1. Team Member Introduction

2. Relevant Experience

3. Project Observations
Fisher Hill Reservoir Park Gatehouse & Comfort Station
Brookline, MA

*2017 MASSACHUSETTS HISTORICAL COMMISSION PRESERVATION AWARD WINNER*
Original Reservoir & Gatehouse
1887

Decommissioned Gatehouse
2008

Restoration of Gatehouse
2013

Restored Gatehouse
2016
Areas of Assessment
- Masonry
- Slate roof
- Exterior millwork
- Windows louvers
- Copper Gutter & Leader

loose coping stones

deteriorated copper gutters

missing copper leaders

damaged louver vents

damaged wood brackets

missing windows

decorative plaque & masonry staining & graffiti (elsewhere)

damaged ridge flashing

damaged copper flashing

loose & missing slate

open masonry joints and shifty stones

vegetation infiltration

shifting masonry stones
New slate roof tiles

Slate roof installation. Design team matched color, size and installation methods.
Original copper hip roof ridge detail with missing brackets.

Recreated copper hip roof ridge detail with new brackets.

Damaged and missing copper gutter and decorative cornice flashing.

Recreated copper gutter and flashing details to match profiles and installation.
Exposed Base
Paint Layer

Replaced wood soffit and bracket to match existing.

Original painted wood base layer revealed with paint swatch comparison for color match.

Existing paint samples for lead testing.
Existing mortar samples from the granite, brownstone and brick samples.

Damaged exterior masonry with infilled windows and door.
Due to extensive water damage and separation of the north wall from freeze thaw cycles, a large portion of the north facade needed to be rebuilt. The random ashlar granite blocks & brownstone details were tagged with identifying numbers for careful removal. The brick backup wall was rebuilt and the random ashlar pattern was relaid in its original pattern.
Granite, brownstone and brick salvaged for re-use.
Preservation specialists mock-up review.

Comparison of original mortar to proposed mortar color and tooling. Masonry cleaning (above).
Gatehouse quoin and brownstone decorative relief detail
View southeast
Historic photo - view southwest reservoir in-use. Historic photos like this along with remnants of the original windows and door wood profiles were analyzed during the design phase to reconstruct the windows doors & louvers to their original appearance.
Historic photo - gatehouse door

Architectural drawings over historic door photo for comparison

Original door pieces salvaged from bottom of gate chamber re-assembled
No physical evidence remained of the lower arch top windows. Historic photos like this were essential to recreate the windows muntin patterns.

The original window frames at the upper clerestory provided evidence of the original frame design and brickmold profiles.
Mock-ups and installation of the Gatehouse windows.
Fisher Hill Reservoir Park - grand opening
Harbor Towers Guardhouse

Boston, MA
A1 enhanced structural frame with integral steel drum to reduce deformation, and increase lateral performance.

B1 integrated thermal, structural, and functional building systems.

C1 modified steel frame with slotted holes to reduce thermal mass, minimize thermal transfer and eliminate condensation.

A preliminary structural deformation analysis of stick frame.

<table>
<thead>
<tr>
<th>Glazing Performance</th>
<th>SN 68 CG - Gray</th>
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<tbody>
<tr>
<td>make-up name</td>
<td>25% transmittance</td>
</tr>
<tr>
<td>transmittance (visible)</td>
<td>7% visible</td>
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<tr>
<td>reflectance</td>
<td>0.28</td>
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<tr>
<td>u-value</td>
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<tr>
<td>shading coefficient</td>
<td>0.32</td>
</tr>
<tr>
<td>SHGC</td>
<td>0.28</td>
</tr>
</tbody>
</table>

B insulated glazing unit to reduce glare and heat gain while increasing visibility.

C preliminary heat transfer modeling output from therm analysis program.
floor plan - circulation diagram, lighting and finishes overlay

building section through office & courtyard

existing
new
formal
informal
visitors
visual connection

construction process

interior views
Beacon Park Restaurant Building
Detroit, MI
contextual urban nodes and paths

reference to urban landmarks

existing condition

site plan with adaptable interior/exterior program

urban alignments
operable glass wall system - open

operable glass wall system - closed

Regional Material
+20.0%

Certified Wood
100.0%

Water Use Reduction
32.8%

Optimize Energy Performance
18.4% energy saved above ASHRAE 90.1

Green Power
35.0% energy consumed is from renewable sources

Stormwater Quantity Control
36.5% stormwater runoff reduction

Site Habitat Restoration
35.2% site vegetation coverage

Heat Island Effect
100.0% roof materials used have a Solar Reflectance Index greater than 78

Recycled Content
20.0% materials used are recycled content

building section

Operable Glass Wall System

Energy Optimization

Certified Wood

Water Use Reduction

Optimize Energy Performance

Green Power

Stormwater Quantity Control

Site Habitat Restoration

Heat Island Effect

Recycled Content

mechanical

Roof materials have a Solar Reflectance Index greater than 78

passive ventilation

Recycled Content

20.0% materials used are recycled content

Forest Stewardship Council (FSC) certified

low-flow fixtures

acoustic absorption

regional materials used

+20.0%

Forest Stewardship Council (FSC) certified

low-flow fixtures

EER lights

cistern
flexible building uses

1. CLOSED RESTAURANT
2. OPEN AIR RESTAURANT
3. OPEN AIR PERFORMANCE
4. BOARD ROOM
5. PRESENTATION
6. FARMERS MARKET
New Riverside Park
Cambridge, MA
1. The Timeline Significance

2. What is "original" to the kiosk

Project Observations
Timeline

1912
Original Harvard Square subway headhouse

1928
Revised headhouse structure built to cover entrance to subway station

1981
Kiosk disassembled & stored during construction work on Red Line

1983
Relocated, Out of Town News kiosk

1978
Listed on National Registry of Historic Places (MHC Review)

2000
City Council designates Harvard Square a conservation district (CHC review)

2014
CDD and the Harvard Square Business Association publish the Harvard Square Vision Plan prepared by PPS.

2015
CHC staff initiates (2) fundamental principles
1. “that all original material that remained after the conversion to a newsstand in 1983 should be preserved to the greatest extent possible…”
2. “…there should be no additional enclosure of the structure.”

2017
Landmark Designation Report 11/30/2017

2018

3.5 Touloukian Touloukian Inc.   •   Architecture & Urban Design

Restoration / Renovation of the Historic Harvard Square Kiosk    •    City of Cambridge    •    31 January 2018 (rev)
1983

"...all original material that remained after the conversion to a newsstand in 1983 should be preserved to the greatest extent possible, and that there should be no additional enclosure of the structure."

deconstruction of kiosk roof & structure  (photo credit: Boston Globe)

moving of kiosk roof & structure  (photo credit: Boston Globe)
“Original” Kiosk

Harvard Square Kiosk - 1977

Harvard Square Kiosk

Harvard Square Kiosk
“Original” Kiosk
1983 Relocated Kiosk

- interior casework & electrical room
- select interior light fixtures
- interior heating & cooling systems
- "Out of Town News" signage
- newsstands & magazine racks
- exterior suspended curtain tracks
- aluminum framed storefronts
- south elevation fenestration, vents, doors & ramp

present day kiosk - exterior

present day kiosk - interior
1983 Relocated Kiosk

What are the original “bones”?

original kiosk - 1928

original kiosk - 1950's

original kiosk - 1961
Guidelines for Treatment of the Landmark

Exterior Surfaces - Brick, Limestone & Granite

- Reconstruction of continuous low wall across south elevation
- Rebuild south brick wall & limestone
- Repair brick & limestone
- Repointing of mortar joints to maintain color, texture and profile of original joints
- Window system interface

Original kiosk
Guidelines for Treatment of the Landmark

Roof

- Low roof system
- High roof system
- Roof drain system

- Replacement of standing seam copper roof & allow for thermo dynamic movement
- Replacement of perimeter dentilled fascia to 1927 details (where necessary)
- Replace wood sheathing where necessary & install new insulation between sheathing and copper roof.
Signage

The back-lit semi circular signs should be restored with vacuum formed translucent red letters matching the originals.

commercial advertising not original to the 1928 kiosk design.

original signage - 1950's
Guidelines for Treatment of the Landmark

Steel support & wood sheathing

- Re-installation of original kiosk roof - 1983
- Steel frame
- Exposed wood beadboard
- Clean structural members for removal of rust and paint, to be repainted in the historic color
- Restoration / replacement of exposed beadboard
Guidelines for Treatment of the Landmark

Interior Features

- preserve exposed wood beadboard & riveted iron structure
- original breezway - 1977
- steel frame
- exposed wood beadboard
- height of casework should not exceed the perimeter brick walls
- address MAAB compliant brick floor

original breezway - 1977
Utilities - Electrical & HVAC

Guidelines for Treatment of the Landmark

- Removal of vents along south elevation
- Removal of all interior & exterior heating and cooling units for redesign of systems for greater efficiency

Potential HVAC system location in existing crawlspace
Potential electrical panel location (interior, below window)
Character of the Place