

INTRODUCTION

This Historic Structure Report (HSR) of the Keokuk Union Depot was compiled between January and July 2014 by Restoric, LLC, (Restoric) of Chicago, Illinois. The Keokuk Union Depot is used interchangeably with “Keokuk Depot,” “Union Depot,” “Depot,” and “KUD” throughout this report. The HSR was commissioned jointly by the Keokuk Union Depot Commission (Commission) and the Keokuk Union Depot Foundation (Foundation).

The Commission was formed in May 2011. The Commission protects, preserves and promotes the Depot for Community use. The Commission consists of seven members, all Keokuk residents, who are appointed by the Mayor and approved by the City Council to serve four-year terms. Debra B. Marion is the President of the Commission. The Foundation was formed in June 2012 and secured 501(c) (3) tax exempt status in 2013. Janet M. Smith is the President of the Foundation. The mission statement of the Foundation is as follows:

The mission of the Keokuk Union Depot Foundation is to develop funding to support the preservation of the Keokuk Union Depot, located in Keokuk, Iowa. The Depot, erected in 1891, is architecturally significant as one of the final projects of John Root, of the eminent Chicago firm of Burnham and Root. The building is also historically significant as the center of regional rail transportation during the late nineteenth and early twentieth centuries, and as a hub of community life during that era. Preservation activities the Foundation will support include the rehabilitation and restoration of the building's exterior and interior, and the adaptive reuse of the structure as a community resource in a manner consistent with its architectural and historical value. [Adopted December 19, 2013].

The HSR was partially funded by a grant from the Jeffris Family Foundation (Jeffris) through their Heartland Fund, with matching funds provided by the KUD Foundation. Jeffris Director, Royce A. Yeater, AIA, advised the development of this report to help ensure the Depot's eligibility for more substantial gifts from Jeffris and others. Jeffris assists the development of historic sites for non-profit organizations in small towns and cities in the eight Midwest states. Considerable local support for the HSR was provided by Debra B. Marion and Janet M. Smith, along with the Commission members and Foundation directors listed on the following page.

Community awareness in the Depot has been renewed in recent years with growing interest and planning efforts for Keokuk's riverfront in general. In 2007, a Keokuk Area Vision project was facilitated by the College of Business Administration at the University of Northern Iowa. Three major priorities stemmed from that study: A) improve Keokuk's economy; B) improve the riverfront and cultural, recreational and tourism assets, and C) beautify the community. The rehabilitation and preservation of the Depot supports the latter two goals directly and will ultimately support the economy indirectly through increased tourism.

The Depot was owned by the Keokuk Union Depot Company (1890 – 1981), the Keokuk Junction Railway (1981 – 1996) and Pioneer Railcorp (Pioneer) (1996 – 2011) prior to February 25th, 2011, when ownership was transferred from Pioneer to the City of Keokuk. The City currently has a 99-year lease on the land beneath and immediately adjacent to the Depot as well as the parking lot and the twelve lots along the bluff to the immediate northwest for \$1 per year.

Since the acquisition of the Depot, the Commission and Foundation, along with a core group of dedicated volunteers, have invested more than 15,000 hours into the building and greatly increased awareness and interest in the Depot while fostering its community use.

Keokuk Depot Commission:

Debra Marion, President
Stephen Celania, Vice President
Tom Seabold, Secretary
James Kisor, Treasurer
Charles Abell
Douglas Clippert
Mike Hickey
Megan McNeill

Keokuk Depot Foundation:

Janet M. Smith, President
Richard Leonard, Vice President
Robert Woodburn, Secretary
Sandra Seabold, Treasurer
Thomas Gardner
Joyce Glasscock
Debra Marion
David Morgan
Mary Jo Scheetz

Above and beyond the Commission members and Foundation directors listed above, local support for the HSR was also furnished by railroad enthusiast and volunteer Lee Erlandsen; active railroader and volunteer, Brian Gruntmeir; Tom Marion, Mayor of Keokuk; Firefighters Chase Nye and Damon Cackley and Assistant Chief, Mark Vogel, of the Keokuk Fire Department (aerial access and research on the 1937 fire). A group of very dedicated volunteers have cleaned out the Depot and made it useable with very limited funds but more than 15,000 hours of sweat equity. They provide tours, security, and help facilitate programming that ensures the vitality and resurrection of the building for public use. The joint accomplishments of these groups over the past three years include:

- Secured Grants and Donations in Excess of \$110,000
- Listed the Depot on the National Register of Historic Places
- Won a Sub-Zero Sponsored "ReThinking Preservation" Contest for Dwell Magazine
- Sponsored a Master's Thesis on the Depot for The School of the Art Institute, Chicago (SAIC)
- Stabilized Waiting Room Wall and Coordinated Temporary Roof and Gutter Repairs
- Completed Measured Drawings of the Depot and Trackside Canopy (Train Shed)
- Completed Window and Door Repairs
- Re-set the Brick Hardscape Under the Trackside Canopy
- Installed Temporary HVAC, Lights and Exit Lighting
- Made the Bathrooms in the Waiting Room Functional
- Completed Engineering Studies of the Roof Structure and MEP Systems
- Sponsored Two Educational Charettes for Preservation Studies with SAIC
- Sponsored an Adaptive Re-use Study with The Illinois Institute of Art
- Contracted the HSR

Additional Support:

Additional research and survey support was provided by: railroad enthusiast Rob Adams; Vince Michael, Ph.D., former SAIC Preservation Program Director; Berry Bennett, Ralph Christian and Paula Mohr, Ph.D., State Historical Society of Iowa; Jim Burnell and Matt Morgan, Colorado Geological Survey (Peachblow sandstone research); Ken Martin, railroad enthusiast, (baseline AutoCAD drawings); Vanessa Papo, Restoric Intern (CB&Q archive research); Jennifer Sandy, Program Officer, National Trust for Historic Preservation, Midwest Office (preservation charrette); Matt Crawford, Historian, Commission on Chicago Landmarks (Burnham and Root research); and Nick Papaik, EMS, Inc., Hometown, IN (cost estimating for stripping lead paint/abatement of the trackside canopy).

PROJECT TEAM

The HSR was developed by a core team from Restoric (in bold) in collaboration with a number of primary and secondary consultants. The primary consultants (denoted by an asterisk) personally investigated the Keokuk Union Depot and provided considerable insight, graphic support or written narrative for the HSR. The secondary consultants reviewed photos, samples and/or the drawings to provide guidance on building restoration methods and cost estimates for the HSR.

Neal A. Vogel, Principal, Restoric

Principal investigator, writer, editor, and team coordinator

Jill S. Tuinier, Preservation Designer, Restoric

Report assembly, drawing revisions, general research and contributing writer

Christen Sundquist Martin, Preservation Intern, Restoric

Historical research and documentation, measured drawings, contributing writer

Brian K. Bussey, Senior Industrial Hygienist, Bussey Environmental, Inc. Evanston, IL
Provided lead and asbestos analysis

A. Tab Colbert, CEO, Ludowici Roof Tile, New Lexington, Ohio
Provided historical insight and technical guidance on restoring the clay tile roof

Greg Glandt, Glandt Roofing Company, St. Louis
Provided cost estimates to install a new clay tile roof

*Cyndi Hammes, Architectural Sales Associate, Allen Consulting Group, Wilton, IA
Provided material samples, technical guidance and cost estimating for Ludowici tiles

Anthony Kartsonas, Principal, Historic Surfaces, LLC, Milwaukee
Performed paint and historic finish analysis of wooden elements

Michael Lukis, Tile Roofs, Inc., Frankfort, Illinois
Provided cost estimates for salvaged and imported clay tiles

*Mario Machnicki, President, U.S. Heritage, Chicago
Performed masonry overview, brick and sandstone assessment and cost estimates

*Matthew Martin, Freelance Architect
Developed roof axonometrics, details, trackside canopy renderings, bench drawings

*Mark Nussbaum, P.E., Architectural Consulting Engineers, Oak Park, IL
Investigated systems and produced report on MEP retrofits and energy/payback analysis

*Kevin M. Wilson, S.E., Principal, & Michael J. Justice, SE, TGRWA, LLC Chicago
Investigated structural condition, provided roof calculations and reinforcement details

STATEMENT OF PURPOSE

This Keokuk Union Depot Historic Structure Report is based on precedents developed by the National Park Service, the Association for Preservation Technology International, and the ASTM Task Group Guide for Historic Structure Reports as follows:

*A Historic Structure Report (HSR) serves to fully document the history and physical condition of a structure in a particular place and time. A historic structure report provides documentary, graphic, and physical information about a property's history and existing condition. Broadly recognized as an effective part of preservation planning, a historic structure report also addresses management or owner goals for the use or re-use of the property. It provides a thoughtfully considered argument for selecting the most appropriate approach to treatment, prior to the commencement of work, and outlines a scope of recommended work. The report serves as an important guide for all changes made to a historic property during a project-repair, rehabilitation, or restoration-and can also provide information for maintenance procedures. Finally, it records the findings of research and investigation, as well as the processes of physical work, for future researchers.*¹

METHODOLOGY

The Keokuk Union Depot Historic Structure Report was completed in several stages: original research and review of archival materials; exterior condition surveys by Restoric; development of measured drawings; interviews; material sampling; and cost estimating from professional material suppliers and restoration contractors all compiled into this long term planning document for the Foundation. Several college classes in historic preservation and interior design were utilized to document the Depot and explore preliminary adaptive re-use schemes which culminated in a master's thesis by Christen Sundquist Martin entitled "Adaptive Reuse and Design Thesis of the Keokuk Union Depot" in 2012. Her final concept to develop the Depot as a brewery was bolstered by a preservation article about the economic advantages of breweries in historic buildings.² This academic concept occurred before public sentiment more fully emerged to suggest the Depot's adaptive reuse as a public event space. Although the compilation of all of these materials occurred over the first quarter of 2014, they were amassed by Restoric since the City of Keokuk took possession of the building in 2011. New discoveries continue to be made as of this writing.

ORIENTATION:

The compass orientation of the Depot is disorienting since it is located at a virtual 180° bend on the Mississippi River which most visitors naturally perceive to flow north to south. The building is oriented at a near 45° angle to true north. This often causes confusion when referring to the buildings elevations or other aspects of its orientation to the site. Restoric has settled cardinal north for the original front façade facing the bluff (even though it is ordinal northwest). However, throughout this report, the terms "riverside" or "trackside" (south); "bluffside" (north); "upriver" (east), and; "downriver" (west) are used interchangeably with compass directions for building and site orientation. These are common colloquial expressions for the Keokuk Union Depot's orientation on the Mississippi riverfront. The Depot is located at 117 Water Street, between Bank and Johnson Streets, but the mailing address has historically been 201 Bank Street [Fig 1.].

¹ Slaton, Deborah. *Preservation Brief 43: The Preparation and Use of Historic Structure Reports*. Technical Preservation Services. Government Printing Office, Washington, D.C. 2005.

² Margrif, Trent. "Available in a Historic Building Near You: Local Beer!" *Forum Journal*, Winter 2011.

SITE:

The Keokuk Union Depot is located in the Southeast tip of Iowa. It is on the west bank of the Mississippi River, down river approximately a quarter-mile from the first Keokuk-Hamilton Bridge constructed in 1869. The original site of the Depot was owned by the “Rock” (Chicago, Rock Island and Pacific Railroad) in the 1880s and surrounded by wooden shanties as makeshift depots for the various lines. The streets were generally dirt roads at that time—although newspaper articles mention that the streets were macadamized when the Depot was built. The limestone bluff to the northwest was leveled and “rounded off” and the face of the bluff was excavated to allow Water Street to dogleg around the Depot **[Fig 1]**.

The Depot sits on a slight rise on the riverfront and has remained above floodwaters during several “100-year” floods **[Fig 2.]** Eight of the top ten historical Mississippi River crests dating back to 1851 have occurred since 1960. However, even during the highest flood stage ever recorded in July 1993, the Depot remained dry—albeit the waters were lapping its doorsteps.



Fig 1. Site plan of the Keokuk Union Depot.

Articles of the grand opening describe an eight-foot “plank walk” from Johnson Street to the Depot. This boardwalk can be seen in early photos of the Depot **[Fig 3.]**. A trolley line was extended to the riverfront on Johnson Street in 1902 but the power lines are not visible in this early image, it may actually date from the early 1890s or even be from the grand opening as the bluff appears freshly excavated. By 1907, a panoramic view shows the riverfront and several site improvements around the Depot with brick walks and stone curbs—Water Street is also bricked (see back cover). It is interesting to note that brick pavers are laid on-edge or on the flat depending on the location. Water Street and the loading dock by the waiting room are laid on-edge but transition to brick pavers laid on the flat for the promenade and even diagonally on the flat at the front of the Depot.



Fig 2. The blue arrow indicates how close floodwaters have been to the Depot.



Fig 3. A large summer gathering at the Depot; this could possibly be the grand opening.

ARCHIVAL MATERIALS:

Restoric staff and interns have performed ongoing original research on the Depot since 2011 with considerable assistance from the Keokuk Depot volunteers and railroad enthusiasts. The lion's share of this archival work was undertaken by Christen Sundquist Martin who completed a dual internship with the City of Keokuk and Restoric, developing documentation on the Depot and writing a National Register Nomination on the building.

Primary Source Materials:

- **Christie, Robert. Historic Resource Development Program: Final Report. December 31, 1991.** Christie (deceased) worked with Keokuk Junction Railway Corp. (KJRY) owners John Warfield President and Ralston (Rich) Taylor, General Manager (both deceased) in securing a grant from the State Historical Society of Iowa (SHSI) to restore the waiting room in 1991. This source provides insight on the condition of the Depot and alterations that occurred between the time passenger traffic ended in 1967 and the restoration efforts in 1991. This period of the building's history is not well documented anywhere else.
- **Christie, Robert. Keokuk Union Depot. National Register of Historic Places, Nomination Form, August 24, 1994.** Christie developed the first Nomination of the Depot and it was briefly listed on the National Register until the new owners, PRC, filed a request to have the building delisted indicating they were not notified and opposed the listing. Christie found source materials that remain elusive today, namely tracings of CB&Q drawings revised in 1928 and 1949. Christie's nomination was weak on the significance of Burnham and Root and John Wellborn Root as the probable designer. There were also some errors on key dates that new research and building investigations have proven to be incorrect. Nevertheless, his Nomination, presumably sponsored by KJRY owners Warfield and Taylor, was an invaluable resource.
- **Sundquist (Martin), Christen. Keokuk Union Depot. National Register of Historic Places, Nomination Form, November 6, 2012.** (Entered by the Keeper 3/27/13). This was the best compiled historic resource to date when completed in 2012. However, new documentation and physical investigation has come to light since it was completed and updated by this HSR. (See **Appendix B**).
- **Historic Photos, Postcards and Illustrations.** Like most railroad stations, the Keokuk Depot has been extensively photographed, illustrated and painted since the grand opening by architecture, train and railroad buffs, as well as for major public events [**Figs 3. 4. & 5.**]. The most frequent photographic view is from the trackside, slightly upriver with the waiting room in the foreground. However, the first illustrations published of the Depot are from the bluffside presenting the front façade of the building. There is also a panoramic image showing the whole riverfront context taken from the top of the bluff in 1907 at the Library of Congress by Frederick J. Bandholtz of Des Moines, Iowa.

Many early historic images come from the collection of railroad professional and enthusiast, Rob Adams's website <http://keokukandwestern.com>. The extensive photographic record available of the exterior has greatly aided building documentation. However, interior photos before 1969 remain elusive.

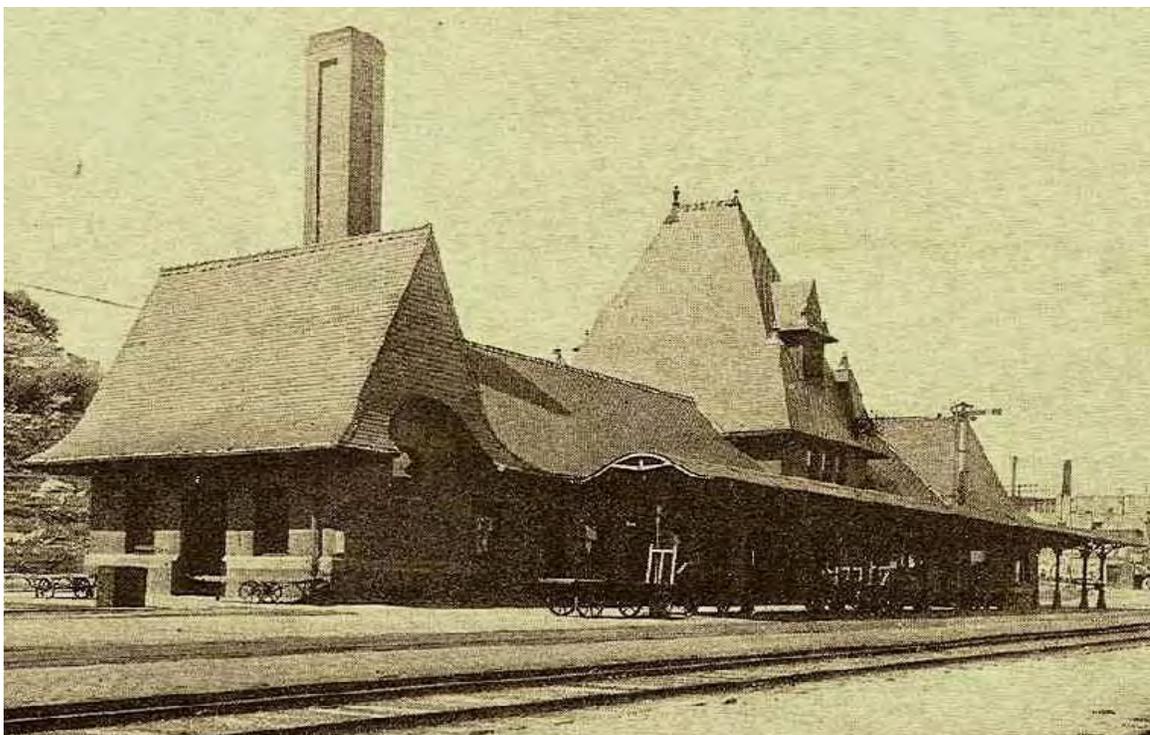


Fig 4. A rare downriver view of the Keokuk Union Depot (circa 1890s).



Fig 5. An artist's liberty at play in the rendered slate roof—which was always clay tile.

- **Historic Articles.** The original construction of the Keokuk Union Depot is well documented in the local papers. Three articles in particular provide a wealth of information: “Will Soon Be Built,” *Constitution-Democrat* (May 7, 1890); “All Aboard!,” *The Gate City* (June 30, 1891), and; “Keokuk’s New Depot,” *Constitution-Democrat*, (July 1, 1891). Christen Sundquist Martin perused dozens of articles about railroading in and around Keokuk over the years. Many were published about the need for a station as early as the 1860s, gaining steam in the 1880s. After construction, most of the articles covered train schedules, incidents and accidents. Two articles published much later which included specific information on the Depot are: “110-Year-Old Railroad Era Ending in Keokuk This Week,” *The Daily Gate City* (April 4, 1967), and; “Restoration Puts Depot Back on Track,” *The Hawk-Eye* (August 25, 1991).
- **Architectural Drawings.** The original Burnham and Root drawings have not been found but were partially re-traced by CB&Q drafters dated 1928 and 1948 of which there were photocopies at SHSI. Restoric acquired AutoCAD drawings produced by Ken Martin, a Burlington, Iowa native and railroad enthusiast, in 2004. Mr. Martin had limited access to the Depot (especially the roof) resulting in some discrepancies, but these drawings were a good starting point. The Depot was re-measured with lasers from ladders and aerial lifts for an Interior Design class taught by Neal Vogel in 2011 and thereafter by Christen Sundquist Martin and her husband Matt Martin (no relation to Ken). New AutoCAD drawings of the Depot were produced for Restoric by the Martins between July 2011 and March 2014 (see **Appendix D**).
- **Interviews:** Numerous Depot volunteers have shared their insights during tours with Restoric staff and consultants since 2011, especially Stephen (Steve) Celania, Lee Erlandsen, Brian Gruntmeir, and Richard Leonard. Several people were also interviewed who worked at the Depot in the 1990s. These include retired Keokuk Junction Railway (KJRY) employee Joann Ketterer who worked there from circa 1965 until 1991, and Jeffrey Dobek (KJRY employee 1991 -1994) who now owns Polrail Service in the Republic of Poland. Pioneer Railcorp and others were contacted but did not respond to interview requests.
- **Internet:** Several websites feature photos, schedules, routes and other information about the Keokuk Union Depot, notably: www.facebook.com/KeokukUnionDepot; www.keokukuniondepot.org; www.trainweb.org/kjry/index.html; and www.keokukandwesternrr.com.
- **Books.** The KUD has been published in several books about Depot architect John Wellborn Root: *John Wellborn Root-A Study of His Life and Work* by Harriet Monroe (1896) and; *The Architecture of John Wellborn Root* by Donald Hoffman (1973).

Photography:

Unless otherwise noted, all photographs were taken by Neal Vogel of Restoric. Historic sources, dates and photographers recorded when known. While there is a plethora of historic exterior photos, interior shots are scarce. Alan Brotherton took the best interior photos of then-altered waiting room in 1969, just prior to subsequent alterations in the 1970s and the partial restoration completed in 1991. These images are included in the INTERIOR section under waiting room.

PHYSICAL DOCUMENTATION:

Educational Site Visits:

Neal Vogel, Principal of Restoric, is also an instructor at SAIC, and formerly at the Illinois Institute of Art (Ai). Several academic fieldtrips were arranged with preservation professionals to study the Depot in 2011 and 2013. Each fieldtrip included cross pollination with local volunteers, Commission and Foundation members, and frequently included the Mayor of Keokuk and other interested parties.

The first visit was made January 15, 2010 in collaboration with the Restoration Methods class for the Historic Preservation Program at SAIC to hold a weekend preservation charrette in Keokuk. This charette included a full day survey of the entire building including a tour of all the rooms, survey of the attics and steam tunnels, and aerial inspection of the chimney and roof courtesy of the Keokuk Fire Department. The survey was stymied by frigid temperatures and heavy railroad machinery and equipment stored in the freight rooms. Several preservation professionals joined this effort including: Vince Michael, Ph.D., Director of the SAIC Historic Preservation Program at that time; Jennifer Sandy, Program Manager of the Midwest Office of the National Trust for Historic Preservation, and; Jack Porter, Preservation Consultant for the State of Iowa.

This weekend charrette yielded results far beyond expectations when (as mentioned previously) class participant Christen Sundquist Martin decided to utilize the Depot for her graduate thesis. This led to an internship with the City of Keokuk during the summer of 2011. In addition to her master's thesis, she developed a revised nomination and re-listed the Depot on the National Register. She also managed to produce measured drawings of the building. In 2012, Ms. Sundquist Martin entered the Depot in a Dwell Magazine "Re-Thinking Preservation" contest that included a \$10,000 grant sponsored by Sub-Zero. The Keokuk Depot won the contest among an impressive and competitive field of entries from around the country.

A second two-day class survey was performed under better conditions in April 2011 with an undergraduate interior design class from Ai. This survey yielded accurate interior measurements and focused on the interior materials, fixtures and finishes of the building. The students produced three adaptive re-use design schemes as a brewery, restaurant, and civic cultural center.

A third and final class, again for SAIC, toured the building and surveyed the masonry restoration work required in collaboration with Mario Machnicki of Chicago-based U.S. Heritage in June 2013. This class removed a sandstone weathering from the watertable course which has been restored for reinstallation in July 2014.

Professional Surveys:

A complete structural survey of the building was completed with Kevin Wilson, S.E. of TGRWA, LLC of Chicago in coordination with Restoric Principal, Neal Vogel in July 2012. This included a full day inspection of the attic framing and masonry walls. All roof members were measured and connections were inspected to determine roof loads and required reinforcement. Michael Justice, S.E. with TGRWA produced load calculations and new structural connection details to strengthen the 123-year-old roof. This work is compiled in the roof drawings (see **Appendix D**).

Professional Surveys (cont.):

A thorough mechanical survey was completed by Mark Nussbaum, P.E. and Debbi Nussbaum of Architectural Consulting Engineers (ACE) in Oak Park on January 2014 in coordination with Neal Vogel of Restoric. This survey included an inspection of the attics and steam tunnels. Mr. Nussbaum provided a thorough analysis outlining various scenarios of conventional versus geothermal systems as well as nominal improvements to the thermal shell versus more extensive insulation efforts. ACE submitted a final report in March 2014 that includes budget information (see MEP section and **Appendix C**).

In addition to these surveys, Restoric Principal, Neal Vogel, has performed exterior and interior surveys during multiple visits between May of 2011 and February of 2014 to investigate and inventory windows, doors, exterior trim, interior ceiling, walls and stairs and flooring, and related materials around the building in preparation for previous cost estimates and this HSR. Suspect asbestos containing material (ACM) was removed in the steam tunnel along with paint samples which were removed for color, finish and lead-content analyses. These results are provided in their respective **Interior** and **Hazardous Materials** sections.

PREPARATION OF COST ESTIMATES:

Based on an analysis of the consultant's reports and the findings of Restoric's preservation team, a spreadsheet of work items was compiled for the Depot site, exterior, interior and trackside eyebrow canopy (train shed). This information was utilized to prepare the cost estimates and phased recommendations. These cost estimates were assembled from professional estimators, material suppliers, engineering professionals and contractors. These costs have been revised and supplemented with feedback from local sources as well as from the consulting team's past experience with historic building restoration projects. All parties concerned agree that the roof is in dire need of repair and is the highest priority for the Keokuk Depot at this time. The Depot Commission, Foundation and volunteers have indicated their strong interest in restoring the original roofline of the building along with its architectural features and the clay tile and copper roofing materials. The spreadsheet of cost estimates are itemized in **Appendix A**.

STATEMENT OF SIGNIFICANCE

With the single exception of Lock and Dam Nineteen, the Union Depot survives as the most historically and architecturally significant structure in Keokuk—among the oldest, most historical towns in Iowa. Throughout the 19th and early 20th centuries, Keokuk was a Midwest transportation hub for riverboats, railways, and roads; the city's history is integral in every way with its position as a transportation center. During the steamboat era, Keokuk became an important port, being situated at the northernmost reliably navigable point on the Mississippi River by virtue of its location at the confluence of the Des Moines River and Mississippi as well as its "puckshetuck" location on the Mississippi³. Navigation further to the north was difficult during low water until later construction of a canal through the rapids, itself a problematic venture until construction of Keokuk Lock & Dam Number 19, incorporating a hydroelectric power plant, in 1913.

³ Sac Fox meaning "foot of the rapids"; Keokuk was a Sac Fox Chief.

As a result of this water transport limitation, railroads assumed a critical role in the business and industrial development of the city and surrounding region. Keokuk became a focal point in a railroad network extending in all directions from the southeast corner of Iowa. Rail access from Illinois, previously limited to ferry operations across the Mississippi River from Hamilton, Illinois was greatly improved when in 1871 Andrew Carnegie's Keystone Bridge Company completed a railroad bridge across the river, linking Keokuk's railroads directly to the eastern part of the nation.

Until construction of the Keokuk Union Depot, passenger and freight customers of the railroad lines serving Keokuk had to contend with multiple inferior and disconnected depots. These inadequate structures were reached via often-muddy streets, which passengers also had to traverse when changing from one rail line to another. The area was dubbed "Bloody Run" in the local paper due to the inherent dangers of the rail crossings on the active riverfront.⁴ As a result, the railroads serving Keokuk began to more seriously entertain the possibility of a Union Depot serving all lines; their discussions finally bore fruit in 1890 with the formation of the Keokuk Union Depot Company. In announcing plans for the new Union Depot on May 7, 1890, the *Keokuk Weekly Constitution-Democrat* editorialized [Fig 6.]:

A union passenger depot is a convenience Keokuk has needed, and needed badly, for a quarter of a century or more. There are several structures now in use by the various railroads entering Keokuk that would possibly answer all the requirements of a rural station, but which are wholly inadequate for the passenger accommodations of a city of Keokuk's proportions. In addition to the undesirable accommodations afforded by these depot buildings, the structures are far apart, and passengers compelled to change cars at this point are put to not a little inconvenience. No one realizes the need of a union station more clearly than do the passengers of the different lines of railway entering the city.

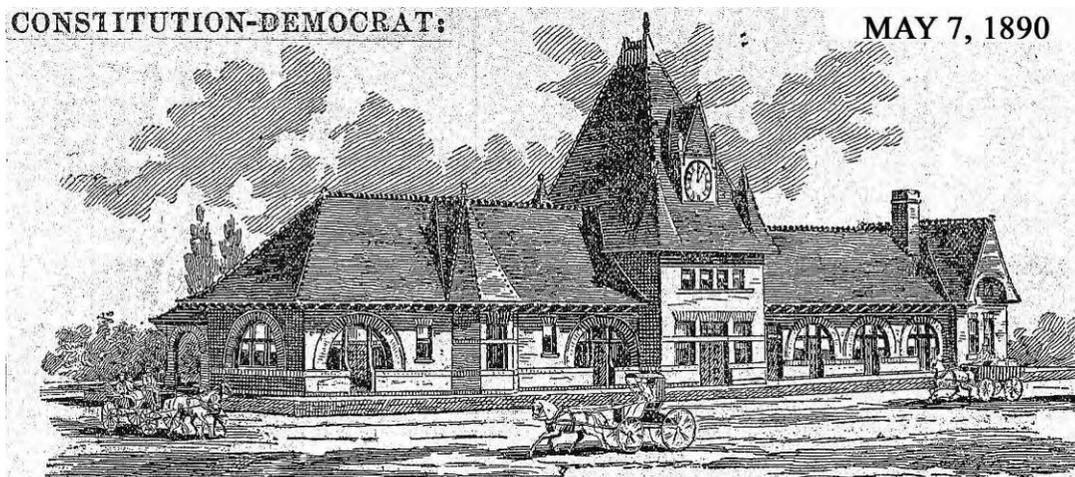


Fig 6. Published rendering of the Keokuk Union Depot.

The rendering above was published within weeks after engineers surveyed the site in April 1890. A schematic floor plan published at the same time was true to the final layout and the elevation shown here is extremely close to the as-built construction of KUD [Fig 7.]. Only three modifications are noted: 1) clock faces were never installed in the upper hip clock-dormers; 2) the chimney was built considerably taller than shown, and; 3) the glimpse of a brick train shed with a clay tile roof in the far left corner was changed to the iron trackside canopy that survives today.

⁴ *Constitution Democrat*, "The Union Depot," August 4, 1886. Page 3.

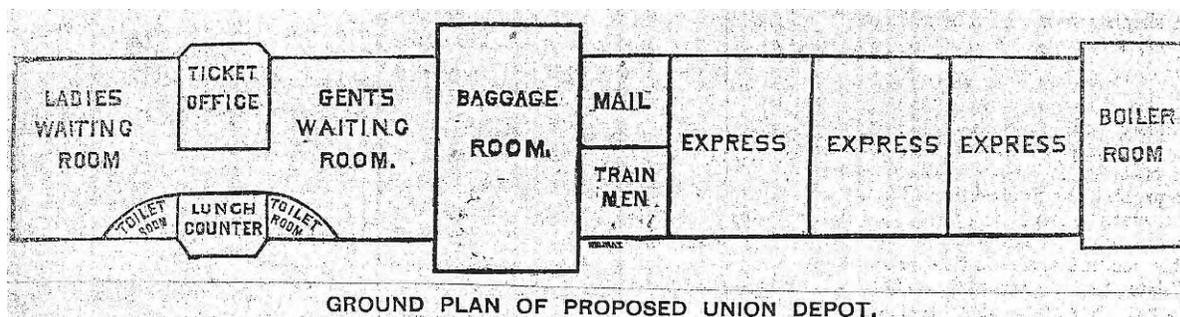


Fig 7. Schematic floor plan of the Keokuk Union Depot published in May 1890.

The Depot played an essential community role for passengers and freight during decades of growth and early historic photos show the importance of the Depot for major events and gatherings. A coalition of five railroads serving Keokuk in 1890 formed the “union” that contracted to build the Depot. These included: the Chicago, Rock Island & Pacific (Rock); the Keokuk and Western Railroad (K&W); the St. Louis, Keokuk and Northwestern (St.Louis); the Toledo, Peoria and Western (TP&W); and the Wabash Railroad (WAB).⁵ The Depot was actually built on land controlled by the Rock. Chicago, Burlington & Quincy (CB&Q) railroad representatives were involved from the onset.

Various iterations of multiple short lines served Keokuk at one point or another over the years and no less than fifteen lines contained “Keokuk” in their name including the Keokuk Junction Railway (KJR) in the most recent past.⁶ Through numerous mergers and acquisitions, many of these historic lines were absorbed by the CB&Q over time until it merged with three railroads to become the giant Burlington Northern Railroad in 1970, subsequently merging with the Atchison, Topeka & Santa Fe to form today’s BNSF Railway.⁷

In the 1880’s railroads, including the CB&Q, began a policy of encouraging heavy industry along their lines to boost freight traffic. As the steamboat trade gave way to railroad transportation, Keokuk became a sensible location for factories, wholesalers, and other commercial enterprises—and for the homes of prominent industrialists who settled there. Railroad traffic in turn was stimulated by the development of local industry and by population growth.

With construction of the dam and power plant completed in 1913, Keokuk became an even more prominent industrial center, augmenting the Depot’s role as a community focal point. The Purity Oats plant, later part of General Mills, began as a flour mill in Keokuk. To provide shipping containers for oatmeal, the Iowa Fibre Box Company was established in Keokuk in 1920 and developed into the national Hoerner-Waldorf Corporation. Other companies growing to prosperity in Keokuk, and relying on its railroad delivery system, included National Carbide Co., Keokuk Steel Casting Co., Keokuk Electro-Metals Co., Northwestern Seed Co., Hulson Grate Co., J. C. Hubinger Co. (now part of Roquette America, Inc.), Thomas Truck and Caster Co., Keokuk Canning Co., Dryden Rubber Co., and Swift Company.⁸ These industries built the town and the Depot best represents the railroads that moved the people and their goods before the rise of air travel and interstate trucking.

⁵ Constitution–Democrat, “Will Soon Be Built,” May 7, 1890

⁶ http://en.wikipedia.org/wiki/List_of_Iowa_railroads

⁷ http://en.wikipedia.org/wiki/Chicago,_Burlington_and_Quincy_Railroad

⁸ www.Burlingtonroute.com/docs/route/industries.html



Fig 8. TP&W and Rock Island trains at Keokuk in 1942.

In the 1940s as many as twenty passenger trains stopped or terminated at Keokuk each day [Fig 8.]. Keokuk was also a principal stop for the Burlington Route's famous streamlined *Mark Twain Zephyr*, inaugurated in 1935 between St. Louis, Missouri and Burlington, Iowa [Fig 9.]. The Union Depot served railroad travelers until the end of rail passenger service to Keokuk in 1967.



Fig 9. Mark Twain Zephyr calling at Keokuk in 1947, retrofitted with the "mars" headlamp.

The depot came to national attention when Ripley's "Believe It or Not!" column featured "Midnight" (William Richardson), a man who lived and worked at the Depot; known for his lifetime aversion to sleeping in beds, he slept on stairs, against walls, or on a keg in the Depot and, consequently, was available at any time of day or night to handle baggage, express, or mail and to shovel coal into the building's steam heating plant.⁹

⁹ Sloat, Jerry. *Lee County Iowa, A Pictorial History*. (The Donning Company, Virginia Beach, VA, 1993), pg. 80.

Because the Depot was designed by the prominent architectural firm of Burnham and Root of Chicago in 1890, and attributed to John Wellborn Root, its architectural significance is even greater, extending far beyond the City of Keokuk. The Iowa Department of Cultural Affairs states that it has “*statewide significance as the work of a master,*” noting “*the Keokuk station is the best example in Iowa of Root’s skill as a designer.*” The Cultural Historian for the City of Chicago, Tim Samuelson, writes “*it is the work of the major architectural firm of Burnham and Root, and amply exhibits their contributions to the evolution of modern American architecture...the Keokuk Depot is the best of Burnham and Root’s railroad stations.*” Renowned American architectural historian Richard Guy Wilson at the University of Virginia describes the Depot as “...one of the top buildings in Iowa from the 19th century” and that it “should be saved and restored.” Wilson also noted the particularly interesting trackside iron canopy as perhaps foreshadowing Art Nouveau design.

Burnham and Root produced more than 350 structures over eighteen years and it is significant that the Keokuk Union Depot is among the last dozen commissions to be completed before Root’s untimely death and as his very last train station (a building type for which he was especially adept). It is considered among the best designs the firm ever offered when Root—well-seasoned and reflective—was at the top of his game.

It is interesting to note Root’s state of mind at this point in his career—unwittingly near the end. He published an anonymous appraisal of Chicago architects in the Inland Architect and News Record (January 8, 1891) while the Depot was under construction (just one week before he died). About himself, Root facetiously wrote: “*Mr. Root, upon whom has largely devolved [Burnham and Root’s] designing, seems to have been too facile always to carefully reconsider his designs, and to have been to a large extent the victim of his own moods.*”¹⁰

It is impossible to verify Root’s complete role in the design of the Keokuk Depot. However, given the refined composition and in the absence of an underling’s signature or subsequent claim for the design, it is attributed to Root himself. Historic references merely note that H.W Chamberlain, a recent Iowa State University graduate, supervised the construction. In 1896, biographer Harriet Monroe wrote “*Although time often failed to ratify his work in his own mind, the cases were few, in spite of the enormous pressure upon him, in which a building went out of the office without representing his best thought at the time. ‘He had a kind of pride,’ says his brother and others, ‘in being personally responsible for nearly if not quite all designs executed in the office.’*”¹¹ Nearly eighty years later, architecture critic Donald Hoffman wrote “Root rarely chose, however, to delegate even a single family residence to the office staff.”¹²

To fully establish the architectural significance of the Keokuk Union Depot, it is important to summarize the career of John Wellborn Root, a late 19th century American designer for whom numerous articles and books have been written. An association with railroads ran continuously throughout Root’s career. With a secondary education in England, Root graduated from New York University in 1869 with a Bachelor of Science in Civil Engineering. Root then spent his first post-graduate year as an unsalaried apprentice in the office of prominent architect James Renwick in

¹⁰ Commission on Chicago Landmarks. *Sidney Kent Residence*. 1986.

¹¹ Monroe, Harriet. *John Wellborn Root-A Study of His Life and Work* (Cambridge: The Riverside Press, 1896), 111.

¹² Hoffman, Donald. *The Architecture of John Wellborn Root*. (Chicago: The University of Chicago Press, 1973), pg. 33.

New York City.¹³ “Going into Mr. Renwick’s office, his [Root’s] natural taste for the romantic styles was stimulated. Renwick built cathedrals all over the country – everything was a cathedral; he was one of two or three...New York architects who were the... exponents of the Gothic revival in this country.”¹⁴ After the year with Renwick, he took a salaried position as an engineer with the firm of J.B. Snook where at age 21, Root was immediately made Superintendent of Construction of New York City’s original Grand Central Station, destined to be the largest enclosure in the United States.¹⁵ The station and its glass-vaulted train shed had been modeled after the St. Pancras Station in London, with which Root was very familiar. Construction of Grand Central Station began in 1869 and was completed in 1871.¹⁶ This station was razed between 1903 and 1913.

Two weeks after the fire occurred, and at the close of the Grand Central project, Root contacted the architectural firm of Peter Wight in New York City. Wight was very impressed with Root’s abilities and at the same time was interested in opportunities that the Great Chicago Fire offered the architectural profession.¹⁷ Within three months, Wight opened an office in Chicago and made Root foreman. In his new office, Root began to design what quickly became recognized as some of the most fashionable residences and public structures in the re-building of the city.

Around the same time, another young architect, Daniel Hudson Burnham, more planner and promoter than designer-engineer-architect, sought Root’s help on an early project, and, based on the results, quickly proposed a partnership.¹⁸ In July 1873, the partnership was formed, which would change the face of (and the building techniques in) Chicago first, then the nation.¹⁹ But immediately upon the onset of the partnership, the Panic of 1873 began, at least temporarily halting most of the new partnership’s expected projects.²⁰ During those first few lean years, both partners hired themselves out to other firms to make ends meet.

However, in 1882, a commission came to Root via his father-in-law, James Walker, former president of the CB&Q, to design and engineer the general office building for the railroad in downtown Chicago.²¹ *Root developed the concept that a corporate headquarters should project the corporation itself, that it should have an advertising value as a “suitable architectural expression of a great and stable railway corporation.”*²² Completed in 1883, the CB&Q Building on the northeast corner of Franklin and Adams in Chicago combined the characteristics of buildings Root had known in Victorian England with the palazzo of the Renaissance in Italy.²³ Offices were built around a center light court topped with glass (much like Grand Central Station).²⁴

¹³ Ibid, 22.

¹⁴ Ibid, 22.

¹⁵ Donald Hoffman, *The Meanings of Architecture: Buildings and Writings* (New York: Horizon Press, 1967) 12.

¹⁶ Ibid.

¹⁷ Monroe, *John Wellborn Root*, 23.

¹⁸ Monroe, *John Wellborn Root*, 23.

¹⁹ Ibid, 24. Note: Since Burnham was a few years older than Root, his name took precedence in the title of their firm. Source: Ibid, 24.

²⁰ Ibid, 25.

²¹ Louise Carroll Wade, *Burnham and Root’s Stockyards Connection* (Chicago: Chicago History Museum, Fall 1975), 142.

²² Hoffmann, *The Architecture of John Wellborn Root*, 30-31.

²³ Olivier Zunz, *Making America Corporate-1870-1920* (Chicago: University of Chicago Press, 1990),

107.

²⁴ Ibid.

Following the completion of the CB&Q Office Building, twenty other railroad commissions came to the Burnham and Root partnership, but none as monumental in design as in Burlington, Iowa, completed in 1883 just 40 miles upriver from Keokuk [Fig 10].²⁵ Like all of Root's stations, the Burlington depot was oriented alongside the tracks. The Burlington Depot was 254 feet in length, with a 117-foot spire.²⁶ South of the waiting rooms was the baggage room, then the mail room, then the express and freight rooms (just like Keokuk).²⁷ It likely provided the impetus—or at minimum heated the debate—to build a depot in Keokuk. Unfortunately, in January of 1943, the Burlington Depot was lost in a fire.



Fig 10. The Burlington Union Depot designed by Burnham and Root was lost to fire in 1943.

Considered among the most notable of the early CB&Q railroad stations designed by Root was the Union Depot in Galesburg, Illinois from 1883.²⁸ It was designed as a variation on the theme Root used for the Burlington Depot with segmental arched windows (like Keokuk), but the slender tower was even taller. Here too, the steep roofs were hipped featuring eyebrow dormers (suggestive of H.H. Richardson's work for the Boston and Albany Railroad). Unfortunately, this station was razed in 1911 due to a fire.²⁹ Root designed other depots for Kewanee, Illinois (1887), Ottumwa, Iowa (1887-89) and, Fort Scott, Kansas (1885) among others [Fig 11].³⁰ All have been razed or altered beyond recognition which only further bolsters the significance of the surviving Keokuk Union Depot.

²⁵ Ibid, 32.

²⁶ Ibid.

²⁷ Ibid,33.

²⁸ Hoffmann, *The Architecture of John Wellborn Root*, 39.

²⁹ "Revitalizing America's Train Stations," *The Great American Train Stations*, <http://www.greatamericanstations.com/Stations/GBB>.

³⁰ Monore, *John Wellborn Root*, 152.

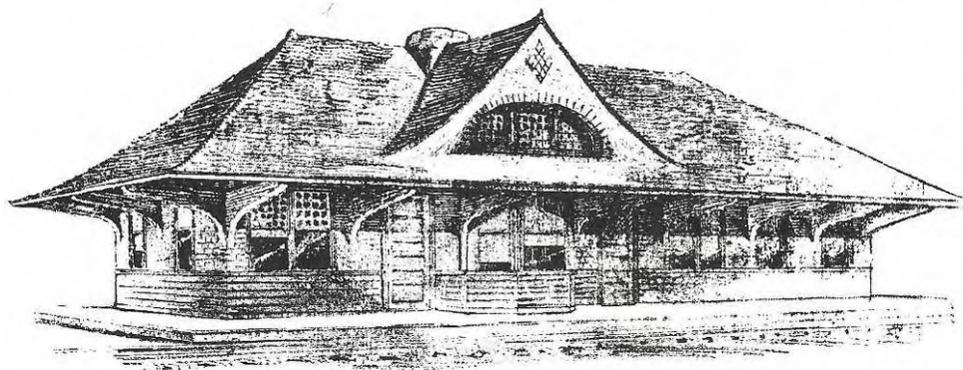


Fig 11. Depot designed by Burnham and Root at Kewanee, Illinois (razed in 1915).

A new architectural style for railroad stations emerged by the 1930s when “*the CB&Q became famous for their streamlined Zephyrs that whisked people from point to point in modern, up to date cars. With the streamlined appearance of the trains, CB&Q officials made plans to build modern, streamlined passenger stations as well.*”³¹ This resulted in many razed or partially razed turn-of-the century stations, leaving very few 19th-century stations unaltered. With the exception of the truncated hip roof and loss of the original clay tiles, the architectural integrity of the Keokuk Union Depot survives as one of the last Burnham and Root depots to remain largely intact.

Root died January 15, 1891, at age 41 of pneumonia.³² He was in the midst of designing the landscaping and grounds of the Columbian Exposition. Upon his death, Robert McLean, editor of *Inland Architect*, commented, “...we have thought him our greatest architect, both in achievement and promise.”³³ Frank Lloyd Wright in the 1930’s wrote, “Of them, the men were Louis Sullivan and John Root...of Root it might be said that Sullivan was slightly envious because the two firms, Adler-and-Sullivan and Burnham-and-Root, were in direct competition, the latter having the best of it.”³⁴ Louis Sullivan writing in third person in his autobiography spoke of Root, “Louis saw the man of power, recognized him, had faith in him and took joy in him as a prospective and real stimulant in rivalry, as a mind with which it would be well worth while to clash wits in the promotion of an essential common cause...John Root had it in him to be great... Louis missed him sadly.”³⁵ As late as 1964, Wright protégé Francis Barry Byrne noted, “Mr. Wright always stated his appreciation of John Root’s talent and on one occasion spoke of him as showing potentialities that would, had he lived and continued his later courses, have made him the greatest of them all.”

In summary, the Keokuk Union Depot is historically significant as a Midwestern center of regional rail transportation during the late 19th and early 20th centuries. Architecturally, it is significant throughout the Midwest and beyond as an architectural landmark designed by the famed Chicago firm of Burnham and Root. A general timeline of significant events over the Depot’s service life has been summarized on the following diagram [Fig 12].

³¹ Molly Myers Naumann, *National Register of Historic Place: Burlington Depot*, October 08, 2008.

³² Ibid, 261.

³³ Hoffmann, *The Architecture of John Wellborn Root*, 11.

³⁴ Ibid.

³⁵ Ibid.

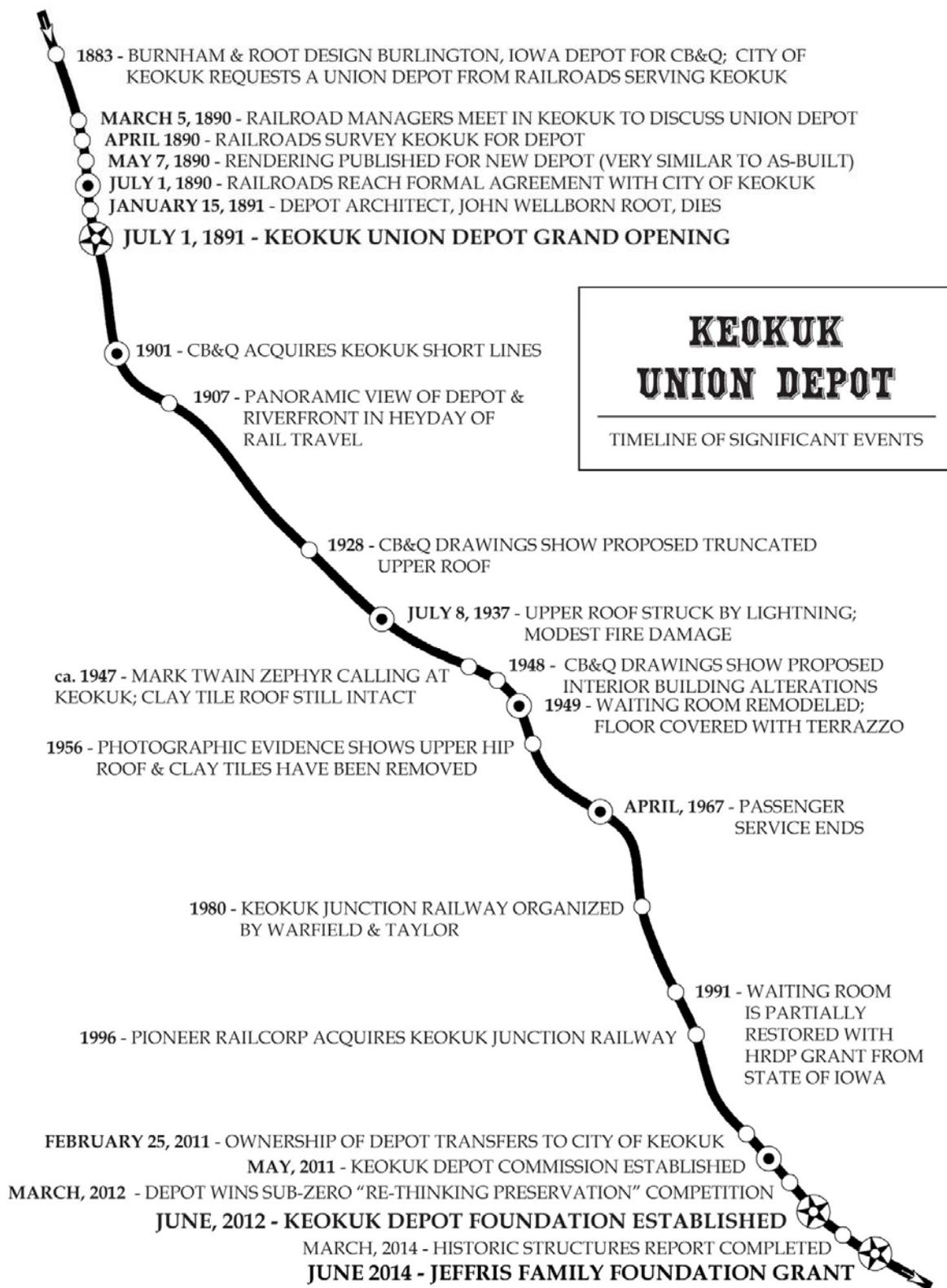


Fig 12. Timeline of significant events at the Keokuk Union Depot.