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DEVELOPMENT STANDARDS AND GUIDELINES

LAKE CRESCENT LODGE

FALL 1983

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DEVELOPMENT STANDARDS AND GUIDELINES

LAKE CRESCENT LODGE

November 1983

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Introduction

Development and Preservation Objectives for Future Development of Lake Crescent Lodge and immediate site will be discussed in terms of physical program requirements of the concessionaire and Olympic National Park to support their respective programs. Also, the necessary elements that must be preserved or developed to satisfy visitor expectation from an historical or experiential perspective must be met. All three objectives, satisfying the needs of the concessionaire, the park and visitor must be developed simultaneously. Slighting one of these elements in the development stages will mean eventual decreased long-term effectiveness and success of the other elements.

The following planning document has been developed by the Cultural Resources Division of the Pacific Northwest Region of the National Park Service with information provided by Olympic National Park staff, the Denver Service Center of the National Park Service, National Park Concessions Incorporated (current concessions contract holder at Lake Crescent site) and other planning personnel from the Pacific Northwest Region of the National Park Service. This programming information provides the basis for planning efforts at the Lake Crescent site that will begin immediately. Areas that require compliance with Secretary of the Interior's Standards for Rehabilitation (Appendix A) or compliance with internal National Park Service policy (NPS 28), the National Historic Preservation Act of 1960 as ammended (particularly Section 106) and other federal legislation, are defined. The information will become part of the Historic Structures Report in progress for the facility and site and will be elaborated on as necessary throughout the total planning process.

LANDSCAPE RECOMMENDATIONS

I. SITE CONTEXT

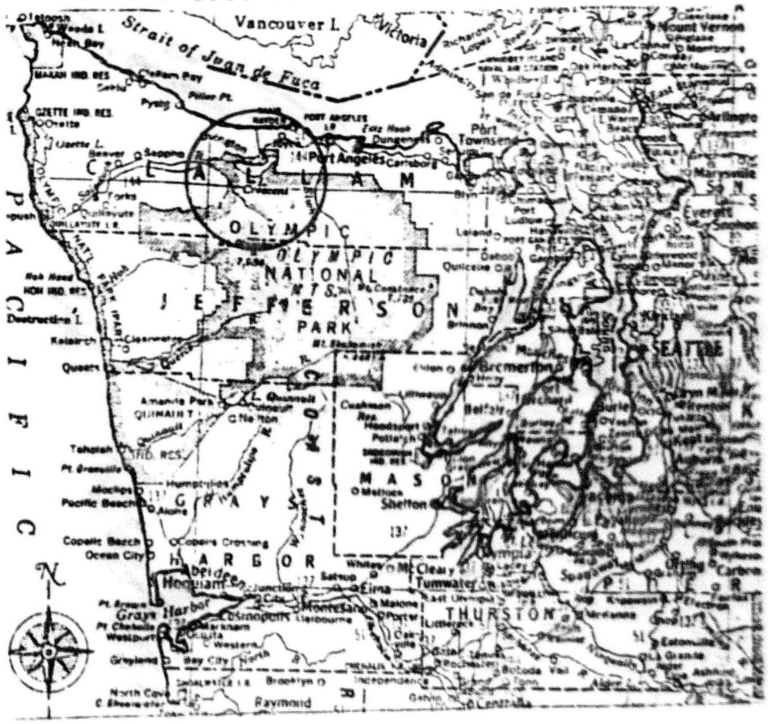
Geographic and Natural Setting

The Olympic Peninsula of Washington State is in the northwestern portion of the conterminous United States. A wilderness of glaciers, rugged mountains, dense old growth forests and water sculpted vegetation, the area remained relatively remote and undeveloped for decades.



Exploration in the late 19th century into the interior valleys of the peninsula unveiled abundant resources and magnificent scenery and it was not long before others recognized the potential development of the area.

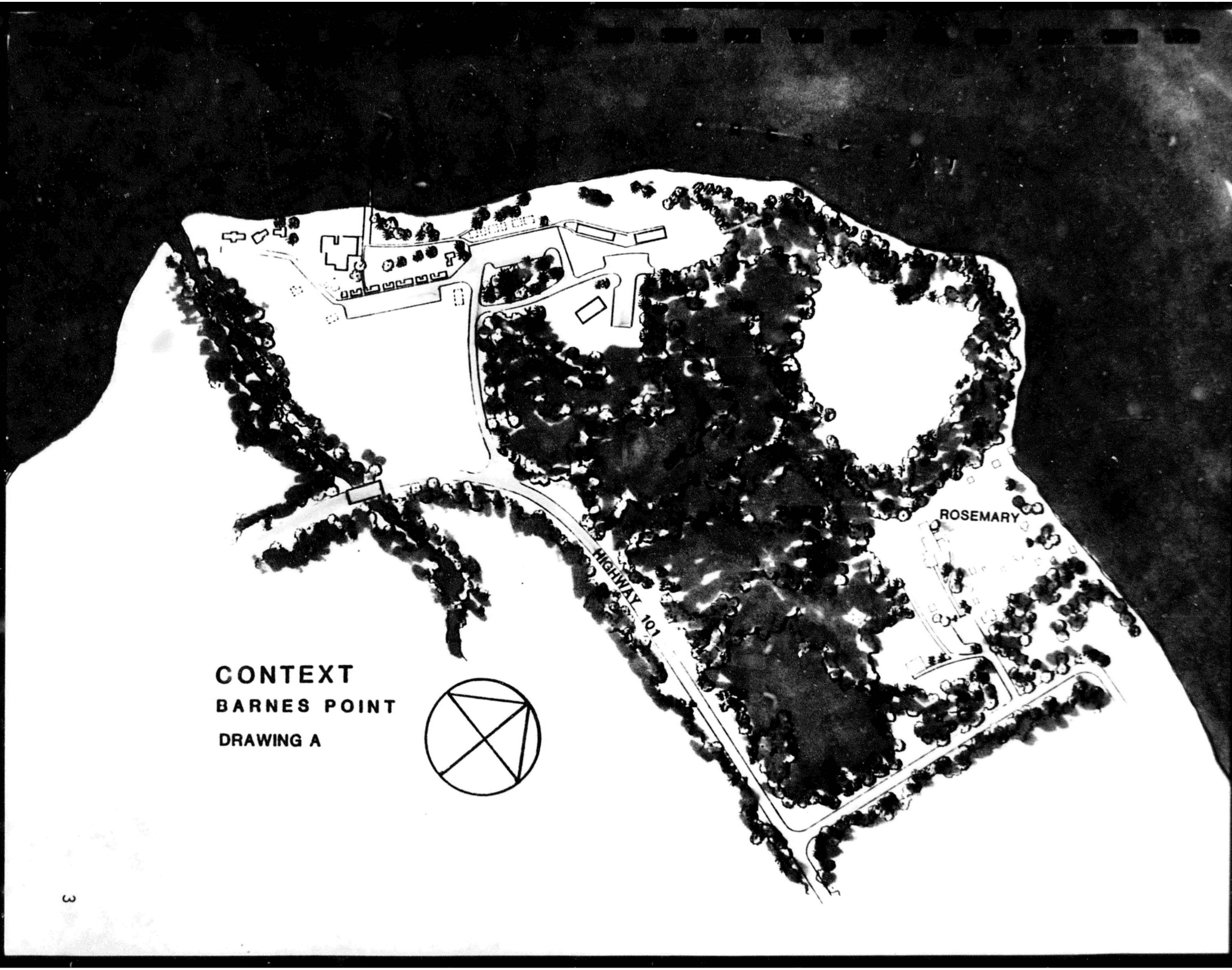
By the later part of the 19th century, the development of resort hotels was taking place on the inland shores of beautiful Lake Crescent.



For the next thirty years a number and variety of these unique resorts came and went. Along the south shore of the lake two such resorts were built. One of these, Lake Crescent Lodge is the focus of this study.

Sited on Barnes Point along the south shore of Lake Crescent, Lake Crescent Lodge was built in 1914 as a destination resort. It survives to the present as a unique and quality resort in a remarkably intact and fragile setting.

The site is defined by several natural features including Pyramid Mountain to the northwest and Storm King Mountain to the northeast;

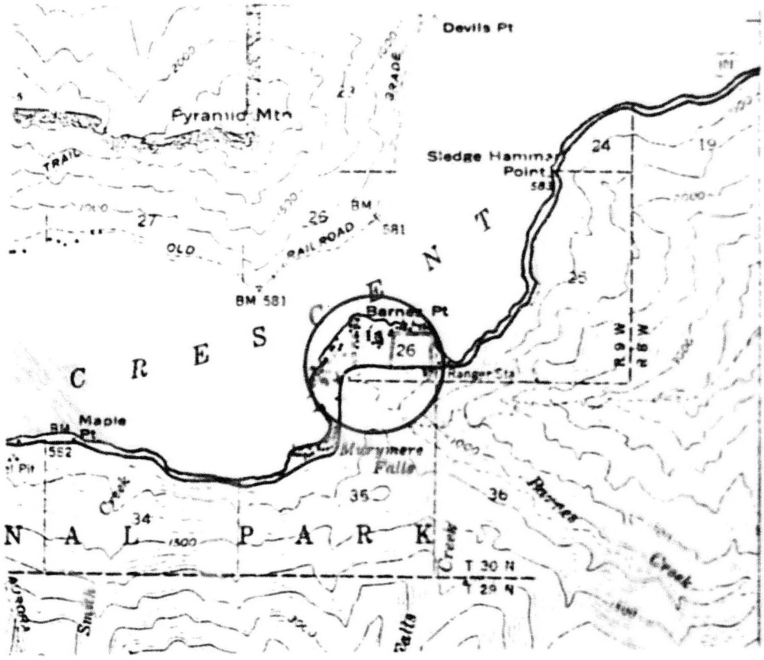


CONTEXT

BARNES POINT

DRAWING A

Happy Lake Ridge and Aurora Peak along the south and Lake Crescent itself directly to the northwest. Primary vehicular access to the site is along Highway 101 which follows the south edge of the lake. The site, including all of Barnes Point is within Olympic National Park and under the jurisdiction of the National Park Service.



Historical Setting

The grounds of Lake Crescent Lodge were developed primarily by Mr. and Mrs. Al Singer, owners of the lodge from its construction in 1914 until they sold it in the late twenties. Both took great pride in the development of a quality resort with special ammenities offered nowhere else on the lake.



A. Lake Crescent Lodge built in a clearing on Barnes Point.

Originally, the site was no more than a clearing in the dense woodlands along the edge of the lake. The Singers, anticipating the tourist trade upon the opening of the Olympic Highway, bougnt the land and built Singer's Tavern (see photo A). By 1915, there was not only the lodge and twenty cottages but also the clear beginning of a consciously designed resort landscape (see photo B).

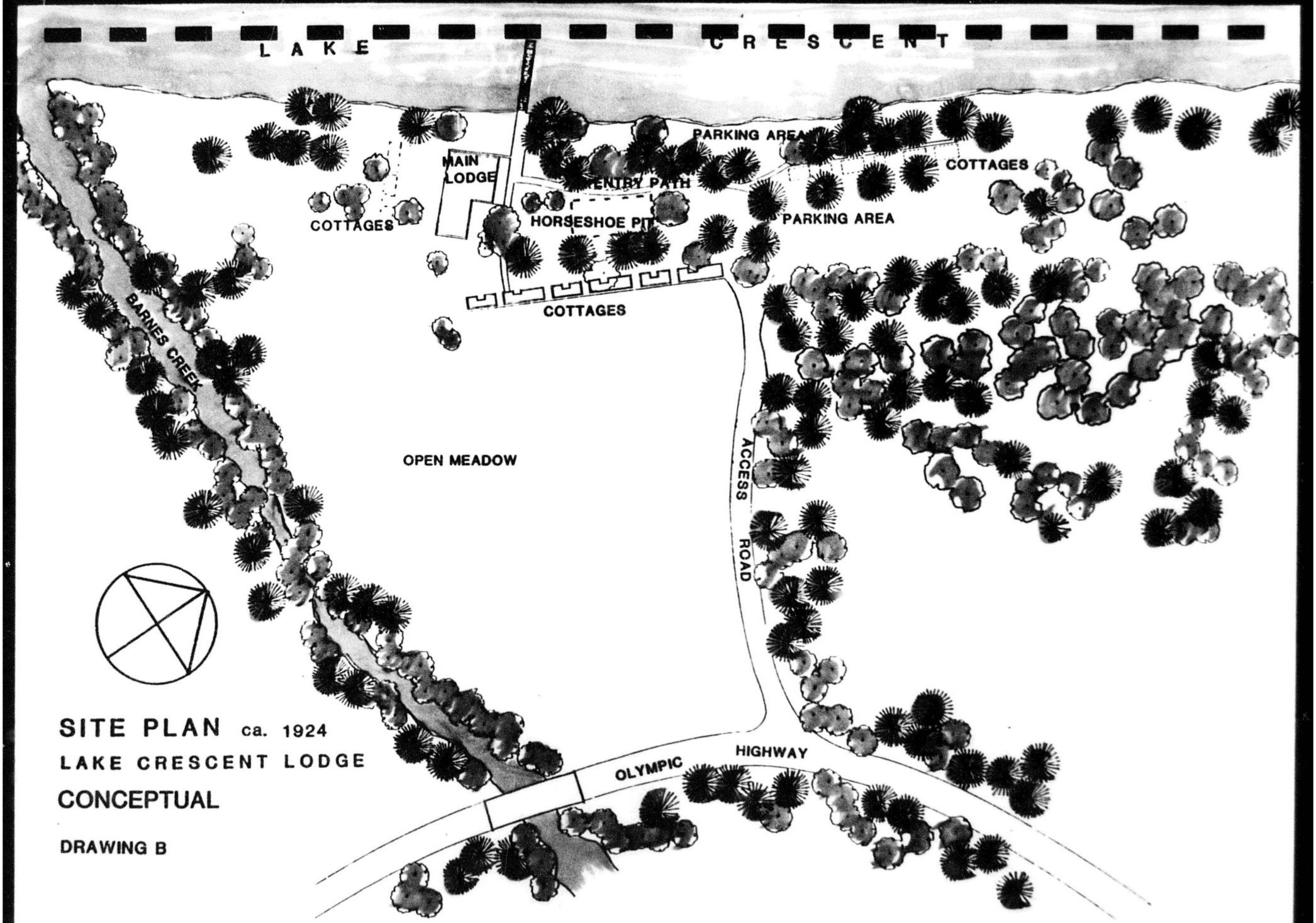
Visitors arrived along an access road which cut down through the woods to a parking area in front of the lake and north of the lodge.



B. Cottages northeast of the main lodge and the beginning of a landscape design.

From there guests followed a path that gently angled toward the main door of the lodge (see drawing A). On either side of the path were a variety of ornamental plant materials including roses, holly, hawthorne and maple trees, and a lawn that spread out toward the lake. A large (80 x 40) fenced horseshoe pit set on a stone foundation (see photo C) was both a focal point and a buffer between the cottages and the path itself.

The areas immediately around the lodge were used in a variety of ways. In addition to the primary entrance and arrival sequence on the north side, another door on the west provided access to a lawn and gathering area from which to enjoy the beauty and activity associated with the lake. Built out, into the lake was a long wooden dock from which to fish and moor small boats. Because the cottages on the south and east sides of the lodge were so close to the main building, the areas between remained largely path-oriented spaces with a few ornamental plantings of laurel, chestnut and smaller flowering plants.

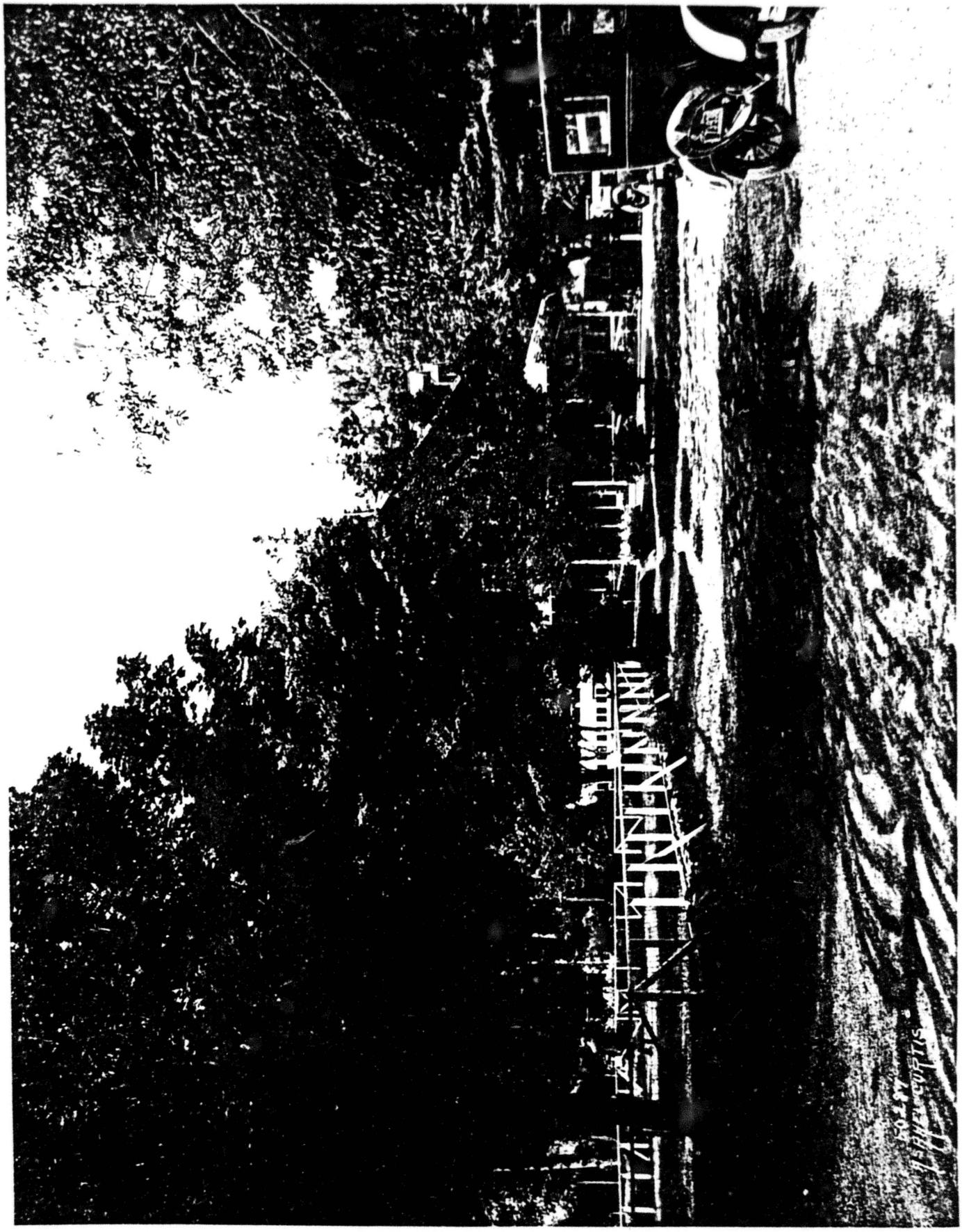


SITE PLAN ca. 1924

LAKE CRESCENT LODGE

CONCEPTUAL

DRAWING B



C. Main entry from the north. Horseshoe pit is fenced on stone foundation between path and cottages to the east.

Finally, while the grounds of Lake Crescent Lodge never reached the level of a formal garden in the classical sense, it is evident that great care was taken in the effort to create a series of landscape experiences (entry path, arrival sequence, exotic plant materials, outdoor gathering areas) and a sense of place in the resort atmosphere.

Current Conditions

The grounds of Lake Crescent Lodge have several remnant landscape materials and structures that survive in form, material, and intent from the original layout of the grounds.

The overall spatial organization of the site remains intact with cabins directly north of the main lodge and oriented to Lake Crescent itself (see drawing B). Primary vehicular access to the site is off of Highway 101 with parking at the end of that access road and directly behind lakefront cottages (676, 677, 678, 679, and 680).

Several of the original plant materials also remain though many are decayed or in poor condition because of neglect. While some new plant materials have been incorporated in the landscape fabric over the years, the original structure of planting areas and massing has been maintained. Even the horseshoe pit, while no longer standing, is partly visible in the ground pattern of the remnant stone foundation.

As the main lodge underwent structural changes (during the Singer era and on) the grounds immediately around it also changed. When the west porch facing the lake was enclosed, the area between the lodge and water lost its role as an extension of the building and became more associated with the open grounds on either side. The east and south sides of the lodge, while maintaining general structure and circulation patterns, also developed into a general service area for the lodge.

The newer facilities on the grounds including two hotel units are located approximately 1/4 mile north of the lodge. The forest which frames and encircles those units and the rest of the site are composed of fir, cedar, alder, hemlock and pine.

Summary: Significance and Integrity

The grounds of Lake Crescent Lodge have undergone change since 1914 but the site, as a whole, is basically intact, with few deletions and intrusions. The complex has both local and regional significance due to its historical role in the resort era on Lake Crescent and the Pacific Northwest. Moreover, because the complex exhibits continuity both in use and physical structure, it reveals patterns of social history important in developing an understanding of this special place.

Although currently in a state of semi-disrepair the complex also retains a high degree of integrity in three ways. First, Lake Crescent Lodge displays relationships and fundamental patterns of land use, circulation systems, building clusters and use, through time without significant spatial alteration. Secondly, most landscape and structural elements considered primary to the character of the complex are intact including the entry and parking area, paths, buildings and vegetation. Finally, while feeling alone cannot determine significance, it is evident that the lodge and all its components provide a very unique and special ambience of time past, continuity and sense of place.

II. MANAGEMENT

Compatible Use

Maintaining the use and function of Lake Crescent Lodge while carefully expanding site capacity and density as proposed is compatible with the integrity of the site's significant features and components as described above.

The following design guidelines for the grounds of Lake Crescent Lodge are standards which will assure the preservation of those qualities and physical components that comprise site integrity. Primary to these standards is the concept that development of the grounds must not alter the significant physical components and spatial organization as described. It should be noted however, that contemporary design alterations or additions are acceptable when those additions and alterations are compatible with the original site structure and character.

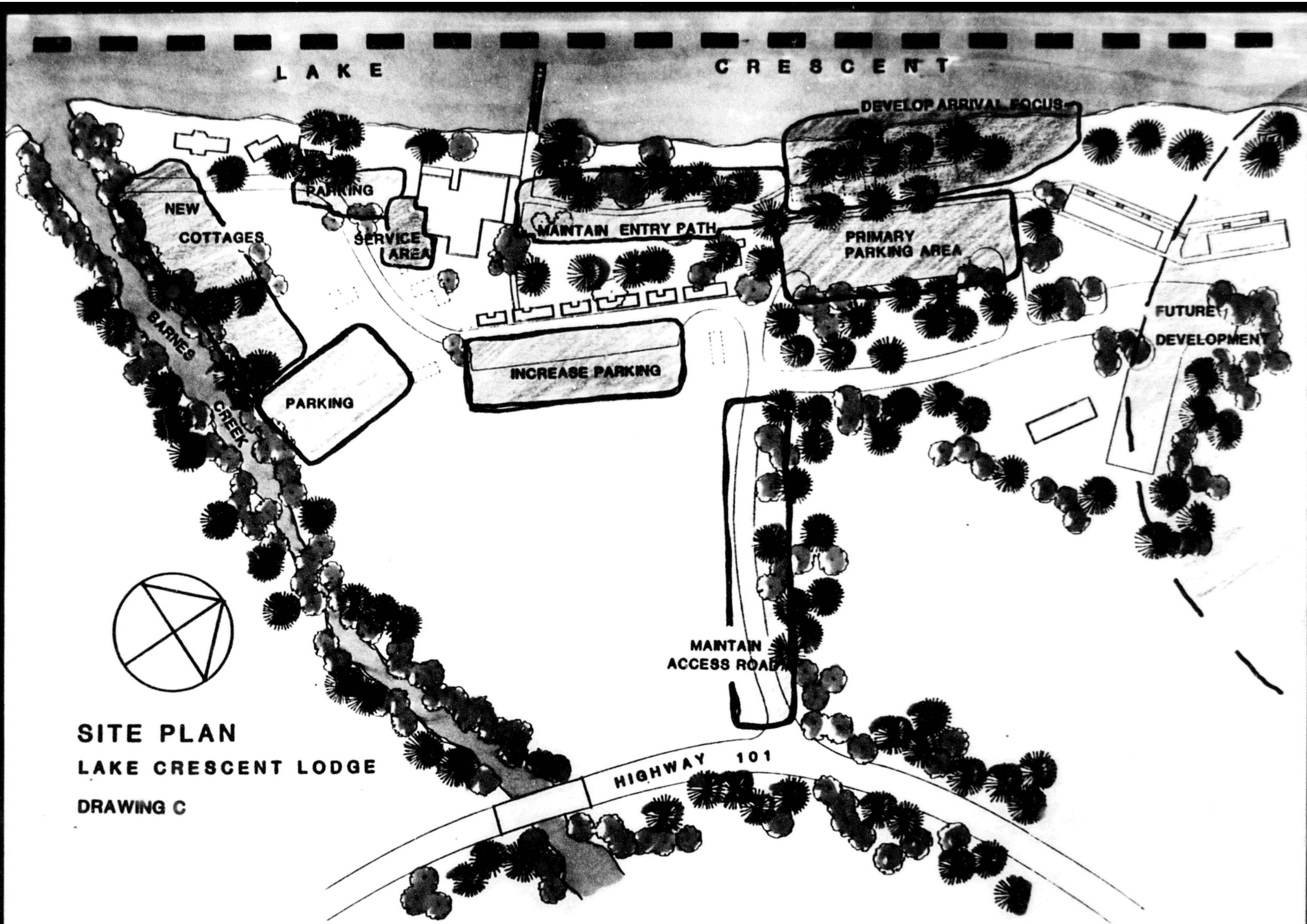
Design Guidelines (See Drawing C)

New Development

1. Develop an arrival focus at the terminus of the access road and parking facility north of the lodge in order to emphasize the original entry axis to the lodge.
2. New cottages and development along the edge of Barnes Creek should maintain the small, intimate scale, massing and orientation of existing structures by siting buildings in tight clusters.
3. New parking facilities on site should be kept small in scale (10-12 vehicles) and development of two smaller lots is strongly preferred.
4. In order to accomodate increased building and maintenance needs, redevelop and improve existing service area on southeast corner of the main lodge to include access for deliveries, garbage pick-up, and short term parking for service vehicles.
5. Maintain site intimacy by carefully screening with appropriate vegetation (as approved by Park Biologist), service areas and public areas from the private spaces around cottages.
6. Future expansion of the Lake Crescent complex should occur in carefully selected sites in wooded areas north of the main lodge.

Circulation

1. Maintain the access road from Highway 101 into the site in its current condition with trees framing one side.
2. Develop and maintain parking area north of main lodge as primary arrival point as per original design.
3. Increase parking facilities to the east and southeast of the lodge by adding two small lots as shown on drawing B.
4. Maintain in its current form, the pedestrian path from the north parking lot and arrival point to the lodge.
5. Keep vehicular traffic and parking facilities behind cottages in order to maintain pedestrian priorities on-site.



SITE PLAN

LAKE CRESCENT LODGE

DRAWING C

Plantings and Materials

1. Reestablish and maintain plantings along main entry path.
2. Retain remnant foundation of horseshoe pit as edge of planting area buffer between cottages and entry path.
3. When new plants are required to replace diseased or decayed plants or to establish new areas those plants will be selected from a list of appropriate plant materials approved by Olympic National Park Staff Biologist. The use of non-indigenous plants is strongly discouraged.

Maintenance

1. In redeveloping this fragile cultural landscape, care should be given to the maintenance of old and new plant materials. It is especially important to excercise extreme caution in pruning plant materials both in order to maintain safety and access and maintain the ambience of a wilderness environment.
2. Develop an overall landscape maintenance program aimed at retaining the character and integrity of the site as developed.

BUILDING RECOMMENDATIONS

Target Objectives for Building Development

Expanded visitor facilities at the Lake Crescent Lodge site was called for as part of a 1976 National Park Service Development Concept Plan (DCP) and Environmental Assessment of Barnes Point. In order to meet expansion objectives, contracts between the concessionaire of the Lake Crescent Lodge Facility and Olympic National Park were structured around a program of expansion over the life of the contract. The development program described in the contract was divided into the five areas: visitor accomodations, employee housing, food and support services within Lake Crescent Lodge, support facilities and recreational development. Specific target objectives in the contracts are described as being firm with certain negative financial impact for noncompliance, but "much of the detail is adaptable".

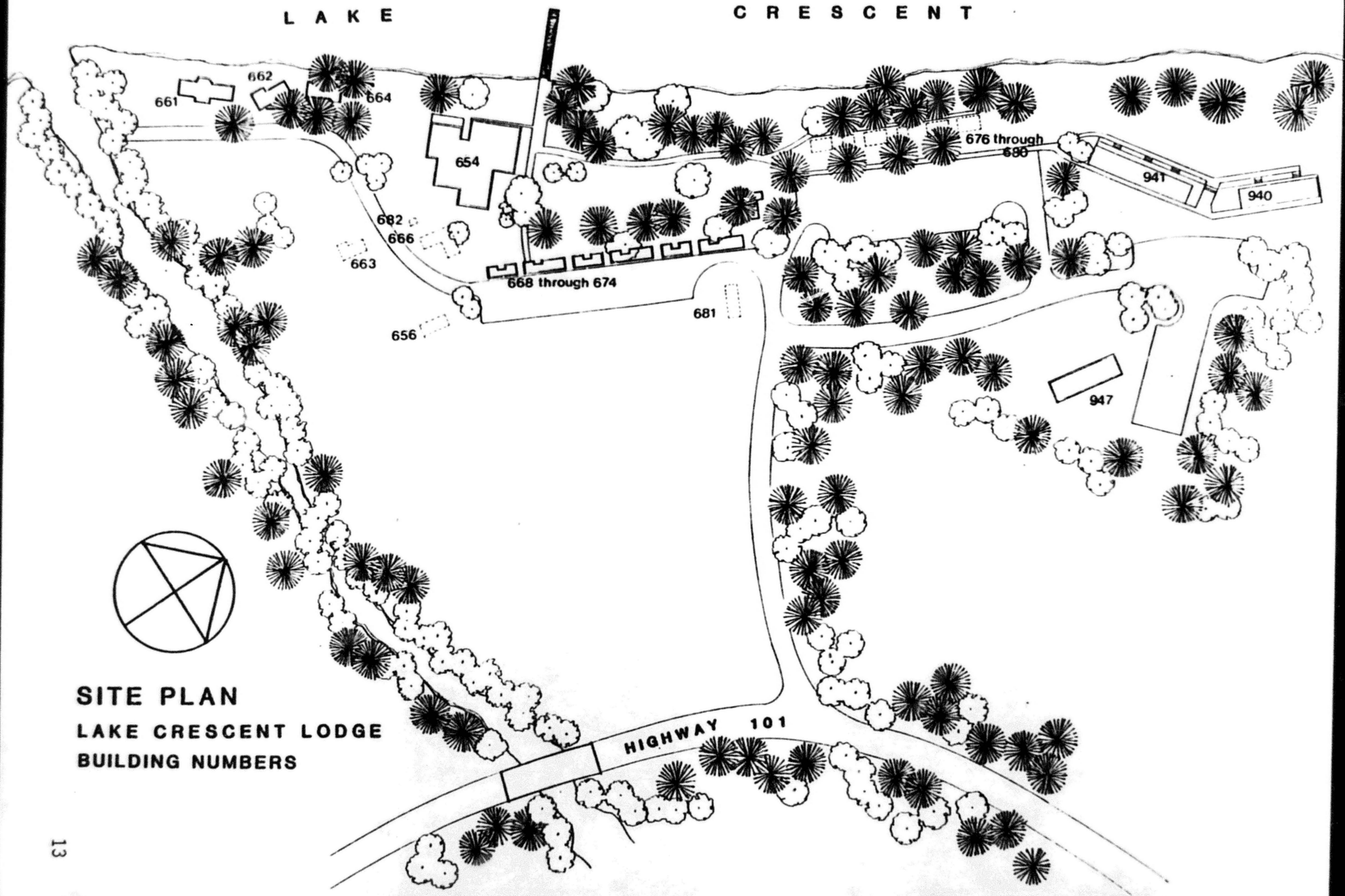
The task at nand becomes one of making sure the details involved in the total development are adaptable to the expectations of all parties involved. To facilitate this end, the five objectives outlined as developer responsibility will be discussed as they relate to satisfying the needs of the concessionaire, park and visitor while assuring the integrity of the historic resource.

Visitor Accomod tions

Target objectives for overnight visitor accomodations call for expanding the current 54 unit capacity to 110 units and to provide gift shop, front desk, and business office away from the lakeside of the lodge building or in a new, separate building. Improvements to existing units and suggested composition of new units to make up the 110 total include:

1.) Meetings with involved parties concluded that the nine units in the existing second floor of the main lodge building should be maintained in their historic use as rooms without individual baths. Discussion of removing partitions between certain rooms to create conference space was dropped. It was suggested that one of these rooms could serve as an office for the facility manager if required. It was suggested that both bathrooms on this level have the bathtubs removed and replaced with shower stalls. These rooms will maintain their current historic character which should include appropriate furnishings. Life safety requirements will be met as required, again with attention to appropriate intervention and detailing.

2.) Ten units in the existing one-story motel building (blds. 940, 941) are to be appropriately redecorated including paint, carpeting, draperies, lamps and other small furniture and accessories. Major furniture will be replaced as necessary and mattresses replaced as needed in the opinion of the National Park Service.



SITE PLAN

LAKE CRESCENT LODGE

BUILDING NUMBERS

3.) Ten units in the existing two-story motel building will receive improvements similar to those described in number 2 above.

4.) Four units in three cabins (blds. 661, 662 and 664) to the west of the lodge will be rehabilitated to re-establish a 30-50 year life complying to the Secretary of the Interior's Standards for Rehabilitation.

5.) Approximately seventy-seven additional units called for may include the current row of cabins (blds. 668-674) adjacent to the lodge. These represent 14 total units of which 4 have 2 bedrooms. If these units are to be retained, they are to be fully rehabilitated to re-establish a firm 30-50 year useful life. Major corrective foundation work is required on these cabins as well as updating utilities. Code requirements must also be met. Retention of these cabins is preferred. A detailed analysis of rehabilitation verses removal will be conducted by architectural consultants in early December.

Buildings 675 through 680 will be withdrawn from concessionaire use and will be scheduled for removal beginning with the fifth year of their current contract. Compliance with internal Park Service policy is required and will be handled by the Pacific Northwest Regional Office.

If buildings 668-674 are to be renovated for visitor rental, they will provide a total of 14 of the suggested 77 units, leaving 63 to be added through new construction. Placement of these units, and materials to be used in their construction will be prescribed by park and regional professionals in order to protect historical and site integrity and to incorporate such construction into long-term development on Barnes Point.

Two alternatives for gift shop, registration and office location were suggested. One plan is to relocate these functions away from the lakeside portion within the existing lodge. The second solution calls for a new facility for these functions separate from the main lodge. The park was firm in their desire to retain these functions in the existing lodge, preferably surrendering their current lakeside location for less critical space in the building.

Employee Housing

Doubling overnight accomodations will require significant staffing increases. Since all current employee housing, except for the manager's unit over the current cocktail lounge, will be withdrawn from use, space must be provided according to numbers projected by the concessionaire. Contract requirements call for a facility that can consist of either separate cabins or dormitory, not to exceed two stories. The basic style of two people per room, with an associated group living area for several rooms is desirable. Placement of these units must conform to long range plans for the total site as well as serve the immediate requirements of the concessionaire. Design and location criteria will be forwarded by park and regional staff.

Food and Support Services Within Lodge

A dining area with lakeside view, approximately 30 tables and 120 seats, that retains the atmosphere of the existing lodge building is called for in development plans. An expanded cocktail lounge is also required. Various rearrangements of the existing lodge have been discussed. Specific proposals must be tied directly to the requirements necessary to expand capacity to serve the projected 110 unit objective while complying with the Secretary's Standards and other codes and regulations.

As a result of a planning session held in August of 1983, representatives from National Park Concessions forwarded a letter to Park Superintendent Chandler through the Denver Service Center outlining their concerns for an expanded lodge facility. Their desires closely parallel those expressed in the demands of their contract with the park with few exceptions. Their major concerns with qualifying and support data from other persons involved in the planning are listed below.

Dining Room:

- Suggested seating in the dining room is one-hundred with a general square footage of 2,000. This square footage contemplates one entry/exit for public use and one entry/exit between kitchen and dining. The one entry situation is highly desirable to provide control needed in payment of meal check and for seating control.

- The dining room should be all tables for flexibility in use by park visitors as well as group meetings or banquets.

- A fireplace is not desirable in the dining room. High ceilings can facilitate exhaust of stale air but cause some energy problems.

- The dining room should join the kitchen so as to reduce travel distance to the customer. Consideration should be given to treatment of windows that face the lake so sun infiltration can be controlled.

- Natural ventilation should be considered since air conditioning is probably not justified on a cost-benefit ratio.

Kitchen:

- A kitchen with a square footage of 2,000 is highly durable, but a minimum of 1,500 should be provided to cover preparation and cooking, pantry, warewashing, walk-in deep freeze, walk-in meat/dairy/ vegetable and fruit refrigerated storage, and dry storage.

- A four-hundred square foot employee dining area near the kitchen is also desirable.

Cocktail Lounge/Bar:

- The concessionaire suggests locating the cocktail lounge/bar so as to take advantage of the lake view, contain about 600 square feet and service approximately 40 customers at one time.

- Within the 600 square feet a one entry/exit, except emergency exit, should be developed along with proper storage for the bar itself.

Restrooms:

- The space for the men and women restrooms should meet the code requirements of the facility of a 100 seat dining room, 40 person coctail lounge, sales and lobby area. Restrooms should be located convenient to all the above mentioned functions.

Additional Space:

- The desire for meeting rooms and additional office space was expressed by the concessionaire on the second floor of the tavern, if sufficient square footage was available. The concept of providing meeting rooms on the second floor was rejected as it would require unacceptable loss of historic fabric. The park did want the option of locating one small meeting room adjacent to the kitchen if possible.

- The concessionaire also commented on properly locating mechanical space, the possibility of requiring additional space in a basement level, location of service entries and expressed a desire to be part of any future planning that would affect their operations.

Support Facilities

Buildings 666, 656, 657 and 682 are currently used for laundry, maintenance, storage and similar functions respectively. Concessionaire contracts call for vacating these facilities no later than the sixth year of the current contract. Such action requires compliance with Park Service policy and will be handled through the Pacific Northwest Regional Office. It is suggested that the replacement of these spaces should be developed in conjunction with new employee or visitor facilities, or as separate service buildings that confirm to design and long-term needs of the total facility.

Recreational Development Plan

This plan should propose such facilitating services that the concessionaire would provide to encourage lake recreation, hiking, bicycling, group travel and other activities to other points of Olympic National Park for day trips. Various levels of satisfying such a plan are outlined in the contract, the least being that the resort serve as

a waystop or inn of convenience while the optional development provides a source to carry Park objectives and ideals to the visitor by actively encouraging and facilitating park related experiences, both active and passive, and both within and outside the immediate site.

CONDITION OF BUILDING FABRIC AND CODE COMPLIANCE FOR DEVELOPMENT OBJECTIVES

Introduction

The physical condition of Lake Crescent Lodge, and how that condition relates to proposed development at the site, has been examined by engineering and architectural staff of the Denver Service Center and architectural staff of the Pacific Northwest Region. A detailed structural analysis for foundation improvements has also been prepared by a private engineering firm from Seattle, Washington (Systems Architects Engineers, P.S., 1317 Dexter Avenue North, Post Office Box 19320, Seattle, Washington, 98109). Comments from park maintenance staff as well as the current concessions personnel has also been taken into consideration.

Structural Condition

The foundation of the lodge consists of 6 x 6 wood posts atop one foot square pre-cast concrete pads. Many of the posts have wood shims possibly indicating earlier re-leveling attempts. One post prone on the ground belongs under a beam splice near the stone fireplace. Other posts in the later addition are raised from the concrete pads. In general, the posts appear to be in good condition. Crawl space head room from one foot to two feet is found throughout all of the original building and additions.

Spot elevations taken at various control points throughout the building indicate settlement up to six inches in approximately sixty feet in places. Settlement was particularly noticeable around fireplace areas. Wood framing members have little or no rot or noticeable insect attack. The only exception are the ends of the main lobby perimeter beams that are pocketed into the stone fireplace and the north dining room perimeter beam bearing on soil.

Aside from the noticeable foundation settlement, the first floor appears in good condition. Gaps are found around the windows of the porch off the main lobby which is attributable to foundation settlement. The stone foundation has severely cracked starting at the corner of the opening. This is probably due to loads imposed at the beam pockets from the perimeter beams below, and/or expansion of the steel lintel of the opening.

The fireplace in the cocktail lounge is in good condition with no visible cracks.

The condition of additions housing the kitchen support areas and the dining room is marginal. Roof rafter members over these sections consists of a series of additions that cause some problems structurally. If these sections are to be retained a more thorough analysis will be required. These sections rest on an approximately three inch concrete floor with a one inch decking. Some cracking and deterioration of this slab is noticeable at the back service porch.

No structural problems of immediate concern were found on the second floor of the lodge. As with the first floor, windows and doors are racked from foundation settlement.

In the main lodge, the attic floor joists (second floor ceiling joists) are lapped over the hallway walls below, with the joists lapping over alternate walls. Therefore, the hallway walls are bearing walls. This fact must be taken into consideration in a space change proposal on the second floor. Room partitions are non-bearing.

As in the lower floors, windows are severely racked with large gaps around them.

Rafter bracing has been added to reduce the effective rafter span to one-third the original.

Concessionaire representatives on site indicate that all roof sections leak and are in need of replacement.

Mechanical Systems

Mechanical systems are generally well maintained. The plumbing system has had some exposed and makeshift alterations and repairs. The water supply and drainage system are generally tight and severable.

Heating in the upper floor guest rooms and baths is provided by electric baseboard heat. The remainder of the building is heated by propane space heaters. There is no central heating system. The building is completely uninsulated.

An automatic fire sprinkling system was installed in the lodge in 1975. This four inch system has been properly installed and well maintained. The crawl space is not sprinkled and the distance from attic peak to sprinklers exceeds current code requirements.

Other mechanical code violations include no discharge pipe on the water heater's temperature and pressure relief valves, no restroom ventilation, improper propane fired appliance venting with respect to clearances and terminations, and the need of replacing some fire sprinkling heads.

Electrical Systems

The lodge is fed by two overhead service lines from a pole mounted single phase transformer rated at 7200-120/240 volt, with primary fusing, and with metering on an intermediate pole midway between the transformer pole and the building.

One service feed goes to a 400 amp fused switch mounted on the outside of the southeast corner of the kitchen area, with separate feeds to switches and breaker panels on the same wall to feed loads in the building.

The second feed goes to another 400 amp fused switch on the inside of the food storage room. An alarm and exit lights breaker panel is fed from the line side of the switch, and from the load side separate feeds go to circuit breaker panels on interior wall, for upstairs heaters and kitchen equipment.

Lighting in the main lobby is by incandescent light from suspended fixtures controlled by rotary switches besides the desk and protected by four unit fuse panel on the stair landing. This panel also provides protection for the second floor lighting which consists of a single incandescent fixture in the center of each room with pull chain control. Each room also has a triplex receptacle at floor level. Lighting in the attic is by incandescent lamps on porcelain lampholders fed by knob and tube wiring on the roof. Supplemental lighting in the lobby is provided by wall mounted incandescent fixtures fed from a cable around the building on a wooden parapet with splices in four inch boxes on the parapet. There are some recessed receptacles in the lobby walls which feed additional wall and counter lights. Dining room lighting is by six recessed flourescent fixtures with control dimmer switches. Two of these fixtures were not operating.

Electric resistance heaters are installed in each bedroom, toilets, and bathrooms upstairs, with individual thermostat control, fed from a Square D load center on the stairs to the attic with wiring distribution in conduit in the attic and conduit drops in the exterior walls to each heater.

There is a secondary feed that goes from the fused switch, overhead to the meter pole to feed the cabins. Three wire service on spool insulators are hooked between cabins with a tap to a two-fuse box on each cabin.

A smoke detector fire alarm system is installed in the building, supplied by Amex Security Corporation, Long Beach, California 90806, phone number 213-417-1849, with control unit #ML-24-DS, battery, and battery charger in the food storage room, detectors located in the upstairs hallway, apartment, kitchen, corridor and office. The zoned alarm panel is in the lobby beside the reception desk with a Faraday fire bell #3440 in the upstairs hallway, lounge, and lobby. Manual pull stations are located at all building exits.

Exit lights are installed at all exterior doors, fed from a breaker in the same panel as the fire alarm system, in the food storage room.

Load readings were taken on both incoming services with 100 amps being the highest reading on one leg of the service to the kitchen area.

Code and Miscellaneous Considerations

Any major use changes of principle areas of the facility will require life safety and code compliance as required. Major changes to the physical configuration of the facility and anticipated increased capacity will require major relocations and installations of mechanical and electrical services. If current loading capacities are to change with a new use, a complete structural analysis may be required. It should also be mentioned that some improvements have recently been made to the facility (ie. fire sprinkling system) that alleviate some code problems, particularly second floor egress.

Exterior

Some minor problems at the facility have been noted in inspection reports recently completed at the facility and will need to be addressed. Do not consider this list to be comprehensive, but more a sampling of general maintenance and repair concerns.

- Where wood foundation skirting is in contact with soil, it was found to be rotting and in need of replacement.
- Veranda and porch decking nails are popping and need to be reset and properly treated for paint.
- Gutter downspouts are either clogged or disconnected in many areas. Drainage water is not carried far enough away from the building. Downspouts are two inches in diameter which is undersized for the debris that collects.
- Exit stairs on the south side are unacceptable structurally and code-wise. Their uninterrupted run is excessive, and the intermediate supports are inadequate.
- The porch roof needs repair of the hip roof flashing.
- The roof portions of the addition sections of the building are poorly detailed and are the cause of several maintenance problems.

Interior

- Several problems result in the building being uninsulated. Several routes of entry are currently open to bats and other pests in all portions of the building. A program of insulating and properly screening vented areas for year round use would remedy these problems.

- The hot water heater room firewall needs to be taped and finished for fire separation.

HISTORICAL STATUS OF BUILDINGS

Introduction

Historical data collected by the Denver Service Center and Regional office personnel of the Park Service provides specific information in regard to areas that need be rehabilitated at the Lake Crescent site. Work discussed thus far in the report takes this information into consideration when particular action is scheduled for structures on site. Areas of necessary compliance with the Secretary's Standards or other regulating criteria is outlined. Particular structures and areas within the lodge itself to be rehabilitated are briefly outlined below. More specific information will be provided in the following section of Recommended Approach and as work procedes in the Historic Structures Report.

Buildings to be Demolished

It was agreed that the schedule for the removal of visitor cabins numbers 675 through 680 and support facilities numbers 666, 656, 657 and 682 should be adhered to as outlined in the concessionaire's current contract with the park. Again, appropriate compliance measures that must be addressed will be handled through the Pacific Northwest Regional Office.

Buildings to be Demolished or Rehabilitated

Visitor cabins numbers 668-674 will be evaluated by Historic Architect Al Staehli, A.I.A. and regional staff the first week of December for potential rehabilitation. It is understood that major foundation, sill and floor joist work will be required if rehabilitation is undertaken as well as a complete evaluation of existing utilities and bathroom facilities. The structures are of major significance to the site and rehabilitation is desired over demolition and reconstruction if conditions warrant.

Buildings to be Rehabilitated

It was agreed that cabins numbers 661, 662 and 664 should be rehabilitated to reestablish a 30-50 year life and remain overnight visitor accomodations following the Secretary's Standards and other controlling Park Service Regulations.

Exterior features to be preserved at the Lodge facility itself are as follows.

1.) The physical separation of the original Singer's tavern portion of the facility (2-1/2 story portion) should be maintained when additions or modifications to adjacent building portions are proposed to the west facade. The 1950's cocktail lounge and second story apartment addition currently in place joins the original structure well. The roof portion of the addition does not meet the facade of the original structure - giving an implied separation. The physical connection of the two portions in plan is also recessed, strengthening the idea of separation. This concept should continue in any new construction.

2.) The dining room portion of the facility is an early and significant addition and should be maintained in the east and southeast corner facade. Additions to the back of these facades are not considered significant and can be modified or replaced as required. The scale, detailing and materials of any new additions to the complex must complement but not compete with the existing structure (see drawing no. 1).

3.) The main entry on the north porch under the main gable roof portion of the original structure should be maintained.

4.) The fire exit over the north porch of the original structure should be relocated in a compatible, less conspicuous location.

5.) Original building materials and details of the original lodge and other buildings should be repaired and/or replaced with in-kind materials as required for efficient operation. More specific details will be provided in the completed Historic Structures Report in these areas.

Interior features to be preserved or rehabilitated in the lodge interior include:

1.) All original features of the main floor of the 2-1/2 story lodge should be preserved. Minor modification made to this space over the years will be evaluated as being admissible according to new functions that will occur in the space and historic integrity of the whole space. Some existing fixtures and equipment may be compatible within the rehabilitated facility and should be considered for reuse. Removal of any equipment or fixtures must be authorized by

the Pacific Northwest Regional Office of the Park Service. This space should not be divided by walls but should remain open. More specific information regarding the rehabilitation of this space as well as appropriate furnishings and accessories, including the reuse of some existing equipment, will be discussed in the Historic Structures Report.

2.) Individual guest rooms above the original lodge portion should be rehabilitated. Code compliance and the addition of an office as well as modification to the bathroom as discussed earlier are understood to be given on this floor. The installation of the fire sprinkling system has greatly modified code requirements and egress requirements on the second level.

3.) Retaining the window sequence, with the possible addition of original clearstory windows in the existing dining room must be included when functions are defined for these spaces (see drawing no. 1).

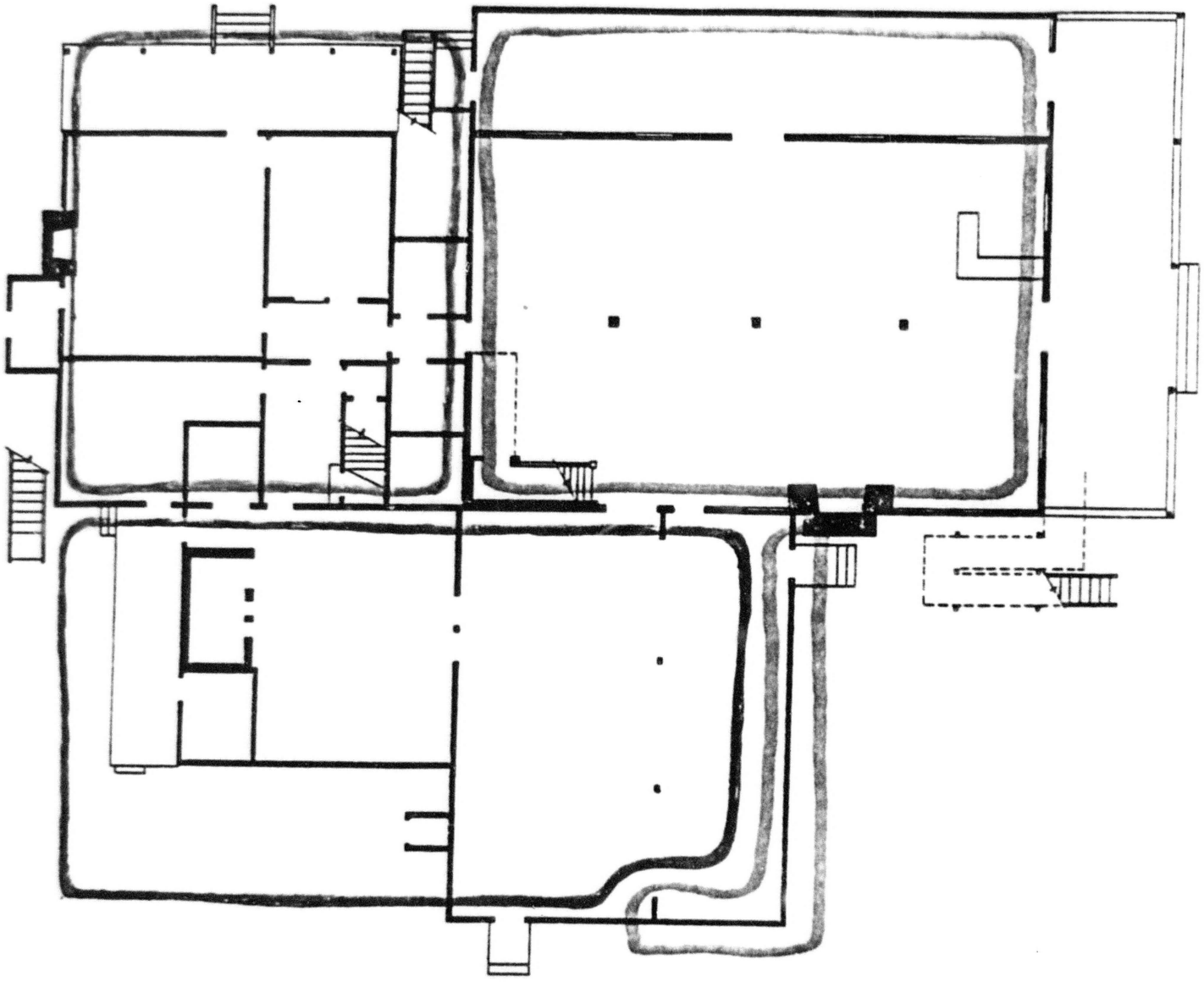
4.) The glassed lakeside porch, though not an original feature should be retained.

5.) The 1950's addition containing the existing coctail lounge and manager's apartment is not of primary significance. Modifying spaces within the existing exterior walls of this building portion is recommended.

6.) Later additions and modifications as outlined on drawings no. 1 and 2 are not considered significant and can be removed or modified as required after compliance measures with regional staff are addressed.

7.) See other sections to be restored, rehabilitated, or demolished as required on drawings no. 1 and 2.

DRAWING NO. 1



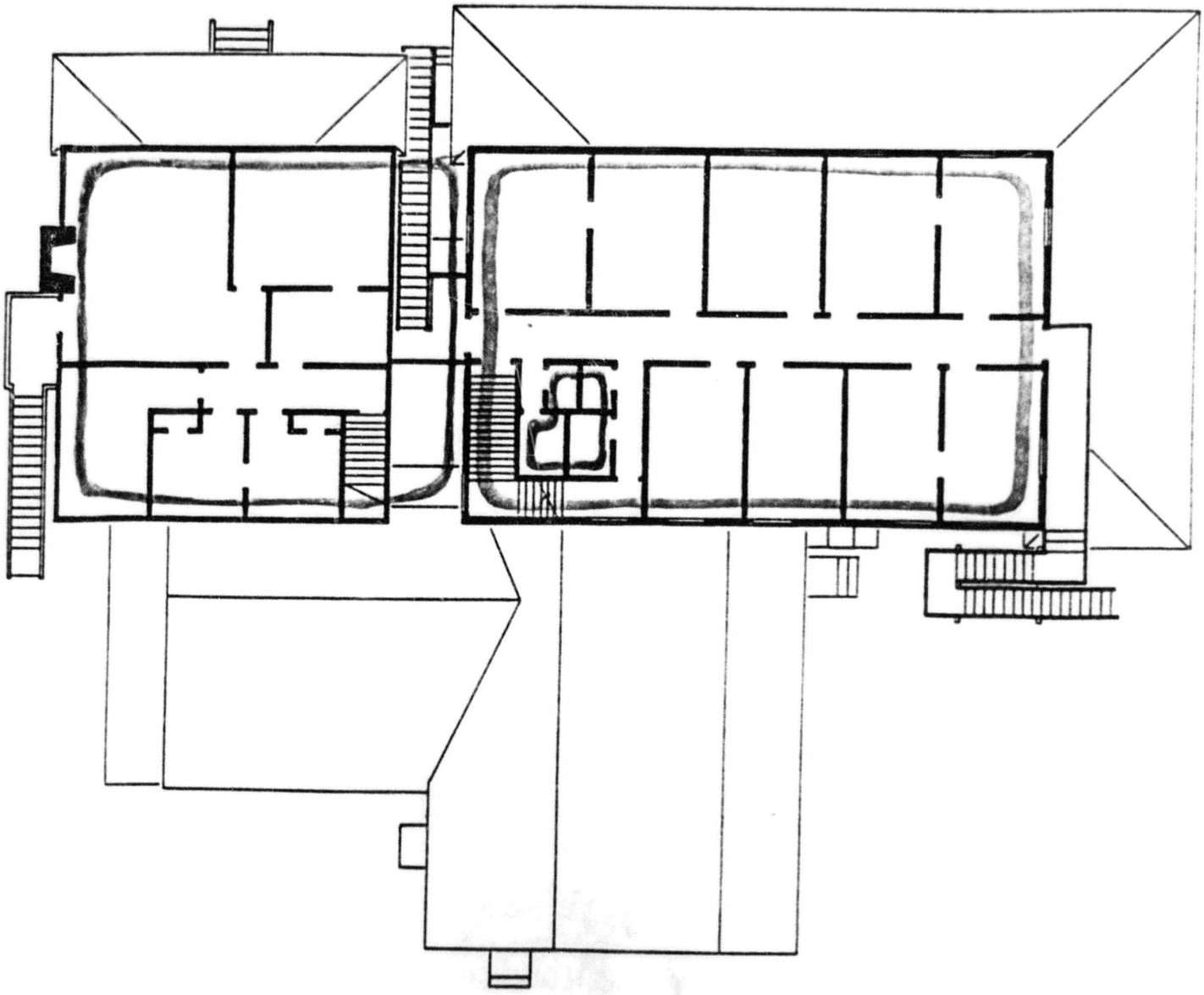
LAKE CRESCENT LODGE

FIRST FLOOR

Areas Restored/Rehabilitated

Areas Modified as Required Within Exterior Walls

New Construction



LAKE CRESCENT LODGE

SECOND FLOOR

Areas Restored/Rehabilitated

Areas Modified as Required Within Exterior Walls

RECOMMENDED APPROACH

Bubble diagrams with approximate square footage allowed for recommended interior spacial arrangement follows.

Public access (see green dotted line) to the facility is through the historic entry under the open front porch. The historic lobby area will remain, hopefully with some furnishings currently found on site arranged around the fireplace. Registration and gift shop functions will be located in the space currently occupied by the dining room. The window walls that will be retained in this space will provide pleasing light as well as offer a view of the historic site. Restrooms will also be located in this space with access from the lobby area and kitchen. This hallway also provides access to the manager's upper story apartment and office.

Five different dining situations are offered (outlined in purple). One is located in the main lodge opposite the lobby. Next to it is the lake front, glassed porch that will be shared space with the cocktail area (outlined in orange). The flexibility in this shared space will allow for more intimate dining and cocktail service during slower times of the day or in off-season, will separate smaller parties from larger groups that will be accomodated in other dining areas, and will provide "waiting" areas in the bar for guests. In order for appropriate circulation to occur between the cocktail/dining and lobby space, railings and carefully placed furnishings are suggested.

A major dining area, located in the current cocktail/office space, should be designed so it can be closed off from adjacent spaces. This could be done with folding doors between the circulation space that occurs naturally between the two building portions. This space could easily accomodate larger groups. It is recommended that the porch off of this space remain open until seasonal business conditions warrant glassing it in. An outdoor dining and cocktail deck is suggested

away from the historic lodge facade as shown. It should be located below the existing porch levels, near ground level, so as not to interfere with views from interior spaces.

Service for all of these spaces (shown in red) will occur as shown. New doorways and passages will have to be added as approved to historic fabric.

Except for emergency exiting all dining guests will pass the hostess control point upon arrival and departure.

A kitchen, support and mechanical area of 1,700 plus square feet is shown (rust color) as added and rehabilitated space. It is felt that the size, location and configuration of this space will be adequate for projected needs. Projecting this space beyond limits suggested is not recommended. If requirements dictate such a move in the planning process, concurrance with regional and park staff of the Park Service is manditory.

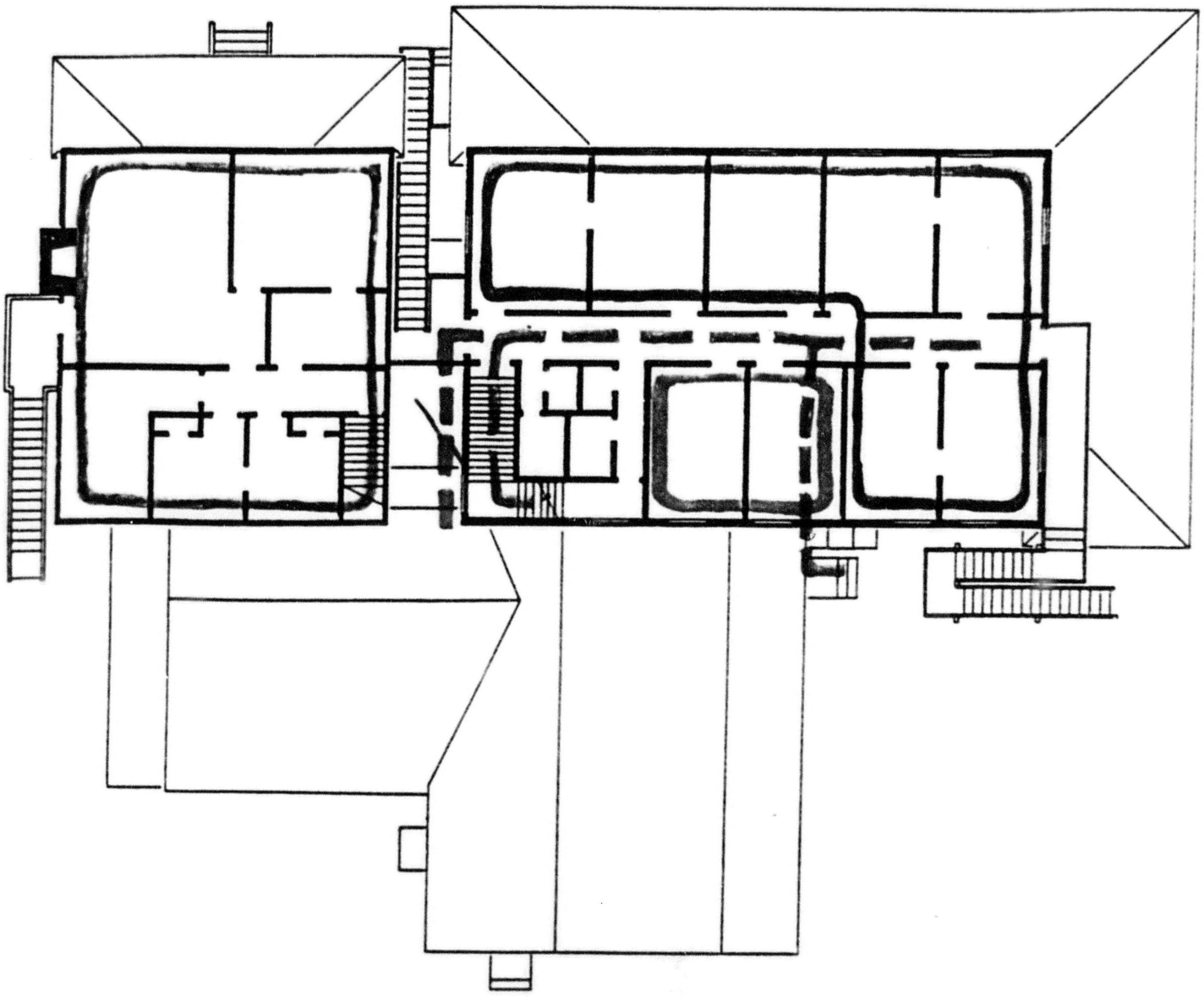
Improvements to the second floor of the original lodge portion call for moving the existing fire exit from the front of the building, providing office space for the manager and appropriately updating the bathrooms. The guest rooms will retain their historic character but will receive necessary code and mechanical improvements.

Central access to the manager's apartment on the second level will have to be reconstructed in rehabilitation plans. General code, mechanical, and surface improvements are also called for in these spaces.

Suggestion for interior surface materials for all public spaces, as well as furnishings and accessories will be forthcoming as part of the completed Historic Structures Report.

It is understood that the introduction of mechanical equipment for a year round facility will require some intrusions to existing spaces. Every effort must be made to make such installations as inconspicuous as possible, particularly in the original lodge portion of the complex. Exposed, carefully planned and installed equipment is preferred in these spaces over "hiding" systems in new soffits or enclosures. New electrical work should generally be in-wall since access is available in crawl spaces and attic.

DRAWING NO. 4

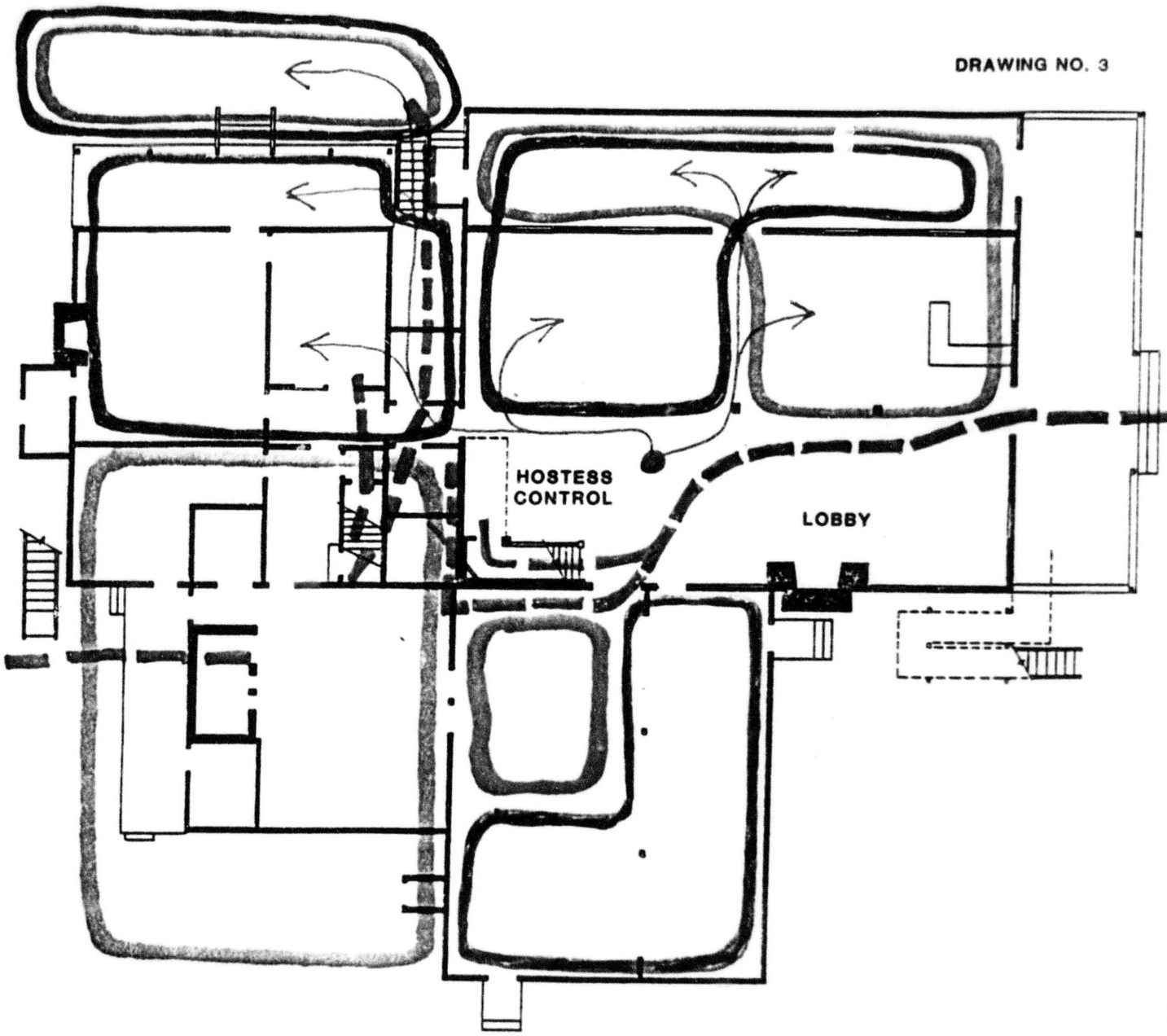


LAKE CRESCENT LODGE

SECOND FLOOR

- Guest Rooms
- Office/Storage/Circulation to Exit
- Manager's Apartment
- Public/Emergency Access
- Service Access

DRAWING NO. 3



LAKE CRESCENT LODGE

FIRST FLOOR

- Dining Area (Interior approx. 1,450 sq. ft./ 625 sq. ft. shared with cocktail area; exterior deck space to be determined.)
- Cocktail Area (Interior approx. 400 sq. ft./ 625 sq. ft. shared with dining area; exterior deck space to be determined.)
- Guest Registration and Gift Shop (Approximately 1,100 sq. ft.)
- Public Restrooms (Approximately 300 sq. ft.)
- Kitchen and Support Facility (Approximately 1,775 sq. ft.)
- Major Visitor Circulation
- Secondary Visitor Circulation
- Service Access

APPENDIX

The Secretary of the Interior's

Standards for Rehabilitation

and Guidelines for

Rehabilitating Historic Buildings (Revised 1983)

U.S. Department of the Interior
National Park Service
Preservation Assistance Division
Washington, D.C.

The "Secretary of the Interior's Standards for Historic Preservation Projects" were initially prepared in 1979 by W. Brown Morton III and Gary L. Hume. The updated and expanded Guidelines for Rehabilitating Historic Buildings that follow were developed by Gary L. Hume and Kay D. Weeks, Technical Preservation Services, Preservation Assistance Division, with the assistance of the professional and support staff.

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THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising Federal agencies on the preservation of historic properies listed or eligible for listing in the National Register of Historic Places. In partial fulfillment of this responsibility, the Secretary of the Interior's Standards for Historic Preservation Projects have been developed to direct work undertaken on historic buildings.

Initially used by the Secretary of the Interior in determining the applicability of proposed project work on registered properties within the Historic Preservation Fund grant-in-aid program, the Standards for Historic Preservation Projects have received extensive testing over the years--more than 6,000 acquisition and development projects were approved for a variety of work treatments. In addition, the Standards have been used by Federal agencies in carrying out their historic preservation responsibilities for properties in Federal ownership or control; and by State and local officials in the review of both Federal and nonfederal rehabilitation proposals. They have also been adopted by a number of historic district and planning commissions across the country.

The Standards for Rehabilitation (36 CFR 67) comprise that section of the overall historic preservation project standards addressing the most prevalent treatment today: Rehabilitation. **"Rehabilitation" is defined as 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 are as follows:

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.

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.

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.

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.

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

6. 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.

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.

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

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.

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.

In the past several years, the most frequent use of the Secretary's "Standards for Rehabilitation" has been to determine if a rehabilitation project qualifies as a "certified rehabilitation" pursuant to the Tax Reform Act of 1976, the Revenue Act of 1978, and the Economic Recovery Tax Act of 1981, as amended. The Secretary is required by law to certify rehabilitations that are "consistent with the historic character of the structure or the district in which it is located." The Standards are used to evaluate whether the historic character of a building is preserved in the process of rehabilitation. Between 1976 and 1982 over 5,000 projects were reviewed and approved under the Preservation Tax Incentives program.

As stated in the definition, the treatment "Rehabilitation" assumes that at least some repair or alteration of the historic building will need to take place in order to provide for an efficient contemporary use; however these repairs and alterations must not damage or destroy the materials and features—including their finishes—that are important in defining the building's historic character.

In terms of specific project work, preservation of the building and its historic character is based on the assumption that (1) the historic materials and features and their unique craftsmanship are of primary importance and that (2), in consequence they will be retained, protected, and repaired in the process of rehabilitation to the greatest extent possible, not removed and replaced with materials and features which appear to be historic, but which are--in fact--new.

To best achieve these preservation goals, a two-part evaluation needs to be applied by qualified historic preservation professionals for each project as follows: first, a particular property's materials and features which are important in defining its historic character should be identified. Examples may include a building's walls, cornice, window sash and frames and roof; rooms, hallways, stairs, and mantels; or a site's walkways, fences, and gardens. The second part of the evaluation should consist of assessing the potential impact of the work necessary to make possible an efficient contemporary use. A basic assumption in this process is that the historic character of each property is unique and therefore proposed rehabilitation work will necessarily have a different effect on each property; in other words, what may be acceptable for one project may be unacceptable for another. However, the requirement set forth in the definition of "Rehabilitation" is always the same for every project: those portions and features of the property which are significant to its historic, architectural, and cultural values must be preserved in the process of rehabilitation. To accomplish this, all ten of the Secretary of the Interior's "Standards for Rehabilitation" must be met.

GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

The Guidelines were initially developed in 1977 to help property owners, developers, and Federal managers apply the Secretary of the Interior's "Standards for Rehabilitation" during the project planning stage by providing general design and technical recommendations. Unlike the Standards, the Guidelines are not codified as program requirements. Together with the "Standards for Rehabilitation" they provide a model process for owners, developers, and federal agency managers to follow.

It should be noted at the outset that the Guidelines are intended to assist in applying the Standards to projects generally; consequently, they are not meant to give case-specific advice or address exceptions or rare instances. For example, they cannot tell an owner or developer which features of their own historic building are important in defining the historic character and must be preserved--although examples are provided in each section---or which features could be altered, if necessary, for the new use. This kind of careful case-by-case decisionmaking is best accomplished by seeking assistance from qualified historic preservation professionals in the planning stage of the project. Such professionals include architects, architectural historians, historians, archeologists, and others who are skilled in the preservation, rehabilitation, and restoration of historic properties.

The Guidelines pertain to historic buildings of all sizes, materials, occupancy, and construction types; and apply to interior and exterior work as well as new exterior additions. Those approaches, treatments, and techniques that are consistent with the Secretary of the Interior's "Standards for Rehabilitation" are listed in the **"Recommended"** column on the left; those approaches, treatments, and techniques which could adversely affect a building's historic character are listed in the **"Not Recommended"** column on the right.

To provide clear and consistent guidance for owners, developers, and federal agency managers to follow, the "Recommended" courses of action in each section are listed in order of historic preservation concerns so that a rehabilitation project may be successfully planned and completed--one that, first, assures the preservation of a building's important or "character-defining" architectural materials and features and, second, makes possible an efficient contemporary use. Rehabilitation guidance in each section begins with protection and maintenance, that work which should be maximized in every project to enhance overall preservation goals. Next, where some deterioration is present, repair of the building's historic materials and features is recommended. Finally, when deterioration is so extensive that repair is not possible, the most problematic area of work is considered: replacement of historic materials and features with new materials.

To further guide the owner and developer in planning a successful rehabilitation project, those complex design issues dealing with new use requirements such as alterations and additions are highlighted at the end of each section to underscore the need for particular sensitivity in these areas.

Identify, Retain, and Preserve

The guidance that is basic to the treatment of all historic buildings—**identifying, retaining, and preserving** the form and detailing of those architectural materials and features that are important in defining the historic character— is always listed first in the "Recommended" column. The parallel "Not Recommended" column lists the types of actions that are most apt to cause the diminution or even loss of the building's historic character. It should be remembered, however, that such loss of character is just as often caused by the cumulative effect of a series of actions that would seem to be minor interventions. Thus, the guidance in all of the "Not Recommended" columns must be viewed in that larger context, e.g., for the total impact on a historic building.

Protect and Maintain

After identifying those materials and features that are important and must be retained in the process of rehabilitation work, then **protecting and maintaining** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, protective plywood, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair

Next, when the physical condition of character-defining materials and features warrants additional work **repairing** is recommended. Guidance for the repair of historic materials such as masonry, wood, and architectural metals again begins with the least degree of intervention possible such as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading them according to recognized preservation methods. Repairing also includes the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing parts of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute material is acceptable if the form and design as well as the substitute material itself convey the visual appearance of the remaining parts of the feature and finish.

Replace

Following repair in the hierarchy, guidance is provided for **replacing** an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair (for example, an exterior cornice; an interior staircase; or a complete porch or storefront). If the essential form and detailing are still evident so that the physical evidence can be used to re-establish the feature as an integral part of the rehabilitation project, then its replacement is appropriate. Like the guidance for repair, the preferred option is always replacement of the

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entire feature in kind, that is, with the same material. Because this approach may not always be technically or economically feasible, provisions are made to consider the use of a compatible substitute material.

It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature under certain well-defined circumstances, they never recommend removal and replacement with new material of a feature that--although damaged or deteriorated--could reasonably be repaired and thus preserved.

Design for Missing Historic Features

When an entire interior or exterior feature is missing (for example, an entrance, or cast iron facade; or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting the historical appearance. Where an important architectural feature is missing, its recovery is always recommended in the guidelines as the first or preferred, course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desireable to re-establish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a second acceptable option for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created.

Alterations/Additions to Historic Buildings

Some exterior and interior alterations to the historic building are generally needed to assure its contined use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site; cutting new entrances or windows on secondary elevations; inserting an additional floor; installing an entirely new mechanical system; or creating an atrium or light well. Alterations may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character.

The construction of an exterior addition to a historic building may seem to be essential for the new use, but it is emphasized in the guidelines that such new additions should be avoided, if possible, and considered only after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alternative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed.

Additions to historic buildings are referenced within specific sections of the guidelines such as Site, Roof, Structural Systems, etc., but are also considered in more detail in a separate section, NEW ADDITIONS TO HISTORIC BUILDINGS.

Health and Safety Code Requirements; Energy Retrofitting

These sections of the rehabilitation guidance address work done to meet health and safety code requirements (for example, providing barrier-free access to historic buildings); or retrofitting measures to conserve energy (for example, installing solar collectors in an unobtrusive location on the site). Although this work is quite often an important aspect of rehabilitation projects, it is usually not part of the overall process of protecting or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features in the process of rehabilitation work to meet code and energy requirements.

Specific information on rehabilitation and preservation technology may be obtained by writing to the National Park Service, at the addresses listed below:

Preservation Assistance Division
National Park Service
Department of the Interior
Washington, D.C. 20240

Preservation Services Division
Southeast Regional Office
National Park Service
75 Spring St. SW., Room 1140
Atlanta, GA 30303

National Historic Preservation Programs
Western Regional Office
National Park Service
450 Golden Gate Ave.
Box 36063
San Francisco, CA 94102

Office of Cultural Programs
Mid-Atlantic Regional Office
National Park Service
143 S. Third St.
Philadelphia, PA 19106

Division of Cultural Resources
Rocky Mountain Regional Office
National Park Service
655 Parfet St.
P.O. Box 25287
Denver, CO 80225

Cultural Resources Division
Alaska Regional Office
National Park Service
2525 Gambell St.
Anchorage, AK 99503

BUILDING EXTERIOR

Masonry: Brick, stone, terra cotta, concrete, adobe, stucco and mortar

Masonry features (such as brick cornices and door pediments, stone window architraves, terra cotta brackets and railings) as well as masonry surfaces (modelling, tooling, bonding patterns, joint size, and color) may be important in defining the historic character of the building. It should be noted that while masonry is among the most durable of historic building materials, it is also the most susceptible to damage by improper maintenance or repair techniques and by harsh or abrasive cleaning methods. Most preservation guidance on masonry thus focuses on such concerns as cleaning and the process of repointing. For specific guidance on this subject, consult Preservation Briefs: 1, 2, 5, 6, and 7. (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving masonry features that are important in defining the overall historic character of the building such as walls, brackets, railings, cornices, window architraves, door pediments, steps, and columns; and joint and unit size, tooling and bonding patterns, coatings, and color.	Removing or radically changing masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Replacing or rebuilding a major portion of exterior masonry walls that could be repaired so that, as a result, the building is no longer historic and is essentially new construction.
	Applying paint or other coatings such as stucco to masonry that has been historically unpainted or uncoated to create a new appearance.
	Removing paint from historically painted masonry.
	Radically changing the type of paint or coating or its color.
Protecting and maintaining masonry by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features.	Failing to evaluate and treat the various causes of mortar joint deterioration such as leaking roofs or gutters, differential settlement of the building, capillary action, or extreme weather exposure.

Recommended	Not Recommended
Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.	Cleaning masonry surfaces when they are not heavily soiled to create a new appearance, thus needlessly introducing chemicals or moisture into historic materials.
Carrying out masonry surface cleaning tests after it has been determined that such cleaning is necessary. Tests should be observed over a sufficient period of time so that both the immediate effects and the long range effects are known to enable selection of the gentlest method possible.	Cleaning masonry surfaces without testing or without sufficient time for the testing results to be of value.
Cleaning masonry surfaces with the gentlest method possible, such as low pressure water and detergents, using natural bristle brushes.	Sandblasting brick or stone surfaces using dry or wet grit or other abrasives. These methods of cleaning permanently erode the surface of the material and accelerate deterioration.
	Using a cleaning method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures.
	Cleaning with chemical products that will damage masonry, such as using acid on limestone or marble, or leaving chemicals on masonry surfaces.
	Applying high pressure water cleaning methods that will damage historic masonry and the mortar joints.
Inspecting painted masonry surfaces to determine whether repainting is necessary.	Removing paint that is firmly adhering to, and thus protecting, masonry surfaces.
Removing damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., handscraping) prior to repainting.	Using methods of removing paint which are destructive to masonry, such as sandblasting, application of caustic solutions, or high pressure waterblasting.
Applying compatible paint coating systems following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting masonry.
Repainting with colors that are historically appropriate to the building and district.	Using new paint colors that are inappropriate to the historic building and district.

Recommended	Not Recommended
Evaluating the overall condition of the masonry to determine whether more than protection and maintenance are required, that is, if repairs to the masonry features will be necessary.	Failing to undertake adequate measures to assure the preservation of masonry features.
Repairing masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration such as disintegrating mortar, cracks in mortar joints, loose bricks, damp walls, or damaged plasterwork.	Removing nondeteriorated mortar from sound joints, then repointing the entire building to achieve a uniform appearance.
Removing deteriorated mortar by carefully hand-raking the joints to avoid damaging the masonry.	Using electric saws and hammers rather than hand tools to remove deteriorated mortar from joints prior to repointing.
Duplicating old mortar in strength, composition, color, and texture.	Repointing with mortar of high portland cement content (unless it is the content of the historic mortar). This can often create a bond that is stronger than the historic material and can cause damage as a result of the differing coefficient of expansion and the differing porosity of the material and the mortar.
	Repointing with a synthetic caulking compound.
	Using a "scrub" coating technique to repoint instead of traditional repointing methods.
Duplicating old mortar joints in width and in joint profile.	Changing the width or joint profile when repointing.
Repairing stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, composition, color, and texture.	Removing sound stucco; or repairing with new stucco that is stronger than the historic material or does not convey the same visual appearance.
Using mud plaster as a surface coating over unfired, unstabilized adobe because the mud plaster will bond to the adobe.	Applying cement stucco to unfired, unstabilized adobe. Because the cement stucco will not bond properly, moisture can become entrapped between materials, resulting in accelerated deterioration of the adobe.

Recommended	Not Recommended
Repairing masonry features by patching, piecing-in, or consolidating the masonry using recognized preservation methods. Repair may also include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of masonry features when there are surviving prototypes such as terra-cotta brackets or stone balusters.	Replacing an entire masonry feature such as a cornice or balustrade when repair of the masonry and limited replacement of deteriorated or missing parts are appropriate.
	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the masonry feature or that is physically or chemically incompatible.
Applying new or non-historic surface treatments such as water-repellent coatings to masonry only after repointing and only if masonry repairs have failed to arrest water penetration problems.	Applying waterproof, water-repellent, or non-historic coatings such as stucco to masonry as a substitute for repointing and masonry repairs. Coatings are frequently unnecessary, expensive, and may change the appearance of historic masonry as well as accelerate its deterioration.
Replacing in kind an entire masonry feature that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. Examples can include large sections of a wall, a cornice, balustrade, column, or stairway. If using the same kind of material is not technically or economically feasible, then a compatible subsitute material may be considered.	Removing a masonry feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and installing a new masonry feature such as steps or a door pediment when the historic feature is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historical appearance because the replaced masonry feature is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new masonry feature that is incompatible in size, scale, material and color.

Wood: Clapboard, weatherboard, shingles, and other wooden siding and decorative elements

Because it can be easily shaped by sawing, planing, carving, and gouging, wood is the most commonly used material for architectural features such as clapboards, cornices, brackets, entablatures, shutters, columns and balustrades. These wooden features--both functional and decorative--may be important in defining the historic character of the building and thus their retention, protection, and repair are of particular importance in rehabilitation projects. For specific guidance, consult Preservation Briefs: 9, 10, and "Epoxies for Wood Repair in Historic Buildings." (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving wood features that are important in defining the overall historic character of the building such as siding, cornices, brackets, window architraves, and doorway pediments; and their paints, finishes, and colors.	Removing or radically changing wood features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Removing a major portion of the historic wood from a facade instead of repairing or replacing only the deteriorated wood, then reconstructing the facade with new material in order to achieve a uniform or "improved" appearance. Radically changing the type of finish or its color or accent scheme so that the historic charcter of the exterior is diminished. Stripping historically painted surfaces to bare wood, then applying clear finishes or stains in order to create a "natural look." Stripping paint or varnish to bare wood rather than repairing or reapplying a special finish, i.e., a grained finish to an exterior wood feature such as a front door.
Protecting and maintaining wood features by providing proper drainage so that water is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.	Failing to identify, evaluate, and treat the causes of wood deterioration, including faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces, or insect or fungus infestation.

Recommended	Not Recommended
Applying chemical preservatives to wood features such as beam ends or outriggers that are exposed to decay hazards and are traditionally unpainted.	Using chemical preservatives such as creosote which can change the appearance of wood features unless they were used historically.
Retaining coatings such as paint that help protect the wood from moisture and ultraviolet light. Paint removal should be considered only where there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate protective coatings.	Stripping paint or other coatings to reveal bare wood, thus exposing historically coated surfaces to the effects of accelerated weathering.
Inspecting painted wood surfaces to determine whether repainting is necessary or if cleaning is all that is required.	Removing paint that is firmly adhering to, and thus, protecting wood surfaces.
Removing damaged or deteriorated paint to the next sound layer using the gentlest method possible (handscraping and handsanding), then repainting.	Using destructive paint removal methods such as a propane or butane torches, sandblasting or waterblasting. These methods can irreversibly damage historic woodwork.
Using with care electric hot-air guns on decorative wood features and electric heat plates on flat wood surfaces when paint is so deteriorated that total removal is necessary prior to repainting.	Using thermal devices improperly so that the historic woodwork is scorched.
Using chemical strippers primarily to supplement other methods such as handscraping, handsanding and the above-recommended thermal devices. Detachable wooden elements such as shutters, doors, and columns may--with the proper safeguards--be chemically dip-stripped.	Failing to neutralize the wood thoroughly after using chemicals so that new paint does not adhere. Allowing detachable wood features to soak too long in a caustic solution so that the wood grain is raised and the surface roughened.
Applying compatible paint coating systems following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting exterior woodwork.
Repainting with colors that are appropriate to the historic building and district.	Using new colors that are inappropriate to the historic building or district.
Evaluating the overall condition of the wood to determine whether more than protection and maintenance are required, that is, if repairs to wood features will be necessary.	Failing to undertake adequate measures to assure the preservation of wood features.

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Recommended	Not Recommended
Repairing wood features by patching, piecing-in, consolidating, or otherwise reinforcing the wood using recognized preservation methods. Repair may also include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of features where there are surviving prototypes such as brackets, moldings, or sections of siding.	Replacing an entire wood feature such as a cornice or wall when repair of the wood and limited replacement of deteriorated or missing parts are appropriate. Using substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the wood feature or that is physically or chemically incompatible.
Replacing in kind an entire wood feature, that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. Examples of wood features include a cornice, entablature or balustrade. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing an entire wood feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted because it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and installing a new wood feature such as a cornice or doorway when the historic feature is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historic appearance because the replaced wood feature is based on insufficient historical, pictorial, and physical documentation. Introducing a new wood feature that is incompatible in size, scale, material, and color.

Architectural Metals: Cast iron, steel, pressed tin, copper, aluminum, and zinc

Architectural metal features--such as cast-iron facades, porches, and steps; sheet metal cornices, roofs, roof cresting and storefronts; and cast or rolled metal doors, window sash, entablatures, and hardware--are often highly decorative and may be important in defining the overall historic character of the building. Their retention, protection, and repair should be a prime consideration in rehabilitation projects. For specific guidance, consult "Metals in America's Historic Buildings." (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving architectural metal features such as columns, capitals, window hoods, or stairways that are important in defining the overall historic character of the building; and their finishes and colors.	Removing or radically changing architectural metal features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Removing a major portion of the historic architectural metal from a facade instead of repairing or replacing only the deteriorated metal, then reconstructing the facade with new material in order to create a uniform, or "improved" appearance. Radically changing the type of finish or its historic color or accent scheme.
Protecting and maintaining architectural metals from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved, decorative features.	Failing to identify, evaluate, and treat the causes of corrosion, such as moisture from leaking roofs or gutters. Placing incompatible metals together without providing a reliable separation material. Such incompatibility can result in galvanic corrosion of the less noble metal, e.g., copper will corrode cast iron, steel, tin, and aluminum.
Cleaning architectural metals, when necessary, to remove corrosion prior to repainting or applying other appropriate protective coatings.	Exposing metals which were intended to be protected from the environment. Applying paint or other coatings to metals such as copper, bronze, or stainless steel that were meant to be exposed.

Recommended	Not Recommended
Identifying the particular type of metal prior to any cleaning procedure and then testing to assure that the gentlest cleaning method possible is selected or determining that cleaning is inappropriate for the particular metal.	Using cleaning methods which alter or damage the historic color, texture, and finish of the metal; or cleaning when it is inappropriate for the metal.
	Removing the patina of historic metal. The patina may be a protective coating on some metals, such as bronze or copper, as well as a significant historic finish.
Cleaning soft metals such as lead, tin, copper, terneplate, and zinc with appropriate chemical methods because their finishes can be easily abraded by blasting methods.	Cleaning soft metals such as lead, tin, copper, terneplate, and zinc with grit blasting which will abrade the surface of the metal.
Using the gentlest cleaning methods for cast iron, wrought iron, and steel--hard metals--in order to remove paint buildup and corrosion. If handscraping and wire brushing have proven ineffective, low pressure dry grit blasting may be used as long as it does not abrade or damage the surface.	Failing to employ gentler methods prior to abrasively cleaning cast iron, wrought iron or steel; or using high pressure grit blasting.
Applying appropriate paint or other coating systems after cleaning in order to decrease the corrosion rate of metals or alloys.	Failing to re-apply protective coating systems to metals or alloys that require them after cleaning so that accelerated corrosion occurs.
Repainting with colors that are appropriate to the historic building or district.	Using new colors that are inappropriate to the historic building or district.
Applying an appropriate protective coating such as lacquer to an architectural metal feature such as a bronze door which is subject to heavy pedestrian use.	Failing to assess pedestrian use or new access patterns so that architectural metal features are subject to damage by use or inappropriate maintenance such as salting adjacent sidewalks.
Evaluating the overall condition of the architectural metals to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of architectural metal features.

Recommended	Not Recommended
Repairing architectural metal features by patching, splicing, or otherwise reinforcing the metal following recognized preservation methods. Repairs may also include the limited replacement in kind--or with a compatible substitute material--of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balusters, column capitals or bases; or porch cresting.	Replacing an entire architectural metal feature such as a column or a balustrade when repair of the metal and limited replacement of deteriorated or missing parts are appropriate.
Replacing in kind an entire architectural metal feature that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. Examples could include cast iron porch steps or steel sash windows. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the architectural metal feature or is that physically or chemically incompatible. Removing an architectural metal feature that is unrepairable and not replacing it; or replacing it with a new architectural metal feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and installing a new architectural metal feature such as a sheet metal cornice or cast iron capital when the historic feature is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historic appearance because the replaced architectural metal feature is based on insufficient historical, pictorial, and physical documentation. Introducing a new architectural metal feature that is incompatible in size, scale, material, and color.

Roofs

The roof--with its shape; features such as cresting, dormers, cupolas, and chimneys; and the size, color, and patterning of the roofing material--can be extremely important in defining the building's overall historic character. In addition to the design role it plays, a weathertight roof is essential to the preservation of the entire structure; thus, protecting and repairing the roof as a "cover" is a critical aspect of every rehabilitation project. For specific guidance on roofs and roofing material, consult Preservation Briefs: 4. (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving roofs--and their functional and decorative features--that are important in defining the overall historic character of the building. This includes the roof's shape, such as hipped, gambrel, and mansard; decorative features such as cupolas, cresting, chimneys, and weathervanes; and roofing material such as slate, wood, clay tile, and metal, as well as its size, color, and patterning.	Radically changing, damaging, or destroying roofs which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Removing a major portion of the roof or roofing material that is repairable, then reconstructing it with new material in order to create a uniform, or "improved" appearance.
	Changing the configuration of a roof by adding new features such as dormer windows, vents, or skylights so that the historic character is diminished.
	Stripping the roof of sound historic material such as slate, clay tile, wood, and architectural metal.
	Applying paint or other coatings to roofing material which has been historically uncoated.
Protecting and maintaining a roof by cleaning the gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for proper venting to prevent moisture condensation and water penetration; and to insure that materials are free from insect infestation.	Failing to clean and maintain gutters and downspouts properly so that water and debris collect and cause damage to roof fasteners, sheathing, and the underlying structure.
Providing adequate anchorage for roofing material to guard against wind damage and moisture penetration.	Allowing roof fasteners, such as nails and clips to corrode so that roofing material is subject to accelerated deterioration.

Recommended	Not Recommended
Protecting a leaking roof with plywood and building paper until it can be properly repaired.	Permitting a leaking roof to remain unprotected so that accelerated deterioration of historic building materials--masonry, wood, plaster, paint and structural members--occurs.
Repairing a roof by reinforcing the historic materials which comprise roof features. Repairs will also generally include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of features when there are surviving prototypes such as cupola louvers, dentils, dormer roofing; or slates, tiles, or wood shingles on a main roof.	Replacing an entire roof feature such as a cupola or dormer when repair of the historic materials and limited replacement of deteriorated or missing parts are appropriate.
	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the roof or that is physically or chemically incompatible.
Replacing in kind an entire feature of the roof that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. Examples can include a large section of roofing, or a dormer or chimney. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the roof that is unrepairable, such as a chimney or dormer, and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and constructing a new feature when the historic feature is completely missing, such as a chimney or cupola. It may be an accurate restoration using historical, pictorial and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new roof feature that is incompatible in size, scale, material, and color.

Recommended	Not Recommended
Alterations/Additions for the New Use	
Installing mechanical and service equipment on the roof such as air conditioning, transformers, or solar collectors when required for the new use so that they are inconspiuous from the public right-of-way and do not damage or obscure character-defining features.	Installing mechanical or service equipment so that it damages or obscures character-defining features; or is conspicuous from the public right-of-way.
Designing additions to roofs such as residential, office, or storage spaces; elevator housing; decks and terraces; or dormers or skylights when required by the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.	Radically changing a character-defining roof shape or damaging or destroying character-defining roofing material as a result of incompatible design or improper installation techniques.

Windows

A highly decorative window with an unusual shape, or glazing pattern, or color is most likely identified immediately as a character-defining feature of the building. It is far more difficult, however, to assess the importance of repeated windows on a facade, particularly if they are individually simple in design and material, such as the large, multi-paned sash of many industrial buildings. Because rehabilitation projects frequently include proposals to replace window sash or even entire windows to improve thermal efficiency or to create a new appearance, it is essential that their contribution to the overall historic character of the building be assessed together with their physical condition before specific repair or replacement work is undertaken. See also Energy Retrofitting. Preservation Briefs: 9 should be consulted for specific guidance on wooden window repair. (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving windows--and their functional and decorative features--that are important in defining the overall historic character of the building. Such features can include frames, sash, muntins, glazing, sills, heads, hoodmolds, panelled or decorated jambs and moldings, and interior and exterior shutters and blinds.	Removing or radically changing windows which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Changing the number, location, size or glazing pattern of windows, through cutting new openings, blocking-in windows, and installing replacement sash which does not fit the historic window opening.
	Changing the historic appearance of windows through the use of inappropriate designs, materials, finishes, or colors which radically change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame.
	Obscuring historic window trim with metal or other material.
	Stripping windows of historic material such as wood, iron, cast iron, and bronze.
Protecting and maintaining the wood and architectural metal which comprise the window frame, sash, muntins, and surrounds through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of the windows results.

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Recommended	Not Recommended
Making windows weathertight by re-caulking and replacing or installing weatherstripping. These actions also improve thermal efficiency.	Retrofitting or replacing windows rather than maintaining the sash, frame, and glazing.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, i.e. if repairs to windows and window features will be required.	Failing to undertake adequate measures to assure the preservation of historic windows.
Repairing window frames and sash by patching, splicing, consolidating or otherwise reinforcing. Such repair may also include replacement in kind of those parts that are either extensively deteriorated or are missing when there are surviving prototypes such as architraves, hoodmolds, sash, sills, and interior or exterior shutters and blinds.	Replacing an entire window when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Failing to reuse serviceable window hardware such as brass lifts and sash locks. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the window or that is physically or chemically incompatible.
Replacing in kind an entire window that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a character-defining window that is unrepairable and blocking it in; or replacing it with a new window that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and installing new windows when the historic windows (frame, sash and glazing) are completely missing. The replacement windows may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the window openings and the historic character of the building.	Creating a false historical appearance because the replaced window is based on insufficient historical, pictorial, and physical documentation. Introducing a new design that is incompatible with the historic character of the building.

Recommended	Not Recommended
Alterations/Additions for the New Use	
Designing and installing additional windows on rear or other-non character-defining elevations if required by the new use. New window openings may also be cut into exposed party walls. Such design should be compatible with the overall design of the building, but not duplicate the fenestration pattern and detailing of a character-defining elevation.	Installing new windows, including frames, sash, and muntin configuration that are incompatible with the building's historic appearance or obscure, damage, or destroy character-defining features.
Providing a setback in the design of dropped ceilings when they are required for the new use to allow for the full height of the window openings.	Inserting new floors or furred-down ceilings which cut across the glazed areas of windows so that the exterior form and appearance of the windows are changed.

Entrances and Porches

Entrances and porches are quite often the focus of historic buildings, particularly when they occur on primary elevations. Together with their functional and decorative features such as doors, steps, balustrades, pilasters, and entablatures, they can be extremely important in defining the overall historic character of a building. Their retention, protection, and repair should always be carefully considered when planning rehabilitation work.

Recommended	Not Recommended
Identifying, retaining, and preserving entrances--and their functional and decorative features--that are important in defining the overall historic character of the building such as doors, fanlights, sidelights, pilasters, entablatures, columns, balustrades, and stairs.	Removing or radically changing entrances and porches which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Stripping entrances and porches of historic material such as wood, iron, cast iron, terra cotta, tile and brick.
	Removing an entrance or porch because the building has been re-oriented to accommodate a new use.
	Cutting new entrances on a primary elevation.
	Altering utilitarian or service entrances so they appear to be formal entrances by adding panelled doors, fanlights, and sidelights.
Protecting and maintaining the masonry, wood, and architectural metal that comprise entrances and porches through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of entrances and porches results.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to entrance and porch features will be necessary.	Failing to undertake adequate measures to assure the preservation of historic entrances and porches.

Recommended	Not Recommended
Repairing entrances and porches by reinforcing the historic materials. Repair will also generally include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of repeated features where there are surviving prototypes such as balustrades, cornices, entablatures, columns, sidelights, and stairs.	Replacing an entire entrance or porch when the repair of materials and limited replacement of parts are appropriate. Using a substitute material for the replacement parts that does not convey the visual appearance of the surviving parts of the entrance and porch or that is physically or chemically incompatible.
Replacing in kind an entire entrance or porch that is too deteriorated to repair--if the form and detailing are still evident--using the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing an entrance or porch that is unrepairable and not replacing it; or replacing it with a new entrance or porch that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and constructing a new entrance or porch if the historic entrance or porch is completely missing. It may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building.	Creating a false historical appearance because the replaced entrance or porch is based on insufficient historical, pictorial, and physical documentation. Introducing a new entrance or porch that is incompatible in size, scale, material, and color.

Alterations/Additions for the New Use

Designing enclosures for historic porches when required by the new use in a manner that preserves the historic character of the building. This can include using large sheets of glass and recessing the enclosure wall behind existing scrollwork, posts, and balustrades.	Enclosing porches in a manner that results in a diminution or loss of historic character such as using solid materials such as wood, stucco, or masonry.

Recommended	Not Recommended
Designing and installing additional entrances or porches when required for the new use in a manner that preserves the historic character of the building, i.e., limiting such alteration to non-character-defining elevations.	Installing secondary service entrances and porches that are incompatible in size and scale with the historic building or obscure, damage, or destroy character-defining features.

Storefronts

Storefronts are quite often the focus of historic commercial buildings and can thus be extremely important in defining the overall historic character. Because storefronts also play a crucial role in a store's advertising and merchandising strategy to draw customers and increase business, they are often altered to meet the needs of a new business. Particular care is required in planning and accomplishing work on storefronts so that the building's historic character is preserved in the process of rehabilitation. For specific guidance on the subject Preservation Briefs: 11 should be consulted. (See Reading List and Ordering Information on pg. 58.)

Recommended	Not Recommended
Identifying, retaining, and preserving storefronts--and their functional and decorative features--that are important in defining the overall historic character of the building such as display windows, signs, doors, transoms, kick plates, corner posts, and entablatures.	Removing or radically changing storefronts--and their features--which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Changing the storefront so that it appears residential rather than commercial in character.
	Removing historic material from the storefront to create a recessed arcade.
	Introducing coach lanterns, mansard overhangings, wood shakes, nonoperable shutters, and small-paned windows if they cannot be documented historically.
	Changing the location of a storefront's main entrance.
Protecting and maintaining masonry, wood, and architectural metals which comprise storefronts through appropriate treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of storefront features results.
Protecting storefronts against arson and vandalism before work begins by boarding up windows and installing alarm systems that are keyed into local protection agencies.	Permitting entry into the building through unsecured or broken windows and doors so that interior features and finishes are damaged through exposure to weather or through vandalism.
	Stripping storefronts of historic material such as wood, cast iron, terra cotta, carrara glass, and brick.

Recommended	Not Recommended
Evaluating the overall condition of storefront materials to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of the historic storefront.
Repairing storefronts by reinforcing the historic materials. Repairs will also generally include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of storefronts where there are surviving prototypes such as transoms, kick plates, pilasters, or signs.	Replacing an entire storefront when repair of materials and limited replacement of its parts are appropriate. Using substitute material for the replacement parts that does not convey the same visual appearance as the surviving parts of the storefront or that is physically or chemically incompatible.
Replacing in kind an entire storefront that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.	Removing a storefront that is unrepairable and not replacing it; or replacing it with a new storefront that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and constructing a new storefront when the historic storefront is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building. Such new design should generally be flush with the facade; and the treatment of secondary design elements, such as awnings or signs, kept as simple as possible. For example, new signs should fit flush with the existing features of the facade, such as the fascia board or cornice.	Creating a false historical appearance because the replaced storefront is based on insufficient historical, pictorial, and physical documentation. Introducing a new design that is incompatible in size, scale, material, and color. Using new illuminated signs; inappropriately scaled signs and logos; signs that project over the sidewalk unless they were a characteristic feature of the historic building; or other types of signs that obscure, damage, or destroy remaining character-defining features of the historic building.

BUILDING INTERIOR

Structural System

If features of the structural system are exposed such as loadbearing brick walls, cast iron columns, roof trusses, posts and beams, vigas, or stone foundation walls, they may be important in defining the building's overall historic character. Unexposed structural features that are not character-defining or an entire structural system may nonetheless be significant in the history of building technology; therefore, the structural system should always be examined and evaluated early in the project planning stage to determine both its physical condition and its importance to the building's historic character or historical significance. See also Health and Safety Code Requirements.

Recommended	Not Recommended
Identifying, retaining, and preserving structural systems--and individual features of systems--that are important in defining the overall historic character of the building, such as post and beam systems, trusses, summer beams, vigas, cast iron columns, above-grade stone foundation walls, or loadbearing brick or stone walls.	Removing, covering, or radically changing features of structural systems which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Putting a new use into the building which could overload the existing structural system; or installing equipment or mechanical systems which could damage the structure. Demolishing a loadbearing masonry wall that could be augmented and retained and replacing it with a new wall (i.e., brick or stone), using the historic masonry only as an exterior veneer. Leaving known structural problems untreated such as deflection of beams, cracking and bowing of walls, or racking of structural members. Utilizing treatments or products that accelerate the deterioration of structural material such as introducing urea-formaldehyde foam insulation into frame walls.

Recommended	Not Recommended
Protecting and maintaining the structural system by cleaning the roof gutters and downspouts; replacing roof flashing; keeping masonry, wood, and architectural metals in a sound condition; and assuring that structural members are free from insect infestation.	Failing to provide proper building maintenance on a cyclical basis so that deterioration of the structural system results.
Examining and evaluating the physical condition of the structural system and its individual features using non-destructive techniques such as X-ray photography.	Utilizing destructive probing techniques that will damage or destroy structural material.
Repairing the structural system by augmenting or upgrading individual parts or features. For example, weakened structural members such as floor framing can be spliced, braced, or otherwise supplemented and reinforced.	Upgrading the building structurally in a manner that diminishes the historic character of the exterior, such as installing strapping channels or removing a decorative cornice; or damages interior features or spaces.
	Replacing a structural member or other feature of the structural system when it could be augmented and retained.
Replacing in kind--or with substitute material--those portions or features of the structural system that are either extensively deteriorated or are missing when there are surviving prototypes such as cast iron columns, roof rafters or trusses, or sections of loadbearing walls. Substitute material should convey the same form, design, and overall visual appearance as the historic feature; and, at a minimum, be equal to its loadbearing capabilities.	Installing a replacement feature that does not convey the same visual appearance, e.g., replacing an exposed wood summer beam with a steel beam.
	Using substitute material that does not equal the loadbearing capabilities of the historic material and design or is otherwise physically or chemically incompatible.

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Alterations/Additions for the New Use

Limiting any new excavations adjacent to historic foundations to avoid undermining the structural stability of the building or adjacent historic buildings.	Carrying out excavations or regrading adjacent to or within a historic building which could cause the historic foundation to settle, shift, or fail; or could have a similar effect on adjacent historic buildings.

Structural System (continued)

Recommended	Not Recommended
Correcting structural deficiencies in preparation for the new use in a manner that preserves the structural system and individual character-defining features.	Radically changing interior spaces or damaging or destroying features or finishes that are character-defining while trying to correct structural deficiencies in preparation for the new use.
Designing and installing new mechanical or electrical systems when required for the new use which minimize the number of cutouts or holes in structural members.	Installing new mechanical and electrical systems or equipment in a manner which results in numerous cuts, splices, or alterations to the structural members.
Adding a new floor when required for the new use if such an alteration does not damage or destroy the structural system or obscure, damage, or destroy character-defining spaces, features, or finishes.	Inserting a new floor when such a radical change damages a structural system or obscures or destroys interior spaces, features, or finishes. Inserting new floors or furred-down ceilings which cut across the glazed areas of windows so that the exterior form and appearance of the windows are radically changed.
Creating an atrium or a light well to provide natural light when required for the new use in a manner that assures the preservation of the structural system as well as character-defining interior spaces, features, and finishes.	Damaging the structural system or individual features; or radically changing, damaging, or destroying character-defining interior spaces, features, or finishes in order to create an atrium or a light well.

Interior: Spaces, Features, and Finishes

An interior floor plan, the arrangement of spaces, and built-in features and applied finishes may be individually or collectively important in defining the historic character of the building. Thus, their identification, retention, protection, and repair should be given prime consideration in every rehabilitation project and caution exercised in pursuing any plan that would radically change character-defining spaces or obscure, damage or destroy interior features or finishes.

Recommended	Not Recommended
Interior Spaces	
Identifying, retaining, and preserving a floor plan or interior spaces that are important in defining the overall historic character of the building. This includes the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves such as lobbies, reception halls, entrance halls, double parlors, theaters, auditoriums, and important industrial or commercial use spaces.	Radically changing a floor plan or interior spaces--including individual rooms--which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Altering the floor plan by demolishing principal walls and partitions to create a new appearance. Altering or destroying interior spaces by inserting floors, cutting through floors, lowering ceilings, or adding or removing walls. Relocating an interior feature such as a staircase so that the historic relationship between features and spaces is altered.

Recommended	Not Recommended
Interior Features and Finishes	
Identifying, retaining, and preserving interior features and finishes that are important in defining the overall historic character of the building, including columns, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, hardware, and flooring; and wallpaper, plaster, paint, and finishes such as stenciling, marbling, and graining; and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings.	Removing or radically changing features and finishes which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Installing new decorative material that obscures or damages character-defining interior features or finishes. Removing paint, plaster, or other finishes from historically finished surfaces to create a new appearance (e.g., removing plaster to expose masonry surfaces such as brick walls or a chimney piece). Applying paint, plaster, or other finishes to surfaces that have been historically unfinished to create a new appearance. Stripping historically painted wood surfaces to bare wood, then applying clear finishes or stains to create a "natural look." Stripping paint to bare wood rather than repairing or reapplying grained or marbled finishes to features such as doors and paneling. Radically changing the type of finish or its color, such as painting a previously varnished wood feature.
Protecting and maintaining masonry, wood, and architectural metals which comprise interior features through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coatings systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of interior features results.

Recommended	Not Recommended
Protecting interior features and finishes against arson and vandalism before project work begins, erecting protective fencing, boarding-up windows, and installing fire alarm systems that are keyed to local protection agencies.	Permitting entry into historic buildings through unsecured or broken windows and doors so that interior features and finishes are damaged by exposure to weather or through vandalism. Stripping interiors of features such as woodwork, doors, windows, light fixtures, copper piping, radiators; or of decorative materials.
Protecting interior features such as a staircase, mantel, or decorative finishes and wall coverings against damage during project work by covering them with heavy canvas or plastic sheets.	Failing to provide proper protection of interior features and finishes during work so that they are gouged, scratched, dented, or otherwise damaged.
Installing protective coverings in areas of heavy pedestrian traffic to protect historic features such as wall coverings, parquet flooring and panelling.	Failing to take new use patterns into consideration so that interior features and finishes are damaged.
Removing damaged or deteriorated paints and finishes to the next sound layer using the gentlest method possible, then repainting or refinishing using compatible paint or other coating systems.	Using destructive methods such as propane or butane torches or sandblasting to remove paint or other coatings. These methods can irreversibly damage the historic materials that comprise interior features.
Repainting with colors that are appropriate to the historic building.	Using new paint colors that are inappropriate to the historic building.
Limiting abrasive cleaning methods to certain industrial or warehouse buildings where the interior masonry or plaster features do not have distinguishing design, detailing, tooling, or finishes; and where wood features are not finished, molded, beaded, or worked by hand. Abrasive cleaning should <u>only</u> be considered after other, gentler methods have been proven ineffective.	Changing the texture and patina of character-defining features through sandblasting or use of other abrasive methods to remove paint, discoloration or plaster. This includes both exposed wood (including structural members) and masonry.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to interior features and finishes will be necessary.	Failing to undertake adequate measures to assure the preservation of interior features and finishes.

Recommended	Not Recommended
Repairing interior features and finishes by reinforcing the historic materials. Repair will also generally include the limited replacement in kind--or with compatible substitute material--of those extensively deteriorated or missing parts of repeated features when there are surviving prototypes such as stairs, balustrades, wood panelling, columns; or decorative wall coverings or ornamental tin or plaster ceilings.	Replacing an entire interior feature such as a staircase, panelled wall, parquet floor, or cornice; or finish such as a decorative wall covering or ceiling when repair of materials and limited replacement of such parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts or portions of the interior feature or finish or that is physically or chemically incompatible.
Replacing in kind an entire interior feature or finish that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. Examples could include wainscoting, a tin ceiling, or interior stairs. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a character-defining feature or finish that is unrepairable and not replacing it; or replacing it with a new feature or finish that does not convey the same visual appearance.

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Design for Missing Historic Features

Designing and installing a new interior feature or finish if the historic feature or finish is completely missing. This could include missing partitions, stairs, elevators, lighting fixtures, and wall coverings; or even entire rooms if all historic spaces, features, and finishes are missing or have been destroyed by inappropriate "renovations." The design may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building, district, or neighborhood.	Creating a false historical appearance because the replaced feature is based on insufficient physical, historical, and pictorial documentation or on information derived from another building. Introducing a new interior feature or finish that is incompatible with the scale, design, materials, color, and texture of the surviving interior features and finishes.

Recommended	Not Recommended
Alterations/Additions for the New Use	
Accommodating service functions such as bathrooms, mechanical equipment, and office machines required by the building's new use in secondary spaces such as first floor service areas or on upper floors.	Dividing rooms, lowering ceilings, and damaging or obscuring character-defining features such as fireplaces, niches, stairways or alcoves, so that a new use can be accommodated in the building.
Reusing decorative material or features that have had to be removed during the rehabilitation work including wall and baseboard trim, door moulding, panelled doors, and simple wainscoting; and relocating such material or features in areas appropriate to their historic placement.	Discarding historic material when it can be reused within the rehabilitation project or relocating it in historically inappropriate areas.
Installing permanent partitions in secondary spaces; removable partitions that do not destroy the sense of space should be installed when the new use requires the subdivision of character-defining interior spaces.	Installing permanent partitions that damage or obscure character-defining spaces, features, or finishes.
Enclosing an interior stairway where required by code so that its character is retained. In many cases, glazed fire-rated walls may be used.	Enclosing an interior stairway with fire-rated construction so that the stairwell space or any character-defining features are destroyed.
Placing new code-required stairways or elevators in secondary and service areas of the historic building.	Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding new code-required stairways and elevators.
Creating an atrium or a light well to provide natural light when required for the new use in a manner that preserves character-defining interior spaces, features, and finishes as well as the structural system.	Destroying character-defining interior spaces, features, or finishes; or damaging the structural system in order to create an atrium or light well.
Adding a new floor if required for the new use in a manner that preserves character-defining structural features, and interior spaces, features, and finishes.	Inserting a new floor within a building that alters or destroys the fenestration; radically changes a character-defining interior space; or obscures, damages, or destroys decorative detailing.

Mechanical Systems: Heating, Air Conditioning, Electrial, and Plumbing

The visible features of historic heating, lighting, air conditioning and plumbing systems may sometimes help define the overall historic character of the building and should thus be retained and repaired, whenever possible. The systems themselves (the compressors, boilers, generators and their ductwork, wiring and pipes) will generally either need to be upgraded, augmented, or entirely replaced in order to accommodate the new use and to meet code requirements. Less frequently, individual portions of a system or an entire system are significant in the history of building technology; therefore, the identification of character-defining features or historically significant systems should take place together with an evaluation of their physical condition early in project planning.

Recommended	Not Recommended
Identifying, retaining, and preserving visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, plumbing fixtures, switchplates, and lights.	Removing or radically changing features of mechanical systems that are important in defining the overall historic character of the building so that, as a result, the character is diminished.
Protecting and maintaining mechanical, plumbing, and electrical systems and their features through cyclical cleaning and other appropriate measures.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of mechanical systems and their visible features results.
Preventing accelerated deterioration of mechanical systems by providing adequate ventilation of attics, crawlspaces, and cellars so that moisture problems are avoided.	Enclosing mechanical systems in areas that are not adequately ventilated so that deterioration of the systems results.
Repairing mechanical systems by augmenting or upgrading system parts, such as installing new pipes and ducts; rewiring; or adding new compressors or boilers.	Replacing a mechanical system or its functional parts when it could be upgraded and retained.

Recommended	Not Recommended
Replacing in kind--or with compatible substitute material--those visible features of mechanical systems that are either extensively deteriorated or are missing when there are surviving prototypes such as ceiling fans, switchplates, radiators, grilles, or plumbing fixtures.	Installing a replacement feature that does not convey the same visual appearance.

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Alterations/Additions for the New Use

Installing a completely new mechanical system if required for the new use so that it causes the least alteration possible to the building's floor plan, the exterior elevations, and the least damage to historic building material.	Installing a new mechanical system so that character-defining structural or interior features are radically changed, damaged, or destroyed.
Installing the vertical runs of ducts, pipes, and cables in closets, service rooms, and wall cavities.	Installing vertical runs of ducts, pipes, and cables in places where they will obscure character-defining features.
	Concealing mechanical equipment in walls or ceilings in a manner that requires the removal of historic building material.
	Installing "dropped" acoustical ceilings to hide mechanical equipment when this destroys the proportions of character-defining interior spaces.
Installing air conditioning units if required by the new use in such a manner that the historic materials and features are not damaged or obscured.	Cutting through features such as masonry walls in order to install air conditioning units.
Installing heating/air conditioning units in the window frames in such a manner that the sash and frames are protected. Window installations should be considered only when all other viable heating/cooling systems would result in significant damage to historic materials.	Radically changing the appearance of the historic building or damaging or destroying windows by installing heating/air conditioning units in historic window frames.

BUILDING SITE

The relationship between a historic building or buildings and landscape features within a property's boundaries--or the building site--helps to define the historic character and should be considered an integral part of overall planning for rehabilitation project work.

Recommended	Not Recommended
Identifying, retaining, and preserving buildings and their features as well as features of the site that are important in defining its overall historic character. Site features can include driveways, walkways, lighting, fencing, signs, benches, fountains, wells, terraces, canal systems, plants and trees, berms, and drainage or irrigation ditches; and archeological features that are important in defining the history of the site.	Removing or radically changing buildings and their features or site features which are important in defining the overall historic character of the building site so that, as a result, the character is diminished.
Retaining the historic relationship between buildings, landscape features, and open space.	Removing or relocating historic buildings or landscape features, thus destroying the historic relationship between buildings, landscape features, and open space.
	Removing or relocating historic buildings on a site or in a complex of related historic structures--such as a mill complex or farm--thus diminishing the historic character of the site or complex.
	Moving buildings onto the site, thus creating a false historical appearance.
	Lowering the grade level adjacent to a building to permit development of a formerly below-grade area such as a basement in a manner that would drastically change the historic relationship of the building to its site.
Protecting and maintaining buildings and the site by providing proper drainage to assure that water does not erode foundation walls; drain toward the building; nor erode the historic landscape.	Failing to maintain site drainage so that buildings and site features are damaged or destroyed; or, alternatively, changing the site grading so that water no longer drains properly.

Recommended	Not Recommended
Minimizing disturbance of terrain around buildings or elsewhere on the site, thus reducing the possibility of destroying unknown archeological materials.	Introducing heavy machinery or equipment into areas where their presence may disturb archeological materials.
Surveying areas where major terrain alteration is likely to impact important archeological sites.	Failing to survey the building site prior to the beginning of rehabilitation project work so that, as a result, important archeological material is destroyed.
Protecting, e.g. preserving in place known archeological material whenever possible.	Leaving known archeological material unprotected and subject to vandalism, looting, and destruction by natural elements such as erosion.
Planning and carrying out any necessary investigation using professional archeologists and modern archeological methods when preservation in place is not feasible.	Permitting unqualified project personnel to perform data recovery so that improper methodology results in the loss of important archeological material.
Protecting the building and other features of the site against arson and vandalism before rehabilitation work begins, i.e., erecting protective fencing and installing alarm systems that are keyed into local protection agencies.	Permitting buildings and site features to remain unprotected so that plant materials, fencing, walkways, archeological features, etc. are damaged or destroyed. Stripping features from buildings and the site such as wood siding, iron fencing, masonry balustrades; or removing or destroying landscape features, including plant material.
Providing continued protection of masonry, wood, and architectural metals which comprise building and site features through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems; and continued protection and maintenance of landscape features, including plant material.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of building and site features results.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to building and site features will be necessary.	Failing to undertake adequate measures to assure the preservation of building and site features.

Recommended	Not Recommended
Repairing features of buildings and the site by reinforcing the historic materials. Repair will also generally include replacement in kind--with a compatible substitute material--of those extensively deteriorated or missing parts of features where there are surviving prototypes such as fencing and paving.	Replacing an entire feature of the building or site such as a fence, walkway, or driveway when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the building or site feature or that is physically or chemically incompatible.
Replacing in kind an entire feature of the building or site that is too deteriorated to repair--if the overall form and detailing are still evident--using the physical evidence to guide the new work. This could include an entrance or porch, walkway, or fountain. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the building or site that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

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Design for Missing Historic Features

Designing and constructing a new feature of a building or site when the historic feature is completely missing, such as an outbuilding, terrace, or driveway. It may be based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building and site.	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial, and physical documentation. Introducing a new building or site feature that is out of scale or otherwise inappropriate. Introducing a new landscape feature or plant material that is visually incompatible with the site or that destroys site patterns or vistas.

Recommended	Not Recommended
Alterations/Additions for the New Use	
Designing new onsite parking, loading docks, or ramps when required by the new use so that they are as unobtrusive as possible and assure the preservation of character-defining features of the site.	Placing parking facilities directly adjacent to historic buildings where automobiles may cause damage to the buildings or landscape features or be intrusive to the building site.
Designing new exterior additions to historic buildings or adjacent new construction which is compatible with the historic character of the site and which preserve the historic relationship between a building or buildings, landscape features, and open space.	Introducing new construction onto the building site which is visually incompatible in terms of size, scale, design, materials, color and texture or which destroys historic relationships on the site.
Removing nonsignificant buildings, additions, or site features which detract from the historic character of the site.	Removing a historic building in a complex, a building feature, or a site feature which is important in defining the historic character of the site.

DISTRICT/NEIGHBORHOOD The relationship between historic buildings, and streetscape and landscape features within a historic district or neighborhood helps to define the historic character and therefore should always be a part of the rehabilitation plans.

Recommended	Not Recommended
Identifying, retaining, and preserving buildings, and streetscape, and landscape features which are important in defining the overall historic character of the district or neighborhood. Such features can include streets, alleys, paving, walkways, street lights, signs, benches, parks and gardens, and trees.	Removing or radically changing those features of the district or neighborhood which are important in defining the overall historic character so that, as a result, the character is diminished.
Retaining the historic relationship between buildings, and streetscape and landscape features such as a town square comprised of row houses and stores surrounding a communal park or open space.	Destroying streetscape and landscape features by widening existing streets, changing paving material, or introducing inappropriately located new streets or parking lots. Removing or relocating historic buildings, or features of the streetscape and landscape, thus destroying the historic relationship between buildings, features and open space.
Protecting and maintaining the historic masonry, wood, and architectural metals which comprise building and streetscape features, through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems; and protecting and maintaining landscape features, including plant material.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of building, streetscape, and landscape features results.
Protecting buildings, paving, iron fencing, etc. against arson and vandalism before rehabilitation work begins by erecting protective fencing and installing alarm systems that are keyed into local protection agencies.	Permitting buildings to remain unprotected so that windows are broken; and interior features are damaged. Stripping features from buildings or the streetscape such as wood siding, iron fencing, or terra cotta balusters; or removing or destroying landscape features, including plant material.

Recommended	Not Recommended
Evaluating the overall condition of building, streetscape and landscape materials to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of building, streetscape, and landscape features.
Repairing features of the building, streetscape, or landscape by reinforcing the historic materials. Repair will also generally include the replacement in kind--or with a compatible substitute material--of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balustrades, paving materials, or streetlight standards.	Replacing an entire feature of the building, streetscape, or landscape such as a porch, walkway, or streetlight, when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the building, streetscape, or landscape feature or that is physically or chemically incompatible.
Replacing in kind an entire feature of the building, streetscape, or landscape that is too deteriorated to repair--when the overall form and detailing are still evident--using the physical evidence to guide the new work. This could include a storefront, a walkway, or a garden. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the building, streetscape, or landscape that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and constructing a new feature of the building, streetscape, or landscape when the historic feature is completely missing, such as row house steps, a porch, streetlight, or terrace. It may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the district or neighborhood.	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial and physical documentation. Introducing a new building, streetscape or landscape feature that is out of scale or otherwise inappropriate to the setting's historic character, **e.g.,** replacing picket fencing with chain link fencing.

Recommended	Not Recommended
Alterations/Additions for the New Use	
Designing required new parking so that it is as unobtrusive as possible, i.e., on side streets or at the rear of buildings. "Shared" parking should also be planned so that several businesses can utilize one parking area as opposed to introducing random, multiple lots.	Placing parking facilities directly adjacent to historic buildings which cause the removal of historic plantings, relocation of paths and walkways, or blocking of alleys.
Designing and constructing new additions to historic buildings when required by the new use. New work should be compatible with the historic character of the district or neighborhood in terms of size, scale, design, material, color, and texture.	Introducing new construction into historic districts that is visually incompatible or that destroys historic relationships within the district or neighborhood.
Removing nonsignificant buildings, additions, or streetscape and landscape features which detract from the historic character of the district or the neighborhood.	Removing a historic building, building feature, or landscape or streetscape feature that is important in defining the overall historic character of the district or the neighborhood.

Although the work in these sections is quite often an important aspect of rehabilitation projects, it is usually not part of the overall process of preserving character-defining features (maintenance, repair, replacement); rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to obscure, radically change, damage, or destroy character-defining features in the process of rehabilitation work to meet new use requirements.

HEALTH AND SAFETY CODE REQUIREMENTS

As a part of the new use, it is often necessary to make modifications to a historic building so that it can comply with current health, safety and code requirements. Such work needs to be carefully planned and undertaken so that it does not result in a loss of character-defining spaces, features, and finishes.

Recommended	Not Recommended
Identifying the historic building's character-defining spaces, features, and finishes so that code-required work will not result in their damage or loss.	Undertaking code-required alterations to a building or site before identifying those spaces, features, or finishes which are character-defining and must therefore be preserved.
Complying with health and safety codes, including seismic codes and barrier-free access requirements, in such a manner that character-defining spaces, features, and finishes are preserved.	Altering, damaging, or destroying character-defining spaces, features, and finishes while making modifications to a building or site to comply with safety codes.
Working with local code officials to investigate alternative life safety measures or variances available under some codes so that alterations and additions to historic buildings can be avoided.	Making changes to historic buildings without first seeking alternatives to code requirements.
Providing barrier-free access through removable or portable, rather than permanent, ramps.	Installing permanent ramps that damage or diminish character-defining features.
Providing seismic reinforcement to a historic building in a manner that avoids damaging the structural system and character-defining features.	Reinforcing a historic building using measures that damage or destroy character-defining structural and other features.
Upgrading historic stairways and elevators to meet health and safety codes in a manner that assures their preservation, i.e., so that they are not damaged or obscured.	Damaging or obscuring historic stairways and elevators or altering adjacent spaces in the process of doing work to meet code requirements.
Installing sensitively designed fire suppression systems, such as a sprinkler system for wood frame mill buildings, instead of applying fire-resistant sheathing to character-defining features.	Covering character-defining wood features with fire-resistant sheathing which results in altering their visual appearance.

Recommended	Not Recommended
Applying fire-retardant coatings, such as intumescent paints, which expand during fire to add thermal protection to steel.	Using fire-retardant coatings if they damage or obscure character-defining features.
Adding a new stairway or elevator to meet health and safety codes in a manner that preserves adjacent character-defining features and spaces.	Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding a new code-required stairway or elevator.
Placing a code-required stairway or elevator that cannot be accommodated within the historic building in a new exterior addition. Such an addition should be located at the rear of the building or on an inconspicuous side; and its size and scale limited in relationship to the historic building.	Constructing a new addition to accommodate code-required stairs and elevators on character-defining elevations highly visible from the street; or where it obscures, damages or destroys character-defining features.

ENERGY RETROFITTING

Some character-defining features of a historic building or site such as cupolas, shutters, transoms, skylights, sun rooms, porches, and plantings also play a secondary energy conserving role. Therefore, prior to retrofitting historic buildings to make them more energy efficient, the first step should always be to identify and evaluate the existing historic features to assess their inherent energy conserving potential. If it is determined that retrofitting measures are necessary, then such work needs to be carried out with particular care to insure that the building's historic character is preserved in the the process of rehabilitation.

Recommended	Not Recommended
District/Neighborhood	
Maintaining those existing landscape features which moderate the effects of the climate on the setting such as deciduous trees, evergreen wind-blocks, and lakes or ponds.	Stripping the setting of landscape features and landforms so that the effects of the wind, rain, and the sun result in accelerated deterioration of historic materials.
Building Site	
Retaining plant materials, trees, and landscape features, especially those which perform passive solar energy functions such as sun shading and wind breaks.	Removing plant materials, trees, and landscape features, so that they no longer perform passive solar energy functions.
Installing freestanding solar collectors in a manner that preserves the historic property's character-defining features.	Installing freestanding solar collectors that obscure, damage, or destroy historic landscape or archeological features.
Designing attached solar collectors, including solar greenhouses, so that the character-defining features of the property are preserved.	Locating solar collectors where they radically change the property's appearance; or damage or destroy character-defining features.

Recommended	Not Recommended
Masonry/Wood/Architectural Metals	
Installing thermal insulation in attics and in unheated cellars and crawlspaces to increase the efficiency of the existing mechanical systems.	Applying urea formaldehyde foam or any other thermal insulation with a water content into wall cavities in an attempt to reduce energy consumption.
Installing insulating material on the inside of masonry walls to increase energy efficiency where there is no character-defining interior moulding around the window or other interior architectural detailing.	Resurfacing historic building materials with more energy efficient but incompatible materials, such as covering historic masonry with exterior insulation.
Installing passive solar devices such as a glazed "trombe" wall on a rear or inconspicuous side of the historic building.	Installing passive solar devices such as an attached glazed "trombe" wall on primary or other highly visible elevations; or where historic material must be removed or obscured.
Roofs	
Placing solar collectors on non-character-defining roofs or roofs of nonhistoric adjacent buildings.	Placing solar collectors on roofs when such collectors change the historic roofline or obscure the relationship of the roof to character-defining roof features such as dormers, skylights, and chimneys.
Windows	
Utilizing the inherent energy conserving features of a building by maintaining windows and louvered blinds in good operable condition for natural ventilation.	Removing historic shading devices rather than keeping them in an operable condition.
Improving thermal efficency with weatherstripping, storm windows, caulking, interior shades, and, if historically appropriate, blinds and awnings.	Replacing historic multi-paned sash with new thermal sash utilizing false muntins.
Installing interior storm windows with air-tight gaskets, ventilating holes, and/or removable clips to insure proper maintenance and to avoid condensation damage to historic windows.	Installing interior storm windows that allow moisture to accumulate and damage the window.

Recommended	Not Recommended
Windows (continued)	
Installing exterior storm windows which do not damage or obscure the windows and frames.	Installing new exterior storm windows which are inappropriate in size or color, which are inoperable.
	Replacing windows or transoms with fixed thermal glazing or permitting windows and transoms to remain inoperable rather than utilizing them for their energy conserving potential.
Considering the use of lightly tinted glazing on non-character-defining elevations if other energy retrofitting alternatives are not possible.	Using tinted or reflective glazing on character-defining or other conspicuous elevations.
Entrances and Porches	
Utilizing the inherent energy conserving features of a building by maintaining porches, and double vestibule entrances, in good condition so that they can retain heat or block the sun and provide natural ventilation.	Enclosing porches located on character-defining elevations to create passive solar collectors or airlock vestibules. Such enclosures can destroy the historic appearance of the building.
Interior Features	
Retaining historic interior shutters and transoms for their inherent energy conserving features.	Removing historic interior features which play a secondary energy conserving role.
New Additions to Historic Buildings	
Placing new additions that have an energy conserving function such as a solar greenhouse on non-character-defining elevations.	Installing new additions such as multi-story solar greenhouse additions which obscure, damage, destroy character-defining features.
Mechanical Systems	
Installing thermal insulation in attics and in unheated cellars and crawlspaces to conserve energy.	Applying urea formaldehyde foam or any other thermal insulation with a water content or that may collect moisture into wall cavities.

NEW ADDITIONS TO HISTORIC BUILDINGS

An attached exterior addition to a historic building expands its "outer limits" to create a new profile. Because such expansion has the capability to radically change the historic appearance, an exterior addition should be considered only after it has been determined that the new use cannot be successfully met by altering non-character-defining interior spaces. If the new use cannot be met in this way, then an attached exterior addition is usually an acceptable alternative. New additions should be designed and constructed so that the character-defining features of the historic building are not radically changed, obscured, damaged, or destroyed in the process of rehabilitation. New design should always be clearly differentiated so that the addition does not appear to be part of the historic resource.

Recommended	Not Recommended
Placing functions and services required for the new use in non-character-defining interior spaces rather than installing a new addition.	Expanding the size of the historic building by constructing a new addition when the new use could be met by altering non-character-defining interior spaces.
Constructing a new addition so that there is the least possible loss of historic materials and so that character-defining features are not obscured, damaged, or destroyed.	Attaching a new addition so that the character-defining features of the historic building are obscured, damaged, or destroyed.
Locating the attached exterior addition at the rear or on an inconspicuous side of a historic building; and limiting its size and scale in relationship to the historic building.	Designing a new addition so that its size and scale in relation to the historic building are out of proportion, thus diminishing the historic character.
Designing new additions in a manner that makes clear what is historic and what is new.	Duplicating the exact form, material, style, and detailing of the historic building in the new addition so that the new work appears to be part of the historic building.
	Imitating a historic style or period of architecture in new additions, especially for contemporary uses such as drive-in banks or garages.

Recommended	Not Recommended
Considering the attached exterior addition both in terms of the new use and the appearance of other buildings in the historic district or neighborhood. Design for the new work may be contemporary or may reference design motifs from the historic building. In either case, it should always be clearly differentiated from the historic building and be compatible in terms of mass, materials, relationship of solids to voids, and color.	Designing and constructing new additions that result in the diminution or loss of the historic character of the resource, including its design, materials, workmanship, location, or setting. Using the same wall plane, roof line, cornice height, materials, siding lap or window type to make additions appear to be a part of the historic building.
Placing new additions such as balconies and greenhouses on non-character-defining elevations and limiting the size and scale in relationship to the historic building.	Designing new additions such as multi-story greenhouse additions that obscure, damage, or destroy character-defining features of the historic building.
Designing additional stories, when required for the new use, that are set back from the wall plane and are as inconspicuous as possible when viewed from the street.	Constructing additional stories so that the historic appearance of the building is radically changed.

READING LIST AND ORDERING INFORMATION

Preservation Tax Incentives Program Information

* Tax Incentives for Rehabilitating Historic Buildings. Program leaflet. Explains the Federal tax incentives available to owners who rehabilitate commercial historic structures. Includes an outline of the certification process, program regulations, and a list of State Historic Preservation Officers. 12 pages. May, 1982.

Preservation Briefs are prepared for property owners, developers, or Federal agency managers to assist in evaluating and resolving common preservation and repair problems. The briefs are often given to preservation tax incentives program applicants to help explain recommended historic preservation method and approaches in the rehabilitation of historic buildings. Copies, except where noted, are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO prices are subject to change without notice.

* Preservation Briefs: 1. The Cleaning and Waterproof Coating of Masonry Buildings by Robert C. Mack, AIA. Provides guidance on the techniques of cleaning and waterproofing and explains the consequences of their inappropriate use. 4 pages. 5 illus. November, 1975.

Preservation Briefs: 2. Repointing Mortar Joints in Historic Brick Buildings by Robert C. Mack, AIA, de Teel Patterson Tiller, and James S. Askins. Provides update on appropriate materials and methods for repointing historic buildings. 8 pages. 12 illus. August, 1980. GPO Stock Number 024-016-00148-6: 1-100 copies, $2.25 each; multiples of 100, $22.

Preservation Briefs: 3. Conserving Energy in Historic Buildings by Baird M. Smith, AIA. Provides information on materials and techniques to consider or avoid when undertaking weatherization and energy conservation measures in historic buildings. 8 pages. 8 illus. April, 1978. GPO Stock Number: 024-016-00103-6: 1-100 copies, $2.25 each; multiples of 100, $22.

Preservation Briefs: 4. Roofing for Historic Buildings by Sarah M. Sweetser. Provides a brief history of the most commonly used roofing materials in America. Presents a sound preservation approach to roof repair, roof replacement, and the use of alternative roofing materials. 8 pages. 15 illus. February, 1978. GPO Stock Number: 024-016-00102-8; 1-100 copies, $2.25 each; multiples of 100, $22.

* Preservation Briefs: 5. The Preservation of Historic Adobe Buildings. Provides information on the traditional materials and construction of adobe buildings, and the causes of adobe deterioration. Makes recommendations for preserving historic adobe buildings. 8 pages. 10 illus. August, 1978.

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* Unavailable from the Government Printing Office. Single copies available from the National Park Service Regional Offices (see Introduction to Guidelines).

Preservation Briefs: 6. Dangers of Abrasive Cleaning to Historic Buildings by Anne E. Grimmer. Cautions against the use of sandblasting to clean various buildings and suggests measures to mitigate the effects of improper cleaning. Explains the limited circumstances under which abrasive cleaning may be appropriate. 8 pages. 10 illus. June, 1979. GPO Stock Number: 024-016-00112-5: 1-100 copies, $2.25 each; multiples of 100, $22.

Preservation Briefs: 7. The Preservation of Historic Glazed Architectural Terra-Cotta by de Teel Patterson Tiller. Discusses deterioration problems that commonly occur with terra-cotta and provides methods for determining the extent of such deterioration. Makes recommendations for maintenance and repair, and suggests appropriate replacement materials. 8 pages. 11 illus. June, 1979. GPO Stock Number: 024-016-00115-0: 1-100 copies, $2.25 each; multiples of 100, $22.

Preservation Briefs: 8. Aluminum and Vinyl Sidings on Historic Buildings by John H. Myers. Discusses esthetic and technical considerations surrounding use of these substitute replacement materials. 8 pages. 11 illustrations. October, 1979. CURRENTLY OUT-OF-PRINT--TO BE REVISED AND REPRINTED IN 1983.

Preservation Briefs: 9. The Repair of Historic Wooden Windows by John H. Myers. Provides useful information on evaluating and repairing historic wooden windows found in typical rehabilitation projects. Emphasizes practical technology for homeowners or developers. 8 pages. 10 illustrations. January, 1981. GPO Stock Number: 024-016-00147-8: 1-100 copies, $2.25 each; multiples of 100, $22.

Preservation Briefs: 10. Exterior Paint Problems on Historic Woodwork by Kay D. Weeks and David W. Look, AIA. Identifies and describes common types of paint surface conditions and failures. Provides guidance on preparing historic woodwork for repainting, including limited and total paint removal. 12 pages. 14 illus. November, 1982. GPO Stock Number: 024-005-00842-0: $2.25 each.

Preservation Briefs: 11. Rehabilitating Historic Storefronts by H. Ward Jandl. Explores the role of the storefront in historic buildings and provides guidance on rehabilitation techniques for storefronts as well as compatible new storefront designs. 12 pages. 12 illus. November, 1982. GPO Stock Number: 024-005-00843-8: $2.25 each.

Technical Reports address in detail technical problems confronted by architects, engineers, government officials, and other technicians involved with the preservation of historic buildings. Copies, except where noted, are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO prices are subject to change without notice.

Access to Historic Building for the Disabled: Suggestions for Planning and Implementation by Charles Parrott. Addresses the special concerns of improved access by disabled persons to historic buildings, as well as legal requirements and compliance planning procedures. Also examines techniques to make programs and services housed in historic buildings accessible in lieu of architectural changes. 92 pages. 42 illus. 1980. GPO Stock Number: 024-016-00149-4. $5.50.

Cyclical Maintenance for Historic Buildings by J. Henry Chambers, AIA. Provides a step-by-step process for building managers, architects, and others involved in the routine maintenance of historic properties. 125 pages. 1976. GPO Stock Number: 024-005-00637-1. $6.50.

** Directory of Historic Preservation Easement Organizations compiled by Charles E. Fisher, William G. MacRostie, and Christopher A. Sowick. Lists over 185 organizations throughout the nation who are willing to accept historic preservation easements. 23 pages. 3 illus. Rev., December, 1981.

Epoxies for Wood Repairs in Historic Buildings by Morgan W. Phillips and Judith E. Selwyn. Presents research findings on the formulations of epoxy consolidants and patching compounds for use on wooden elements in preservation projects, including case study applications. 72 pages. 43 illus. Appendix. 1978. GPO Stock Number: 024-016-00095-1. $5.00.

** Exterior Cleaning of Historic Masonry Buildings by Norman R. Weiss. Discusses various methods of cleaning and the complex factors to consider before selecting a suitable method. Intended primarily for architects, conservators, and other professionals responsible for the preparation of specifications and development of agency-wide cleaning programs. 18 pages. Selected bibliography. 1977.

Gaslighting in America: A Guide for Historic Preservation by Denys Peter Myers. Surveys interior and exterior gaslighting fixtures used in America, providing histories of the major manufacturing firms and a listing of the charter dates for individual and city gas companies. 248 pages. 120 illus. Appendix. Bibliography. 1978. GPO Stock Number: 024-016-00094-3. $8.50.

Metals in America's Historic Buildings: Uses and Preservation Methods by Margot Gayle and David W. Look, AIA (Part I); and John Waite (Part II). Concentrates on the historic uses of such architectural metals as lead, tin, zinc, copper, nickel, iron, steel, and aluminum (Part I). Also discusses the sources of metal deterioration and suggests appropriate preservation and maintenance techniques, addressing each metal individually (Part II). 170 pages. 180 illus. 1980. GPO Stock Number 024-016-00143-5. $7.00.

** Moving Historic Buildings by John Obed Curtis. Discusses the limited circumstances under which a historic masonry or frame building should be moved; establishes a methodology for planning, research, and recording prior to the move; and addresses the actual siting, foundation construction, building reassembly, and restoration after a successful move has taken place. 56 pages. 47 illus. Selected bibliography. 1979.

** Photogrammetric Recording of Cultural Resources by Perry E. Borchers. Describes the basic principles of photogrammetry and their application to the recording of cultural resources. 38 pages. 28 illus. 1977.

Rectified Photography and Photo Drawings for Historic Preservation by J. Henry Chambers, AIA. Presents a method developed for the preparation of photographic working drawings and photodocumentation. Intended for architects. 37 pages. 13 illus. 1973. GPO Stock Number: 024-016-00124-9. $4.75.

** Unavailable from the Government Printing Office. Requests for single copies may be sent to Technical Preservation Services, Preservation Assistance Division, National Park Service, Washington, D.C. 20240. Due to limited stock, copies of all materials requested may not be available.

Rehabilitation of Historic Buildings: An Annotated Bibliography by Frederec E. Kleyle. Cites readily available literature on various aspects of building rehabilitation with chapters on economics, building regulations, technical preservation topics, and selected case studies. 21 pages. 1980. GPO Stock Number: 024-016-00130-3. $3.50.

Wallpapers in Historic Preservation by Catherine Lynn Frangiamore. Surveys the technology, styles, and uses of wallpapers in America with suggestions for using wallpaper within a restoration project. 56 pages. 39 illus. Appendices. 1977. GPO Stock Number: 024-005-00685-1. $5.00.

** X-Ray Examination of Historic Structures by David M. Hart. Discusses a method for investigating a building's fabric by non-destructive means. Intended for architects, conservators, and other professionals. 24 pages. 19 illus. 1975.

** Unavailable from the Government Printing Office. Requests for single copies may be sent to: Technical Preservation Services, Preservation Assistance Division, National Park Service, Washington, D.C. 20240. Due to limited stock, copies of all materials requested may not be available.

TPS Publications: Outside The Government Printing Office

Some of the publications TPS has developed have been printed by the private sector and are only available from these non-governmental sources. The following list includes the sources' addresses:

Energy Conservation and Solar Energy for Historic Buildings: Guidelines for Appropriate Designs. Prepared for Technical Preservation Services, National Park Service, by Thomas Vonier Associates, Inc. funded by the U. S. Department of Energy. Provides design guidance on energy conservation measures and solar energy applications for historic buildings. 24 pages. 28 illus. November 1981. Available for $6.95, prepaid, from: The National Center for Architecture and Urbanism, 1927 S Street, N.W., Suite 300, Washington, D.C. 20009.

Respectful Rehabilitation: Answers to Your Questions on Historic Buildings. Prepared by Technical Preservation Services, National Park Service, U.S. Department of the Interior, and published by the Preservation Press of the National Trust for Historic Preservation. Provides answers to 150 questions which are often posed in the course of rehabilitating historic structures. Topics covered range from paint, wood, masonry, metals, and interior features to mechanical systems and health and safety codes. 185 pages. 150 illus. September 1982. Available for $9.95 plus $2.50 for postage and handling from: Preservation Shops, 1600 H Street, N.W., Washington, D.C. 20006.

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