

6.1.5 SOP No. 5: Maintaining, Repairing, Altering, Demolishing, Leasing, or Transferring Existing Buildings or Structures.

Maintenance, repair, alteration, demolition, or leasing of buildings can result in adverse effects under Section 106 to historic properties. Reducing or withdrawing maintenance from a historic building may result in an adverse effect, and the leasing of historic buildings may cause adverse effects due to changed management procedures. In compliance with Section 106 of NHPA and its implementing regulations, this SOP specifies procedures to implement in planning such undertakings.

NPR 8510.1 requires an SOP for maintaining, repairing, altering, demolishing, leasing, or transferring existing buildings or structures. This SOP is applicable to NRHP-listed, eligible, and potentially eligible properties located at ARC and/or under ARC jurisdiction.

Applicable Laws/Regulations/Procedural Requirements

- National Historic Preservation Act
- National Environmental Policy Act
- NASA Policy Directive 8500.1
- NASA Procedural Requirements 8510.1

Policy

- NASA will proactively protect and maintain NRHP-eligible historic buildings, structures, and districts. The HPO will periodically inspect the condition of all NRHP-eligible buildings, structures, and districts to monitor the compliance of undertakings and to ensure that deterioration through neglect or natural disasters has not adversely affected the properties.
- Avoidance of adverse effects to NRHP-eligible historic buildings will be proactively incorporated into the planning process.
- Until such time as SHPO has concurred with NASA's determination that a historic building is ineligible for inclusion to the NRHP, it will be treated as potentially eligible.
- All buildings and structures listed in or considered eligible for the NRHP will receive priority and regular maintenance to prevent deterioration through neglect.
- Maintenance, repair, alterations, and demolition of historic buildings should comply with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties, unless such actions are otherwise in compliance with Section 106 of the NHPA.
- Maintenance, repair, alteration, or demolition activities that would disturb soils at a historic site must undergo an archaeological survey before the activity may proceed.
- Procedures covered herein apply to in-house work, contracted work, and, to the extent required for tenants/lessees to comply with the law, work conducted by outside agencies or tenants/lessees to ARC facilities.

Procedures

ARC personnel, contractors, and project managers must consult with the HPO to determine whether a proposed action constitutes an undertaking. An undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency (36 CFR Part 800.16(y)). The HPO will coordinate with EMD to review all actions proposed or planned by ARC and/or tenant/lessee that may affect historic properties. These include missions; plans, specifications, and work orders; specifications for maintenance, repair, and alterations; demolition to any buildings or structures; and lease agreements of ARC properties. If the HPO determines that there is no undertaking, the Center has no further Section 106 obligations. If the HPO determines that there is an undertaking, the HPO must then determine the potential of the activity to cause effects on historic properties through the Section 106 process (see SOP No. 1 for procedures in compliance with Section 106 of NHPA).

After review of the planned activities, the HPO may determine that these activities result in no potential to affect historic properties, "No Historic Properties Affected," or "No Adverse Effect," and will document the decision per the Section 106 process (see SOP No. 1 for further details of the Section 106 process).

Maintenance and Repair

The following activities generally result in "No Adverse Effect," if they adhere to the Secretary of Interior's Standards for the Treatment of Historic Properties and do not diminish character-defining features of the properties.

Painted Surfaces

- All interior and exterior painted surfaces will be painted, as needed.
- Painted surfaces will be maintained in such a manner as to ensure that painted surfaces are free of peeling, blistering, and excessive wear.
- Paint materials will be of a "good quality" from a major manufacturer and a type and color that matches existing colors.
- Any paint materials will be stored in fire-proof cabinets or disposed of in compliance with all applicable laws.

Floors and Floor Coverings

- Floors and floor coverings will be maintained in such a manner as to ensure that floors and floor coverings are free of excessive wear and deterioration.
- Hardwood floors, tile, and linoleum coverings will be maintained using proper sealants and waxes.

Heating, Ventilating, and Air Conditioning Systems

- The HVAC systems will be kept and maintained in operational conditions in accordance with the manufacturer's instructions and all applicable laws.

- HVAC systems will be installed or repaired in accordance with the manufacturer's recommended requirements.
- HVAC system repair will be made by a technician licensed to do business in the State of California.
- Any adjacent areas to HVAC systems will be free of litter, dirt accumulation, and unnecessary storage.

Electrical Systems

- Electrical lines and equipment (including but not limited to conduits, fuses, panels, and switches) will be maintained from the electric meter.
- All work will be equipped with properly functioning safety equipment, overload protective devices, and switches.
- Any high voltage (220 volts and higher) contact points will be marked as such in accordance with all applicable laws, including but not limited to National Safety Council standards.
- Any new installation of electrical systems (including but not limited to additions of electric panels or subpanels, new circuits or meter boxes, renovations or rewiring of existing electrical systems) will be conducted by an electrician, licensed to do business in the State of California, in compliance with all applicable laws, including but not limited to National Electrical Code requirements.

Water Systems

- The water distribution system will be maintained from water meter and throughout.
- The water distribution system will be maintained in such a manner as to show no evidence of leaks.
- Any new installation or major renovation of water distribution systems will be conducted by a plumber and/or contractor licensed to do business in the State of California.

Sewage Systems

- The internal building fixtures attached to the sewage disposal system (including sinks, toilets, urinals, and dish washing equipment) as well as lateral piping will be maintained from the point of connection to the sewer main into and throughout.
- Grease traps (interceptors) will be maintained and cleaned. Any heavy grease accumulation cause clogging within the main sewage system will be cleared from the line.

- Any effluent discharged will be treated and removed in accordance with all applicable laws, including but not limited to State of California Water Quality Control Board standards.

Natural and Liquefied Petroleum Gas Systems

- Natural and liquefied petroleum gas (LPG) systems will be maintained from the meter or tank into and throughout, and any installation of such systems will comply with all applicable laws, including but not limited to the National Fire Protection Association standards for the installation of gas appliances and gas piping and for storage and handling of liquefied petroleum gases.

Food Service Equipment

- Any and all equipment used in food service operations (including but not limited to dishwashers, refrigerators, freezers, and serving counters) will be kept and maintained in compliance with all applicable laws, including but not limited to U.S. Public Health Service standards.

Roof System

- Roofing materials will be maintained to ensure that such materials are intact and are free of deterioration that would affect the structural qualities and are not jeopardized by adjacent tree limbs and other vegetation.
- Roof repairs will be made using the same type, size, style, and color of existing roofing materials.
- Any overhanging tree limbs and other vegetation that may cause roof deterioration will be trimmed and pruned. Such trimming or pruning will include any fungi or moss accumulation in or on roofing materials.
- Gutters, downspouts, and roof drains will be cleaned and maintained in such a manner as to ensure that such gutters, downspouts, and roof drains are free of obstructions and that all openings are clear and fully operational.
- Gutter and downspout surfaces will be maintained to prevent deterioration of or structural damage to the improvements.

Foundation and Exterior Surfaces

- The foundation and exterior surfaces will be maintained in such a manner as to prevent differential settlement or lateral, vertical, or longitudinal displacement.
- Exterior surfaces will be maintained in such a manner as to prevent water and moisture from entering or causing other deterioration of or damage to the buildings.
- Exterior surfaces of the improvements will be kept free of encroaching tree limbs or other vegetative growth.

- Exterior surfaces of the improvements will be repaired using the same size, style, type, and grade of material as exists.
- Any repaired or replaced exterior surfaces will be painted with a minimum of one coat of primer and two coats of paint to match existing color and type.
- Doors and windows will be maintained to prevent water or moisture from entering and causing deterioration of or damage.
- In-kind replacement of broken or cracked glass panes to match thickness and historic characteristics (texture, sheen, waviness) of the existing or historic glass materials. Temporary boarding of broken glass to seal enclosures immediately should not compromise the framing or surrounding materials.
- Repainting historic and non-historic surfaces that have been previously painted using similar paint type to match existing or historic colors. Paint removal will be conducted with nondestructive methods (no chemical use or sandblasting).
- Repointing or mortar repair for historic and non-historic masonry using mortar mixes to match existing or historic materials, color, and texture.
- Installation of impermanent carpet, other coverings and equipment over existing non-character-defining flooring (e.g., vinyl and/or vinyl asbestos flooring). Historic terrazzo, stone, and tile floors and stairs will not be altered.
- Energy conservation actions to meet standard reductions in energy use that do not compromise the integrity of historic properties, including replacement or installation of compatible caulking or weather-stripping at doors, windows, and other penetrations that require weatherproofing.
- Hazardous material (e.g., lead paint, asbestos, and mold) testing, remediation, and abatement that does not require the removal of historic materials or alteration of visible contributing elements of historic property.
- Removal of pests, such as termites, insects, rodents, and animal debris without damaging adjacent surfaces. Ventilation systems of the improvements (including but not limited to wire screen, metal or wooden louvers) will be maintained to the great extent possible in such a manner as to prevent birds, bees, rodents, and other wildlife from entering the improvements.
- Removal of vines and other vegetation that is potentially damaging to building materials.
- Replacement of non-character-defining insulation (ceilings, attics, basement spaces), plumbing, HVAC equipment, electrical systems, telecommunications equipment, security systems, or fire suppression systems with upgraded systems that do not require physical, visual, or noise intrusion that could compromise the historic property's integrity.
- Repair or renovation of interior spaces of buildings determined not eligible for the NRHP.
- Demolition of buildings or structures determined not eligible for the NRHP where no historic properties are within the APE.

- Rehabilitation work to historic properties in accordance with approved reuse guidelines established by historic preservation professionals who meet the Secretary of Interior's Professional Qualification Standards (see Section 5.2.3).

Fire Alarms and Sprinklers; Fire Protection Systems, Fire Escapes and Emergency Exits

- Fire alarms and sprinkler systems will be kept and maintained in full operating condition at all times in accordance with all applicable laws, including but not limited to the National Fire Protection Association requirements.
- Fire protection systems, fire escapes, and emergency exits will be maintained to ensure a safe and expedient exit at all times in accordance with all applicable laws.
- Fire exit doors with fully operable panic hardware will be maintained in fully operating condition at all times and will be identified by illuminated fire exit signs.
- For any new installation of fire alarms, sprinklers, fire protection systems, fire escapes, and emergency exits, such installation will be conducted by a licensed contractor.

Exterior Lighting

- Exterior lighting will be kept and maintained in full operational condition. Installations will be done by a California-licensed electrician/contractor and will be energy efficient with dusk-to-dawn controls or timers to provide energy conservation.

Site and Landscape Maintenance

- Repair or in-kind replacement of existing signs, fences, walkways, driveways, and parking areas to match existing design, form, texture, and materials.
- Repair or in-kind replacement of existing above-ground fuel, propellant, and chemical storage facilities.
- Placement of temporary barriers.
- Ongoing maintenance of existing landscaping, including grass cutting; hedge trimming; tree pruning; and removal of dead, diseased, or hazardous vegetation. Historic landscape themes will be maintained and continued in historic settings and districts.
- Removal of pests, such as termites, insects, rodents, and animal debris without damaging adjacent surfaces

Alteration or Demolition

- The HPO must review the activity through the Section 106 process (see SOP No. 1).

Leasing

- The HPO must review the activity through the Section 106 process (see SOP No. 1). Leasing or licensing for events less than 45 days that will make no permanent alterations to facilities will not be considered an adverse effect. The lessees will be made aware of historic preservation requirements (see SOP No. 6).

Transferring Existing Buildings or Structures

- The HPO must review the activity through the Section 106 process (see SOP No. 1).