detector survey as well as test excavations.

Clearly, as new technologies and methodologies are adapted to the needs of archeological investigations, these techniques can be used to help define boundaries of National Register properties.

Whether using new technologies or old, the level of effort to define boundaries should be an explicit part of research designs for archeological surveys designed to identify all potentially National Register eligible sites. In addition, the principles for demarcating the limits of archeological sites should also be explicitly stated in the survey methodology. Once defined, this methodology should be consistently applied to each potential archeological site identified in a survey.

National Register boundaries distinguish, from their surrounding environment, archeological sites meeting the National Register criteria for evaluation either individually or as contributing elements in an archeological district. Site boundaries often are reasonable distinctions that may not always reflect the spatial concepts implicit in certain theoretical perspectives, notably those of "nonsite"

archeology. However, boundary determinations require clear recognition of how physical features and their mutual relationships form a "site." Usually this requires the archeologist to decide the degree of fall off in cultural material density that is no longer acceptable in order for an enclosed area to be considered part of the significant "site."

Boundaries for National Register properties are horizontal boundaries that can be clearly marked in two dimensions. Vertical boundaries of a site probably will have been established or predicted through testing to evaluate the site for significance.

Absolute boundary definition is often unachievable. Boundaries usually represent compromises reconciling both theory and field conditions to facilitate communication with agencies and the public about sensitive geographic locations having important concentrations of archeological information.

There are several methods for obtaining boundary evidence for archeological sites. These are summarized on page 30 in the main text of this bulletin. Examples of each are provided in this appendix or in the main text of this bulletin. Each of the techniques used must be adequately documented in the text of the nomination.

The first two, "subsurface testing" and "surface observation," provide direct documentation of archeological resources. Several examples in the main text use these methods. See the discontiguous district of Crockett Canyon/Coyote Ranch Archeological District (p. 23) as well as most of the examples under "Archeological Sites and Districts" (pp.30-36). In this appendix see Case 1 for an example of direct documentation through subsurface testing and Case 2 for an example of surface observation.

The third method, "observation of topographic and other natural features," often provides logical and defendable boundaries for sites. For examples in the main text, see in particular Rockshelter Petroglyphs (p.31), Prehistoric Quartzite Quarry Archeological Site (p.31), and Harbor Island Historic and Archeological District (p.33). In this appendix see Case 3 for a further example.

The fourth technique, "observation of land alterations," includes the documentation of land disturbance that may have destroyed portions of a site, thereby indicating a boundary for the remaining resource. See Case 4 for an example. It may also involve documenting the lack of disturbance to a property as evidence supporting a site's integrity. This latter case is illustrated in Cases 5 and 6.

The last technique listed on page 30 is "study of historic or ethnographic documents." This technique often involves the use of maps and legal boundaries. Several examples in the main text illustrate the use of such documents for determining boundaries. See these contiguous districts in rural settings: The Woodlawn Historic and Archeological District (p.17), Bloomvale Historic District (p.21), Weyerhaueser South Bay Log Dump Rural Historic Landscape (p.22). The boundaries for Pecos Archeological District are coterminous with the legal boundaries of Pecos National Historical Park (p.24). Cases 7, 8, and 9 in this appendix provide further examples.

In addition to these five techniques is the "property type model," which was defined in earlier editions of this appendix (as *Definition of National Boundaries for Archeological Districts*). The property type model is based on known site types. For example, a late archaic camp in a swampy area is discovered during a survey and is nominated for the important information potential of its well-preserved plant remains. However, testing was not done to determine the boundaries of the site. To describe and justify a boundary coterminous with the rise of land overlooking the swamp, a property type model could be used. Such a model would compare this type of site to other known sites in the region, clearly presenting and supporting the expected boundary for this type of site. Case 10 provides an example of the property type model.

IV. CASE STUDIES

It is an archeological truism that "every site is different." The process of determining the boundaries of an individual archeological site depends, to a certain degree, upon the individual characteristics of that site and its surroundings. The following case studies add to those presented in the main text. It is important to note that in most cases, more than one technique is used to determine boundaries.

Examples for each of the main techniques discussed above are provided first. Following those is Case 11, a district with boundaries based on more than one area and period of significance; Case 12, a site eligible under criteria A and D as both a traditional cultural place and an archeological site; Case 13, a boundary reduction; and Cases 14 and 15, examples of delimiting boundaries amid continuous distribution of artifacts.

Case 1. Shovel Test Pits delimiting a prehistoric site located within a forest. A multicomponent prehistoric site was located within Federal property in a state in the upper South. The boundaries of the site were defined through the excavation of 46 shovel test pits and limited surface collection of artifacts along a road. Information potential and National Register eligibility was confirmed through the excavation of 15 1 x 1 meter test units. Although some disturbance to the site resulted, previous construction of the road does not appear to have significantly compromised the integrity of this property. *In situ* materials were found as deep as 50 cm below the present ground surface. The distribution of artifacts at this site conforms to a model of site definition in which the highest density of artifacts is judged to be located at the center of the site, with fewer artifacts found in outlying areas. The edge of the site is defined by the boundary between the presence of artifacts and the absence of artifacts, as revealed in test pits.

Boundary Description: The site is located along AAA Road with the extreme northeastern boundary being located approximately 3,000 feet north of the confluence of BBB Branch and CCC Branch, at an elevation of 1500 ft. amsl. From this point the site area follows the road to the west (which coincides with the contour of the ridge top) for an additional 1,000 feet. The site is confined to the north and south by its topographic situation; cultural materials were confined to the level or near level portions of the ridge system. (See Figure 1.)

Boundary Justification: The site boundaries were determined by the limits of cultural materials as defined by subsurface shovel testing. A surface collection along the road revealed a continuation of materials outside of the defined boundaries;

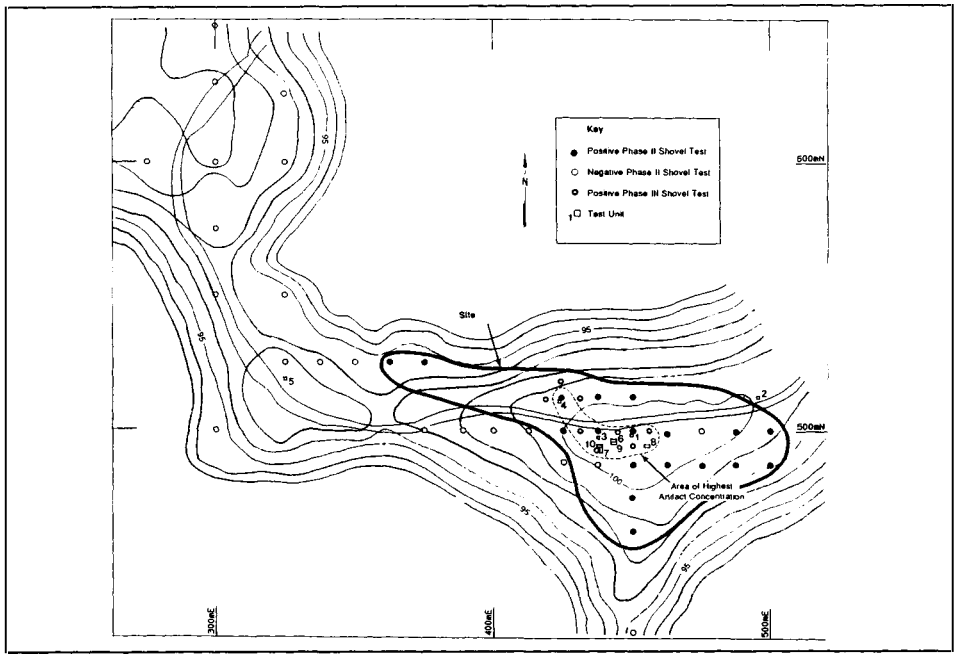


Figure 1. (Case 1). The site boundaries for this prehistoric archeological site from a state in the upper south were defined by the presence of artifacts recovered during shovel test pit excavation. The map included with the National Register nomination clearly shows the limits of the site with a bold line, illustrates the location of excavation units, and clearly locates the position of the site within a forested environment.

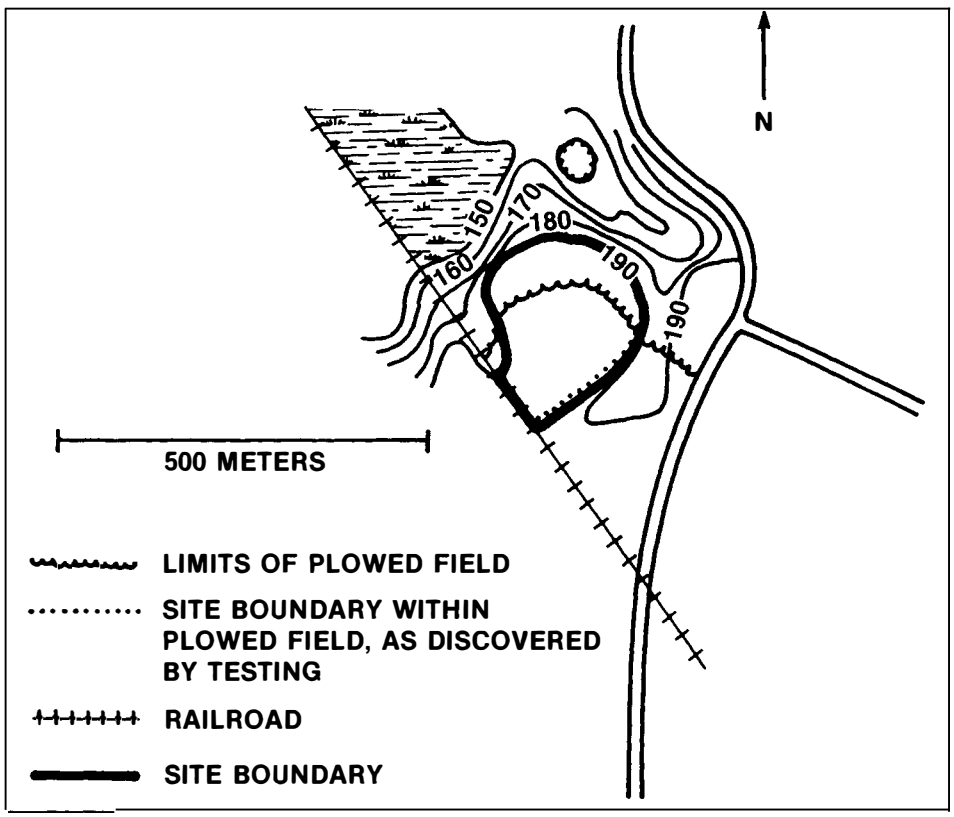


Figure 2. (Case 2). Located primarily within a plowed field, the bounds of this site were determined through direct documentation. Although no testing occurred within the woods to the north of the fields, the presence of higher artifact densities in this area suggested that the site continued beyond the plowed field.

however, it is likely that recent road improvement activities are responsible for the current location of these materials. For this reason, the boundaries as defined by the shovel testing appear to be the most accurate definition of the site's size and extent.

Case 2. A Plowed Prehistoric Site Identified through Surface Collection, Natural Topography, and Land Disturbance. The site lies on a rise of land partly in a wooded lot (11.5 acres) and partly in a plowed field (ca.5 acres) entirely within property owned by a state agency. The site was discovered in 1981 when the State agency leased land for farming; the plowed field was surface-collected and artifacts and features were mapped. The site was defined by direct documentation (observation of surface features and surface collection; natural topographic features; and land disturbance.)

Boundary Description: The site is bounded on the south by the known extent of cultural materials, on the west by railroad tracks and on the north and east by a contour line defining a terrace overlooking a wetland (See Figure 2.)

Boundary Justification: The southern boundary of the site is established by the limit of cultural materials and features and roughly corresponds to a lowering in grade. The highest artifact densities recovered during surface collection were noted at the northern and western edges of the plowed field. By extrapolation, it is likely that the site extends into the wooded areas to the north and west. The western boundary is established by the railroad cut which corresponds roughly to the original terrace edge. The northern and eastern boundaries are set by the contour line marking an abrupt fall to the wetland.

Case 3. A Prehistoric Site Defined by Natural Topographic Features: The site was discovered in 1965 and was investigated archeologically between then and 1977 by the State University and the State Archeological Society. Excavations and surveys revealed that the site was occupied from Early Archaic through Woodland times and that a historic, eighteenth-century, English-colonial component is also present.

Boundary Description: The boundaries of the site correspond to the edges of an erosional remnant, the 140-foot contour line on the topographic quad, a ridge. The site is bounded by the creek and swamp on the northwest, and by low-lying floodplain on all other sides (See Figure 3.)

Boundary Justification: The boundaries of the site correspond to those of the landform on which it lies. Archeological investigations have revealed artifacts only in those areas above the 140-foot contour of the valley floor in all sampled areas of the ridge. The site's maximum length northeast to southwest is 2,500 feet, and its maximum width is 800 feet. The low-lying nature of the swamps and floodplain surrounding this erosional upland remnant presumably made this ridge the only habitable portion of the area, implying strongly that topography constituted a behavioral boundary here.

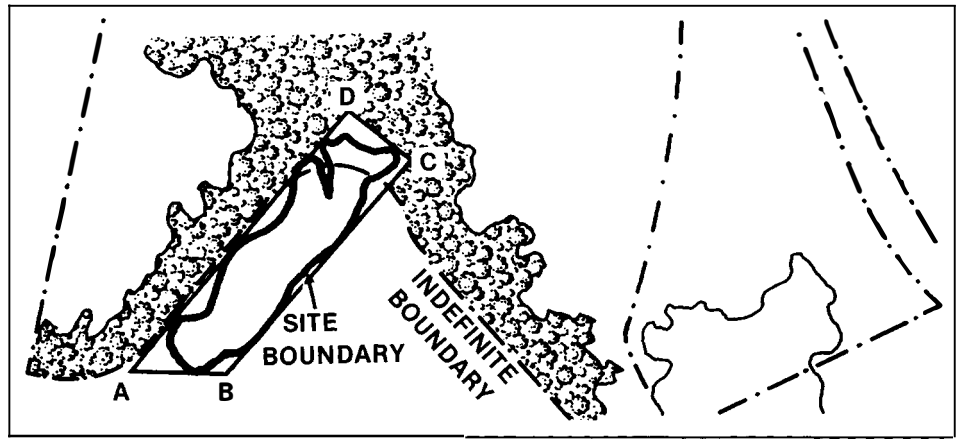


Figure 3. (Case 3). The boundary of this site was primarily determined by topographic features and contains the ridge area encompassed by the 140-foot contour line. Archaic and Woodland prehistoric components, in addition to an eighteenth-century historic occupation, are constrained by a creek, swamps, and flood-plain settings.

Case 4. Documented Land Disturbance of a Riverine Site Defined by Natural Features and Modern Land Uses: A Woodland period prehistoric archeological site was identified by avocational archeologists and reported to the SHPO. The 50-acre site comprises surface finds along a floodplain adjacent to a meandering river course. No scientific excavations have been conducted at the site.

Boundary Description: The site is bounded by natural topographic features and manmade alterations to the landscape. The 600-foot contour line defines the northern, western, and eastern boundaries of the site. The southern portion of the site is defined by a railroad right-of-way which was constructed at the toe of a steep slope marking a topographic boundary as well as a manmade one (See Figure 4.)

Boundary Justification: The river forms a naturally occurring boundary to nearly three sides of the site. The area contained within the inside bend of the curve of the river had bearing on the living space which was available to prehistoric people. Surface collections have yielded prehistoric cultural materials over most of the dry land area to within a few feet of the present shore and as far south as the railroad easement. The marshy area lying between the 600-foot contour and the river was not included because interpretations of the environmental history of the site indicate that the area has been subjected to river scouring during various meander episodes, leading to little expectation of the existence of cultural remains.

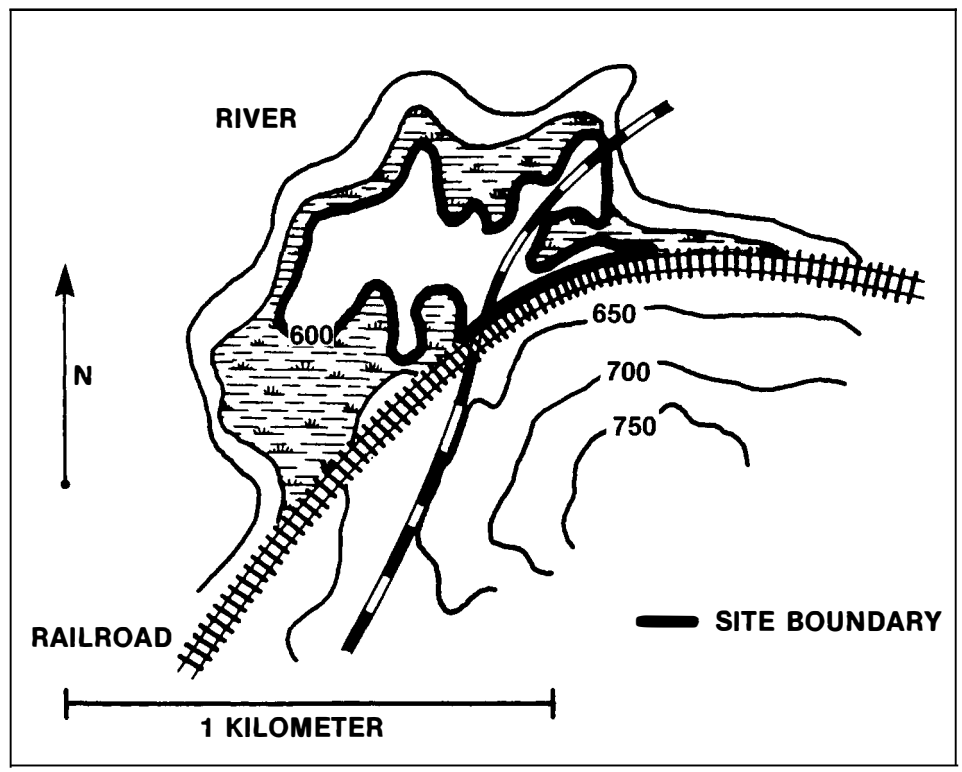


Figure 4. (Case 4.) The river and associated swamp form a natural boundary for this prehistoric site on its west, north, and east sides. The southern boundary was truncated by construction of a railroad seated at the base of a topographic rise.

The railroad easement that defines the southern boundary represents a corridor of highly disturbed land from which archeological resources cannot be expected to have survived. The right-of-way also serves to mark a sharp break in slope, delineating the well-drained alluvial terrace which lies on the inside bend of the river from the steep (greater than 15%), rocky, till covered northerly facing slope. The topographic characteristics beyond the easement would have rendered this area unattractive for occupation.

Case 5. Documents and Lack of Land Disturbance of a Historical Archeological Site in an Urban Setting: An eighteenth-century house in a Colonial-era town has been nominated. The townhouse is located on a deep lot maintained as lawn and gardens. Historical research confirms that the current property lines were established in the original plat of the block in the 1700s and that substantial construction has never occurred. Archeological investigation of other houses in the urban area has revealed the presence of associated buried privies and trash deposits.

Discussion: Historic documentation of legal boundaries would be the most appropriate in this case where the documentation confirms that current property lines represent the historic property lines. In addition, the lack of interior block disturbance is documented, leading to an expectation of buried feature remains such as privies. This expectation may be confirmed by surface observation of site features and materials. Subsurface testing would not be necessary for boundary definition in this case. Modern legal boundaries should be used in concert with historic documentation which confirms that the current legal boundaries are historically the legal boundaries of the site.

Case 6. Documents and Lack of Land Disturbance for a Multiple Property Nomination for Charcoal Iron Furnaces: Numerous charcoal iron furnace complexes and associated communities have been identified. All known examples of this class of property are included. Although predominantly subsurface in nature, a few aboveground resources are present. Archival research and intensive restoration of one of the furnace complexes have established a description of the types and functions of the resources represented, their time range, their physical characteristics, and the probable classes of important research data represented. Original plats for individual furnace complexes and communities as well as historic photographs are available. Limited archeological surveys have confirmed the presence of historically documented features at several of the furnace sites and associated communities. Typically, the iron furnaces and associated communities have not been developed following their abandonment.

Boundary Description: For each furnace complex and associated community, the boundary is defined by the historical limits of the resource as illustrated in historic plat maps and verified as undisturbed based on field inspection (See Figure 5.)

Boundary Justification: Given that all members of this class of resources have been identified; that the original plats are available to establish boundaries; that archival research, restoration, and limited archeological research have established the types and functions of the various resources represented; and that the furnace sites are located in a region of the State that has experienced little development, it is appropriate to use historic documents (plats) to determine the boundaries of each property included in the nomination. Subsurface testing is not necessary for boundary justification, because enough is known about the site functions and features to accurately predict locations of activity loci and expected data classes. Limited surface reconnaissance on several properties and restoration of one furnace and auxiliary building have confirmed the presence of expected features, based on historic documentation. Visible signature features, such as furnace stack remnants, earthen ramps, slag dumps, ore pits, and building foundations in conjunction with plats, historic photographs, and standing buildings have been useful in locating specific features, i.e., stacks are located near streams

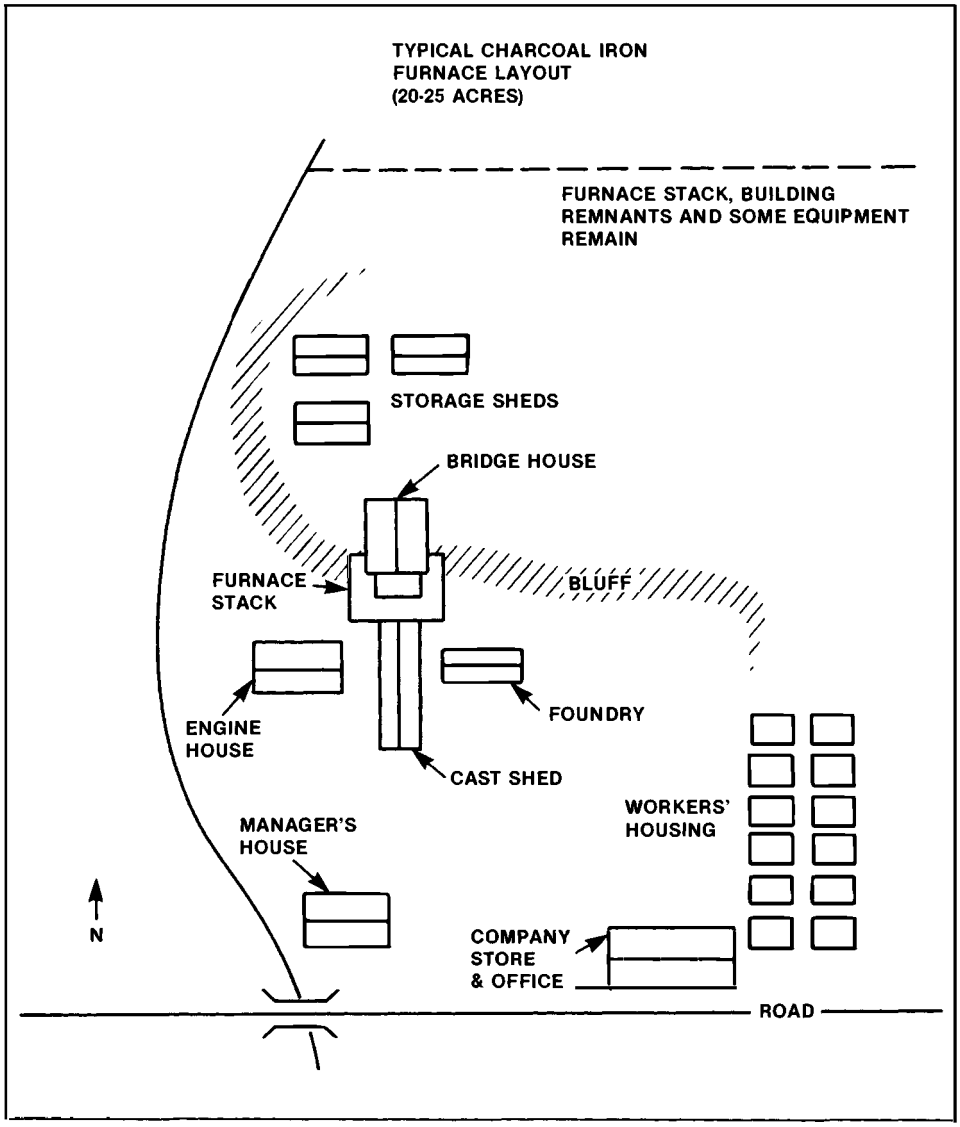


Figure 5. (Case 6). This figure shows a typical charcoal iron furnace dating from the nineteenth century. As part of a multiple property nomination, the boundary of each complex was estimated based upon historical cartographic documentation and confirmed using limited field investigations.

and sandstone banks, but are generally not useful in establishing boundaries. Later land alterations are virtually nonexistent or have had minimal impact on the properties in question. In sum, use of historic documentation (plats), in conjunction with visits to each of the sites to confirm expectations regarding integrity, is considered appropriate to define boundaries for each of the properties included in the multiple property nomination.

Case 7. Use of Legal Boundary for a Site Divided by Modern Property Lines: A prehistoric site has been discovered as the result of a cultural resource survey in preparation for a construction project on part of parcel A. It is clear that the site extends beyond the construction project limits onto parcel B. The developers involved and their archeological contractors have been unable to gain the adjacent private owner's consent to survey parcel B in the area of the site for the purpose of boundary definition. Investigations of the site area within parcel A establish that the site, *as it exists within parcel A,* meets National Register criteria.

The SHPO or other nomination sponsor would be expected to make every effort to identify the totality of the property prior to nomination, so that the nomination reflects the entire resource. However, if examination of the part of the site on parcel B has been legally prohibited, and if there is no other basis for a well-justified estimation of the boundaries of the entire site, and, what is most important, if the portion of the site within parcel A was clearly eligible on its own, then the known portion of the site could be nominated.

Discussion: Where direct documentation of boundaries is not possible, and natural and topographic conditions do not help demarcate a site, legal boundaries may be used to define boundaries. In this case, the lot line shared by parcels A and B will form the defined eastern boundary. (See Figure 6.)

Case 8. Use of Documents for a Partially Inundated Historic Fortification: Archeological investigations were conducted at an early nineteenth-century coastal fortification along the eastern United States. Although the aboveground elements of the fort were determined not to meet National Register criteria due to renovations in the twentieth-century, the subsurface remains of the facility contained unique deposits representing the military occupation of the site. Significantly, deep testing confirmed that a portion of the "old tabia[sic.] barracks and magazine" had been buried by up to nine feet of sand. Other tabby foundations (tabby is a cement-like construction material) were observed eroding out of the adjacent beach area. These discoveries reinforced historical and cartographic research that suggested portions of the early nineteenth-century fort remained buried within periodically inundated areas of the coastline.

Discussion: The northern, western, and eastern boundaries of the property were defined as the current legal bounds of the military property. The area surrounding the fort that may have contained archeological remains has been heavily disturbed through subsequent residential development. The southern boundary along the coastline was interpreted from historical maps as extending approximately 150 feet into the adjacent river. These boundaries contain the documented extent of the fortifications.

Case 9. The Use of Documents for the Site of an Eighteenth-Century Settlement: The irregularly shaped site marks the remains of an eighteenth-century settlement situated on a high bluff on the west bank of a river. This area is presently in planted pines, mixed forest, and abandoned pecan orchards. The site was located on the basis of documentary and map information as well as by archeological data obtained in sampling excavations carried out there in 1974 and 1977 by the State University.

Boundary Description: The site is bounded on the west side by a railway line for a distance of about 1500 feet. The north and south boundaries turn eastward from either end of this boundary line. The northern boundary runs eastward 700 feet, turns southward for 450 feet, and continues 2,700 feet eastward to the western edge of the river. The southern boundary runs eastward 1,300 feet, turns northward 450 feet, and continues eastward roughly 2,100 feet to the western edge of the river. A line along the western edge of the river forms the eastern boundary of the site.

Boundary Justification: The boundaries of the settlement were

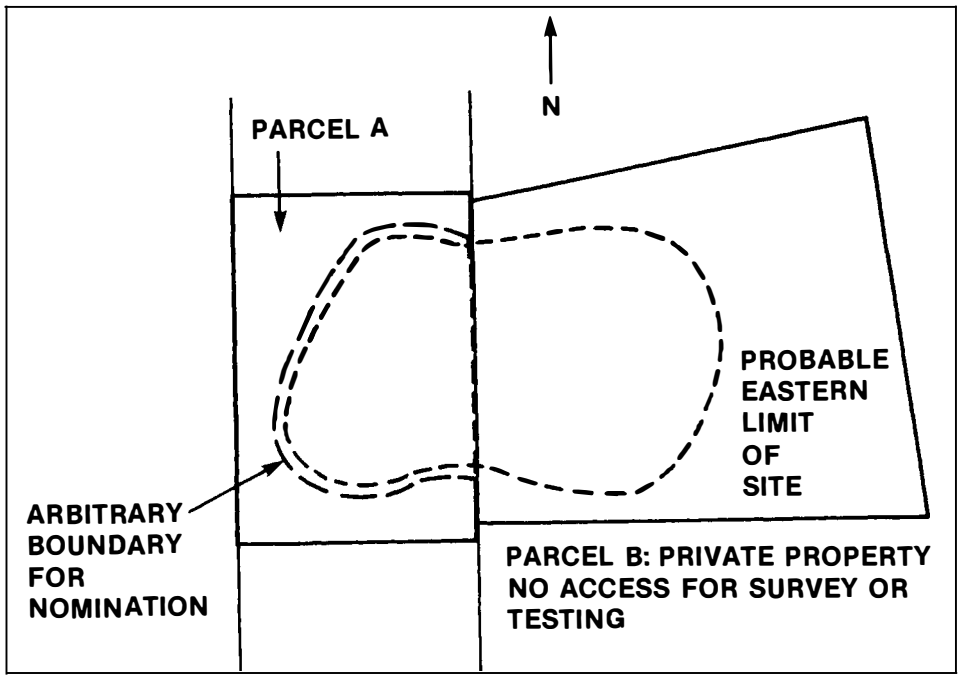


Figure 6. (Case 7). In this example, the eastern boundary of this prehistoric site was estimated, because access was denied to this portion of the property. The figure illustrates the polygons used to calculate the UTM coordinates for the nomination, while the actual boundaries are shown on the west side of the parcel.

defined by comparing the configuration of modern roads with those shown on early maps of the region. Based on this information, archeological sampling was conducted to ascertain the location and spatial limits of the past settlement. The results of these excavations were employed to extrapolate the overall distributions of structural and specialized activity artifacts. These distributions revealed that the early settlement lay along both sides of an abandoned road running westward from the river landing and along either side of a north-south road intersecting it about 1,000 feet from the riverbank. These distributions reflect the linear layout of the site indicated in comparative documents relating to contemporary settlements of similar function and corroborate the scanty documentation for the settlement of the site itself.

The western, northern, and southern boundaries of the site are defined by the gradual thinning out of artifacts in the area. The western boundary is also demarcated by the railroad, the construction of which destroyed archeological evidence in its immediate vicinity. The northern and southern boundaries of the site near the river are also defined by the presence of two deep gullies and a slough; the steep slopes of which mark the end of the occupied area. A road cut through the bluff indicates the actual landing site on the river. Presently, the western edge of the river was chosen as the eastern boundary due to the absence of underwater archeological investigation. Underwater components are commonly found in association with land sites situated along rivers in the State and the presence of such a component here is likely. If, as the result of an underwater survey, underwater components are discovered, the eastern boundary may be expanded.

Case 10. Property Type Model for a Deeply Buried Site: Prehistoric cultural material is discovered deeply buried in a floodplain. The materials have come from a depth of approximately 20 feet. Sufficient cultural material has been recovered through soil core testing to allow identification of the site's cultural/temporal affiliation. This appears to be an important multiuse site, and eligibility under the National Register criteria is firmly established.

Discussion: Subsurface testing is the preferred approach, but it is considered infeasible in this case for technological reasons. Natural topographic features may be used to define the site limits, however, completely different topography may have existed when the buried level was the ground surface. The effort required to test a site at such depth exceeds the technology commonly available in a survey program. Therefore, the site was listed with reasonable boundaries. The basis of the property type model (i.e., analogy to a known site, etc.) should be thoroughly explained in the nomination. The implications of using such a method include the probable inclusion of areas lacking significant site remains, as well as the exclusion of actual site areas. Where accurate boundaries cannot be confirmed, a property type model should be used to outline a reasonable boundary believed big enough to include the entire site.

Case 11. A Large National Register District: The 650-acre district is a multicomponent locality displaying at least two discrete occupations. The earlier occupation is represented by a series of Pueblo II (ca. 10th-11th century, A.D.) residential sites and associated special-use localities (field houses, lithic quarries). The later occupation (early 20th century) is

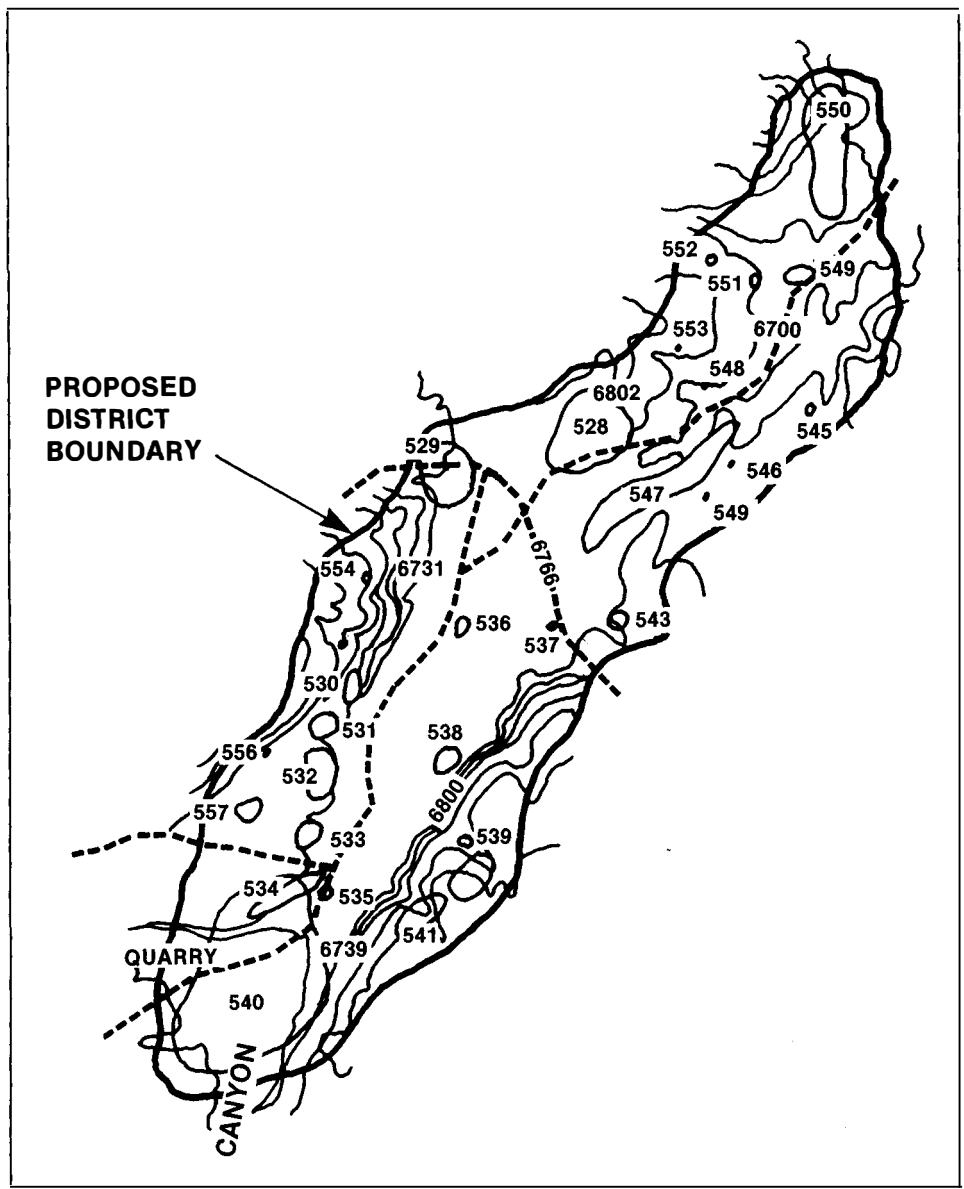


Figure 7. (Case 11). The border of this multicomponent district was established based on the distribution of known archeological sites.

centered around a limestone quarry and kiln at the southwest corner of the district. Associated with this limekiln is a concentration of Navajo hogans, probably occupied by workers at the mine. The sites are scattered around the periphery of the valley floor used for agricultural purposes by the Puebloan occupants.

Boundary Description: Starting at a point (area of Point A) on the 35-36 section line, 1,500 feet south of the marked corner of sections 25, 26, 35, and 36, the boundary trends east about 200 feet, then south for a chord distance of approximately 2,700 feet, crossing an unimproved road, to the area of Point B. From there, the boundary trends southwest, following the edge of the canyon, approximately 9,200 feet (chord distance) to where the boundary intersects the section 10-11 line, in the area of Point C. From there, the boundary trends west-southwest for approximately 1,500 feet (area of Point D), then north and northeast approximately 3,000 feet to Point E (crossing the canyon and two unimproved roads). From Point E, the boundary trends northeast, again following the edge of the canyon for about 4,400 feet to the area of Point F. From there, the boundary continues northeast, with a southeastward curve, for a chord distance of 5,600 feet to the point of beginning (area of Point A-See Figure 7.)

Boundary Justification: The external boundary is based on the known distribution of individual cultural properties. The boundary includes all culturally and behaviorally related sites associated with the Pueblo II and early twentieth-century limekiln settlements located within the geographically defined canyon. The two separate areas of significance are considered as one district because the property distributions overlap in the southwestern area of the district, with the additional acreage necessary to include the entire limekiln complex being minimal compared to the overall district size. Within the boundary is the alluvial valley used for agricultural purposes by the Puebloan occupants. The valley floor has been included because it contains the agricultural land that made settlement here possible. Although surface inspection revealed few visible cultural resources, aerial surveys may reveal buried agricultural features in this valley. In this particular case, the valley floor is included within the district without evidence of archeological materials due to the small scale of the district and the dispersal of sites within the district around the valley. However, for larger districts, evidence of agricultural use, such as the presence of vegetable pollen, would be necessary to justify the inclusion of the valley floor within the boundaries of the district. In the absence of such evidence, the boundaries would be drawn to exclude the valley floor from the center of the district or become a discontiguous one.

Case 12. Archeological Site and Traditional Cultural Property. This nomination describes three archeological sites found within a cultural landscape important to a Native American group in a western state. The property includes about 5 acres of an adjacent river, which was used in traditional subsistence practices. Archeological components include a village midden area with a depth of about 2 feet, while the landscape features include rocks, a grove of trees, and a waterfall. Within this site there is significant linkage between archeological record and traditional cultural features. The site was determined eligible under criteria A and D.

The limits of the archeological sites and cultural landscape were defined using a combination of direct documentation (ethnographic and archeological studies) with topographic setting. The boundaries for this site were documented both by a series of maps and an aerial photograph, each showing the limits of the property Boundary Description: The boundary is indicated on the map accompanying the nomination. (See Figure 8.)

Boundary Justification: The property is situated on a 40-acre river terrace and that portion of the river directly adjacent to the terrace. The property is bounded on the north by the mountainous slope rising from the terrace. The river channel which loops around the terrace forms the eastern and southern boundary. The western boundary is defined by a relatively steep slope rising up from the terrace. The boundaries encompass the resources and their immediate setting.

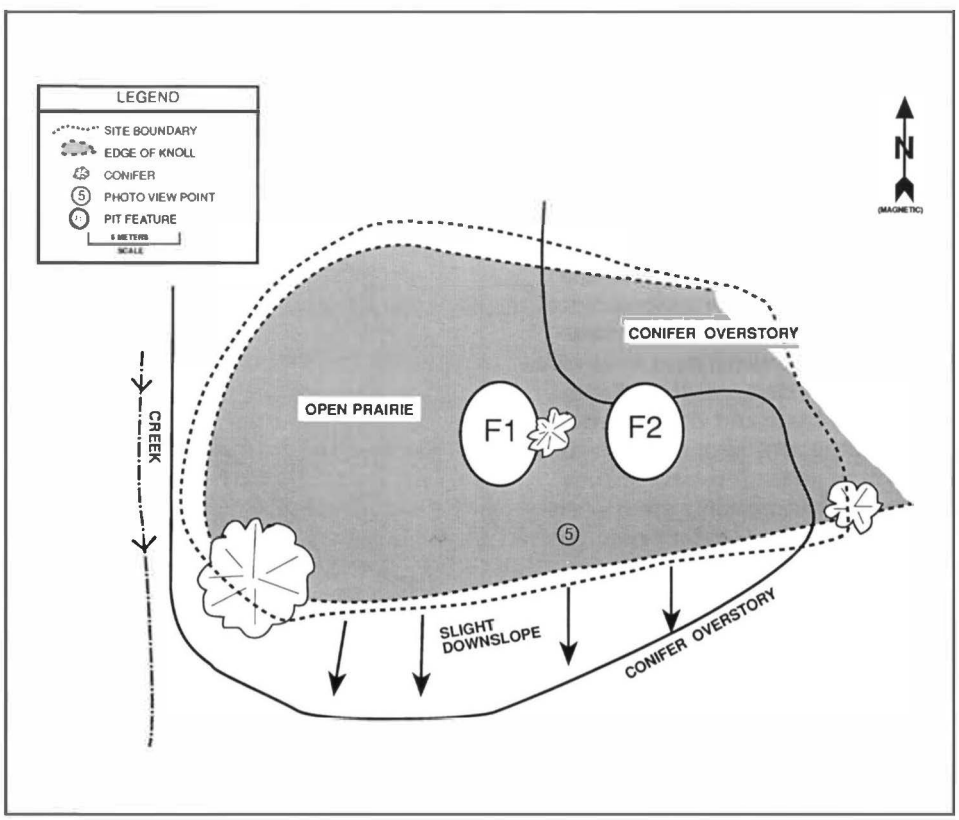


Figure 8. (Case 12). This nomination from a western state included aerial photographs to illustrate site boundaries. A transparency with the site boundary indicated was overlaid on the photo to show the extent of this site. The site also included elements of a traditional cultural property. The boundaries of this site were determined through archeological and ethnographic survey.

Case 13. Boundary Reduction of a Large National Register District. Listed on the National Register in the early 1970s, a large district in a northwestern state contained over 400 archeological sites across more than 400,000 acres. Sites within the district represented all periods of human occupation in North America, from Paleoindian through the early twentieth century. Only 10 percent of the entire district had been the subject of archeological investigations at any level. Site distribution in the district appears to have been influenced by a variety of environmental factors, including topographic and hydrological setting. Most of the recorded sites are wholly on the ground surface or are shallowly buried, while many of the sites are threatened by natural forces (wind and water erosion) and degradation by human activities.

Discussion: After 20 years of archeological studies, the district's boundaries were reduced in the early 1990s by 50 percent in order to more accurately reflect the distribution of known sites and areas with high probability to contain additional important sites. A very few of the previously identified sites were excluded from the revised boundaries, now totaling over 200,000 acres. Excluded from the district were areas with the highest elevations and slopes greater than 20 percent that were unlikely to contain any archeological sites. Revision of the boundaries also removed unnecessary "buffer" areas from the district. Because of the large size of the district and the amount of new archeological information, a completely new nomination was prepared rather than a simple amendment to the existing nomination.

Case 14. Continuous Artifact Distribution: Multiple Prehistoric Sites Located on a Flood Plain: The flood plain of the river is a broad, flat plain with little topographic relief. The known distribution of prehistoric sites located in the floodplain derives principally from the mapping of numerous artifact collecting areas, representing the past 30 years of surface collection activities by numerous individuals. To date, there has been no systematic subsurface testing survey of the floodplain, chiefly due to the presence of deep alluvium deposits which prohibit cost-effective testing. Many of the artifact collecting areas overlap and indicate an almost continuous pattern of prehistoric land use on the homogeneous floodplain (See Figure 9.)

Assignment of a polygonal boundary is appropriate in this case, since it encompasses the area of a known Late Woodland-Contact Period Settlement within a broad, featureless expanse generally known for its almost continuous distribution of prehistoric cultural remains. The polygonal area may be replaced by more precise site boundaries as site formation processes and improvements in archeological methodology provide further data regarding the floodplain's prehistoric land use.

Boundary Description: The boundaries of the site are defined by a polygon. The polygon is square, measuring 500 meters on a side, covering 25 hectares. The boundaries of the site are defined by UTM coordinates which mark a polygon's corners. The unit includes land in private ownership on a bend of broad floodplain of the river in an area known for its very high density of

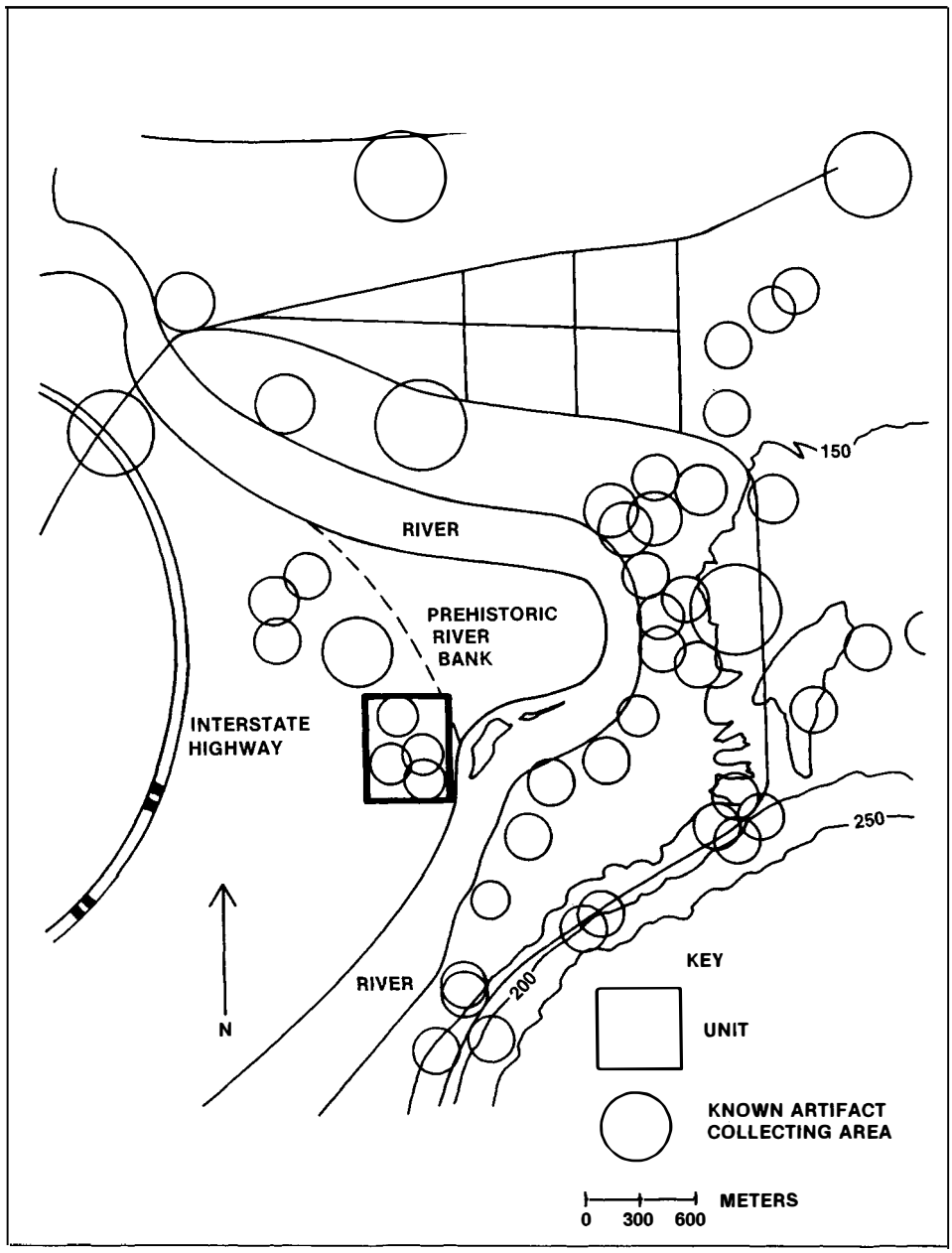
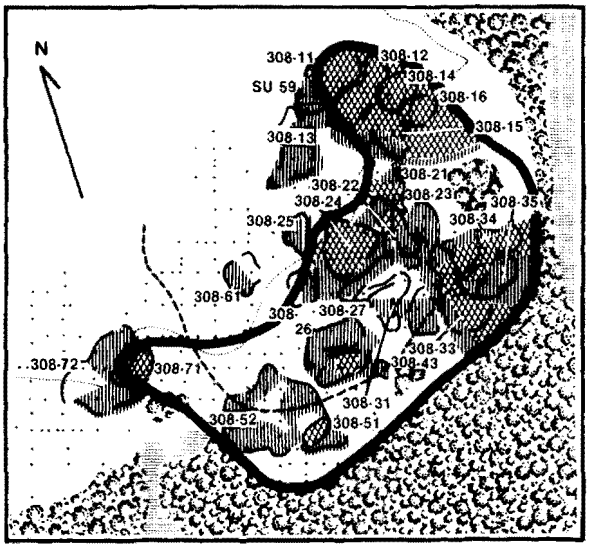


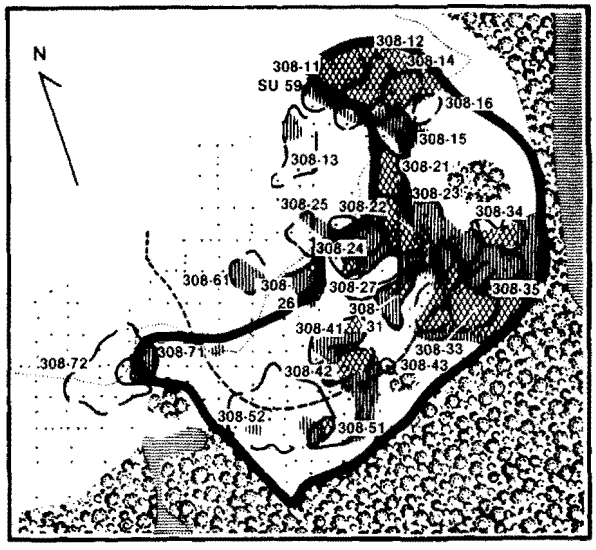
Figure 9. (Case 14). Numerous circles on this figure illustrate the location of recorded archeological sites located on this broad floodplain area. The National Register property is shown by the rectangle, which encompasses four known sites. A reasonable boundary was assigned to this property.



— VALUES FOR LITHICS/qcm GREATER THAN THE MEDIAN BUT LESS THAN THE 75th PERCENTILE

— VALUES FOR LITHICS/qcm GREATER THAN THE 75th PERCENTILE

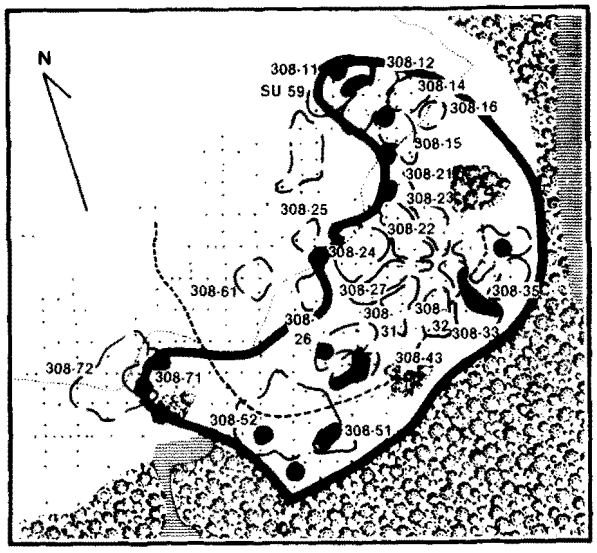
SPATIAL DISTRIBUTION OF LITHICS



— VALUES FOR GRAMS OF TOTAL SHELL/qcm GREATER THAN THE MEDIAN BUT LESS THAN THE 75th PERCENTILE

— VALUES FOR GRAMS OF TOTAL SHELL/qcm GREATER THAN THE 75th PERCENTILE

SPATIAL DISTRIBUTION OF SHELL REMAINS



— PRESENCE OF THE FIRE CRACKED ROCK

SPATIAL DISTRIBUTION OF FCR

KEY

EXCAVATION UNIT------·
SHOVEL TEST PIT-------·
ABANDONED ROAD -- ----
FOOTPATH----------.....
CONCENTRATION-----(=)
SITE BOUNDRY------

0 50 100
METERS

Figure 10. (Case 15). The boundary of this archeological site was determined by the density of artifacts found through extensive testing of the area. Although numerous concentrations of artifacts (lithics, shell remains, and fire-cracked rock) are shown across the hillside overlooking a marsh and cove, the National Register boundary for this site includes the largest area of artifact distribution.

sites, as evidenced by overlapping artifact areas.

Boundary Justification: The nominated area (geographic) of the floodplain includes the majority of four known collecting areas. The artifacts and features within the polygonal area demonstrate the presence of Late Woodland and Contact Period occupations, on which the statement of significance is based. Through a series of fortunate events surrounding a recent flooding episode of the river, the archeological remains of a large Late Woodland-Contact Period village were exposed in this area of the floodplain. The exposed domestic features and artifact concentrations were carefully recorded by amateur archeologists, but only within the areas fortuitously stripped of alluvium by the flood. Subsequently, the property owner intentionally refilled this area, thus recreating a deep, featureless plain. Without intensive archeological testing below the 1-3 meters of alluvium and fill above the prehistoric occupation zone, it is impossible to define the site boundaries on the basis of presence or absence of cultural materials. In fact, by comparison to the east bank of the river, which has been more intensively surface collected, it appears that the distribution of prehistoric cultural materials is almost continuous across miles of land.

Case 15. Continuous Artifact Distribution: Prehistoric Camp Site Overlooking an Estuary: The site is located on a prominent hill on the western side of the mouth of a cove overlooking the southern half of a marsh. Concentrations were delimited all along the base of the hill (the base is at approximately the same location as the abandoned road shown as a dashed line on Figure 10). Concentrations also occur on its eastern and northeastern slopes, both of which include sizable areas that are nearly level. The site is in mainly open fields at present with thick shrubs in wet areas, scattered evergreens, and broad leafed forest undergrowth vegetation.

Two kinds of test units—shovel tests and excavation units—were used to define the site boundary and concentrations within the site. The density per .25 cubic meters of the number of lithics, grams of shell, and fire-cracked rock were calculated for each unit and mapped. Density contour lines using the median and 75th percentile values were drawn on large scale maps for each of the site areas. These lines were used as boundaries between site and non-site areas and among concentrations within the site.

Boundary Description: The site is bounded by the marsh on the south and east, and by the density of artifact distributions (boundary established at the 75th percentile isopleth) on the north and the west.

Boundary Justification: An essential step for analyzing archeological remains on a regional basis is the careful identification of comparable units. This example establishes such units by using an explicit definition of two concepts—the site and the concentration. "Site" as used here refers to a bounded area within which artifact concentrations occur. Site boundaries were set along contour lines of artifact density, interpolated from shovel test and excavation unit data. In this context, sites are areas that contained concentration of artifact deposits. These concentrations represent areas bounded by contour lines representing a certain density within the site of one or more kinds of archeological materials e.g., lithics, shell or fire-cracked rock remains. The size, structure, shape, and contents, as well as other characteristics of each concentration, can then be investigated.

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