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<b>TO:</b>	<b>CHAIR AND MEMBERS PLANNING &amp; ENVIRONMENT COMMITTEE ON MONDAY FEBRUARY 1, 2016</b>
<b>FROM:</b>	<b>JOHN M. FLEMING MANAGING DIRECTOR, PLANNING AND CITY PLANNER</b>
<b>SUBJECT:</b>	<b>DESIGNATION OF THE KING STREET BRIDGE UNDER THE <i>ONTARIO HERITAGE ACT</i></b>

<b>RECOMMENDATION</b>
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That, on the recommendation of the Managing Director, Planning and City Planner, with the advice of the Heritage Planner, the following actions **BE TAKEN** with respect to the King Street Bridge:

- (a) The following report **BE RECEIVED**;
- (b) Notice of Municipal Council's intention to designate the King Street Bridge to be of cultural heritage value or interest **BE GIVEN** with the attached Statement of Cultural Heritage Value or Interest under the provisions of subsection 29(3) of the *Ontario Heritage Act, R.S.P. 1990, c. O. 18*.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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None.

<b>PURPOSE AND EFFECT OF RECOMMENDED ACTION</b>
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The effect of the recommended action is to designate the King Street Bridge under the Part IV, Section 29 *Ontario Heritage Act* to be of cultural heritage value or interest.

<b>BACKGROUND</b>
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**History of the King Street Bridge**

With its prominent location at the Forks of the Thames River, the City of London is a city of bridges. London is fortunate to have a wealth of early bridge structures including two nineteenth century bridges: Blackfriars Bridge (built in 1875) and the King Street Bridge (built in 1897). While the Blackfriars Bridge is individually designated under the *Ontario Heritage Act* and located within the Blackfriars/Petersville Heritage Conservation District, the King Street Bridge has not yet received such recognition.

The King Street Bridge is a single span, nine-panel, pin-connected Pratt through truss with fixed approach spans. It spans 65 metres (213 feet) across the south branch of the Thames River, immediately adjacent to the Forks of the Thames. It is the first, and only, bridge to span the Thames River between King Street and Becher Street.

Wooden bridges were limited in their ability to span crossings, and were constantly washed away with spring floods. Wrought iron and steel as structural elements enabled the construction of greater spans in bridges, and quickly eclipsed wood as the preferred structural material for bridges in the mid-nineteenth century. Cognizant of its precarious river crossings, the City of London was not averse to exploring the possibilities of new bridge materials including the wrought iron of the Blackfriars Bridge and steel of the King Street Bridge. By 1889, all of London's wooden bridges were replaced with metal structures (McClelland 2008). Of these eight pre-1889 structures, only

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Blackfriars Bridge remains.

The Pratt Truss structure of the King Street Bridge was patented by Thomas and Caleb Pratt in 1844 (Comp & Jackson 1977). It quickly became a dominant structure type, particularly because of the need for non-wooden bridges for the construction of railways after the 1850s. The Pratt Truss is a visual articulation of compression and tension members. The earliest Pratt Trusses are connected with pins, however the development of portable pneumatic tools at the turn of the twentieth century revolutionized field riveting and eventually bolts.

In addition to carrying traffic between King Street and Becher Street, the King Street Bridge carries a 91 centimeter (36”) sewer pipe. This dual function of transportation and wastewater capacity of the King Street Bridge contributed to its retention in the mid-twentieth century as well as its rarity and significance. It is contemporary to the development of the Stanley-Becher area with urban sewers. A call for tenders was issued, following a resolution by Municipal Council on May 5, 1897, for the construction of a bridge to carry the sewer pipes in connection with the sewerage system over the Thames River at King Street.

On June 14, 1897, the Municipal Council of the City of London awarded the Central Bridge and Engineering Company Limited of Peterborough, Ontario the \$6,020 contract to “build highway bridge and approaches, and erect sewer pipe.” To commemorate this technical achievement, the names of the Mayor, Chair of the Board of Works, and the City Engineer are inscribed on the west abutment (see Appendix B, Image 17).

The King Street Bridge is the only example of the Central Bridge and Engineering Company known in London, and only one of eight examples of the company’s work remaining standing in Ontario. Originally established as the Central Iron Works in 1884 by William Hartill Law (1835-1918), the business was reorganized in 1894 as the Central Bridge and Engineering Company of Peterborough. Bridges produced by the Central Bridge and Engineering Company were sent all over Ontario, including Peterborough, the County of Northumberland and Durham, Wallaceburg, the Trent Canal, Keewatin, and London. Most contracts obtained by the Central Bridge and Engineering Company were obtained through a competitive bid process, where the Central Bridge and Engineering Company was able to undercut their competition. New production methods in the 1880s made steel more affordable until it reached the same price as wrought iron (Cuming 1983, 43). Political controversy surrounding Law’s award of the Trent Canal contracts are believed to have contributed to the dissolution of the Central Bridge and Engineering Company in 1898-1899 (Bateman 2008). The King Street Bridge is believed to be one of the last bridges fabricated by the Central Bridge and Engineering Company that remains.

Isaac Crouse (1825-1915) was also involved in the construction of the King Street Bridge, particularly in the construction of the sewerage system associated with the bridge structure. He is the noted builder of the Blackfriars Bridge and Meadowlily Bridge (built in 1910 with son Levi). Many of London’s early bridges (up to 1911) were built in some manner by Isaac Crouse. Crouse constructed the sewerage system and abutments for the King Street Bridge, with the structure itself supplied by the Central Bridge and Engineering Company. The Historic Sites Committee of the London Public Library Board erected a plaque honouring Isaac Crouse on the west post adjacent to the King Street Bridge (see Appendix B, Image 18).

Several other local firms were involved in the construction of the King Street Bridge. They include Hilliard & McKinley (Thomas Hilliard and John McKinley, builders, located at 290 Ridout Street), James Cowan & Company (hardware and building supplies, located at 137 Dundas Street), and the London Foundry Company (owned by David J. Cowan, located at 369 Thames Street). Charles F. Hanson and William Taylor were the inspectors assigned to the project.

Vehicular access was maintained on the King Street Bridge until 1947. Newspaper articles cite the poor condition of the bridge as the reason to preclude vehicles from using the King Street Bridge (see Appendix B, Image 4). Considerations were made to remove the King Street Bridge; however its wastewater function ensured its retention. The *London Free Press* reported “Plans for rebuilding King Street Bridge were shelved at least for the time being last night when City Council accepted a report from the London and Suburban Planning Board, recommending no

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decision be taken at this time” (September 30, 1947). A subsequent article on February 1, 1949 in the *London Free Press* was entitled “King Street Bridge Traffic Use Ebbs But Still Serves as Vital Public Utility,” citing the sewer pipe as the reason for the retention of the King Street Bridge.

Discussions in the mid-1970s regarding transportation flow into and out of the Downtown considered the construction of a bridge crossing the Forks of the Thames River to connect King Street and what would become Riverside Drive (see Appendix B, Image 6). Comments reported in the November 16, 1977 *London Free Press* article cited concern for the \$3.6 million Forks beautification project in the planning stages. Again, the fate of the King Street Bridge was under question, but no decision was made.

In 1982, the King Street Bridge was re-opened for pedestrians and cyclists. The original cantilevered sidewalk was removed, and a divided deck (with the sewer pipe exposed) installed (see Appendix B, Image 7). The steel structure was cleaned and painted in 1983, and again in 1997. In 2009, the suspended sewer was structurally relined. The original bridge trestle approaches, approximately 156 feet long under the west approach and 300 feet long under the east approach, have been subsequently buried/backfilled.

A major rehabilitation of the structural steel, including recoating, deck and railing replacement (replacing the divided deck with full timber deck), and subsurface re-facing, was undertaken in 2010 (see Appendix B, Image8). Staff and AECOM undertook research to develop a context for the rehabilitation program, resulting in a heritage-sensitive approach. Design objectives focused on maintaining the visual look of the original bridge while meeting the technical requirement of the Canadian Highway Bridge Design Code. In particular, previously modified components including the divided deck (installed in 1982) and the hand railing (original hand railing removed in 1982) were removed and replaced with elements more reflective to the appearance of the original structure. The 1897 inscription on the west abutment was protected during the rehabilitation, and existing commemorative plaques were remounted. The rehabilitation program was supported by “Investing in Ontario” funding from the Province of Ontario.

The City received a recognition award in 2011 from the Architectural Conservancy of Ontario – London Region and the Heritage London Foundation for the “outstanding contribution made to the preservation of London’s built heritage with the restoration of three bridges: Norman A. Bradford Bridge on Oxford Street, Blackfriars Street Bridge and King Street Bridge. Their preservation is an important reminder of the significance bridges were to the growth of a city built at the Forks of the Thames River.”

**Other Bridges**

The King Street Bridge is a rare example of a nine-panel, single-span, pin-connected, Pratt through truss bridge. There are only a few comparable bridge structures in Ontario, and the only of its kind in the City of London. These comparable structures are as follows:

- Ball’s Bridge (Huron County), built 1885. Two span, wrought iron, pin-connected, Pratt through truss.
- Young’s point (Douro-Drummer Township, Peterborough). Two span, steel and wrought, pin-connected, Pratt through truss.
- Upper Rideau (Rideau Canal between Narrows Bay and Rideau Lake), built 1898. Steel Pratt through truss, riveted connections.
- Water Street Bridge (over Trout Creek, St. Mary’s), built 1898. Seven-panel, pin-connected, Pratt through truss bridge built by Stratford Bridge Company.
- Trafalgar Bridge (Perth South Township; Mitchell & St. Mary’s), built 1905. Steel, pin-connected, Pratt through truss.
- Hudson/North Street over Gananoque River Bridge (Gananoque), built 1911. Wrought iron, pin-connected, Pratt through truss.

**ANALYSIS**

**Provincial Policy Statement**

The *Provincial Policy Statement* (2014), issued pursuant to Section 3 of the *Planning Act*, provides

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policy direction of matters of provincial interest related to land use planning and development. Section 2(d) of the *Planning Act* identifies “the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest” as matters of provincial interest. The *Planning Act* requires that all decisions affecting land use planning matters “shall be consistent with” the *Provincial Policy Statement*.

*Provincial Policy Statement 2.6.1* states that “significant built heritage resources and significant cultural heritage landscapes shall be conserved.” Within the context of the *Provincial Policy Statement*, the following definitions apply:

- **Built Heritage Resource:** means a building, structure, monument, installation or any manufactured remnant that contributes to a property’s cultural heritage value or interest as identified by a community, including an Aboriginal community. Built heritage resources are generally located on property that has been designated under Parts IV or V of the *Ontario Heritage Act*, or included on local, provincial, and/or federal registers.
- **Conserved:** means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained under the *Ontario Heritage Act*.
- **Cultural Heritage Landscape:** means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or associations.
- **Significant:** means, in regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest for the important contributions they make to our understanding of the history of a place, an event, or a people.

**Official Plan**

Chapter 13 of the *Official Plan* includes the objective to “protect in accordance with Provincial policy those heritage resources which contribute to the identity and character of the City.” Policies support the designation of properties under the *Ontario Heritage Act*.

**Strategic Plan**

The Strategic Plan for the City of London 2015-2019 identifies heritage conservation an integral part of Building a Sustainable City. The recommended action supports the following strategic areas of focus:

- Strengthening Our Community
  - Amazing arts, culture and recreation experiences – ...strengthening culture in London (4.D)
- Building a Sustainable City
  - Robust infrastructure – Heritage Bridge Preservation Strategy (1.C)
  - Heritage conservation – Protect and celebrate London’s heritage for current and future generations (6.B)
- Growing Our Economy
  - Diverse and resilient economy – Promote culture as a key part of economic growth and quality of life (1.F)

**Designation under the *Ontario Heritage Act***

In August 2015, it was brought to the attention of the Heritage Planner that one of the plaques affixed to the King Street Bridge had been stolen. This plaque explained the historical significance of the King Street Bridge as an early Pratt-type through truss over the south branch of the Thames River. This plaque was installed during the heritage-sensitive rehabilitation of the King Street Bridge in 2010 (see Appendix B, Image 19).

While the theft of this plaque is unfortunate, it has brought renewed attention to the King Street Bridge from a cultural heritage perspective. Presently, the King Street Bridge is not protected under the *Ontario Heritage Act*.

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Research and evaluation were undertaken to determine if the King Street Bridge merits protection under Part IV of the *Ontario Heritage Act*. A property may be designated if it meets one or more of the following mandated criteria, as per *O. Reg. 9/06*:

- Physical or design value;
- Historical or associative value; and/or,
- Contextual value.

A summary of this evaluation is highlighted in the table below:

<b>Criteria for Determining Cultural Heritage Value or Interest</b>		
	<b>Criteria</b>	<b>Evaluation</b>
The property has design value or physical value because it,	Is a rare, unique, representative or early example of a style, type, expression, material, or construction method	<ul style="list-style-type: none"> <li>• Rare example of single-span, pin-connected Pratt through truss in Ontario; only of its kind in London</li> <li>• Representative of pin-connected construction methods</li> </ul>
	Displays a high degree of craftsmanship or artistic merit	<ul style="list-style-type: none"> <li>• Pin-connection construction method required craftsmanship in the absence of pneumatic technology</li> <li>• Heritage-sympathetic rehabilitation in 2010 worthy of recognition</li> </ul>
	Demonstrates a high degree of technical or scientific achievement	<ul style="list-style-type: none"> <li>• Dual function of vehicular/pedestrian transportation and wastewater pipe; ensured its retention at several points in its history</li> <li>• Technical achievement celebrated in 1897 inscription on west abutment</li> </ul>
The property has historical value or associative value because it,	Has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	<ul style="list-style-type: none"> <li>• Not known.</li> </ul>
	Yields, or has the potential to yield, information that contributes to an understanding of a community or culture	<ul style="list-style-type: none"> <li>• Not known.</li> </ul>
	Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	<ul style="list-style-type: none"> <li>• Demonstrates the work of Isaac Crouse, recognized early London bridge and infrastructure builder</li> <li>• Demonstrates work of Central Bridge and Engineering Company; notable from a province-wide perspective, although limited significance in London context</li> </ul>
The property has contextual value because it,	Is important in defining, maintaining, or supporting the character of an area	<ul style="list-style-type: none"> <li>• Contributes to the history of bridge crossings at the Forks of the Thames River: wrought iron, steel through and pony truss, concrete bridges all represented within vicinity</li> </ul>
	Is physically, functionally, visually, or historically linked to its surroundings	<ul style="list-style-type: none"> <li>• First and only bridge crossing between King Street and Becher Street</li> <li>• Historically part of the development of London's sewerage system</li> </ul>
	Is a landmark	<ul style="list-style-type: none"> <li>• Locally recognized as a landmark</li> </ul>

The evaluation determined that the King Street Bridge is a significant cultural heritage resource and merits protection under Part IV of the *Ontario Heritage Act*. A draft Statement of Cultural Heritage Value or Interest was prepared and circulated to recognized technical experts for review

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and comment. Comments were received from the consultants (AECOM) responsible for the 2010 rehabilitation of the King Street Bridge as well as the Transportation Planning & Design Division and Water & Wastewater Division. The recommended Statement of Cultural Heritage Value or Interest for the King Street Bridge can be found in Appendix A.

The Stewardship Sub-Committee of the London Advisory Committee on Heritage (LACH) recommended designation of the King Street Bridge at its meeting held on November 25, 2015. The LACH recommended designation of the King Street Bridge at its meeting held on January 13, 2015.

**Ontario Heritage Bridge Guidelines (Interim 2008)**

The potential cultural heritage value or interest of bridge structures that are owned by the Province of Ontario are evaluated using the *Ontario Heritage Bridge Guidelines* (Interim 2008). These guidelines were developed by the Ministry of Transportation (MTO) and the Ministry of Culture (now Ministry of Tourism, Culture and Sport). These guidelines state that any MTO structure over 40 years old is subject to an evaluation of its cultural heritage value or interest. Bridge structures are scored out of 100 points, where a bridge structure achieving a score of 60 points or greater merits inclusion on the Ontario Heritage Bridge List. Once a bridge is included on the Ontario Heritage Bridge List, the conservation options described in the *Ontario Heritage Bridge Guidelines* must be applied in the management, planning, and Environmental Assessment processes.

While the King Street Bridge is not an MTO structure, the *Ontario Heritage Bridge Guidelines* to provide an evaluation framework to confirm an evaluation of cultural heritage value or interest of a bridge structure. As such, the King Street Bridge was evaluated using the criteria of the *Ontario Heritage Bridge Guidelines*. A conservative scoring resulted in 78 points assigned to the King Street Bridge. Therefore the King Street Bridge would merit inclusion on the Ontario Heritage Bridge List if it were an MTO structure (see Appendix C). This confirms the evaluation under the *Ontario Heritage Act* which determined the King Street Bridge is a significant cultural heritage resource and should be designated.

**CONCLUSION**

The King Street Bridge is a significant cultural heritage resource in the City of London and should be protected under Part IV of the *Ontario Heritage Act*.

Should Municipal Council issue Notice of Intention to Designate the King Street Bridge under Part IV of the *Ontario Heritage Act* the designation of the property may be appealed within thirty days of notice being served. If an appeal is received, the Conservation Review Board will review the designation and the appeal, and make a recommendation to Municipal Council. Ultimately, however, Municipal Council makes the decision regarding the designation of any property under the *Ontario Heritage Act*.

**ACKNOWLEDGEMENTS**

This report was prepared with the input of: Jane Fullick, Karl Grabowski, John Lucas, Pat Donnelly, Tom Copeland, Jana Nethercott, Gavan McDonald, Ian Blevins, Arthur McClelland, Heather Aiton Landry, and Don Menard.

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<b>PREPARED BY:</b>	<b>SUBMITTED BY:</b>
<b>KYLE GONYOU HERITAGE PLANNER URBAN REGENERATION</b>	<b>JIM YANCHULA, MCIP, RPP MANAGER, URBAN REGENERATION</b>
<b>RECOMMENDED BY:</b>	
<b>JOHN M. FLEMING, MCIP, RPP MANAGING DIRECTOR, PLANNING AND CITY PLANNER</b>	

2015-12-24

KG/

Attach:

Appendix A: Statement of Cultural Heritage Value or Interest for the King Street Bridge

Appendix B: Photographs

Appendix C: *Ontario Heritage Bridge Guidelines Evaluation*

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**APPENDIX A: STATEMENT OF CULTURAL HERITAGE VALUE OR INTEREST – KING STREET BRIDGE (335 THAMES STREET)**

**Legal Description**

CON BF PLAN NIL LOT 26 S/S KING PT LOT 26 N/S YORK

**Description of Property**

The King Street Bridge is a nine-panel, pin-connected, steel Pratt through truss bridge that spans the south branch of the Thames River between King Street and Becher Street. It was designed by the Central Bridge & Engineering Company of Peterborough, Ontario and built by famed London bridge builder, Isaac Crouse, in 1897.

**Statement of Cultural Heritage Value or Interest**

The King Street Bridge is of cultural heritage value because of its physical or design values, its historical or associative values, and its contextual values.

**Physical/Design Values**

The King Street Bridge is the second oldest bridge structure remaining in the City of London. Only surpassed in age by Blackfriars Bridge (built in 1875), the King Street Bridge is a rare example of a pin-connected, Pratt through truss steel bridge. While the pin-connected technology that was used to assemble the King Street Bridge was common in the late nineteenth century, few examples remain as field riveting became more common in the twentieth century and was eventually eclipsed by bolted steel and concrete bridge construction methods. It is the only remaining bridge of its type in London.

In particular, the King Street Bridge demonstrates technical or scientific achievement in its dual function. From its conception, the King Street Bridge served both as a transportation route across the Thames River as well as carrying a sewer pipe. Its functional purpose of carrying a 36” sewer pipe ensured its retention during the mid-twentieth century when removal of the King Street Bridge was considered. The King Street Bridge had an original overall span length of 623 feet, including multiple trestles extending to the east and west of the bridge; however the King Street Bridge currently retains one main span and three approach spans for an overall span length of 213 feet.

**Historical/Associative Values**

As a river-city, London has many historical water crossings. The King Street Bridge is the first and only bridge structure at the King Street-Becher Street crossing of the south branch of the Thames River. Unlike other river crossing structures, it has never been replaced. The King Street Bridge carried vehicular traffic from its construction in 1897 until 1947 when it was closed due to failure of the deck. Following rehabilitation work in 1982, the King Street Bridge was reopened to pedestrians and cyclists with a divided bridge deck showing the sanitary sewer line below. The cantilevered sidewalk was removed during this rehabilitation. The original approach trestles and an old brick sewer have been buried. In 2010, a major restoration project was undertaken to rehabilitate the structural steel, including recoating, replacement of the railings, and returned the bridge to a single full width deck form. This work was undertaken in a sympathetic manner to its cultural heritage values, ensuring the long-term conservation of the King Street Bridge.

The King Street Bridge is the only known example of the Central Bridge & Engineering Company of Peterborough, Ontario in London. Municipal Council awarded the contract to design and fabricate the King Street Bridge to the Central Bridge & Engineering Company on June 14, 1897 at a cost of \$6,020. The Central Bridge & Engineering Company was incorporated in 1892. Eight of its bridges are known to remain standing across the province; all are metal truss or girder structures constructed circa 1896-1898.

Isaac Crouse (1825-1915) is associated with the construction of the trunk sewerage system of the King Street Bridge. The descendant of United Empire Loyalists from New Brunswick, Isaac Crouse was born in a log farmhouse on Concession II (now Southdale Road), in the former Westminster Township. In addition to being a farmer, millwright, and land proprietor, Isaac

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Crouse learned the bridge building trade while working for the Central Pacific Railroad in Nevada in the 1860s. Isaac Crouse is credited with the construction of Blackfriars Bridge (1875), the first dam at Springbank (1878), the sewerage construction for the King Street Bridge (1897), and Meadowlily Bridge (1910, with son Levi Crouse), among other structures. Isaac Crouse is significant to London through his contributions to early bridge construction and the King Street Bridge is considered as part of his representative work.

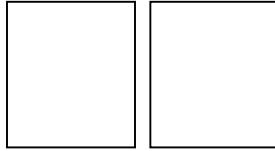
**Contextual Values**

The King Street Bridge is located in close proximity to the Forks of the Thames. A concentration of bridges is located near the Forks of the Thames, including Blackfriars Bridge (built in 1875), the Thames Street Overpass (1889), Kensington Bridge (1930), Wharncliffe Road Bridge (1958), Westminster Bridge (1977), and Canadian National Bridge over the south branch of the Thames River. Although these structures do not represent a family of bridges, they contribute to the character and significance of the Forks of the Thames to the understanding of the history and evolution of the City of London. The King Street Bridge is an important link between the Downtown Heritage Conservation District and the west side of the Thames River and is an integral part of the City’s pathway and trail system. Locally, the King Street Bridge is a landmark.

**Heritage Attributes**

Heritage attributes which support and contribute to the cultural heritage value or interest of the King Street Bridge include:

- Nine-panel, pin-connected, steel Pratt through truss bridge;
- Latticework detailing seen on structural members and replicated in the hand railing (replaced in 2010);
- Full timber deck;
- Suspended sanitary sewer;
- Inscription on west abutment (“London Sewerage System A.D. 1897 J. W. Little Mayor, Ald. E. Parnell Ch. Board of Works, A. O. Graydon City Engineer”);
- Historical plaques on the approach pillars: one dedicated to Isaac Crouse (west approach), and one dedicated to the King Street Bridge (east approach);
- Historical associations with the Central Bridge & Engineering Company of Peterborough, Ontario and Isaac Crouse, famed London bridge builder;
- Views of the King Street Bridge from various locations around the Forks of the Thames, contributing to its landmark recognition and contextual values.



APPENDIX B: PHOTOGRAPHS

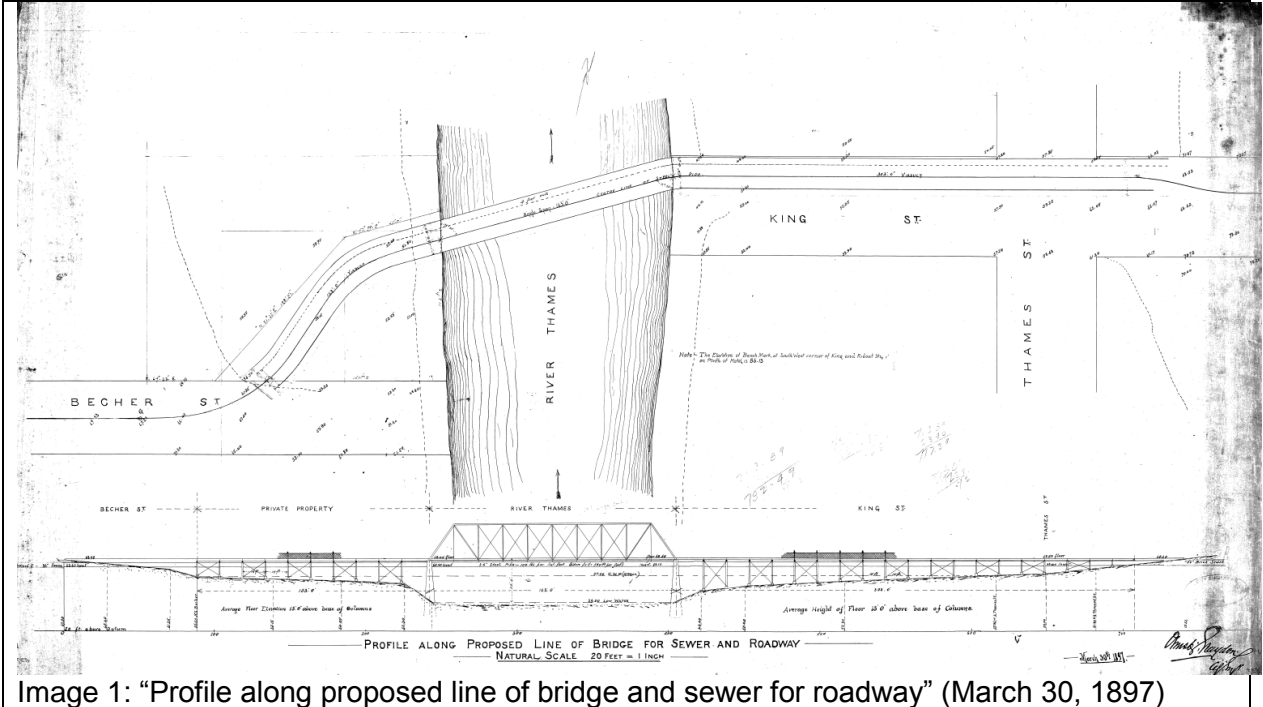


Image 1: "Profile along proposed line of bridge and sewer for roadway" (March 30, 1897)

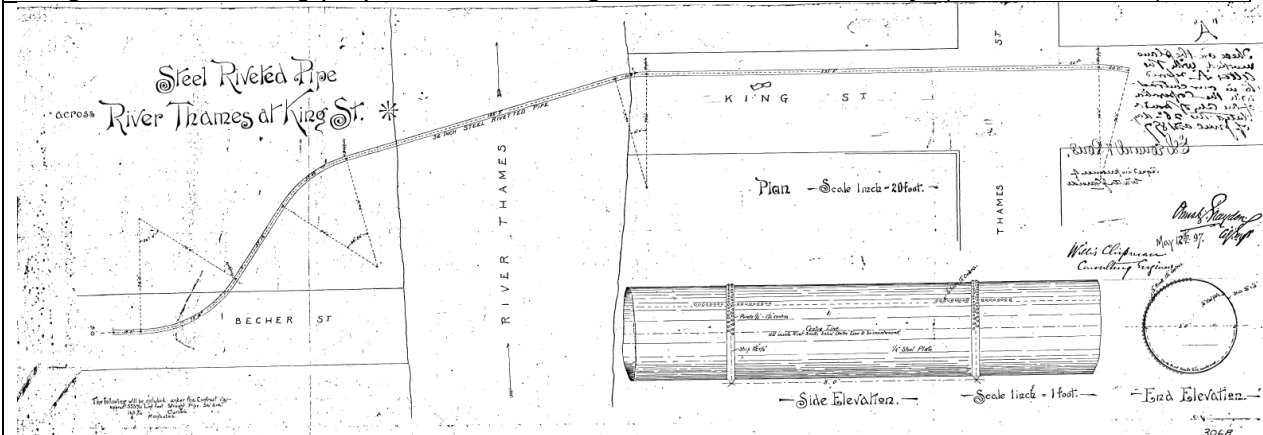


Image 2: "Detail of steel riveted pipe across River Thames at King Street" (May 12, 1897)



Image 3: King Street Bridge with elevated approaches, now buried (no date).



Image 4: Image of the King Street Bridge, with the cantilever sidewalk to the north. Note the barrier preventing access across the King Street Bridge (courtesy of the *London Free Press*, October 3, 1957).

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Image 5: Exposed suspender sewer of the King Street Bridge during rehabilitation work (courtesy of the *London Free Press*, 1958).

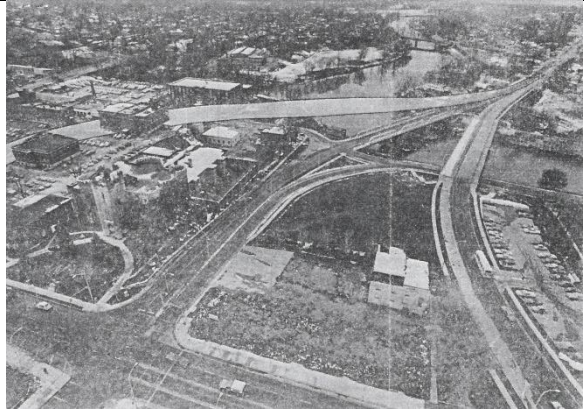


Image 6: Proposed additional crossing at the Forks of the Thames River (courtesy of the *London Free Press*, November 15, 1977).



Image 7: King Street Bridge, looking west (courtesy of the City of London, December 16, 2008).



Image 8: Rehabilitation work on the King Street Bridge (courtesy of the City of London, 2010).



Image 9: East approach to the King Street Bridge (September 28, 2015).



Image 10: King Street Bridge, looking west (September 28, 2015).

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Image 11: Detail of the hand railing, installed as part of the 2010 rehabilitation program (September 29, 2015).



Image 12: Detail of the pin-connection of the King Street Bridge (September 29, 2015).



Image 13: West approach to the King Street Bridge (September 29, 2015).



Image 14: View of the King Street Bridge from the northwest (September 29, 2015).

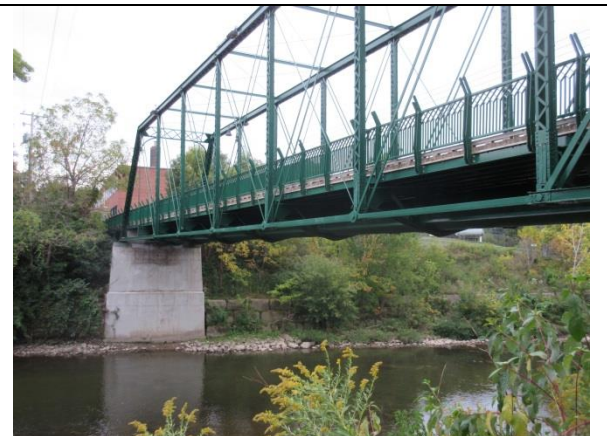


Image 15: West abutment, with suspended sewer (September 29, 2015).



Image 16: King Street Bridge seen from Mitchell A. Baran Park (October 28, 2015).

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Image 17: Inscription on the west abutment of the King Street Bridge (September 29, 2015).

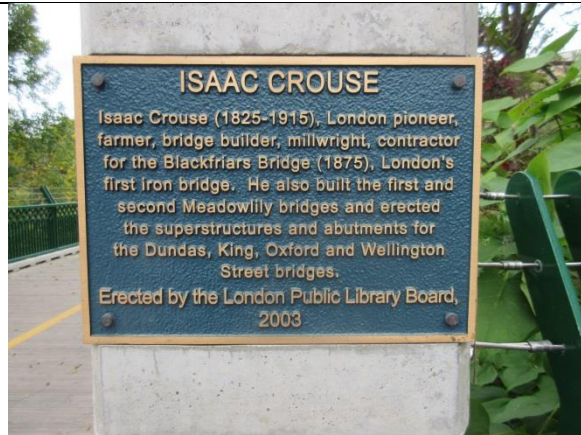


Image 18: London Public Library Board plaque dedicated to Isaac Crouse (September 28, 2015).

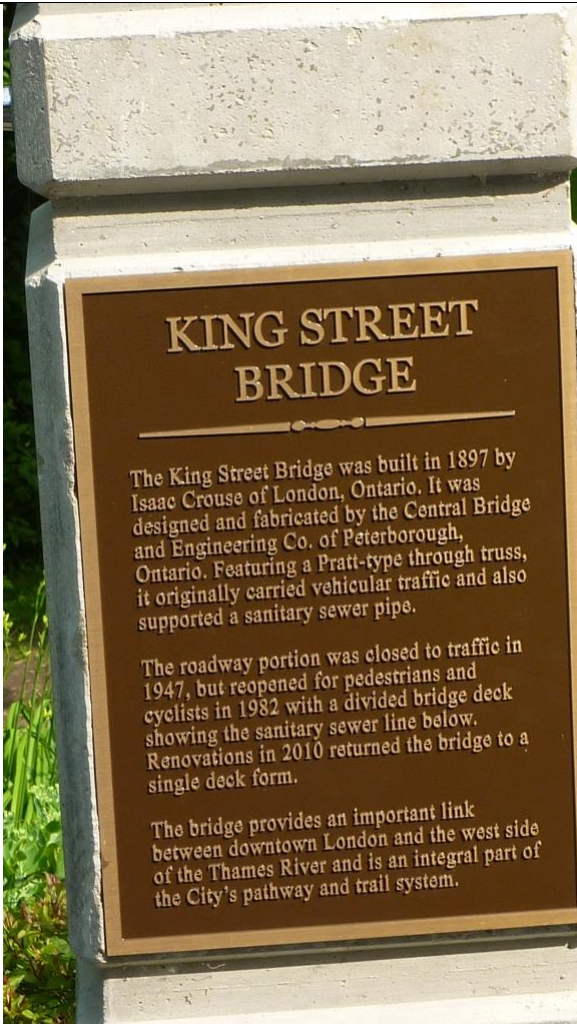


Image 19: King Street Bridge plaque, stolen in summer 2015.

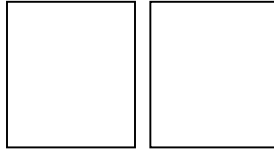
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**APPENDIX C: ONTARIO HERITAGE BRIDGE GUIDELINES EVALUATION**

The Ontario Heritage Bridge Guidelines evaluation framework is divided into three main areas: physical/design value, contextual value, and historical/associative value. Criteria are individually scored within each category out of a potential total score of 100 points. A bridge which scores in excess of 60 points merits inclusion on the Ontario Heritage Bridge List.

Criteria	Details	Max. Score	Criteria	Assigned Score	Comments
<b>Design/Physical Value</b>					
<b>Functional Design</b>	Excellent	20	Displays a high degree of technical merit or scientific merit; <u>and</u> <ul style="list-style-type: none"> <li>Is one of a kind or prototype (first or earliest of its time); or</li> <li>Is exemplary for its kind (i.e. the longest, highest, etc. of its kind).</li> </ul>	<b>20</b>	King Street Bridge displays a high degree of technical or scientific merit in its dual function of carrying wastewater and transportation across the Thames River. It is the only of its structure type (pin-connected Pratt through truss) in London.
	Very Good	16	Displays a high degree of technical merit or scientific achievement; <u>and</u> <ul style="list-style-type: none"> <li>Includes types in which fewer than five survive within a Region.</li> </ul>		
	Fair	12	This category includes types of which fewer than five survive within a Region, regardless of degree of technical merit or scientific achievement, even if many were originally constructed.		
	Common	0	Of little value from a technical or scientific perspective. Many were built, many remain.		
<b>Visual Appeal</b>	Excellent	20	High degree of craftsmanship or stylistic merit for most of the elements of the bridge; the design elements are well balanced elements and overall the structure is well proportioned; modifications are sympathetic.	<b>20</b>	Rehabilitation work to the King Street Bridge in 2010 was very sympathetic to its heritage qualities, and highlights the high degree of craftsmanship in the original steel bridge structure that has endured for 118 years.
	Very Good	12	Well-proportioned bridge that has a general massing that is appropriate to the landscape in which it is situated.		



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	Fair	4	Structure only has one or two noteworthy elements or is severely altered from its original form.		
	Common	0	No noteworthy features.		
<b>Materials</b>	Excellent	10	Provincially rare or unusual materials. Stone, wrought iron are examples of provincially rare materials.	<b>8</b>	Pin-connected steel is considered a regionally rare material as this is the only bridge of this type in London.
	Very Good	8	Regionally rare or unusual materials. Wood and riveted steel are examples of regionally rare materials.		
	Fair	5	Unusual combinations: this is reserved for materials that are used in combination(s) that are considered unusual or remarkable.		
	Common	0	Common materials or combination.		
<b>Contextual Value</b>					
<b>Landmark</b>	Excellent	15	Physically prominent: the bridge is highly significant physically and a primary symbol in the area. This includes 'gateway' structures. <ul style="list-style-type: none"> <li>It is a critical element in understanding a family of bridges within a corridor.</li> </ul>	<b>9</b>	King Street Bridge is locally significant, as indicated by the existing plaques on the bridge and recognition by the London Public Library as well as members of the community.
	Very Good	9	Locally significant: the bridge is perceived in the community as having symbolic value rather than purely visual or aesthetic value. <ul style="list-style-type: none"> <li>It is an important element in understanding a family of bridges within a corridor.</li> </ul>		
	Fair	3	A familiar structure in the context of the area. <ul style="list-style-type: none"> <li>It is a contributory element in the understanding of a family of bridges within a corridor.</li> </ul>		



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	Common	0	Not prominent in the area.		
<b>Character Contribution</b>	Excellent	10	The bridge is a critical element in defining the character of the area and is of great importance in establishing or protecting this character.	<b>6</b>	King Street Bridge contributes to an understanding of the history and development of London and the Forks of the Thames.
	Good	6	Maintains or contributes to the overall character of the area and is of municipal importance in establishing or protecting this character.		
	Common	0	Character contribution is minimal.		
<b>Historical Associations</b>					
<b>Designer/ Construction Firm</b>	Excellent	15	Known influential designer-builder; structure demonstrates or reflects the innovative work or ideas of companies, engineers, and/or builders having major impact on the development of a community. For this item, community is broadly defined to include professional groups who have been demonstrably affected by the work in question.	<b>9</b>	While the King Street Bridge could be considered excellent in its associations with the Central Bridge & Engineering Company of Peterborough, Ontario, the extent of its influence is not fully known. Further research is required to ascertain. However, the Central Bridge & Engineering Company is considered to have good historical associations through its contributions to the development of steel as a structural material for bridges. Historical associations with Isaac Crouse, noted London bridge builder, are also worthy of this scoring.
	Good	9	Known prolific builder-designer; companies, engineers, and/or builders directly responsible for a large number of structures who activities led to design or construction refinement and the establishment of standard forms.		
	Fair	3	Known undetermined contributions; companies, engineers, and/or builders about who have made a limited/minor contribution to the community.		
	Unknown	0	Those responsible for the design/construction are unknown.		
<b>Association with Historical Theme, Person, or Event</b>	Excellent	10	Direct associations with a theme or event that is highly significant in understanding the cultural history of the nation, province, or municipality.	<b>6</b>	King Street Bridge is associated with the development of waste water management within the City of London as well as

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	Good	6	Close association with a theme or event within an area.		development at the Forks of the Thames.
	Commo	0	Limited or no association with historic themes or events.		
<b>Total</b>				<b>78</b>	