# HISTORIC TREATMENT PROCEDURES

## PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section includes general protection and treatment procedures for entire Project and the following specific work:
  - 1. Historic removal and dismantling.
  - 2. Bird-excrement removal.

### 1.2 DEFINITIONS

- A. Consolidate: To strengthen loose or deteriorated materials in place.
- B. Dismantle: To disassemble and detach items by hand from existing construction to the limits indicated, using small hand tools and small one-hand power tools, so as to protect nearby historic surfaces; and legally dispose of dismantled items off-site, unless indicated to be salvaged or reinstalled.
- C. Existing to Remain: Existing items that are not to be removed or dismantled.
- D. Historic: Spaces, areas, rooms, surfaces, materials, finishes, and overall appearance which are important to the successful preservation rehabilitation restoration and reconstruction as determined by Architect. Designated historic spaces areas rooms and surfaces are indicated on Drawings.

1. At Historic Dolly Varden Rooftop Sign: Areas of significant architectural importance, integrity, and visibility; to be preserved and restored consistent with the remaining historic fabric and to the extent shown on Drawings.

- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Reconstruct: To remove existing item, replicate damaged or missing components, and reinstall in original position.
- G. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- H. Reinstall: To protect removed or dismantled item, repair and clean it as indicated for reuse, and reinstall it in original position, or where indicated.
- I. Remove: Specifically for historic spaces, areas, rooms, and surfaces, the term means to detach an item from existing construction to the limits indicated, using hand tools and hand-operated

power equipment, and legally dispose of it off-site, unless indicated to be salvaged or reinstalled.

- J. Repair: To correct damage and defects, retaining existing materials, features, and finishes while employing as little new material as possible. Includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- K. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- L. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- M. Reproduce: To fabricate a new item, accurate in detail to the original, and in either the same or a similar material as the original, unless otherwise indicated.
- N. Restore: To consolidate, replicate, reproduce, repair, and refinish as required to achieve the indicated results.
- O. Retain: To keep existing items that are not to be removed or dismantled.
- P. Reversible: New construction work, treatments, or processes that can be removed or undone in the future without damaging historic materials unless otherwise indicated.
- Q. Salvage: To protect removed or dismantled items and deliver them to Owner ready for reuse.
- R. Stabilize: To provide structural reinforcement of unsafe or deteriorated items while maintaining the essential form as it exists at present; also, to reestablish a weather-resistant enclosure.
- S. Strip: To remove existing finish down to base material unless otherwise indicated.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Construction Schedule for Historic Treatments: Indicate for entire Project the following for each activity to be performed in historic spaces, areas, and rooms, and on historic surfaces:
  - 1. Detailed sequence of historic treatment work, with starting and ending dates, coordinated with Owner's continuing operations and other known work in progress.
  - 2. Utility Services: Indicate how long utility services will be interrupted.
  - 3. Use of elevator and stairs.
- B. Qualification Data: For historic treatment specialist, historic removal and dismantling specialist, historic removal and dismantling specialist's, field supervisors, historic removal and dismantling specialist's workers, and industrial hygienist.
- C. Preconstruction Documentation: Show preexisting conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by Contractor's historic treatment operations.

- D. Historic Treatment Program: Submit before work begins.
- E. Fire-Prevention Plan: Submit before work begins.

#### 1.4 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: An experienced firm regularly engaged in historic treatments similar in nature, materials, design, and extent to this work as specified in each section, and that has completed a minimum of **five** recent projects with a record of successful in-service performance that demonstrate the firm's qualifications to perform this work.
  - 1. Field Supervisor Qualifications: Full-time supervisors experienced in historic treatment work similar in nature, material, design, and extent to that indicated for this Project. Supervisors shall be on Project site during times that historic treatment work is in progress. Supervisors shall not be changed during Project except for causes beyond the control of the specialist firm.
  - 2. Worker Qualification: Persons who are experienced in historic treatment work of types they will be performing.
- B. Bird-Excrement-Removal Specialist Qualifications: A firm that employs personnel experienced and skilled in the processes and operations indicated.
- C. Industrial Hygienist Qualifications: Certified as Industrial Hygienist by the American Board of Industrial Hygiene; having Bachelor's degree in industrial hygiene, public health, biological science, occupational health, or environmental and safety discipline; and experienced in work of types specified.
- D. Historic Treatment Program: Prepare a written plan for historic treatment for whole Project, including each phase or process and protection of surrounding materials during operations. Describe in detail materials, methods, and equipment to be used for each phase of work. Show compliance with indicated methods and procedures specified in this and other Sections.
  - 1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
  - 2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
- E. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-prevention devices during each phase or process. Coordinate plan with Owner's fire-protection equipment and requirements. Include each fire watch's training, duties, and authority to enforce fire safety.
- F. Regulatory Requirements: Comply with notification regulations of authorities having jurisdiction before beginning removal and dismantling work. Comply with hauling and disposal regulations of authorities having jurisdiction.

- G. Standards: Comply with ANSI/ASSE A10.6.
- H. Historic Treatment Preconstruction Conference: Conduct conference at Project site.

## 1.5 STORAGE AND PROTECTION OF HISTORIC MATERIALS

- A. Salvaged Historic Materials:
  - 1. Clean only loose debris from salvaged historic items unless more extensive cleaning is indicated.
  - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to Owner's storage area designated by Owner or as indicated on Drawings.
  - 5. Protect items from damage during transport and storage.
- B. Historic Materials for Reinstallation:
  - 1. Repair and clean historic items as indicated and to functional condition for reuse.
  - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make item functional for use indicated or as indicated on drawings.
- C. Storage and Protection: When taken from their existing locations, catalog and store historic items within a weathertight enclosure where they are protected from wetting by rain, snow, condensation, or ground water, and from freezing temperatures.
  - 1. Identify each item with a nonpermanent mark to document its original location. Indicate original locations on plans elevations, sections, or photographs by annotating the identifying marks.
  - 2. Secure stored materials to protect from theft.

#### 1.6 PROJECT CONDITIONS

A. Hazardous Materials: It is unknown whether hazardous materials will be encountered in the Work.

- 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.
- B. Storage or sale of removed or dismantled items on-site is not permitted unless otherwise indicated.

## PART 2 - EXECUTION

### 3.1 EXAMINATION

- A. Preparation for Removal and Dismantling: Examine construction to be removed or dismantled to determine best methods to safely and effectively perform removal and dismantling work. Examine adjacent work to determine what protective measures will be necessary. Make explorations, probes, and inquiries as necessary to determine condition of construction to be removed or dismantled and location of utilities and services to remain that may be hidden by construction that is to be removed or dismantled.
  - 1. Verify that affected utilities have been disconnected and capped.
  - 2. Inventory and record the condition of items to be removed and dismantled for reinstallation or salvage.
  - 3. Before removal or dismantling of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
  - 4. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures as a result of removal and dismantling work.
- B. Survey of Existing Conditions: Record existing conditions by means and use of **measured** drawings, preconstruction photographs, and/or preconstruction digital video.
- C. Perform surveys as the Work progresses to detect hazards resulting from historic treatment procedures.

#### 3.2 PROTECTION, GENERAL

- A. Ensure that supervisory personnel are on-site and on duty when historic treatment work begins and during its progress.
- B. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from historic treatment procedures.
  - 1. Use only proven protection methods, appropriate to each area and surface being protected.
  - 2. Provide barricades, barriers, and temporary directional signage to exclude public from areas where historic treatment work is being performed.

- 3. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of historic treatment work.
- 4. Contain dust and debris generated by removal and dismantling work and prevent it from reaching the public or adjacent surfaces.
- 5. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
- 6. Protect floors and other surfaces along haul routes from damage, wear, and staining.
- 7. Provide supplemental sound-control treatment to isolate removal and dismantling work from other areas of the building.
- C. Temporary Protection of Historic Materials:
  - 1. Do not attach temporary protection to historic surfaces except as indicated as part of the historic treatment program and approved by Architect.
- D. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

### 3.3 **PROTECTION FROM FIRE**

- A. General: Follow fire-prevention plan and the following.
  - 1. Comply with NFPA 241 requirements unless otherwise indicated. **Perform duties entitled** "Owner's Responsibility for Fire Protection."
  - 2. Remove and keep area free of combustibles including, rubbish, paper, waste, and chemicals, except to the degree necessary for the immediate work.
    - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
  - 3. Prohibit smoking by all persons within Project work and staging areas.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or highly combustible materials, including welding, torch-cutting, soldering, brazing, paint removal with heat, or other operations where open flames or implements utilizing high heat or combustible solvents and chemicals are anticipated:
  - 1. Obtain Owner's approval for operations involving use of **open-flame or** welding or other high-heat equipment. Notify Owner before each occurrence, indicating location of such work.
  - 2. As far as practical, restrict heat-generating equipment to shop areas or outside the building.
  - 3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
  - 4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.

- 5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
- 6. Fire Watch: Before working with heat-generating equipment or highly combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows.
  - a. Train each fire watch in the proper operation of fire-control equipment and alarms.
  - b. Prohibit fire-watch personnel from other work that would be a distraction from firewatch duties.
  - c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
  - d. Have fire watch perform final fire-safety inspection each day beginning no sooner than **60 minutes** after conclusion of work at **each area of** Project site to detect hidden or smoldering fires and to ensure that proper fire-prevention is maintained.
  - e. Maintain fire-watch personnel at **each area of** Project site until **60 minutes** after conclusion of daily work.
- C. Fire Extinguishers, Fire Blankets, and Rag Buckets: Maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire watch are trained in fire-extinguisher and blanket operation.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
  - 1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is completed.

### 3.5 GENERAL HISTORIC TREATMENT

- A. Ensure that supervisory personnel are present when historic treatment work begins and during its progress.
- B. Halt the process of deterioration and stabilize conditions, unless otherwise indicated. Perform work as indicated on Drawings. Follow the procedures in subparagraphs below and procedures approved in historic treatment program:
  - 1. Retain as much existing material as possible; repair and consolidate rather than replace.
  - 2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
  - 3. Use reversible processes wherever possible.
  - 4. Use historically accurate repair and replacement materials and techniques unless otherwise indicated.

- 5. Record existing work before each procedure (preconstruction) and progress during the work with digital preconstruction documentation.
- C. Notify Architect of visible changes in the integrity of material or components whether due to environmental causes including biological attack, UV degradation, freezing, or thawing; or due to structural defects including cracks, movement, or distortion.
  - 1. Do not proceed with the work in question until directed by Architect.
- D. Where missing features are indicated to be repaired or replaced, provide features whose designs are based on accurate duplications rather than on conjectural designs, subject to approval of Architect.
- E. Where Work requires existing features to be removed or dismantled and reinstalled, perform these operations without damage to the material itself.
- F. Identify new and replacement materials and features with permanent marks hidden in the completed work to distinguish them from original materials. Record a legend of identification marks and the locations of the items on record Drawings.
- 3.6 HISTORIC REMOVAL AND DISMANTLING
  - A. General: Have removal and dismantling work performed by a qualified historic treatment specialist.
  - B. Perform work according to the historic treatment program.
  - C. Water-Mist Sprinkling: Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment that ensure that such water will not create a hazard or adversely affect other building areas or materials.
  - D. Anchorages:
    - 1. Remove anchorages associated with removed items.
    - 2. Dismantle anchorages associated with dismantled items.

### 3.7 BIRD-EXCREMENT REMOVAL

- A. General: Before disturbing accumulated bird excrement, employ a qualified industrial hygienist to perform tests, make recommendations, and observe the work. Follow procedures required by authorities having jurisdiction and recommended by industrial hygienist.
- B. Removing Bird Excrement: Have bird-excrement removal work performed by a qualified birdexcrement removal specialist. **Remove exterior bird-excrement accumulations with building windows and other openings in the building closed or sealed off.**

- 1. Before removal, treat bird excrement to kill pathogens; dampen excrement to prevent particles becoming airborne.
- 2. Use only nonmetallic tools such as plastic spatulas and brushes with natural fiber or nylon bristles.
- 3. Collect excrement debris as it is removed and legally dispose of off-site.
- C. Removing Bird-Excrement Stain: Clean as required in section pertaining to cleaning substrate material from which bird excrement was removed.

### 3.8 HISTORIC TREATMENT SCHEDULE

- A. Spaces, areas, rooms, and surfaces requiring special care and treatment to ensure successful preservation, rehabilitation, restoration, and reconstruction are indicated on Drawings and generally described below.
  - 1. The Historic Dolly Varden Rooftop Sign.