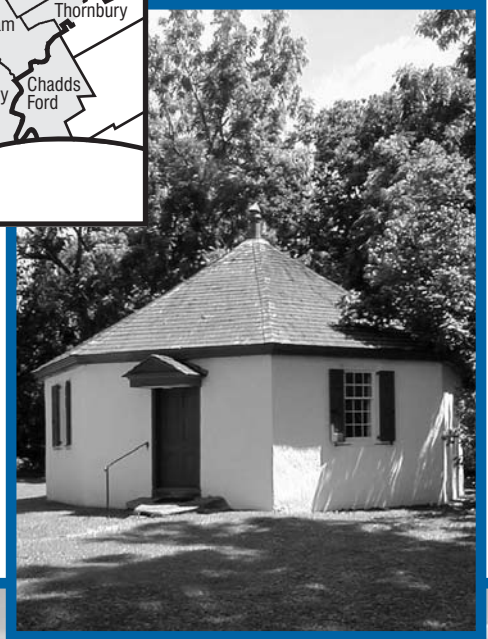
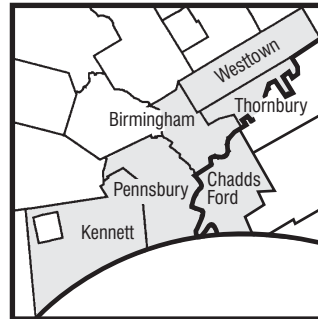


# B

# Battlefield Protection Strategies

A Guide for  
Brandywine  
Battlefield  
Communities



A large, white, stylized letter 'B' is positioned on the left side of the cover. The background of the left half of the cover is a dark grey/black area with a pattern of white stars and stripes, reminiscent of the American flag.

*A Guide for  
Brandywine  
Battlefield  
Communities*

# *Battlefield Protection Strategies*

Prepared by  
Chester County Planning Commission

In cooperation with  
Delaware County Planning Department,  
Recipient of Partnership Funding from the American  
Battlefield Protection Program

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# A Call to Action

Historical, cultural, scenic, natural resources and open space areas which are integral to the landscapes and character of Chester and Delaware County communities are gradually being threatened by sprawling development. These resources constitute a significant contribution to character and quality of life of our communities that is so valued by the residents. Managing growth and directing development to the most suitable areas within a municipality can protect resources, while still permitting development to take place.

Lying within the picturesque Brandywine Valley, the Brandywine Battlefield National Historic Landmark, which crosses communities in southern Chester and Delaware Counties, is incrementally being consumed by sprawling development. As host to the largest troop movement of the American Revolution,<sup>1</sup> the Battle of Brandywine, the area still showcases a rich array of cultural and natural resources, scenic vistas and open lands representative of that era, serving to document and commemorate the history of our nation. However, the very same natural and cultural resources which create the area's unique appeal to its residents, also account for its strong attraction to new development. Yet, while the Brandywine Battlefield has great historical and cultural significance on both a national and local level, increasing, consumptive land development patterns are taking their toll on the Battlefield's open lands and historic landscape. New land developments continue to steadily consume the remaining open lands that not only play a crucial role in the protection of the Battlefield itself, but also help to preserve the very essence and character of the communities.

As a testament to its importance, the land on which the Battlefield is located was federally recognized in 1938. In 1961, the Battlefield was named a National Historical Landmark, the highest level of national historical designation that can be bestowed upon a resource. National Historic Landmarks are listed on the National Register of Historic Places, the official federal listing. Administered by the National Park Service, the National Register documents cultural resources of significance to American history. In 1974, the National Register nomination named contributing structures in the landmark, and the landmark's boundary was certified in 1977. Based on that information, there are 16 properties and 5 historic districts within the landmark that are listed on the National Register.

The title "National Historical Landmark" denotes a historic property that possesses exceptional national significance reflective of American history. The designation is highly honorary. It is the cornerstone of acknowledging and heightening public awareness about the resource and its significance. Despite this very high level of distinction, the landmark designation does *not* protect sites from land development, nor does it regulate property use or rights. It does, however, afford the same types of benefits given to National Register sites. It requires that special consideration be given to the effects of federally assisted projects, such as road widening, on listed or eligible properties. It provides eligibility for federal income tax credits to owners of income-producing properties, including commercial, industrial, and rental-residential uses, which are historically certified and rehabilitated in accordance

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**"The area still showcases a rich array of cultural and natural resources, scenic vistas and open lands representative of that era, serving to document and commemorate the history of our nation."**

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<sup>1</sup> *Brandywine Battlefield: The National Historic Landmark Revisited* (Delaware County Planning Department, 1992)

*Brandywine Battlefield National Historic Landmark Cultural Resources Management Study* (Nancy V. Webster, AICP, Martha L. Wolf, Betty Cosans-Zebooker, Ken Joire, 1989)



with certain qualifications. It also provides qualification for federal assistance in historic preservation, when funds are available. Because landmark designation is honorary, and does not regulate property use or rights, it is a good foundation for introducing and educating the community about historic preservation. However, further steps are required for the protection and preservation of such a noteworthy cultural resource.

In 1997, the Pennsylvania Legislature named the Battlefield the first “Commonwealth Treasure” because of its status as an extraordinary symbol of our state and our national heritage. Further, due to increasing development pressures, for the past five years, Congress has declared the Battlefield a “Priority One Endangered Landmark”.

Protection of the Brandywine Battlefield is a challenging task as the majority of the lands are privately owned. The Battlefield covers 10 square miles on an estimated 375 parcels, and lies within portions of six municipalities and two counties — Birmingham, Pennsbury, Kennett, Westtown and Thornbury Townships in Chester County, and Chadds Ford Township, Delaware County. Efforts are underway to preserve the Battlefield, on both a municipal and regional level, as follows:

**The Brandywine Battlefield Task Force**, formed in 1993, is a volunteer group of municipal, state, and federal representatives. Its aim: the implementation of public and private partnerships to preserve the 10 square mile Brandywine Battlefield National Historic Landmark; the education of the community about its cultural resources; and the development of an interpretation of the Battlefield and its historical and physical setting. The taskforce has undertaken a number of activities looking towards the Battlefield's preservation. These include sponsoring bus tours for government officials to raise public awareness, identifying critical parcels for preservation, developing a long-range Interpretive Plan to provide direction for signage, trails, and other interpretation of the Battle of Brandywine and producing an informational brochure for landowners within the landmark. In 1993, the critical large parcels remaining undeveloped were identified. In 1997, a second tier of significant parcels was identified.

**The American Battlefield Protection Program** awarded a grant to the Brandywine Battlefield Task Force. It was the first such grant given to a Revolutionary War site for a public awareness campaign facilitated through bus tours, archeological investigation, and the production of this reference document to assist municipal officials in the protection efforts.

**The Brandywine Conservancy** serves as the land conservation arm of the Taskforce, specializing in conservation and resource protection techniques. The Conservancy is responsible for contacting the owners of critical parcels, managing the conservation easement program for the Taskforce and pursuing funding opportunities. Currently, most of the owners have been contacted, and over 500 acres within the landmark are protected by conservation easements.

**Sandy Hollow**, a 50-acre tract in Birmingham and Thornbury Townships, has been successfully preserved as Township open land.

**Brandywine Battlefield National Historic Landmark Cultural Resources Management Study** was completed in 1989. In 1992, the abridged version, *Brandywine Battlefield: The National Historic Landmark Revisited* (1992), was published.

Both provide excellent background information about the battle and its importance, and serve as a base of information for preservation efforts.

**Fifty acres** of the landmark in Chadds Ford Township are protected as a part of the Brandywine Battlefield Park, created in 1949 to commemorate the Battle. The Park includes two house museums (Washington's Headquarters and Lafayette's Headquarters), a visitors center, and picnic grounds. The Birmingham Road corridor in Birmingham Township, where critical battle events took place, was the initial focus for the park's location, however, land could not be obtained in that area.

**The Chadds Ford Historical Society**, incorporated in 1968, owns and operates two house museums of significance to the landmark, the John Chads House/Springhouse and the Barns-Brinton house. The Historical Society helps to maintain public awareness about the area's history through educational programs and by sponsoring events.

**Chester County Heritage Park and Open Space Municipal Grant Program:**

Using this program, the four Chester County municipalities within the landmark have developed Open Space Plans in which the framework for policy supportive of preservation within these municipalities is established.

**At the State level**, funds for preservation activities for the Brandywine Battlefield have been authorized for several years as part of the state budget. Appropriation of funds for the protection of the Battlefield would be a logical next step, yet, to date, no funds have been appropriated from the state budget. Funds from other state agencies have been committed for the protection of the Battlefield lands.

**Chester County funds**, in combination with private and Township contributions in the amount of \$2,546,000 have been committed for the purchase of conservation easements and fee simple interests for properties along the Meetinghouse Road corridor.

**The federal Patriot Act**, passed by Congress and signed by the President during the fall of 1999, authorizes funding for the Brandywine Battlefield and the Paoli Massacre site, and allows for a museum to be built at Valley Forge National Historic Park. The Act also authorizes matching funds for the protection of the Meetinghouse Road Corridor, a crucial area of battle action. Federal funds are to be matched, on a dollar-for-dollar basis, with those funds contributed by non-federal sources. Funds for the protection and preservation of this land will be disseminated to the state, a political subdivision, or to the Brandywine Conservancy, which will be responsible for management of the effort. At this point, an appropriation bill has partially funded the Brandywine Battlefield in the amount of \$500,000.

Congressmen Pitts and Weldon have requested an additional appropriation of \$2.5 million for the Brandywine Battlefield's protection.

**Resource protection:** Birmingham, Pennsbury, Kennett, Westtown and Thornbury Townships in Chester County, and Chadds Ford Township, Delaware County, containing the Battlefield, are supportive of historical and natural resource protection, and have undertaken measures to be highlighted in the next section.

## **Purpose of this Guide**

Successful protection of the Brandywine Battlefield must begin at the local level. *Battlefield Protection Strategies, a Guide for Brandywine Battlefield Communities* has been developed for use by the communities within the Battlefield to assist in efforts for its protection, and that of related resources. It discusses incorporating Battlefield protection into local planning, and provides a compilation of various implementation strategies that municipalities can consider in preserving this important national resource. While not all strategies will be applicable to each particular municipality or situation, the question of which tools are most feasible must be decided at that level. These strategies can help direct development to the most suitable areas, and in a manner compatible with preserving critical areas of the Battlefield. Inappropriate development of the open lands and historic resources can permanently erase the rich history of the Brandywine Battlefield that so greatly contributes to the character of these communities.

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**“This Guide discusses incorporating Battlefield protection into local planning, and provides a compilation of various implementation strategies that municipalities can consider in preserving this important national resource.”**

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# Planning Process

Cultural resource protection is an important part of local planning, since it is linked to protecting character-defining features that contribute to a community's character, sense of place, and quality of life important to municipal residents. It can be integrated into the local planning program, and is most effective at the local level where Pennsylvania's regulatory power lies, and where interaction with residents can occur more readily. Cultural resource planning is related to other community objectives. Its integration with other municipal objectives helps ensure a sound and comprehensive planning program and compatibility with the existing framework of the municipal planning program. This section is an overview of how cultural resource protection can fit into the local planning process, and highlights the efforts that municipalities within the landmark have taken. How to best incorporate and implement Battlefield protection is dependent upon the individual municipality.

Support for resource protection should first be established as municipal policy. Once this has occurred, actions to carry out policy should then be implemented. The cultural landscape of the Brandywine Battlefield Landmark consists of a variety of resources, including historic resources, scenic vistas, viewsheds, open spaces, natural resources and agricultural lands. As protection of the landmark is directly related to other community objectives, implementation can be achieved through a variety of techniques, not just those commonly associated with historic preservation. (Types of techniques are discussed in the Strategies section of this document.)

## Policy

As the first step, a policy basis for resource protection of the landmark should be established in one or more policy documents. Policy can be included within the municipal Comprehensive Plan, Open Space Plan or through a municipal-wide Historic Preservation Plan, and can be established within plan goals and objectives. Goals and objectives can directly address preservation of the landmark. Since the landmark consists of a variety of resources, other municipal goals and objectives can also help support Battlefield protection. Those emphasizing natural resource protection, scenic resource retention, agricultural preservation, open space and maintaining existing community character can also support and complement Battlefield preservation.

To legitimize its place as an important function of local government, cultural resources protection should be approached from a planning perspective, and examined in relation to other community planning considerations. Background information and analysis of cultural resources can be included as an element of a Comprehensive or Open Space Plan, or combined with the natural resources and open space section. Understanding existing historic and cultural sites is crucial in establishing a basis for their protection. A municipal Historic Sites Survey is a good way to accomplish this. Each community within the landmark has completed some level of survey, and that information, combined with information from the Brandywine Battlefield Surveys, identifies significant resources, types and the extent of those resources. An evaluation of resources based on survey information, past

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**“Support for resource protection should first be established as municipal policy. Once this has occurred, actions to carry out policy should then be implemented.”**

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and present planning actions, legal issues, public and private sector roles, citizen participation and possible funding sources should be examined in the planning analysis. This provides an understanding of preservation in terms of local planning and lays the groundwork for future efforts. This is an important forum in which to analyze options and determine appropriate protection methods. Planning recommendations related to cultural resource protection, and an implementation plan listing specific future actions should be included within the plan to provide clear direction to the municipal officials carrying out the policy. Since the landmark crosses municipal boundaries, regional coordination would provide a more comprehensive approach.

The loss of important historic resources is one of the concerns addressed by the Chester County Comprehensive Policy Plan, *Landscapes*. The plan was developed in response to concerns about sprawling development patterns, and the high land consumption rate resulting in a reduction of open space and resources. Plan goals and objectives aim to achieve the highest quality of environmental, social and economic vitality for the County and suggest the re-evaluation of how and where development occurs. The plan identifies the protection of historic resources as important to preserving the local quality of life. One of the plan's goals calls for sustaining and enhancing resources while accommodating planned growth. The plan includes specific objectives and policies for resource protection, as well as actions to carry out plan goals.

The Delaware County Planning Department is developing a new County Comprehensive Plan. The draft has recognized historic preservation as an important component in retaining the identity of communities whether they are first generation suburbs or the more suburban western municipalities, such as Chadds Ford Township.

## Implementation

Implementation of planning policy and recommendations can occur through both regulatory and non-regulatory means. These can range from strategies such as public land acquisition, to effective agricultural zoning practices. Whatever the method, regional coordination, cooperation among interested parties and broad community support are important elements for a successful Battlefield protection effort.

Although, ideally, it is important to continually strive to preserve all that is left of the landmark, protection of all the remaining open land may not be feasible. While all of the lands within the landmark's boundary play a role in the understanding and interpretation of the battle, the parcels which are most significant or are readily obtainable should be the initial focus. To assist the municipalities in targeting the most significant areas, the Brandywine Battlefield taskforce has identified critical parcels of the battle site.

To assist local governments in Chester County in historic resource planning, and implementing the historic resource goals and policies of *Landscapes*, a historic preservation planning manual for the municipalities entitled *Preserving Our Places* was developed. The manual provides general information about historic preservation, and describes resource protection for Chester County's different landscapes (urban, suburban, and rural) within the context of a preservation plan. The Chester County Municipal Historic Preservation Planning Grant Program complements *Preserving Our Places* and provides funding for the completion of a municipal historic preservation plan.

The Vision Partnership Program was developed in Chester County to promote cooperation at the local level, between local and County governments in the implementation of the policies found in *Landscapes*. The grant program provides technical and financial assistance to individual municipalities, groups of two or more municipalities, and regional planning bodies, for implementation of *Landscapes*. All the Chester County communities within the landmark are members, and have completed the first part of the program, the Memorandum of Understanding and Consistency review process, making them eligible to pursue funding to update plans and ordinances. As discussed below, several of these communities are currently in the process of plan and ordinance revisions.

The Delaware County Planning Department includes a historic preservation planning section. This staff offers the municipalities encouragement and guidance for documentation of resources as well as helping municipal officials develop the most appropriate form of resource protection.

### **Overview of Planning Policy and Implementation by Municipalities in the Battlefield Landmark**

The historical documentation and survey work already completed by Battlefield communities, along with the policy and implementation measures in place, display support for resource protection. The following outlines policy, implementation measures, and other activities of municipalities within the landmark that could contribute to its protection. This listing is a sampling of the measures that communities have adopted.<sup>2</sup> Efforts are discussed under three categories — policy supportive of protection in Township planning documents, land use ordinance implementation measures, and other types of additional actions that have assisted in protection of the landmark.

## **Birmingham Township, Chester County**

### **Planning Policy**

Under the Vision Partnership Program, Birmingham is currently in the process of updating the 1979 Comprehensive Plan. The Township recognizes the importance of resource protection and character preservation, while at the same time providing opportunity for a diversity of housing as their basic planning philosophy. Plan goals and objectives promote resource preservation and propose measures (such as cluster, planned residential development, lot averaging, and transfer of development rights) encouraging development to occur in a sensitive manner to existing resources. The Township is including a detailed preservation plan, as part of the update.

The Township Open Space Plan (1994) emphasizes the resource protection philosophy of the Comprehensive Plan. Goals and objectives stress resource protection, with one specifically focusing on preserving historic sites important to the Battle of Brandywine. This is a thorough, well-done planning document which features a section discussing scenic, historic, and cultural resources. The results of a preliminary Historic Resource Survey, identifying 59 historic sites, are included. The plan recommends a number of open space preservation and land use control measures which, implemented, could help preserve the Battlefield.

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**“The historical documentation and survey work already completed by Battlefield communities, along with the policy and implementation measures in place, display support for resource protection.”**

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<sup>2</sup> Information was primarily obtained through the results of the Consistency Review Reports conducted as part of the Chester County Vision Partnership Program to determine consistency with the County Comprehensive Plan, *Landscapes*.

## **Implementation**

The Township zoning ordinance contains extensive resource protection measures which could help in the protection of Battlefield lands and resources. Protection of open space and environmental resource measures include restrictions on development in the floodplain, steep slope controls, riparian buffer protections, stripping topsoil and excavation provisions, cluster development, lot averaging, development design options, planned residential developments, transfer of development rights, and net out of constraints. The Township has also taken the additional step of developing design guidelines for new and existing construction. These are excellent measures, and a number of recommendations, such as considering current density requirements, cluster provisions and additional sewage disposal methods, of the Consistency Review process could very much strengthen their effect.

Birmingham has taken a proactive approach in preserving historic resource protection and designated two types of protection provisions: a local historic district, in accordance with Act 167 the Pennsylvania Historic District Act, and a historic overlay district, in accordance with Act 247 the Municipalities Planning Code, whose boundaries coincide. The historic district zoning district follows the length of Birmingham Road, an area that has important historic resource and cultural significance. Through enacting both protection techniques, both design features and development density issues are addressed. The Township has a historic Architectural Review Board to advise on the impact of proposed structural activities within the local historic district.

The Township subdivision and land development ordinance also includes resource protection provisions. These include requiring dedication of parkland or open space in new development, and conservation plans including identification of historic structures and scenic/conservation easements.

## **Additional Measures**

- The Dilworthtown National Register Historic District, as well as individually listed National Register Sites in Birmingham, are located within the landmark.
- Sensitive design development of the Caleb Dilworth farm enabled development of the land to occur, while retaining the 18<sup>th</sup> century farm complex and a sense of open space along the Birmingham Road right-of-way through deep setbacks.
- Critical lands within the landmark have been preserved as Township-owned land at Sandy Hollow.
- Birmingham Township is a designated Certified Local Government (CLG) and as such was the recipient of the grant to produce the 1989 Battlefield Study, and took the leadership role in sponsoring and helping fund the project. This program encourages greater participation in historic preservation at the local level by strengthening the preservation partnership among local, state, and federal entities. Among other benefits, CLG certification provides the Township eligibility for preservation grant funds.

# Pennsbury Township, Chester County

## Planning Policy

The Township Comprehensive Plan (1981) clearly supports planned growth within the Township. It includes goals and objectives supportive of historic resource preservation. Historical information and a listing of significant sites is included as background information in the Comprehensive Plan, with the Brandywine Battlefield identified as a Township resource. It should be noted that this plan, along with many of the plans from the other municipalities, pre-dates the 1989 Battlefield Management Study which provided much of the base of information about the landmark.

Through the Vision Partnership Program, the Township took part in a regional Comprehensive Plan, *Kennett Area Regional Comprehensive Plan*. In that plan, discussion of cultural and historic resources are treated as plan elements, including inventory information and a cultural resource planning recommendations. The Brandywine Battlefield is acknowledged as a resource within the Township and is delineated in the plan inventory. This is a regional plan that is broad scale in nature and general recommendations relating to protection of resources is provided.

Also under the Vision Partnership Program, the Township recently completed a Route 1 Corridor Improvement Plan. The focus of the plan is to recommend design improvements to enhance the visual quality of the corridor. The plan stresses the importance of historic resource protection in retaining Township character. Historic resources along the corridor are inventoried and the Brandywine Battlefield Landmark and related resources are discussed as crucial resources within the region.

The Township Open Space Plan (1993) supports the preservation of Pennsbury's historic and cultural resources, as well as scenic resources in plan goals and objectives. The plan includes a discussion of types of historic, cultural, and scenic resources, and delineates the Battlefield site along with the other historic and scenic resources. The Plan recommends a variety of actions which could help protect Battlefield lands, including facilitating historic preservation efforts of the Township Historic Committee, establishing an agricultural security area, investigating TDRs, encouraging private land conservation, and developing scenic road guides.

## Implementation

Under the Chester County Vision Partnership Program, the Township is currently in the process of writing a municipal-wide historic overlay zoning district to provide protection for significant resources.

The Township zoning ordinance allows open space design options which can provide concentrated development and allow important Battlefield lands to be protected as open. The zoning ordinance contains protection standards in the Open Space Design Option. The zoning ordinance encourages the re-use of historic buildings through permitting the additional uses of bed and breakfasts and antique stores within historic buildings identified with the Township Historic Sites Survey. Expansion of uses for historic buildings is a good method to help provide for their continued future use. The zoning ordinance contains resource protection measures for a variety of natural resources. The Township subdivision and land development ordinance required historic sites to be identified on a site analysis plan as part of preliminary subdivision or land development plan proposals.



## **Additional Measures**

The Township is in the process of updating its preliminary Historic Sites Survey. The Township contains a National Register Historic District in the village of Fairville. Additionally, there is a Township Historic Committee to advise on matters of historic resources, and also an Open Space Committee.

The Township has created a Township Land Trust. This is an important method which can help secure and protect important lands within the landmark. This method is discussed further under the Strategies section of this document.

Landscaping, signage and lighting ordinance were enacted which require environmental and cultural site assessments for proposed land developments and restricts lighting and signage to maintain a more village like appearance.

## **Thornbury Township, Chester County**

### **Planning Policy**

The 1999 Township Action Plan, completed under the Vision Partnership Program, supports protection of the Brandywine Battlefield, and acknowledges it as one of the two most important historic/cultural resources within the Township. In recent years the Township has placed emphasis on its protection through public acquisition of lands, and is currently in the process of acquiring 10 acres adjacent to the Battlefield. The plan identifies philosophical support for preserving and protecting key portions of the Brandywine Battlefield as an objective of their cultural and historic resource goal. The plan recommends continuing to support preservation efforts of the Battlefield through public acquisition and dedication. The Township has a preliminary Historic Resource Survey, completed as part of the Chester County Survey of Historic Structures.

The Township Open Space Plan (1993) includes goals for protection of natural resources and Township character. There is a general goal addressing preserving the historic character of the Township. The plan includes inventory information about historic, scenic, and cultural resources and specifically acknowledges the Brandywine Battlefield as an important resource. Areas of significance from *The Battlefield Management Study* (1989) are outlined in the plan, which serves as an excellent basis for Township planning and protection efforts. Importantly, the plan designates the large, undeveloped parcel within the Township as a top candidate sites for open space and recreation lands. The plan recommends actions to help preserve historic resources, including zoning amendments, subdivision ordinance revisions, and investigating the feasibility of an Act 167 local historic district. The plan also includes a variety of natural resource recommendations which could assist in Battlefield protection.

### **Implementation**

The Township has taken proactive measures in the preservation of historic resources through zoning. The Township has exhibited its support for protection of the landmark through enacting a separate district dedicated to the resource, Historic Battlefield Overlay District, which is specifically intended to protect the historic resources in the Township associated with the battle. This is an excellent initial effort. However, the large lot sizes and low amount (30 percent) of open space required may make protection of a critical mass of the site difficult. An Historic

Overlay District was adopted by the Township in the fall of 1999 for the purposes of protecting historic resources on a more wide-scale basis. Zoning also includes resource protection standards that prohibit or significantly restrict disturbance in areas with significant natural resources, including stream corridors, wetlands, groundwater recharge areas, steep slopes, and ridge tops, and preserving these resources could assist in the protection of the Battlefield lands. There are density requirements and design standards for tracts of land containing significant environmentally sensitive features of wetlands, floodplains, and steep slopes. Zoning includes a cluster option which requires 60 percent open space. Net density can be modified to reduce disturbance to sensitive areas. The subdivision ordinance requires that as part of the Site Analysis plan documented or known historic or archeological resources are identified. The Battlefield is designated as a significant historic site on the Township's Official Map.

### **Additional Measures**

Open space on the west-side of South New Street was deeded in 1994 to the Township in perpetuity and is administered by the Township. This land lies within an important area of the Battlefield. There is a Township Historical Commission in place.

## **Kennett Township, Chester County**

### **Planning Policy**

The Township Comprehensive Plan (1992) includes inventory information and a discussion about historic resources and preservation techniques. The Township has a preliminary inventory of historic resources compiled as part of The Chester County Historic Sites Survey. Plan goals addressing historic resources and natural resources which respectively call for conserving made-made resources to preserve the context of the local heritage, and conserving natural resources to preserve the values of the local and regional environmental, establish policy supportive of resource protection. Lands containing the Battlefield are included within the Site Responsive Future Land Use category whereby development is responsive to location, capacity, and existing features based on a site analysis. The plan includes implementation measures for historic and cultural resource protection which recognize that the conservation of these resources is key in maintaining Township character, and focus on methods of further documenting resources and establishing resource protection during the development process.

Through the Vision Partnership Program, the Township is participating in a regional Comprehensive Plan which is completed. In that plan, discussion of cultural and historic resources are treated as plan elements including inventory information and cultural resource planning recommendations. The Brandywine Battlefield is acknowledged within the plan inventory. Since this is a regional plan which is broad scale in nature, general recommendations applying to resources throughout the region are provided.

The 1993 Township Open Space Plan (a joint effort with Kennett Square Borough) includes a discussion about cultural, historic, and scenic resources, and includes goals and objectives supportive of character preservation and preserving existing historic resources. The landmark is not mentioned as a resource, however,

only a small portion falls within the Township — the Old Kennett Meeting and several surrounding parcels. The implementation action for historic preservation promotes continuing in its support, and actions, such as ordinance revisions and establishing a greenway trail system, could help in its protection.

### **Implementation**

Township zoning includes protection language in planned residential development provisions, open space development options, and extensive natural resource protection measures. The open space development option is allowed in all residential zoning districts and the agricultural district and requires from 50 percent to 65 percent open space to be preserved with density bonuses as an incentive. The Township clearly displays support for historic preservation by including special provisions for the conservation of historic resources within this district. The Township subdivision and land development ordinance requires the identification of historic resources in site analysis.

### **Additional Measures**

The Township has a Historical Commission and contains the Hamorton and Longwood National Register Historic Districts. There is also a Township Open Space Committee.

The Kennett Township Land Trust was developed in recent years. Interest in the idea came about during the preparation of the Township Open Space Plan. In order to create and promote the concept of a local land trust, the supervisors adopted Zoning Ordinance 102, the Kennett Township Land Trust Enabling Ordinance. According to the ordinance, the land trust is needed to help implement the comprehensive plan (related provisions in the zoning and subdivision and land development ordinance) and complement land preservation efforts in the Township. The ordinance also authorizes the Township supervisors to provide assistance to the land trust.

## **Westtown Township, Chester County**

### **Planning Policy**

The Westtown Comprehensive Plan (1987) acknowledges the threat of development on natural and historic resources, and advocates controlled growth directed to preserve open areas and minimize environmental consequences. The plan includes a number of directives for open space protection and encourages preservation of historic buildings, and the area on which the Battlefield is located is designated for agricultural/cluster development which, if designed properly, could serve to protect this land. The Township Open Space Plan inventories historic resources in the Township. The Battlefield crosses the southwestern corner of the Township in an area that is mostly agricultural. While the plan does not specifically address protection of the Battlefield lands, recommended plan actions, such as amending zoning to address historic resource protection, could help to preserve the landmark.

The Township has completed a draft Comprehensive Plan update, focusing on directing growth in a manner to preserve resources. The plan includes recommendations for open space and character protection which could help serve to protect the Battlefield. The Future Land Use Plan suggests agricultural uses as the preferred future land use type and acknowledges the Battlefield site, however, includes several

land use options should development occur. These options would have to be carefully constructed to minimize impact on the integrity of the Battlefield land and existing scenic viewsheds.

### **Implementation**

Following the Comprehensive Plan recommendations, most of the Township land within the Battlefield is zoned for agricultural/cluster residential and permits a flexible development option, whereby a greater development density and required open space is permitted. The remaining land is zoned R-1 residential, which permits cluster development by right. Township zoning includes extensive natural resource protection measures.

## **Chadds Ford Township, Delaware County**

### **Planning Policy**

The Comprehensive Plan (1973), for Chadds Ford Township consists of a future land use map and five pages. Reference is made to sprawl and efforts to avoid it through concentration of commercial development along the two major arteries, Route 202 and Route 1, and likely due to the age of the plan, low-density residential development. Protected open space is indicated in the area of the Girl Scout camp and the lands between Route 100 and Ring Road, and Route 1 and the railroad tracts (most of which is owned by the Township). An area of historical designation is given to the village of Chadds Ford and to the Brandywine Battlefield Park. Parks, recreation and historic sites are specifically addressed, including such areas as the Octorora rail line for trails and the acquisition of open space. Suggested is identification and restoration of historic sites, as well as establishment of a local historic district in the village of Chadds Ford.

Importantly, large parcels of land within the Township remain open and are still actively farmed, such as the area along the southern side of Ridge Road and between Webb Road and the Township's northern border. The Brandywine Conservancy holds easements on a large portion of the Township land, especially in the southwestern portion along the Brandywine River, and the Woodlawn Trust owns over 260 acres in the Beaver Valley Road area in the southern portion of the Township. Since the adoption of the comprehensive plan, there has been a substantial amount of residential and commercial development. The Township is currently working on completing an update to this plan.

### **Implementation**

Zoning reflects the philosophy of the Comprehensive Plan. The residential areas both north and south of Route 1 are zoned R-1 (2 acre) which reflects the plan's recommendation for large lot zoning for a less dense growth pattern. The nonresidential development is directed to areas along Route 202 and the Painters Crossroads area of Route 1.

Planned Residential Developments are limited to parcels over 50 acres, with the exception of the mobile home and retirement home zoning (PRD 2) which is 25 acres. As far as can be determined, there is no specific clustering incentive. A Planned Residential Development from the early 1970s created a community (Ringfield) which became a showcase for open space conservation.

In 1986, the Township adopted an historic district ordinance (Ordinance No. 69) which created a Historical and Architectural Review Board (HARB) and two districts, the village of Chadds Ford and the Delaware County portion of the village of Dilworthtown. Both of these districts are also National Register Districts.

The subdivision and land development ordinance encourages the planning commission to recommend modifications to those proposals which would “preserve historic or cultural sites or structures”. This is enforced by the requirement for completion of an Environmental Impact Assessment (EIA) for proposals over 25 acres, over 20 dwellings, or for most nonresidential zones. Specifically, the EIA requires identification of historic resources on the National Register, Pennsylvania Inventory (no longer valid), and those in the Comprehensive Plan. The Township Historic Resources Survey is not included within the Comprehensive Plan.

### **Additional Measures**

The Delaware County Planning Department completed *Historic Sites Survey for Birmingham Township* (1984) which inventories 126 historic resources, with survey forms completed on 55 of these structures. Of these resources, six are on the National Register and two are determined to be eligible for the National Register. Some are contributing structures to the Brandywine Battlefield National Historic Landmark.

Due to ever growing development pressures within the Township, with a Township Open Space Committee was formed. A task force has been formed consisting of this committee, the Brandywine Conservancy, Natural Lands Trust, and community representatives. The focus of the task force will be in compiling an open space component for the comprehensive plan. The final product of this task force will include recommended regulatory amendments that will more effectively protect natural resources and open space.

The Township is aware of the significance of the Battle of Brandywine and has the Brandywine Battlefield Park located within its boundaries. The entire area of the Township north of Route 1 is located within the landmark, as well as a significant amount of area along the Brandywine in the southern portion of the Township.

# Implementation Issues

**B**attlefield communities have taken proactive measures to establish implementation techniques. However, there are a number of issues that continue to effect protection efforts and need to be taken into consideration in developing appropriate Battlefield protection strategies. One of the most difficult, but necessary, planning endeavors is to balance varying planning interests. For example, one consideration which has emerged at the forefront of preservation efforts is the balance between roadway improvements and historic preservation. Frequently solutions to resolve traffic congestion, such as road widening, can compromise important historic structures sited along the right-of-way. This section provides a brief description of implementation issues to Battlefield protection.

## Roadway Improvements

Capacity issues and traffic congestion concerns in the Battlefield will lead to the necessity for roadway improvements. Many of the local roads continue to follow the alignment of the original paths of the Brandywine Valley area. These roads were not designed to meet the vehicular traffic levels which have occurred as a result of the residential and commercial development. Numerous remaining historic structures in the landmark are situated at relatively close proximity to the rights-of-way. Roadway improvement activities, such as widening or realignment, could impact existing historic structures along the right-of-way and the historic and scenic nature of the roadway itself. Historic structures are at risk of being demolished for these improvements. Due to the high level of significance of the landmark, demolition of remaining historic structures becomes an issue.

Since its formation, the Battlefield Task Force has been aware of the importance of cooperative efforts with PennDOT, and to address this, a PennDOT representative has been a member of the Task Force since 1995. The alternatives proposed by PennDOT for the widening of U.S. Route 202 have been presented in public meetings, as well as tours for interested organizations, such as the Brandywine Battlefield Task Force. The Task Force has a representative registered as a consulting party to PennDOT, as prescribed in the Advisory Council on Historic Preservation's revised regulations effective June 17, 1999. Environmental assessments, conducted as part of the Route 202 widening project, are underway for the purpose of considering the projects effect on the landmark for both above and below ground resources. PennDOT will issue a draft environmental impact statement in the fall of 2000 which will state the effect on existing resources.

## Tourism within the Battlefield Site

The issue of tourism has been a focus of the Task Force since its inception. The question of how tourism and the traffic generated would function on the narrow roadways and within the primarily low density residential setting of the landmark is an important consideration. The extent of visitation of the Battlefield and where and how visitors are directed will become an increasingly crucial question. Cooperative efforts between the Task Force, municipalities, and residents will need to take place to determine a workable solution. Lands privately preserved may pose

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“There are a number of issues that continue to effect protection efforts and need to be taken into consideration in developing appropriate Battlefield protection strategies.”

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a different situation than those preserved through public funds. Lands primarily protected through easements or through zoning regulations which promote development sensitive to preserving significant portions of the landmark may not be accessible for visitation. Designated areas for tourism will ultimately be dependent upon the extent to which parcels are protected and their location.

Applications by the Task Force for ISTE A funding have addressed the issue of tourism and requested funds for such activities as retaining priority scenic overlooks from Route 202, as well signage from highway corridors and guidance back to Route 202. A draft *Long Term Interpretive Plan for the Brandywine Battlefield National Historic Landmark* was completed by the Task Force in September 1998. This Plan addresses physical improvements to assist in the interpretation of the battle. The intricacies and impact of tourist traffic within the Battlefield is a critical issue.

### **Subdivision and Land Development Applications**

Brandywine Battlefield, lying on mostly privately owned lands and within an attractive area for development, is subject to constant and increasing pressures for new land developments. Development occurring in a low-density, spread-out, sprawling pattern is a primary threat to destroying remaining undeveloped critical parcels. Municipalities have already taken a number of steps to enact ordinance measures which promotes sensitive development, as discussed in the previous section. Additional measures for consideration are included in the following section. The importance of private property rights in Pennsylvania and the value of land are issues affecting land preservation.

The following provides a sample of development pressures within the landmark:

- In 1989, a Planned Residential Development was proposed and eventually developed on the 93 acre Davis Tract in Birmingham Township, Chester County. Sandy Hollow, the location of heavy conflict during the battle, became part of the open space dedicated to the Township.
- A Planned Residential Development was approved in the 1990s for the corner of PA Route 926 and U.S. Route 202 in Thornbury Township that originally was called the Robinson Tract, later changed to Bridlewood, and now called Brandywine at Thornbury. A Phase I archaeological study was completed on this property with limited results.
- A Planned Residential Development was proposed for the Craig property in Chadds Ford Township in February 1993. The developer withdrew the application when public resistance was initiated based on evidence that the barn had been used as a field hospital and as a mass burial site.

### **Ownership and Maintenance Responsibilities of Protected Lands**

Open lands can be protected through a number of methods, including conservation easements, deed restrictions, restrictive covenants, fee simple purchase, and zoning techniques. No matter the method employed, one of the primary issues in protection of open lands is long term monitoring, maintenance, and liability for the land once it is preserved, and establishing the party who will take on the long-term responsibility for the activities. This issue can become of such concern as to dismantle land preservation efforts altogether. There needs to be commitment to enforce the terms of the land protection method and maintain the preserved lands. The value to the public depends on long term monitoring of the site. While interested parties may initially favor land preservation, reservations can result when deal-

ing with the everyday practicalities of land protection, and thus it is important to address issues at the onset which may later serve as impediments to the process.

An important consideration is the enforcement ability of the organization assigned to the long-term responsibility for the property. There are a variety of entities that could take responsibility, including municipalities, state or other public agencies, land conservancies, homeowners groups, or private landowners. The responsible party will be related to the method of preservation and intended use of the land, for example, protected open space versus tourism. Continual monitoring of the site is important because its violation can result in long-term change which may be impossible to reverse, thus destroying the historic and cultural value. Inspection procedures and monitoring requirements should be clearly defined in the easement or other agreement.

Another consideration is land maintenance; this can include physical maintenance of grounds, handling tourists and visitors to the site, as well as ensuring the public areas do not interfere with rights of neighboring landowners. Liability also becomes an issue for protected lands which are open to the public. Designations of responsible parties need to be established at the onset of the process.

An example of land protection is the Sandy Hollow site, located between Birmingham Road and South New Street, which is deed restricted and owned by Birmingham Township. The site is to be preserved as open space and maintained by the Township. The Township has applied for a grant to provide for some public accessibility to the Township site. As the land is publicly-owned and the Township has taken responsibility for the site, this represents a relatively straight forward example of maintenance and protection of open lands.

### **Federal Legislation**

The federal Patriot Act authorizes matching funds in the amount of \$3 million for the protection of the land along the Meetinghouse Road Corridor, a crucial area of battle action. Federal funds are to be matched on a dollar-for-dollar basis to those funds contributed by non-federal sources. Funds for the protection and preservation of this land will be disseminated to the state, a political subdivision, or to the Brandywine Conservancy, which will be responsible for management of the effort. Presently, \$500,000 of the \$3 million has been appropriated for the protection of the Battlefield. This is a critical time period for the landmark, as it faces great and increasing development pressure, and the success of this initiative and the appropriation of the total amount of funds is crucial for the protection of significant lands within the landmark. In order to have a significant impact on preserving critical parcels in the landmark, these funds could be maximized and used to purchase conservation easements, rather than outright fee simple purchase of land. The Task Force has several property owners who are interested and considering land preservation techniques, and has secured some matching funding from Chester County, the state, and Birmingham Township.

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**“This is a critical time period for the landmark, as it faces great and increasing development pressure.”**

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# Resource Protection Strategies

Resource protection and growth management policies can generally be agreed upon and supported within municipal plans, while the subsequent ordinances intended to implement these policies do not always achieve the anticipated results. Translating planning policy into effective implementation strategies is one of the most difficult tasks facing a municipality.

This section outlines possible strategies for municipalities to consider in protecting Battlefield lands and resources. These options involve both regulatory and non-regulatory measures. As the Brandywine Battlefield Landmark is made up of a diversity of resources (historic, cultural, natural, scenic, agricultural, and open space), a variety of techniques, not just those traditionally associated with historic preservation, can help protect the landmark. Many of these techniques support planning goals already advocated by municipalities in their planning documents. Protecting the Battlefield can serve to achieve municipal goals of retaining open space, natural resource protection, agricultural land preservation, and maintaining scenic viewsheds, as well as cultural and historic resource preservation. To successfully implement some of these options will require coordination and cooperation among stakeholders. As highlighted above, the communities within the landmark have already implemented protection strategies through a number of techniques and should be highly commended for their initiative. Protection of resources is just one of many facets of local government, and with that in mind, this listing was created to assist communities in selecting further protection measures.

A general description of each strategy is included, as well as a brief discussion of how this strategy can help to protect the Battlefield. This list is not intended to be an exhaustive documentation of each strategy, but rather a compilation of options that can be further investigated. To that end, references with more detailed information about each strategy are included. Nearly all the strategies can be found in Volumes I and II of the *Chester County Community Planning Handbook*, which was distributed to all Chester County municipalities. Reference numbers for each strategy and in which volume of the handbook the strategy can be found is included under the strategy name.

## Chester County Vision Partnership Program

The Vision Partnership Program was established in Chester County to promote cooperation between local and County governments to implement the policies of *Landscapes*, the County Comprehensive Policy Plan, at the local level. The County recognizes that successful implementation of the goals and actions of *Landscapes* can only occur on a municipal level. This program strives for the implementation of a common and coordinated strategy to guide future growth in the County, so that important resources and the unique character of Chester County communities is maintained.

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“As the Brandywine Battlefield Landmark is made up of a diversity of resources (historic, cultural, natural, scenic, agricultural, and open space), a variety of techniques, not just those traditionally associated with historic preservation, can help protect the landmark.”

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The program provides a number of advantages to participating municipalities, including:

- Coordinates County and local planning;
- Improves communications between the County and municipalities by striving for a common vision;
- Increases opportunities for County, state, and federal funding through consistency between local and County planning policy;
- Improves planning of infrastructure by examination and planning from a broader perspective;
- Improves the management of community resources through broader scale, more unified protection;
- Coordinates open space resources through linkage on a multi-municipal basis; and
- Provides financial assistance and technical support through provision of grants.

The program involves a multi-step process, beginning with municipal endorsement of the County Plan and agreement to work with the County in its implementation through execution of a Memorandum of Understanding (MOU). This is followed by the consistency review process in which local plans and ordinances are examined for their consistency with the County Plan and includes recommendations about growth boundaries.

Grants are provided for the program for the purposes of funding technical assistance intended to achieve the objective of the implementation of *Landscapes*. Eligible applicants include individual municipalities, groups of two or more municipalities, or regional planning bodies which must have executed a MOU and completed the Consistency Review process. Consistency between the applicant's Comprehensive Plan and the County Plan must be achieved before proceeding to other planning documents. Eligible projects include plans and implementation documents enabled under the Municipalities Planning Code, as well as special projects. Comprehensive Plans, Revitalization Plans, Zoning Ordinances, Subdivision Ordinances, Official Maps, Village Plans, and Corridor studies are examples of eligible projects. More information about specific types of eligible, as well as ineligible documents, is included in the *Vision Partnership Program Municipal Participation Manual* (rev 4/98), which was distributed to all Chester County municipalities.

All the Chester County communities within the landmark are participants in the Vision Partnership Program and have completed the first parts of the program, therefore making them eligible to pursue funding to update plans and ordinances. Several of these communities are currently in the process of plan and ordinance revisions. A 10 percent-50 percent funding match is required for this program.

### **How Does This Strategy Relate to Protection of the Landmark?**

This program is important for Battlefield protection since it provides funding to Chester County communities to develop and implement policy supportive of cultural resources protection. Cultural resource planning is just one of many facets of local government. This program can help provide additional technical and financial support for municipalities to target protection measures through developing planning policy and establishing ordinances, such as historic overlay zones and other measures, such as community design guide, for implementation.

# Chester County Municipal Historic Preservation Planning Grant Program

The Chester County Municipal Historic Preservation Planning Grant Program provides financial assistance to local governments for the completion of a municipal Historic Preservation Plan. The program promotes a comprehensive and broad-based approach to preservation planning through examination in a planning context. Preparing a Preservation Plan that identifies goals, objectives, policies, procedures, and strategies will solidify the local preservation program and give it the foundation needed for implementation. The completion of a Historic Preservation Plan will accomplish the program objectives:

- Awareness of the existing historic framework throughout the community;
- Provide information and examination of alternatives available for protecting resources;
- Establish a list of potential implementation actions for municipalities in protecting resources;
- Provides a municipality with a “blueprint” for preserving its resources.

Chester County municipalities that have entered into the Vision Partnership Program and have a Comprehensive Plan found to be consistent with *Landscapes*, and whose Comprehensive Plan contains policy regarding historic preservation, are eligible for this program. To encourage the integration of preservation into the local planning program, the scope for the Preservation Plan is modeled after the comprehensive planning process and requires identification of goals and objectives, identification and evaluation of historic resources, summary of past historic preservation efforts, analysis of the legal foundation, defining public and private sector involvement, examining historic preservation financial, regulatory, and other resources, looking at the role of citizen participation, and identification of strategies and an implementation schedule. A 25 percent funding match is required for this program.

## **How Does This Strategy Relate to Protection of the Landmark?**

By providing grants for developing a Historic Preservation Plan, this program allows a municipality to investigate and examine in depth preservation within the context of local planning and in relation to other community concerns and objectives. Within these communities, the preservation of the Battlefield could be a dominant focus of the plan. This plan could assist in Battlefield protection by providing a forum in which the resource could be examined from a planning perspective, and a prescriptive long-range strategy for its protection developed. Issues such as impeding barriers to implementation, legal background, funding possibilities, the role of stakeholders could be examined. This plan completed on a regional basis and adopted by each municipality would provide a consistent and unified strategy and protection effort.

# Chester County Heritage Park and Open Space Municipal Grant Program

The Chester County Heritage Park and Open Space Municipal Grant Program distributes six grant funds that address and provide funding for local planning and recreation. These grant funds are:

Administered through the County Planning Commission:

- Recreation, Open Space, and Environmental Resource Planning grants
- Spray Irrigation Grants
- The Vision Partnership Grant Program

Administered through the Parks and Recreation Department:

- Parkland and Open Space Acquisition Grant
- Park Facilities Grant
- Greenways Grant

Through the Parkland and Open Space Acquisition Grant, funding for acquisition of easements or fee simple purchase of open space and recreation land is available to local governments and nonprofits. Acquisitions funded through this program are required to be used for natural, historic, or open space protection or recreation, and must provide public access. No structures of monetary value may be acquired using this grant. A 50 percent funding match is required for this program.

The Greenways Grant provides funding for the acquisition of easements or fee simple property purchase, improvements to trails, and rehabilitation of habitat on public lands. Funding is available to municipalities or landowning recreation authorities. Acquisitions must provide for public access, and no structures of monetary values are eligible for acquisition through this program. Greenways are discussed as a strategy within this section of this document. A 50 percent funding match is required for this program.

## How Does This Strategy Relate to Protection of the Landmark?

These various County programs can be used by Chester County municipalities to protect land through regulatory means, such as zoning and subdivision regulations, purchase of conservation easements, and outright land acquisition. The approach employed is dependent on the methodology of the municipality.

## Growth Boundaries

### Community Planning Handbook, Volume I, #2

A growth boundary is a growth management tool used to prevent sprawl and to direct growth to the most appropriate areas. The “boundary” is a geographic delineation to mark where more intense development is appropriate from where it is not.

This boundary is not intended to stop growth, but to direct it to the most appropriate locations. The area within a mapped growth boundary indicates where growth is desired and will be supported with the necessary facilities and services. Municipalities should not only limit development outside of the growth boundary, but they must commit to planning for the infrastructure, including water, sewer, roads, schools and parks, that will be needed to support development within the boundary. Growth boundaries are useful for adding certainty to the development

process by ensuring that as the market creates the demand for development, the necessary facilities will be available. This public and private cooperation can meet growth needs by providing development in locations where it is wanted and limit growth pressures where it is not wanted.

Not all development is intended to occur within the line. Rather, the line is intended to indicate the desired intensity of development. More intense development, which is dependent on public services, would occur within the boundary and limited development would occur outside it. Encouraging and supporting development within the growth boundary reduces the development pressure outside the boundary.

The comprehensive plan is the most appropriate document in which to include growth boundaries. The zoning ordinance would then be used to implement the growth boundary by allowing a variety of densities and uses within that boundary to permit the projected growth. Limited development using options such as conservation design could be designated for areas outside the boundary. Incentives should be implemented for locating growth within appropriate areas, as well as standards for protection of those areas outside of the boundaries.

### **How Does This Strategy Relate to Protection of the Landmark?**

This strategy preserves the lands within the landmark by encouraging more intense development in the most suitable areas of the municipality. Sensitive resources - open space, farmland, natural resources, environmentally sensitive lands, scenic resources, and historic resources — which make up the cultural landscape of the Battlefield, can be located outside the boundary in areas of more limited development. The designation and adoption of growth boundaries within the Battlefield communities could provide a unified and comprehensive approach to resource preservation. A municipal-wide outlook would be taken to determine the most appropriate areas for more intensive growth, and sensitive and critical lands associated with the battle would be located outside the line where limited development would occur. Options for this type of development design are included within other strategies in this section. Coordinating and designating growth boundaries on a regional level would provide the most effective preservation tactic.

## **Open Space Development**

### **Community Planning Handbook, Volume I, #4**

Open space development (also called cluster development) allows residential units to be grouped together on a relatively small portion of a parcel, leaving the remainder in permanent open space. For example, in a zoning district which permits one unit/acre, rather than having each of 20 residential units on its own acre of land (consuming the entire parcel), the same 20 units would be placed in a much smaller area (possibly on one-quarter acre lots, or smaller), leaving a majority of the original parcel in perpetual open space. An important component of effective cluster development is to ensure enough open space is preserved to protect resources and create a visual effect. Usually this requires that a minimum of 50 - 60 percent of land is dedicated to open space so that a critical mass is achieved.

The primary purpose of this technique is to protect natural resources and to establish permanent open space to the greatest extent possible, while allowing for a similar amount of development as would be allowed with a more conventional

development pattern. Clustering can help preserve scenic viewsheds and the context of historic resources by placing them in the open space. It permits fewer environmental impacts than conventional development (such as less disturbance of natural areas, less runoff, less erosion), lower infrastructure cost for the applicant and lower maintenance costs for the municipality, and can allow recreation land within preserved open space area.

Open space development is appropriate in areas where resource and open space preservation are key objectives, but where for whatever reason more aggressive agricultural and/or open space preservation techniques (such as Agricultural Zoning) are not practical. It is also very appropriate in suburban areas that are not yet extensively developed and where there are still a significant number of large undeveloped parcels.

Open Space development is primarily implemented through the zoning ordinance, although changes in the subdivision and land development ordinance are often necessary to provide the municipality with adequate information on development plans. By merely *allowing* open space development as an option, municipalities hope that applicants will decide to cluster based on the savings in infrastructure costs alone. Some municipalities *encourage* open space development through density incentives. In some cases, these incentives are small (10 to 15 percent more units allowed when clustering), however more aggressive incentives can result in greater open space being preserved. Open space development can also be *required*, with a minimum open space requirement included for all new subdivisions. While few municipalities have been this aggressive, this approach has not been legally challenged and appears supportable as long as reasonable gross densities are allowed.

### **How Does This Strategy Relate to Protection of the Landmark?**

Open Space development is a key strategy for the protection of the Battlefield since it permits critical historic and natural areas of a parcel to be protected as open space, while still allowing economic benefits of land development. In this way, important areas of the Battlefield where skirmishes occurred, historic buildings are located, archeological resources are expected, and scenic viewsheds exist, can be protected from disturbance. Also very important, is that by using this technique, the rural and open space character of these communities can be preserved by clustering development and nestling these clusters away from the roadway in more compact development patterns. This is a technique that many of the communities have already implemented in some form. In new development, this type of regulation can serve to retain the context of the historic structure through permitting the structure to be located within a portion of the open space.

## **Municipal Build-Out Analysis**

### **Community Planning Handbook, Volume II, #5**

As discussed in this document, one of the most difficult planning tasks facing a municipality is the translation of policy into effective regulation, and ordinances intended to implement these principles may not always achieve the anticipated results. A municipal build-out analysis is an extremely useful and powerful tool for evaluating the effect of the ordinance regulations. Such analysis provides the municipality with a numeric and graphic audit of how much development could occur if every eligible property were developed. Current zoning and subdivision ordinance

regulations are applied to each tract capable of further subdivision and development to determine potential development yields. This analysis allows municipal officials to visualize how their current ordinances could be translated into actual land use scenarios. This process offers a “reality check” of whether regulations achieve the community planning objectives and identifies where ordinance revisions are needed to provide the intended outcome.

This technique can assist a municipality in choosing its preferred future and character by presenting a clear view of what the community will look like if fully developed under current land use policies. The municipal build-out analysis can be used at any time by interested municipalities, and serves as a discussion piece for determining what areas of land use regulations are in need of revision within the municipality. The analysis shows, as both a numeric calculation and a graphic depiction, the impact of current municipal land use regulation.

### **How Does This Strategy Relate to Protection of the Landmark?**

Current zoning and subdivision ordinance provisions can be “tested” to determine if they are yielding the land use patterns desired by the municipality. Questions such as what types of land use scenarios will result under current ordinances, how much and where will development generally be located, and will our sensitive natural and cultural resources be protected, can be investigated through developing land use scenarios during this analysis. Municipalities may believe that they have already addressed resource protection and desired future land use patterns through current regulations and planning practices. This analysis is important for resource protection because it can help a municipality determine if there presently are adequate protection measures in place to preserve valuable resources.

## **Transferable Development Rights**

### **Community Planning Handbook, Volume I, #10**

Transferable Development Rights (TDR) is a zoning option that allows conservation and development to co-exist within a municipality. The technique directs growth to preferred locations through the sale and purchase of development rights. The option establishes a program by which development rights are established for a given piece of land and which can be separated from the title of that property. These rights can be sold on the open market in exchange for permanently preserving the land. The option establishes an area to be protected, known as the “sending area” and an area to accommodate growth, known as the “receiving area”.

While the TDR program is a part of the municipal zoning ordinance, the actual buying and selling of development rights remains with the property owner. Therefore, the value of each development right is controlled by the open market, not the municipality. The TDR option offers one of the most equitable systems for preserving open space and agricultural lands by compensating the owner of preserved land, while guiding the growth of development centers through the allowance of increased density.

A municipality should consider using this technique if they can answer yes to several of the following questions:

- Does the comprehensive plan have a policy for conservation and concentrated development?
- Are there areas or resources in the community in need of protection/conservation?
- Is agriculture a significant land use in the municipality?
- Is there a logical area in which to guide development (i.e., public sewer and water, collector road, etc.)?
- Does current zoning lend itself to a TDR program (i.e., distinct conservation and development districts)?
- Is the municipality adjacent to a borough or developed municipality?

The use of transferable development rights provides many benefits, including conserving natural and cultural resources, creating a municipal open space network, and, importantly, linking development location and infrastructure, which lowers infrastructure costs. This technique provides the opportunity to implement municipal planning objectives for cultural resource protection. However, unfamiliarity and the perceived complexity and uniqueness of a TDR program has led to hesitation in using this strategy. TDR is implemented in the zoning ordinance, and land transfer is limited to within a single municipality, unless joint zoning is adopted, whereby appropriate sending and receiving areas within several municipalities can be identified. This option does require a municipality to identify and commit to an area of growth.

### **How Does This Strategy Relate to Protection of the Landmark?**

By sending development to suitable areas of the Township, areas containing resources which the Township would like to protect can remain as open lands. This technique can preserve the landmark by designating critical areas of the Battlefield as sending areas. Since many important areas of the Battlefield coincide with areas of sensitive environmental resources, as designated in the municipal Open Space Plans, designating these areas within the landmark as sending areas would provide protection for the Battlefield. TDR's do not reduce the amount of development within a municipality, just its location. The municipalities will carefully need to consider locations for, and the amount of development receiving areas can accommodate.

## **Official Map**

### **Community Planning Handbook, Volume I, #12**

The official map legally establishes the location of existing and proposed streets, waterways, parks, and other public lands and facilities in a municipality. Private and public lands for which the public has a future need are identified on the map. By including these features on the official map, notification is provided to landowners and potential developers concerning the location of future public improvements.

Once written notice is submitted by the property owner to the municipality of the intention to subdivide or build on mapped lands, the municipality has a one year time frame in which to purchase the property or obtain an easement on the property. If construction does occur in a mapped and reserved area without going through



the required process and waiting period, the municipality can require that the improvements be removed at the builder's expense.

The official map is adopted in the form of a map and accompanying written ordinance. The official map should be cross-referenced with other land ordinances, such as the zoning and subdivision ordinances.

The official map can be used for a wide range of planning applications ranging from the extension of the existing street pattern to the preservation of crucial open space or historic resources. The features which can be included on the map are almost unlimited if they are consistent with the municipal comprehensive plan or other planning document. However, only those resources that the municipality is seriously interested in acquiring should be included on the official map.

There are several misconceptions associated with the official map which are important to note:

- The official map is not the same as the zoning map or a future land use map. It is a separate, legally adopted document with its own set of rules and requirements.
- The official map does not imply municipal responsibility for mapped roads. The inclusion of planned roads or public lands does not constitute the opening or establishment of the street or the acceptance of the land. This responsibility would not apply until the purchase or acceptance of the streets or properties designated on the map.
- The official map is not a taking of land. Unless the land is dedicated or donated to the municipality by the developer, the municipality must purchase or acquire an easement on the mapped land. If acquisition does not occur within one year after the owner indicates the intention to develop, the property owner can proceed with developing the property.
- The two requirements which made it more difficult and expensive to create an official map were changed during the 1988 amendments to the Municipalities Planning Code. First, the official map does not have to be surveyed. A survey of the property is not required until the municipality proceeds with acquisition or when the streets of a proposed development are being laid out. Second, the map does not have to include the entire municipality, which allows for focus on one feature or area of the municipality, rather than undertaking a larger mapping effort.

### **How Does This Strategy Relate to Protection of the Landmark?**

By developing an official map, important sites and land areas associated with the landmark can be “ear-marked” as open space or parklands for future acquisition by the municipalities. In this way, the municipalities can make it known which properties it seriously intends to acquire. It allows the municipality to plan ahead for protecting important Battlefield lands and develop a strategy for acquisition. The municipality can “reserve” important lands associated with the landmark without immediate purchase. Also, in terms of funding and grants, this strategy can help in preservation through providing support for funding requests by showing municipal intent and commitment to protecting these areas as part of their overall planning program.

# Net-Out of Resources

## Community Planning Handbook, Volume I, #16

The technique of deducting environmentally constrained lands from development density calculations is commonly referred to as “net-out”. Netting-out is intended to protect and preserve environmentally constrained areas (such as wetlands, steep slopes, floodplains, and woodlands) by reducing or eliminating the credit given for these lands toward the amount of development permitted on a given site.

Net-out is appropriate wherever environmentally constrained lands are threatened by disturbance from development. While net-out is appropriate in less developed rural and natural areas where there are large amounts of constrained lands, the similarly large supply of unconstrained developable land in these areas may reduce the short-term development pressure on constrained lands. Net-out may be a more immediate priority in areas that have already been mostly developed and where there is greater development pressure on environmentally constrained lands because they constitute a higher percentage of the land remaining undeveloped.

Net-out regulations are primarily contained in the zoning ordinance. Whether resources are deducted from total lot area or from developable area, and whether to totally or partially net-out resources (fully deduct them from lot size/developable area calculation or only deduct a portion of them) needs to be decided. In doing so, legal defensibility must always be considered as well as factors such as interaction with other zoning provisions and desired development pattern. (The Chester County Community Planning Handbook, Volume I should be referenced for more detailed information about these issues when considering this strategy.) Subdivision and land development ordinance requirements are also important for providing the municipality with adequate information on development plans.

Before adding net-out provisions to its ordinances, a municipality should establish a policy basis for such requirements by identifying the resources needing protection and the need for such protection in a policy document, such as the comprehensive plan and/or the open space plan. Which resources warrant protection is a key question to answer at the onset, and natural resources and prioritization of those that need regulatory protection should be discussed. To be legally defensible, a net-out ordinance should only deduct land area for resources whose protection can be linked to the “public health, safety, and welfare”. Resources that can be clearly linked include steep slopes, ponds, lakes, and watercourses and their associated floodplains. Such protection is a legal concept that has historically been effective in defending net-out provisions for natural resource protection and other zoning restrictions.

### **How Does This Strategy Relate to Protection of the Landmark?**

When the location of sensitive environmental resources coincide with the location of important lands in the Brandywine Battlefield, the use of net-out provisions can result in helping to protect both important cultural and natural resources. Since much of the landmark lies in the path of development pressure, net-out is a useful tool to help preserve those areas of the landmark containing natural resources.

In areas of the landmark which are less developed, the considerable amount of unconstrained lands may reduce the short-term development pressure on constrained lands. Net-out may be a more immediate priority in areas that have already been mostly developed and where there is greater development pressure on envi-

ronmentally constrained lands because they constitute a higher percentage of the land remaining undeveloped.

## Natural Resources Protection

**Community Planning Handbook, Volume I, #17, #18, #19, #20, Volume II, #21**

This strategy describes the management of a municipality's valuable natural resources, including wetlands, floodplains, vegetation, steep slopes, and riparian buffers.

**Wetlands** are land areas that are usually saturated with water and also show soil and vegetative characteristics specific to wetlands. These areas include all streams and other bodies of water and frequently include adjacent areas, as well. Wetlands are a critical resource that provide important wildlife habitat and play a key role in flood prevention, surface water management, groundwater recharge, and ground and surface water quality. Municipalities must choose what level of involvement to assume in wetland management. While both the federal and state governments have wetland protection laws in place, local municipalities can take additional steps to protect wetlands from the impacts of development. There are a range of possible approaches to wetlands management that local governments can take. Any municipality with undisturbed wetland areas within its boundaries should consider developing wetland management tools. Such tools are generally located in both zoning and subdivision and land development ordinances.

**A floodplain** is the relatively flat area adjoining a stream, river, or watercourse that has been or may be covered by floodwater. The hazards of living or developing property in areas that are subject to flooding are generally well-known today. Nevertheless, many developed areas are subject to periodic flooding, either because they were settled in times when the characteristics of floodplain areas were not well understood, or because development has increased flood heights and frequency over the years. Consequently, floods cause damage to property and can be life-threatening. Floodplain regulations are usually located in the zoning ordinance, as an overlay district that places special controls over the 100-year floodplain.

**Vegetation management** preserves and carefully manages existing trees, woodlands, native vegetation, and hedgerows before, during, and after the development process. The purpose of vegetation management is not to restrict development and, in fact, if properly executed, it can work to the developer's benefit. For example, a land developer may acquire a 50-acre parcel of residentially zoned land, of which 20 acres is existing mature woodlands. The developer proposes to construct 40 dwelling units, preserving a minimum of ten acres for open space. The developer would be most efficient, both economically and environmentally, to plan the development with respect to the existing woodlands instead of clear-cutting the parcel prior to the permitting process and planting new vegetation after the development has been completed.

Vegetation management is most applicable in the suburban and rural areas where large parcels of undeveloped land still remain. It is imperative that a municipality establish these requirements prior to development being proposed to preserve and maintain its mature and/or native vegetation. Vegetation management, or “vegeta-

tion preservation” as it is often called, is primarily implemented through the subdivision and land development ordinance. The zoning ordinance, however, can influence the preservation of existing vegetation through the inclusion of maximum disturbance standards, minimum planting standards, and a native plant material planting list.

**Slope management** is a tool that allows a municipality to protect areas of steep and moderate slopes. Steep and moderate slopes are important resources more because of the impacts generally resulting from slope disturbance than due to any intrinsic value of sloped land. Uncontrolled disturbance of slopes and vegetation on slopes results in increased stormwater runoff, erosion, sedimentation and siltation of nearby streams, downstream flooding, and decreased stability of the slope itself, which can lead to slope collapses and increased municipal liability for permitting development that caused such collapse. There are a variety of approaches to slope management that local governments can take. Any municipality with undeveloped slope areas within its boundaries should consider developing slope management tools. Such tools are generally located in both zoning and subdivision and land development ordinances.

**Riparian buffers** are stands of trees, shrubs, and other vegetation which protect waterways from the impact of human activities, such as farming, grazing, lumbering, mining and development. “Riparian” refers to the vegetated area of land adjacent to a pond, lake, stream, creek, river, or wetland. Riparian areas form the transition between the aquatic and terrestrial environment, and this vegetation intercepts polluted and sediment-laden stormwater running off the land surface before it reaches the water body. Buffers are most critical in watershed headwater areas, and smaller first and second order streams. Buffers along the wider downstream portions of a watershed are important, especially for fisheries and wildlife habitat, but will have proportionately less impact on water quality. Preserving and restoring riparian buffers are among the most effective techniques used to protect and enhance the quality of groundwater, surface water and wildlife habitats. Municipalities can manage stream corridors and their buffers through both non-regulatory and regulatory processes.

### **How Does This Strategy Relate to Protection of the Landmark?**

Through protecting natural resources in a municipality, those portions of the Battlefield which coincide in location with the resources would also be preserved. This can be a particularly effective strategy in highly constrained areas of the Battlefield. However, when implementing this recommendation, it is important for a municipality to understand the types and locations of existing natural resources in order regulate them. This type of information is documented in the municipal Comprehensive Plan and the municipal Open Space Plan.

## **Performance Zoning**

### **Community Planning Handbook, Volume I, #23**

Performance zoning, sometimes called impact zoning or flexible zoning, is a method of regulating the design and location of a development based on factors that relate directly to its site and the specific effects of the particular development. It evolved from earlier attempts at regulating industrial developments by regulating

the effects of industrial land uses. Whereas earlier regulations attempted to specifically list all of the particular industrial land uses that were (and were not) permitted in particular zoning districts, the performance-based approach would regulate industrial uses depending on how well they met certain objective criteria. Such criteria often included limits on vehicle traffic, air pollution, noise, and lot coverage. Municipalities using the performance approach were not specifically concerned with the type of industry or land use that might locate on a site, but were more interested in the actual effects of the land use on the environment. If the performance standards were met, the developer was generally free to choose his method of compliance. Performance zoning is, therefore, an attempt to fine-tune traditional zoning into a tool that is more sensitive to the particular nature of specific sites. Under performance zoning, municipalities may lose some control over the specific types of land uses that may be constructed, but can exert more control over the effects of the land use.

Although performance zoning originated as a way to control industrial land uses, a performance approach became applied to other land uses also, such as residential, retail, and commercial development. In southeastern Pennsylvania, performance zoning is principally used to control the effects of residential development on the natural environment, and is most often used in new construction in suburban and rural landscapes.

### **How Does This Strategy Relate to Protection of the Landmark?**

Brandywine Battlefield communities can benefit through the use of performance zoning by helping to control the effects of land use and development on a site. Thus, performance zoning is sensitive to the particular nature of specific sites. A municipality can exert control over the effects of development on the natural environment. This is key as a large portion of the undeveloped areas of the Battlefield consist of natural resources. In this way, important areas of the Battlefield can be protected.

## **Parkland Dedication/Fee-In-Lieu Provisions**

### **Community Planning Handbook, Volume I, #24**

Municipalities are authorized under Pennsylvania law to require developers to dedicate public open space within proposed developments. If the developer and municipality agree, the dedication of land, a fee-in-lieu of the land, the development of recreational facilities, or a combination of any of the three may be acceptable. This parkland or fee-in-lieu is to be used by the municipality to ensure that future residents of the development have adequate park and recreation opportunities. This technique is most effective in suburban and rural areas where current recreational facilities are limited and land is readily available. This technique can also be of some use in natural landscapes in protecting open areas and natural features for passive recreational uses. Mandatory dedication/fee-in-lieu requirements are contained in the municipal subdivision and land development ordinance. The requirements are included as a condition to final plan approval. A municipal open space or recreation plan is required as a precondition to adopting the requirements.

## **How Does This Strategy Relate to Protection of the Landmark?**

In areas of the Battlefield which are to be developed, this technique can be used to preserve portions as open space. Municipal officials could work with the developer to ensure that the most sensitive and significant areas of the Battlefield remain the open space areas within the new development. Critical portions of the Battlefield should be shared with the developer as early as possible in the development stage. A developer can also pay a fee-in-lieu of providing open space in a new development. In this way, the municipality can use the fees to purchase critical areas of the Battlefield to be used for passive recreation as well as cultural opportunities for Township residents.

## **Scenic Overlay District**

### **Community Planning Handbook, Volume I, #25**

A scenic river overlay district is an area adjacent to a scenic river with specific regulations on land use. Establishing a scenic river overlay district is one way a municipality can encourage development which preserves the scenic attributes of riparian areas. The width of the corridor usually varies according to topographic relief and must be specified in the ordinance. Scenic river overlay districts can manage development by providing incentives for appropriate development location and design in conjunction with provisions to discourage inappropriate development location.

Implementation of the scenic river overlay district is primarily accomplished through the zoning ordinance with supplemental requirements included in the subdivision and land development ordinance.

## **How Does This Strategy Relate to Protection of the Landmark?**

A scenic overlay district can be established in zoning to help protect those areas of the Battlefield and sensitive natural resources lying adjacent to the Brandywine Creek. This technique is designed to preserve scenic riparian corridors and encourages appropriate location of development through incentives. This method can be used in combination with other techniques, such as open space development and riparian buffer protection, to provide a greater area of protection and more effective protection for this corridor.

## **Site Analysis Plan**

### **Community Planning Handbook, Volume I, #26**

A site analysis plan is part of a subdivision and land development ordinance that identifies environmental characteristics and other important features of a tract proposed for subdivision or land development. The site analysis plan provides the information needed to determine whether a development meets a municipality's natural resource protection standards and other ordinance requirements. When a municipality requires a site analysis plan, it can also encourage designs that are consistent with the environmental features on a site.

Subdivision ordinances typically establish plan information standards and require applicants to provide a general inventory of the features on a site. However, some ordinances may not require all of the information that is needed to effectively evaluate the wide range of a site's resources and the corresponding development impact

on them. Linking site features, such as soil characteristics, slope, and drainage patterns to proposed development layouts, is one of the primary reasons for incorporating the site analysis into the ordinance's plan information requirements. The site analysis plan requirement also ensures that the applicant submits the information needed by the municipality to determine compliance with their other ordinances.

Site analysis plan requirements need to be tailored to each municipal subdivision ordinance. These can include identification of historic resources. Municipal open space and/or natural resource protection plans are good sources of information for determining what natural or cultural features the municipality wants to identify and protect.

### **How Does This Strategy Relate to Protection of the Landmark?**

Historic and cultural resources are an important site component and a site analysis plan can require the identification of historic resources. In this way, the municipality will be alerted to the fact that the proposed development is within the Battlefield landmark and whether the development plan meets the municipal historic resource protection ordinance requirements. This technique can assist the municipality in maintaining the context of the resource.

## **Conservation Easements and Local Land Trusts**

### **Community Planning Handbook, Volume I, #27**

Local governments or conservation organizations interested in permanently protecting resources are not limited to buying land. Instead of purchasing property, they may be able to save money and accomplish their goal more efficiently by using conservation easements. Conservation easements are legal documents that limit certain activities on the land, such as types of development or alterations to historic structures, and conserve specific features. One cost saving factor is that the landowner may be eligible for favorable tax treatment by selling the development rights to their property for less than fair market value. Another is that landowners may maintain the current revenue stream from their land, such as through continued agricultural production, and sell the future development rights. The market value of the rights for sale is equal to the full development value of the land, minus the value of the land with easements in place.

A conservation easement must be donated or sold by the legal landowner and it must be accepted by the receiving party. Nonprofit organizations, including land trusts, are the traditional recipients of easements. An example is the Pennsbury Township Land Trust, dedicated to promoting the municipal open space plan and the responsible development and conservation of remaining large tracts of land in the municipality. In addition, there are several nonprofit conservation organizations actively engaged in land protection through the use of conservation easements. Examples of these organizations include the Brandywine Conservancy, the Brandywine Valley Association, the French and Pickering Creeks Conservation Trust, Natural Lands Trust, Open Lands Conservancy, the Pennsylvania Chapter of The Nature Conservancy, and the Willistown Conservation Trust.

While each conservation easement is unique, there are general provisions included in all easements. Easements are usually permanent and recorded with the deed to

the property. The affirmative rights contained in an easement (i.e., a listing of what activities are allowed) do not take precedence over local, state or federal laws, they only clarify what legal activities are permitted to occur. The negative provisions specify what actions or activities are no longer allowed to take place on the property. The specific terms of the conservation easement are determined by the landowner and the organization accepting the donation of, or purchasing, the easement. The Internal Revenue Code (IRC) establishes guidelines which must be met before a landowner can claim a tax deduction for donating all or part of the easement value.

While the specific terms of the easement are determined on a case-by-case basis, criteria regarding the “conservation purposes” must be met if donated easements are to be eligible for tax benefits. There are four eligible purposes spelled out in IRC § 170(h)(4)

1. The preservation of land areas for outdoor recreation by, or the education of, the general public;
2. The protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem;
3. The preservation of open space (including farmland and forest land) where such preservation is a.) for the scenic enjoyment of the general public, or b.) pursuant to a clearly delineated federal, state, or local governmental conservation policy - and will yield a significant public benefit; or
4. The preservation of a historically important land area or a certified historic structure.<sup>3</sup>

The IRS definition of historically important land areas is contained in the Code of Federal Regulations (CFR) at 26 CFR 1.170A-14(d)(5) and includes:

- Independently significant land areas, including any related historic resources that meet National Register Criteria for Evaluation;
- Land areas within registered historic districts, including any buildings that contribute to the significance of the historic district; and,
- Land areas adjacent to a property individually listed in the National Register of Historic Places (but not within a historic district) where physical or environmental features of the land area contribute to the historic or cultural integrity of the historic property.<sup>4</sup>

The terms of a historic easement will vary. It is up to the property owner and the easement holder to agree on the terms. They may include the facade of a historic structure, the entire exterior, interior features worthy of preservation, the land around the building or any mutually acceptable combination of these features. Facade easements generally restrict alterations to a building's exterior that would change its architectural integrity. Facade easements are defined as easements that: “... protect the outside appearance of a building. These easements usually control exterior alteration and may require proper maintenance of the property. They also usually include aspects of the scenic easement, to control the development rights of the lot on which the building stands and the air rights, which are development rights for constructing additional stories above the building.”<sup>5</sup>

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<sup>3</sup> Trust for Historic and the Land Trust Alliance, *Appraising Easements: Guidelines for Valuation of Historic Preservation and Land Conservation Easements*, (The Preservation Press, Washington, D.C. 20036, October 1984), pp. 3 and 4.

<sup>4</sup> United States Department of the Interior National Park Service, *Preservation Tax Incentives for Historic Buildings*, (1990), p. 19.

<sup>5</sup> Stefan Nagel, ed., “Establishing an Easement Program to Protect Historic, Scenic, and Natural Resources,” Information, Series No. 25, 1991, p. 2.



### **How Does This Strategy Relate to Protection of the Landmark?**

Purchase of conservation easements is one of the most well-known land preservation techniques. This technique enables landowners within the Battlefield to sell the development rights to their properties to a conservation organization or land trust, thereby still receiving monetary value for the land while ensuring that it is preserved as open space in perpetuity. Property owners can also place an historic easement on an historic structure and the surrounding land, thereby protecting important features of the building and the surrounding context.

## **Greenways**

### **Community Planning Handbook, Volume I, #28**

Greenways are linear networks of open space that fulfill a variety of functions. Many people mistakenly believe that “greenway” is just another term for trails. Greenways are links between man made features and the natural environment. They protect the natural environment, interconnect landscapes, and provide natural buffers. Some greenways are appropriate for public recreational uses, such as hiking or canoeing; many others are not. Greenways can be used for preserving steep slope areas and floodplains or protecting a scenic ridgeline, or wildlife corridor. They can be public, private, or semi-public and involve privately owned property, conservation easements, government owned lands, or a combination of ownership types. A greenway is a concept of planned development and conservation. It is a coordinated vision between many different parties that strives to balance a healthy local economy with historic, natural, and scenic conservation.

Greenway concepts are generally outlined in the municipal comprehensive plan or open space, recreation, and environmental resources plan. An analysis of need and a strategy for greenway creation are established within these plans. Specific tools to create the greenways are contained in the municipal zoning ordinance, subdivision/land development ordinance, and/or official map.

### **How Does This Strategy Relate to Protection of the Landmark?**

Greenways can serve to protect natural and cultural landscapes and provide interconnection between these features. An intermunicipal greenway system could be developed to connect specific, critical areas of the Battlefield for passive recreation and cultural enhancement. Since most of the land within the Battlefield is privately owned, these areas would have to be carefully targeted. Greenways could be public, private, or semi-private, dependent on a variety of factors such as land ownership and location. A successful effort would require collaboration and cooperation between private and public entities.

## **Lot Averaging**

### **Community Planning Handbook, Volume I, #2**

Lot averaging is a technique that allows subdivision designers to create lots that average the minimum allowable lot size in the applicable zoning district, rather than strictly adhering to the minimum lot size on every lot created. This technique gives designers more flexibility in siting lots, avoiding environmentally constrained areas, creating attractive street layouts, and siting other necessary infrastructure such as

sewage facilities and storm drainage facilities. With this flexibility, applicants are often able to increase the number of lots that can be sited in a given subdivision unless development yield is specifically limited. Lot averaging techniques can generally be divided into two categories:

### **Common Approach**

In the form in which it is most commonly implemented, lot averaging provides limited direct benefits to communities other than giving applicants design flexibility that can result in improved subdivision layout. The common approach to lot averaging is most appropriate in suburban areas where a continuation of the suburban development pattern is desired, albeit with somewhat improved design and environmental sensitivity. It is less appropriate in natural or rural areas where open space preservation is the goal and in urban areas where more compact development is the goal.

### **Flexible Approach**

In a more aggressive and flexible form, lot averaging can provide significant open space preservation and result in vastly superior design and less visually obtrusive subdivisions than would result from conventional development. In this more flexible form, lot averaging can be a companion or alternative to open space/cluster development. The flexible approach to lot averaging can be very appropriate in rural and natural areas where open space preservation is the key goal, although it should be noted that lot averaging itself cannot ensure open space preservation.

Lot averaging, using either approach, is implemented through the zoning ordinance, with supporting language generally necessary in the subdivision and land development ordinance.

### **How Does This Strategy Relate to Protection of the Landmark?**

Where development on the Battlefield occurs, using the flexible approach to lot averaging can serve to provide a development pattern which better complements preservation of open lands than conventional development. Through the flexible approach, there is no minimum lot size requirement as long as all of the lots within the development average to the minimum permitted lot size in the zoning district. In this way, a variety of lot sizes within the same development can result, which allows flexibility for the development to be designed in response to the natural site features. This technique could allow buildings to be grouped in a small area, with most of the land remaining as open. The primary differences between lot averaging and cluster development are, 1) resulting open space would be held as portions of individual residential lots, and 2) the lack of an open space requirement could make it possible for a developer to use this technique to increase development yield without preserving significant amounts of open space. This technique can be used in combination with a cluster development option in order to allow for maximum open space protection.

# Conservation Subdivision Design

## Community Planning Handbook, Volume II, #30

Conservation subdivision design requires the consideration and preservation of resources on the site within the development process. The process involves the identification of resources through a site analysis plan and the design of a proposed development in the least intrusive manner. The tool is appropriate for those municipalities who seek to protect and retain natural resources and character in the face of development pressure. This tool, when combined with other planning techniques, can greatly assist in the protection of an interconnected network of open space within the municipality.

The statewide “Growing Greener” program developed by the Natural Lands Trust<sup>6</sup> has established a methodology for achieving conservation subdivisions in a systematic way. This tool provides a summary of this process as a technique for preserving our cherished resources while accommodating some level of development.

The conservation subdivision design process can be achieved in the four basic steps outlined below. The process is essentially the reverse of that used by many Chester County municipalities today. The actual process and ordinance language must be tailored to the municipality

### 1. Prepare a Site Analysis Plan

The first step is to prepare a site plan of all existing natural and man-made resources. This plan serves as the basis for determining which resources should be permanently protected from development and identifying their precise location on the site. The municipality should identify which resources are to be protected; those resources should include those cherished by the community and identified within the municipal comprehensive plan and open space plan.

Conventional subdivisions either incorporate sensitive resources into lot areas or treat them as leftover/unusable lands. Often, these resources may not be protected at all under conventional zoning and subdivision practices. The site analysis plan allows the applicant and municipality to evaluate and discuss the site's resources and how they are to be protected before any development plans are proposed.

Having identified sensitive resources, also known as “conservation areas”, the remaining lands considered suitable for development become known as “Potential Development Areas.”

### 2. Site the Dwellings

The second step involves locating dwelling sites within the “Potential Development Areas”. The applicable zoning district will define the calculation for determining the number of dwellings permitted on a particular site. While the maximum achievable density is a function of the zoning ordinance, the lot size should be very flexible in order to achieve the best dwelling and lot design for the tract.

This step is performed without the consideration of lot sizes or dimensions. Without such limitations, dwellings can be positioned to take advantage of views, and solar and wind orientation. Dwelling sites should be located so that they pose the least impact on resources and take advantage of open space views. The resulting design takes advantage of the best locations to build based upon site conditions.

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<sup>6</sup> The Natural Lands Trust is a regional land trust working to conserve land in the Delaware Valley by acquiring and managing properties, accepting conservation easement, and encouraging and supporting the conservation efforts of others in the region.

### **3. Design Streets and Trails**

The third step is to design the road and trail network which will serve these dwellings. Street locations should be sensitive to contours, ridgelines, tree lines and the positioning of dwellings to provide both safe and efficient access.

### **4. Draw Lot Lines**

The final step involves drawing lot lines around each dwelling site and connecting the dwelling to the street. While the process may create somewhat unusual lot shapes, each will meet minimum ordinance requirements and ensure the proper positioning of dwellings. Conventional developments design the lot lines first, forcing dwellings into artificial setbacks that seldom respond to the lay of the land.

### **How Does This Strategy Relate to Protection of the Landmark?**

Critical historic resources related to the Battlefield can be identified as part of the Site Analysis Plan. Through the identification and consideration of existing resources on a property prior to development, important site features can be taken into consideration and preserved in the development design process. Buildings, lot lines, right-of-ways, utilities, and other elements can be sited in such a way as to minimize negative impacts on important existing site features.

## **Community Sewage System Options**

### **Community Planning Handbook, Volume I, #34**

Community sewage treatment and disposal systems can help support local land use, environmental protection and open space preservation goals. The options for community sewage systems are particularly important in areas where large public sewage treatment and disposal facilities are not available and where higher density, open space/cluster designs, or village types of new land development are desired. Policies are included within municipal planning and regulatory documents specifying the type of sewage systems preferred by the municipality and the types that must be evaluated for proposed new land development. These policies can also specify the order in which various treatment and disposal options are evaluated.

In Pennsylvania, local municipalities are responsible for ensuring that sewage and wastewater is properly treated and disposed. The most common method of treating and disposing of residential wastewater in the rural and suburban areas of Chester County is the individual on-lot sewage system. These systems are located on a single lot and serve a single dwelling unit, and generally consist of a septic tank and a sub-surface effluent absorption bed. About one acre of land per residence is generally needed to use this type of system, especially when the water supply is provided by a well on the same lot.

When developments contain homes on smaller lots or in clusters, the use of individual on-lot systems may not be possible. In these cases, municipal officials should be aware of methods available to ensure that adequate facilities of the type preferred by the municipality are provided. One method is to specify the municipality's preference for certain types of community sewage systems. Community sewage systems are defined in 25 PA Code Chapter 73 as: "A sewage facility, whether privately or publicly owned, for the collection of sewage from two or more lots, or two or more equivalent dwelling units and the treatment or disposal, or both, of the sewage on one or more of the lots or at another site."

Planning and implementing sewage systems is built upon other planning techniques available to municipalities. The foundation for creating compact and mixed use communities is the land use patterns in the municipal comprehensive plan. The municipal zoning ordinance then creates the framework which specifies the density and type of land uses that will be permitted in certain locations. Within this framework, planning for sewage facilities can be conducted under the Pennsylvania Sewage Facilities Act, also known as Act 537. One of the purposes of an Act 537 plan is to examine environmental conditions, population growth, and type of land developments that may occur as a result of the density and uses specified in the municipal zoning ordinance. The Act 537 plan can then be used to set policies stating how different types of sewage systems will be evaluated and selected to best meet anticipated needs. Separate municipal ordinances can also be used to govern other sewage-related issues, such as the use of sewage holding tanks, maintenance of individual and community systems, the designation sewer service areas, and the establishment of sewer connection policies and service fees.

### **How Does This Strategy Relate to Protection of the Landmark?**

Types of sewage facilities play a key role in where and how development occurs. Open lands and resources can be maintained through planning for and directing new infrastructure. The main purpose for permitting community sewage system options within the Battlefield is to allow for development types that promote resource protection. Development design options, such as open space development, conservation subdivision development, and villages, require smaller lot sizes which necessitate alternative sewage disposal methods, as on-lot systems can not be accommodated on these smaller sized lots. A community sewage system allows development to be concentrated and the remaining portion of the tract to be reserved as open lands. This open land can be targeted for the most critical and sensitive portions of the Battlefield. Policies specifying the type of sewage systems preferred by the municipality, and their order of preference, should be included within municipal planning and regulatory documents.

## **Locating Individual Sewage Systems in Open Space**

### **Community Planning Handbook, Volume II, #37**

The option of locating individual sewage systems in a development's open space provides opportunities for creative residential subdivision designs that conserve critical environmental resources. Such an option creates an alternative to constructing a community sewage system. This technique applies primarily to new residential land development projects not located near a public sewer system, but can also be applied when trying to replace a home's malfunctioning septic system.

Title 25, Section 73.1 of the Pennsylvania Code defines an individual sewage system as: "A system of piping, tanks or other facilities serving a single lot and collecting and disposing of sewage in whole or in part into the soil or into waters of the Commonwealth or by means of conveyance to another site for final disposal." While a number of variations exist, individual sewage treatment and disposal systems are typically referred to as "septic systems." Current state regulations also per-

mit the use of elevated sand mounds, small flow treatment facilities, spray irrigation systems, and others as individual residential sewage systems.

The primary purpose for allowing the location of individual sewage disposal systems in open space is to support cluster and other alternative residential subdivision designs. These designs strive to conserve critical environmental resources and open space within a development. They can preserve from 50 to 80 percent of the original tract as community and/or public open space and still accommodate a reasonable number of building lots. To accomplish this objective, the lots within these developments are significantly smaller than the customary one or two acre building lots. The use of smaller lots makes it difficult to place a septic system within the boundaries of the lot and still meet the horizontal isolation distances required by state regulations. This can be particularly true when individual wells will be used in conjunction with individual sewage systems. A safe distance between the water supply well and septic system absorption area must still be provided. One way to ensure safe isolation distances is to place part or all of the individual sewage system “off-the-lot.”

Approving the use of individual sewage systems in open space areas is a decision that is made at the local municipal level. There are no State or County Health Department regulations that require the system to be located on the same building lot as the house it serves. If a municipality is agreeable to this concept, then it can be implemented through a combination of provisions contained in municipal Act 537 plans, subdivision and land development ordinances, building codes, and Home Owner Association (HOA) agreements

### **How Does This Strategy Relate to Protection of the Landmark?**

Alternative residential development design, such as open space development and conservation subdivision design, can help support preservation of the Battlefield through preserving critical areas within the subdivision's reserved open space. However, these types of development options require smaller lot sizes that can not support individual on-lot disposal systems. For these development options to work, alternative disposal options, such as locating sewage facilities within the open space, must be permitted by the municipality. By allowing individual sewage systems to be located in a subdivision's open space, rather than on a individual lot, residential development options designed to allow critical areas of the Battlefield to be preserved as open space can be achieved.

## **Agricultural Preservation Programs**

### **Community Planning Handbook, Volumes I & II, #39**

In 1996, Chester County ranked second only to Lancaster as Pennsylvania's leading agricultural county. However, Chester County has also had the third highest rate of population growth in the Commonwealth between 1980 and 1990. Most of this growth was in the form of suburban development, which has often come at the expense of farmlands. In response to this consumption of farmland, local governments have become increasingly interested in preserving the County's agricultural areas. Various programs are available to help preserve agricultural lands. Some agricultural preservation programs are aimed at preserving the economic viability of the agricultural community. Other programs, such as voluntary enrollment in the Agricultural Security Area Program, protect farmers from ordinances that could

prohibit normal farming practices. A municipality considering agricultural preservation should consider the following programs and other tools under this section to establish a comprehensive preservation program. The following programs are available for preserving agriculture:

### **Agricultural Security Area Program**

The Agricultural Security Area Program was established by Act 43 in 1981 to help protect the agricultural industry in Pennsylvania from increasing development pressure. This program helps insulate farmers from some governmental regulations and activities, such as nuisance ordinances, that could hinder normal farming practices. Landowners also receive special consideration before condemnation proceedings begin, and all state-funded development projects which may affect the area must be specially scrutinized. Hazardous waste and low-level radioactive waste sites cannot be located in Agricultural Security Areas. However, there are no special restrictions on the use of land in these areas and this program does not preclude subdivision.

Participation in this program is voluntary, but there are requirements: owners must petition the governing body to be included in the area; and lands in the agricultural security area must total at least 250 acres, although they may be noncontiguous. The public is given the opportunity to comment on the proposal, which is then referred to the local planning commission and Agricultural Security Area Advisory Committee, which make their recommendations to the local government. The local government then decides to adopt or reject the proposal. The Agricultural Security Area has a seven year lifetime, which may be renewed.

### **Agricultural Conservation Easement Program**

This program ensures that farms are limited only to agricultural uses. Under this program, farmers agree to voluntarily sell the development rights of their farms to the Chester County Agricultural Land Preservation Board, while retaining title to the land. The value of the conservation easement is based on an appraisal that reflects the difference between the land's market value and its agricultural value. These conservation easements are legally binding documents and are recorded with the farm's deed and land records. Agricultural conservation easements are binding on the current and future owners, and are perpetual in duration. The landowner can remain on the farm, conduct normal farming practices, and sell the farm subject to the conservation easement.

This program is funded by a state bond for farmland preservation that was passed in 1987, and has been supplemented by a two-cent per pack tax on cigarettes, which yields approximately \$20 million annually. As of 1996, 42 counties in the state shared these funds. In 1989, Chester County residents voted to float a \$50 million bond for open space, of which \$12 million was appropriated toward farmland preservation. After 1997, the \$12 million will have been depleted and additional funding will be needed to continue the program.

Because funding is limited, a strict review process is conducted to determine farm ranking and eligibility for appraisal. This review process includes assessments of the amount of prime agricultural soils, the proximity of the farm to other preserved farms, the degree of development pressure affecting the farm, and other elements that are factored into an equation resulting in a score for each applicant. Applicants must be within an Agricultural Security Area of at least 500 acres. Also, the farm must be at least 50 acres in size or ten acres and adjacent to eased land.

Fifty percent of the soils must be Class I-IV, and 50 percent of the farm must be in harvested cropland, pasture, or grazing land.

### **Tax-based Programs**

Pennsylvania has adopted a number of programs that are targeted at preserving farms by reducing their tax burdens:

- Act 515 of 1966 and Act 319 of 1974 allow farms to be taxed according to their current uses instead of their potential market values, which can reduce property taxes. These programs are administered by the Chester County Assessment Office. In Delaware County, Act 515 is administered by the Delaware County Planning Department and Act 319 by the Delaware County Assessment Office.
- Act 71 of 1976 exempts farmers from payments of assessments for municipal improvements such as sewer and water lines. This program is administered by the Pennsylvania Department of Agriculture.

The “Right-to-Farm” Act is not a tax-oriented program, but it reflects Pennsylvania's policies on promoting agriculture and the protection of common agricultural practices that may be regarded as objectionable to non-farm neighbors. It also sets forth the role of the Pennsylvania Department of Agriculture in promoting agriculture.

### **Pennsylvania Farm Link**

The Pennsylvania Farm Link is a program designed to help match farmers planning for retirement, and other interested land holders, with farmers hoping to work into farm ownership or long-term leasing. The program was created by the Center for Rural Pennsylvania, in collaboration with the Rodale Institute, in the recognition that helping more people enter farming is an essential component of revitalizing Pennsylvania's rural communities. The program maintains a statewide database that can be searched for prospective matches according to qualifications specified by the farm owner. Additional information can be obtained by calling 1-800-9PA-FARM

### **Chester County Conservation District**

The Chester County Conservation District can assist farmers in a number of areas, including the preparation of conservation plans and erosion and sedimentation control plans. The Delaware County Conservation District offers similar services. Assistance available through the Chester County Conservation District includes:

- Compliance with the Clean Streams Law, specifically in the preparation of conservation plans.
- Compliance with the Nutrient Management Law, such as helping the farmer prepare nutrient management plans and dealing with concentrated animal feeding operations.
- Dealing with conflicting local and state regulations, such as conflicts between setback requirements in zoning and in nutrient management regulations.
- Implementing “Best Management Practices” regulations, and how they can be applied to intensive agricultural activities such as mushroom growing and the disposal of spent mushroom soils. The Conservation District is up-to-date on other new and evolving technologies and can provide a list of other agencies that can be of assistance.



### **How Does This Strategy Relate to Protection of the Landmark?**

Agricultural preservation practices can maintain the integrity of the Battlefield lands in their historic use through maintaining the land for farming. Each of these methods offer differing means of protection with the result being the retention of farmland. Which technique is most appropriate is dependent on the individual municipality and the farm community. For these techniques to be effective, however, the landowners must be highly supportive of farmland preservation and the continuation of farm related uses into the future.

## **Effective Agricultural Zoning**

### **Community Planning Handbook, Volume I, #40**

Effective agricultural zoning, also known as agricultural protection zoning, is a land management tool that municipalities can use to encourage the preservation of farmlands, discourage their conversion into non-agricultural uses, and discourage the establishment of land uses that are incompatible with agricultural uses. This tool focuses on agriculture by posing strict zoning controls that limit the amount of houses that can be constructed on agricultural areas while placing few restrictions on agricultural related uses.

This technique is most effective when it is used to protect existing agricultural areas that are beginning to experience development pressure and where the local agricultural economy is still healthy. Effective agricultural zoning is most appropriately used in rural landscapes, as well as in portions of the natural landscapes that are being farmed.

### **How Does This Strategy Relate to Protection of the Landmark?**

Agricultural zoning is a land management tool to help encourage the preservation of farms and their continued use, and discourage incompatible uses. Agricultural lands in the Battlefield could be protected through imposing zoning controls that limit the amount of development while placing few restrictions on agricultural uses. Much of the remaining undeveloped landscape has not changed since the time of the battle, and in this way, the lands would be protected in their original form and use. This technique is most effective in communities with a strong farming base, and which desire continued agricultural use of the land.

## **Historic Preservation Planning**

### **Community Planning Handbook, Volume I, #43**

Historic preservation planning provides the municipality a framework within which to identify policies and develop procedures necessary to achieve historic preservation goals. The standard planning principles of goal identification, data collection, resource analysis, strategy formation and implementation can be applied specifically to the protection and preservation of historic resources. Historic preservation planning can help a community ensure that historic preservation values are considered a priority in community development decisions.

One of the most significant benefits of historic preservation planning is that it provides a forum through which a municipality can formalize existing policies. Community leaders may well recognize the importance of historic preservation and

support related activities, but the specific policies may not be in place to ensure that preservation remains a priority in the long term. A municipality may have identified an historic district and adopted an ordinance, but how that district affects tourism, for example, or how that ordinance relates to other neighborhood revitalization efforts, may not be clear. Evaluation of the interrelationship of various community policies as they relate to historic preservation becomes necessary when preservation values are integrated into local planning.

Historic preservation planning depends on the resources and expertise available in the municipality. In its highest form, it involves preparation of a document that, although prepared as an individual unit, is considered part of the community's overall comprehensive plan. A historic preservation plan can focus exclusively on how historic resources impact the community as a whole. The link between historic preservation goals and other community development goals should be clearly illustrated.

An historic preservation plan prepared in this fashion must be consistent with the general comprehensive plan policies. Inconsistencies identified during the planning process should be resolved before the plan is finalized. Also, broad input on preservation issues must be obtained during the plan formation. A preservation plan prepared by those with a singular perspective may not be credible to the community at large and could consequently encounter difficulties upon implementation. Comprehensive historic preservation planning requires an evaluation of differing perspectives before determining the best way to represent the local views.

An alternative to developing an independent document is the inclusion of an historic preservation component or chapter within the municipal comprehensive plan. Limited financial resources make this a more typical approach. An advantage to this approach is that historic preservation issues are placed on equal footing with all other community issues when policies are determined. In this way, policy conflicts can be easily identified and resolved at the outset.

At a minimum, comprehensive plans should reference historic preservation as a consideration in particular plan elements or strategies, such as those related to economic development, housing and community development. In such cases, historic preservation is usually referenced as a means to accomplish an objective without any specific policy attached. The positive aspect to this is at least some recognition of preservation values; the negative aspect is that without policies in place, historic preservation values can never be completely integrated into local planning.

### **How Does This Strategy Relate to Protection of the Landmark?**

Historic preservation planning would provide the Battlefield communities with a framework on which to base future preservation efforts. In analyzing historic preservation from a planning perspective, communities can develop a comprehensive approach to planning for the protection of their resources. As part of the process, a detailed outline of strategies, their priority, timeframe in which these actions should be undertaken, and the parties responsible for completing the actions can be established. The Battlefield communities have already embarked on the initial stages of preservation planning through survey work, and inclusion of goals supportive of preservation in municipal plans. Battlefield communities could use this technique to determine which preservation strategies work best for that particular community and to develop a plan for implementation.

## Historic Resource Survey

The first step in historic preservation planning and regulation is completing a survey to determine the types, significance, and locations of historic resources existing within a community. An Historic Resource Survey is the process of documenting the historic resources within a specified area, and provides the foundation of local preservation efforts. A survey is defined in National Park Service publications as “the process of gathering data on the historical and physical character of the community”. Communities can plan for appropriate preservation techniques based upon the information gained in the survey.

There are two levels of surveys. The preliminary or reconnaissance survey is a gathering of basic data on the number, types, location, and conditions of resources within a certain area. This type of survey can be completed relatively quickly and provides an overview of existing resources. It requires minimal expertise and research. The comprehensive historic resources survey is a more thorough level of survey consisting of specific information on the physical and historical aspects of the resources. A higher level of research is necessary which warrants a higher level of expertise on the part of the surveyors. This level of survey is needed by municipalities to establish the basis for historic districts and other historic preservation strategies. The information needed for a National Register nomination is extensive, and the information needed can be incorporated into the survey work at the onset to avoid later duplication of efforts.

The Pennsylvania Historical and Museum Commission provides assistance with surveys and should be contacted before any survey work is initiated. The publication, *Guidelines for Historic Resource Surveys in Pennsylvania*, describes the surveying process and includes survey forms. The Pennsylvania Historic Resource Survey Form is the standard format for a comprehensive survey, and also is the initial step of the National Register nomination process. The survey method required for Act 167 Local Historic Districts and National Register nominations is outlined in the publication, *How to Complete the Pennsylvania Historic Resource Survey Form*, available through the Pennsylvania Historical and Museum Commission.

Identification and documentation of historic resources should be considered an ongoing process, and new information discovered on historic sites should be incorporated into the survey, as should documentation on new sites. The survey also can be used as an educational tool in raising public awareness and support for historic preservation through the involvement of residents and owners of historic properties.

### How Does This Strategy Relate to Protection of the Landmark?

The municipalities within the Battlefield have completed preliminary surveys which provide the basic groundwork to understand their existing resources. This is an excellent initial step in local preservation efforts. As a next step, comprehensive historic resources surveys should be completed to provide specific information about the historical background and physical characteristics of the site. A thorough understanding of a municipality's resources provides a strong framework to support implementation of municipal preservation strategies. This type of survey serves as a good basis for local historic district ordinances, historic overlay zoning, and National Register nominations.

# Historic Districts

## Community Planning Handbook, Volume I, #44

Historic districts are commonly defined as areas possessing a concentration, linkage or continuity of sites, buildings or structures united historically or aesthetically by plan or physical development. There are two types of historic districts: National Register districts and local districts. Locally designated districts are considered to be those regulated by ordinance. Act 167, the Historic District Act, provides for the creation of districts and the appointment of Historical Architectural Review Boards.

Historic districts listed on the National Register of Historic Places, the nation's official list of historic and cultural resources, provide properties with a degree of protection from federally-funded projects or programs that could threaten or destroy historic character. Although National Register designation provides a high level of recognition and can qualify a property owner for certain beneficial tax credits or other preservation funding, it does not offer the same type of protection that a local historic district can provide.

Historic districts designated at the local level are those protected from major changes through the adoption and enforcement of a local historic preservation ordinance. Historic preservation ordinances are flexible tools that can facilitate preservation through a variety of means. They are often used to encourage a wide range of preservation activities in historic districts depending on local preservation goals. Many ordinances encourage preservation by regulating alterations to building facades, exterior building materials, exterior architectural detailing and building mass. New construction in historic districts can be encouraged to complement the existing character through design that is sensitive in terms of size, style and placement. Through the designation of a local historic district and adoption of an historic preservation ordinance, municipalities can accomplish many goals, including guiding alterations to privately-owned historic buildings and delaying or preventing demolition of important resources.

Most local historic preservation ordinances, in addition to identifying and setting forth provisions for one or more historic districts, provide for the appointment of an Historical Architectural Review Board or an Historical Commission. These entities assist in administration of the ordinance and advise the local governing body on the appropriateness of building activity in historic districts. Historical Architectural Review Boards usually have well-defined responsibilities associated with specific districts, while Historical Commissions usually serve in a broader capacity.

### How Does This Strategy Relate to Protection of the Landmark?

National Register listing has been one of the initial strategies undertaken in Battlefield protection. The entire Battlefield landmark is listed on the National Register, and there are 16 individual contributing resources and 5 contributing historic districts listed on the National Register. Battlefield communities could review existing Historic Resource Surveys and determine if other resources could be considered for National Register listing.

A local historic district ordinance can vary in the degree of regulation depending on the municipal goals and result desired. By enacting local historic districts, significant historic structures within the Battlefield landmark can be protected to a certain extent from major exterior changes which would compromise the building integrity.

As well, to help preserve the character as new residences are constructed, new construction can be encouraged to complement the existing character. In Pennsylvania, building design can only be regulated through a local historic district ordinance. Design guidelines should ideally be the principles on which recommendations by the Historical Architectural Review Board concerning the appropriateness of building alterations are made.

## **Historic Overlay Zoning**

### **Community Planning Handbook, Volume I, #44**

Historic overlay zoning is another alternative for promoting historic preservation. It imposes different types of preservation measures depending on the local goals for a particular area or a particular resource. Instead of providing for architectural controls, historic overlay zoning usually modifies the area and bulk requirements of the underlying zone for the purpose of protecting historic resources and encouraging their preservation. The uses permitted in a district can also be modified by an historic overlay zone. The use of overlay zoning is highly flexible and may or may not be associated with a specific district.

Historic Overlay Zoning Districts promote historic preservation through zoning regulation. The Municipalities Planning Code, Article VI, permits regulating places of unique historical, architectural, or patriotic interest or value through creation of a specific zoning classification. This method offers a different approach to preservation than a locally controlled historic district. Historic overlay zoning modifies use, and area and bulk regulation of underlying zoning to protect historic resources and help promote their preservation.

In developing a historic overlay zoning district, it is important to ensure that regulations within the district are compatible with other zoning ordinance provisions in order to reduce conflict and potential negative impacts on resources or future historic preservation efforts. This method is flexible and does not have to be associated with a specific underlying zoning district. This is an excellent method for municipalities which do not have the concentration of resources for a local historic district, or do not desire the level of regulation of a local historic district.

Before this zoning is established, a Survey of Historic Sites should be completed in order to identify those resources that it would like to protect. Generally, resources are classified as to their level of significance. A historic overlay zone adds another layer to the underlying zoning establishing specific regulations to protect resources. For example, alternate uses, appropriate and compatible with the building's character, can be permitted to offer incentive for reuse of a structure. Area and bulk regulations may also be modified to complement existing character.

### **How Does This Strategy Relate to Protection of the Landmark?**

This technique can help in the preservation of historic structures within the Battlefield through zoning regulations. Unlike the local historic district ordinance, the historic overlay zoning district addresses traditional zoning requirements, such as lot size, setbacks, and uses. The historic overlay zone allows modification of underlying zoning regulations for historic structures for the purpose of providing greater flexibility for these buildings in meeting zoning requirements and encouraging their continued use. One concern often expressed is that the size and/or cost to maintain historic structures serves as a deterrent to their preservation. A historic

overlay zone can serve as an incentive to provide more flexibility for these structures, for example through permitting additional use opportunities, such as bed-and-breakfasts, to encourage their continuation and to maintain economic viability.

## **Historic Preservation Design Guidelines**

### **Community Planning Handbook, Volume I, #45**

Historic preservation design guidelines are the general principles or policies on which recommendations concerning the appropriateness of physical changes in historic districts are based. Design guidelines can be a key part of an historic preservation ordinance, and subsequently the local preservation program itself. The use of guidelines helps to ensure that the characteristics that make an historic district unique are conserved. They can be used to evaluate proposed changes to existing historic structures in the district, to review new construction to make certain that it complements the district, or for both purposes.

Most ordinances that are adopted to preserve a local district include review standards or criteria. These review standards should form the basis for design guidelines and are the types of factors that should be considered when reviewing requests for changes in the historic district. Act 167, the historic district enabling legislation in Pennsylvania, authorizes the review of the design, arrangement, texture, material and color and the relation of such factors to similar features of buildings and structures in the district. It limits, however, the governing body to considering only those matters that are pertinent to the preservation of the historic aspect and nature of the district.

Although it is the governing body that makes the final decision on proposed alterations, it is usually the Historic Architectural Review Board or Historical Commission that is charged with reviewing a request and making a recommendation on whether or not a proposed modification complies with the standards. In Pennsylvania, as in many other states, approvals are granted by issuing a “certificate of appropriateness”. The review of requests for certificates of appropriateness is usually driven by the municipal building permit process which excludes review of routine maintenance. Preservation design guidelines usually comprise both the guidelines and the procedures for reviewing an application.

Birmingham Township in Chester County is the location of a unique historic village known as Dilworthtown. This village is situated at a five point crossroads and still contains many buildings dating from the 18th and 19th century. It is a National Register Historic District, the boundaries of which extend into Chadds Ford Township Delaware County. In order to preserve this unique historic district (later expanded), the Township adopted a local historic preservation ordinance and a set of design guidelines to be used to determine the appropriateness of changes proposed in the historic district. The guidelines not only assist the Historical Architectural Review Board in formulating recommendations, they also serve to convey to the residents the kinds of changes that would least likely harm the district's unique characteristics. The historic district design guidelines are quite thorough, consisting of five sections, each of which addresses a different aspect of the review process.

### **How Does This Strategy Relate to Protection of the Landmark?**

Historic preservation design guidelines can be developed to display examples of complementary exterior design features for new construction and alterations to existing structures within the Battlefield. These guidelines would serve as an educational tool for the community. Municipalities could make copies of these guidelines available to owners of historic homes and to prospective developers in the subdivision and land development application to raise awareness about existing architectural style, historic character, and building design within the community.

In the case of a local historic district, design guidelines should be used in conjunction with a local historic district, and should be the basis on which decisions made by the Historical Architectural Review Board concerning the appropriateness of building modifications are determined.

## **Village Protection Program**

### **Community Planning Handbook, Volume I, #46**

A village protection program is a plan of action that a municipality can implement to preserve its historic villages, which are not intended as the focus for growth. Many actions can be implemented through the zoning ordinance. Others can be implemented through a variety of other options such as historic preservation planning and design guidelines.

Village planning efforts should be initiated by the governing body and undertaken by the planning commission, historical commission, or ideally, a task force with representatives of the two groups. Village residents should be involved directly on the task force or indirectly through surveys and public meetings. Depending on the expertise available on the task force, the municipality may want the assistance of a planning consultant.

A village protection program should be included as part of the municipal comprehensive plan in order to establish a consistent policy for guiding growth. Because many of the protection measures are implemented through zoning, the goals and policies for village planning should be included either directly or by reference in the comprehensive plan. The Chester County Planning Commission *Community Planning Handbook* should be consulted for an overview and the *Village Planning Handbook* should be consulted for detailed information.

### **How Does This Strategy Relate to Protection of the Landmark?**

In areas of the Battlefield where historic villages remain, such as Dilworthtown in Birmingham Township, village protection planning can assist in preserving the existing character and land use pattern of these villages. Future land use and development patterns should be developed as part of the Future Land Use Plan of the municipal Comprehensive Plan, and these recommendations implemented through a village zoning district within the zoning ordinance. District regulations would focus on the specific characteristics reflective of the existing village. These generally include shallow setbacks, less intensive land uses, and smaller lot sizes.

# Adaptive Re-Use of Older Buildings

## Community Planning Handbook, Volume II, #52

Adaptive re-use is the process of converting an existing building to accommodate a new use. Adaptive re-use supports both economic development and historic preservation objectives. Re-use maintains a building's vitality, provides for economically viable new uses, creates tax revenue, and provides widened development opportunities while preserving buildings, maintaining community character, and providing links to the past.

While adaptive re-use is often associated with preserving historic buildings, it is frequently applied to more commonplace buildings as well. Buildings may outlive their original purpose for a variety of reasons, such as their original function no longer applies at its existing location (i.e., a residence along a commercial corridor), or the building's original function is obsolete (i.e., specialized farm uses or mills). Types of adaptive re-use include converting a residence for use as a restaurant, or a barn into residences. One of the most common types of re-use is residential conversion of a single family home into two or more dwelling units, provisions for which are included in many municipal zoning ordinances.

A key component of any re-use is that it is undertaken with sensitivity to a building's character defining features; this lends to the project's uniqueness, and often its success and marketability. Other important factors include finding a market niche, providing a mix of uses, identifying risk factors early on, and taking a collaborative approach. Federal income tax credits (of 20 percent and 10 percent), provided under the Tax Reform Act of 1986, provides an incentive for the re-use of older and historic structures.

Land use ordinances may inadvertently serve as disincentives for re-use because they are primarily designed to regulate new construction. Compliance can be difficult or impossible for an existing building, thereby discouraging re-use. For example, lot size, setback, parking, or impervious surface requirements may be difficult to meet for older and existing buildings located on smaller lots. Expanding the types of permitted uses in zoning for historic buildings provides incentive for their re-use. This tactic can help the preservation of buildings by permitting alternative uses which may not be allowed in all zoning districts. Appropriate additional uses will be dependent on a particular municipality. Pennsbury Township's zoning ordinance permits Qualified Historic Buildings, meaning those buildings designated on the Township Historic Sites Survey, to be re-used for bed-and-breakfasts and antique stores by special exception. Another incentive to consider is permitting increased density for adaptive re-use projects. These types of incentives can help increase project feasibility, as adaptive re-use projects may, in some cases, be more difficult to undertake than new construction projects.

### How Does This Strategy Relate to Protection of the Landmark?

Adaptive re-use allows existing historic buildings within the Battlefield to be transformed into new uses, thus permitting their continued existence into the future. In this way, the existing character of the area can be maintained through retaining the architectural and cultural heritage.



# Scenic Road Overlay District

## Community Planning Handbook, Volume II, #59

Scenic roads contribute to the experiences of residents and visitors and help define places. Scenic roads are defined in terms of both the character of the roads themselves and the landscapes through which they pass. Scenic roads provide visual and physical access to different landscapes. These roads also provide access to other scenic and cultural resources, such as scenic areas, vista points, overlooks, open spaces, recreational areas, and historic structures or historic districts and landmarks. These unique resources and features provide opportunities to understand local heritage or lifestyle, appreciate the uniqueness of the community, and participate in leisure activities.

In Chester County, all of the municipalities within the landmark have adopted open space, recreation, and environmental resource plans. These municipal open space plans identify scenic and other resources, such as stream corridors, scenic roads, scenic views, and vista points, and recommend strategies to preserve their integrity.

In most cases, scenic roads are an unprotected element of the open space and recreational resources of a municipality. A Scenic Road Overlay can be used as an option to protect scenic roadways. The overlay concept of zoning implies that, for a specific area of a municipality, because of some unique characteristic of that area, more than one zoning district regulates development. An overlay can be used as a layer over more than one zoning district; it can even cross municipal boundaries if applied at a regional level by the participating municipalities. While the underlying zoning district(s) designates basic zoning regulations, such as permitted uses, conditional uses, and yard and bulk requirements, the overlay district may establish more restrictive development regulations, such as setbacks, design guidelines, signage, buffers, and an additional list of uses. The overlay district regulations will generally prevail over those of the underlying zoning district(s).

In the case of scenic road overlay districts, additional regulations are established as an overlay to the underlying zoning district(s) for managing concerns associated with viewshed protection, safety, access, mobility, aesthetics, and land use planning in the area. The essential objective of a scenic road overlay district is not only to sustain the best use of land, but also to protect the scenic quality, efficiency and safety of traffic flow in these scenic areas.

For a more detailed discussion of scenic roads and their preservation, see the Chester County Planning Commission publication *Scenic Roads Handbook, Local Government Handbook #3*.

### **How Does This Strategy Relate to Protection of the Landmark?**

Many of the current roadways within the Battlefield are the original pathways and retain the configuration that existed at the time of the battle. These roadways contribute to the experience of the Battlefield, both in terms of their character and by providing visual and physical access to the surrounding landscapes and vistas. These roadways help to play an important role in contributing to the sense of place that defines the Brandywine Valley. Roadways are often overlooked in preservation efforts, as efforts are concentrated on historic structures and districts. But in doing so, an important element can be lost. The character of the area would be greatly altered should the existing narrow, winding roadways be widened and reconfigured. By protecting existing scenic roadways, municipalities can protect original roadways

that existed during the time of the battle. One option could be dedication of easements along these roadways to ensure that the scenic quality of the road corridor is maintained.

## **Multi-Municipal Planning Programs**

### **Community Planning Handbook, Volume I, #74**

By working with neighboring jurisdictions, a municipality can increase its ability to address planning problems that do not necessarily start and end within municipal boundaries (i.e., traffic control and environmental protection). By reaching mutually acceptable ordinance language, municipalities would have a greater geographic area and more diverse infrastructure base to accommodate a wide range of uses.

Multi-municipal purchasing arrangements allow municipalities to benefit from economies of scale in their purchases of materials and/or services. Many Chester County municipalities work together to jointly purchase goods and services at a lower cost. This type of cooperation is enabled by Act 180 of 1972, also known as The Intergovernmental Cooperation Law.

Multi-municipal cooperation is discussed in detail in the Chester County Planning Commission *Planning Bulletin #47, Regional Planning, and Other Forms of Multi-Municipal Cooperation*.

### **How Does This Strategy Relate to Protection of the Landmark?**

This strategy is key to comprehensive protection of the landmark. As the Battlefield crosses municipal, as well as county, boundaries, working in a cooperative spirit in planning for its protection is necessary to ensure a successful preservation effort. Through participation in the Brandywine Battlefield Taskforce, Battlefield communities have displayed commitment to multi-municipal planning. Further steps could be taken. A multi-municipal effort could be undertaken to complete a regional Battlefield protection plan. Through this plan, mutually agreed upon strategies could be developed. In a more aggressive step, zoning districts could be coordinated so that they are compatible along municipal borders.

## **Public Participation Techniques**

### **Community Planning Handbook, Volume II, #75**

Public participation is a key component within the planning process. Public participation allows citizens to become involved in local decision-making. Citizens want to be included in issues that directly affect their lives. Local government must provide the means for citizens to contribute their experiences, concerns, and opinions to the decision-making process. Active participation by the public can make the planning process more effective by identifying solutions that have public support and identifying areas where additional citizen education may be needed.

The level of public involvement often depends on the issues involved. When issues are controversial, demonstrating that all points of view have been considered is important. As many people as possible, representing a diversity of interests, should be included. When all sides have an opportunity to express their concerns, the final product can address these concerns and gain greater support.

Public participation should occur at all phases of the planning process. Involving the public early in the process is important so that people know about the program, and issues that need to be addressed can be identified. Early involvement provides for positive contributions in the beginning, instead of negative reactions to proposals that people feel have been made without them. Opportunities for public involvement should be included at key stages throughout the planning process to keep people informed and obtain citizen input. The success of any program is enhanced with citizen involvement.

### **How Does This Strategy Relate to Protection of the Landmark?**

As part of any successful planning process, including preservation of the Battlefield, public involvement is necessary and should occur throughout the process. In this way, concerns can be addressed and incorporated in the project at the planning stage so that later actions do not come as a surprise. Since the majority of Battlefield lands are privately owned, it is crucial that there is citizen involvement during all stages of the preservation effort. Support from the residents is necessary for protection of the Battlefield to be achieved. A public education process can help raise awareness and provide an understanding as to the importance of the Battlefield. One option is the Historic Resource Survey, which can be used as an educational tool to elicit citizen involvement and increase awareness about the Battlefield.

## **Consistency of Plans and Ordinances**

### **Community Planning Handbook, Volume II, #77**

A commonly heard complaint concerning municipal plans (including comprehensive, historic preservation, or open space plans) is that they are a waste of time and money because they “sit on the shelf gathering dust.” Unless someone picks a plan up and uses it, much of the considerable effort that went into creating the plan is wasted. Perhaps the real problem is not the plan, but a lack of understanding on how to best implement its proposals and follow through on its recommendations. Also, the comprehensive plan may lack a clearly defined implementation section and, therefore, not give clear direction on what should be done next and who should be responsible for doing it. In other cases, the plan may give clear direction on what needs to be done, but the municipality, for whatever reason, has not revised their ordinances as the plan recommends.

First, the comprehensive plan should be updated as needed and, second, the plan's recommended revisions made to the municipal ordinances. However, if a complete update to the comprehensive plan is called for because the plan is outdated or no longer relevant to the community, the timeframe required to create consistency can be quite long. When followed by extensive and potentially controversial revisions to zoning and subdivision ordinances, the entire process from start to finish can often take two years, or more.

## Comprehensive Planning

The comprehensive plan is the cornerstone on which land use decisions in the community should be based. A well documented comprehensive plan with specific implementation measures is the first step in creating a cohesive and useful set of planning documents. The implementation section of the plan should clearly establish the following items for each recommended action:

**Priority:** Priorities can be divided into Immediate, Short-term, Long-term, or Ongoing. Each of these terms should also be defined (for example, short-term might mean within the next five years, while long-term might be in the next five to ten years);

**Responsibility:** The group that would take primary responsibility for implementing the measure should be stated; for example, the planning commission, governing body, historic commission, or recreation board;

**Implementation Tool:** The method used for implementing the proposed action should be included; typically this might include the zoning ordinance, subdivision ordinance, sewage facilities plan, or official map;

**Relationship to Planning Policies:** The particular goal or objective being addressed by the implementation measure should be clearly indicated.

The time and effort necessary to create a vision for the future will be well spent if the comprehensive plan's recommendations are followed through with the necessary ordinance revisions. The ideal action plan will clearly state what revisions are needed to the municipal land use ordinances in order to implement the plan's policies. To best implement the policies of the comprehensive plan, a clear relationship between the plan and the ordinances should be established.

## Revise Ordinances

The next step in policy implementation is the review and revision of the municipal land use ordinances. In most municipalities, the majority of relevant land use standards are contained in the zoning ordinance and subdivision and land development ordinance. The zoning ordinance primarily controls the types of land uses permitted, where they are permitted, and the intensity at which they may be built. The subdivision and land development ordinance focuses on the design and facilities requirements for proposed development and the review procedures required for plan approval. Both ordinances deal with issues relevant to environmental protection.

If the current ordinances are out-of-date, a complete ordinance overhaul is often better than attempting a piecemeal approach to revisions. This comprehensive approach ensures that all of the sections and standards are properly coordinated and cross-referenced. In many cases, it is easier to completely rewrite an ordinance than to force new sections into the context of an older ordinance. However, if only a few revisions are needed and the current ordinances are working well for the municipality, it may be just as effective to work with the existing ordinances. Because of the complexity and legal standing of land use ordinances, it is advisable to use a qualified planning consultant for anything other than very basic ordinance work.

If the comprehensive plan has a clear and specific implementation section, it should be fairly easy to focus on those aspects of the ordinances that are necessary

to implement the comprehensive plan policies. If a consultant is retained to work on the ordinances, the contract should make clear that the update is to address the recommendations of the comprehensive plan in regard to ordinance revisions.

### **Review and Revise Ordinances As Needed**

Once the ordinances have been updated and the revisions are put into practice, it is useful for the planning commission to maintain a list of issues that may arise as the standards are applied to actual development proposals. Even the most carefully written ordinances cannot always foresee every circumstance that may come before the municipality. If it is likely that such circumstances may be a frequent occurrence, rather than a unique situation, the municipality should revisit the ordinance periodically and revise it as needed.

### **How Does This Strategy Relate to Protection of the Landmark?**

For the successful planning for the preservation of the Battlefield, municipal policy supportive of Battlefield protection must be implemented through ordinances. First, policy supportive of its protection and strategies for implementation must be established in planning documents, and then ordinance revisions completed to implement that municipal policy. It is an appropriate role within municipal planning documents to analyze the Battlefield as a community resource and to delineate specific strategies for its protection. In this way, the municipality has in effect a 'shopping list' for various protection strategies. However, for protection of the Battlefield to become a reality, municipal policy must be translated into ordinance language.