REHABILITATED HISTORICAL PROPERTIES

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What do all these buildings have in common?...this derelict factory in Dayton, Ohio, coverted into stores and offices...the rehabilitation of this burned out townhouse in the Soulard Historic District of St. Louis...the reopening of this once-deteriorated hotel in Providence, Rhode Island, into a luxurious first class hostelry...the rejuvenation of this run-down office building in Seattle's Pioneer Square...the conversion of this unused train station in Dallas into a shopping complex...the transformation of this convent in Louisville into boutiques, offices, and restaurants.

For one thing, they are all designated historic structures. Second, they were all rehabilitated using Federal tax incentives. Third, the rehabilitation work you see was all certified and approved by the National Park Service.

In 1976 the Tax Reform Act was passed into law, providing some important tax benefits to owners rehabilitating historic buildings. The law grew out of the desire by Congress and preservationists to narrow the gap between preferential tax treatments afforded new construction and those for older commercial buildings...in other words, to put historic buildings on an equal economic footing in the real estate marketplace with new construction.

For an owner to claim tax benefits, the law requires that the Secretary of the Interior certify the structure as historic and that the rehabilitation is consistent with the historic character of the building or district in which it is located.

The 1976 provisions, even with certain built-in limitations, were successful beyond most preservationists' expectations. Over 3,300 projects in all 50 states, representing an investment of some $1.6 billion, were approved between 1976 and the end of 1981. From these statistics, it is evident that National Park Service involvement and interest in historic rehabilitation extends well beyond the boundaries of our national parks; it encompasses historic buildings in private ownership, either those listed in the National Register of Historic Places or those certified as contributing to the historic character of registered historic districts. It is conceivable that upwards of a quarter million structures may be eligible for Federal tax incentives.

In 1981 the historic preservation movement scored another major victory with passage of new incentives for the rehabilitation of historic buildings. In September of that year, the Economic Recovery Tax Act was signed into law providing a 25 percent investment tax credit for certified rehabilitations of historic buildings used for commercial and rental residential purposes. While there are some limitations attached to this credit (the rehabilitation must be substantial; the building must be used for income-producing purposes; and at least 75 percent of the existing external walls must remain intact as external walls) the new 25 percent incentive is clearly accomplishing its purpose...to en-

list increased private funds in the rehabilitation and preservation of historic buildings. Since January of this year, an additional thousand structures have qualified for the 25 percent credit, with a rehabilitation investment of over $600 million.

While the economic impact of the preservation tax incentives is significant, no less important are the design consequences of this legislation and the way people look at and use histori buildings. A new group of professionals is involving itself in historic preservation activities—developers who have heretofore only dealt with new construction, bankers who are inexperienced with the problems and timetables of historic rehabilitation, and architects who, although well versed in modern construction technologies and products, have had only limited experience in meeting the many challenges old buildings present. In some cases, this collective inexperience has spelled disaster for historic buildings—in other cases, it has led to solutions that innovatively adapt modern building technologies to older resources.

This afternoon, I would like to discuss undertaking rehabilitation work from the viewpoint of the National Park Service, which is involved with ensuring that the mandate of the law is met—in other words, that the rehabilitation is consistent with the historic character of the building. In this talk, I will cover some of the major rehabilitation concerns that affect historic buildings and will summarize these concerns by reviewing the ten standards used by state preservation offices and the National Park Service in certifying rehabilitation work. In so doing, I hope to give a sense of the Park Service's rehabilitation philosophy.

The rehabilitation of historic structures as used in the new tax law does not imply that some form of historic restoration is required. Here it is important to get our terminology straight. In the NPS definition:

> *Rehabilitation means the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.*

The Standards for Rehabilitation and guidelines which accompany these standards reinforce this definition. Because the availability of the 25 percent ITC is limited to rehabilitations that are certified, it is important for architects, developers and their lawyers to have a clear understanding of what constitutes appropriate rehabilitation of historic buildings.

One of the most important questions is: what constitutes a compatible new use in historic buildings? There is tremendous diversity in the range of resources being rehabilitated and an equally wide range of uses to which rehabilitated buildings are being put. The concept of reusing a building for an entirely different purpose is not a new one—perhaps the most extreme

example was the adaptive use for the Parthenon in Athens as a powder magazine in the 17th Century. Most buildings, however, are constructed with a particular use in mind, and their design and detailing reflect that use.

A 19th Century townhouse, for instance, was constructed with large spaces on the ground floor—a formal entry hall with ornate staircase; large front and rear parlors separated by sliding doors and invariably containing some fine interior decoration—crown molding, carved mantelpieces, plaster ceiling rosette, tile floor, or large double-hung windows with interior shutters. The upper floors tended to have smaller rooms, often less ornately finished. Where few alterations have occurred, the design and sequence of rooms in historic buildings is an integral part of the character.

A new use, such as doctors' offices with the necessity for small examination rooms and substantial new plumbing facilities on the ground floor, most likely would result in the destruction of decoration and sequence of spaces, and would therefore be an inappropriate new use. In the first half of the 20th Century, Victorian houses sometimes were converted into funeral parlors—one of the most common types of adaptive use projects involving historic buildings in the United States. It is no coincidence that this new use tended to be compatible with the historic building—the need for large public spaces was well met by many Victorian floor plans and the somber elegance of the homes was well suited to this most somber of professions.

I have chosen an easy example to make my point—namely that the uses to which a historic building can be put successfully are, in some cases, limited. It is difficult to convince some developers of that fact, however. If you make a determination that a building is architecturally significant, then certain tangible features, portions or spaces must convey that significance. These elements should be preserved in an adaptive use project.

This is true with industrial and commercial buildings as well as residential structures, although perhaps less obvious. The Carr Mill is an historic factory; nothing of significance exists on the interior. The uses to which this space could be put without adversely affecting the historic character are enormous—apartments, shops, offices, even manufacturing concerns. Another industrial structure, however, might present an entirely different situation—such as the Tivoli Brewery in Denver, which was constructed to house a particular manufactoring process, with a design and layout to reflect that process. Certain pieces of original equipment survived, such as copper brewing vats, machinery, even an auditorium for workers. A use that could not accommodate most of these significant features would not be a compatible adaptive use.

In rehabilitation, two types of actions can adversely impact historic buildings—design solutions, and technical or physical rehabilitation treatments.

A common mistake in rehabilitation is trying to improve upon the orginial design — by adding elaborate wood moldings in one room that never had such ornate decoration, or by installing Victorian mantelpieces where there had been simple Mission Style mantels.

In one project in Seattle, the Westland Building, an intact early 20th Century commercial building with Prairie Style features, the architect proposed creating an intrusive new entrance to the building that would have required removing original windows on the first and second floors and changing the size and scale of the openings along that facade. The argument was made that the facade needed a focal point and that the entrance should be highlighted. In the end, the architect was persuaded to retain the existing openings and create a less prominent entrance, and a very successful, though perhaps less dramatic, project resulted, with certification from the Park Service.

Part of the character of some historic buildings is the lack of regularity — facades that aren't quite symmetrical, openings that are all slightly different sizes: At Grace Street Power Station, for example, a 19th Century trolley barn — the owners wanted to take the many different sized windows and regularize them by creating two-story symmetrical openings. The quirkiness of this historic building — the variety of windows that told of numerous alterations over time — was obliterated by the proposed design. Unfortunately, the owners were unwilling to make changes and the project was completed as planned, but without certification and benefit of Federal tax incentives. In many cases, however, secondary facades may be modified to provide altered or new window and door openings, basement entrances, new access stairs, decks and porches, greenhouses, elevator shafts, new grilles and louvers for mechanical equipment, and new dormers and skylights in the roof, so long as such new features are not visible from the street and provided they do not destroy or alter the building's historic character. Party walls which have been exposed may receive new openings or protective coatings, such as stucco, if these treatments do not alter the basic character of the overall building.

New Additions

In some cases, it is necessary to provide additional space to a historic building to make it economically viable. Although new additions do not generally count as rehabilitation expenses, they have an impact on the historic building and as such are reviewed as part of the overall rehabilitation. The Standards for Rehabilitation do not discourage additions, but state that if the additions are planned they should not destroy significant architectural and historical material and should be compatible with the size, scale, color, material and character of the building and its neighborhood.

In a New York hotel, for instance, a new stair and elevator tower was included as part of the overall rehabilitation. Located

on a side elevation on an empty lot, it is set back from the street and clearly contemporary in nature. Connecting openings were cut in a non-significant pary wall. Although perhaps not the most imaginative design, the size, scale, and color were all compatible with the historic building.

In Bangor, Maine, an early 19th Century hotel was renovated into housing for the elderly. A new building, housing additional apartments adjacent to the hotel, was constructed sympathetic in size, scale and material to the historic building. Although clearly new construction, it was certified as part of the overall rehabilitation.

Storefronts

Storefronts, whether original or later additions, are in many cases the most important components of historic commercial buildings. Frequently they are located on primary facades. There are two basic situations in evaluating storefront rehabilitation proposals. In both, it is important to preserve the "storefront character" of the building.

When original or significant later storefronts have survived, we encourage their repair and retention in the rehabilitation process. This includes Art Deco storefronts. From a preservation point of view, this is the best and frequently the least expensive solution. If the storefronts are too deteriorated to save, or are later incompatible additions, or are simply missing, an acceptable solution would be a new contemporary storefront compatible with the rest of the building in scale, design, materials, color and texture. It should not create a new design element and it should preserve the "storefront character" of the building. In most cases, the primary material should be glass. An accurate restoration based on historical research and physical evidence is another acceptable approach...however, this restorative solution is not required for certification.

Recessed Arcades

Another popular treatment to the ground floor of historic buildings is the creation of a recessed arcade. Usually this treatment involves the removal of existing storefronts or other architectural elements, dramatically altering the storefront character, the relation between ground and upper floors, the relationship of the building with the street, and neighboring structures.

Typically, the bays of commercial buildings at the street level were of relatively lightweight construction which infilled the area between the heavy masonry piers. This infill construction would have been of glass, wood and/or metal. The recommended treatment here is retention of existing storefronts or replacement with compatible infill construction.

Windows

The repair and maintenance of historic buildings is quite dif-

ferent from new construction--solutions for new buildings are not always appropriate for historic buildings. One of the most common issues facing owners of large industrial and commercial buildings is what to do with the deteriorating window sash. Windows tend to be a particularly vulnerable part of an old building and in a surprising number of cases, an important element in the overall design of the building. An architect whose practice was confined largely to modern buildings would likely march to a catalog and select a stock contemporary window as a replacement. If one—or a series—of openings is larger than the others, rather than order a special window, specifications are written to block down that window so that it conforms to the others.

The National Park Service's approach to window repair and replacement is sometimes at odds with the approach taken by developers and their architects. We generally encourage the repair and reuse of original or early windows, especially where such windows are an integral part of the building's design and character. In many cases the existing windows can be repaired in place—flaking paint and broken sash cords do not mean that a window cannot be brought back to life. In a number of instances where the architect has taken time to examine the windows carefully, repairs can be undertaken at costs competitive with--or less than—replacement windows. In those cases where existing sash are too deteriorated to save, we encourage owners to install replacement sash that match the original in materials, size, general pane configuration and reflective qualities.

There is flexibility in some situations, depending on the specific building in question. Owners can often simplify the pane configuration without destroying the character of the building where windows are not a prominent design feature.

New Mechanical Systems

Like windows, mechanical systems are components of a historic building--even the best, most modern equipment will become outdated or wear out in 30 years or so. Many historic buildings, dating from the pre-air conditioning era, were designed to derive maximum comfort from natural means—porches, operable windows, high ceilings, and awnings were traditional means to regulate the temperature inside a historic building.

Because mechanical system technologies are rapidly changing, there is no substitute for a competent specialist in this area, especially if your project is a large one. Mechanical systems should be chosen that cause the least damage to significant architectural fabric and character. The proper approach is to have a new HVAC system work with a building and not simply added to it. Some solar applications are appropriate; others are not.

The other main category of actions that adversely affect historic buildings involves what I call physical or technical rehabilitation treatments. An increasing number of wonder products for historic buildings in the last few years promise increased energy ef-

ficiency, increased watertightness, and freedom from maintenance. Owners should recognize that certain treatments, if improperly applied, or certain materials by their physical properties, may cause or accelerate physical deterioration of historic buildings and result in denial of certification. For this reason, physical treatments must be carefully tested on the particular building in question before they are used.

Masonry Cleaning

The inappropriate cleaning of masonry is a major cause of damage to historic buildings. While cleaning may be appropriate in some cases, it may accelerate deterioration in others. The reasons for cleaning any building should be carefully considered before arriving at a decision to clean.

* Is the cleaning being done to make the building look new? The so-called dirt may actually be weathered masonry.
* Is there evidence that dirt and pollutants are having a harmful effect on the masonry? Improper cleaning can accelerate the deteriorating effect of pollutants.
* If the proposed cleaning is to remove paint, think twice before so doing: many buildings were painted at the time of construction or shortly thereafter for aesthetic reasons and/or to protect soft brick. Removal of paint may be historically inappropriate and can cause longterm damage to the building.

The National Park Service's advice is straightforward: if cleaning is undertaken, be sure that the gentlest means possible is used. In many cases soap and water with a bristle brush will achieve the necessary results. Try a test patch before proceeding. Remember: getting it "clean" may not make it look new.

Another common rehab treatment is: exposing masonry surfaces on building interiors. Our basic advice here is: don't expose brick surfaces that were originally plastered. Removing plaster and decorative trim from walls—even on a selective basis—will give a historic interior an appearance that is historically and architecturally inappropriate. In addition to the aesthetic considerations, exposing interior brickwork can lead to new maintenance problems—exposed brick is frequently poor quality and poorly laid up. It will collect dust faster than a smooth wall—further, sandblasted brick will frequently give off a reddish powder that will continue to plague residents for years to come.

Masonry Repair and Repointing

Properly done, masonry repair restores the visual and physical integrity of historic buildings. If improperly done, it can detract from the appearance of the building and cause severe physical damage to the masonry units themselves. Owners are strongly encouraged to repoint only those portions of the building that require repair and then to match the original mortar in com-

position, color and texture. Use of portland cement in repointing historic buildings may cause serious longterm problems—the normal cycle of expansion and contraction resulting from temperature changes causes spalling and cracking of softer brick and stone. Use of miracle waterproof coatings can change the ability of materials to "breathe," causing moisture build-up and accelerated deterioration.

Having gone through some of the most common rehabilitation concerns, let me use the Secretary of the Interior's 10 Standards for Rehabilitation as a way of summarizing the major points:

Standard No. 1:

> *Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.*

Some buildings, like the New York Customs House, by virtue of their very significant spaces, or features, or decorative elements, do not readily lend themselves to alterations or subdivision of the spaces without a significant loss of character or a destruction of the spaces, or features, or decorative elements. Little could be done with a space as significant as this except to retain it as a public space, and used in this instance as an exhibit space. This is an extraordinary instance, however. Most buildings do lend themselves to reuse without loss of significant spaces or features.

Some historic buildings, such as an old warehouse, do not contain any significant spaces or features, and will lend themselves to a variety of new uses while preserving those portions and features which are significant to its historic and architectural values.

Standard No. 2:

> *The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.*

For instance, where a townhouse's distinctive architectural feature, such as a projecting bay, has been removed, an important original quality or characteristic of a whole row of townhouses may be destroyed. A somewhat more subtle loss of character involved a historic Greyhound Bus depot, where streamlined modern architecture caused the loss of historic character. Such a remodelling project would not meet the Standards for Rehabilitation.

Standard No. 3:

> *All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no*

historical basis and which seek to create an earlier appearance shall be discouraged.

Classic violations of Standard No. 3 might be termed "remuddling." I am thinking of a certain modest 19th Century commercial building that has been "earlied up," or "Mother Goosed" by destroying the storefront, creating an arcade, and installing "ye olde colonial doorway," complete with shuttered windows and tiny panes of glass.

Standard No. 4:

Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

A Vermont Inn dating from the 1840s lost its later wing. While not original, the wing was over 100 years old and had become a familiar adjunct of the original building. The missing wing was evidence of evolving history and development of the building, had acquired significance, and that significance should have been recognized and respected.

Standard No. 5:

Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.

Sometimes a rehabilitation involves subdividing a space which includes a significant architectural feature such as a very elaborate plaster cornice. Any new partition wall should be carefully cut to conform to the profile of the original cornice, treating the craftsmanship with sensitivity.

Standard No. 6 [THIS IS A FUNDAMENTAL STANDARD]:

Deteriorated architectural features shall be repaired RATHER than replaced, wherever possible. In the event replacement is necessary the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

In some instances, it may be relatively simple to repair the damage done to the historic material as a result of earlier and inappropriate alterations. In other instances replacement of architectural elements may be necessary. If so, replacement should be based on historic photographs or physical evidence—not on conjectural designs.

Standard No. 7:

> *The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.*

In the past few years, this Standard has become well-known, and we have witnessed a slight decrease in the use of sandblasting, of very high pressure water, and of combination processes that may include chemicals inappropriate for the fabric of the building being cleaned. The basic issue with any of these methods is damage. Tests usually are required to determine the appropriate cleaning materials and methods.

Standard No. 8:

> *Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any project.*

In some instances, such as the old U.S. Mint in New Orleans, a very large rehabilitation project, it was known that there were likely archeological remains underneath and in close proximity all around this historic building. Almost any excavation, whether for steam lines, drainage ditches, or condensate lines might encounter some archeological feature or evidence of earlier archeological resources which should be taken into account in the planning and execution of a rehabilitation project.

Standard No. 9:

> *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.*

This Standard needs little explanation, but does require sensitivity and judgement.

Standard No. 10:

> *Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.*

For instance, the addition of a greenhouse did not compromise the historic integrity of the principal prospect of the historic Bourse Building in Philadelphia. The addition was below the window sill line; the principal elevation remained visible—all but the basement windows. Such an addition not only preserved the historic character, but also allowed for its future removal without impairing the essential character of the original structure.

Conclusion

One of the major goals of the National Park Service is to upgrade the quality of rehabilitation work undertaken on historic buildings. In part this is done with the use of standards that not only encourage the retention of significant historic and architectural fabric but that also are sufficiently flexible to make possible an efficient and economically viable contempory use. As we have seen, most of the damage done to historic buildings over the years has been done out of ignorance rather than malice. It is essential that sound technical information be available for use by the layman as well as the professional.

The National Park Service has produced a wide range of technical information on recommended rehabilitation treatments and methods—from conserving energy in historic buildings to the repair and maintenance of historic wooden windows. A series of preservation Briefs provides guidance on specific preservation techniques that can prolong the life of a historic building. Individual copies are available at no charge from your State Historic Preservation Office or National Park Service regional offices.

Also available from the Government Printing Office are indepth case studies focusing on innovative rehabilitation projects—from the rehabilitation of storefronts along an entire main street in Arkansas to the recent renovation of the Hotel Peabody, a National Register property in Memphis. This latter publication provides detailed financial data on a multi-million dollar project and outlines the role of Federal tax incentives in making the project economically viable.

A series of indepth technical reports also published by the National Park Service and available from the Government Printing Office will help architects and owners deal with exterior cleaning of historic masonry buildings and how to identify, preserve and maintain metals in America's historic buildings.

State and Federal preservationists are also available to property owners to provide assistance on specific questions relating to preservation technology and their particular rehabilitation project. Early consultation often can resolve issues before they become problems, and can assure the preservation of the historic character of buildings, as intended by Congress when the tax incentives became law.

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