Talcott Street Pedestrian Bridge

Hartford, CT

Mitigation Plan

December 2020

BUILDING CONSERVATION ASSOCIATES INC

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Prepared For
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December 2020

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BUILDING CONSERVATION ASSOCIATES INC

INTRODUCTION

Shelbourne Management, LLC (Shelbourne) retained Building Conservation Associates, Inc. (BCA) to compile a historical assessment, evaluate existing conditions, and develop a plan for documenting, removing, salvaging, and storing original architectural elements of the historic copper-clad Talcott Street Pedestrian Bridge located at 36-70 Talcott Street in Hartford, CT. As part of a redevelopment project undertaken by Shelbourne, 36-70 Talcott Street is proposed to be demolished.

The property includes two pedestrian bridges that span Talcott Street and connect 36-70 Talcott Street with 956 Main Street, a building under separate ownership and not part of the redevelopment project. Selected elements of the westernmost bridge, referred to in this report as the Talcott Street Pedestrian Bridge, are proposed to be carefully disassembled and stored for possible future reassembly to mitigate the adverse historic preservation impact of the demolition of 36-70 Talcott Street.

The purpose of this Mitigation Plan prepared by BCA is to demonstrate the feasibility of and provide a methodology for documenting, removing, salvaging, and storing original architectural elements of the Talcott Street Pedestrian Bridge identified by the Hartford Preservation Commission in collaboration with Shelbourne. The selected elements are as follows:

- Copper sheet-metal cladding system (all cladding elements)
- Glass clock faces (quantity: 2 each)
- Kalamein window sash and frames (quantity: 18 each)

This Mitigation Plan has been developed in response to the Hartford Preservation Commission's request for further information and provides specific technical recommendations to allow for an appropriate reconstruction of the Talcott Street Pedestrian Bridge at a later date.[1] BCA analyzed the historical significance and architectural integrity of the bridge to ensure the recommendations provided in this plan are in keeping with accepted historic preservation standards.

This plan focuses on the material fabric of the Talcott Street Pedestrian Bridge. The evaluation of existing conditions included herein is comprehensive; BCA reviewed representative examples of each typical material and architectural element. However, access was limited, and a detailed conditions survey of every surface was not conducted. This plan does not address architectural issues pertaining to building code, accessibility, occupancy, or egress. It also excludes assessment of hazardous materials; electrical, mechanical, plumbing, and structural issues; fire protection; and security systems.

HISTORIC PRESERVATION REGULATORY REVIEW

The historic Talcott Street Pedestrian Bridge, the westernmost of the two pedestrian bridges at 36-70 Talcott Street, is designated as a contributing structure within the National Register-listed Department Store Historic District.[2] Due to this designation, the proposed redevelopment

[1] See "*REPORT*: 36-70 Talcott Street, Hartford, CT 06103." City of Hartford Department of Development Services – Planning Division, November 18, 2020.
[2] Historic Resource Consultants, "Department Store Historic District," National Register of Historic Places Registration Form (Washington, DC: U.S. Department of the Interior, National Park Service, 1995).

project encompassing 36-70 Talcott Street is subject to review by the Hartford Preservation Commission for its potential to impact historic resources.[3] The Hartford *Guidelines for Renovations and Additions to Historic Buildings* state, "Removal or alteration of historical materials or architectural features should be avoided."[4]

According to guidance received by Shelbourne from the Hartford Preservation Commission regarding the proposal to redevelop 36-70 Talcott Street, the demolition of the existing parking garage structure at the property is acceptable; however, more information is required to evaluate the proposal for removing and salvaging elements of the Talcott Street Pedestrian Bridge in lieu of preservation or restoration of the bridge in place.

The recommendations in this plan are informed by the United States Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*.

HISTORICAL ASSESSMENT

Research Methodology

BCA performed targeted archival research and consulted the following repositories and documents in the preparation of this plan:

- "Department Store Historic District," registration form, National Register of Historic Places (1995).
- "Connecting Bridge for G. Fox & Co. Inc.," architectural drawings prepared by Abbot, Merkt & Co. (1930).[5]
- "Talcott Plaza" architectural drawings prepared by Thomas Munroe Nichols & Associates (1986).[6]
- Connecticut Historical Society Museum & Library, Connecticut Images Collection.[7]
- Trinity College Library, Hartford Collection.[8]

Historical Significance

Constructed in 1930, the Talcott Street Pedestrian Bridge connected the G. Fox & Co. department store building at 956 Main Street to the G. Fox & Co. warehouse building directly across Talcott Street, known today as 36-70 Talcott Street (Figure 1). The copper-clad bi-level bridge was designed by the architecture and engineering firm Abbot, Merkt & Co. in a Neoclassical style to complement the 1918 department store's original design. Decorative details include paneled pilasters, the clock faces on the second story, a modillioned cornice, a stepped parapet, and 12-over-12 windows.

The bridge likely served as a back-of-house service corridor for employees of G. Fox & Co., which at the time was one of the most popular department stores in Hartford and a major part

[3] City of Hartford Historic Preservation Ordinance.
[4] Hartford *Guidelines for Renovations and Additions to Historic Buildings* (2006).
[5] Accessed via Hartford GIS Scanned Document Viewer.
[6] Ibid.
[7] Accessed via Connecticut Digital Archive.
[8] Accessed via Artstor.

of the city's retail core. Despite its utilitarian purpose, the ornate Neoclassical exterior highlighted the grandness of the retail shopping experience offered by G. Fox & Co. and evoked the store's commercial success. With its expansive window openings, the bridge would have showcased the bustling activity of the large store's operations to pedestrians looking up at the bridge from the street below.

Architectural finishes at the interior of the bridge, including painted plaster walls on metal lath and kalamein moldings, were relatively plain and were designed to complement the adjacent finishes in the warehouse and store. On the upper level of the bridge, the ramped floor allowed for movement of merchandise and personnel directly from the third floor of the store building to the fifth floor of the warehouse. On the lower level, the ramp sloped towards the store building to allow for movement of goods from the fourth floor of the warehouse to the second floor of the store building, just above the store's mezzanine level.

Today, the Talcott Street Pedestrian Bridge helps visually identify the Department Store Historic District's important past as a prominent hub of retail activity in Harford in the late 19th and early-to-mid 20th centuries.

EXISTING CONDITIONS

Methodology

BCA visited the site on March 13, 2020, to evaluate the existing conditions of the Talcott Street Pedestrian Bridge from vantage points inside the parking structure at 36-70 Talcott Street, from the interior of each level of the bridge, from the roof of the bridge, and from the street level. Typical materials and conditions were documented in the field with digital photographs. Access into the bridge is closed off at both ends. At the time of BCA's site visit, access into the bridge was obtained from the warehouse by removing gypsum wall board, which was attached to metal studs. The second level of the bridge is currently home to roosting pigeons and was not directly accessed.

Exterior Description

The Talcott Street Pedestrian Bridge comprises one two-level volume, oriented north-south above Talcott Street and connecting 36-70 Talcott Street to 965 Main Street to the south. The bridge is constructed from a concrete-encased steel frame with copper sheet-metal cladding mechanically fastened to an armature of steel and wood members. Original drawings indicate a composition roof; the material of the existing roof is a contemporary membrane roofing system. The main copper gutter runs across the lower part of the bridge just above the arch springings. The arched soffit of the Talcott Street Pedestrian Bridge is made of cement plaster executed in a coffered pattern.

The bridge is designed in the Classical Revival style and is organized by pilasters into five bays of double-hung, 12-over-12 kalamein window assemblies on both primary facades. Pairs of pilasters demarcate the ends of the bridge as well as the central bay. The upper level is differentiated by the use of Corinthian pilasters and a projecting cornice with dentils, while the design of the lower level features the simpler Ionic order and a complimentary yet less prominent cornice. At the second level on both elevations, the central bay contains an ornamental glass clock face surrounded by a geometric relief and Classical Revival decorative panels. The clock face contains

Roman numerals which appear to be etched in the glass. The bridge is topped with a stepped sheet-metal parapet on both elevations.

Interior Description

The interior of the Talcott Street Pedestrian Bridge has a ramped terrazzo floor at each level, with an eight-inch channel base with a kalamein molding above. Metal access panels are present in the interior walls on both levels below the windows. Kalamein window frames and sills are present at each bay. Ferrous metal window guards are present at the upper-level windows. The walls are painted plaster on both levels and are topped with a simple wood picture molding between window openings. The walls transition to the painted plaster ceiling at a plaster cove molding on both levels. Contemporary wall partitions infill the north and south interior elevations where the bridge meets the two adjacent buildings at both levels. Non-historic partitions were first introduced at these locations in 1986, when a new fire-rated gypsum board wall assembly was built at each level (Figure 2). Today, the interior of the bridge is inaccessible and the existing partition was partially removed to allow access to the interior for BCA's conditions evaluation.

Materials Conditions

Metal

The copper sheet-metal cladding at both primary facades of the bridge exhibits general atmospheric soil deposition and water staining (Figures 3 and 4). Water staining is particularly concentrated at each of the two cornice levels where water is able to collect (Figure 5). Bird matter is present on upward-facing surfaces at isolated locations (Figure 6). Heavy soil deposition is present at the copper gutter (Figure 7). A verdigris patina is present on copper surfaces and is particularly concentrated at the parapet level on the west elevation, while on the east elevation the verdigris patina occurs more uniformly (Figures 8 and 9).

At isolated locations, sections of copper cladding appear loose, bent, and detached from the cladding armature (Figure 10). At one location on the west elevation, a section of copper cladding is missing, leaving the underlying structure exposed (Figure 11). At the interior of the bridge, original copper surfaces are visible behind the wall access panels where these surfaces were not exposed to weathering (Figure 12). A hands-on inspection was not performed to evaluate the performance of joints and fasteners holding the copper cladding in place, or of other attachments, as part of this investigation.

The kalamein window sash, frames, sills, and stools exhibit pigeon guano, general atmospheric soil deposition, surface losses, and overall loss of finishes (Figure 13). The metal window guards at the second level of the bridge exhibit overall loss of finishes in isolated locations (Figure 14). A detailed window-by-window survey to evaluate the performance of window hardware and operability was not conducted as part of this report.

Glass

The glass clock face on the west façade exhibits surface cracks and broken glass (Figure 15).

Cement Plaster

The cement plaster soffit at the bridge exhibits heavy atmospheric soil deposition, water damage, and biological growth (Figure 16). Surfaces losses and cracks in the cement plaster occur at isolated locations. At one location on the south end of the soffit, a network of cracks occurs adjacent to a hole in the cement plaster (Figure 17). At one location, a flat panel in one soffit was removed to accommodate the installation of electrical equipment (Figure 18).

Wood

Where exposed to environmental conditions at locations where the sheet-metal cladding is loose or missing, wood elements of the exterior cladding system exhibit water damage and displacement (Figure 19).

The painted wood picture moldings at the bridge interior on both levels exhibit general atmospheric soil deposition and overall finish failure (Figure 20).

Interior Plaster

The painted plaster walls and ceilings at the interior of the bridge on both levels exhibit extensive finish failure on all surfaces (Figures 21 and 22). At isolated locations, plaster surfaces exhibit losses and disaggregation where penetrations were made to accommodate non-historic mechanical equipment and other interventions (Figure 23).

Terrazzo

The terrazzo floors at both levels of the bridge are obscured by debris from failing paint finishes and subsequent construction activity (Figure 24). Further investigation is required to determine the condition of the terrazzo.

Architectural Integrity

Integrity refers to a historic property's ability to express the intentions of its designers through the materials of its construction. Historic properties can exhibit varying degrees of integrity due to their existing conditions. Integrity also measures the level of accuracy with which a historic resource can be interpreted for the public. Consequently, a historic property with integrity can make meaningful contributions to the public's understanding of the property's historical context.[9]

Observation of the existing conditions at the Talcott Street Pedestrian Bridge does not suggest any major alteration campaigns have occurred that significantly detract from an understanding of the structure's original design and use. However, as detailed above, the exterior and interior of the bridge exhibit deteriorated finishes and isolated missing architectural elements. The

[9] National Park Service, United States Department of the Interior, "How to Apply the National Register Criteria for Evaluation," *National Register Bulletin 15*, 1997.

cumulative impact of these deteriorated material conditions negatively affects the bridge's integrity but does not completely obscure the original design intent.

The utilitarian interior of the bridge exhibits a moderate-to-low degree of architectural integrity due to deteriorated conditions, loss of finishes, and installation of inappropriate partitions and contemporary mechanical interventions in the 1980s. The exterior envelope of the bridge, including its cladding and ornamental features that establish the bridge as a prominent feature in viewsheds within the Department Store Historic District as originally designed, is largely intact today and therefore exhibits a high degree of architectural integrity in situ. However, the proposed demolition of 36-70 Talcott Street will constitute an irreparable loss of association between the bridge and its historic context, since the bridge was purpose-built to connect two functionally related buildings. This loss of association will negate the overall architectural integrity of the bridge.

DOCUMENTATION, REMOVAL, SALVAGE, AND STORAGE

The following plan for documentation, removal, salvage, and storage of selected architectural elements at the Talcott Street Pedestrian Bridge is presented in an outline form to demonstrate the feasibility of the proposed approach. Construction drawings and technical specifications are not included in this plan.

Outline Plan

I. Documentation

1. Before beginning removal and salvage of selected elements, document elements and materials to be removed.
    a. Document using overall photographs, detail photographs, and other information as required to completely describe existing conditions and configuration of each element.
2. Label each photograph with project name, date and time photograph was taken, and location according to Salvage Diagram. Key photographs to Salvage Diagram using graphic Salvage Tag identification so that area depicted in photograph can be easily referenced.
3. Protect elements from damage caused by or resulting from removal and salvage work.

II. Removal

1. Proceed with removals systematically. Complete removals operations in one location before proceeding to other locations. Label each element before removal according to Salvage Diagram.
2. Lower removed elements for salvage.

III. Salvage

1. Handle elements to be salvaged to prevent breakage, chipping, scratching, soiling, and other damage.
    a. Wrap salvaged elements to protect them from damage during handling and transportation.

2. Provide materials for protecting and crating removed elements to be salvaged. Ensure the use of sound, secure crates and padding that will protect elements from damage during handling, transportation, and storage.

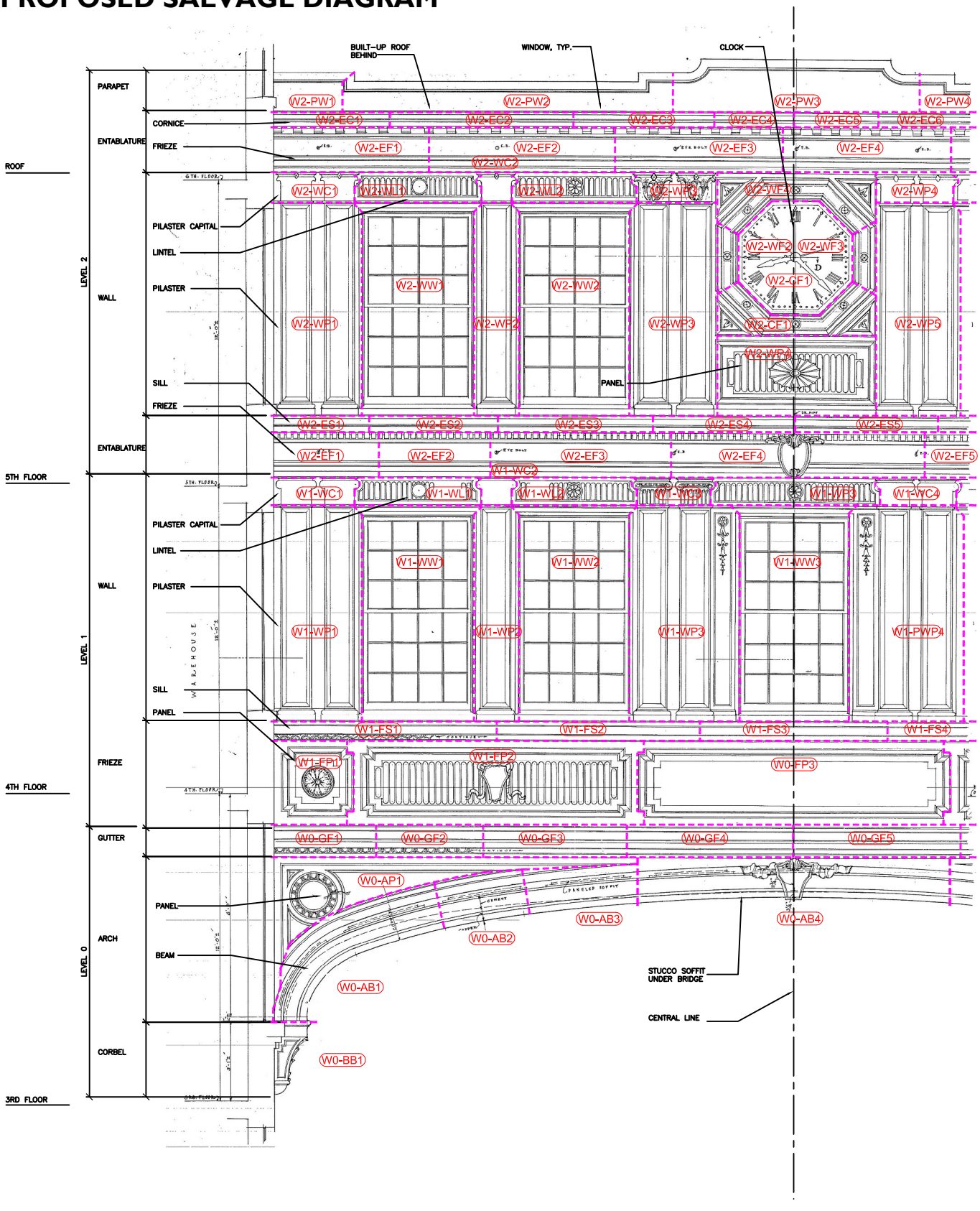
IV. Storage

1. Carefully handle crated or otherwise secured removed elements to be salvaged to prevent damage and deterioration.
2. Transport items to designated storage facility. Protect items from damage, deterioration, loss, theft, and vandalism during transport. Following transportation, record Status of each stored crate in Salvage Catalog.

Graphics

Following are a "Proposed Salvage Diagram" and a "Proposed Salvage Catalog." The Salvage Diagram is a graphic representation of the proposed locations of cuts for removal of copper sheet-metal cladding based on assumed joint locations. The Salvage Catalog is a sample spreadsheet showing how salvaged elements are proposed to be keyed to drawings and inventoried for storage.

PROPOSED SALVAGE DIAGRAM



LEGEND:

ASSUMED JOINT

SALVAGE TAG

SIDE
LEVEL
LOCATION
OBJECT
NUMBER

W1-FS4

WEST ELEVATION NORTH HALF

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ELEVATION	LEVEL	ID	LOCATION	ELEMENT	CRATE NUMBER	STATUS	FOR CONTRACTOR USE
WEST	LEVEL 0	W0-GF3	GUTTER	FASCIA			
WEST	LEVEL 0	W0-GF2	GUTTER	FASCIA			
WEST	LEVEL 0	W0-GF4	GUTTER	FASCIA			
WEST	LEVEL 0	W0-AB3	ARCH	BEAM			
WEST	LEVEL 0	W0-GF5	GUTTER	FASCIA			
WEST	LEVEL 0	W0-GF1	GUTTER	FASCIA			
WEST	LEVEL 0	W0-BB1	BRACKET	BRACKET			
WEST	LEVEL 0	W0-AB2	ARCH	BEAM			
WEST	LEVEL 0	W0-AP1	ARCH	PANEL			
WEST	LEVEL 0	W0-AB4	ARCH	BEAM			
WEST	LEVEL 0	W0-AB1	ARCH	BEAM			
WEST	LEVEL 1	W1-WP3	WALL	LINTEL			
WEST	LEVEL 1	W1-WC1	WALL	PILASTER CAPITAL			
WEST	LEVEL 1	W1-WL2	WALL	LINTEL			
WEST	LEVEL 1	W1-FS2	FRIEZE	SILL			
WEST	LEVEL 1	W1-WL1	WALL	LINTEL			
WEST	LEVEL 1	W1-FS3	FRIEZE	SILL			
WEST	LEVEL 1	W1-FS4	FRIEZE	SILL			
WEST	LEVEL 1	W1-WC4	WALL	PILASTER CAPITAL			
WEST	LEVEL 1	W1-WC2	WALL	PILASTER CAPITAL			
WEST	LEVEL 1	W1-WC3	WALL	PILASTER CAPITAL			
WEST	LEVEL 1	W1-FS1	FRIEZE	SILL			
WEST	LEVEL 1	W1-WW2	WALL	WINDOW			
WEST	LEVEL 1	W1-WW3	WALL	WINDOW			
WEST	LEVEL 1	W1-WP2	WALL	PILASTER			
WEST	LEVEL 1	W1-WW1	WALL	WINDOW			
WEST	LEVEL 1	W1-WP1	WALL	PILASTER			
WEST	LEVEL 1	W1-FP2	FRIEZE	PANEL			
WEST	LEVEL 1	W0-FP3	FRIEZE	PANEL			
WEST	LEVEL 1	W1-FP1	FRIEZE	PANEL			
WEST	LEVEL 1	W1-WP3	WALL	PILASTER			
WEST	LEVEL 1	W1-PWP4	WALL	PILASTER			
WEST	LEVEL 2	W2-CF1	WALL	CLOCK FRAME			
WEST	LEVEL 2	W2-WF4	WALL	CLOCK FRAME			
WEST	LEVEL 2	W2-WF2	WALL	CLOCK FRAME			
WEST	LEVEL 2	W2-WP4	WALL	PANEL			
WEST	LEVEL 2	W2-WF3	WALL	CLOCK FRAME			
WEST	LEVEL 2	W2-ES2	ENTABLATURE	SILL			
WEST	LEVEL 2	W2-ES1	ENTABLATURE	SILL			
WEST	LEVEL 2	W2-WC1	WALL	PILASTER CAPITAL			
WEST	LEVEL 2	W2-WP4	WALL	PILASTER CAPITAL			
WEST	LEVEL 2	W2-WP3	WALL	PILASTER CAPITAL			
WEST	LEVEL 2	W2-PW4	PARAPET	PARAPET			
WEST	LEVEL 2	W2-ES3	ENTABLATURE	SILL			
WEST	LEVEL 2	W2-EF5	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-ES4	ENTABLATURE	SILL			

WEST	LEVEL 2	W2-WC2	WALL	PILASTER CAPITAL			
WEST	LEVEL 2	W2-ES5	ENTABLATURE	SILL			
WEST	LEVEL 2	W2-EC5	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-EC4	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-EC6	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-EF4	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-EF4	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-WL1	WALL	LINTEL			
WEST	LEVEL 2	W2-CF1	CLOCK	FACE			
WEST	LEVEL 2	W2-WL2	WALL	LINTEL			
WEST	LEVEL 2	W2-EF2	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-EF1	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-EF2	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-EF1	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-EF3	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-WW2	WALL	WINDOW			
WEST	LEVEL 2	W2-WW1	WALL	WINDOW			
WEST	LEVEL 2	W2-EF3	ENTABLATURE	FRIEZE			
WEST	LEVEL 2	W2-WP1	WALL	PILASTER			
WEST	LEVEL 2	W2-PW3	PARAPET	PARAPET			
WEST	LEVEL 2	W2-WP2	WALL	PILASTER			
WEST	LEVEL 2	W2-WP5	WALL	PILASTER			
WEST	LEVEL 2	W2-WP3	WALL	PILASTER			
WEST	LEVEL 2	W2-EC2	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-EC1	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-EC3	ENTABLATURE	CORNICE			
WEST	LEVEL 2	W2-PW2	PARAPET	PARAPET			
WEST	LEVEL 2	W2-PW1	PARAPET	WALL			

Figure 1. View of G. Fox & Co. store (left) and warehouse (right), looking west; bridge is visible at center (1936). Image via Connecticut Historical Society Museum & Library, Connecticut Images Collection. Accessed via Connecticut Digital Archive.

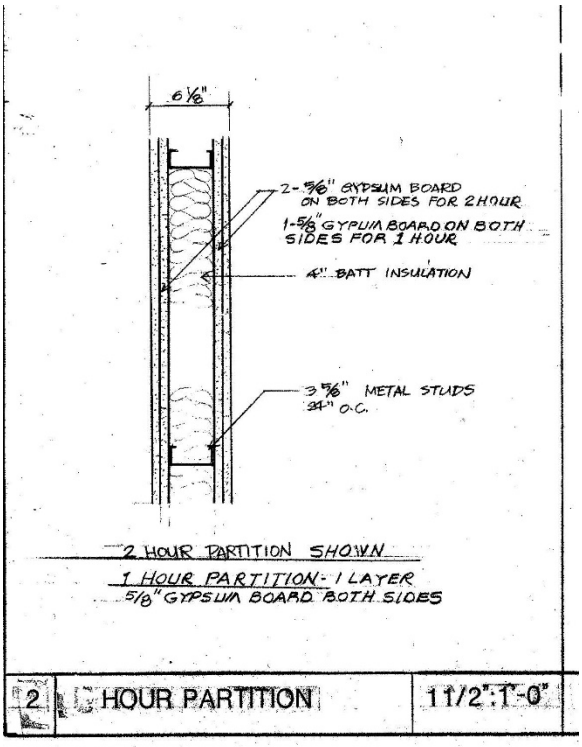


Figure 2. Detail showing new fire-rated gypsum board partition at bridge interior. Drawing A-7, Detail 2 from "Talcott Plaza" architectural drawings prepared by Thomas Munroe Nichols & Associates (1986). Accessed via Hartford GIS Scanned Document Viewer.

Figure 3. General atmospheric soil deposition and water staining on copper surfaces.

Figure 4. Detail, general atmospheric soil deposition and water staining on copper surfaces.

Figure 5. Water staining on copper surfaces at upper-level cornice.

Figure 6. Bird matter on upward-facing surfaces.

Figure 7. Heavy soil deposition and bird matter at the copper gutter.

Figure 8. Verdigris patina on copper surfaces is concentrated at the parapet level on the west elevation.

Figure 9. Verdigris patina on copper surfaces occurs throughout each level of the bridge on the east elevation.

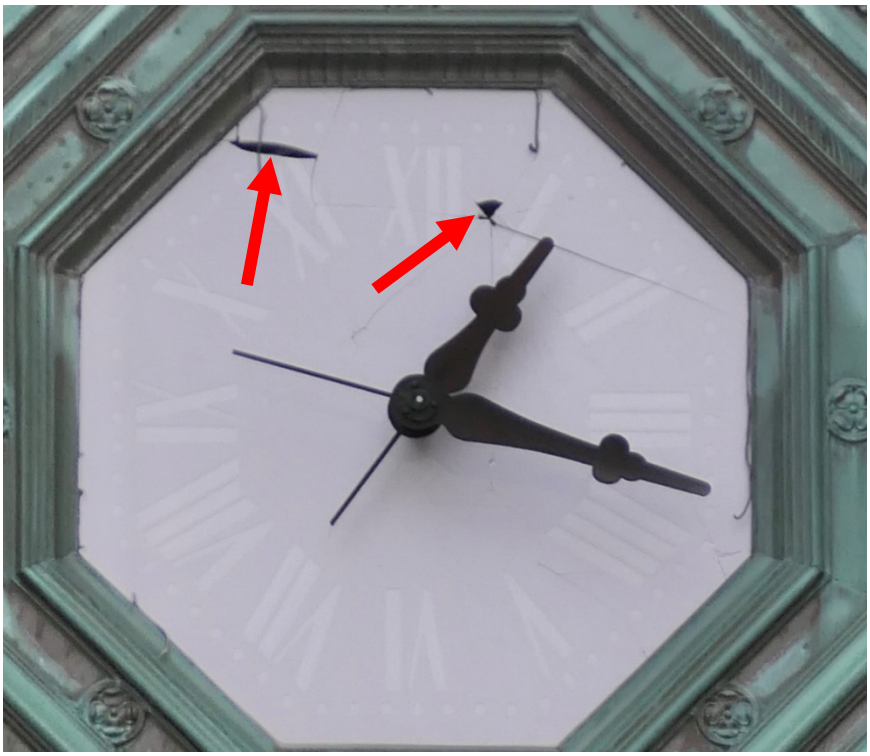
Figure 10. Bent and loose copper cladding is detached from its metal armature at isolated locations.

Figure 11. Missing copper cladding section and exposed underlying metal framing and concrete encasing of the steel structure on the west elevation.

Figure 12. Original copper surfaces are visible behind interior wall access panels, on the first level, on the interior of the bridge where these surfaces were not exposed to weathering.

Figure 13. General atmospheric soil deposition, surface losses, and loss of finishes are typical at the kalamein windows. Extensive amounts of pigeon guano are extant on all surfaces especially on the floor at the second level of the bridge.

Figure 14. Loss of finishes at metal window guards at the second level of the bridge.



15. Multiple cracks and missing glass at the ornamental clock face on the west elevation. Arrows indicate locations of missing glass.

Figure 16. Heavy atmospheric soil deposition, water damage, and biological growth on cement plaster surfaces at the bridge soffit.

Figure 17. Surfaces losses and cracks at isolated locations in the cement plaster soffit.

Figure 18. A flat panel in one soffit was removed to accommodate the installation of electrical equipment.

Figure 19. Water-damaged and displaced wood elements at the cladding armature.

Figure 20. General atmospheric soil deposition and finish failure at the painted wood picture molding at the first level.

Figure 21. Extensive finish failure at painted plaster walls and ceiling at the first level.

Figure 22. Failing finishes on plaster surfaces on the first level visible at right. Non-historic partition and door at connection to adjacent building visible at left.

Figure 23. Surfaces losses and disaggregation at plaster surfaces where penetrations were made to accommodate non-historic mechanical equipment on the first level.

Figure 24. The terrazzo floors at both levels of the bridge are obscured by pigeon guano and debris from failing paint finishes and subsequent construction activity.