



...to preserve, protect, and interpret the natural and cultural resources relating

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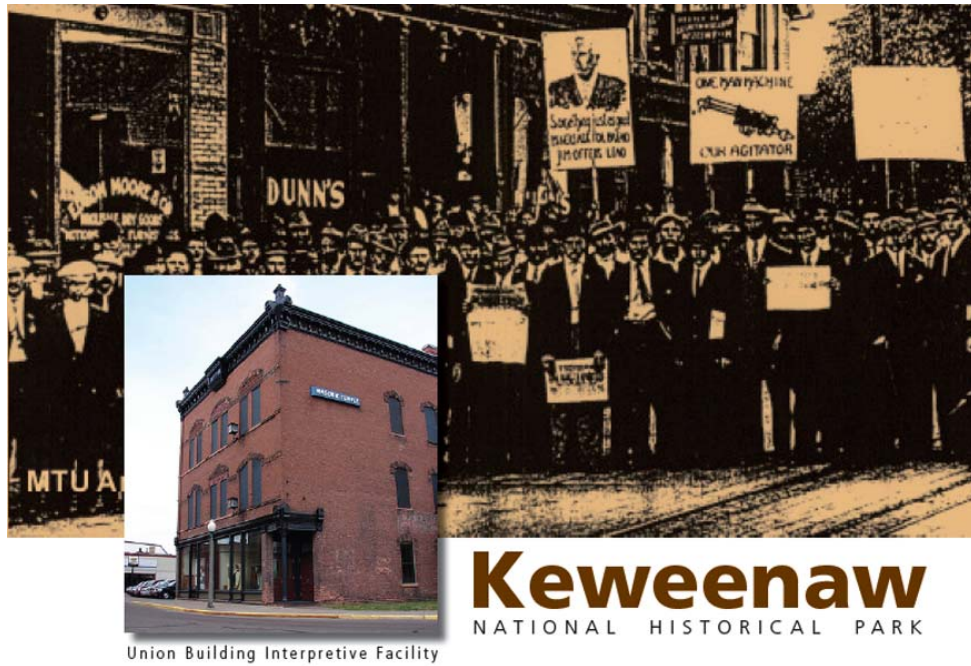
current and future generations through cooperative efforts and partnerships...

to the copper mining industry for the enjoyment and benefit of

## DRAFT ENVIRONMENTAL ASSESSMENT FOR THE UNION BUILDING INTERPRETIVE FACILITY

FEBRUARY 1, 2010

DRAFT



**Keweenaw**  
NATIONAL HISTORICAL PARK

(Office of Krister Olmon)

# UNION BUILDING INTERPRETIVE FACILITY ENVIRONMENTAL ASSESSMENT

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## **Chapter 1: Introduction**

### **Park History and Project Background**

Keweenaw National Historical Park was established in 1992 in Houghton County, Michigan. As stated in its enabling legislation (Public Law 102-543), the park's purpose is two-fold:

- (1) to preserve the nationally significant historical and cultural sites, structures, and districts of a portion of the Keweenaw Peninsula in the State of Michigan for the education, benefit, and inspiration of present and future generations, and
- (2) to interpret the historic synergism between the geological, aboriginal, sociological, cultural, technological, and corporate forces that relate the story of copper on the Keweenaw Peninsula.

A Congressionally mandated partnership park, Keweenaw works with officially designated partners (Keweenaw Heritage Sites, or KHS), private property owners and organizations, and other governmental agencies to fulfill its purpose. Although the breadth of this partnership encompasses four counties, the park's two units are located in Houghton County; each is based on a National Historic Landmark district. The Calumet Unit is located within the community of Calumet and has a stronger emphasis in social history, while the Quincy Unit contains key elements of the Quincy Mining Company's industrial operations and several of its neighborhoods of worker housing. The park owns only six structures within these two units, and the majority of property within park boundaries is privately owned.

### ***Mission Statement***

The mission of Keweenaw National Historical Park is to preserve, protect, and interpret the natural and cultural resources relating to the copper mining industry for the enjoyment and benefit of current and future generations through cooperative efforts and partnerships with state and local governments, public and private entities.

### ***Historical Significance***

The park was established to commemorate the Keweenaw Peninsula's history of copper mining and its relation to the development of an industrialized society in the United States. The peninsula embodies a unique geologic occurrence of pure elemental copper and contains remnants of the oldest known metal mining activities in the western hemisphere. The Calumet and Quincy units represent the longest duration, greatest production, and most technologically innovative examples of copper mining in North America. Both Calumet and Quincy attracted a large number of immigrants to work for the mining companies and the businesses that supported their operations.

The Quincy Unit encompasses small neighborhoods of company housing, but it is dominated by the former mining operations of the Quincy Mining Company. It has a primary interpretive focus on mining technology, but also corporate paternalism.

The Calumet Unit includes structures related to the Calumet and Hecla Mining Company (C&H) and what was once the cosmopolitan Village of Red Jacket (now Calumet). Park headquarters is located in Calumet, in C&H's former General Office Building. Based around several historic neighborhoods, an industrial district, and a commercial core, it reveals a social story that intersects with the industrial story and C&H's form of corporate paternalism.

## Significance Statement

The Union Building documents that intersection between Calumet's industrial and social stories, and is particularly important in architectural and social history.<sup>1</sup> It is located a few blocks west of park headquarters at the edge of the village. Its development began in 1888 when two fraternal lodges – the Free and Accepted Masons and the Independent Order of Odd Fellows – formed the Union Building Association. The Association's purpose was to fund the construction of a shared lodge hall, which was then built on land owned by C&H. Over time, the partnership's name came to identify the building itself as the Union Building. The building also demonstrates the connection between mining company and community: donating land was an expression of C&H's paternalistic management style, and allowed them a measure of control over how land was being used and how its workforce was spending its leisure time. The three and one-half story masonry structure was completed in 1889, and provided meeting spaces for the Odd Fellows on the second floor and Masons on the third; other fraternal and benevolent groups rented the lodge spaces as well.

The Union Building was designed by B.H. Pierce and Co., an architectural firm based in Hancock, a town eleven miles south of Calumet. Pierce is noted for being the Keweenaw's earliest known architect, and the Union Building was likely one of his first commissions. Architecturally, it is typical of lodge halls built during this time. The first floor was designed for commercial use, and the upper floors for secret lodge functions. This configuration served two purposes: elevating the meeting spaces above street level distanced them from the public; and rent paid by commercial tenants helped fund the building's maintenance. Over time, tenants included the post office, a bank, the Keweenaw Printing Company, and a beauty salon. It should also be noted that the east façade of the lodge rooms was particularly important in Masonic and Odd Fellow ritual, and thus was important architecturally; it remains a character defining element of the building.

Although it is typical architecturally, unlike most lodge halls that date from the Victorian era, the Union Building has changed little over time and retains a high degree of integrity.<sup>2</sup> Its integrity underscores its significance as a primary resource in Calumet's social history. Fraternal and benevolent organizations served important purposes in American society at the turn of the 20<sup>th</sup> century. Membership opened doors to local and even national social networks, which was invaluable in a predominantly foreign-born, immigrant population like Calumet's. Benevolent organizations also provided a level of social and financial security during an era when individuals were responsible for many of the benefits taken for granted in 21<sup>st</sup> century society. Among them were access to medical care and insurance in the case of sickness or death. This was vital in mining regions like Calumet, where work was difficult and dangerous, and the threat of being injured or even killed on the job was real.

Many benevolent groups were organized within ethnic communities, and facilitated immigrants' adaptation to mainstream American culture. These organizations speak to the diversity of Calumet's historic population: nearly every immigrant group – Hungarian, French-Canadian, Irish, English, Croatian, German, Polish, and more – all formed benevolent societies. Calumet was also home to the first Slovenian benefit society in the United States, which formed in 1883. The Ancient Order of Hibernians (Irish Catholic) and the Sons of Hermann (German) both met in the Union Building.<sup>3</sup> Through the years, lodge rooms were also used by the community for piano recitals, graduation parties, wedding receptions, and other social gatherings. The building functioned in this capacity until the 1970s, when it was sold to a private individual.

The Union Building is listed as a contributing structure in the National Register's Red Jacket Downtown Historic District (1976), and the Calumet National Historic Landmark District (1988). It has also been included

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<sup>1</sup> US Department of the Interior, National Park Service, Keweenaw National Historical Park, *Union Building Historic Structure Report, Part 1: Developmental History*, 2009.

<sup>2</sup> Will Moore, personal communication, January 13, 2009. See also Moore, "Keweenaw National Historical Park, Historians' Roundtable Summative Memo," (unpublished paper, January 22, 2009).

<sup>3</sup> Stephanie K. Atwood, *Historic Use of the Interior Space of the Union Building* (unpublished report, 2008), 71.

in the State of Michigan's Historic Register and in the Village of Calumet Civic and Commercial Historic District.

Recognizing its inherent historical value, and guided by previous development plans, the National Park Service (NPS) purchased the building in 1999 with the intention of preserving it for interpretive purposes. A comprehensive exterior rehabilitation project was completed in 2005. This work included a new roof, repairs to the masonry and cornice, and the rehabilitation of the storefronts. As part of the effort to preserve and interpret the structure, planning is underway to rehabilitate the interior as a permanent interpretive facility and temporary visitor orientation facility.

## Purpose

This Environmental Assessment (EA) has been prepared to assist the NPS in planning the development of the Union Building as the first NPS-operated visitor interpretive facility for Keweenaw NHP. The project includes the rehabilitation of the historic structure's interior, including provision for universal access, and the design and installation of interpretive exhibits on the first and second floors.

EAs analyze a range of action alternatives and their impacts on the natural, human, and built environment. The alternatives proposed for the Union Building's rehabilitation include architectural and exhibit considerations. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and the National Historic Preservation Act of 1966 (NHPA), and regulations of the Council on Environmental Quality (40 CFR 1500-1508) and the NPS Director's Order 12 (DO-12). The impact analyses are intended to comply with both NEPA and Section 106 of the NHPA.

Keweenaw NHP's General Management Plan and Environmental Impact Statement (GMP/EIS) directs the NPS to provide a traditional park experience within its boundaries.<sup>4</sup> This experience is being developed, in part, through the acquisition and rehabilitation of significant historic structures like the Union Building. The GMP/EIS also calls for the NPS to establish an interpretive presence in the Calumet Unit. The Union Building was identified as the most suitable facility to meet these goals during two separate planning endeavors: the Park's draft Long Range Interpretive Plan (LRIP) and the Park Facility Plan (PFP).<sup>5</sup> The preservation and rehabilitation of this structure as an interpretive and visitor orientation facility is integral to the Park's mission.

The purpose of this project is therefore twofold: the first is to complete the work begun in 2005 and rehabilitate the interior of a significant park-owned historic structure following the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (or, in short, the *Secretary's Standards*). The second purpose is to develop the structure as an interpretive and orientation facility for visitors and residents. This facility will provide information about the park and regional area, and interpret social history through exhibits on the first and second floors, providing a cohesive overview of the community's development and role in the Keweenaw Peninsula's rich, nationally significant copper mining history.

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<sup>4</sup> US Department of the Interior, National Park Service, *Keweenaw National Historical Park, Michigan, Final General Management Plan and Environmental Impact Statement* (Washington, DC: 1998).

<sup>5</sup> US Department of the Interior, National Park Service, *Keweenaw National Historical Park Long Range Interpretive Plan*(draft) (2009); US Department of the Interior, National Park Service, *Keweenaw National Historical Park, Park Facility Plan* (2009).

## **Need for the Project**

At present, the NPS at Keweenaw NHP cannot provide quality visitor services because it does not have a visitor interpretation and orientation facility. Visitors and residents alike are often unaware that they are in a national park unit when they are in the area. Currently, the NPS operates a seasonal information desk in the anteroom of the Quincy Mine Hoist Association Gift Shop, where visitors can speak to a uniformed ranger and access information about the park and area through a timeline exhibit, large wall map, and free park-produced media and brochures. NPS staff also provides incidental orientation service at the front desk of park headquarters when visitors stop by; the Isle Royale and Keweenaw Parks Association (IRKPA) maintains a small sales area here as well. The park brochure, newspaper, and walking tour guides are available at headquarters, as are KHS brochures, but there are no exhibits, interpretive displays, or information about the broader Keweenaw Peninsula that the park and its partners have been mandated to interpret.

The current level of service is inadequate, particularly as the park and its partnership premise are somewhat confusing: Keweenaw NHP has neither entrance stations nor adequate signage marking its boundaries, and most of the property located within these boundaries is and will remain privately owned. Furthermore, the park's network of Keweenaw Heritage Sites stretches across 100 miles from one end of the Copper Country to the other, each telling a site-specific aspect of Keweenaw copper mining history. An interpretive facility is required to interpret an important component of copper mining history that is not significantly addressed by other park partners. A visitor orientation facility is needed to inform visitors and residents why the park exists, and how to navigate it efficiently and effectively.

## ***Scoping***

Preliminary initial project scoping was conducted by interdisciplinary staff at Keweenaw NHP. Additional internal scoping was conducted with the Park's NEPA Interdisciplinary Team (IDT) and other NPS resource professionals from the Midwest Regional Office (MWRO) and Harpers Ferry Center (HFC). During these sessions, staff defined the purpose of and need for the facility, suggested potential locations for the facility, identified potential impact topics and issues, and determined the project's relationship to and consistency with other planning efforts.

There have also been external scoping efforts for the project. Local newspapers, radio, TV, and other media sources were utilized for press releases. NPS staff participated in an hour-long live radio program, discussing the project with a broad audience. Project plans have been posted to the park's website, which includes a link for public comments. The community was also invited to review the project during a public meeting held at park headquarters on October 28, 2008. The exhibit design has also been evaluated in a number of professionally facilitated focus groups, and comments from these meetings have been recorded. See Chapter 5 of this document for specific dates and individuals who participated in scoping sessions.

The undertakings as described in this document are subject to Section 106 of the National Historic Preservation Act of 1966. Consultations with the Michigan State Historic Preservation Office (SHPO) have been ongoing since the public meeting.

## ***Relationship to Previous Planning Efforts***

Interior rehabilitation of the Union Building to develop the first NPS-operated visitor interpretive facility helps the park fulfill its mandate, and is in accordance with its GMP/EIS. The project follows the *Calumet Concept Development Plan*, prepared for the Charter Township of Calumet and the Village of Calumet by the Calumet Township Strategic Plan Committee with assistance from U.P. Engineers and Architects, Inc. of Houghton,



Michigan.<sup>6</sup> This plan, incorporated into the GMP/EIS, identifies the Union Building as the place where Calumet's social and community life will be interpreted, and link the stories of the industrial and commercial districts. Since that time, the draft Long-Range Interpretive Plan (LRIP), and the Park Facility Plan (PFP) have confirmed the direction of these initial planning efforts.

## Setting and Context

Calumet was once a thriving community with a population over 40,000. Today, the area is home to approximately 7,000 residents and is struggling to adapt to a post-mining economy. The urban area consists of the villages of Calumet and Laurium, which are within the Charter Township of Calumet. The Village of Laurium is comprised mostly of historic single-family homes; it was listed on the National Register of Historic Places in 2005.

The Union Building, located at the transition of Red Jacket Road to Fifth Street near the corner of Scott Street, marks the entrance to the Village of Calumet Civic and Commercial Historic District. Its setting has a high degree of historic integrity. Across the road to the south are two 19<sup>th</sup> century wood-frame churches, a vacant lot owned by the NPS, and the Coppertown Mining Museum, a designated Keweenaw Heritage Site located in the former C&H pattern shop. To the west across Fifth Street is another Keweenaw Heritage Site: the Keweenaw Heritage Center at St. Anne's, a large Gothic Revival sandstone church built in 1901.

Two neighboring properties are more modern in character. An insurance agency occupies a one-story brick structure lying to the east of the Union Building across Fourth Street. To the north is a car dealership, which, although of a mid-century design, has been in business in that location since the 1920s. A narrow alley separates its small sales lot from the Union Building's north elevation.

The nearly rectangular lot is 89.67 feet wide by 163.2 feet deep. The legal description of the Union Building parcel is:

Lot 3 of the Assessor's Plat of Newtown Location, Calumet Township, Houghton County, Michigan, according to the recorded plat thereof, said plat being recorded in Plat Cabinet 2, Folio #108 and #109, Houghton County Records.<sup>7</sup>

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<sup>6</sup> Calumet Township Strategic Plan Committee, *Concept Development Plan, Keweenaw National Historical Park, Calumet Michigan* (unpublished report, March 1991, revised May 1995).

<sup>7</sup> Deed and Plat Records, Houghton County, MI. Houghton County Courthouse. Houghton, MI.

## Impact Topics

### Methodology

Impact topics were identified and analyzed based on data gathered from park studies and in consultation with NPS staff from the park, MWRO, and HFC, and with subject matter experts from the local community. Potential impacts are described in terms of type, duration, and intensity. This is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act of 1969 (NEPA). The analysis also complies with Section 106 of the National Historic Preservation Act of 1966 (NHPA).

Under Section 106, only historic resources that are eligible for or are listed on the National Register of Historic Places are considered for impacts. As the Union Building is located within the Calumet National Historic Landmark District (1989), Section 106 applies to the structure as well as the surrounding cultural landscape. An impact, or effect, to the structure or the landscape occurs if a proposed action would alter in any way the characteristics that qualify it for inclusion on the register. If the proposed action would diminish the integrity of any of these characteristics, it is considered to be an adverse effect. Specifically, for purposes of this document, determination of the level of impacts to cultural resources was accomplished using the following criteria:

**Negligible:** The impact would be at the lowest level of detection or barely perceptible and not measurable. For purposes of section 106, the determination of effect would be *no adverse effect*.

**Minor:** Adverse impact — The impact would not affect the character defining features of a structure or building listed on or eligible for the National Register of Historic Places. For purposes of section 106, the determination of effect would be *no adverse effect*.

Beneficial impact — The character-defining features would be stabilized/preserved in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995b), to maintain existing integrity of a structure or building. For purposes of section 106, the determination of effect would be *no adverse effect*.

**Moderate:** Adverse impact — The impact would alter a character defining feature(s) of the structure or building but would not diminish the integrity of the resource to the extent that its national register eligibility would be jeopardized. For purposes of section 106, the determination of effect would be *no adverse effect*.

Beneficial impact — The structure or building would be rehabilitated in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* to make possible a compatible use of the property while preserving its character defining features. For purposes of section 106, the determination of effect would be *no adverse effect*.

**Major:** Adverse impact — The impact would alter a character defining feature(s) of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed on the national register. For purposes of section 106, the determination of effect would be *adverse effect*.

Beneficial impact — The structure or building would be restored in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* to accurately depict its form, features, and character as it appeared during its period of significance. For purposes of section 106, the determination of effect would be *no adverse effect*.

*Impairment:* A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Keweenaw NHP; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Impacts may be beneficial or adverse in nature. **Stated impacts are assumed to be *adverse* unless specifically noted as a beneficial impact.**

In the absence of quantitative data concerning the full extent of actions under a proposed alternative, best professional judgment prevailed.

### ***Impact Topics***

Federal law requires that the environmental impacts of federal projects on park resources be considered when planning and evaluating alternatives. NEPA outlines 30 potential tangible and intangible resources of concern that could be affected by the range of proposed alternatives. Impacts on these resources can be beneficial or adverse. Their type, duration, and context – and their cumulative effects – need to be considered, and the measures for mitigation need to be described. Similar to Section 106, NEPA categorizes intensity into four levels: no effect; negligible effect (when there is an impact, but one so low it cannot be measured); minor effect (when the impact is of little consequence); and exceeds minor effect (when the impact is clearly discernable).

### ***Impact Topics Dismissed***

As the project is limited to interior work on a cultural resource within an urban setting, impacts to natural resources were dismissed from further consideration. These include: geological resources; air and water quality; impacts on habitat, and rare and unusual vegetation; species of special concern; and energy resources. Recreation resources were also dismissed, as the facility does not meet the NPS definition of a recreation resource such as a trail or campsite.

Urban Quality of Gateway Communities was dismissed from consideration as an impact topic because the Union Building is part of the urban fabric of the Village of Calumet's commercial and civic district. The village is located within the boundaries of the Calumet Unit of Keweenaw National Historical Park and does not meet the commonly accepted definition of a gateway community to a national park – a community on the edge or periphery of a national park. The cultural landscape of Calumet is an urban environment: impacts are addressed under the Cultural Landscape impact topic. The project is not expected to impact the park's actual gateway communities of Hancock and Houghton that lie 12 and 14 miles south of Calumet respectively. Impacts to traffic or to the socioeconomic conditions of either of these communities will not be measurable.

### ***Impact Topics Retained***

Of the 30 topics that NEPA identifies, Keweenaw NHP's IDT determined that nine applied to the project and required consideration in each of the alternatives. Impacts to land use, visitor experiences and aesthetic resources, museum collections, and long-term management of resources were also evaluated.

Some themes overlapped and were considered jointly: given the urban nature of the Park and project area, impacts to the cultural landscape, urban quality, and land use were examined together. Others required a closer look: since the project deals entirely with a historic structure, the IDT chose to examine that topic in greater detail and considered impacts to the interior and exterior separately.

Impacts to archeological resources were also retained for consideration, but within the contexts of historic interior spaces and the cultural landscape, urban quality, and land use. It should be noted that an archeological survey was conducted in 2003 prior to exterior rehabilitation work; it concluded that the property does not contain significant archeological deposits, and that no additional testing was needed.<sup>8</sup> However, it was determined that as ground disturbance would be required for installing conduit and an interior elevator, these resources should be considered.

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<sup>8</sup> Dr. Pat Martin, “Archaeological Testing of the Union Building Property, Calumet, Michigan,” (unpublished report, 2003).

## Chapter 2: Alternatives

### Background

As stated in Chapter 1, this project will complete the rehabilitation of a significant, NPS-owned historic structure for use as an interpretive and visitor orientation facility. As defined by the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, rehabilitation is “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.”<sup>9</sup>

The draft *Union Building Historic Structure Report* (HSR) prescribes rehabilitation as the ultimate treatment for the Union Building based on its historic significance, its physical condition, character-defining features, economic feasibility, and its proposed use. NPS management policies allow the rehabilitation of a historic structure for an efficient and contemporary use “if it cannot adequately serve an appropriate use in its present condition.”<sup>10</sup>

The 2005 exterior rehabilitation addressed the deterioration of the building’s exterior envelope, including the roof, masonry, storefront, metal cornices, wood doors, first floor wood windows, and site drainage. This work also included a new fire suppression system and utility services upgrades. In 2008, the building’s steam heating system was repaired and rehabilitated. Restoration of the second and third floor wood double-hung windows has been scheduled to occur in 2009-2010.

The interior rehabilitation of the Union Building will address existing deficiencies to achieve contemporary occupancy as defined by current life-safety standards and building codes. The primary design challenge for reuse involves satisfying requirements of emergency egress, universal access, and plumbing fixture counts for public toilet facilities while preserving the building’s significant spaces and features. Treatment of deteriorated architectural fabric and finishes must also be determined.

### Value Analysis

Two separate Value Analysis (VA) workshops were conducted during the preliminary planning process in 2008.<sup>11</sup>

The first VA was held July 21-24, and identified architectural and engineering options for the interior rehabilitation phase of the project. NPS staff from the park, MWRO, and HFC met with the architecture and engineering contractor, SmithGroup, to define alternatives for the interior rehabilitation. Facilitated by Kirk Associates, the VA primarily examined options for locating adequate restroom facilities, a stairwell, and an elevator to provide universal accessibility in the facility while minimizing the impact to the historic fabric of the structure.

The second VA was held October 28-30 and defined alternatives for exhibit design and installation. Participants included NPS staff from the park, MWRO, and HFC, a Keweenaw NHP Advisory Commission representative, community stakeholders, and the Office of Krister Olmon. The VA first determined alternatives

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<sup>9</sup> U.S. Department of the Interior, National Park Service, *Secretary of the Interior's Standards for the Treatment of Historic Properties* (2005).

<sup>10</sup> U.S. Department of the Interior, National Park Service, *Management Policies* 2006.

<sup>11</sup> See Kirk Associates, *Rehabilitate Union Building – Phase 2 Interior: Value Analysis Final Report* (unpublished report, 2008) and US Department of the Interior, National Park Service, Harpers Ferry Center, *Value Analysis Report: Keweenaw National Historical Park Exhibits for the Union Building* (unpublished report, 2008).

for the exhibit design and installation phase of the project; next, participants discussed how the alternatives differed thematically and examined approaches to communicate the themes. Visitor flow patterns and spatial impacts were also considered.

Both VAs concluded that the highest priority in each alternative was the preservation of historic fabric, while acknowledging the importance of visitor flow through the facility.

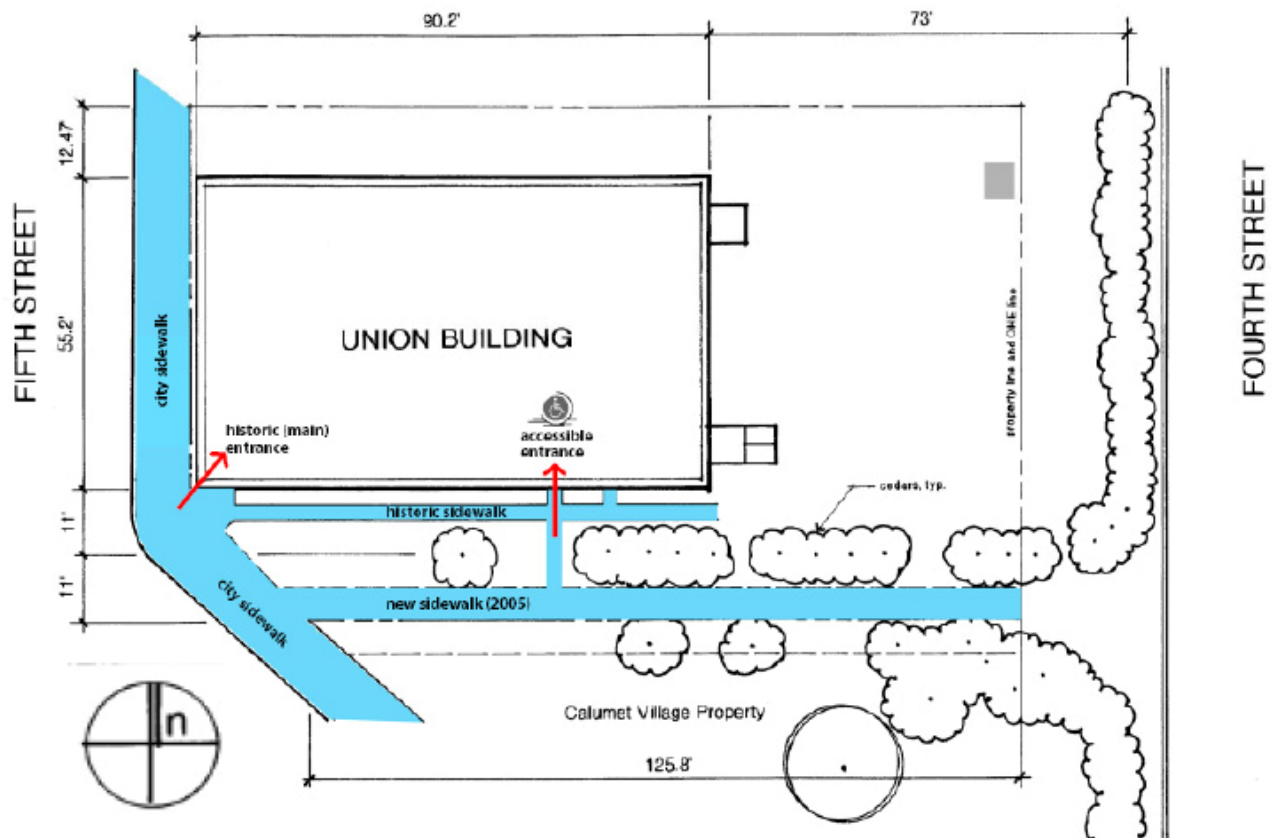


Figure 1: Plot Plan of the Union Building Site (SmithGroup)

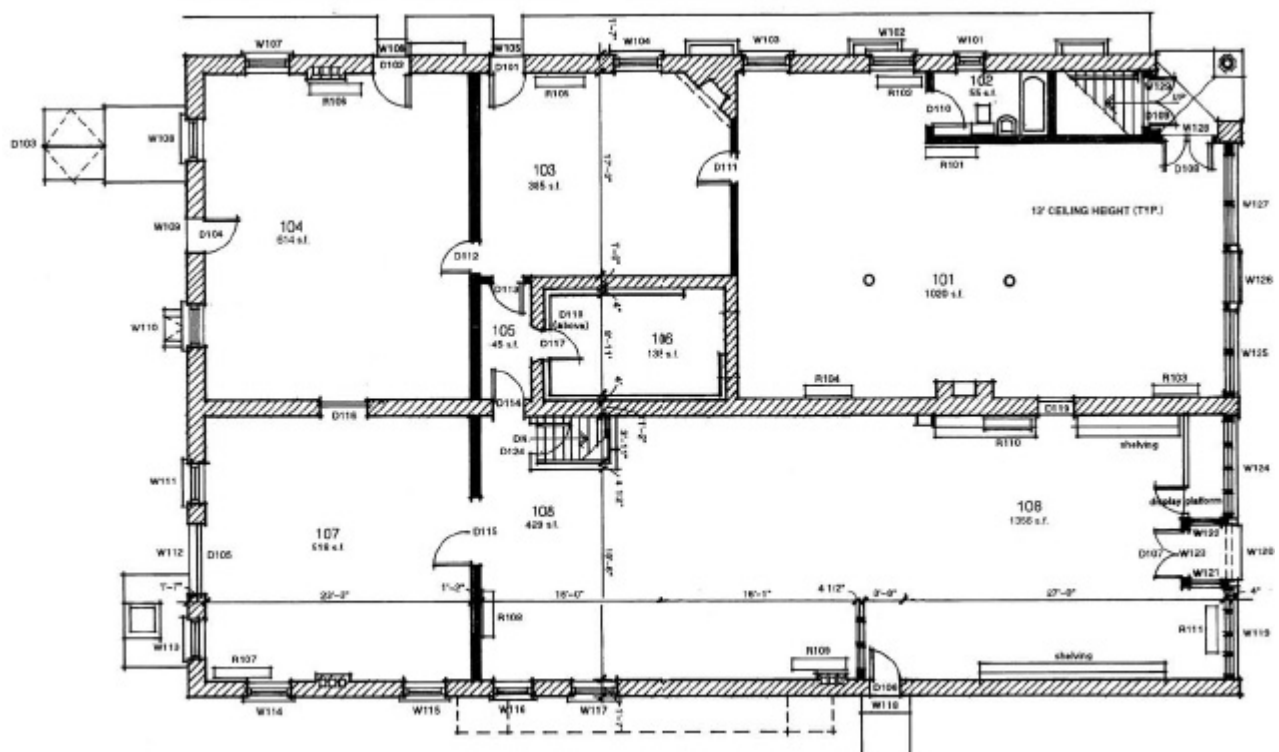


Figure 2: A&E Value Analysis Participants, July 21-28, 2008 (SmithGroup Photo)

## Descriptions of Alternatives

### *Alternative 1 (No Action)*

Alternative 1, the No Action alternative, results in no new work to accommodate an adaptive reuse of the Union Building. This alternative assumes that the building will remain unoccupied and that the NPS will continue to maintain the vacant building. The current condition of the interior spaces and the lack of universal access would prevent utilization of the building for park purposes.

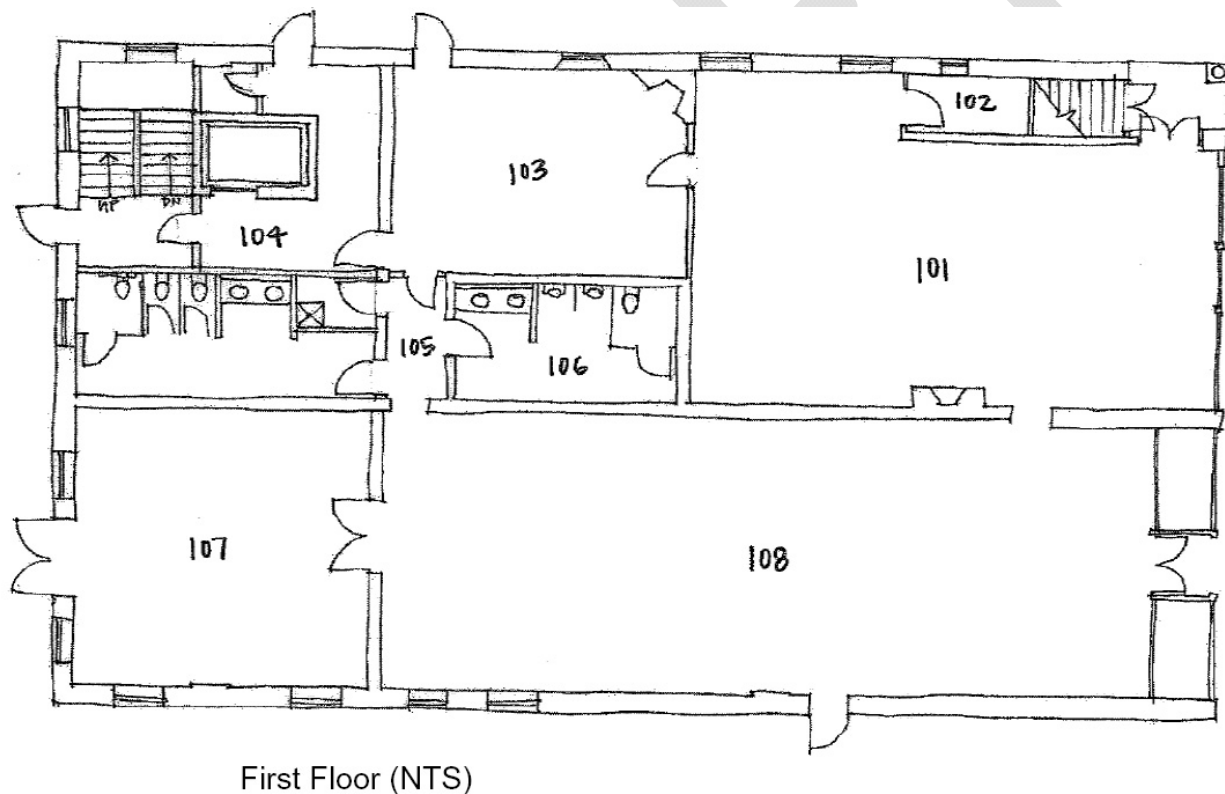


**Figure 3: Existing Conditions, First Floor of Union Building (SmithGroup)**

### ***Alternative 2 – Interior Elevator and Stair (Preferred Alternative)***

Alternative 2 incorporates a new four-stop elevator and egress stair within the interior of the Union Building. This plan repurposes secondary spaces in the building's southeast corner (rooms 003, 104, 209, and 308) for vertical circulation (see Chapter 4). New group toilet facilities on the first floor (rooms 104 and 106) serve users on the first, second, and third floors. Supplemental new single-occupancy unisex accessible toilets are included on the second and third floors. The second floor toilet facility is located in an existing toilet room (rooms 206 and 207). The third floor toilet facility is located in the east end of the south anteroom (Room 307).

Utilizing the Choosing by Advantages (CBA) process, Alternative 2 was selected as the preferred alternative for rehabilitation during the Union Building architectural VA sessions held at park headquarters in July 2008. Alternative 2 incorporates all contemporary use requirements, including an elevator for universal accessibility, an additional stair for safe building egress, and toilet facilities, all within the building's secondary interior spaces. It was determined that Alternative 2 best maintains the integrity of both the Union Building's exterior envelope and the surrounding cultural landscape. Alternative 2 also best supports a beneficial visitor experience by integrating intuitive building circulation, convenience to toilet facilities, and optimal use of the building's primary entrances adjacent to the new elevator and stair. Finally, Alternative 2 best optimizes use of the building for after-hour community functions and, of all action alternatives, has the lowest projected operational expenses based on a square foot analysis.



**Figure 4: VA Sketch, Floor Plan, First Floor of Union Building, Alternative 2 (SmithGroup)  
[Not to scale (NTS)]**



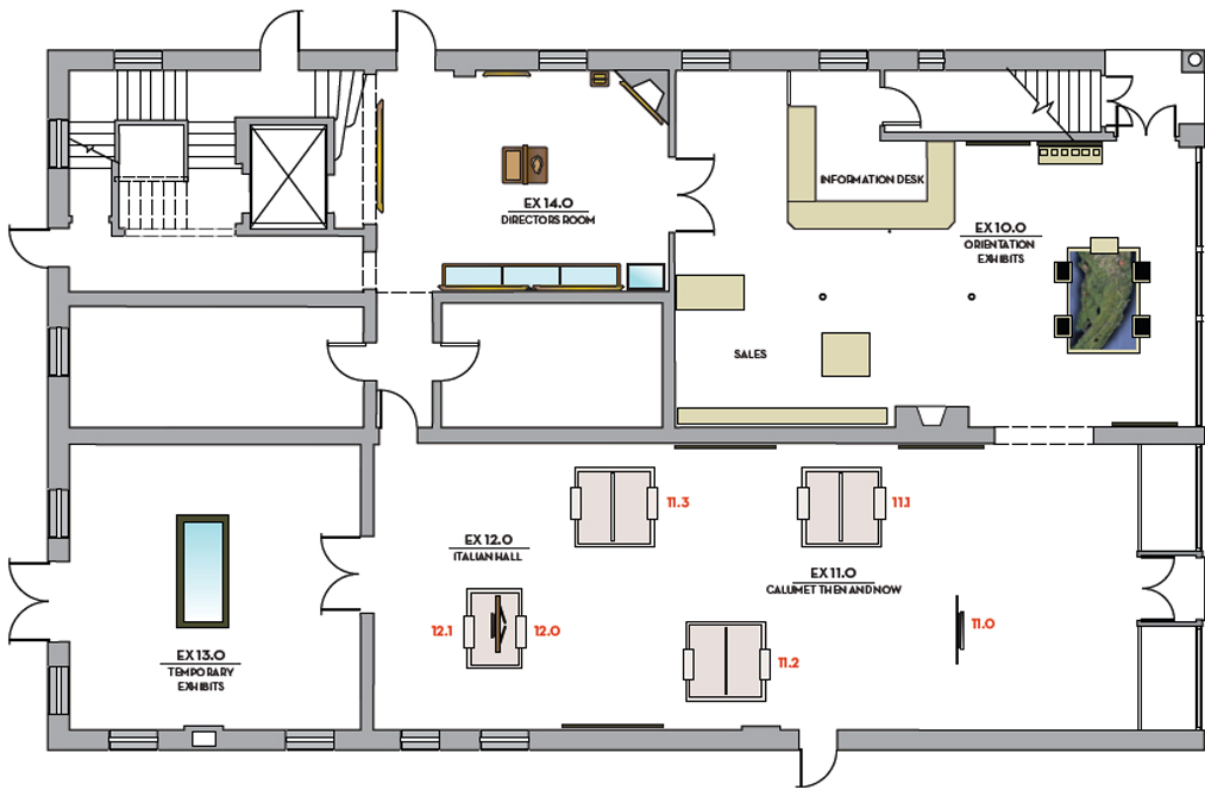


Figure 5: Exhibit Plan, First Floor of Union Building, Alternative 2 (Office of Krister Olmon)

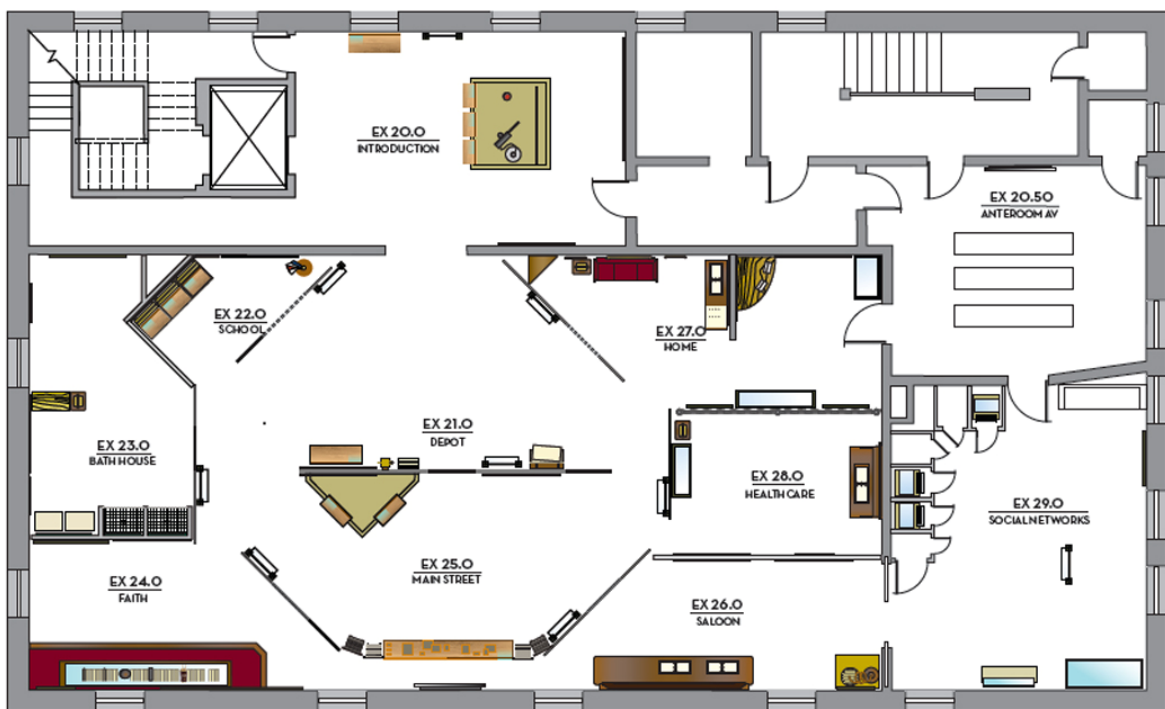


Figure 6: Exhibit Plan, Second Floor of Union Building, Alternative 2 (Office of Krister Olmon)



**Figure 7: SE Corner of First Floor: Proposed Location of Elevator/Stair Core (NPS Photo, Karl Benda)**



**Figure 8: Second Floor Kitchen: Proposed Location of Elevator/Stair Core (NPS Photo, Karl Benda)**



**Figure 9: Third Floor Kitchen: Proposed Location of Elevator/Stair Core (NPS Photo, Karl Benda)**

## **Subsequent Decision to Remove Second Floor Stage Platform (Addition to Alternative 2 – Preferred Alternative)**

### ***Background***

As project planning evolved, it became apparent that the platform stage located on the second floor was significantly impacting visitor circulation through the exhibit, and the exhibit design itself. Therefore, NPS staff reexamined the stage. As described above, the second floor of the Union Building was designed to accommodate the Odd Fellows' lodge functions. In 1915, they completed alterations to the interior that included new wood flooring, the removal of existing trim and finishes and installation of new wood trim including base trim, wainscot, paneled wood doors, door and window casings, beamed ceilings, and application of new wallpapers and painted finishes. The main 66-foot by 34-foot lodge hall contains a stage platform centered along the east wall. Currently covered in circa 1970 sculpted loop and shag carpeting, the 8-foot by 10-foot platform is constructed of hardwood flooring with two risers running continuously along the three exposed perimeter elevations. The platform's date of construction is uncertain but this feature is clearly associated with lodge functions and contributes to the historic character of the space.

### ***Use and Treatment of Second Floor Lodge Hall***

Schematic architectural and exhibit plans for the interior rehabilitation of the Union Building lay the design foundations for the building's new use as an interpretive facility. Plans identify the second floor lodge hall as the primary location for exhibits featuring themes relating to life in a copper mining town. After consultation with the park's historical architect and historian in response to numerous comments on the Schematic II Plan, the exhibit design planning team proposed to remove the small platform from the second floor lodge hall. The following points outline the reasons for the proposed removal to accommodate the lodge hall's new use:

- The floor area occupied by the platform consumes a substantial amount of the room's available space for interpretive exhibits. Attempts to integrate the platform into the exhibit plan have not been successful.
- The second floor lodge hall was selected for interpretive exhibit use over the third floor lodge hall based on an assessment of integrity and significance of remaining architectural fabric. It was determined that the third floor lodge hall and stage best characterizes historic fraternal organization functions and offers richer material to interpret the building's historic use of the upper floors. The third floor stage will be retained and restored and will include the recreation of painted screens, backdrop, and proscenium.
- The raised platform cannot be incorporated into an exhibit that meets universal accessibility standards. The protruding risers would be particularly problematic for visitors with visual challenges. Removing the platform complies with the spirit of the May 2006 memorandum from Acting Director Steve Martin which notes that "[t]he NPS must ensure that all rehabilitation and renovation projects incorporate accessibility corrections to the highest degree practicable," and that the NPS "must ensure that all interpretive programs, services and opportunities are provided in such a way as to ensure that they are accessible to all individuals with disabilities."<sup>12</sup>
- Visitor circulation in the room would be constricted by the location of the platform.
- The second floor stage platform is not accompanied by associated architectural elements. Selective removal of the platform will not result in a fragmented or discontinuous arrangement of the room or its remaining features.

### ***Mitigation for Removal of Second Floor Stage Platform***

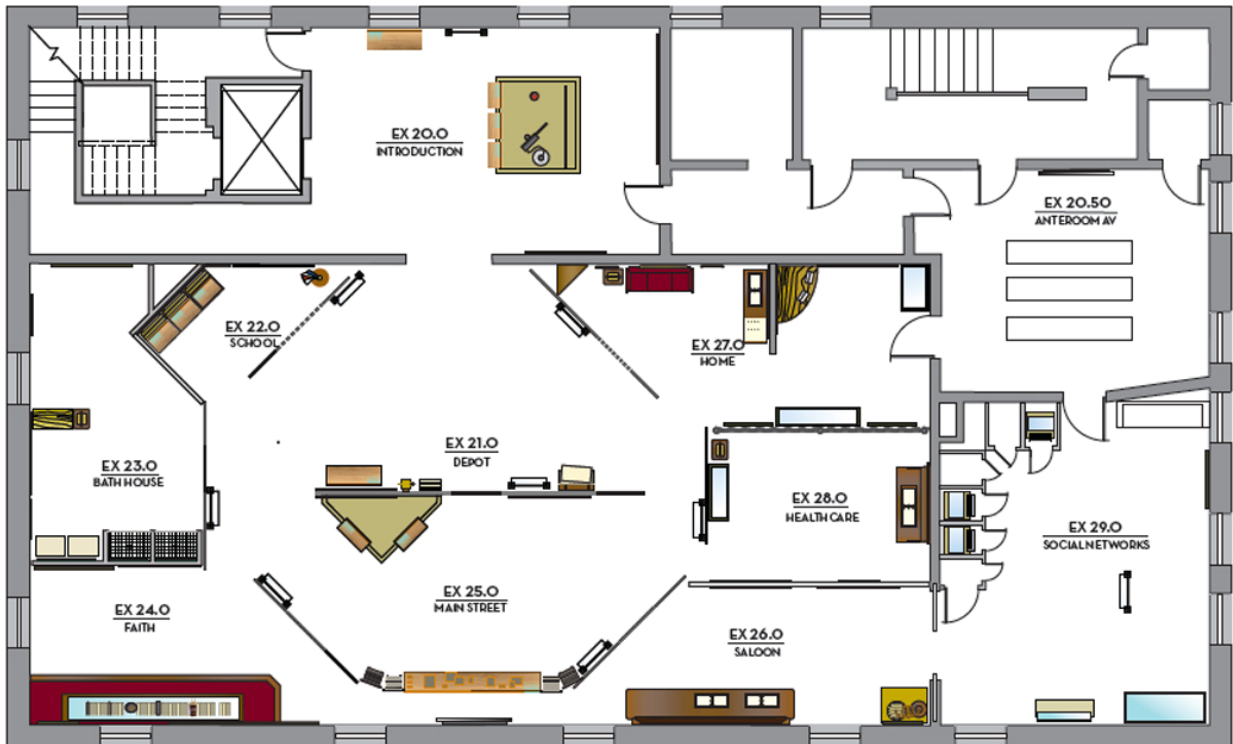
- Prior to removal, the platform will be photographed and documented in measured drawings.

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<sup>12</sup> U.S. Department of the Interior, National Park Service, Director Steve Martin, *Disability Access in the National Park Service*. (unpublished memorandum, July 24, 2006).



- The platform will be carefully removed and stored for potential future reinstallation.
- As a component of the exhibit design, interpretive media will be developed highlighting the Union Building's historic room functions, occupants, and features, including the second floor stage platform. Individual identification signs will be installed throughout the building to indicate former uses of historic rooms.



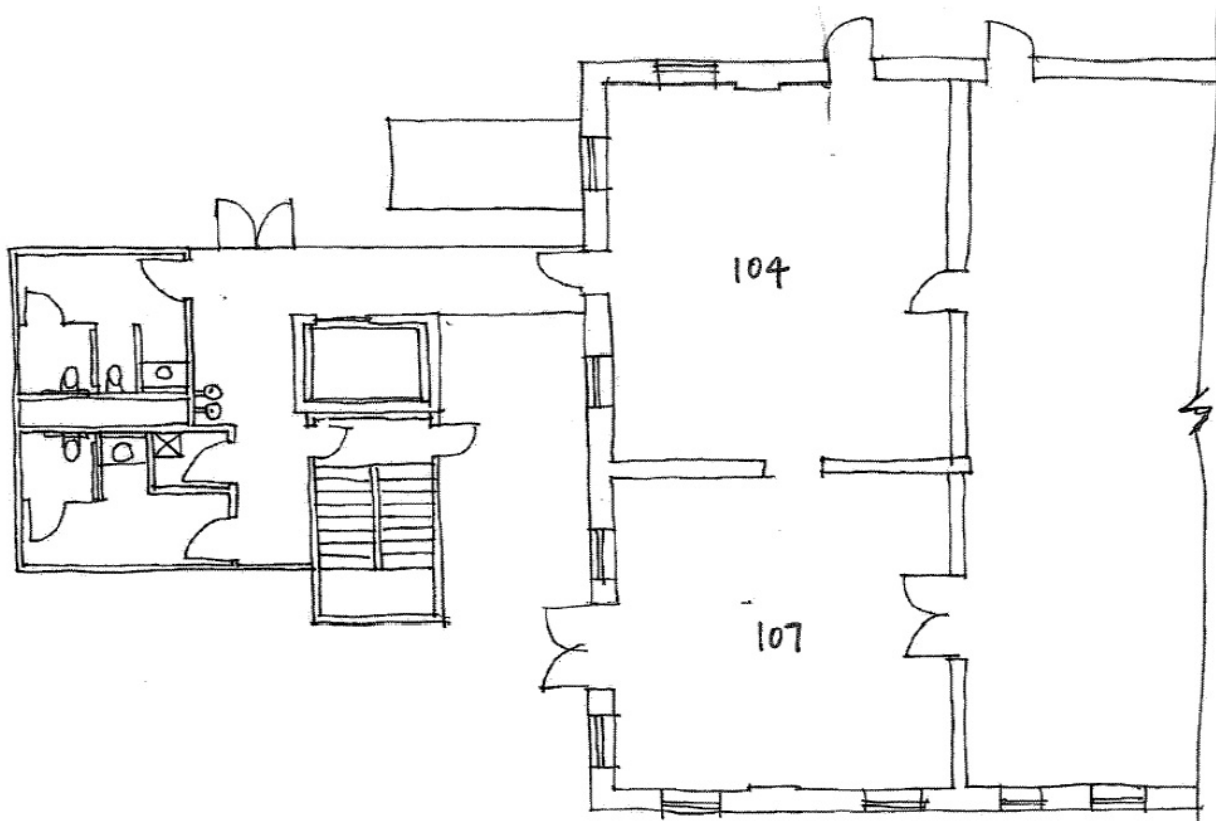
**Figure 10: Exhibit Plan, Second Floor of Union Building, Alternative 1 (Office of Krister Olmon)**



**Figure 11: Second Floor Exhibit Room Showing Existing Stage Platform (NPS Photo, Karl Benda)**

### ***Alternative 3 – Exterior Elevator and Stair Addition***

Alternative 3 is comprised of a new three-story building addition located on the east portion of the Union Building site. This addition provides a four-stop elevator, egress stair, and, except for the basement level, group toilet facilities on each floor. A new connecting corridor links the new addition to the Union Building's east elevation and intersects southeast corner rooms (rooms 003, 104, 209, and 308).

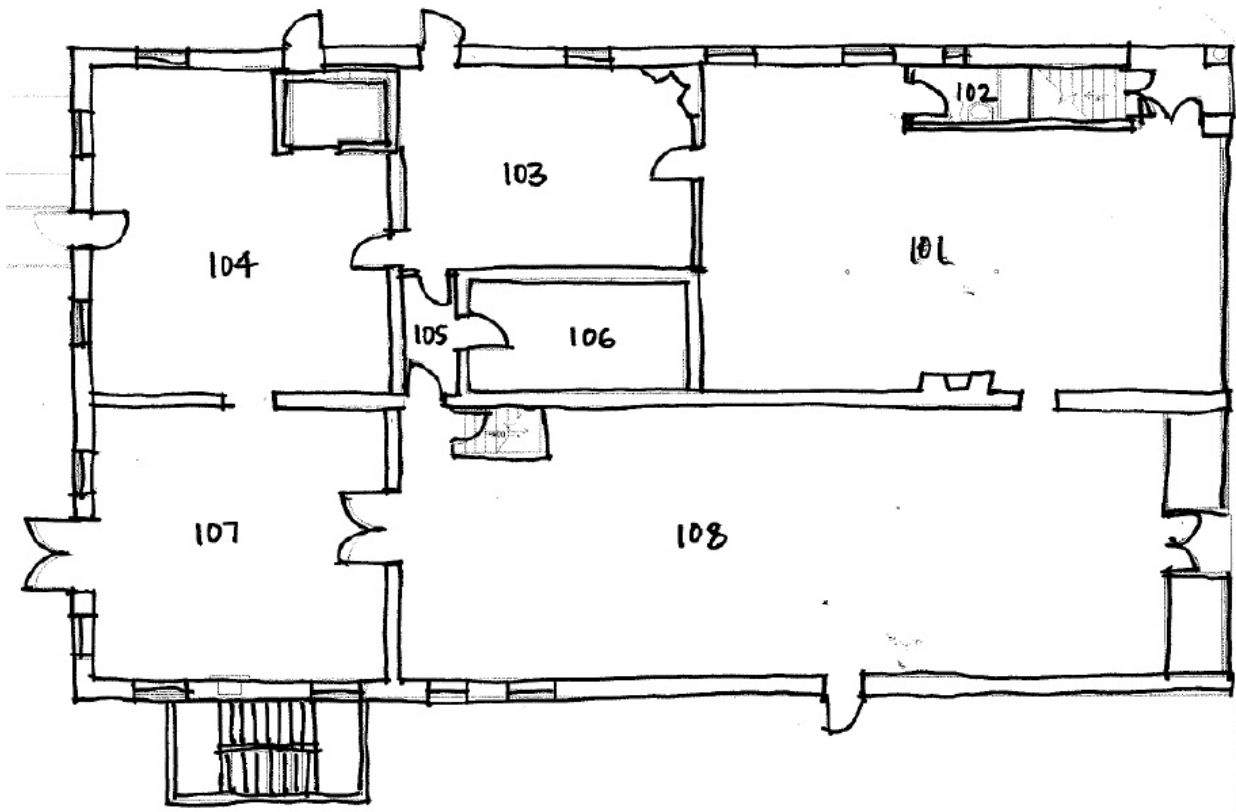


First Floor (NTS)

**Figure 12: VA Sketch, Floor Plan, First Floor of Union Building, Alternative 3 (SmithGroup)**

#### ***Alternative 4 – Interior Elevator and Exterior Stair Addition***

Alternative 4 encompasses a new exterior three-story egress stair addition and an interior four-stop elevator. The new three-story exterior stair addition is located along the building's north elevation and is accessed directly from the first floor northeast corner room and the large second and third floor lodge spaces (rooms 107, 214, and 309). The new interior elevator is located along the building's south perimeter wall and links the basement, with the first floor southeast corner room and at the second and third floor south anterooms (rooms 003, 104, 208, and 307).



First Floor (NTS)

Figure 13: VA Sketch, Floor Plan, First Floor of Union Building, Alternative 4 (SmithGroup)



## Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested by the Council on Environmental Quality (CEQ), which provides direction in its guidance *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (1981; Q6a). CEQ defines the environmentally preferred alternative as “the alternative that causes least damage to the biological and physical environment. It also means the alternative which best protects; preserves; and enhances historic, cultural, and natural resources.”

The environmentally preferred alternative is determined by applying the criteria suggested in NEPA, which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that “the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101.” The six criteria from Section 101 are detailed below.

- Criterion 1: Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Criterion 2: Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Criterion 3: Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Criterion 4: Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Criterion 5: Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life’s amenities.
- Criterion 6: Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Using the CEQ’s interpretations of the Section 101 criteria and the alternatives impact analysis in this document, it was determined that Alternative 2: Interior Elevator and Stair and its accompanying decision to remove the second floor stage platform is the environmentally preferred alternative.

Alternative 2 and the accompanying decision to remove the second floor stage platform would implement the highest level of rehabilitation, restoration, and preservation of all the alternatives. This alternative strikes a balance between available resources, the desire to rehabilitate the building to its period of significance, and provide meaningful interpretation for visitors while minimizing impacts to the historic structure and the surrounding community.

No new information came forward during public scoping or consultation with regulatory agencies or Native American tribes to necessitate the development of any new alternatives, other than those described and evaluated in this document. Because it meets the Purpose and Need for the project and is the environmentally preferred alternative, Alternative 2: Interior Elevator and Stair, and the accompanying decision to remove the second floor stage platform, is also recommended to be the Preferred Alternative for this proposal.

DRAFT

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## Chapter 3: Impacts Analysis

[NOTE: Impacts may be beneficial or adverse in nature. **Stated impacts are assumed to be adverse unless specifically noted as a beneficial impact.** (See page 10, *Methodology*)]

### *Impacts to the Cultural Landscape, Urban Quality, and Land Use*

#### Alternative 1 – No Action

Alternative 1 would result in no immediate impact to the cultural landscape; there is, however, a potential for moderate impact in the long term due to continued deterioration of the structure. It would neither increase traffic nor create a greater demand for parking within the historic districts. The No Action alternative does not advance local zoning or land use objectives.

#### Alternative 2 – Interior Elevator and Stair (Preferred Alternative)

Alternative 2, the preferred alternative, is characterized by an interior stairwell and elevator. This configuration, including new interior restroom facilities, would moderately impact the cultural landscape in the form of new concrete walkways to existing door openings and a new, freestanding post-mounted facility identification sign. New underground conduit will be installed to link the building with NPS telecommunication, network/data, security, and fire detection systems. This will require ground disturbance from the NPS-owned Keweenaw History Center (the former C&H Public Library) to the C&H Warehouse No. 1, and on to the Union Building; although it will have a moderate impact, it will be of minor duration.

The preferred alternative would result in increased vehicular traffic within the commercial and former industrial districts, and create a greater demand for parking spaces and safe pedestrian routes. While the specific intensity is unknown, it is expected not to exceed a moderate impact and would be mitigated accordingly.

This project is consistent with local zoning and land use objectives, and will rehabilitate an existing building at the entrance to Calumet's commercial district, thereby having a beneficial impact on the community.

#### Alternative 3 – Exterior Elevator and Stair Addition

This alternative results in a moderate impact to the cultural landscape and the visual environment. The new building addition obscures views of the Union Building's east façade and consumes the open space on the east side of the building lot that is currently defined by the historic perimeter plantings of cedar hedgerows. Due to the height and massing of this addition, it will be visible from nearby locations and from longer views within the landmark district. New underground conduit will be installed to link the building with NPS telecommunication, network/data, security, and fire detection systems. This will require ground disturbance from the NPS-owned Keweenaw History Center (the former C&H Public Library) to the C&H Warehouse No. 1, and on to the Union Building; although it will have a moderate impact, it will be of minor duration. Other minor impacts to the cultural landscape include the installation of new concrete walkways to existing and new door openings, and a new freestanding post-mounted facility identification sign.

Alternative 3 will also result in increased vehicular and pedestrian traffic within the commercial and former industrial historic districts. There will be a greater demand for parking spaces and safe pedestrian routes. While the specific intensity is unknown, it is expected not to exceed a moderate impact and would be mitigated accordingly.

By rehabilitating an existing building in Calumet's commercial district, this project is consistent with local zoning and land use objectives, thereby having a beneficial impact on the community.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

Alternative 4 would result in a moderate impact to the cultural landscape and the exterior appearance of the building. The new stair addition occupies a portion of historic alley located between the building's north

elevation and the adjacent lot line. The addition would also be visible from vantage points within the commercial district. Other moderate impacts to the cultural landscape include installation of new concrete walkways to existing and new door openings, and a new freestanding post-mounted facility identification sign. New underground conduit will be installed to link the building with NPS telecommunication, network/data, security, and fire detection systems. This will require ground disturbance from the NPS-owned Keweenaw History Center (the former C&H Public Library) to the C&H Warehouse No. 1, and on to the Union Building; although it will have a moderate impact, it will be of minor duration.

As with the other action alternatives, Alternative 4 would result in increased vehicular and pedestrian traffic within the historic commercial and former industrial districts, and there will be a higher demand for parking and safe routes for pedestrians. While the specific intensity is unknown, it is expected not to exceed a moderate impact and would be mitigated accordingly.

This project is consistent with local zoning and land use objectives and will rehabilitate an existing building in Calumet's commercial district, thereby having a beneficial impact on the community.

### ***Impacts to the Historic Building Exterior***

#### **Alternative 1 – No Action**

The No Action alternative results in no impacts to the building's exterior, although it would potentially result in moderate impacts due to continuous loss of historic fabric through progressive deterioration.

#### **Alternative 2 – Interior Elevator and Stair (Preferred Alternative)**

The Preferred Alternative, characterized by an interior stair and elevator, results in moderate beneficial impacts to the exterior envelope in the form of retractable canvas storefront awnings on the building's west elevation.

The interior restrooms do not impact the building's exterior envelope.

#### **Alternative 3 – Exterior Elevator and Stair Addition**

Alternative 3 would result in moderate impacts to the east building façade where the connecting corridor from the new addition interfaces the existing brick masonry wall. Changes will include the installation of new door openings on each floor and concealment of a portion of the exterior wall.

The group toilet rooms located in the new building addition contribute to the moderate impacts identified above. The inclusion of toilet facilities in the new addition increases its overall size, scale and massing.

There would be moderate beneficial impacts to the exterior envelope in the form of retractable canvas storefront awnings on the building's west elevation.

#### **Alternative 4 – Interior Elevator and Exterior Stair Addition**

Alternative 4 would require moderate impacts to the north building façade where the new egress stair addition connects to the existing brick masonry wall. Changes involve the concealment of a portion of the exterior wall and conversion of existing window openings to function as emergency egress doors.

This alternative would result in moderate beneficial changes to the exterior envelope that includes the addition of retractable canvas storefront awnings on the building's west elevation.

New interior toilet facilities do not impact the building's exterior envelope.

## ***Impacts to Historic Interior Spaces***

### **Alternative 1 – No Action**

Choosing the No Action alternative would result in no alterations to the Union Building's interior spaces. It could, however, result in moderate impacts due to the continuous loss of historic fabric through progressive deterioration.

### **Alternative 2 – Interior Elevator and Stair (Preferred Alternative)**

Implementation of Alternative 2 requires an additional door opening in an interior masonry wall in the basement to meet egress requirements resulting in a moderate impact caused by the removal of a historic stairway. A portion of the basement floor in the southeast corner will be excavated to a depth of approximately 4 feet for the elevator. It also requires the removal of the second and third floor kitchens (rooms 209, 307, and 308) for the elevator and stair core and removal of the second floor mezzanine robing room (Room 212). It also prescribes alterations to the east end of second and third floor south anteroom spaces (rooms 208 and 307), requiring demolition of the interior east partition walls and a portion of the floor and ceiling. It also requires reconfiguration of the first floor southeast corner room (Room 104), Room 206 on the second floor, and Room 307 on the third floor to accommodate toilet rooms. A portion of the attic locker room will be removed to accommodate the HVAC system. Moderate impacts to secondary interior spaces result.

### **Alternative 3 – Exterior Elevator and Stair Addition**

Alternative 3 would result in moderate impacts to the second and third floor kitchens (Rooms 209, 307, and 308). Other moderate impacts include the removal of built-in cabinets along the north wall and the installation of new door openings to connect to the east addition. A new door opening in the basement through an interior masonry wall is required, and as a consequence a historic stairway from the first floor to the basement will be removed. A portion of the attic locker room will be demolished to accommodate the HVAC system.

The group toilet rooms located in the new building addition do not result in impacts to any existing interior spaces.

### **Alternative 4 – Interior Elevator and Exterior Stair Addition**

Alternative 4 would require a new door opening in the basement through an interior masonry wall, and as a consequence a historic stairway from the first floor to the basement will be removed. A portion of the basement floor in the southeast corner will be excavated to a depth of approximately 4 feet for the elevator. A portion of the attic locker room will be demolished to accommodate the HVAC system. Alternative 4 also requires reconfiguration of the first floor southeast corner room (Room 104), Room 206 on the second floor, and Room 307 on the third floor to accommodate toilet rooms. Additional alterations would be made to the east end of second and third floor south anteroom spaces (Rooms 208 and 307), requiring demolition of the interior east partition walls and a portion of the floor and ceiling, resulting in moderate impacts to secondary interior spaces.

A new exterior stair would block the existing first floor door opening and would require changes to existing window openings (rooms 107, 214, and 309) for use as door openings to access the new egress stair addition, resulting in moderate impacts to these interior spaces.

## ***Impacts to Museum Collections***

### **Alternative 1 – No Action**

Implementing the No Action alternative would mean that museum objects that have been identified for inclusion in the Union Building exhibit would remain in their current locations. It would result in negligible impacts to museum collections, which are not currently housed in the Union Building.

#### Alternative 2 – Preferred Alternative

The Preferred Alternative would result in moderate beneficial impacts to some artifacts from some collections that would be featured in the Union Building exhibit and would be housed in conditions that provide a secure and climatically controlled environment.

Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.

#### Alternative 3 – Exterior Elevator and Stair Addition

Alternative 3 would result in moderate beneficial impacts to artifacts from some collections that would be featured in the Union Building exhibit, as they would be housed in conditions that provide a secure and climatically controlled environment.

Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

Alternative 4 would result in moderate beneficial impacts to some artifacts from some collections that would be featured in the Union Building exhibit and would be housed in conditions that provide a secure and climatically controlled environment.

Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.

### ***Impacts to the Visitor Experience and Aesthetic Resources***

#### Alternative 1 – No Action

There would be no change to the current visitor experience for the Calumet Unit of the park as a result of implementing the No Action alternative. Visitors will continue to encounter a vacant building at one of the primary intersections in the community.

The Union Building is located at the transition of Red Jacket Road to Fifth Street, where Calumet's industrial and commercial districts meet. An unoccupied building in this prominent location adversely impacts the overall visitor experience and fails to represent the vitality of both the park and the community.

A portion of the building's interior aesthetic resources will continue to degrade because of unprotected exposure to UV light. Significant historic features, such as the third floor Masonic stage set, will not be properly documented. Visitor appreciation and understanding of the building's aesthetic resources and their historic significance will remain undeveloped.

### Alternative 2 – Preferred Alternative

The Preferred Alternative clusters a new elevator, stair, and primary first floor group toilet facilities in one corner of the building and provides for convenient and intuitive building navigation resulting in moderate beneficial impacts. Vertical circulation is adjacent to both the existing accessible entrance and main visitor entry experience. This arrangement facilitates visitor flow and movement.

Differing locations of second and third floor single-occupancy toilet facilities may be more difficult to locate, thus potentially causing minor impacts. This approach relies on the first floor group toilet facilities to meet use requirements on the upper floors.

New construction in the form of an elevator, stair, and toilet facilities must be differentiated from yet compatible with the building's historic materials and features. This alternative relies on a skillful application of the *Secretary's Standards*: visitors must be able to distinguish new work from historic fabric. Locating these new features within the footprint of the historic structure heightens the degree of design difficulty.

The reuse of this prominent, historic structure provides access to a NPS visitor experience within the park's Calumet Unit, resulting in a moderate beneficial impact. Exhibits and orientation information located within the building facilitate visitor understanding and exploration of the surrounding industrial and commercial districts.

The Preferred Alternative results in moderate beneficial impacts to the building's primary interior aesthetic material. Preservation of architectural features, such as doors, wood trim, metal ceilings, and wood floors, is integral to the rehabilitation.

This alternative would have moderate impacts to some secondary aesthetic material associated with the removal of the second and third floor kitchens, second floor mezzanine, and the first floor southeast corner room to allow for the installation of an elevator, stair, and toilet facilities. The aesthetic spatial arrangement of these rooms, and a portion of adjacent rooms, will result in moderate impacts.

### Alternative 3 – Exterior Elevator and Stair Addition

In this configuration, the vertical circulation is remote from the existing accessible entrance and main visitor entry, resulting in a moderate impact to visitor experience; visitors looking for the stair and elevator may have to rely on way-finding signage and direction from NPS staff.

This approach may rely on establishing a new visitor entrance for the addition located in the rear of the building. This entry experience does not maximize the use of historic door openings and may serve to diminish the visitor's experience of this historic structure, resulting in moderate impacts to visitor experience.

Implementation of Alternative 3 would consolidate an elevator, stair, and multi-level group toilet facilities into a new building addition and provides the most convenient arrangement for visitor access to group restroom facilities on all floors.

To be in accordance with the *Secretary's Standards*, this new addition must be differentiated from but compatible with historic fabric, and in size, scale and proportion. Visitors must be able to discern what is historic and what is new. Alternative 3 provides the opportunity for a well-defined interface between the two.

This alternative results in moderate beneficial impacts to the building's primary interior aesthetic material resources. The preservation of architectural features, such as doors, wood trim, metal ceilings, and wood floors, is integral to the interior rehabilitation.

Moderate impacts would be made to some secondary aesthetic material associated with the limited removal of the second and third floor cabinets. Alterations to these rooms to accommodate visitor circulation between the

new addition and the existing building will result in moderate impacts to the aesthetic spatial arrangement of these rooms.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

This alternative separates the new interior elevator and the new exterior stair addition on opposite sides of the structure, resulting in a moderate impact to visitor experience; this arrangement fragments building circulation to the upper floors.

Although the elevator would be adjacent to the existing accessible entrance, the new stair would be located on the opposite side of the building, remote from the main visitor entry experience. The separation and consequential dispersion of discrete visitor groups caused by separate access routes for using the stairs or the elevator, as needed or preferred, would potentially cause a moderate impact to the visitor experience.

Furthermore, the new stair addition interfaces second and third floor spaces in locations that conflict with the intuitive use of these rooms, resulting in a moderate impact to visitor experience; visitor circulation through the stair interrupts both the second floor exhibit sequence and third floor assembly use.

A minor impact will be caused by differing locations of second and third floor single-occupancy toilet facilities, which may make them more difficult to locate. This approach relies on the first floor group toilet facilities to meet use requirements on the upper floors.

As with all action alternatives, Alternative 4 results in moderate beneficial impacts to the building's primary interior aesthetic resources. The preservation of architectural features such as doors, wood trim, metal ceilings, and wood floors are integral to the interior rehabilitation.

Although this alternative would minimize impacts to existing interior aesthetic material resources, it would cause moderate impacts to some secondary aesthetic material resources as a result of the interior elevator installation and toilet facilities. The elevator would also alter and moderately impact the aesthetic spatial arrangement of the first floor southeast corner room and second and third floor south anterooms.

### ***Impacts to the Socioeconomic Environment***

#### Alternative 1 – No Action

Implementing the No Action alternative would result in moderate impacts to the socioeconomic environment of Calumet's commercial district. The on-going presence of a vacant commercial building at the entrance to Calumet's primary commercial street limits the economic potential of the commercial district.

#### Alternative 2 – Preferred Alternative

The Preferred Alternative would result in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors would likely explore Calumet's historic district and patronize local shops and restaurants, which is expected to measurably improve the economic vitality of the community.

#### Alternative 3 – Exterior Elevator and Stair Addition

Alternative 3 would also result in moderate beneficial impact on the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors would likely explore Calumet's historic district and patronize local shops and restaurants which is expected to measurably improve the economic vitality of the community.



#### Alternative 4 – Interior Elevator and Exterior Stair Addition

Common to all action alternatives, Alternative 4 would result in moderate beneficial impact to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors would likely explore the Calumet historic district and patronize local shops and restaurants. It is expected that this would measurably improve the economic vitality of the community.

#### ***Impacts to Long-term Management of Resources***

The IDT primarily considered project and lifecycle costs when considering the impacts that the different alternatives would have on the long-term management of resources. Cost estimates were derived from the *Rehabilitate Union Building – Phase 2 Interior Value Analysis Study, July 21-24, 2008* report. Life cycle costs are based on a 25-year cycle, and include the initial costs of rehabilitation and annual expenses associated with utilities (gas, electricity, and water) and regular building maintenance. Estimates are for building construction costs only; exhibit costs are independent of those related to construction.

#### Alternative 1 – No Action

The No Action alternative would have moderate impacts on the long-term management of resources, primarily through continued operational costs associated with the on-going maintenance of an unoccupied historic building.

Although there would be no initial cost to implement the No Action alternative, and no operational costs for additional interpretive staff, the estimated total life cycle cost would total \$95,961.00.

#### Alternative 2 – Preferred Alternative

The Preferred Alternative would have a moderate beneficial impact on the long-term management of resources as compared to the other action alternatives. As this alternative does not expand the building's existing area, neither operational nor life-cycle costs would increase. The estimated initial project cost is \$3,041,100, and the estimated total life cycle cost is \$3,349,095.

While this alternative provides for the second floor exhibit area to be locked in order to allow community groups to use the third floor assembly space after regular hours, this configuration would still require an NPS staff presence to monitor access to the first floor.

As with construction and operational cost estimates, staff costs are based on a 25-year period. A year-round operation, staffed by one full-time equivalent GS-05 Park Guide (\$1,512,011) and one and a half, full-time equivalent GS-04 Visitor Use Assistants (\$2,028,400) would total \$3,540,411. A seasonal operation, based on a six month season, would require a one-half full-time equivalent GS-05 Interpretive Ranger (\$946,741) and one and a quarter full-time equivalent GS-04 Visitor Use Assistants (\$845,705) for a total of \$1,792,446.

#### Alternative 3 – Exterior Elevator and Stair Addition

Alternative 3 would result in moderate impacts to the long-term management of resources. Implementation would expand the existing building area by 2,760 square feet, and consequently increase operational and life cycle costs. The estimated initial project cost is \$3,675,309, and the estimated total life cycle cost is \$4,035,686.

As with all action alternatives, the configuration proposed in Alternative 3 achieves lock-off of first and second floor NPS and exhibit areas for after-hour community use of the third floor assembly space.

As with construction and operational cost estimates, staff costs are based on a 25-year period. A year-round operation, staffed by one full-time equivalent GS-05 Park Guide (\$1,512,011) and one and a half, full-time

equivalent GS-04 Visitor Use Assistants (\$2,028,400) would total \$3,540,411. A seasonal operation, based on a six month season, would require a one-half full-time equivalent GS-05 Interpretive Ranger (\$946,741) and one and a quarter full-time equivalent GS-04 Visitor Use Assistants (\$845,705) for a total of \$1,792,446.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

If implemented, Alternative 4 would result in moderate impacts to the long-term management of resources. Like the other action alternatives, Alternative 4 enables the NPS to lock-off the second floor for after-hour community use of the third floor assembly space; NPS staff would be required to monitor access to first floor NPS areas.

This configuration expands the existing building area by 800 square feet, which would increase operational and life cycle costs. The estimated initial project cost is \$3,221,355, and estimated total life cycle costs are \$3,545,819.

As with construction and operational cost estimates, staff costs are based on a 25-year period. A year-round operation, staffed by one full-time equivalent GS-05 Park Guide (\$1,512,011) and one and a half, full-time equivalent GS-04 Visitor Use Assistants (\$2,028,400) would total \$3,540,411. A seasonal operation, based on a six month season, would require a one-half full-time equivalent GS-05 Interpretive Ranger (\$946,741) and one and a quarter full-time equivalent GS-04 Visitor Use Assistants (\$845,705) for a total of \$1,792,446.

## **Cumulative Impacts**

### ***Cumulative Impacts to the Cultural Landscape, Urban Quality, and Land Use***

#### Alternative 1 – No Action

Implementing Alternative 1 would result in moderate cumulative impacts.

If it remained vacant, the building would promote the degradation of the commercial district. Occupied buildings are vital to maintaining urban quality; unoccupied, the Union Building – mainly through its large storefront windows – would contribute to the decline of the historic district and would cause moderate impacts to the preservation objectives of the Village of Calumet and the preservation of the National Historic Landmark District.

In addition, vandalism tends to escalate when a building is vacant, which, in turn, promotes vandalism of adjacent buildings. Leaving the building empty would adversely impact the preservation objectives of the Village of Calumet and the preservation of the National Historic Landmark District.

Furthermore, due to the expectations of the community relative to this project, the NPS could anticipate an erosion of public support should the building remain vacant which, while not readily quantifiable, would be anticipated to result in moderate impacts.

#### Alternative 2 – Preferred Alternative

There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.

#### Alternative 3 – Exterior Elevator and Stair Addition

There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.

#### ***Cumulative Impacts to the Historic Building Exterior***

##### Alternative 1 – No Action

Implementing the No Action alternative results in less of an NPS presence than if the building were occupied, leading to a potential increase in the rate of deterioration and vandalism.

##### Alternative 2 – Preferred Alternative

Aside from the minor, beneficial impact resulting from the installation of new retractable canvas storefront awnings on the building's west elevation (addressed above), the Preferred Alternative would not result in any impacts to the building's exterior envelope.

##### Alternative 3 – Exterior Elevator and Stair Addition

Alternative 3 would not comply with "best practices" that are required in the Civic and Commercial Historic District, thereby having moderate impacts to the community.

Treatment would not comply with the *Secretary's Standards*, with which owners of historic properties within park boundaries are encouraged to comply, and would, therefore, cause moderate impacts in the community.

##### Alternative 4 – Interior Elevator and Exterior Stair Addition

Alternative 4 would not comply with "best practices" that are required in the Civic and Commercial Historic District, thereby having moderate impacts to the community.

Treatment would not comply with the *Secretary's Standards*, with which owners of historic properties within park boundaries are encouraged to comply, and would, therefore, cause moderate impacts in the community.

#### ***Cumulative Impacts to Historic Interior Spaces***

##### Alternative 1 – No Action

The No Action Alternative would result in the continued, gradual degradation of historic material from non-use, resulting in moderate impacts. In particular, it would result in moderate impacts caused by the deterioration of interior spaces from UV light due to a lack of storefront awnings and UV filters installed on window glazing.

##### Alternative 2 – Preferred Alternative

As the Preferred Alternative would encourage visitation of the facility, implementing this alternative would result in greater wear and tear related to higher visitor use, resulting in minor impacts.

##### Alternative 3 – Exterior Elevator and Stair Addition

Implementation of Alternative 3 would also result in greater wear and tear on historic material due to higher visitor use of the building, resulting in minor impacts.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

As with all of the action alternatives, Alternative 4 would result in greater wear and tear on historic fabric related to higher visitor use, resulting in minor impacts.

### ***Cumulative Impacts to Museum Collections***

#### Alternative 1 – No Action

There are no cumulative impacts associated with the No Action alternative.

#### Alternative 2 – Preferred Alternative

Implementation of the Preferred Alternative, as with all action alternatives, would potentially subject collections to deterioration by mishandling during moving and maintenance, or through willful or inadvertent damage by visitors, resulting in minor to moderate impacts.

#### Alternative 3 – Exterior Elevator and Interior Stair Addition

Common to all action alternatives, implementing Alternative 3 would potentially subject collections to deterioration by mishandling during moving and maintenance, or through willful or inadvertent damage by visitors, resulting in minor to moderate impacts.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

Like alternatives 2 and 3, implementing Alternative 4 would result in the potential for museum collections to be subjected to deterioration by mishandling during moving and maintenance, or through willful or inadvertent damage by visitors, resulting in minor to moderate impacts.

### ***Cumulative Impacts to the Visitor Experience and Aesthetic Resources***

#### Alternative 1 – No Action

The No Action alternative would result in a continuing gap in visitor understanding and appreciation of historic resources, would have a moderate impact to visitor experience, and lead to the proliferation of undervaluing historic resources.

#### Alternative 2 – Preferred Alternative

Implementation of the Preferred Alternative would result in a moderate beneficial cumulative impact. Increased visitation would result in greater visitor understanding and appreciation that would increase exponentially over time.

#### Alternative 3 – Exterior Elevator and Stair Addition

Implementation of Alternative 3 would result in a moderate beneficial cumulative impact. Increased visitation would result in greater visitor understanding and appreciation that would increase exponentially over time.

#### Alternative 4 – Interior Elevator and Exterior Stair Addition

Alternative 4 would also result in a moderate beneficial cumulative impact. Increased visitation would result in greater visitor understanding and appreciation that would increase exponentially over time.

## ***Cumulative Impacts to the Socioeconomic Environment***

### **Alternative 1 – No Action**

Alternative 1 would result in moderate cumulative impacts to the socioeconomic environment. In the No Action alternative, the Union Building would continue to be a limiting factor in the development of the Civic and Commercial Historic District. Unoccupied, it would result in stagnant or decreased property values. Furthermore, the economic benefit associated with increased visitation would not be realized.

### **Alternative 2 – Preferred Alternative**

Implementation of the Preferred Alternative would result in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial and historic district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors are likely to patronize local shops and restaurants; this is expected to measurably improve the economic vitality of the community.

### **Alternative 3 – Exterior Elevator and Stair Addition**

Alternative 3 would also result in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial and historic district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors are likely to patronize local shops and restaurants; this is expected to measurably improve the economic vitality of the community.

### **Alternative 4 – Interior Elevator and Exterior Stair Addition**

As with the other action alternatives, Alternative 4 would result in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial and historic district. An NPS interpretive facility located in the Union Building would increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors are likely to patronize local shops and restaurants; this is expected to measurably improve the economic vitality of the community.

## **Beneficial Impacts of the Preferred Alternative (Alternative 2)**

### ***Beneficial Impacts to the Cultural Landscape, Urban Quality, and Land Use***

The Preferred Alternative (Alternative 2) enhances the cultural landscape, urban quality, and land use. The new interior elevator, stair, and toilet facilities provide universal accessibility without impacting the surrounding cultural landscape, and, by providing a destination for visitors, augments urban quality and supports land use planning.

Furthermore, desired conditions for the Civic and Commercial Historic District will be met by restoring and increasing pedestrian traffic, resulting in a moderate beneficial impact.

### ***Beneficial Impacts to Historic Building Exterior***

Alternative 2 is consistent with local zoning and land use objectives and will rehabilitate an existing building in the Village of Calumet Civic and Commercial Historic District.

### ***Beneficial Impacts to Historic Interior Spaces***

The configuration proposed for the Preferred Alternative – clustering a new elevator, stair, and primary first floor group toilet facilities in one corner of the building – provides for convenient and intuitive building navigation.

Vertical circulation is adjacent to both the existing accessible and main visitor entrances. This arrangement facilitates visitor flow and movement and retains the historic entry experience.

The removal of the second floor stage platform will provide barrier-free access to the second floor exhibit space and provide for greater visitor appreciation and understanding of “then-and-now” aspects of universal design and accessibility.

### ***Beneficial Impacts to Museum Collections***

Exhibited objects will be cared for in accordance with standard NPS practices as outlined in the *NPS Museum Handbook*. The *Handbook* provides guidance for the protection, monitoring, and care of collections.

### ***Beneficial Impacts to the Visitor Experience and Aesthetic Resources***

The Preferred Alternative preserves significant historic fabric while enhancing an intuitive visitor flow through the building and the exhibit. Visitors will have the option to explore the facility and exhibit space in accordance with their own interests and time constraints.

Reusing this prominent building provides access to an NPS visitor experience within the Calumet Unit of the park. Exhibits and orientation information located within the building will facilitate visitor understanding and exploration of the surrounding industrial and commercial districts as well as other points of interest in the Keweenaw Peninsula.

There will be a moderate beneficial cumulative impact through increased visitation, resulting in greater visitor understanding and appreciation for the values of historic preservation and resource stewardship; this is expected to increase exponentially over time.

The preservation of architectural features such as doors, wood trim, metal ceilings, and wood floors are integral to the interior rehabilitation. Thus, the rehabilitation will also result in moderate beneficial impacts to the building's primary interior aesthetic material resources.

The Preferred Alternative preserves significant historic fabric while enhancing an intuitive visitor flow. Visitors will have the option to explore the building and exhibits in accordance with their own interests and time constraints.

Visitors will benefit from the use of museum collections as primary source material in the Union Building exhibits. They will provide a sense of place by facilitating intellectual and emotional connections to the story of life in a mining community.

### ***Beneficial Impacts to the Socioeconomic Environment***

The project will result in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building will increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits, visitors are likely to patronize local shops and restaurants; this is expected to measurably improve the economic vitality of the community.

### ***Beneficial Impacts to the Long-term Management of Resources***

The rehabilitation proposed in the Preferred Alternative does not expand the existing building area. In addition, as compared to the other action alternatives, this design keeps total life-cycle costs to a minimum.

The facility configuration will provide for the lock-off of second floor NPS and exhibit areas to accommodate the after-hours community use of the third floor assembly space, although this will require NPS staffing to monitor access to first floor NPS areas.

## **Mitigations for the Preferred Alternative by Impact Topic**

### ***Cultural Landscape, Urban Quality, and Land Use***

Alternative 2 calls for minor alterations to the cultural landscape: new concrete walkways to existing door openings would be installed, as would a new, free-standing, post-mounted facility identification sign. Implementing Alternative 2 would result in increased vehicular and pedestrian traffic within the commercial and former industrial districts, and there will be a corresponding demand for parking spaces and safe pedestrian routes.

Therefore, the materials, configuration and placement of the walkways and sign will comply with the *Secretary's Standards*. Even though the federal government is exempt from regulation by local units of government, the NPS at Keweenaw NHP will submit an application to the Village of Calumet Historic District Commission (HDC) for the proposed sign and walkways. Furthermore, the NPS will work collaboratively with

the Charter Township of Calumet, the Village of Calumet, and other partners to seek solutions for traffic control, parking, and safe pedestrian walkways.

Moderate ground disturbance along the Red Jacket corridor will be required in order to install underground conduit from the Keweenaw History Center (the Former C&H Public Library) to the C&H Warehouse No. 1, and on to the Union Building. This project will be designed in consultation with archeologists, who will suggest the location of the trench/boring, and monitor and document its excavation. Artifacts, if encountered, will be collected and cataloged.

### ***Historic Building Exterior***

Alternative 2 proposes minor changes to the exterior envelope: retractable canvas storefront awnings on the building's west elevation would be reintroduced.

Therefore, the materials, configuration and placement of the awnings will comply with the *Secretary's Standards*. As well, even though the federal government is exempt from regulation by local units of government, the NPS at Keweenaw NHP will submit an application to the Village of Calumet HDC for the proposed awnings.

### ***Historic Interior Spaces***

General impacts to the interior spaces include the removal of historic architectural fabric in secondary spaces, including: wall partitions; lockers; ceiling and floor construction; fixtures; and finishes to accommodate universal accessibility and restrooms. Other impacts include the selective removal of historic fabric that is damaged beyond feasible in situ rehabilitation.

Installing the interior elevator and egress stair requires removal of a portion of the basement floor to accommodate the elevator, reconfiguration of the southeast corner of the first floor (Room 104), removal of the second and third floor kitchens (rooms 209, 307, and 308), removal of the second floor mezzanine Robing Room (Room 212), and alters the east end of the second and third floor anteroom spaces (rooms 208 and 307).

First floor group toilet rooms will result in alterations to the southeast corner room (Room 104) and the former vault (Room 106). The second floor single-occupancy toilet room will require alterations to existing rooms (rooms 206 and 207), while the one on the third floor will impact the east end of the south anteroom (Room 307).

Enlarged door openings on the north and east walls of Room 101 are needed to establish sight lines from the proposed visitor reception desk, located along the south wall, to adjacent exhibit spaces and points of entry. An additional interior door opening in the basement is required to meet egress requirements; as a result, a historic stairway will be removed.

The removal of the stage platform in the former Odd Fellow lodge hall on the second floor is required to accommodate visitor circulation through the exhibit and to meet barrier-free requirements for universal design. In the former Mason hall on the third floor, the removal of the stage, proscenium, and backdrop panels is required due to the advanced state of deterioration and proposed community use of the space (Room 309). A barrier-free route to the stage, which is approximately 2 feet above the floor, is also required to meet universal accessibility requirements. The installation of two new door openings to either side of the stage proscenium will also be needed.



The interior spaces that will be affected by the rehabilitation will be documented using Historic American Building Survey (HABS) standards for drawings and photography. Representative samples of finishes, hardware, and fixtures will be salvaged, cataloged, and stored in the Keweenaw NHP museum collection. The stairway into the basement will be retained and stored on-site. The excavation for the elevator will be monitored by an archeologist. Historic architectural features and finishes associated with the perimeter walls of the affected rooms shall be retained and restored wherever possible. In keeping with the *Secretary's Standards*, new partition walls, features, and finishes will be designed to be compatible with, yet clearly differentiated from, historic fabric. New material intended to replace portions of damaged fabric will match existing.

Elements of the kitchen spaces affected by the installation of the elevator and stair will be incorporated into an interpretive exhibit highlighting the historic purpose and function of the food preparation areas. The exhibit will also address the impacts of contemporary occupancy requirements on historic buildings and how they can be mitigated.

Plumbing for lavatories and water closets on the first floor will be consolidated along a common new wall to avoid disruption to historic fabric. The new toilet facilities will be located in secondary first floor spaces to avoid impacts to primary public spaces. The former vault room that has been identified for the men's new toilet room was altered by the building's previous owner, and is missing original finishes.

The number and size of toilet facilities on the second and third floors is lessened by the reliance on new first floor group toilet facilities to meet code-required fixture counts for upper floor occupants. On the second floor, rehabilitating the existing toilet room (Room 207) will require the removal of the three-quarter height partitions that comprise the south and west walls. This demolition will expand the floor area of the existing changing room (Room 206) to meet the space requirements for an accessible toilet room. The use of these rooms will remain consistent as a result of the rehabilitation. The new third floor toilet room will be incorporated into the reconfiguration of the east end of the south anteroom (Room 307) as part of the new elevator and stair installation. Plumbing will be concentrated along a new partition wall to minimize impacts to historic fabric.

The second floor platform will be carefully removed and stored for potential future reinstallation. Prior to removal, the platform will be photographed and documented in measured drawings. As a component of the exhibit design, interpretive media will be developed highlighting the Union Building's historic room functions, occupants, and features, including the platform. Individual identification signs will be installed throughout the building to indicate former use of historic rooms.

Like the second floor platform, the third floor stage will be thoroughly documented. The proscenium, wings, and backdrop panels will be partially reconstructed based on documentary drawings, photographs, and material samples. The new ramp or vertical platform lift for stage accessibility will be located behind the stage backdrop panels. The new door openings to backstage spaces will be centered on the walls flanking the stage proscenium and will be detailed to be compatible with, yet differentiated from, existing historic door openings.

### ***Museum Collections***

Museum objects featured in the Union Building exhibit will be exposed to potential agents of deterioration, such as contaminants, ultraviolet and visible light, temperature, humidity, and handling. They will also be subject to a slightly greater security risk through increased exposure to the public. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a museum storage facility.

In some instances, however, museum objects on exhibit in the Union Building will be housed in markedly improved security and environmental conditions. Objects will be cared for in accordance with standard NPS

practices outlined in the *NPS Museum Handbook*, which provides guidance in the protection, monitoring, and care of collections.

### ***Visitor Experience and Aesthetic Resources***

Differing locations of second and third floor single-occupancy toilet facilities may make them more difficult to locate, but this approach relies on the first floor group facilities to meet use requirements on the upper floors.

The elevator, stair, and toilet facilities will be constructed within the building envelope, requiring the removal of historic fabric in secondary spaces and introducing new construction within the context of historic fabric. Thus, some secondary aesthetic material resources will be adversely impacted, particularly in the first floor southeast corner room, second and third floor kitchen spaces, and second floor mezzanine. The aesthetic spatial arrangement of these rooms and a portion of the adjacent rooms will be impacted.

To address the impacts created by the toilet facilities, the combination of all new restrooms will be designed to accommodate anticipated building occupancies. First floor toilet rooms will be located near primary circulation areas. Signage near second and third floor restrooms will direct visitors to the availability of first floor facilities. New construction will be differentiated from, yet compatible with, the building's historic materials and features. This alternative relies on a skillful application of the *Secretary's Standards*: visitors must be able to distinguish new work from historic fabric. Locating these new features within the footprint of the historic structure heightens the degree of design difficulty.

To ensure that new construction conforms to the *Secretary's Standards*, project design shall be awarded to an architectural firm qualified to meet the requirements of historical architects as defined by 36 CFR. The construction contract shall be awarded based on a technical evaluation of potential contractors and of their prior experience and performance in rehabilitation. In addition, the project will be managed and reviewed by NPS cultural resource staff with expertise in the application of these standards.

Interior spaces affected by the rehabilitation will be documented using HABS standards for drawings and photography. Representative samples of finishes, hardware, and fixtures will be salvaged, cataloged, and stored in the Keweenaw NHP museum collection. A sampling of collected materials will be used in an exhibit to interpret the affected or lost spaces.

### ***Socioeconomic Environment***

The project will result in beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building will increase visitation and facilitate exploration of the commercial and historic district. This outcome is consistent with NPS and local plans for the district. After experiencing the Union Building exhibits, visitors are likely to patronize local shops and restaurants; this is expected to measurably improve the economic vitality of the community. No mitigations have been identified for cumulative impacts to the socioeconomic environment.

### ***Long-term Management of Resources***

Community and visitor use of the Union Building will dramatically increase traffic flow through the building with the typical attendant wear on the structure. There will also be fiscal impacts associated with the operation of the facility.

The initial project costs are estimated to total \$3,041,100. The estimated total life cycle costs, based on a 25-year cycle, are projected to total \$3,349,095.

As with construction and operational cost estimates, staff costs are based on a 25-year period. A year-round operation, staffed by one full-time equivalent GS-05 Park Guide (\$1,512,011) and one and a half, full-time equivalent GS-04 Visitor Use Assistants (\$2,028,400) would total \$3,540,411. A seasonal operation, based on a six month season, would require a one-half full-time equivalent GS-05 Interpretive Ranger (\$946,741) and one and a quarter full-time equivalent GS-04 Visitor Use Assistants (\$845,705) for a total of \$1,792,446.

To mitigate these impacts, the facility will be placed on a routine maintenance schedule in accordance with NPS standards for the care of historic structures. The NPS will also seek base funding increases to accommodate the increased staffing levels, non-personal services, and fixed costs required for the operation and maintenance of the facility.

## **Conclusions**

### Alternative 1 (No Action)

Alternative 1, the No Action alternative, will result in no work being undertaken to make the building accessible for public use. Although work in 2005 stabilized its exterior, the interior is currently in an advanced state of disrepair and cannot be accessed safely in its present condition by the public or NPS staff. Choosing the No Action Alternative will mean that the NPS would continue to maintain an unoccupied and unused building.

### *Impacts*

This alternative will result in no impacts to the cultural landscape, landscape use, or urban quality. Neither the building's interior nor exterior will be impacted. Furthermore, impacts to the visitor experience and aesthetic resources will remain unchanged: visitors and residents will continue to encounter a significant vacant building at a primary intersection, sending a negative message about the vitality of the NHL and the community. The building's historic and aesthetic resources will continue to degrade, and visitor appreciation for and understanding of their significance will remain undeveloped. No Action will result in moderate impacts to the socioeconomic environment, as a vacant building at the primary entrance to Calumet's Civic and Commercial Historic District limits its economic potential. Finally, the No Action alternative will not incur any operating costs for additional interpretive staff, but the operational costs of maintaining an unoccupied historic building will continue.

### *Cumulative Impacts*

A vacant building would promote the degradation of the commercial district, invite vandalism, and undermine the preservation of historic resources within the Calumet NHL district. The community has anticipated this building's use as an interpretive facility for nearly 15 years, and because expectations are high, halting the project could erode public support for the NPS. No Action would also result in an increased rate of deterioration: interior spaces would continue to degrade from lack of use and lack of appropriate UV and visible light filters. Visitors and residents would continue to encounter a vacant prominent building, thus adversely impacting their experience. As the Union Building is readily identifiable as an NPS-owned structure, the No Action alternative would undermine the NPS' and Keweenaw NHP's mission of preserving and interpreting cultural resources, and would potentially have a moderate impact on the perception of the park's viability as an engine for preservation. No economic benefits would be realized through increased visitation, and the cultural potential of Calumet's Civic and Commercial Historic District would be further limited.

### Alternative 2 (Preferred Alternative)

Alternative 2 proposes an interior elevator and stair, and was selected as the Preferred Alternative during the architectural VA. This alternative meets contemporary use needs and requirements, including those for accessibility and egress. It also maintains the building's exterior envelope and, thus, the cultural landscape, thereby effectively enhancing a beneficial visitor experience by maintaining historic entrances and circulation patterns to the greatest extent possible. Alternative 2 also facilitates after-hours community use of the space. Furthermore, it accomplishes this with the lowest projected operational costs of all the action alternatives. Therefore, Alternative 2, which was the selected Environmentally Preferred Alternative, is further reinforced as the Preferred Alternative for the Union Building Interior Rehabilitation project.

### *Impacts*

By placing the stairway and elevator inside, alterations to the surrounding cultural landscape would be minimal, restricted to walkways to provide universal accessibility and access to existing entry points. The installation of storefront awnings will result in moderate beneficial impacts to the exterior. This alternative facilitates intuitive circulation patterns, enhancing the visitor experience in a beneficial manner. Interior spaces will be moderately impacted in this alternative, but primarily in secondary spaces. As with all action alternatives, museum collections will be moderately impacted in both beneficial and adverse ways: some objects from some collections will receive a higher level of care due to compliance with *NPS Museum Handbook* standards, although all collections will be subjected to the potential for damage from common agents of deterioration. Common to all alternatives that implement the project, socioeconomic resources will be impacted in a moderately beneficial manner. However, of the three action alternatives, Alternative 2 will have the least adverse impact on the long-term management of resources and do so at the least expense.

### *Cumulative Impacts*

It is anticipated that, over time, both vehicular and pedestrian traffic will increase and lead to a greater demand for parking. Placing the elevator and stairway inside would not impact the exterior envelope but, common to all action alternatives, increased use of the building's interior will result in a higher rate of day-to-day wear and tear on historic fabric. Collections may also be moderately impacted when moved or handled, either intentionally or inadvertently, by staff and visitors. Again, all action alternatives result in an increase in operational costs from staffing and maintaining the facility, but since Alternative 2 does not increase the size of the building, total lifecycle costs will be less than for the other two action alternatives. As with all action alternatives, an increase in visitation to the downtown core is anticipated to have moderate beneficial socioeconomic benefits.

### *Mitigations*

The design for Alternative 2 complies with the *Secretary's Standards*. Although exempt from regulation by local units of government, the NPS would submit an application to the Village of Calumet's Historic District Commission for review of any exterior work. Select interior spaces will be documented using standards established by the Historic American Building Survey. Archeologists will be involved in designing and monitoring the trenching/boring for the required conduit and excavating for the elevator. Historic finishes and features will be retained and restored where possible, or salvaged, documented, cataloged, and stored in the museum collection. Museum objects will be cared for in accordance with standards specified in the *NPS Museum Handbook*. The NPS will work with architects and construction firms experienced in rehabilitating historic structures. The exhibit will also interpret the character-defining features and spaces that will be altered as part of Alternative 2. Furthermore, the exhibit will address how the Union Building and other historic structures are impacted by contemporary use requirements and how those impacts are mitigated. Consistent with the *Secretary's Standards*, new construction will be compatible with, yet differentiated from historic material. By grouping primary facilities on the first floor, fewer impacts will be made to the second and third floors.

### Alternative 3

Alternative 3 proposes an exterior elevator and stairway, which would require a new three story addition on the east side of the building. Group toilet facilities would be available on each public use floor.

#### *Impacts*

This reconfiguration of the building's exterior would have a moderate impact on the cultural landscape of the historic district and the NHL by creating a prominent new addition to the historic structure. Secondary interior spaces would be impacted, primarily when historic fabric would be removed to create new doors for access to the new addition and to accommodate visitor circulation. The new addition, however, would be remote from existing, historic entrances and would dilute the visitor's experience and the building's exterior aesthetics. Common to all action alternatives, museum collections will be moderately impacted in both beneficial and adverse ways: some objects from some collections will receive a higher level of care due to compliance with *NPS Museum Handbook* standards, although all collections will be subjected to the potential for damage from common agents of deterioration. Alternative 3, like all action alternatives, would have a moderate beneficial impact on the socioeconomic resources in the area, although it would increase long-term operational and life-cycle costs relative to the Preferred Alternative.

#### *Cumulative Impacts*

Over time, there would be an increase in traffic that would result in greater demand for parking spaces. The cumulative impacts of this project within the historic civic and commercial district would be difficult to predict, but as this type of new construction is less consistent with the *Secretary's Standards*, and as property owners within the historic district work with the Village of Calumet's Historic District Commission and are encouraged to comply with these standards, Alternative 3 sets a poor precedent for new development and could undermine historic preservation efforts. Maintaining a new addition would increase operational costs, which would also likely increase from year to year.

### Alternative 4

Alternative 4 proposes an interior elevator in the southeast corner, and an exterior stair addition along the north side of the building. The stairwell would be accessed directly from the rooms on all three floors, including the second floor lodge room containing the principal exhibit hall.

#### *Impacts*

The stairwell addition would be visible from much of the surrounding area, which would have a moderate impact on the cultural landscape. Alternative 4 would result in moderate impacts to both the exterior and interior spaces. As with all action alternatives, museum collections will be moderately impacted in both beneficial and adverse ways: some objects from some collections will receive a higher level of care due to compliance with *NPS Museum Handbook* standards, although all collections will be subjected to the potential for damage from common agents of deterioration. If implemented, this alternative would fragment visitor circulation and detract from the main visitor entry experience. Furthermore, placement of the stairwell on the north elevation would interrupt the exhibit on the second floor and the assembly space on the third floor, further impacting the visitor experience. The long-term management of resources would be moderately impacted by increased costs related to maintaining a new building addition.

#### *Cumulative Impacts*

As with all action alternatives, it is anticipated that vehicular and pedestrian traffic would increase and the demand for parking will rise. New construction for the stairwell would conflict with Design Guidelines established by the Village of Calumet Historic District Commission, and would set a poor precedent for other

property owners in the historic district, leading to potentially moderate cumulative impacts. Increased visitation would lead to increased wear and tear on historic interior spaces, and, as with all alternatives, museum collections would be both beneficially and adversely impacted over time. Ultimately, it is expected that, like all the action alternatives, implementing Alternative 4 would have a moderately beneficial socioeconomic impact over time by inviting increased visitation to downtown Calumet.

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**Table 1: Alternatives**

Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to the Cultural Landscape, Urban Quality and Land Use</b>	<p>Results in no immediate impact to the cultural landscape; there is, however, a potential for moderate impact in the long term due to continued deterioration of the structure.</p> <p>Will not increase traffic or need for parking within the historic district.</p> <p>No action does not advance local zoning or land use objectives.</p>	<p><u>Interior Elevator and Stair</u></p> <p>Results in moderate impact to the cultural landscape. Changes include installation of new concrete walkways to existing door openings and a new free-standing post-mounted facility identification sign.</p> <p>Installing underground conduit along Red Jacket Road will create a moderate but short-term impact to the cultural landscape.</p> <p>New interior elevator, stair, and toilet facilities do not impact the surrounding cultural landscape.</p> <p>Will result in increased vehicular and pedestrian traffic within the commercial and former industrial districts; there will be a greater demand for parking spaces and</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Results in a moderate impact to the cultural landscape and the visual environment. The new building addition obscures views of the Union Building's east façade and consumes the open space on the east side of the building lot that is currently defined by the historic perimeter plantings of cedar hedgerows. Due to the height and massing of this prominent addition, it will be visible from nearby locations and from longer views within the landmark district.</p> <p>Installing underground conduit along Red Jacket Road will create a moderate but short-term impact to the cultural landscape.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Results in moderate impacts to the cultural landscape and the exterior appearance of the building. New addition would be visible from vantage points within the commercial district. The new three-story egress stair addition impacts the cultural landscape and occupies a portion of the historic alley located between the building's north elevation and the adjacent lot line.</p> <p>Installing underground conduit along Red Jacket Road will create a moderate but short-term impact to the cultural landscape.</p> <p>Other moderate impacts to the cultural landscape including installation of new concrete walkways to existing and new door</p>

		<p>safe routes for pedestrians. While the specific intensity is unknown, it is expected not to exceed a moderate impact and will be mitigated accordingly.</p> <p>The project is consistent with local zoning and land use objectives by rehabilitating an existing building in Calumet's commercial district, thereby having a beneficial impact on the community.</p>	<p>Other moderate impacts to the cultural landscape including installation of new concrete walkways to existing and new door openings and a new free-standing post-mounted facility identification sign.</p> <p>Will result in increased vehicular and pedestrian traffic within the commercial and former industrial districts; there will be a greater demand for parking spaces and safe routes for pedestrians. While the specific intensity is unknown, it is expected not to exceed a moderate impact and will be mitigated accordingly.</p> <p>The project is consistent with local zoning and land use objectives by rehabilitating an existing building in Calumet's commercial district, thereby having a beneficial impact on the community.</p>	<p>openings and a new free-standing post-mounted facility identification sign.</p> <p>New interior elevator and toilet facilities do not impact the surrounding cultural landscape.</p> <p>Will result in increased vehicular and pedestrian traffic within the commercial and former industrial districts; there will be a greater demand for parking spaces and safe routes for pedestrians. While the specific intensity is unknown, it is expected not to exceed a moderate impact and will be mitigated accordingly.</p> <p>The project is consistent with local zoning and land use objectives by rehabilitating an existing building in Calumet's commercial district, thereby having a beneficial impact on the community.</p>
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Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Historic Building Exterior</b>	Results in no alterations to the Union Building exterior.	<p><u>Interior Elevator and Stair</u></p> <p>Results in moderate beneficial changes to the exterior envelope that includes the addition of retractable canvas storefront awnings on the building's west elevation.</p> <p>New interior toilet facilities do not impact the building's exterior envelope.</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Requires moderate impacts to the east building façade where the connecting corridor from the new addition interfaces the existing brick masonry wall. Changes will include the installation of new door openings on each floor and concealment of a portion of the exterior wall.</p> <p>Results in moderate beneficial changes to the exterior envelope that includes the addition of retractable canvas storefront awnings on the building's west elevation.</p> <p>The group toilet rooms located in the new building addition contribute to the moderate impacts identified above. The inclusion of toilet facilities in the new addition increases its overall size, scale and massing.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Requires moderate impacts to the north building façade where the new egress stair addition connects to the existing brick masonry wall. Changes involve the concealment of a portion of the exterior wall and conversion of existing window openings to function as emergency egress doors.</p> <p>Results in moderate beneficial changes to the exterior envelope that includes the addition of retractable canvas storefront awnings on the building's west elevation.</p> <p>New interior toilet facilities do not impact the building's exterior envelope.</p>

Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Historic Interior Spaces</b>	<p>Results in no alterations to the Union Building's interior spaces.</p> <p>Results in moderate impacts due to continuous loss of historic fabric through progressive deterioration.</p>	<p><u>Interior Elevator and Stair</u></p> <p>Requires an additional interior basement door opening and removal of stairway. A portion of the basement floor in the southeast corner will be excavated to a depth of approximately 4 feet for the elevator. Also requires a reconfiguration of the first floor southeast corner room (Room 104), Room 206 on the second floor, and Room 307 on the third floor to accommodate toilet rooms. Second and third floor kitchens (rooms 209, 307, and 308) will be removed, as will the second floor mezzanine Robing Room (Room 212). Alterations to the east end of second and third floor south anteroom spaces (rooms 208 and 307) will require demolition of the interior east partition walls and a portion of the floor and ceiling. Lockers in</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Results in moderate impacts to the second and third floor kitchens (rooms 209, 307, and 308). Other moderate impacts include the removal of north wall built-in cabinets and installation of new door openings to connect to the east addition, and an additional interior basement door opening and removal of stairway. Lockers in the attic will also be removed.</p> <p>The group toilet rooms located in the new building addition do not result in impacts to any existing interior spaces.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Requires an additional interior basement door opening and removal of stairway. A portion of the basement floor in the southeast corner will be excavated to a depth of approximately 4 feet for the elevator. Requires reconfiguration of the first floor southeast corner room (Room 104), Room 206 on the second floor, and Room 307 on the third floor to accommodate toilet rooms; and alterations to the east end of second and third floor south anteroom spaces (rooms 208 and 307), requiring demolition of the interior east partition walls and a portion of the floor and ceiling. Lockers in the attic will also be removed. These actions result in moderate impacts to secondary interior spaces.</p> <p>Exterior stair blocks existing first</p>

		the attic will also be removed. These actions result in moderate impacts to secondary interior spaces.		floor door opening and requires changes to existing window openings (rooms 107, 214, and 309) for use as door openings to new egress stair addition, resulting in moderate impacts to these interior spaces.
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Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Museum Collections</b>	Results in negligible impacts to museum collections, which are not currently housed in the Union Building.	<p><u>Interior Elevator and Stair</u></p> <p>Some artifacts from some collections to be featured in the Union Building exhibit will be housed in conditions that provide a secure and climatically controlled environment, resulting in moderate beneficial impacts to those collections.</p> <p>Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Some artifacts from some collections to be featured in the Union Building exhibit will be housed in conditions that provide a secure and climatically controlled environment, resulting in moderate beneficial impacts to those collections.</p> <p>Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Some artifacts from some collections to be featured in the Union Building exhibit will be housed in conditions that provide a secure and climatically controlled environment, resulting in moderate beneficial impacts to those collections.</p> <p>Any museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public, resulting in potentially minor to moderate impacts to collections. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a NPS museum storage facility, resulting in minor impacts to such collections.</p>

Impact Topics	Impacts			
	Alternative 1 No Action	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to the Visitor Experience and Aesthetic Resources</b>	<p>Results in no change to the current visitor experience to the Calumet Unit of the Park. Visitors will encounter a vacant building at one of the primary intersections in the community.</p> <p>Visitor appreciation and understanding of the building's interior aesthetic resources and historic significance will remain undeveloped.</p>	<p><u>Interior Elevator and Stair</u></p> <p>This alternative clusters a new elevator, stair, and primary first floor group toilet facilities in one corner of the building and provides for convenient and intuitive building navigation, resulting in moderate beneficial impacts.</p> <p>Vertical circulation is adjacent to both the existing accessible entrance and main visitor entry experience. This arrangement facilitates visitor flow and movement.</p> <p>A minor impact will be caused by differing locations of second and third floor single-occupancy toilet facilities, which may be more difficult to locate. This approach relies on the first floor group toilet facilities to meet primary use requirements.</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>The building's vertical circulation is remote from the existing accessible entrance and main visitor entry experience, resulting in a moderate impact to visitor experience; visitors looking for the stair and elevator may have to rely on way-finding signage and direction from NPS staff.</p> <p>This approach may rely on establishing a new visitor entrance for the addition located in the rear of the building. This entry experience does not maximize the use of historic door openings and may serve to diminish the visitor's experience of this historic structure, resulting in moderate impacts to visitor experience.</p> <p>The new building addition consolidates an elevator, stair, and multi-level group toilet</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>This alternative separates the new interior elevator and the new exterior stair addition on opposite sides of the structure, resulting in a moderate impact to visitor experience; this arrangement fragments building circulation to the upper floors.</p> <p>The separation and consequential dispersion of discrete visitor groups caused by separate access routes for using the stairs or the elevator, as needed or preferred, would potentially cause a moderate impact to the visitor experience.</p> <p>The new stair addition interfaces the second and third floor spaces in locations that conflict with intuitive use of these rooms, resulting in a moderate impact to visitor experience; visitor</p>

		<p>Reuse of this prominent building provides access to an “NPS visitor experience” within the Calumet Unit of the park, resulting in a moderate beneficial impact. Exhibits and orientation information located within the building facilitate visitor understanding and exploration of the surrounding industrial and commercial districts.</p> <p>Alternative 2 results in moderate beneficial impacts to the building’s primary interior aesthetic material resources. Preservation of architectural features such as doors, wood trim, metal ceilings, and wood floors are integral to the interior rehabilitation.</p> <p>This alternative will have moderate impacts to some secondary aesthetic material resources associated with the removal or alteration of the second and third floor kitchens, second floor mezzanine, and the first floor southeast corner room to allow for the installation of an elevator, stair and toilet facilities. The aesthetic spatial arrangement of these rooms will result in moderate impacts.</p>	<p>facilities into a new building addition and provides the most convenient arrangement for visitor access to group restroom facilities on all floors.</p> <p>Reuse of this prominent building provides access to an “NPS visitor experience” within the Calumet Unit of the park, resulting in a moderate beneficial impact. Exhibits and orientation information located within the building facilitate visitor understanding and exploration of the surrounding industrial and commercial districts.</p> <p>Alternative 3 results in moderate beneficial impacts to the building’s primary interior aesthetic material resources. Preservation of architectural features such as doors, wood trim, metal ceilings, and wood floors are integral to the interior rehabilitation.</p> <p>This alternative will have moderate impacts to some secondary aesthetic material resources associated with the removal or alteration of the second and third floor kitchens, second floor mezzanine, and the</p>	<p>circulation through the stair interrupts both the second floor exhibit sequence and third floor assembly use.</p> <p>A minor impact will be caused by differing locations of second and third floor single-occupancy toilet facilities, which may be more difficult to locate. This approach relies on the first floor group toilet facilities to meet primary use requirements.</p> <p>Reuse of this prominent building provides access to an “NPS visitor experience” within the Calumet Unit of the park, resulting in a moderate beneficial impact. Exhibits and orientation information located within the building facilitate visitor understanding and exploration of the surrounding industrial and commercial districts.</p> <p>Alternative 4 results in moderate beneficial impacts to the building’s primary interior aesthetic resources. Preservation of architectural features such as doors, wood trim, metal ceilings, and wood floors are integral to the interior rehabilitation.</p>
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			<p>first floor southeast corner room to allow for the installation of an elevator, stair and toilet facilities. The aesthetic spatial arrangement of these rooms will result in moderate impacts.</p>	<p>This alternative will cause moderate impacts to some secondary aesthetic material resources as a result of the interior elevator installation and toilet facilities. The elevator will also alter and moderately impact the aesthetic spatial arrangement of the first floor southeast corner room and second and third floor south anterooms.</p>
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Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Socioeconomic Environment</b>	Results in moderate impacts to the socioeconomic environment of Calumet's commercial district. The presence of a vacant commercial building at the entrance to Calumet's primary commercial district could limit the economic potential of the community.	<u>Interior Elevator and Stair</u>  Results in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building will increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits visitors are likely to explore the Calumet historic district and patronize local shops and restaurants which is expected to measurably improve the economic vitality of the community.	<u>Exterior Elevator and Stair Addition</u>  Results in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building will increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits visitors are likely to explore the Calumet historic district and patronize local shops and restaurants which is expected to measurably improve the economic vitality of the community.	<u>Interior Elevator and Exterior Stair Addition</u>  Results in moderate beneficial impacts to the socioeconomic environment of Calumet's commercial district. An NPS interpretive facility located in the Union Building will increase visitation and facilitate exploration of the commercial district. After experiencing the Union Building exhibits visitors are likely to explore the Calumet historic district and patronize local shops and restaurants which is expected to measurably improve the economic vitality of the community.



Impact Topics	Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Long-term Management of Resources</b>  (Project and Life Cycle Costs)  NOTE: Project and life cycle cost estimates are derived from the <i>Rehabilitate Union Building – Phase 2 Interior Value Analysis Study, July 21-24, 2008</i> . Life cycle costs are based on a 25-	<p>The no action alternative will result in moderate impacts associated with continued operational costs associated with on-going maintenance of an unoccupied historic building.</p> <p>Initial Cost: \$0</p>	<p><u>Interior Elevator and Stair</u></p> <p>Achieves lock-off of second floor NPS areas for after-hour community use of the third floor assembly space.</p> <p>Does not expand existing building area, resulting in moderate beneficial impacts to operational costs. Maintaining the existing building area will not cause operational or life cycle costs to increase.</p> <p>The following estimates are for building construction costs only; exhibit costs are common to all alternatives:</p> <p>Estimated Initial Project Cost: \$3,041,100</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Achieves lock-off of first and second floor NPS areas for after-hour community use of the third floor assembly space.</p> <p>Expands existing building area by 2,760 square feet, resulting in moderate impacts to operational costs. Increased building area will increase operational and life cycle costs.</p> <p>The following estimates are for building construction costs only; exhibit costs are common to all alternatives:</p> <p>Estimated Initial Project Cost: \$3,675,309</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Achieves lock-off of second floor NPS areas for after-hour community use of the third floor assembly space.</p> <p>Expands existing building area by 800 square feet, resulting in moderate impacts to operational costs. Increased building area will increase operational and life cycle costs.</p> <p>The following estimates are for building construction costs only; exhibit costs are common to all alternatives:</p> <p>Estimated Initial Project Cost: \$3,221,355</p>

<p>year cycle and include the initial cost of rehabilitation and annual costs associated with utilities and regular building maintenance.</p>	<p>Estimated Total Life Cycle Cost (25 year cycle): \$95,961</p> <p>No operational costs for additional interpretive staff are incurred.</p>	<p>Estimated Total Life Cycle Cost (25 year cycle): \$3,349,095</p> <p>Estimated operational costs associated with interpretive staff for the Union Building facility over a <b>25-year period</b> are provided below. Staffing costs for both a year-round and seasonal facility are calculated:</p> <p><u>Year-round Operations:</u>  1 FTE full time GS 05, Park Guide: \$1,512,011  1.5 FTE full time GS 04, Visitor Use Assistants: \$2,028,400  TOTAL: \$3,540,411</p> <p><u>Seasonal Operations (open 6 months):</u>  .5 FTE GS 05, Interpretive Ranger: \$946,741  1.25 FTE GS 04, Visitor Use Assistants: \$845,705  TOTAL: \$1,792,446</p>	<p>Estimated Total Life Cycle Cost (25 year cycle): \$4,035,686</p> <p>Estimated operational costs associated with interpretive staff for the Union Building facility over a <b>25-year period</b> are provided below. Staffing costs for both a year-round and seasonal facility are calculated:</p> <p><u>Year-round Operations:</u>  1 FTE full time GS 05, Park Guide: \$1,512,011  1.5 FTE full time GS 04, Visitor Use Assistants: \$2,028,400  TOTAL: \$3,540,411</p> <p><u>Seasonal Operations (open 6 months):</u>  .5 FTE GS 05, Interpretive Ranger: \$946,741  1.25 FTE GS 04, Visitor Use Assistants: \$845,705  TOTAL: \$1,792,446</p>	<p>Estimated Total Life Cycle Cost (25 year cycle): \$3,545,819</p> <p>Estimated operational costs associated with interpretive staff for the Union Building facility over a <b>25-year period</b> are provided below. Staffing costs for both a year-round and seasonal facility are calculated:</p> <p><u>Year-round Operations:</u>  1 FTE full time GS 05, Park Guide: \$1,512,011  1.5 FTE full time GS 04, Visitor Use Assistants: \$2,028,400  TOTAL: \$3,540,411</p> <p><u>Seasonal Operations (open 6 months):</u>  .5 FTE GS 05, Interpretive Ranger: \$946,741  1.25 FTE GS 04, Visitor Use Assistants: \$845,705  TOTAL: \$1,792,446</p>
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**Table 2: Cumulative Impacts**

Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to the Cultural Landscape, Urban Quality and Land Use</b>	<p>Typically, vandalism escalates when a building is vacant, which, in turn, promotes vandalism of adjacent buildings, resulting in moderate impacts.</p> <p>Leaving the building vacant would cause moderate impacts to the preservation objectives of the Village of Calumet and the</p>	<p><u>Interior Elevator and Stair</u></p> <p>There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>There will be an increase in vehicular and pedestrian traffic in both the commercial and industrial districts that will require technical analysis, although the NPS anticipates a greater demand for parking, which is not expected to exceed moderate impacts.</p>

	<p>preservation of the National Historic Landmark District.</p> <p>Due to the expectations of the community relative to this project, the NPS could anticipate an erosion of public support, which, while not readily quantifiable, would be anticipated to result in moderate impacts.</p>			
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Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Historic Building Exterior</b>	Results in less presence than if the building were occupied, leading to a potential increase in rate of deterioration and vandalism.	<u>Interior Elevator and Stair</u>  Would not result in any cumulative impacts to the building's exterior envelope.	<u>Exterior Elevator and Stair Addition</u>  Would not comply with "best practices" that are required in the Civic and Commercial Historic District, thereby having moderate impacts to the community.  Treatment would not comply with the <i>Secretary's Standards</i> , with which owners of historic properties within park boundaries are encouraged to comply, and would, therefore, cause moderate impacts in the community.	<u>Interior Elevator and Exterior Stair Addition</u>  Would not comply with "best practices" that are required in the Civic and Commercial Historic District, thereby having moderate impacts to the community.  Treatment would not comply with the <i>Secretary's Standards</i> , with which owners of historic properties within park boundaries are encouraged to comply, and would, therefore, cause moderate impacts in the community.

Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Historic Interior Spaces</b>	<p>Results in continued gradual degradation from non-use, resulting in moderate impacts.</p> <p>Results in UV deterioration of interior spaces due to lack of awning and UV filters installed on window glazing, resulting in moderate impacts.</p>	<p><u>Interior Elevator and Stair</u></p> <p>Results in greater wear and tear related to higher visitor use, resulting in minor impacts.</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Results in greater wear and tear related to higher visitor use, resulting in minor impacts.</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Results in greater wear and tear related to higher visitor use, resulting in minor impacts.</p>

Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Museum Collections</b>	No impact.	<u>Interior Elevator and Stair</u>  Collections may be subjected to deterioration by mishandling during moving and maintenance, or through inadvertent or willful damage by visitors, resulting in minor to moderate impacts.	<u>Exterior Elevator and Stair Addition</u>  Collections may be subjected to deterioration by mishandling during moving and maintenance, or through inadvertent or willful damage by visitors, resulting in minor to moderate impacts.	<u>Interior Elevator and Exterior Stair Addition</u>  Collections may be subjected to deterioration by mishandling during moving and maintenance, or through inadvertent or willful damage by visitors, resulting in minor to moderate impacts.

Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to the Visitor Experience and Aesthetic Resources</b>	The continued gap in visitor understanding and appreciation of historic resources will have a moderate impact to visitor experience and lead to the proliferation of undervaluing historic resources.	<u>Interior Elevator and Stair</u>  Results in moderate beneficial impacts (see above, p. 38).	<u>Exterior Elevator and Stair Addition</u>  Results in moderate beneficial impacts (see above, p. 38).	<u>Interior Elevator and Exterior Stair Addition</u>  Results in moderate beneficial impacts (see above, p. 38).



Impact Topics	Cumulative Impacts			
	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3	Alternative 4
<b>Impacts to Socioeconomic Environment</b>	<p>Results in moderate impacts to development of the Civic and Commercial Historic District.</p> <p>Results in stagnant or decreased property values, resulting in moderate impacts.</p> <p>Results in moderate impacts to economic benefits for the community that may have been realized with increased visitation.</p>	<p><u>Interior Elevator and Stair</u></p> <p>Results in moderate beneficial impacts (see above, p. 39).</p>	<p><u>Exterior Elevator and Stair Addition</u></p> <p>Results in moderate beneficial impacts (see above, p. 39).</p>	<p><u>Interior Elevator and Exterior Stair Addition</u></p> <p>Results in moderate beneficial impacts (see above, p. 39).</p>

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**Table 3: Mitigation**

Mitigation		
Impact Topics	Impacts of Preferred Alternative (Alternative 2)	Mitigation
<b>Impacts to the Cultural Landscape, Urban Quality, and Land Use</b>	<p>Results in moderate impacts to the cultural landscape. Changes include installation of new concrete walkways to existing door openings and a new free-standing, post-mounted facility identification sign.</p> <p>Installing underground conduit along Red Jacket Road will create a moderate but short-term impact to the cultural landscape.</p> <p>Will result in moderate impacts caused by increased vehicular and pedestrian traffic within the commercial and former industrial districts. There will be a greater demand for parking spaces and safe routes for pedestrians.</p>	<p>Materials, configuration, and placement will comply with the <i>Secretary's Standards</i>. The Village of Calumet Historic District Commission (HDC) reviews proposed alterations to the streetscape within Calumet's local historic district. Although the federal government is exempt from regulation by local units of government, Keweenaw NHP shall submit an application for the proposed sign and walkways.</p> <p>The project will be designed in consultation with archeologists suggesting the location of the trench/boring, and monitoring and documenting its excavation. Artifacts, if encountered, will be collected and cataloged.</p> <p>NPS staff will work collaboratively with the Charter Township of Calumet, the Village of Calumet, and other partners to seek solutions for traffic control, parking, and safe pedestrian flow.</p>
<b>Impacts to Historic Building Exterior</b>	<p>Results in moderate impacts from minor changes to the exterior envelope that includes the addition of retractable canvas storefront awnings on the building's west elevation.</p>	<p>Materials, configuration, and placement will comply with the <i>Secretary's Standards</i>. Proposed exterior alterations to buildings within Calumet's local historic district are submitted for review by the Village of Calumet HDC. Although the federal government is exempt from regulation by local units of government, Keweenaw NHP intends to submit an application for the proposed retractable storefront awnings.</p>

Impact Topics	Impacts of Preferred Alternative (Alternative 2)	Mitigation
<b>Impacts to Historic Interior Spaces</b>	<p>Impacts to the interior include the removal of architectural fabric in secondary spaces including: wall partitions, lockers; ceiling and floor construction; fixtures; and finishes to accommodate universal accessibility and restrooms, and the selective removal of historic fabric that is damaged or deteriorated beyond repair.</p> <p>Installation of the interior elevator and egress stair requires a portion of the basement floor in the southeast corner to be excavated. It requires reconfiguration of the southeast corner of the first floor (Room 104), removal of the second and third floor kitchens (rooms 209, 307 and 308), removal of the second floor mezzanine Robing Room (Room 212), installation of a large opening in the east wall the first floor Director's Office (Room 103), and demolition of the east end of the second and third floor anteroom spaces (rooms 208 and 307).</p> <p>Basement stairway requires removal to accommodate required egress.</p> <p>First floor group toilet rooms will result in moderate impacts to the southeast corner room (Room 104) and the former vault (Room 106).</p>	<p>Interior spaces affected by the rehabilitation will be documented using Historic American Building Survey (HABS) standards for drawings and photography. Representative examples of finishes, hardware, and fixtures will be salvaged, accessioned, cataloged, and stored in the Keweenaw NHP museum collection. Historic architectural features and finishes associated with the perimeter walls of the affected rooms shall be retained and restored wherever possible. In keeping with the <i>Secretary's Standards</i>, new partition walls, features, and finishes will be designed to be compatible, yet clearly differentiated from historic fabric. New material intended to replace portions of damaged fabric will match existing materials.</p> <p>Excavation for the elevator will be monitored and documented by an archeologist. Elements of the third floor kitchen cabinets and fixtures will be incorporated into an interpretive exhibit highlighting the historic function of the kitchen(s). The exhibit will also address the impacts of contemporary occupancy requirements on historic buildings and how they can be mitigated.</p> <p>The basement stairway will be retained and stored on-site.</p> <p>Plumbing for lavatories and water closets will be consolidated along a common new wall to avoid disruption to historic fabric. The new toilet facilities shall be located in secondary first floor spaces to avoid impacts to primary public spaces.</p>

	<p>The second floor single-occupancy toilet room will require alterations to existing rooms (room 206 and 207).</p> <p>Removal of the second floor stage platform is required to accommodate visitor circulation through the exhibit and barrier-free requirements for universal design.</p> <p>The third floor single-occupancy toilet room will impact the east end of the south anteroom (Room 307).</p>	<p>Rehabilitation will require the removal of the three-quarter height partitions that comprise the south and west walls of the existing toilet room (Room 207). This demolition will expand the floor area of the existing changing room (Room 206) to meet the space requirements for an accessible toilet room. The use of these rooms (combined toilet and changing) will remain consistent as a result of the rehabilitation. Plumbing will be concentrated along one existing wall to minimize impacts to historic fabric. The number and size of new toilet facilities on the second floor is lessened by the reliance on new first floor group toilet facilities to meet code-required fixture counts for upper floor occupants.</p> <p>The second floor platform will be carefully removed and stored for potential future reinstallation. Prior to removal, the platform will be photographed and documented in measured drawings. As a component of the exhibit design, interpretive media will be developed highlighting the Union Building's historic room functions, occupants, and features, including the second floor stage platform. Individual identification signs will be installed throughout the building to indicate former uses of historic rooms.</p> <p>The new third floor toilet room will be incorporated into the reconfiguration of the east end of the south anteroom (Room 307) as a component of the new elevator and stair installation. Plumbing will be concentrated along a new partition wall to minimize impacts to historic fabric. The number and size of new toilet facilities on the third floor is lessened by the reliance on new first floor group toilet facilities to meet code-required fixture counts for upper floor occupants.</p>
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	<p>Enlarged door openings are needed on the north and east walls of Room 101 to establish sight lines from the proposed visitor reception desk, located along the south wall, to adjacent exhibit spaces and points of entry.</p> <p>Removal of the third floor stage, proscenium, and backdrop panels is required due to the advanced state of deterioration and proposed community use of the lodge hall (Room 309).</p> <p>Community use of the third floor lodge hall (Room 309) stage requires a barrier free route to the stage which is approximately 2 feet above the floor. Accessibility may be achieved through the installation of a ramp or a vertical platform lift. The installation of two new door openings to either side of the stage proscenium will also be required.</p>	<p>Enlarged door openings will be constructed and detailed to be consistent with the character of the existing opening. The existing east wall door opening with paneled wood door, wood casings, and transom will be widened to include a double door with a larger transom. The existing un-framed opening on the north wall will be reengineered with new structural support and finished without casings or embellishments.</p> <p>The stage proscenium and backdrop panels will be partially reconstructed based on documentary drawings, photographs, and material samples.</p> <p>The new ramp or vertical platform lift for stage accessibility will be located behind the stage backdrop panels. The new door openings to backstage spaces will be centered on the walls flanking the stage proscenium and will be detailed to be compatible with, and yet differentiated from, existing historic door openings.</p>
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Impact Topics	Impacts of Preferred Alternative (Alternative 2)	Mitigation
<b>Impacts to Museum Collections</b>	<p>Museum objects featured in the Union Building exhibit will be exposed to potential agents of deterioration such as contaminants, ultraviolet and visible light, temperature and humidity, and handling of objects.</p> <p>Museum collections to be displayed in the Union Building exhibit will be subject to a slightly greater security risk through increased exposure to the public and the usual agents of deterioration. Although all museum objects within the exhibit will be protected in appropriate cases with climate controls, the environment may not be as stable as that found in a museum storage facility.</p>	<p>In some instances, museum objects will be housed in conditions that will provide a marked improvement for both security and environment as compared to typical conditions. Objects will be cared for in accordance with standard NPS practices as outlined in the <i>NPS Museum Handbook</i>, which provides for protection, monitoring, and care of collections.</p> <p>Objects will be cared for in accordance with standard NPS practices as outlined in the <i>NPS Museum Handbook</i>, which provides for protection, monitoring, and care of collections.</p>
<b>Impacts to the Visitor Experience and Aesthetic Resources</b>	<p>Differing locations of second and third floor single-occupancy toilet facilities may be more difficult to locate. This approach relies on the first floor group toilet facilities to meet use requirements on the upper floors.</p> <p>An elevator, stair, and toilet facilities will be constructed within the building envelope, requiring the removal of historic fabric in secondary spaces, and introducing new construction within the context of historic fabric.</p>	<p>The combination of all new toilet facilities for the Union Building shall be designed to accommodate anticipated building occupancies. For convenience, first floor toilet rooms will be located near primary circulation areas. Signage near second and third floor toilet rooms will direct visitors to the additional availability of first floor facilities.</p> <p>New construction will be differentiated and yet compatible with the building's historic materials and features. This alternative relies on a skillful application of the <i>Secretary's Standards</i>; visitors must be able to distinguish new work from historic fabric.</p> <p>To ensure that new construction conforms to the <i>Secretary's Standards</i>, project design shall be awarded to an architectural</p>

	<p>This alternative will adversely impact some secondary aesthetic material resources associated with the removal or alteration of the second and third floor kitchens, second floor mezzanine, and the first floor southeast corner room to allow for the installation of an elevator, stair, and toilet facilities. The aesthetic spatial arrangement of these rooms and a portion of adjacent rooms will be impacted.</p>	<p>firm qualified to meet the requirements of historical architects as defined by 36 CFR.</p> <p>The construction contract shall be awarded based on a technical evaluation of potential contractors and of their prior experience and performance in rehabilitation. In addition, the project will be managed and reviewed by NPS cultural resources staff with expertise in the application of the <i>Secretary's Standards</i>.</p> <p>Interior spaces affected by the rehabilitation will be documented using HABS standards for drawings and photography. Representative examples of finishes, hardware, and fixtures will be salvaged, accessioned, cataloged and stored in the Keweenaw NHP museum collection. A sampling of collected materials will be used in an exhibit to interpret lost spaces for visitors.</p>
<b>Impacts to Socioeconomic Environment</b>	(There are no adverse impacts to be mitigated.)	



Impact Topics	Impacts of Preferred Alternative (Alternative 2)	Mitigation
<p><b>Impacts to Long -term Management of Resources</b></p> <p>(Project and Life Cycle Costs)</p>	<p>Community and visitor use of the Union Building will increase traffic flow through the building with the typical attendant wear on the structure. There will also be fiscal impacts associated with operation of the facility.</p> <p>Estimated Initial Project Cost: \$3,041,100</p> <p>Estimated Total Life Cycle Cost (25 year cycle): \$3,349,095</p> <p>Estimated operational costs associated with interpretive staff for the Union Building facility over a 25-year period are provided below. Staffing costs for both a year-round and seasonal facility are calculated:</p> <p><u>Year-round Operations:</u>  1 FTE full time GS 05, Interpretive Ranger: \$1,512,011  1.5 FTE full time GS 04, Visitor Use Assistants: \$2,028,400  TOTAL: \$3,540,411</p> <p><u>Seasonal Operations (open 6 months):</u>  .5 FTE GS 05, Interpretive Ranger: \$946,741  1.25 FTE GS 04, Visitor Use Assistants: \$845,705  TOTAL: \$1,792,446</p>	<p>The facility will be placed on a routine maintenance schedule in accordance with NPS standards for the care of historic structures. Park managers will seek base funding increases to accommodate the increased staffing levels, non-personal services, and fixed costs required for operation and maintenance of the facility.</p>

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