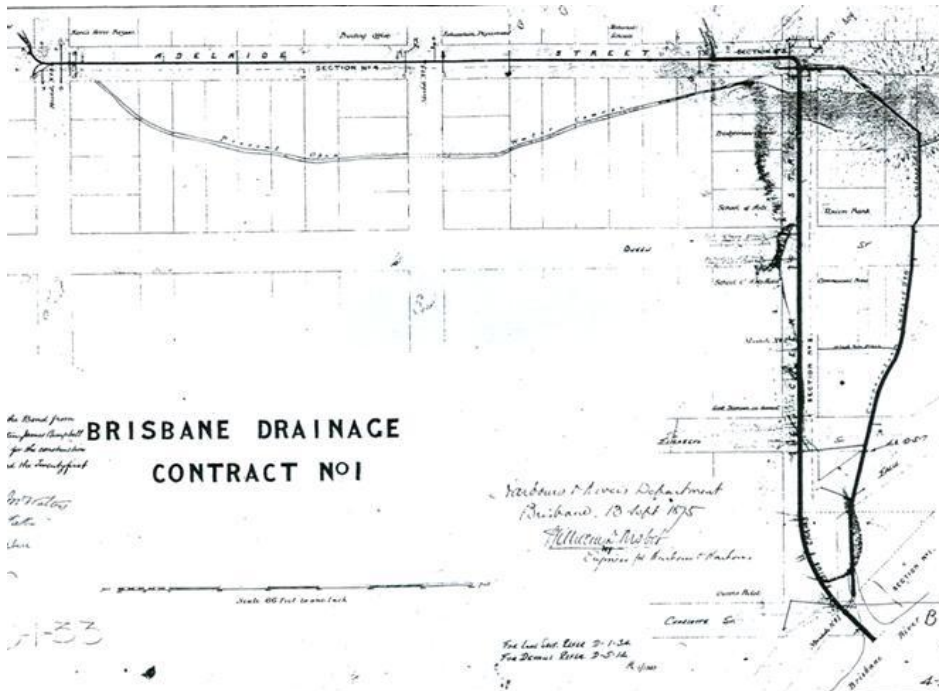


Heritage Citation



Brisbane Drainage Contract No. 1

Key details

Addresses	Beneath Adelaide Street, Brisbane City, Queensland 4000
Type of place	Drainage
Period	Victorian 1860-1890
Key dates	Local Heritage Place Since — 1 January 2009 Date of Citation — January 2008
Construction	Structure: Face brick
People/associations	Thomas M. Walters, Henry Paten, James Campbell and R. Armour (Builder); William David Nisbet, Engineer for Harbours and Rivers (Engineer)
Criterion for listing	(A) Historical; (B) Rarity; (D) Representative; (F) Technical

The Brisbane Municipal Council constructed this underground stormwater drain by contract between 1875 and 1877. It was the first of several integrated drains in a contract program designed for Brisbane after the damaging floods of February 1875. This drain was the first from this plan to be constructed. The drain is laid below Adelaide Street from the intersection with Albert Street, to Creek Street and then below Creek Street with its outlet at the Brisbane River.

History

When the Moreton Bay Penal Settlement moved to Brisbane from Redcliffe in 1824, it occupied the ridgeline (William and George Streets and the south end of Queen Street) beside the Brisbane River. The site was chosen because it was well watered by a number of creeks, lagoons and swamps that drained to the river. The penal settlement was closed in 1839 and the district opened to free settlement in 1842. The waterways that cut through what was to become the Central Business District (CBD) were eventually diverted and channelled into new streets as the settlement expanded. Some were given such names as Creek, Tank and Water Streets. The less-affluent residents of Brisbane built upon low-lying swampy areas, such as Frog's Hollow. Other marshy areas such as York's Hollow were left aside as undrained public land.

Brisbane's unpaved streets became quagmires in heavy rain and the Municipal Council (incorporated 1859) built its first stormwater drain in Albert Street in 1860. The inadequacy of stormwater drains exacerbated the flooding of the town in 1863. The Council constructed the Wheat Culvert (designed by Municipal Surveyor Christopher Porter) at Adelaide and Albert Streets intersection in 1863. These drain constructions, however, were only stopgap measures and most CBD drains at that time were built by private citizens to suit the needs of their own properties. One such drain ran through the Adelaide street property of Robert Armour. Wheat Creek traversed

Armour's property and so he enclosed the creek in a 6ft x 4ft egg-shaped drain. The lack of a coordinated system of stormwater drains exacerbated flooding of the town in 1870, following a series of severe storms.

As a result, the Council drew up plans to properly drain parts of the CBD, but the plans had to be shelved due to lack of funds. Thus prior to 1875, the only other Municipal drainage undertaking was the "Corporation Culvert", that enclosed Big/Wheat Creek from the bridge located at the Adelaide and Creek Streets intersection and then downstream to its outfall close to the Brisbane River. Robert Armour's private drain had been built to match the upstream dimensions of the "Corporation Culvert".

Another series of violent storms and accompanying flooding in February 1875 finally brought the drainage issue to crisis point. Brisbane's main shopping precinct, located in Queen Street, flooded three times and shop basements filled with water and stock was ruined. The situation was made worse by the fact that most of the water poured into the town's centre from the swamp in Tank Street (until 1866, the town's water supply storage), which had become a cesspool due to it being misused as a dump for refuse and animal waste. Such was the unhealthy nature of the waters that flooded Queen Street that City Surveyor Joseph Fowles became sick after constantly touring the floodwaters and he died a few months later. Fowles, who had 13 years of service to Council was used a scapegoat. He was blamed for the poor drainage and so was sacked by the Municipal Council while he absent due to his serious illness.

Following agitation by building owners and Council representatives, the colonial government passed the Brisbane Drainage Act on 13 July 1875. On 21 August 1875, the colonial government's new Engineer of Harbours and Rivers, William David Nisbet, presented a report on a drainage plan for Brisbane. Nisbet's plan was for 10 underground stormwater drainage contracts throughout the town centre. These drains would collect and enclose the natural water flows of the area, discharging all stormwater into the Brisbane River.

Such was the urgency for these stormwater drains that the first contract was put out for tender on 2 September 1875, eleven days before Nisbet had even completed the preparation of the design drawings for the new drains. The contract for the Brisbane Drainage Contract Number 1 was awarded on 20 October 1875 to Thomas M. Walters, Henry Paten, James Campbell and R. Armour. The latter is probably the same man who built a private culvert under his Adelaide Street property.

The witness to the signing of Contract Number 1 was Joseph Stanley who had been co-opted to Nisbet's office, from his own duties as Assistant Draftsman in the Railway Extension Section of the Commissioner for Railways. On 31 October 1876, Stanley was appointed, by the colonial Secretary for Works, as a surveyor in Nisbet's Department of Harbours and rivers. It was Stanley who prepared most of the drawing plans for Nisbet's drainage contracts. In 1879, Stanley was appointed, by the Governor-in-Council, as the Resident Engineer for Brisbane.

The Contract No.1 drain was Brisbane's first relief drain, relieving flow in the "Corporation Culvert" and the open watercourse running through properties between Adelaide and Queen Streets. The brick Contract No. 1 drain was completed in March 1877. This drain was designed as, and remains, the main outfall for what is now Brisbane's CBD, collecting flow from the 1863 Wheat Creek Culvert, the "Corporation Culvert" and from Robert Armour's private drain. It runs under part of Adelaide Street from just south of the intersection with Albert Street down to Creek Street and then under Creek Street to the river.

Tenders were called for a further five of Nisbet's planned stormwater drain designs, with the remaining four proposed contracts never proceeding. These five tenders were awarded during the period March 1876 through to October 1877.

In 2001, the Brisbane Drainage Contract No. 1 was identified as being of heritage significance by the Institution of Engineers Australia (Queensland Division) in its 2001 publication Engineering Heritage Inner Brisbane – A Walk/Drive Tour. In 2002, Brisbane Drainage Contract No. 1 was one of several stormwater drains identified as

having heritage significance by the Brisbane City Council in its City Assets Study. The Adelaide Street segment of this stormwater drain was also investigated recently as part of the planning process for the Inner Northern Busway and the resultant report recommended this drain for heritage listing.

Description

The three design drawings (D-1-33, D-1-34, D-5-1) of 1875 should be included as an essential element of any heritage listing of Brisbane Drainage Contract No. 1.

It is a brick underground stormwater drain laid below Adelaide and Creek Streets and then to the Brisbane River. The length below Adelaide and Creek Streets consists of an egg-shaped cross-section 6ft [1,830mm] x 4ft [1,220mm] is 1,657'-6", laid at a slope of 1 in 42. The length below Creek Street consists of a 9ft [2,740mm] circular cross-section, was 1,184'-6" [362m], laid at a slope of 1 in 252.

Statement of significance

Relevant assessment criteria

This is a place of local heritage significance and meets one or more of the local heritage criteria under the Heritage planning scheme policy of the *Brisbane City Plan 2014*. It is significant because:

Historical

CRITERION A

The place is important in demonstrating the evolution or pattern of the city's or local area's history

as the first of a series of storm water drains built by the Brisbane Municipal Council during the late 1870s to relieve any future flooding in the CBD.

Rarity

CRITERION B

The place demonstrates rare, uncommon or endangered aspects of the city's or local area's cultural heritage

as a large, substantially intact, nineteenth century storm water drain in the CBD.

Representative

CRITERION D

The place is important in demonstrating the principal characteristics of a particular class or classes of cultural places

as a large, brick storm water drain dating from the 1870s.

Technical

CRITERION F

The place is important in demonstrating a high degree of creative or technological achievement at a particular period

as part of a nineteenth century city drainage system.

References

1. Brisbane City Council, Report on Line 28 BCC Stormwater Drain by City Surveyor Christopher Porter, (Brisbane: Brisbane City Council, 2000)
2. Brisbane City Council, Maps – Brisbane Drainage Contract No. 1, Plan No.1, D-1-33
3. Brisbane City Council, Maps – Brisbane Drainage Contract No. 1, Plan No 2 E14, D-1-34
4. Brisbane City Council, Maps – Brisbane Drainage Contract No. 1, Plan No.3 E17, D-5-14
5. Brisbane City Council, “Stone and Brickwork Drainage Conservation Management Study” in *City Assets Study*, (Brisbane: Brisbane City Council, 2002)
6. Brisbane City Council, Camera Investigation of the Culvert at corner of Adelaide and Albert Streets, (Brisbane: Brisbane City Council, date unknown)
7. Institute of Engineers Australia (Queensland Division), *Engineering Heritage Inner Brisbane – A Walk/Drive Tour*, Brisbane, Institute of Engineers Australia (Queensland Division), 2001
8. Oliver, Charles, amendments to draft Heritage Unit citation on Brisbane Drainage Contract No. 1, October 2007
9. Richard E.L., “Early Brisbane Stormwater Drainage to 1887” in *Queensland Division Technical Papers – 17 September 1982*, (Brisbane: Institution of Engineers [Queensland Division], 1982)
10. Richard E.L., “Stormwater Design Standards of the Department of Works and Brisbane City Council” in *Queensland Division Technical Papers – June 1990*, (Brisbane: Institution of Engineers [Queensland

Division], 1990)

11. The Queensland Blue Book, V&P of the Queensland Legislative Assembly, 1876-1879

Copyright Brisbane City Council

Note: This citation has been prepared on the basis of evidence available at the time including an external examination of the building. The statement of significance is a summary of the most culturally important aspects of the property based on the available evidence, and may be re-assessed if further information becomes available. The purpose of this citation is to provide an informed evaluation for heritage registration and information. This does not negate the necessity for a thorough conservation study by a qualified practitioner, before any action is taken which may affect its heritage significance.

Citation prepared by — Brisbane City Council (page revised September 2020)



Dedicated to a better Brisbane