



Glasgow Over The Years

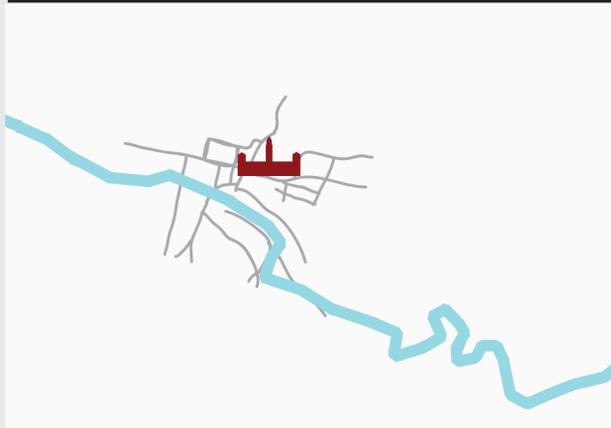
The present site of Glasgow has been settled since prehistoric times.

With the onset of the Industrial Revolution, the population and economy of Glasgow and the surrounding region expanded rapidly to become one of the world's pre-eminent centres of chemicals, textiles and engineering; most notably in the shipbuilding and marine engineering industry, which produced many innovative and famous vessels. Glasgow was the

"Second City of the British Empire" for much of the Victorian era and Edwardian period. The city has many amenities for a wide range of cultural activities, from curling to opera and ballet and from football to art appreciation; it also has a large selection of museums that include those devoted to transport, religion, and modern art. In 1990 when Glasgow was designated European City of Culture.

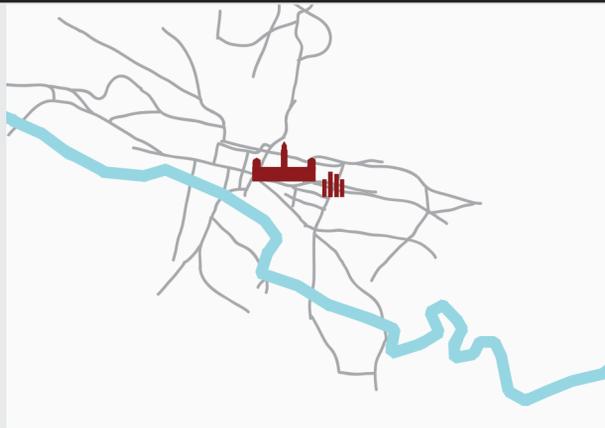


Glasgow growth



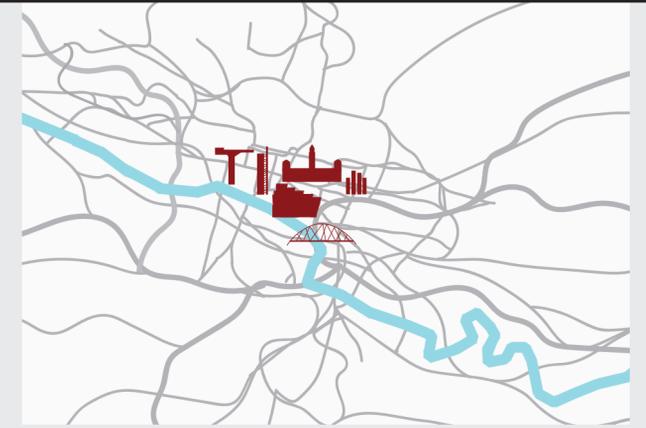
1778

Glasgow is the largest city in Scotland, and the third largest city in the United Kingdom. Glasgow started out as a small rural settlement along the River Clyde. It expanded to a royal burgh then to the establishment to the University of Glasgow, which was founded in 1451. In 1707, Glasgow became a prominent hub of international trade to and from the Americas. By the end of the eighteenth century, over forty-seven billion pounds of tobacco was being imported by the River Clyde each year at its peak.



1857

Industrialization and ship building led to the growth of Glasgow. By the end of the nineteenth century, Glasgow was producing more than half of Britain's tonnage of shipping, and a quarter of the world's locomotives. It was during this time that much of the city's major architectural pieces were built, such as the City Chambers. The Glasgow Necropolis was established in 1832. Following the creation of the Pere Lachaise Cemetery in Paris, there was a pressure for cemeteries in the United Kingdom. It required the law to allow burial for profit. Glasgow hopped on board because they had an increase in population but decline in church attendance.



2017

The Finnieston Crane represents the industrialization of the city. There are three other cranes like this along the River Clyde. Completed in 1932, it was commissioned by the Clyde Navigation Trust to transport tanks and steam locomotives on to ships. There are only ten other giant, cantilever cranes left in the world. The SEC Armadillo was built in 1997 by award winning architects Foster and Partners. This auditorium has held The X Factor, Britain's Got Talent, the Commonwealth Games, and Family Pantomimes.

The Clyde Arc

The Clyde Arc Bridge is a steel, bowstring-symmetrical tied arch bridge located in the city of Glasgow in Scotland. The construction of the Clyde Arc Bridge started in May 2005 and it was given officially to public in September 2006. The design of the major piers starts with a circular shape at the bottom part, which tapers inwards at the top part and ends at the springing point of the arch. The

white color of both the steel arch and the hanger bars is in accordance with the white prevailing colour of the existing buildings. At night the purple and maroon changing LED system enhances the dramatic effect of the diamond shaped arch. It is significant because it enhances the general redevelopment of the southern areas and due to its pioneered design it provides an iconic gateway to the city.



Diagram 1

The Clyde Arc is a truly unique bridge because it crosses at a skew angle connecting the historic center of the city in the north side and the southern outskirts. Its diamond shape of the bridge also twists as it crosses the river, creating a silhouette like never before.

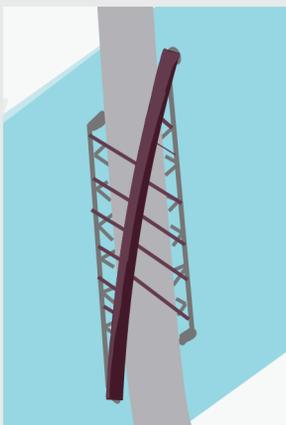


Diagram 2

Each of the cables, shown in red, is connected to the edges of the deck at different angles.



Diagram 3

The Clyde Arc Bridge consists of a main 96m deck, which is suspended by bars hanging from the single arch, and two approaching spans of 36.5m each. The total width of the deck is 21.3m and the clear carriageway width is 16.3m, which accommodates two lanes for private traffic and two lanes for public and cycle traffic. The area of the deck is divided into equal load distribution areas and it is assumed that each cable sustains one of these areas.

CLYDE ARC

Glasgow, Scotland

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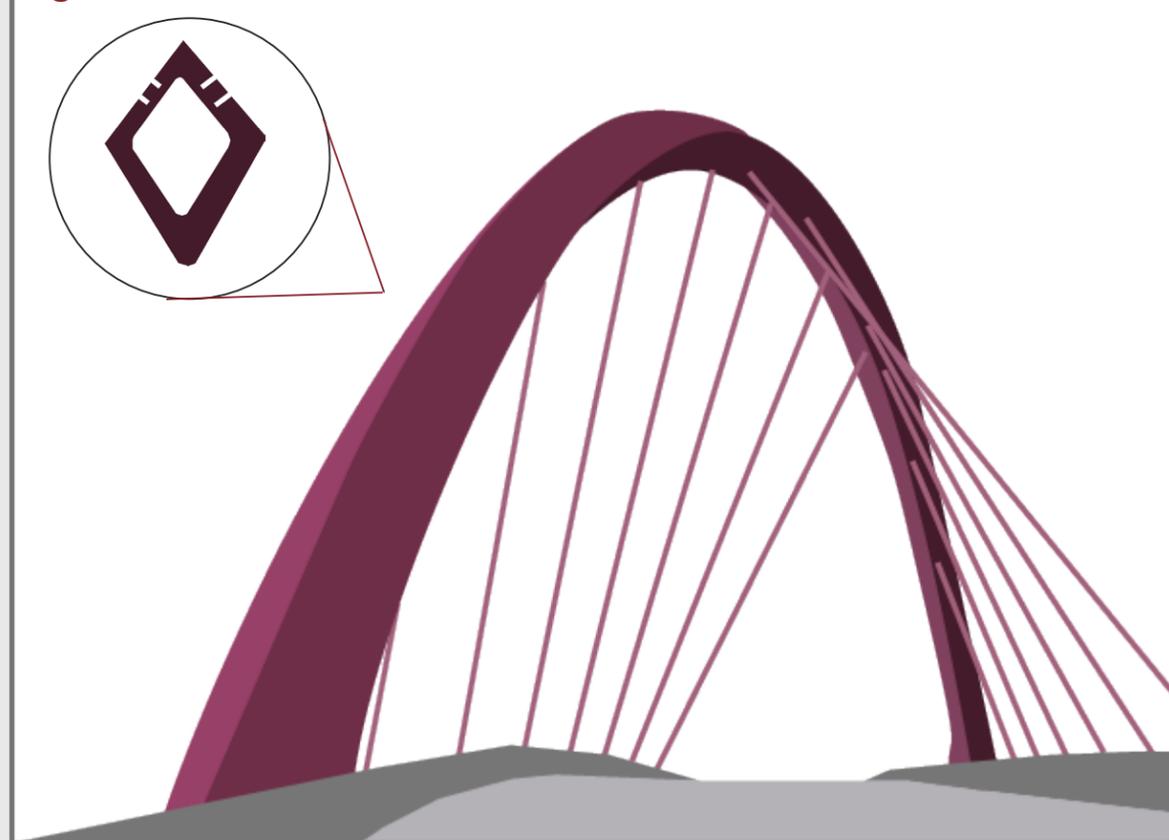


Figure 2

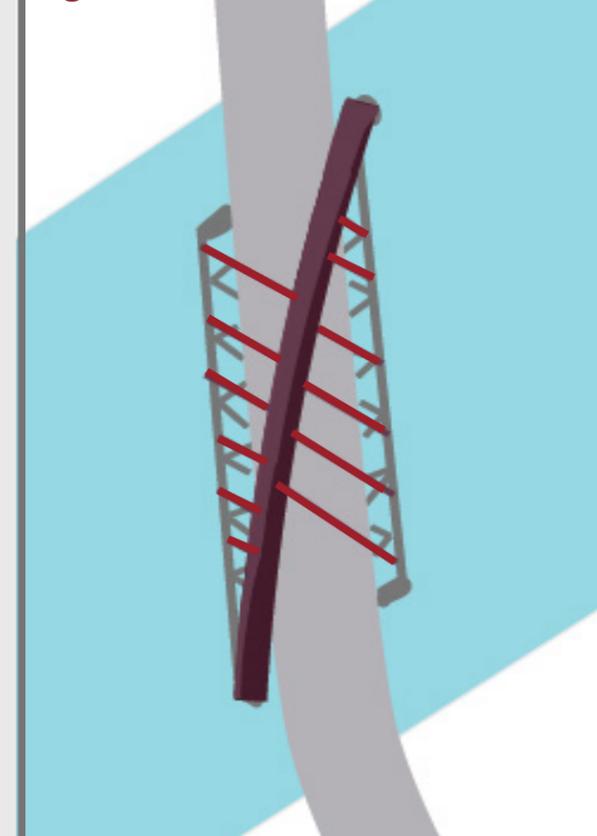


Figure 3

