The Old Windmill Tower is culturally significant as the oldest surviving European structure in Queensland, and one of only two surviving convict-built buildings in Brisbane. It is a reminder of the early difficulties encountered in establishing the small convict settlement that developed into the present city of Brisbane.

The Old Windmill Tower at Spring Hill was constructed to support the needs of the convict penal settlement established in Brisbane in 1825. Maize and wheat were being cultivated in the area but there was no efficient way of grinding the grain into meal and flour.

In 1827 Captain Patrick Logan, Commandant of Moreton Bay, proposed construction of a treadmill that would serve as both a facility to grind grain and a means of punishment for convicts who committed offences while at the settlement.

The mill tower was constructed during 1828 and included two sets of millstones, one linked to a treadmill and one driven by rotating wind-sails.

**Treadmill as punishment**

Work at the treadmill was usually carried out from sunrise to sunset, with a three-hour break in the middle of the day in summer, or a two-hour break in cooler months. Sixteen men were constantly on the wheel, with another ten providing relief. The work was repetitive, exhausting and dangerous. Convict, Michael Collins, died in 1829 when he became entangled in the treadmill wheels, but the treadmill continued to be used until 1839.

**Wind power**

The windmill tower contained four storeys topped by a rotating cap connected to the wind-driven sails. A fantail veered the sails as wind direction changed but wind speeds rarely reached the levels needed to meet milling requirements. The mill was coarsely constructed and needed constant repairs.

After years of break-downs, closures and a lightning strike, the mill was sold in 1849 and partially dismantled for parts. Due to a legal problem with the sale, however, ownership reverted to the Crown. The sails were still attached in 1854, though in a ruined state.

**New life for the tower**

In 1861 the mill was converted to a telegraph signal station. The remains of the cap, sails and internal mechanisms were removed, floors added to each storey, and doors, windows and a spiral staircase installed. Linked by telegraph to a station at Lytton, messages from ships entering the river were converted to semaphore using flags hoisted on a mast erected near the mill.

A time ball was added to the roof of the tower in the 1860s – the ball dropped each day at 1pm so Brisbane’s residents could set their watches. The time ball operated until 1930.

During the 1890s the fire brigade used the tower for observation. The Queensland Institute of Radio Engineers conducted radio research from the tower in the early 1920s, and Queensland’s first television broadcast was transmitted from the tower in 1934.

**Restoration and the future**

Brisbane City Council accepted trusteeship of the tower in 1922. In the following decades Council installed floodlighting, replaced deteriorated timber in the balcony and window sills, and repaired the roof, time ball and mast.

Significant restorations (including re-rendering external walls, straightening floors and stairs, and reconstructing the signal flagstaff) were completed as part of Australia’s bicentennial celebrations in 1988.

In 2009 Council led a major restoration of the windmill as part of a $2 million joint project with Queensland Government, celebrating the 150th anniversary of Brisbane’s declaration as a municipality and Queensland’s separation from New South Wales. These works improved safety and enabled access to the tower’s observation platform.

The Old Windmill Tower has proven popular with visitors since Council opened the site to the public for Brisbane Open House in 2012. In 2013 visitors were given access to the tower’s observation platform for the first time, offering a unique view of the city from one of Brisbane’s oldest buildings.
Old Windmill Tower timeline

1825 Brisbane convict settlement established.
1828 Mill tower constructed. Began operation as a treadmill powered by 16 convicts at a time.
1829 Convict Michael Collins killed when he became entangled in the treadmill wheels.
1836 Windmill struck by lightning.
1839 Treadmill disconnected.
1842 Penal colony at Moreton Bay officially closed.
1845 Recomenced operation for brief period.
1849 Windmill sold and dismantled for parts.
1861-1921 Converted to telegraph signal station communicating ships’ messages by semaphore.
1860s Time ball added to tower roof. Time ball ceased operation in 1930.
1890s-1922 Tower used by fire brigade for observation.
1922 Tower placed under trusteeship of Brisbane City Council.
1920s Operated as radio research station by Queensland Institute of Radio Engineers.
1934 Allen Campbell and Thomas Elliott transmitted Queensland’s first television broadcast from tower. Broadcasting continued until outbreak of World War II.
1988 Council undertook major restoration work as part of bicentenary celebrations.
1989-1996 Various archaeological and conservation work conducted.
2009 Council led restoration work as joint project with Queensland Government for Q150 celebrations.
2012 Windmill tower opened to the public for the first time as part of Brisbane Open House.
Brisbane City Council plays an important role in identifying, documenting and protecting Brisbane’s heritage, including more than 2000 heritage places across the city – from convict-era buildings to statues, bridges and trees.

You can explore some of Brisbane’s hidden secrets with Council’s self-guided heritage trails. Visit www.brisbane.qld.gov.au/heritagetrails for more information or to download trail brochures.