

A historical black and white photograph of King Street Station in Seattle. The image features a tall, brick clock tower with a pointed roof and a large clock face. The tower is part of a larger building with multiple windows and a flat roof. In the foreground, several horse-drawn carriages are visible, along with a group of people standing near the entrance. The overall scene depicts a busy transportation hub from a past era.

KING STREET STATION Rehabilitation

Trevina Wang
Seattle Dept of Transportation

King Street Station History

Designed by
Reed and Stem

Inspired by Campanile
at San Marco Piazza,
Venice, Italy

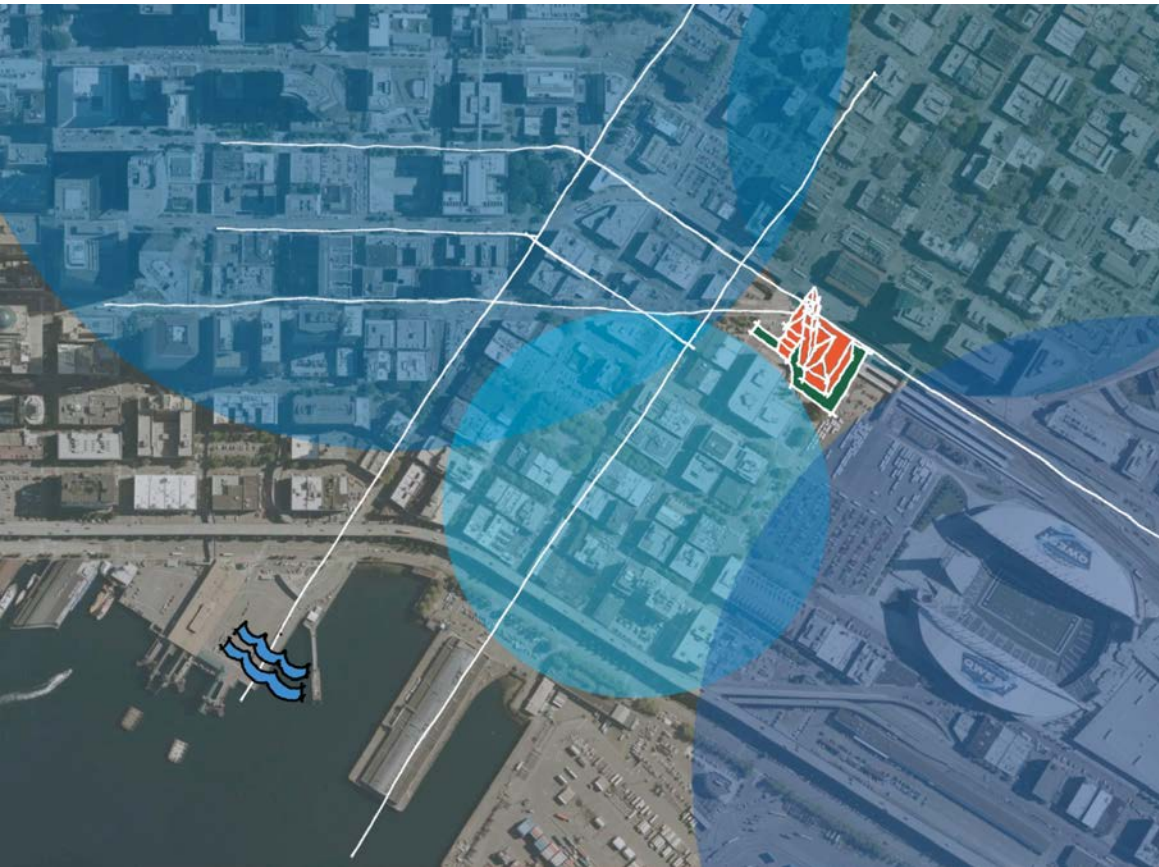
Opened to public
May 1906

Construction cost
\$450,000

National Register of
Historic Places



Station Acquisition by City of Seattle



One of three major hubs to move people in and out of downtown

Opportunity to restore a landmark

Revitalize historic Pioneer Square neighborhood

Support future development around station

Project Funding

Federal (\$33 million)

Federal Railroad Administration

Federal Transit Administration

Federal Highway Administration

State (\$9 million)

Washington State Dept of Transportation

Washington State Historic Society

City (\$10 million)

Private (\$ 0.2 million)

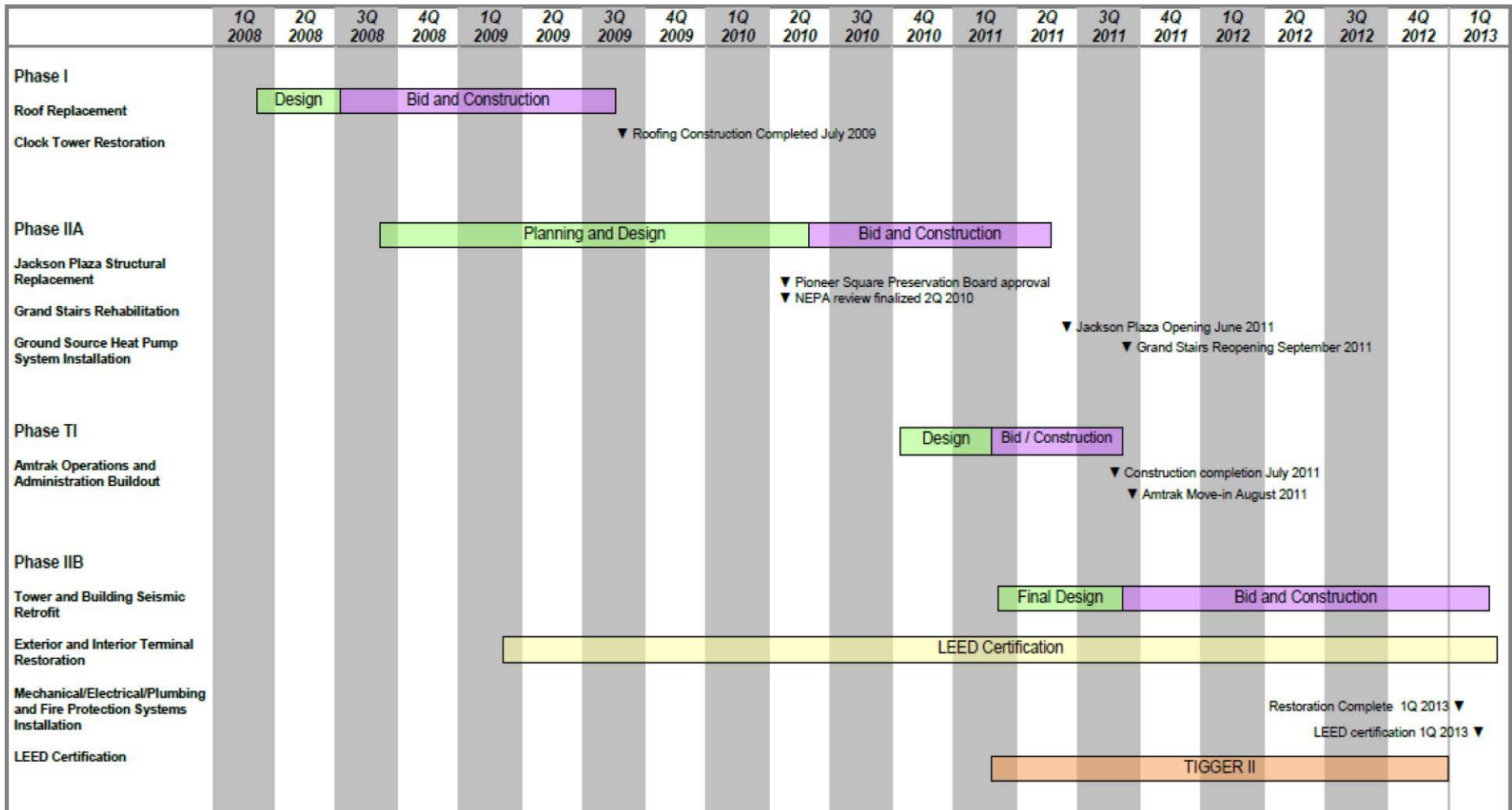
South Downtown Foundation

4Culture

National Trust



King Street Station Project Milestones



LEGEND

▼ Project Milestones ► Specific Items to be Considered



City of Seattle's Sustainable Building Mandate

Implemented since
2000

First in Nation

5,000 SF

LEED Silver minimum

King Street Station

LEED Platinum





Transportation/Commuting Connections

Amtrak (Heavy Rail)

Commuter Rail

Light Rail

Streetcar

Bus

Bike

Pedestrian

Ferry

Historical Lavender Glass Tiles
Salvaged for Re-Use on Clocktower

Original Structure and Materials
Restored/Maintained

Performance-based Seismic Upgrade
for 500 and 2500 year Events

Original Clay Ceramic Roof Tiles Restored
Providing Extended Roof Life of 75 Years

Roof Insulation with R-30 Value

Wall Insulation with R-25.6 Value

Photovoltaics on
Restored Canopy

Glass Canopy to
Improve Daylighting

Original Windows
Preserved and Repaired

Operable Windows
Restored Throughout

New Public Open Space

Future Canopy
with Photovoltaics

Water
Harvesting
for Toilet
Flushing

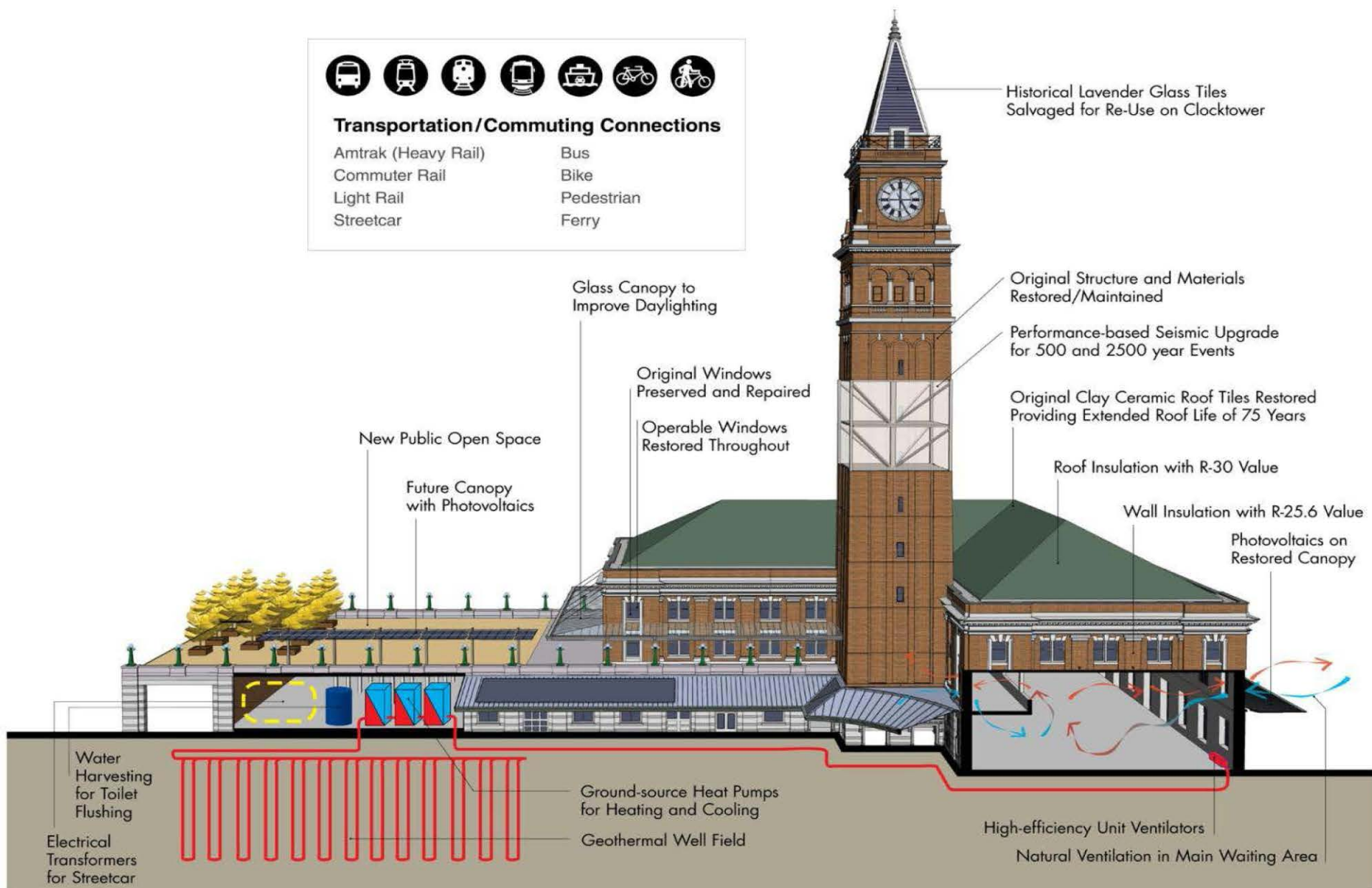
Electrical
Transformers
for Streetcar

Ground-source Heat Pumps
for Heating and Cooling

Geothermal Well Field

High-efficiency Unit Ventilators

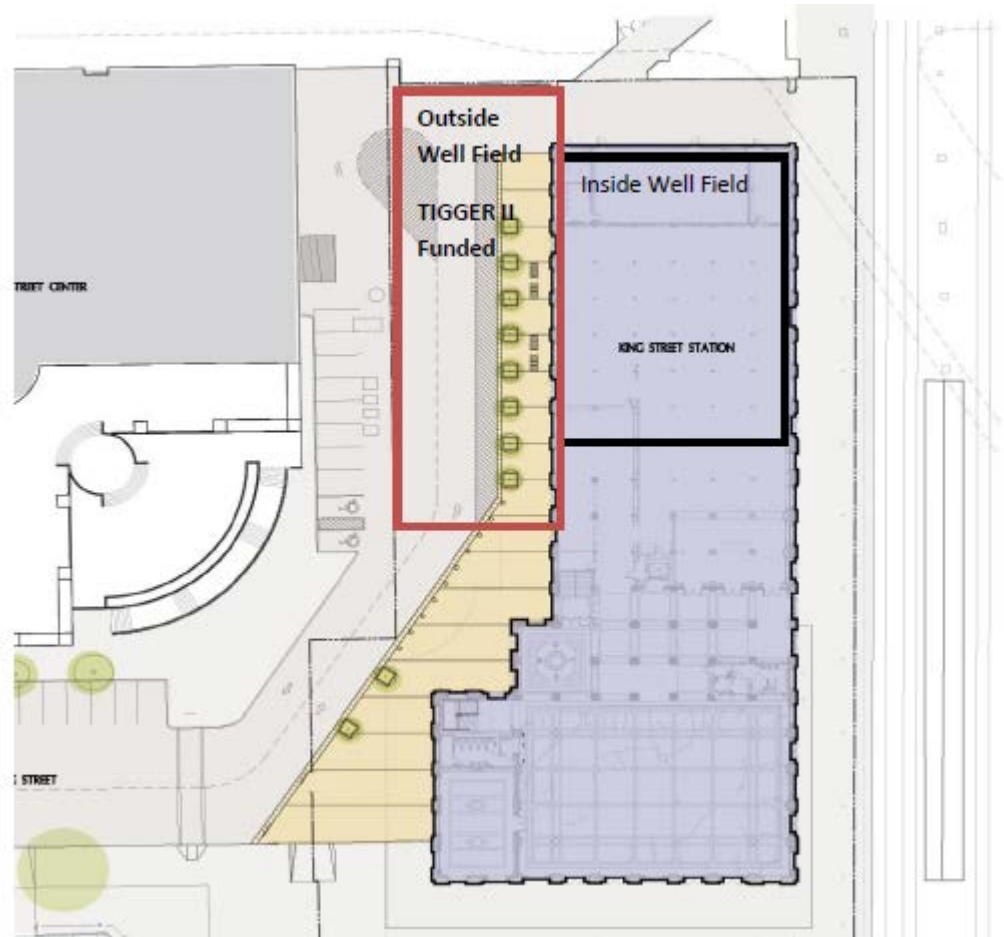
Natural Ventilation in Main Waiting Area



Geothermal Well Field

Ground Source Heat Pump

- 37 wells in building
- 31 outside wells (TIGGER II funded)
- 300 - 350 feet in depth
- quiet, energy efficient
- heating and cooling
- delete chiller and boiler



Natural Ventilation

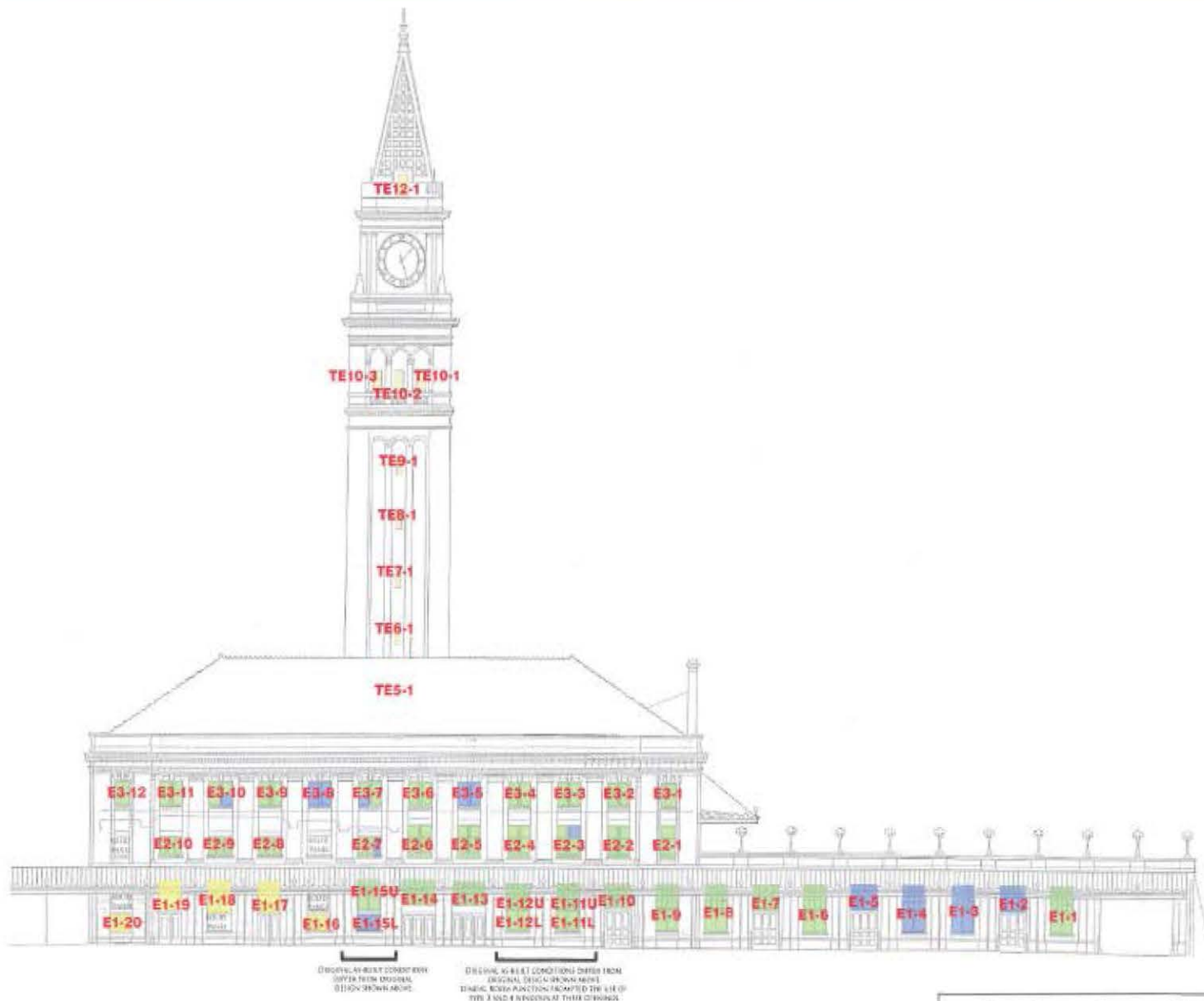
Air quality test passed

Add actuators to
windows

Public Waiting Room

Larger fluctuation of
temperature





ORIGINAL AS BUILT CONDITIONS DIFFER FROM
ORIGINAL DESIGN SHOWN ABOVE

ORIGINAL AS BUILT CONDITIONS DIFFER FROM
ORIGINAL DESIGN SHOWN ABOVE
ORIGINAL ROOF PUNCTURE FROM THE USE OF
TYPE 3 AND 4 REINFORCING CONCRETE

NOTE: REPAIRS/REPAIRS INDICATE ORIGINAL CONDITION. REPAIRS/REPAIRS INDICATE ORIGINAL
CONDITION AND REPORTED IN REPORT. THEIR REPAIRS/REPAIRS ARE NOTED IN THE
CONDITION NOTES FOR EACH WINDOW. REPAIRS/REPAIRS TO THE AS BUILT DRAWING
REMARKS BY 2011 AS BUILT DRAWING

W1-1 WINDOW IDENTIFICATION NUMBER.
LETTER INDICATES FACADE, STORY-
SERIES NUMBER. THESE KEY TO
CONDITION AND REPAIR NOTES IN
THE REPORT.

INTACT ORIGINAL
MISSING ORIGINAL
REPAIRED DURING PHASE I
REPLICATED MID-2000S

KING STREET STATION | REHABILITATION
(BUILT 1906) | NRHP/WHR LISTED | PIONEER SQUARE
PRESERVATION DISTRICT
CITY OF SEATTLE DEPARTMENT OF TRANSPORTATION (SDOT)

SEPTEMBER, 2009

REVISIONS:

ARTIFACTS
ARCHITECTURE

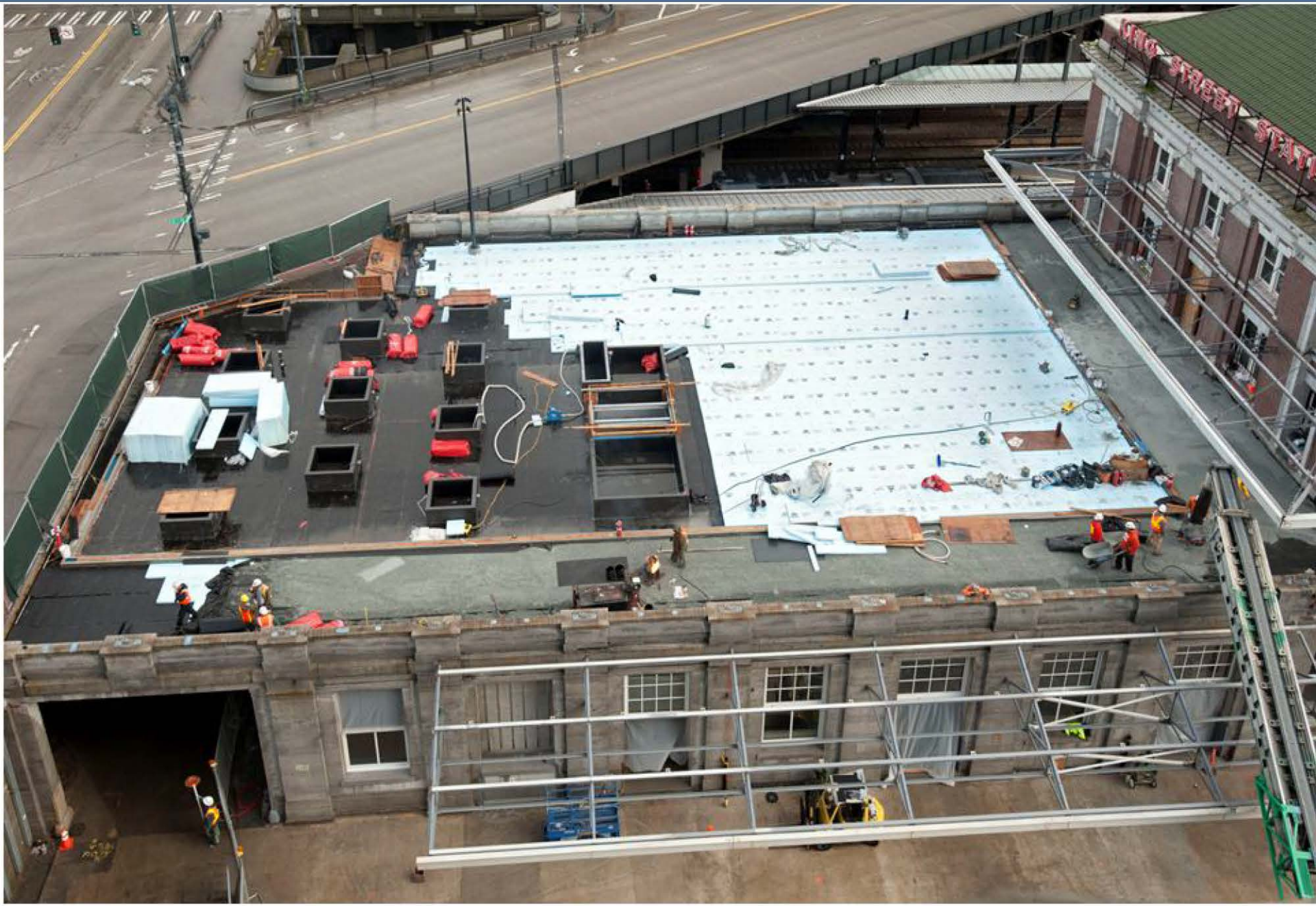
Refurbished Wood Windows



Plaza/Roof Insulation



Jackson Public Plaza Rebuilt



Jackson Public Plaza



Jackson Plaza Historic Fixtures



23 Replica Fixtures
Efficient LED Lights

Building Energy Performance

Original Energy Consumption: 118 KBTU/sf/yr

Completed Building: 38 KBTU/sf/yr

68% energy use reduction



206 metric tons of CO₂ per year

<http://www.seattle.gov/transportation/kingstreet.htm>

