

# 11593

## Information Related to Responsibilities of the Secretary of the Interior Section 3, Executive Order 11593

Office of Archeology and Historic Preservation  
Heritage Conservation and Recreation Service

Vol. 3 No. 3

October

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Shown here is an artist's interpretation of the reuse design for the Historic Monument Area as seen looking down Second Avenue. The Muster House is featured prominently at left.



Photo 1. Completed rehabilitation work on this former residence included cornice, porch, and window repairs.

### TAX BENEFITS DENIED: REHAB STANDARDS NOT MET

by Margaret Thomas  
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Technical Preservation Services

Rehabilitation projects in 36 states, involving a private investment of more than \$250 million, already have qualified for the tax incentives established in section 2124 of the Tax Reform Act of 1976. To be eligible for the tax incentives, property owners must prepare a Historic Preservation Certification Application which includes a description of the historic character of a building and the rehabilitation work to be done. The appropriate SHPO and OAHF professionals review the application to determine whether the project constitutes a "certified rehabilitation" of a "certified historic structure."

Rehabilitation work on certified historic structures must be compatible with the Secretary of the Interior's Standards for Rehabilitation. These ten standards are intended to ensure that the significant historical and architectural features of a building are preserved in the process of rehabilitation.

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### MAGI SYSTEM: COMPUTERIZED MAPPING

by Mark R. Edwards  
Historic Survey Coordinator  
Maryland Historical Trust

When the Maryland Department of State Planning was created in 1969, it was given the responsibility to formulate and maintain "a plan . . . for the development of the state. . . ." <sup>1</sup> As part of this State Development Plan, the Department in turn set up the Maryland Automated Geographical Information System (MAGI), <sup>2</sup> to analyze interrelated social, economic, and physical factors of land areas throughout the state.

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### DECERTIFICATION OF NONCONTRIBUTING PROPERTIES

by Jann Gilmore  
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National Register

Acting on behalf of the Secretary of the Interior, the Keeper of the National Register has recently determined that several properties located within National Register historic districts do not contribute to the significance of these districts for purposes of the tax provisions of the Tax Reform Act of 1976. As of July 31, 1978, the National Register had received 513 requests for Certification of Significance with 39 states participating. Of those, 417 properties have been determined as contributing, 37 have been preliminarily determined as contributing, 5 have been determined as noncontributing, and 54 requests were pending. Louisiana leads in the number of requests for determinations,

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## HCRS PROGRAMS BENEFIT FROM INFORMATION EXCHANGE

by Carol Shull  
Supervisory Historian  
National Register

Staff members of OAHF have visited each regional office of HCRS to discuss the National Historic Preservation Program and to exchange information on HCRS programs. A primary purpose of the meetings was to explore ways in which the historic, natural, and recreation programs of HCRS can be mutually supportive.

The HCRS regional offices are located in Philadelphia, Atlanta, Ann Arbor, Denver, Albuquerque, Seattle, and San Francisco, and there is an area office in Anchorage. Each regional office has its own organizational structure, but the program functions are essentially the same nationwide. While overall policy is made in Washington, the regional offices are directly responsible for carrying out the recreation and conservation programs formerly in the Bureau of Outdoor Recreation (BOR).

An analysis of one regional office—the Mid-Continent Regional Office in Denver—clearly demonstrates the compatibility of former BOR programs with OAHF programs and provides insight into how the recreation, natural, and historic preservation components of HCRS can reinforce one another.

The Denver office is divided into three program areas: Recreation Assistance, Land Use Coordination, and Resource Planning Services. Denver staff members, usually called Outdoor Recreation Planners, are educated in a broad variety of fields including history, geography, planning, law, biological sciences, resource management, recreation and park administration. They have a broad understanding and commitment to conservation, a goal complementary to historic preservation.

The Denver staff prepares an annual report of its activities for the public and an additional report to Congress which describes the program's work and achievements. In historic preservation, the Interagency Archeological Services

Division prepares an annual report to Congress on data recovery activities under the Archeological and Historic Preservation Act. The Secretary of the Interior also submits an annual report to Congress on endangered National Historic Landmarks and natural landmarks. The historic preservation programs might benefit from publishing more comprehensive reports to the public and to Congress similar to those prepared by the Denver office.

### Recreation Assistance

Grant projects are approved at the regional level, and Denver's Grants-in-Aid Division administers the region's part of the \$600 million Land and Water Conservation Fund which finances the acquisition of lands for federally-administered recreation areas and provides matching grants to states for recreation planning, acquisition, and development. Historic preservation advocates may have much to learn from the politically astute supporters of the well-funded Land and Water Conservation Fund for which the Administration has requested \$725 million this year.

In order to receive Land and Water Conservation Fund monies, each state must have a State Liaison Officer (SLO), similar to the State Historic Preservation Officer (SHPO), and an approved State Comprehensive Outdoor Recreation Plan (SCORP). The current emphasis is on working with the states in developing and improving resource planning in a "planning-by-objective" approach in which the states establish objectives and specific measures of accomplishment to make the SCORP an action-oriented planning tool.

A grants simplification study has recently been completed by HCRS with the goal of maintaining and improving Land and Water Conservation Fund program accountability. Administrators of this fund and of the Historic Preservation Fund could clearly benefit by exploring together planning by objectives and grants administration techniques. The procedures for the program should also be reviewed to ensure that historic resources are given adequate protection consistent with

the overall conservation goals of HCRS.

Because the combined levels of government do not have financial resources available to meet the ever-increasing demand for outdoor recreation, an exciting private enterprise and technical assistance program has been developed. This program is initiating new techniques for acquiring land and private sector resources from corporations, private and corporate foundations, and utility companies and others, to be used for parks, recreation, environmental education and open space. In 1977 the region's private enterprise program produced contributions from the private sector totaling \$7.64 million for public recreation projects. Contributors benefited from favorable publicity, tax savings, and more efficient utilization of land through multiple use.

The estate, gift, and income tax deductions in Section 2124 of the Tax Reform Act of 1976 apply to land areas for outdoor public recreation or education or scenic enjoyment, the preservation of historically important land areas or structures, and the protection of natural environmental systems. OAHF and the Denver HCRS technical assistance program have recently cooperated in a conference sponsored by Continuing Legal Education in Colorado. This program, "Federal Income Tax Incentives to Preserve Our Historic, Natural, and Recreational Heritage," was videotaped and a coursebook was published for public distribution.

The region has developed an impressive technical assistance workshop manual and a number of booklets, and plans about 20 workshops for state and local agencies and community groups this year. *Protecting Wyoming's Heritage . . . Gifts of Land for Conservation and Land . . . The Lasting Legacy of Open Space* are examples of some of its publications. Historic preservation could be included in these workshops and publications. Possible topics of mutual interest are tax benefits for heritage resources; OAHF's technical assistance program to federal, state, and local governments and the private sector; and the use of the Historic Preservation Fund to

draw funds from the private sector.

### **Land Use Coordination**

With the creation of HCRS, the Interior Department's responsibilities to comment on the effects of all federally-assisted projects on historic, natural, and recreation values were consolidated. In Denver, the Division of Environmental Affairs provides technical assistance to federal agencies in planning federal projects and comments on environmental impact statements. Bob Stewart, the manager of that division, has a sound knowledge of the environmental review process and assured OAHP staff members that HCRS comments can address all of the agency's concerns. A seminar in Washington instructed regional HCRS personnel on the consideration of historic resources in the federal planning process. So that HCRS and SHPO comments will be consistent, Bob Stewart and Arthur Townsend, the Colorado SHPO, are conducting some onsite inspections together.

The Federal Operations Division of the Denver office gives technical advice to other federal agencies on incorporating recreation planning into their programs. This assistance is comparable to the technical assistance OAHP provides to federal agencies on historic preservation concerns in accord with Executive Order 11593. For example, recreation personnel are working with the Federal Energy Regulatory Commission to ensure development of recreation plans for water impoundment areas; they are also working with the Department of Defense on military base recreation areas and with the Environmental Protection Agency on incorporating recreation components into water and sewer development projects. A cooperative management program encourages the use of underutilized federal lands for public outdoor recreation through leases or cooperative use agreements with state or local governments. In each instance HCRS could benefit if such planning also included historic preservation values.

### **Resource Planning Services**

Regional HCRS personnel work in Water Resource Planning to develop the outdoor recreation potential in regional and river basin studies. As a result of the

reorganization, HCRS has this same responsibility for cultural resources. Recently the Army Corps of Engineers requested the Denver office to assist in developing a water control project to protect Ste. Genevieve, a National Historic Landmark district, by examining the benefits to be gained by preserving the district. As HCRS becomes more involved in urban problems, the agency should coordinate its programs concerned with preserving historic, natural, and recreational resources in order to improve the quality of life in our urban centers.

HCRS identifies for the Secretary of the Interior priorities for the study of Wild and Scenic Rivers and National Trails. An amendment to the National Trails Act now before Congress would provide for the designation of National Historic Trails such as the Oregon Trail and the Lewis and Clark Trail. Historic resource values should be important concerns in the studies and inventories and in HCRS recommendations for designation.

Also located in Denver is the Natural Landmarks Program, which was transferred from the National Park Service. If the proposed heritage legislation is passed, the new natural component of HCRS is likely to be based on a National Register similar to the National Register of Historic Places. National Register and other HCRS personnel are studying how the National Register and its experience in preserving historic resources can be applied to a new HCRS natural areas program.

OAHP has recently begun to review its responsibilities to determine whether any of its programs could provide better service if they were regionalized. We hope that the study will provide information on how the natural, recreation, and historic preservation programs of HCRS can be better coordinated. As the work of the Denver HCRS office shows, the programs clearly have much in common. HCRS could have a greater impact on the quality of life in the United States if its programs were better coordinated and its personnel promoted all of the resources for which it is responsible.

The Technical Preservation Services Division (TPS) of OAHP has approved rehabilitation work on more than 326 buildings as being consistent with the standards. Approval has been denied or withheld, however, for several projects because the rehabilitation work fails to preserve the significant features of certified historic structures.

### **Example of Property Denied Certification**

One property that has been denied certification is a two-story brick structure built in the 1840s as a single-family residence. It is located within a National Register historic district and is a designated certified historic structure because it contributes to the significance of the district. The district contains four other structures of similar period and appearance, and borders on a high-rise, central business area.

The application for certified rehabilitation described the already completed conversion of the building into a restaurant. During rehabilitation, the roof was reshingled; the wooden cornice was repaired; window shutters were restored; existing (non-original) windows and sash on the second floor were removed and replaced with six-over-six pane windows; the front porch was braced; the porch columns were cleaned and repainted; three original fireplaces were reopened; and the front walk was relaid with old bricks (see photo 1).

This work would appear to meet the Standards for Rehabilitation; however, the project also involved substantial alterations that failed to meet the intent of the standards.

For instance, a substantial 19th-century brick barn with shaped shingles in the gable and a two-story rear brick wing (see photo 2) were both demolished during the rehabilitation project. According to the applicant, the structures were taken down "in part because they were in poor condition and in part because their configuration did not lend them to the new function of the premises."

A two-story, cinder-block addition to the house was constructed in place of the demolished barn and wing. The

followed by Massachusetts, Connecticut, New York, Georgia, and Pennsylvania.

The first property certified as not contributing to a district is 136 South Washington Street within the Naperville Historic District in Naperville, Illinois. The district contains many architectural styles spanning the 1830s through the 1920s, with representative examples of the Greek Revival, Italianate, and Queen Anne styles.

Under Section 67.5 of Title 36, Code of Federal Regulations, Part 67, known as Historic Preservation Certifications Pursuant to the Tax Reform Act of 1976, which was published October 7, 1977, structures located within registered historic districts are reviewed by the Secretary of the Interior for conformance to the "Standards for Evaluating Structures within Registered Historic Districts." The standards, listed here, are used by the SHPO in making recommendations to the Secretary of the Interior.



36 South Washington Street, Naperville, IL

- (A) A structure contributing to the historic significance of a district is one which by location, design, setting, materials, workmanship, feeling and association adds to the district's sense of time and place and historical development.
- (B) A structure not contributing to the historic significance of a district is one which detracts from the district's sense of time and place and historical development intrinsically; or when the integrity of the original design or individual architectural features or spaces have been irretrievably lost.

- (C) Ordinarily structures that have been built within the past 50 years shall not be considered eligible unless a strong justification concerning their historical or architectural merit is given or the historical attributes of the district are considered to be less than 50 years old.

### Reasons for Decertifying

The Naperville property that was determined not to contribute to the significance of the district consists of two, two-story buildings which serve as a bank. One building was constructed in 1955 and clearly does not contribute to the character of the district because of its recent construction. The second building, originally constructed in the 19th century and partially demolished in the 1950's, has lost most of its original architectural elements and no longer contributes to the district's sense of time and place. The only extant original architectural details are four columns on the first-floor facade. The second-story windows have been replaced by metal casement windows, the lower cornice has been removed, the brackets of the upper cornice have been removed, all doors have been changed, and both buildings have been remodeled several times including a complete interior gutting 10 years ago. Today the building's interiors feature modern plasterboard, wood paneling, acoustical tile ceilings, carpeted floors and modern fixtures. Demolition of the building adjacent to the earlier of the two bank buildings caused a further loss of integrity resulting from disruption of the buildings' contiguous massing and a loss of streetscape character. It was determined that the integrity of the 19th-century building's design and individual architectural features had been irretrievably lost and that the building no longer contributes to the district's sense of time and place.

Decertification of this property as nonconforming to the Naperville Historic District means that the property owners are not subject to the demolition provisions of the Tax Reform Act of 1976. They will not

be penalized for demolishing the structures and will be eligible to deduct the costs associated with demolition if they decide to destroy the structures. The owners can then take accelerated depreciation on the cost of a new building if it is erected on the site of the former buildings.

### Magi System from page 1

The MAGI system, sponsored jointly by the Maryland government and by the National Aeronautics and Space Administration (NASA), was designed and developed by the Environmental Systems Research Institute of Redlands, California. Initially, the system was used to produce computer maps that showed various suitable uses for land. A composite of map variables was used as the input to create such maps, and was stored in a geographically referenced data bank.

As an automated system, MAGI stores data and then displays that data on computer maps. But unlike a typical mapping system, MAGI gives fast retrieval and analysis of information, and does so in an understandable and effective way. But the importance of the system goes beyond its use either as a resource inventory, or as a data base development system, or as a method by which potential land uses may be analyzed. The system is a basic structure for the continued statewide integration and analysis of geographic statistics. When used by other state agencies or by private builders and developers to help them plan construction, MAGI can be a powerful tool used to effectively manage the state's natural and built resources.

With these benefits in mind, the Department of State Planning outlined six general tasks, leading to a statewide planning system:

- 1) Select geographic indicators that influence decision making for land-use planning and management;
- 2) Create base maps that describe geographic variations;
- 3) Develop computer files for geographic data;
- 4) Design and develop computer programs and procedures for data storage, analysis, retrieval,

- and update;
- 5) Develop computer models of data analysis to be used for planning decisions; and
  - 6) Develop an in-house capability to operate the system.<sup>3</sup>

In the initial data collection, the MAGI system required that various maps of natural resources (such as soils, vegetation, and mineral resources) and of cultural geography (such as transportation) be selected as indicators for land-use planning. When mapped, these variables create polygons, lines, and/or points of geographic distinction. For example, the borders of polygonal map define the area for a particular soil type; line maps define forms such as roads and railroads; and point-specific maps locate items such as historic sites.

FORTTRAN language was used to make this data understandable to the computer, through a process called "geocoding." Additionally, the mapped data had to be identified according to a common geographic reference system, for which the Maryland Coordinate Grid was selected.<sup>4</sup> Geographic data was then assigned to a grid, wherein each cell represented 2,000 square feet, or 91.2 acres.

The roughly 90-acre cell provided a scale sufficient enough to analyze most variables in the system, but the potential increase of identified historic sites, especially in congested areas and cities; required an alternate way to map these resources (see Historic Sites: Background).

Planners may request simple data listings and project maps for natural soil groups, geology, slope, mineral resources, aquifers, surface water quality, natural features, vegetation, endangered species, water and sewer service areas, transportation facilities, public properties, historic sites, existing land use, watersheds, and electoral districts. Such simple listings are represented on maps with densities shown as shades of gray. But usually, planners require more sophisticated analysis. For example, suitability maps for a housing development project might require combining a soils map, an existing land-use map, a vegetation map, and a slope map.<sup>6</sup> For this reason, MAGI was

developed as an overlay system, in which clear plastic maps may be combined to show the variations in geography (such as soils, geology, vegetation) and to give a composite analysis of an area.<sup>7</sup>

### Historic Sites: Background

When the Department of State Planning originally encoded historic site information in 1974, the Maryland Historical Trust provided an inventory of historic sites that was transferred to locational maps and incorporated into the data base. When completed, the encoding produced information for approximately 8,000 sites throughout the state.

Recently, the staff at the Trust reviewed the MAGI system and concluded that it should be upgraded and expanded to include information on historic sites identified since 1974. Both the Trust and the Department of State Planning agreed that a new coding method should be incorporated so that information would be more accurate and flexible, and so that both agencies could gain greater use of the system.

Work to revise the MAGI system began in the summer of 1976. It was decided to double the information about each site, and to make new information more specific. Site information was gathered and coded onto a standard form for later transferral onto punch cards. On the first line of encoding information was a new ten-digit identification block. This was expanded by two digits from the original code to include a functional classification, for some 35 functions such as public buildings, private residences, barns, churches, etc. Next to the identification block was the historic name, followed by the specific data (if known), the address or location, and state plane coordinates. For the second line, the ten-digit code was repeated, followed by style, condition, exterior cladding material, significance (based on the National Register's thematic classifications by letters), and a final statement about the building's importance.

Actual encoding of historic site information incorporating the new changes began during the summer of 1977. Using Trust funds, three summer interns completed

encoding information for approximately 8,500 sites.

While the interns encoded the information, three Department of state planning staff members mapped sites with the system. Because of the likelihood that the number of historic sites to be identified would increase, and thus their representation on the maps, especially in cities or other congested areas, would become more difficult, it was decided to plot sites according to their time periods on four identical overlay maps. The time breakdowns were 1695-1800, 1801-1850, 1851-1900, and 1901-present. This overlay system allowed sites within each 90-acre cell to be clearly identified, and may be used successfully for many years.

### Use of the System

The system can sort and retrieve any combination of variables within the ten-digit code block—county, function, register status—as well as other listed information such as style, condition, and construction material. For example, it would be possible for the system to print out a list of each county in which a Greek Revival commercial structure was built between 1826 and 1850, and then it could go on to map the sites. According to Department of State Planning staff members, this procedure would cost about \$50-\$100.

The most extensive use of the MAGI system to date was recently initiated by the Maryland Nuclear Power Plant Siting Program, a division of the state Department of Natural Resources (DNR). In considering sites to construct electrical plants along Maryland's Eastern shore, five areas were studied. Data was collected for each on land use, soil geology, construction costs, distance from water sources, impact on built and natural resources, and other factors from which predictions about environmental impact could be made. Measurements could then be compared with those taken at existing sites, and alternatives to plant design and operation could be explored to minimize impact. Based on this collected information, a technical base for policy and regulatory decisions could be fashioned.

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To create this technical base for site selection, the collected information was organized into four parts for analysis. Impact assessments were gathered for the existing nuclear power plants in the region. A detailed site evaluation was prepared for the proposed power plants with the aid of MAGI, interrelating numerous variables. From this, composite maps graphically illustrating potential restriction areas and selected candidate areas were prepared. Based on this information, the state will acquire acceptable candidate areas for their so-called "land bank." Intensive, topically oriented research will then be conducted on the site finally selected, with the data gathered influencing final plant design.

### Potential Use of the System

One of the most serious limitations of the system as it pertains to cultural resources involves the listing of prehistoric and historic archeological data. Currently, only a portion Maryland's archeological sites are integrated into the survey data base. Until recently the State Archeologist was responsible for identifying archeological resources and consequently information in the Trust files existed mainly for historic sites. Through a recently hired staff archeologist, the SHPO is beginning a series of archeological surveys which will boost information on sites of prehistoric significance.

Recently, the Trust staff archeologist and the State Archeologist began a program of consolidating information on known archeological sites throughout the state. There are presently 2,636 mapped sites in the archeological files at the Trust. This information, though, is not part of the survey data base and is not available for public use.

The Trust staff archeologist and the State Archeologist are currently discussing mapping and encoding all known archeological data, paralleling the information now in the MAGI system for historic sites. One area of discussion centers on the security of this data, especially as it pertains to locational information. Although

MAGI utilizes a standard security system of code works, there are hopes that additional safeguards can be added to insure that the materials will be used only as part of the land-use planning process. These additional safeguards would deter those who would use the system to find sites where artifacts could be looted, thus denuding sites of the material that makes interpretation possible.

The unique matrixing or "stacking" ability of variables by the MAGI system lends itself well to the potential mixing of historical and archeological resource information. In mapping, both types of resources could be depicted by period. For historical sites, this could be done utilizing the same 25- or 50-year increments used in coding; archeological sites could be mapped by occupation period, such as Paleo-Indian, Archaic, or Woodland cultures. Thus, a number of stratified cells for a particular geographical study area could be mapped and analyzed in great detail, not only as they reflect the relationship between different types of land-use variables, but also as they reflect the richness of historical and archeological information within and between each cell.

MAGI and systems like it are not ends in themselves. It must not be forgotten that human judgment is the key for successful land planning in the future. Effective resource management will only be as successful as society's commitment to the concept of controlled growth, and only as important as society's understanding of fragile relationships between our cultural patrimony and the inexorable process of growth. MAGI can be one method in which we measure our growth while preserving our irreplaceable cultural resources.

### Footnotes

<sup>1</sup> Articles 41 and 88C, Annotated Code of Maryland.

<sup>2</sup> The booklet entitled *Maryland Automated Geographical Information System, Technical Series May 1974, Generalized Land Use Plan*, discusses the system in great detail. This booklet served as the basis for much of the technical information presented in the first section of this article.

<sup>3</sup> *MAGI Manual*, p. 3.

<sup>4</sup> *Ibid.*, p. 5.

<sup>5</sup> The Maryland Historical Trust currently has approximately 14,000 sites listed on its statewide survey. By current estimates, there are between 40,000 and 50,000 buildings, districts, objects, and structures eligible for inclusion on the survey. Thus, the job of surveying historic resources is far from complete, and the coordinated survey of archeological sites has just begun.

<sup>6</sup> *MAGI Manual*, p. 9.

<sup>7</sup> *Ibid.*, for a complete description of the MAGI overlay system, see page 9 of the manual.

### MAGI Manual

*The encoding of sites was accomplished using a manual produced jointly by the two agencies. The manual, a short 10 pages, was designed so information could be encoded easily, with a minimum of training. It includes an introduction to the MAGI system, a discussion of materials used in the encoding process (the MHT survey sheet and the encoding form), and an itemized breakdown for information that will be listed on the encoding form. Two appendixes are a guide to architectural styles, and a popular amateur's guide to terms used in describing historic buildings. In order to ensure that encoding of newly identified sites will continue in the future, MHT site surveyors now encode all new sites as a part of their contractual obligations.*

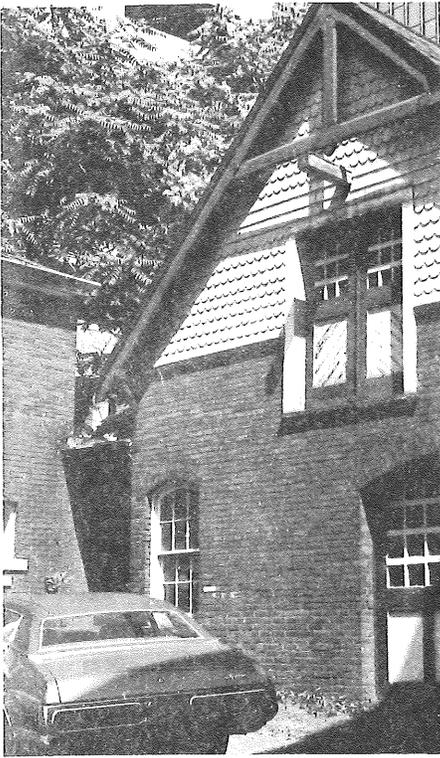


Photo 2. The barn and wing shown here were demolished during the course of rehabilitation work.

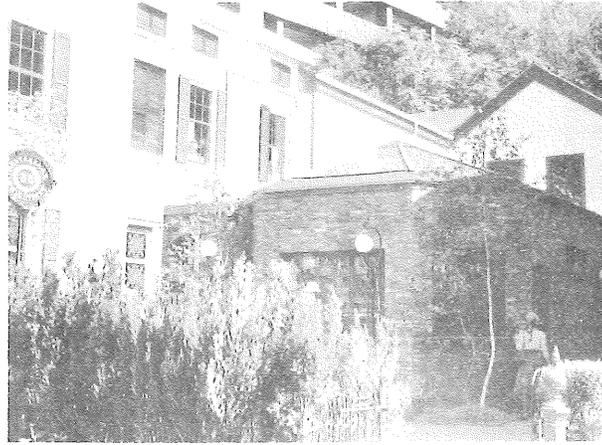


Photo 3. New construction included this one-story dining wing and the two-story addition behind it.

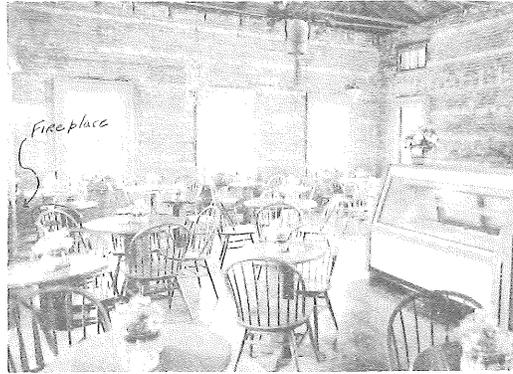


Photo 4. Brick walls were exposed and the ceiling was removed in the dining area on the second floor.

visible portions of the new addition were covered with clappingboards and new shaped shingles similar in appearance to those on the gable of the barn. Bricks from the demolition work were reused to construct a one-story dining room addition on the side of the house (see photo 3).

The barn and the wing were clearly significant structures, contributing not only to the character and history of the individual property but to the overall district as well. Removal was contrary to the standard which states that the distinguishing original qualities of a building or site shall not be destroyed.

On the interior of the house, wall coverings were removed and, on the second floor, the ceiling was removed and an attic crawl space was incorporated into the dining areas (see photo 4). Exposed brick surfaces, which were never intended to show, give the house an inappropriate appearance in conflict with the standard which states that alterations that have no historical basis and that seek to create an earlier appearance shall be discouraged.

In a letter transmitting the application to OAH, the SHPO recommended that the

rehabilitation work not be approved because much of the historic architectural fabric had been removed and destroyed.

Because the original application lacked photographs and adequate descriptions of the barn and wing prior to demolition and of the building's interior before work began, it was difficult for TPS to evaluate the significance of these features and to determine the effect of the rehabilitation work on them. Supplementary information requested—additional photos and rough floor plans of the property before and after rehabilitation—provided TPS with the documents necessary to deny certification of the rehabilitation work.

The property owner may appeal the denial of certification in writing to the Chief of the Office of Archeology and Historic Preservation, in accord with Title 36 of the Code of Federal Regulations, Part 67.8.

### Typical Problems in Reviewing Applications

The previous example highlights two problems typically arising with projects that do not appear to meet the Standards for Rehabilitation. First, inadequate documentation in

Historic Preservation Certification Applications causes difficulties in the state and federal review processes. Photographs and detailed descriptions of architectural features are essential, especially if questionable treatments (such as demolition) of significant features are involved.

Second, many problems can be avoided if applications are submitted before the rehabilitation work is completed. By reviewing proposed work, the SHPOs and TPS have the opportunity to comment and advise on rehabilitation projects before final design decisions are made. Such reviews are also best for property owners because approval of proposed work indicates that the project will later be designated a certified rehabilitation, provided the completed work is consistent with the approved application.

*Copies of the Secretary of the Interior's Standards for Rehabilitation and the Historic Preservation Certification Application are available for SHPOs or from Tax Reform Act, Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, US Department of the Interior, Washington DC 20240.*

# REFITTING THE BOSTON NAVAL SHIPYARD AT CHARLESTOWN

by Floy Brown  
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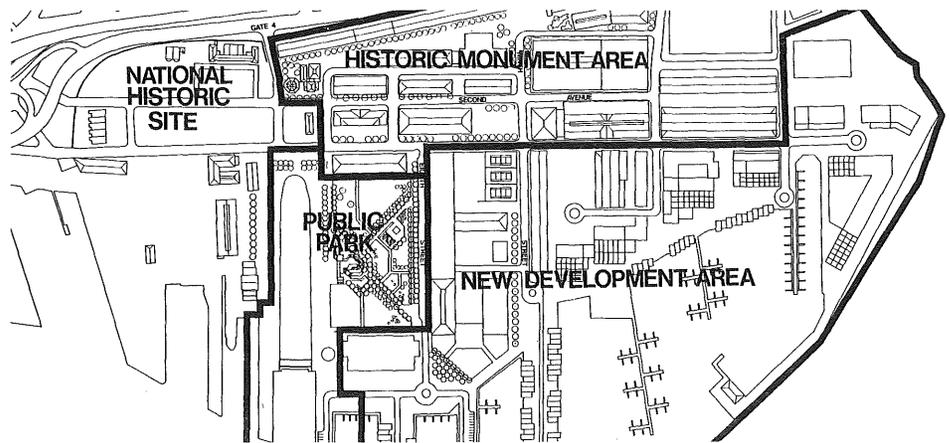
This article first appeared in the June 1978 issue of **Environmental Comment**, a monthly publication of ULI—the Urban Land Institute.

Copies of the issue, which focused on *Urban Waterfronts*, can be obtained for \$1.00 from Urban Land Institute, 1200 18th Street NW, Washington, DC 20036.

What seemed in 1973 to be an economic catastrophe for the city of Boston has now become a catalyst for the revitalization of the Boston Inner Harbor waterfront. In 1973 the U.S. Navy announced plans to close the Boston Naval Shipyard, a 130-acre industrial site which employed thousands of skilled workers and provided many contracts to private enterprise. Initially, the city's efforts to avoid the severe economic impact from the closing were directed toward finding a replacement for the U.S. Navy—a shipbuilding or port-related industrial concern. After two years of marketing attempts, Boston officials concluded that the shipyard was obsolete for modern industrial reuse. Planning was redirected toward a mixed residential and commercial reuse of the shipyard. Boston's site development plans will result in new jobs, \$3 million in new tax revenue, 1,200 additional housing units, and an attractive new waterfront for the Charlestown area. The solution for reuse also represents a creative utilization of the laws which govern the disposal of surplus federal real property and of newly available tax incentives designed to stimulate the rehabilitation of historic structures.

## 175 Years as Shipyard

The Boston Naval Shipyard, a national historic landmark listed in the National Register of Historic Places, is located in the historic



Situated on the 31-acre parcel for the Historic Monument Area are 30 buildings of outstanding significance. The restored area will serve primarily as a commercial district with retail shops, offices, light manufacturing, and some residential spaces.

Charlestown section along the Inner Harbor waterfront of Boston, Massachusetts. It is one of the nation's oldest shipyards, having been established by Congress in 1797. The original 23-acre plot on the Charles River was purchased in 1800. Over its 175-year history, the shipyard grew to encompass a total of 130 acres (85 acres of land and 45 acres of water). The shipyard contains 86 buildings, 4.6 miles of railroad, and numerous piers, wharves, and drydocks. Several buildings, such as the ropewalk group, the chain forge and foundry, and the octagonal Muster House, are among the few remaining of their type in the nation.

The ropewalk housed the machinery for spinning hemp and other materials into rope, a process which necessitated the unusual 1,360-foot length of this brick and granite building. Designed by Alexander Parris, the ropewalk was built in 1834, and the original machinery was not replaced until 1898. From 1834 to 1971, the ropewalk produced all of the line and cordage used by the U.S. Navy. The chain forge and foundry is the site of the development of Dielock anchor chain, the official U.S. Navy standard since 1928. The collection of furnaces, drop forges, and dies used in this unique industrial process is still virtually intact.

In the course of active life, the shipyard built and fitted out thousands of ships for service. The recoppering of the U.S.S. *Constitution* was completed in July 1803 with material provided by Paul Revere. In September 1813 the yard's first ship, the 18-gun sloop

*Frolic*, was launched, and in 1814 the first U.S. Navy ship-of-the-line, the 74-gun *Independence* (forerunner of the battleship), slid down the ways into the Charles River. The famous ironclad gunboat *Merrimac* was built there in 1855. During World War II over 50,000 people labored to build and launch one new ship per month. From 1946 until its closing in 1973, the shipyard was primarily engaged in repair and conversion work. Presently, the shipyard's principle attraction for visitors is the restored U.S.S. *Constitution*. Better known as *Old Ironsides*, the frigate U.S.S. *Constitution* is the oldest commissioned ship of the U.S. Navy, dating from 1797. The square-rigged wooden vessel is now moored on the Charles River in the section of the shipyard which was transferred from the U.S. Navy to the National Park Service in 1974 to become part of the Boston National Historic Park. The transfer of 25 acres, 20 buildings, and a drydock left 105 acres and 65 buildings and structures to be disposed of as surplus federal real property.

## Planned Reuse

The Federal Property and Administrative Services Act of 1949, as amended, is the legal authority by which the U.S. government disposes of most unneeded federal real property. The agency holding excess property notifies the General Services Administration (GSA) of its intent to relinquish rights to the property. GSA then screens the property with other federal agencies to determine further federal use. In the absence of such requirements, GSA

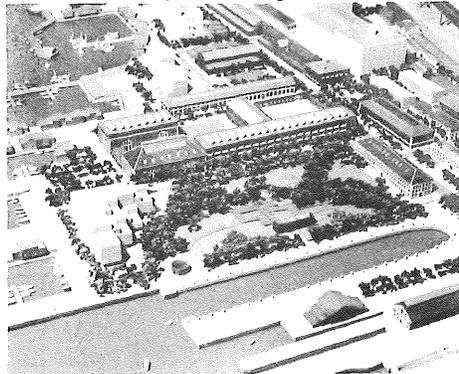
determines the property to be surplus to the needs of the entire federal government. GSA then makes it available to state and local governmental units and eligible nonprofit institutions to be used for various public purposes. Public purpose disposals are made for parks and recreation, historic monuments, public health or education, wildlife conservation, or public airports. Such public benefit disposals are made at no cost to the recipient, but the deeds of conveyance contain appropriate use restrictions. If a local public agency wishes to acquire surplus property without use restrictions, it can negotiate with GSA to purchase the property at fair market value.

The city of Boston recognized exciting potential in acquiring and redeveloping the Boston Naval Shipyard at Charlestown. With a reuse goal predicated upon creation of an economically viable project, the Boston Redevelopment Authority (BRA) began working with GSA to refine plans for acquisition of the surplus portions of the shipyard. The development strategy was to take maximum advantage of the attractive physical location of the shipyard on Boston's waterfront. The presence of the U.S.S. *Constitution* National Historic Site and its potential for attracting over 1,000,000 visitors a year would be a major impetus for tourist-related investment in the shipyard. Extensive economic, environmental, architectural, and transportation analyses concluded that the shipyard was too large, varied, and complex for a single reuse, and that a mixed development concept was more appropriate. The concept proposes a mixture of compatible uses that take advantage of the special characteristics of the site and that coincide with growth sector needs of the Boston economy.

### Preserving Historic Value

Because the property is a national historic landmark, the Department of the Interior and the Advisory Council on Historic Preservation were called upon to approve plans for redevelopment, which had to be consistent with the protection of buildings and areas of historic value. Various controls imposed by the landmark status directly affected the feasibility of

certain reuse and development schemes. However, during the course of planning for the redevelopment, the passage of the Tax Reform Act of 1976 made available significant incentives for rehabilitation of historic buildings listed on the National Register. The tax incentives stimulate preservation of historic commercial and income-producing structures



*Model of the Charlestown Navy Yard, for which BRA unveiled its \$100 million program, shows a planned waterfront park with recycled buildings behind it. Also planned are clusters of townhouses along the piers of the Navy Yard (right) and a marina facility. Work on the park is expected to begin this spring.*

by placing rehabilitation on an equal footing with new construction. The tax incentives have been critical in attracting private investment in the redevelopment of the shipyard.

With the exception of the area adjacent to the U.S.S. *Constitution* which had already been transferred to the National Park Service, the remaining 105 acres of land and water in the shipyard were made available to the Boston Redevelopment Authority. Because of the varying characteristics of the acreage, the property was divided into three parcels forming distinct areas for reuse. The historic monument area, which is contiguous to the National Park Service site and encompasses 31 acres and 30 buildings of outstanding significance, was acquired by the BRA under a provision of the Federal Property and Administrative Services Act (40 U.S.C. 484 (k)(3)). Under law, the historic monument area was conveyed at no cost, and it must be preserved in perpetuity according to a "program of preservation and utilization" approved by the Secretary of the Interior. An amendment to the law in 1972 was designed to facilitate disposal of

historic property by permitting revenue-producing uses. All or portions of the historic monument area, therefore, may be leased for private development provided that the income received by the redevelopment authority in excess of expenses is used for public preservation or park and recreation purposes.

Under the terms of the conveyance of the historic monument area, BRA has agreed to preserve and restore the ropewalk complex, the chain forge and foundry, and the octagonal Muster House. These three buildings will probably be limited to interpretative uses similar to the National Park Service activities at the Boston National Historic Park. Remaining buildings will be rehabilitated for new purposes. This is being accomplished by leasing individual buildings or groups of buildings to developers who are free to substantially rehabilitate the interior of buildings but who must preserve the visual integrity of the exteriors. To guide developers in planning for reuse of these historic structures, the BRA has adopted the Secretary of the Interior's standards for rehabilitation, ten standards broadly worded to ensure that the significant historical and architectural features of a building are preserved in the course of rehabilitation. The allowable adaptive reuses for buildings in the historic monument area as determined by the BRA include primarily commercial and retail enterprises, some residential space, offices, and light manufacturing.

A second parcel of the shipyard consisting of 16 acres of land and water has been designated for park and recreation purposes and conveyed to the BRA at no cost, with the condition that the area will always remain a park (40 U.S.C. 484 (k)(2)). Most of the present buildings will be demolished to open the area for waterfront recreation. Substantial areas will be available for a marina and boat docking, fulfilling the critical need for such facilities in Boston. This park space will also serve as a link between the historic areas and planned new development.

To date, a single developer, Immobiliare New England has bid

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## NEIGHBORHOOD REINVESTMENT: A NEW SERIES

by Marjorie R. Samuels  
Planner  
National Register

The National Register Planning Branch will publish a series of articles on questions related to the back-to-the-city movement and/or neighborhood reinvestment, which will appear as supplements to successive issues of 11593. This format will facilitate subsequent assembly of the articles into one volume.

Several years ago, preservationists applauded the successful beginnings of the back-to-the-city movement as a long-awaited effort that would bring the upper- and moderate-income people who had fled to the suburbs in previous decades back to the decaying urban areas. Who were these urban pioneers who returned? They were primarily young (ages 25-34), white, professional, single or married with no children, with an interest in the amenities of urban life and in architecturally distinctive homes in a heterogeneous neighborhood. They purchased older residences, often doing much rehabilitation work themselves. As a result, property values rose, city tax rolls increased, new commercial interests followed, and suddenly, those "heterogeneous" neighborhoods began to change dramatically. The shift back to the city snowballed at an increasing pace.

But what was the effect of this rapid return to urban centers? Where did the money come from, and whom did it benefit? How did the reinvestment affect neighborhood residents—those who could stay and those who could not? And what can be done to make reinvestment compatible with neighborhood diversity?

The projected series of articles will address these and other related questions. Topics under consideration include:

- the role of lending institutions in financing mortgages and loans in urban areas
- problems of obtaining insurance for older urban buildings

- urban taxation policies
- problems of assessing property values in older urban neighborhoods
- development practices in urban neighborhoods
- displacement of the urban poor
- downzoning and building codes in urban areas
- land banks and revolving funds for neighborhood reinvestment
- the role of state and local governments in the reinvestment process
- the role of OAH in promoting neighborhood reinvestment
- other sources of federal and private funding for urban neighborhoods
- bibliography of works published in this subject area.

The Planning Branch would appreciate recommendations on additional specific topics to be covered in the series.

## TAX REFORM ACT SYMPOSIUM

by Sarah G. Oldham  
Architectural Historian  
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H. Ward Jandl  
Architectural Historian  
Technical Preservation Services

A 1-day symposium entitled "The Tax Reform Act and the Economics of Rehabilitation," organized by OAH and cosponsored by the National Trust for Historic Preservation, was held May 17, 1978, at the Woodrow Wilson House in Washington, DC. The symposium brought together experts representing the interests of owner/developers, communities, lenders, governments, and historic preservationists to discuss and evaluate the impact and limitations of the historic structures provisions of section 2124 of the Tax Reform Act of 1976 (Public Law 94-455).

The intent of Congress in passing section 2124 was to provide added stimulus to the private sector to preserve and rehabilitate historic structures. OAH was enlisted in implementing the law to ensure that only owners of qualified

historic structures benefit from the provisions and to ensure that rehabilitation work undertaken on such structures meets certain standards of appropriateness and quality. A certification program, required by the law, has been in operation within OAH since March 1977.

Because the historic preservation provisions are now authorized only through mid-1981, OAH planned the symposium to assess the program and to seek advice on how to maximize the positive effects of the preservation provisions for owner/developers as well as for communities.

The symposium was divided into four related sessions. The first two explored the economic effect of the preservation provisions on actual rehabilitation projects and community development. The third session addressed the concerns of bankers in rehabilitation lending and sought to identify means to encourage such lending. The final session dealt with the gathering of financial data on rehabilitation projects under the Tax Reform Act certification program.

### Cities, Developers, Lenders Involved

One of the bankers present summed up the importance of bringing together a diverse group to discuss how best to encourage the reuse and revitalization of historic structures. He pointed out that there are three ingredients in any real estate transaction: the city, the developer, and the lender.

- Owner/developers need to be made aware of the federal tax incentives and of the possibilities for their use in preserving and reusing our cultural heritage.
- Municipal authorities need to understand federal tax incentives to realize their potential as a tool to further community development.
- Lenders need to know about the incentives to better evaluate the investment potential of projects when they are asked to make decisions on loan applications.

All three parties need to interact with, and to understand each other more fully to bring about a revitalization of our urban areas

and to achieve the goals espoused by Congress in passing section 2124.

It was clear from the day's discussions that section 2124 is merely one of many factors affecting the current level of rehabilitation activity in this country. A large number of Tax Reform Act projects involve residential usage, a commentary on the Nation's housing needs. Developers are combining these federal tax incentives with other federal programs and with state and local tax abatement programs in housing as well as commercial projects. The developers and others present expressed a need for a compilation of federal assistance programs that may be used in combination with section 2124 to provide additional incentives to rehabilitate historic structures. All present were interested in learning more about state and local tax abatement programs which could enhance historic resource development. Existing incentives, however, may be insufficient to stimulate the desired level of rehabilitation activity and they may be directed to achieve certain goals at the expense of others.

Representatives of community development interests at the symposium were concerned with whether the provisions will cause residential and commercial displacement. Although statistics to date indicate that the provisions are being used to create many more new housing units (in what were once warehouses and factories) than to refurbish existing units, and are being used for small-scale as well as large-scale commercial projects, the question of whether or not the provisions will cause widespread displacement needs to be studied further.

The banking community representatives described traditional banking practices that have limited lending for rehabilitation projects but also emphasized the current interest of banking trade associations in the urban revitalization effort. Banks in Baltimore and Texas are initiating new types of appraisal formulae in which sweat equity and/or investment potential are considered along with traditional value considerations. All agreed that probably 99% of bankers are not

familiar with the federal tax incentives to encourage rehabilitation. However, as one banker pointed out, public information efforts need to be aimed especially at developers, architects, accountants, and lawyers because these are the professionals who guide development before an applicant contacts a bank for financing. Then, obviously, it is important for bankers to understand the provisions in order to make a fully informed evaluation of a loan application.

### **More Incentives Proposed**

A number of proposals for additional incentives to rehabilitate historic structures were made, including investment tax credits for lenders against corporate income taxes for lending in certain areas; better integration of Department of Housing and Urban Development housing goals with Department of Interior preservation goals in their respective programs; direct investment tax credits for property owners for rehabilitation costs in addition to the present incentives; and limitations on the amount of the 60-month write-off that is considered a tax preference item. In addition, many agreed that while the incentives to rehabilitate income-producing properties have the potential to do much for the preservation of historic structures, the lack of incentives for preserving and rehabilitating non-income-producing structures denies equivalent preservation potential to many other buildings. One solution would be to offer an investment tax credit for the costs of rehabilitating owner-occupied structures.

OAHP will continue its public information efforts and its close monitoring of the Tax Reform Act program. We would welcome comments or suggestions concerning topics discussed at the symposium or concerning the Tax Reform Act program in general. *A summary of the symposium proceedings is available by writing Tax Reform Act, Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, US Department of the Interior, Washington, DC 20240.*

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successfully on nearly all of the land in the new development area. Rehabilitation and adaptive reuse of historic structures within the new development area is made attractive by the availability of considerable tax incentives which were established by Section 2124 of the Tax Reform Act of 1976 (P.L. 94.455). These preservation provisions permit owners of certain depreciable properties to amortize the costs of a rehabilitation over a 5-year period or to depreciate the costs of a substantially rehabilitated structure at an accelerated rate. To qualify for the tax incentives, property owners must secure certifications from the Secretary of the Interior regarding the historic character of a structure and the quality of the rehabilitation work performed on a structure. Immobiliare New England has

### **New Development Area**

The final parcel, the new development area, contains about 58 acres of land and water. It is being purchased by the BRA for \$1.7 million from GSA. Under this section of the Federal Property Act (40 U.S.C. 484(e)(3)(H)), the BRA has the right to subdivide the "sale parcel" for purchase and development by private enterprise. As a guideline to future development, the Advisory Council on Historic Preservation has recommended that any new construction be compatible with the historic character of the shipyard and the architectural quality of the buildings which are being rehabilitated for adaptive use. To market the property, the BRA has issued "developer kits" which include a description of the site to be offered, the conditions of sale or lease, the stages of the disposition process, and acceptable treatments for historic buildings. Proposals are reviewed competitively against established criteria for design and reuse. The BRA also reviews the economic feasibility of particular proposals. The new development area will be given largely to housing, with a parcel set aside for a hotel and conference center and some light manufacturing. Selective demolition will be permitted of those buildings which have been determined by the Secretary of the Interior as not contributing to the historic character of the area.

## PUBLICATIONS

### GUIDELINES FOR LOCAL SURVEYS

The conservation and reuse of our built environment provides us with evidence of the talents and traditions of our ancestors as well as with a means of saving energy, time, and raw materials. To identify those elements that merit preservation, an increasing number of local governments are undertaking historic resource surveys. A new publication from the National Register—*Guidelines for Local Surveys: A Basis for Preservation Planning*—is designed to provide assistance to communities, organizations, federal and state agencies, and other individuals interested in conducting resource surveys.

In question-and-answer format *Guidelines for Local Surveys*:

- explains what a historic resource survey is and how it can be a valuable planning tool
- discusses how to plan and conduct surveys and how to use the collected data
- describes other federal programs and resource groups that can help in preserving significant properties
- examines the advantages and disadvantages of using volunteer versus paid consultants to perform the survey

Extensive appendixes include information on archeological surveys, legal and financial tools available to preservationists, federal preservation legislation and useful reports and publications on surveys. An index makes it easy to find answers to specific questions. *The illustrated 84-page volume is available for \$2.50 from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.*

11593 is published by the Interior Department's Heritage Conservation and Recreation Service. Design is by Shelley Dieterichs. Articles, suggestions, ideas and comments should be addressed to Sally Marusin, principal editor, or to Robert Haynes or Norma Rowland, editors.

U.S. Department of the Interior

Heritage Conservation and Recreation Service  
Office of Archeology and Historic Preservation  
Washington, DC 20240

### THE ARCHEOLOGICAL SURVEY: METHODS AND USES

Interagency Archeological Services announces the publication of a new volume in its Cultural Resource Management Series—*Archeological Survey: Methods and Uses* by Thomas F. King. Written primarily for the non-archeologist, the publication presents the methods and objectives of archeological survey. It begins by describing the formation of the archeological record and how the record has been discovered through survey in the recent past. A major objective of archeological survey is to identify and evaluate all sites that have potential for yielding useful cultural and scientific information. Basic survey methods—background research, research design, and fieldwork—are described in the manual and exceptions requiring special techniques such as urban surveys or the survey of buildings and structures are discussed.

The volume should enhance the reader's understanding of the nature of archeological resources, of the conclusions drawn from archeological survey reports, and of the importance of survey data in developing a state plan for the wise use of cultural property. *The 134-page report is available from Interagency Archeological Services, Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, US Department of the Interior, Washington, DC 20240.*

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identified a number of large industrial buildings which can be converted to housing while preserving the integrity of the original design. The proposed rehabilitation of these structures, as designed by the firm of Anderson Notter Finegold Inc. has been reviewed and determined to be consistent with the historic character of the area. The preservation tax benefits are key to the economic viability of this project.

The plans for redevelopment of

the Boston Naval Shipyard coincide with growth trends of the Boston economy. The proposed hotel, commercial, industrial, and residential uses of the Charlestown site will not replace the 5,000 Navy Base jobs lost in 1973. However, the BRA estimates that the project will generate 300 construction jobs per year over the 10-year development schedule and 1,300 permanent jobs with an annual payroll of \$15.3 million at project completion. Total public sector investment is estimated at \$17.4 million, not including acquisition costs. Private sector investment will be a minimum of \$100 million. Through redevelopment of the shipyard, the city of Boston will gain an estimated tax revenue of over \$3 million, and the state will receive almost \$1.6 million a year in income taxes.

What initially appeared to be an economic disaster has emerged as a vital new area of growth for Boston. Equally as important as the economic factors, however, is the creative approach to recycling the vast area of land, water, and buildings encompassed by the Boston Naval Shipyard. The BRA plans for redevelopment include a unique combination of historic preservation, new development, and public recreation amenities that will contribute significantly to the quality of life in the city of Boston. This creative approach to urban planning is reflected in the words of a BRA report:

For more than a decade now the City of Boston and its Charlestown neighborhood have been experiencing a process of revitalization that has brought new jobs, new people and new roles signifying a new phase in the economic history of the City and one of its oldest neighborhoods. But much remains to be done, and the present moment could be a critical turning point in the process of replacing obsolescent roles with new ones which would bring new elements of life to Boston and to Charlestown. The proposed development project in the Charlestown site of the Boston Navy Yard holds the potential for turning the demise of an institution that has long been intertwined with the Nation's history, into a positive factor contributing to Boston and to its economy, and to the emergence of Charlestown from blight and decay to a prime residential area. The proposed development project would cap important efforts, trends, and achievements already underway in the revival of the Boston economy and in the revitalization of Charlestown.