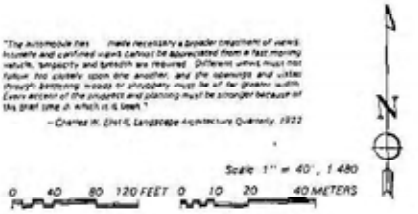
Guidelines for Preserving Cultural Landscapes

PLANNED VIEWS

Early motor parkway designers faced the challenge of adapting traditional landscape architecture methods to the new speeds and scale produced by automobiles. The influence of romantic landscape painting and picturesque park design remained strong, but landscape compositions were simplified to be appreciated at higher speeds. The ability of automobiles to easily cover distances and climb hills gave parkway designers greater ability to seek out attractive scenery and dramatic viewpoints. GWMP's designers combined this new freedom with traditional design techniques to provide access to spectacular scenery and focus attention on dramatic views and symbolic vistas.

"The automobile has ... made necessary a broader treatment of views. Insularity and confined vistas cannot be appreciated from a fast moving vehicle, spaciosity and breadth are required. Different views must not follow too closely upon one another, and the openings and vistas through bordering woods or shrubbery must be of far greater width. Every element of the prospect and planting must be stronger because of the great rate at which it is seen."

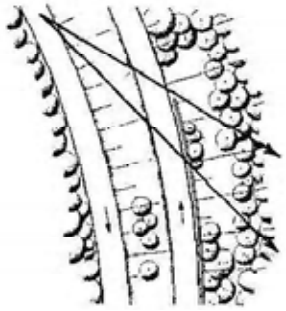
– Charles W. Eliot II, Landscape Architecture Quarterly, 1922



FRAMED VISTA -1-

While pedestrians or carriage occupants could easily enjoy lateral views, motorists had to continually watch where they were going. As speeds increased, the emphasis on forward views became increasingly important. Parkway designers frequently combined a bend in the road with a break in the bordering vegetation to frame scenes off the main axis of the parkway. These "windows" were deliberately limited in width and number to avoid creating prolonged distractions.

GWMP designers employed this technique in dramatic fashion along the Potomac Palisades, where southbound motorists are treated to striking views of Washington, D.C.

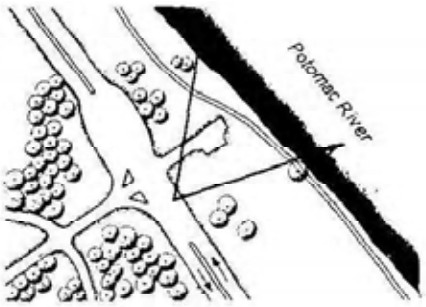


Potomac Palisades

PANORAMA -2-

Parkway designers considered the relationship between the road and Washington's monumental core to be a matter of great aesthetic and symbolic significance. The approach to Washington was designed to provide a simple yet dignified transition between the informal parkway landscape and the grand spaces and neoclassical monumentality of the national capital.

Border plantings were kept to a minimum in order to provide expansive views across the Potomac River. The circulation system of Columbia Island was designed in part to slow down motorists so they would appreciate these views at a more dignified pace. When the parkway was originally built, the heights near National Airport provided another panoramic view of the city, but the roadway was moved to lower ground when the airport was constructed.

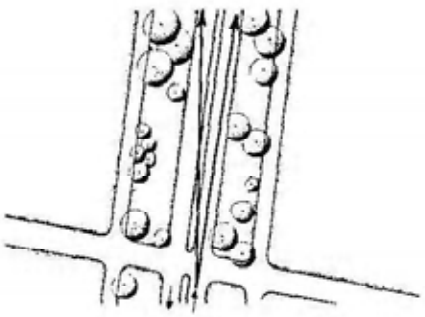


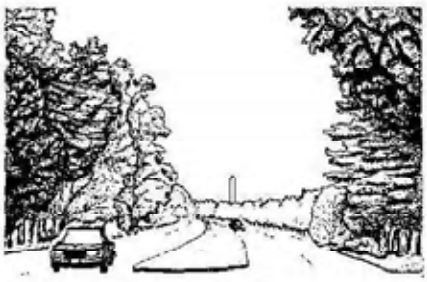
Columbia Island

AXIAL VIEW -3-

The use of long straight avenues to direct attention to objects of interest was another classic design technique employed by parkway builders. This tactic was used sparingly, since the parkway was designed primarily as an informal landscape with continuous sweeping curvature and irregular naturalistic planting.

The most striking use of the classic axial view occurs just north of Alexandria, where one of the parkway's two long straight stretches points directly at the distant Washington Monument. Tall rows of trees on either side of the parkway help focus the motorist's gaze while screening out surrounding development. This "Monument Vista" provides the first suggestion of formal Washington. It was strongly emphasized in the original parkway plans.



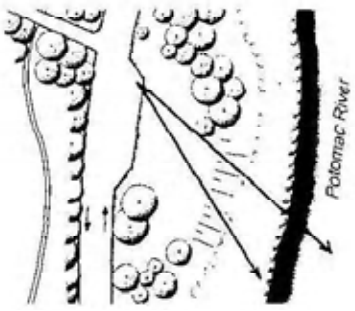


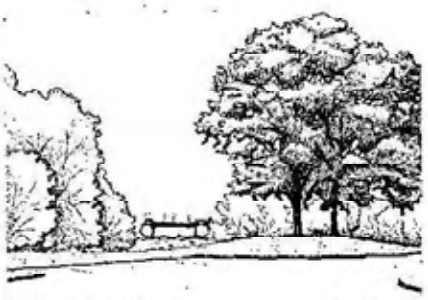
Washington Monument Vista, Alexandria

SCENIC PULLOUT -4-

Small parking areas were provided at particularly scenic areas to provide motorists with an opportunity to safely pull off the roadway and enjoy the view. These scenic pullouts range in size from minor pavement widenings to extensively developed picnic areas complete with toilet facilities, tables, fireplaces, and interpretive signs explaining the adjacent historic and natural features.

The Hillcrest overlook provides an excellent view across the Potomac to Fort Washington, an imposing edifice that guarded the southern approach to Washington from 1808-1922.





Hillcrest Overlook

Anne Marconi-Berks, 1994

Early parkway designers faced the challenge of adapting traditional landscape architecture methods to the new speeds and scale demanded by automobiles. The identification and protection of historic planned views along the George Washington Memorial Parkway is an integral part of the parkway documentation project. (HABS, 1994)

SPATIAL ORGANIZATION AND LAND PATTERNS

Identify, Retain, and Preserve Historic Materials and Features

Recommended	Not Recommended
Identifying, retaining and preserving the existing spatial organization and land patterns of the landscape as they have evolved over time. Prior to beginning project work, documenting all features which define those relationships. This includes the size, configuration, proportion and relationship of component landscapes; the relationship of features to component landscapes; and the component landscapes themselves, such as a terrace garden, a farmyard, or forest-to-field patterns.	Undertaking project work without understanding the effect on existing spatial organization and land patterns. For example, constructing a new structure without researching a property's agricultural and development history which may have created new spatial divisions.

Stabilize and Protect Deteriorated Historic Materials and Features as a Preliminary Measure

Stabilizing deteriorated features that define spatial organization and land patterns, such as a deteriorating structure that separates a courtyard garden and a kitchen garden; a hedgerow along a farm's perimeter which has an insect infestation; or a collapsing dry stone wall along a scenic parkway.	Failing to undertake stabilization measures for deteriorating or fragile features, such as a cluster of farm outbuildings or an industrial complex, causing the loss of spatial definition and land patterns.
Protecting spatial organization and land patterns that extend beyond a landscape. Utilizing preservation tools such as acquisition, zoning, scenic and conservation easements.	Allowing spatial organization and land patterns to be altered through incompatible development or neglect.

The addition of this war memorial to the Civic Center in downtown Denver, Colorado, compromised the character-defining visual and spatial relationships of S. R. DeBoer's 1924 design for the plaza. (author, 1993)

Maintain Historic Features and Materials

Maintaining spatial organization and land patterns by non-destructive methods in daily, seasonal and cyclical tasks. For example, maintaining topography, vegetation and structures which define individual spaces or the overall pattern of the cultural landscape.

Failing to undertake preventive maintenance such as keeping volunteer tree and forest growth from spreading into open fields or meadows.

Utilizing maintenance methods which destroy or obscure the landscape's spatial organization and land patterns.

Repair Historic Features and Materials

Repairing spatial organization and land patterns by use of non-destructive methods and materials when additional work is required. For example, repairing structures, reclaiming open space from woody plant intrusion, or replanting vegetation to recapture the individual spaces or overall patterns of the cultural landscape.

Failing to undertake necessary repairs or remedial action, resulting in the loss of spatial organization and land patterns.

Replacing a feature that defines spatial organization and land patterns when repair is possible.

When historic land uses cannot be continued, maintenance practices, such as mowing or prescribed burns, may be used to prevent the succession of old fields. This image depicts the results of such a cyclical maintenance action in Arkansas. (NPS, 1996)

Limited Replacement In Kind of Extensively Deteriorated Portions of Historic Features

Replacing in-kind deteriorating or missing parts of significant features that define spatial organization and land patterns. For example, replacing leaching tanks which define the interior spaces of a mining complex.

Failing to undertake the necessary in-kind replacements which may compromise the spatial organization and land patterns.

TOPOGRAPHY

Identify, Retain, and Preserve Historic Features and Materials

Recommended

Identifying, retaining and preserving existing topography. Documenting topographic variation prior to project work, including shape, slope, elevation, aspect, and contour. For example, preparing a topographic survey.

Evaluating and understanding the evolution of a landscape's topography over time. Using archival resources such as plans and aerial photographs or, in their absence, archeological analysis techniques, to understand the historic topography.

Not Recommended

Executing project work that impacts topography without undertaking a topographic survey.

Executing project work without understanding its impact on historic topographic resources, such as watershed systems.

The landscape at Drayton Hall in Charleston, South Carolina, reflects seven generations of family ownership. This circular topographic addition along the approach road has been preserved. Future research is now underway to understand its date of introduction and the design intent. (author, 1994)

Stabilize and Protect Deteriorated Historic Features and Materials as a Preliminary Measure

Stabilizing and protecting topography in a manner that is appropriate to the character of the landform. For example, installing a temporary protective textile over an eroding slope or restricting access to fragile earthworks.

Allowing unstable topographic conditions to deteriorate without intervention. For example, permitting pedestrian access to further degrade threatened landforms.

Maintain Historic Features and Materials

Maintaining historic topography by use of non-destructive methods and daily, seasonal, and cyclical tasks. This may include cleaning drainage systems, mowing vegetative cover or managing groundhogs.

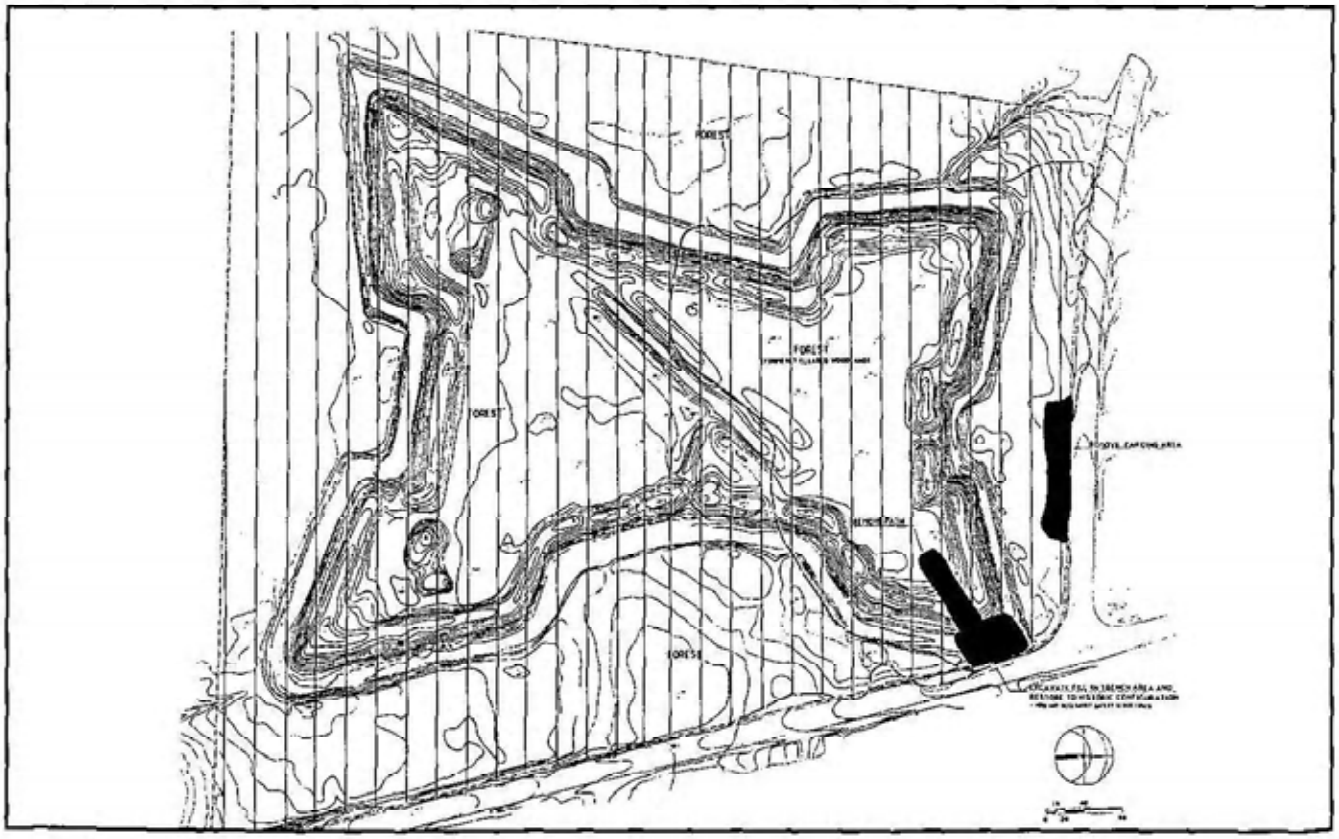
Failing to undertake preventive maintenance.

Utilizing maintenance methods which destroy or degrade topography, such as using heavily weighted equipment on steep or vulnerable slopes.

Repair Historic Features and Materials

Repair declining topographic features. For example, re-excavating a silted swale through appropriate regrading or re-establishing an eroding terrace.

Destroying the shape, slope, elevation aspect, or contour of topography when repair is possible.



To stabilize the earthworks at Fort Fisher in Petersburg, North Carolina, access has now been restricted to the fragile fort. A parking lot and trench area have been removed [see black areas] and stormwater runoff from local roads have been redirected. (NPS, 1989)

Limited Replacement In Kind of Extensively Deteriorated Portions of Historic Features

Utilizing a replacement material that does not match the historic material when the historic material is available. For example, using asphaltic materials to fill in natural sink holes in a turfed or soil area.

Replacing in-kind topographic features where there is extensive deterioration and damage. For example, minor filling and soil rejuvenation in areas of subsidence.

VEGETATION

Identify, Retain, and Preserve Historic Features and Materials

Recommended

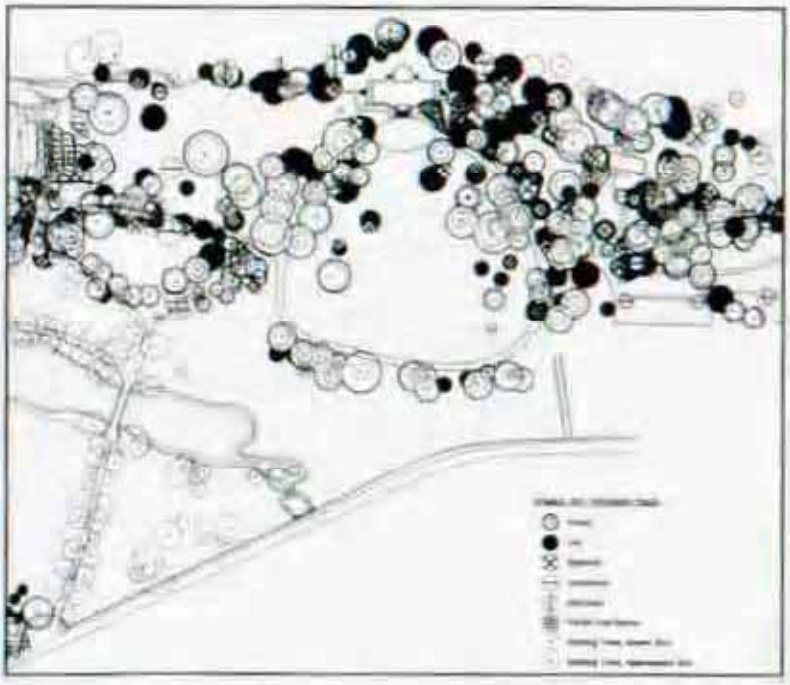
Identifying, retaining, and preserving existing vegetation; for example, woodlands, forests, trees, shrubs, crops, meadows, planting beds, vines, and ground covers. Documenting broad cover types, genus, species, caliper, and/or size, as well as color, scale, form and texture.

Evaluating the condition and determining the age of vegetation prior to project work. For example, tree coring to determine age.

Not Recommended

Undertaking project work that impacts vegetation without executing an "existing conditions" survey of plant materials.

Undertaking work without understanding the significance of vegetation. For example, removing roadside trees for utility installations or indiscriminate clearing of vegetation.



To provide a basis for later treatment decisions, the existing vegetation within the core area of the Vanderbilt Mansion National Historic Site in Hyde Park, New York, have been inventoried and analyzed. This plan illustrates change in the specimen tree canopy from 1938-1991. For example, lost trees are shown with a black circle, while trees that were introduced are depicted with an "x." (LANDSCAPES, 1992)

A large Osage orange (Maclura pomifera) at the Arkansas Post National Memorial needs to be cored to establish its age. (courtesy NPS)

Retaining and perpetuating vegetation through propagation using methods such as seed collection and genetic stock cuttings from existing plants to preserve the gene pool..	Failing to propagate vegetation from extant genetic stock, when few or no known sources of replacement are available.

Stabilize and Protect Deteriorated Historic Features and Materials as a Preliminary Measure

Stabilizing vegetation by staking, cabling, reinforcing, or other appropriate methods. For example, cabling a tree or limb to protect it against breakage from wind, ice, snow, or age.	Failing to stabilize threatened vegetation. For example, permitting the effects of severe weather conditions to damage or destroy vulnerable plant materials.
Stabilizing vegetation that serves to protect historic or archeological resources.	Removing vegetation from earthworks with subsurface archeological resources or removing large trees that shield marble burial markers from the effects of acid rain.
Protecting vegetation by controlling invasive or inappropriate volunteer plant materials. For example, utilizing mechanized removal, pruning, or approved herbicides.	Allowing invasive vegetation to thrive, leading to the damage and demise of historic vegetation.
Protecting below-ground root systems from soil compaction or protecting tree trunks and limbs from damage by equipment such as mowers, weed wackers and plows.	Failing to provide adequate barriers or alternative routes to protect significant vegetation from pedestrian, vehicular and heavy equipment traffic.

Maintain Historic Materials and Features

Maintaining historic vegetation by use of non-destructive methods and daily, seasonal, and cyclical tasks. This may include spring fertilizing, winter mulching or mowing an open field after it has gone to	Failing to undertake preventive maintenance of vegetation.
Utilizing maintenance practices which respect habit, form, bloom, fruit and color.	Utilizing maintenance practices and techniques that fail to recognize the uniqueness of individual plant materials. For example, rotating crops on an inappropriate schedule, or pruning plants which should be left "natural" into "shapes."
Utilizing historic horticultural and agricultural maintenance practices when those techniques are critical to preserving the historic character of the vegetation. For example, utilizing a specific mowing pattern at a country estate.	Employing modern practices when traditional or historic can be used. For example, using a modern textile to control weed growth when a natural material that was used historically is available.
Rejuvenating vegetation by corrective pruning, deep root watering or fertilizing, aerating soil, and/or grafting onto historic genetic stock.	Replacing or destroying vegetation when rejuvenation is possible. For example, removing a deformed and damaged plant when corrective pruning may be employed.

Preservation principles in the Standards have parallels world wide. This tree in a public park in Warsaw, Poland, [top left] was protected and stabilized following a recent storm. (author, 1994). Pampas grass, as depicted in this 1858 engraving, [top center] was often used as a bedding plant. Along the monumental core in Washington, D.C., some of the beds have been replaced in-kind [top right] as a result of their easy availability in the nursery trade.

Stabilize and Protect Deteriorated Historic Features and Materials as a Preliminary Measure

Stabilizing and protecting circulation features by temporary shoring methods until more permanent methods can be undertaken. For example, installing a temporary timber retaining wall or gabions to halt erosion until a permanent solution can be determined.

Failing to provide stabilization to circulation features. For example, allowing erosion from an unstable slope to cover a drive, ultimately resulting in a new alignment.

Protecting circulation features and materials by monitoring use. For example, restricting access to a prehistoric trail during periods of peak rainfall, or restricting high speed traffic from a leisure drive or parkway.

Failing to control the volume and intensity of use on circulation systems that results in damage or loss of features or materials. For example, allowing heavy loads on a historic trail.

Limited Replacement In Kind of Historic Features

Replacing in-kind a single plant or an entire plant grouping when the vegetation is too deteriorated or damaged to be saved. For example, infilling an individual plant in a windbreak, or perennials in a border, with historically appropriate plant materials.

Replacing vegetation that is beyond repair with new material when the historic plant is available.

As part of a preservation project, the walks around Boston's Jamaica Pond Park were repaired and resurfaced. A loose, crushed stone surface material (an embedded aggregate) was rolled into the asphalt surface, thus allowing for upgraded uses such as jogging, biking and snow removal, while retaining the historic character. (FLONHS and author, 1990)

CIRCULATION

Identify, Retain, and Preserve Historic Features and Materials

Recommended	*Not Recommended*
Identifying, retaining, and preserving the existing circulation systems prior to project work. All circulation features should be documented, from small paths and walks to larger transportation corridors such as parkways, highways, railroads and canals, as well as alignment, surface and edge treatment, width, grade, materials and infrastructure.	Executing project work that impacts circulation systems without undertaking an "existing conditions" survey.
Evaluating the existing condition and determining the age of circulation systems. For example, utilizing aerial photographs and historic maps to date the introduction of carriage roads in an expanding rural cemetery.	Undertaking work without understanding the importance of circulation systems. For example, closing off historic roads and removing others, thus altering the historic circulation patterns in a fishing village.

Maintain Historic Materials and Features

Maintaining circulation systems through non-destructive methods in daily, seasonal and cyclical tasks. This may include hand raking, top dressing, or rolling surface materials.	Failing to undertake preventive maintenance of circulation features and materials. For example, using a snow plow across a coarse textured pavement. Using materials such as salts and chemicals that can hasten the deterioration of surface treatments.
Utilizing maintenance practices that respect infrastructure. For example, cleaning out debris from drainage systems.	Allowing infrastructure to become dysfunctional. For example, permitting a failed drainage system to contribute to the degradation and loss of associated road surface.

Repair Historic Materials and Features

Repairing surface treatment, materials and edges. For example, by applying a traditional material to a stabilized subsurface base or patching a railroad corridor retaining wall.	Replacing or destroying circulation features and materials when repair is possible. For example, removing damaged curbing that could be repaired during a road repaving project.

Limited Replacement In Kind of Extensively Deteriorated Portions of Historic Features

Replacing in-kind circulation features or materials when they are too deteriorated or damaged to be repaired. For example, replacing a worn cinder path with a new material that matches the old in composition, design, color and texture.	Removing circulation features that are beyond repair when the historic feature or material is available. For example, installing new drainage inlets when the historic prototype survives.

In the 1980s, Star Lake in Lower Onondaga Park in Syracuse, New York, was filled-in without undertaking any research or analysis. This loss of this character-defining feature significantly altered the park's spatial relationships. (Onondaga County Historical Society and author, 1989)

WATER FEATURES

Identify, Retain, and Preserve Historic Features and Materials

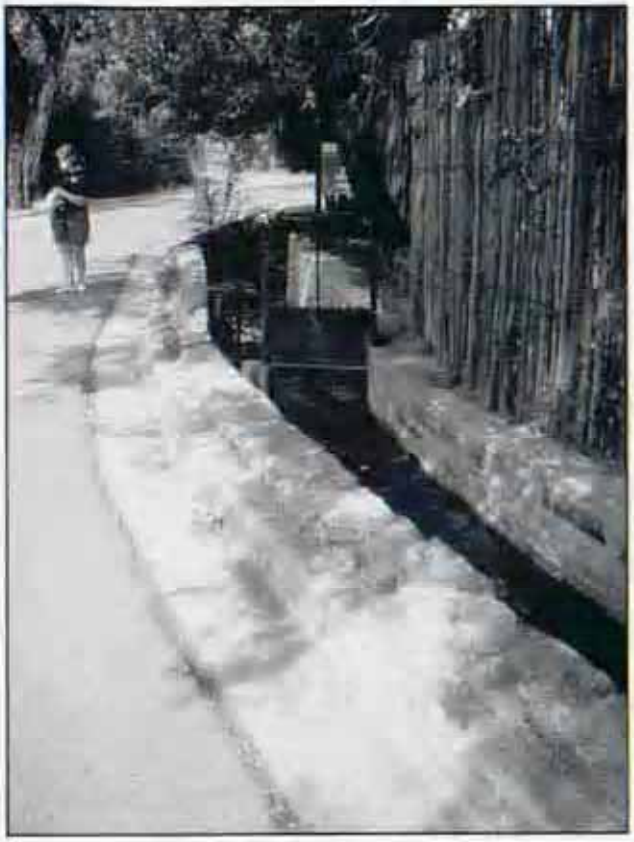
Recommended	Not Recommended
Identifying, retaining and preserving existing water features and water sources such as retention ponds, pools, and fountains. Documenting shape, edge and bottom condition/material; water level, movement, sound and reflective qualities; and associated plants and animal life and water quality prior to work.	Undertaking project work that impacts water features or hydrology, without undertaking an "existing conditions" survey. For example, filling in a pool that provides habitat for rare or endangered wildlife.
Evaluating the condition and, where applicable the evolution of water features over time. For example, assessing water quality and/or utilizing archeological techniques to determine the changing path of a watercourse	Executing project work without understanding its impact on water features. For example, placing a section of stream in a culvert or channel.

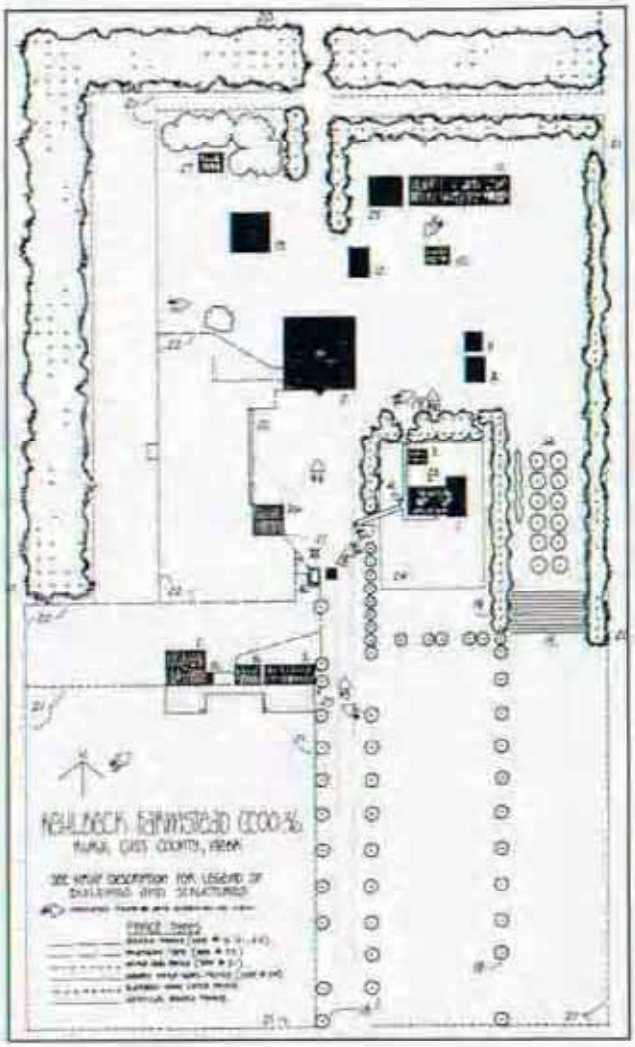
Stabilize and Protect Deteriorated Historic Features and Materials as a Preliminary Measure

Stabilizing water features by consolidating or reinforcing the form, bottom, or edge treatments. For example, bracing a slipped spill rock in a cascade.	Failing to stabilize threatened water features. For example, permitting pedestrian access to further degrade threatened embankments.
Protecting water features by controlling inappropriate volunteer plant materials. For example, cleaning a pond by removing invasive plant materials.	Allowing invasive vegetation to thrive, leading to radical changes in water quality.
Protecting water features from hazardous or toxic materials. For example, limiting agricultural fertilizers to minimize their impact on associated streams.	Failing to protect water features from point source, or runoff pollutants, toxins or wastes.

Maintain Historic Features and Materials

Maintaining water features by use of non-destructive methods and daily, seasonal, and cyclical tasks. For example, cleaning leaf litter or mineral deposits from drainage inlets or outlets.	Failing to undertake preventive maintenance to water features. Utilizing maintenance methods which destroy or degrade water features, such as heavily weighted equipment in the base of a pond, thus destroying its fragile lining.
Maintaining a water feature's mechanical, plumbing and electrical systems to insure appropriate depth of water or direction of flow. For example, routinely greasing and lubricating gate mechanisms in a canal lock.	Allowing mechanical systems to fall into a state of disrepair, resulting in changes to the water feature. For example, failing to maintain a fountain's plumbing, thus altering its spray.





This integrity of this historic irrigation system in San Antonio, Texas, [above] has been preserved by keeping it clean of leaf litter and mineral deposits. (author, 1992) The plan for the Kehlbeck Farmstead in Cass County, Nebraska, [right] illustrates a well-planned and aesthetically arranged general farm complex of the twentieth century. Note the varied graphic techniques used to identify and document a variety of fence types. (National Register Files)

Repair Historic Features and Materials

Repairing water features by reinforcing materials or augmenting mechanical systems. For example, patching a crack in an irrigation ditch or repairing a failed pump mechanism.

Replacing or removing features or systems when repair is possible. For example, abandoning an irrigation system that could be repaired.

Limited Replacement In Kind of Extensively Deteriorated Portions of Historic Features

Replacing in kind a portion of a water feature when it is too deteriorated or damaged to be repaired. For example, installing coping stones in limited areas that match the old in composition, design, color and texture.

Replacing portions of water features using a new material when the historic material is available.

STRUCTURES, FURNISHINGS AND OBJECTS

Identify, Retain, and Preserve Historic Materials and Features

Identifying, retaining and preserving existing structures, furnishings and objects prior to project work--including gazebos and bridges, playground equipment and drinking fountains, benches, lights, statuary and troughs. Documenting the relationship of these features to each other, their surrounds, and their material compositions.

Undertaking project work that impacts structures, furnishings, and objects without undertaking an "existing conditions" survey. For example, removing historic roadside

Evaluating the condition and determining the age of structures, furnishings and objects. For example, utilizing Historic Structure Reports and historic aerial photographs to understand the relationship of barns, windmills, silos and water troughs in a ranch compound or the placement of light standards and benches along park paths.

Undertaking work without understanding the significance of structures, furnishings and objects. For example, removing a pergola that defines a courtyard, or fence posts that delineate the limits of a horse farm.

Retaining the historic relationships between the landscape and its buildings, structures, furnishings and objects.

Removing or relocating buildings, structures, furnishings and objects, thus destroying or diminishing the historic relationship between the landscape and these features. For example, taking down an estate's greenhouse, or removing a stone mile-marker from a historic road.

Stabilize and Protect Deteriorated Historic Materials and Features as a Preliminary Measure

Stabilizing structures, furnishings and objects by reinforcement or consolidation of their features or materials. For example, reinforcing a roof member of a bandshell or using an epoxy consolidant on a spalling masonry bench.

Failing to stabilize threatened structures, furnishings and objects. For example, permitting the effects of severe weather to damage or destroy vulnerable features.

Protecting the features and materials of structures, furnishings and objects. For example, installing a fence around a deteriorating pumping station or placing a temporary shelter or box over a garden ornament in winter.

Allowing vulnerable structures, furnishings and objects to remain unprotected. For example, failing to secure doors and windows of an abandoned boathouse, thus permitting vandalism or looting.

Maintain Historic Features and Materials

Maintaining structures, furnishings and objects by use of non-destructive methods and daily, cyclical and seasonal tasks. This may include cleaning, limited paint removal, or re-application of protective coating systems.

Failing to undertake preventive maintenance for structures, furnishings and objects resulting in their damage or loss. For example, failing to remove rust from an iron boot scraper which leads to its deterioration.

Utilizing maintenance practices and materials that are harsh, abrasive, or unproven. For example, using grit blasting on wood, brick, or soft stone, or using harsh chemicals on masonry or metals.

Top: Council rings are simple stone benches with fire pits in the center that resemble the kivas of the Pueblo Indians in the American Southwest. Landscape architect Jens Jensen typically placed council rings along a woodland edge--often where they are prone to successional overgrowth. By employing cyclical and seasonal clearing operations, the area around and within the council ring at the Clearing in Ellison Bay, Wisconsin, has been kept free of perennial weeds, and the stone masonry remains in excellent condition. (author, 1993)

Repair Historic Features and Materials

Repairing features and materials of structures, furnishings and objects by reinforcing historic materials. For example, returning the mechanism of a windmill to good working order or straightening bent wrought iron fencing.

Replacing or destroying a feature of structures, furnishings or objects when repair is possible. For example, replacing a pavilion's tile roof with asphalt shingles or removing a broken historic light fixture rather than rewiring it.

Limited Replacement In-Kind of Extensively Deteriorated Portions of Historic Features

Replacing in-kind a feature of a building, structure, furnishing or object when it is too deteriorated to repair. New materials should match the old in composition, design, color and texture. For example, replacing broken wooden fence or bench slats, clapboards or shingles, window parts, or rack timbers in-kind.

Removing or replacing features of buildings, structures, furnishings or objects with new material when historic materials are available. For example, demolishing an ice house rather than re-roofing it, or failing to save and reattach the original portion of a stone statue, using a concrete replacement instead.

Adding "period"-looking buildings, structures, furnishings and objects.

Many of the stones from the Island Bridge along Boston's Riverway had fallen into the Muddy River below. As part of the preservation work, these stones were retrieved from the water and reused, in addition to several new stones that were cut in order to replace in-kind those that were lost. (author, 1985, 1994)

Although the work in the following sections is quite often an important aspect of preservation projects, its is usually not part of the overall process of preserving character-defining features (maintenance, repair and limited replacement); rather, such work is assessed for its potential negative impact on the landscape's historic character. For this reason, particular care must be taken not to obscure, alter, or damage character-defining features.

To meet ADA requirements, accessibility to the Houghton Chapel at Wellesley College has been provided from a secondary entrance. The landscape in this area possessed little integrity--thus, as part of this regrading operation, the historic granite stairs were buried below and preserved in-situ, below the new grade. (Carol R. Johnson Associates, Inc.)

ACCESSIBILITY CONSIDERATIONS

Recommended

Identifying the cultural landscape's character-defining features, materials and finishes so that accessibility code-required work will not result in their damage or loss.

Complying with barrier-free access requirements, in such a way that character-defining features, materials and finishes are preserved. For example, widening existing brick walks by adding new brick adjacent to it to achieve the desired width.

Not Recommended

Undertaking code-required alterations before identifying those features, materials and finishes which are character-defining and must therefore be preserved.

Damaging or destroying character-defining features in attempting to comply with accessibility requirements. For example, paving over historic concrete walks with blacktop.

Working with local accessibility and preservation specialists to determine the most appropriate solution to access problems which will have the least impact on character-defining features.	Altering character-defining features, materials and finishes without consulting with local accessibility and preservation specialists.
Providing barrier-free access that promotes independence for the disabled person to the highest degree practicable, while preserving significant character-defining landscape features, materials and finishes. For example, incorporating wider sidewalks only at intersections where ramps are being installed, leaving the main runs or historic sidewalks in place.	Making access modifications that do not provide a reasonable balance between independent, safe access and preservation of character-defining landscape features, materials and finishes. For example, replacing three foot wide stone, brick or historic concrete sidewalks with new, wider concrete sidewalks.
Finding solutions to meet accessibility requirements that minimize the impact on the cultural landscape, for example, retaining the original character-defining entrance steps and replacing the access ramp at a side or secondary entrance.	Making modifications for accessibility without considering the impact on the cultural landscape. For example, introducing a new access element (ramp or lift) that destroys the symmetry of a formal garden.

HEALTH AND SAFETY CONSIDERATIONS

Recommended	*Not Recommended*
Identifying the cultural landscape's character-defining features, materials and finishes so that code-related work will not result in their damage or loss.	Undertaking code-required alterations before identifying those features, materials and finishes which are character-defining and must therefore be preserved.
Complying with health and safety code requirements, in such a manner that character-defining features, materials and finishes are preserved. For example, recognizing standards for the application of pesticides or herbicides.	Altering, damaging or destroying character-defining features, materials and finishes while making modifications to a cultural landscape to comply with safety codes.
Removing toxic materials only after thorough testing has been conducted and only after less invasive abatement methods have been shown to be inadequate.	Destroying a cultural landscape's character-defining features, materials and finishes without careful testing and without considering less invasive abatement methods.
Providing workers with appropriate personal protective equipment for hazards found in the worksite.	Removing unhealthful materials without regard to personal and environmental safety.
Working with local code officials to investigate systems, methods, or devices of equivalent or superior effectiveness and safety to those prescribed by code so that unnecessary alterations can be avoided.	Making changes to cultural landscapes without first exploring equivalent health and safety systems, methods, or devices that may be less damaging to character-defining features, materials and finishes.
Upgrading character-defining features to meet health and safety codes in a manner that assures their preservation. For example, upgrading a historic stairway without destroying character-defining handrails and balustrades.	Damaging or obscuring character-defining features, materials and finishes or adjacent areas in the process of doing work to meet code requirements.

Installing safety-related systems that result in the retention of character-defining features, materials, and finishes; for example, fire-suppression systems or seismic retrofits.	Covering character-defining features with fire resistant sheathing which results in altering their visual appearance.
Applying the necessary materials to add protection to character-defining features, materials and finishes. For example, applying fire retardant, intumescent paint coatings to a deck to add thermal protection to its steel.	Using materials intended to provide additional protection, such as fire-retardant coatings, if they damage or obscure character-defining features, materials and finishes.
Adding new features to meet health and safety codes in a manner that preserves adjacent character-defining features, materials and finishes. For example, creating a fire access route along a derelict historic corridor.	Radically changing, damaging or destroying character-defining features, materials and finishes when adding new code-required features.

ENVIRONMENTAL CONSIDERATIONS

Recommended	*Not Recommended*
Identifying the cultural landscape's character-defining features, materials and finishes so that environmental protection-required work will not result in their damage or loss.	Undertaking environmental protection required work before identifying character-defining features, materials and finishes which should be preserved.
Complying with environmental protection regulations in such a manner that character-defining features, materials and finishes are preserved. For example, protecting historic vegetation in which rare and endangered species nest.	Altering damaging or destroying character-defining features, materials and finishes while making modifications to a cultural landscape to comply with environmental protection regulations.
Working with environmental protection officials to investigate systems, methods, devices or technologies of equivalent or superior effectiveness to those prescribed by regulation so that unnecessary alterations can be avoided.	Making changes to cultural landscapes without first exploring equivalent environmental protection systems, methods, devices or technologies that may be less damaging to historic features, materials and finishes.
Reclaiming or re-establishing natural resources in a manner that promotes the highest degree of environmental protection, while preserving significant historic features, materials and finishes. For example, reclaiming a wetland to comply with applicable environmental regulations, while re-establishing the feature as it appeared historically. Undertaking environmental protection-required work	Making environmental protection related modifications that do not provide a reasonable balance between improved environmental conditions and the preservation of historic features, materials and finishes.

ENERGY EFFICIENCY

Recommended	*Not Recommended*
Retaining and maintaining those historic energy efficient features or parts of features of the landscape. For example, maintaining vegetation which performs passive solar energy functions.	Removing or altering those historic features or parts of features which play an energy conserving role. For example, removing a historic windbreak.
Improving energy efficiency of existing features through non-destructive means. For example, utilizing a recirculating system in a fountain rather than uncontrolled discharge to a storm system.	Replacing energy inefficient features rather than improving their energy conservation potential. For example, replacing an entire historic light standard rather than retrofitting the fixture to be more efficient.