



Heritage Assessment Culvert 1 and Culvert 2

Final | January 2024

Prepared for CVC

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Cover design: Pauline Fowler

Cover image: View to west of the top of culvert 1, Old Grafton Glen Innes Road Chambigne

VERSION HISTORY

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EXECUTIVE SUMMARY

Virtus Heritage Pty Limited (hereafter Virtus Heritage) was engaged by Clarence Valley Council (CVC) to prepare the following Heritage Assessment (HA). This report addresses the two sandstone box culverts, located below the Old Grafton Glen Innes Road at Chambigne. One culvert was initially located by the CVC civic team in August 2022 when a large pothole appeared in the road deck above it. CVC contacted Virtus Heritage regarding a heritage appraisal, and when the site inspection took place, two similar culverts were identified within c.20 metres distance of each other.

Roadworks did take place at that time, however, for future management of the culverts, a heritage assessment report was requested, in line with their listing as local heritage items on Schedule 5 of the CVC LEP 2012. Recommendations were also sought in line with their anticipated heritage significance.

This assessment confirms local heritage significance for both box culverts. The significance relates to the following heritage values – historical, research and representative.

Recommendations

The following recommendations have been made based on the information provided, the research undertaken and the results of the site inspection:

- The local heritage significance supports heritage listing for Clarence Valley Council. A copy of this report needs to be retained by CVC and consulted for works.
- Any proposed changes that are required to maintain the operations of the culverts needs to consider their heritage significance. This means that the existing configuration of the culverts are to be retained.
- The culverts should be retained and repaired, so that they remain operational.
- No replacement of sandstone is to take place.
- Reinforcement of the road deck above the culverts, will need to follow the advice of suitable structural engineers.

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DEFINITIONS

| Abbreviations | Description |
|-------------------|---|
| AA | Archaeological Assessment |
| DA | Development Application |
| DPE | NSW Department of Planning and Environment |
| EP&A Act | Environmental Planning and Assessment Act 1979 |
| HNSW | Heritage NSW |
| LEP | Local Environmental Plan |
| LGA | Local Government Area |
| S.140 | Section 140 excavation permit |
| S.170 | Section 170 government body heritage register |
| SHI | State Heritage Inventory |
| SHR | State Heritage Register |
| SoHI | Statement of Heritage Impact |
| SSD | State Significant Development |
| SSI | State Significant Infrastructure |
| The Burra Charter | The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, 2013 (Australia ICOMOS 2013) |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |

1. INTRODUCTION

Virtus Heritage Pty Limited (hereafter 'Virtus Heritage') was engaged by Clarence Valley Council (CVC) CVC to prepare this Heritage Assessment (HA) for two culverts located below the Old Grafton Road at Chambigne in the Clarence Valley LGA southwest of Grafton. The purpose of this HA is to provide CVC with heritage significance and heritage management advice for managing the culverts as they are part of the local road network managed by CVC.

1.1 Background

In August 2022, the culverts were initially spotted during inspection of a large pothole in the road surface. Due to their sandstone construction and visible timbers below the road, a heritage inspection was completed by CVC, who identified the need for specific heritage recommendations for any future works and in relation to the earth / spoil which had fallen through after the road works above it. The spoil was removed carefully by CVC to protect and avoid damage to the structure, and a staff induction was carried out to ensure that the structure is protected from impacts of heavy machinery (D. Wray, email to author, 5 September 2022). After this was completed, CVC sought to include the culvert/s as local heritage item/s on the Clarence Valley Council Local Environmental Plan, similarly to culverts encountered on other NSW historic roads. To enable this listing, in August 2023, Virtus Heritage Pty Ltd were engaged to complete this assessment.

1.2 Project Team and Qualifications

Gina Scheer, (B.A. Hons Archaeology and M. Heritage Conservation, University of Sydney, Principal Archaeologist and Built Heritage Specialist, Virtus Heritage) has prepared this report. Dr Mary-Jean Sutton, (Principal Archaeologist, Virtus Heritage, PhD Archaeology, University of Queensland; B.A. Hons Archaeology, University of Sydney) conducted peer review. Project information and description of works was provided by Deborah Wray, Senior Strategic Planner at CVC .

1.3 Limitations

This report is limited to assessing the non-Aboriginal heritage significance of the two culverts observed during the site inspection of August 2022. There is limited information regarding these specific culverts and therefore assessment is made on a comparable basis and on information regarding the Old Grafton Road construction.

1.4 Acknowledgements

We would like to acknowledge the assistance of the following individuals for the completion of this report:

- Deborah Wray, Senior Strategic Planner, Clarence Valley Council for information; and
- Pauline Fowler, Senior Archaeologist, Virtus Heritage Pty Ltd for LiDAR imagery

2. SITE LOCATION AND DESCRIPTION

The site inspection was carried out by Pauline Fowler and Gina Scheer of Virtus Heritage Pty Ltd on 20 August 2022.

The following information was provided by CVC in relation to a culvert on the Old Grafton – Glenn Innes Road to inform the site inspection. In August 2022, CVC civic services had noted the following in relation to the first culvert and its description:

“Civil Services received a report last Friday of a large pothole on Old Glen Innes Road at Chambigne. Council staff inspected and found the pothole to be located over a box culvert. The pothole failure had failed such that the gravel pavement had started to collapse into the box culvert. The box culvert was inspected and photos were taken. The walls of the culvert appear to be constructed of sandstone blocks with lengths of timber spanning the walls with gravel pavement constructed above the timber spans. Civil Services has conducted reactive maintenance works to make the pavement failure safe and we have also reduced the sign posted speed limit, but we need to conduct more permanent repairs. As we discussed, I request that Deborah Wray conduct a site inspection with Civil Services staff to determine if any heritage matters need consideration in the planning of this work. Obviously, we are keen to progress this work as soon as possible.” (Rick Johnson, Rick.Johnson@clarence.nsw.gov.au, Tuesday, 16 August 2022 11:12 AM)

Old Glen Innes Rd
[Culvert - 3295]
21104770

Short Description
Old Glen Innes Rd

Operating Status
In Use



View through the culvert from east.

Details

Old Glen Innes Rd, Chambigne [Culvert (Clvert), 4433, 1200x900 mm box, 1 cell(s), (CS) (Trnsprt) (FIN:SW)]

Virtus Heritage identified two box culverts during the August 2022 site inspection, as noted on the following aerial photograph, and described in the following section.



**VIRTUS
HERITAGE**

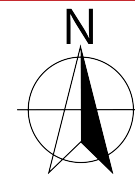
375 CVC Old Grafton–Glen Innes Road Sandstone Culverts Grafton, NSW

Figure 1: Location of Culverts

Author: Shaun Sewell
Date: 14/11/2023
Scale: 1:1500 @ A4
Datum: GDA94 / MGA zone 56
Source: NSW Spatial Services

Legend

- Culverts
- Roads
- - - Watercourses
- Contour 10m
- Towns and Cities



Maps and figures contained within this document may be based on third party data, may not be to scale and are intended for use as a guide only. Virtus Heritage does not warrant the accuracy of such maps or figures.

2.1 Site Inspection

There were two sandstone box culverts identified during the site inspection on 20 August 2022, although only one had been reported by the CVC civil services team during their roadworks inspection. The culverts are not visible from the road decking along Old Grafton Road at Chambigne, as can be seen in the photograph at Figure 2. Following the site inspection, Deborah Wray, CVC Strategic Planner also viewed the culvert (the first culvert) and provided advice to the road crew at that time for the immediate roadworks. The photograph at Figure 3 shows the northern side location of the first culvert observed. Additional photographs are included on the following pages.



Figure 2: View to east on the Old Grafton Road at the culverts location, Chambigne locality.



Figure 3: View to northeast of the first culvert location, refer to arrow.

2.1.1. Culvert # 1

The following photographs show Culvert # 1 then Culvert # 2. All photographs were taken from the northern side of the road as this was accessible on foot. On the southern side of the road, there was a steeper drop-off and access was not made.

Culvert # 1 was located slightly lower in the valley than Culvert #2. It had five courses of stone on each side (the wing walls) of the drain. The culvert's arrangement was a rectangular shape, with a flat base also composed of sandstone flat blocks and two wing walls of sandstone blocks. The lintel appeared to be a large block of concrete and no roof timbers were visible externally. The timbers forming the roof of the culvert were partially visible internally. Some of these timber planks appeared termite damaged, refer to the photographs in this section.

The culvert drain appeared clear throughout, and the pipe visible at the far southern end must have been partially cleared by the CVC road crew prior to Virtus Heritage inspection. However, it was hard to see past the spoil / earth pile, and therefore the material of the pipe is not identified herein.



Figure 4: LiDAR captured image of the culvert with measurements (P. Fowler), compare with Figure 5 overleaf.



Figure 5: Photograph of Culvert #1, northern end.



Figure 6: View into Culvert #1 at the northern end, showing courses of sandstone forming the wing walls and a flat base of sandstone 'pavers'.



Figure 7: Culvert #1 is blocked at the southern end by soil. Note the collapsing timber roof at that end (the termite damage?). The timber roof visible here and below appears to be hardwood planks, but with no visible thickness.



Figure 8: View through Culvert #1 showing mounded debris in front of what appears as a round opening, for a drainage pipe, at the southern end.



Figure 9: View along the roof of Culvert #1 shows timbers at the northern end and continuing to the southern end, above the round opening.

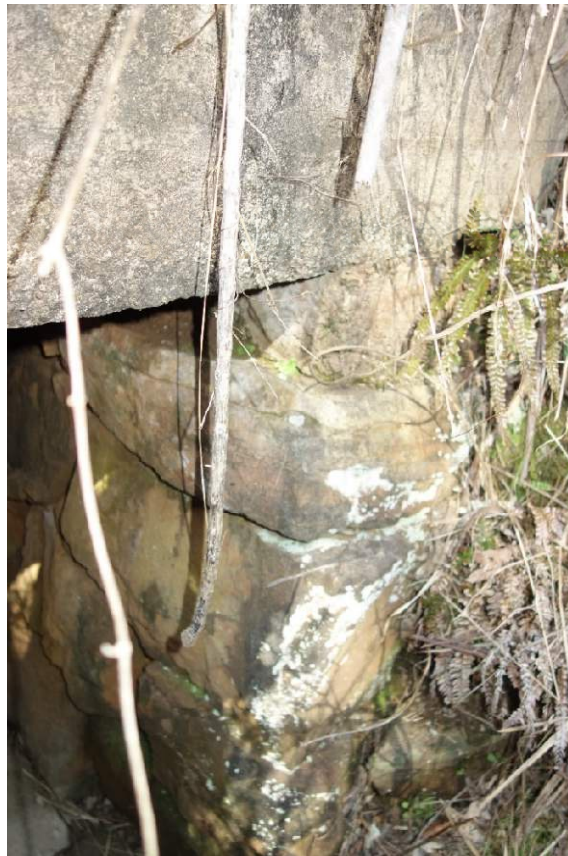


Figure 10: View to the northwestern wing wall, the courses of sandstone with some moss or fungus below the concrete lintel/roof to the box culvert.



Figure 11: View to the timber planks (no thickness observed) forming the culvert roof and above the northwestern sandstone wing wall.



Figure 12: View to the northeastern sandstone wall, showing the concrete slab edge adjacent to and overlapping the timber plank roofing.

2.1.2. Culvert # 2

Located further south under the old Grafton Glen Innes Road approximately 15 to 20 metres, (mapping was not undertaken with no working equipment) distance from Culvert # 1 was another culvert which appeared very similar. At first this was thought to be the historical culvert previously identified by CVC, however, the coordinates provided had led Virtus Heritage to Culvert # 1. The decision was made to record this culvert due to the similarity with Culvert #1.

This box culvert was three courses of sandstone blocks high internally on the eastern side wing wall and four courses – one comprising flat stones – on the western side wing wall. Internally, these sandstone courses appeared in good and sound condition. Externally, they were covered by vegetation and what appeared to be a concrete slab forming a lintel at the visible northern edge.



Figure 13: : View into the culvert on the northern side, showing the mossy, flat sandstone base.



Figure 14: View to the NE top corner and lintel outside Culvert #2. Note the slab of concrete and sandstone blocks above (headwall) it measure c.1.5m thick.



Figure 15: view along the interior of Culvert #2 from north to south. Note the flat edged wing walls, concrete roof and flat sandstone base. Visible at the end is the fallen timber post, seen in the CVC photograph.



Figure 16: Another view through Culvert #1, showing the sandstone walls and base, concrete roof and at least one piece of dislodged timber at the southern end.



Figure 17: View to the northwestern wingwall and roof, three sections of concrete slab roofing are visible, and the culvert / drain is clear.

In summary, Culverts #1 and #2 appear to be similar in construction type and use of sandstone, timber and concrete. Both are box culverts, roughly square in shape. The sandstone headwalls and wing walls appear to represent original form and fabric, and are aesthetically pleasing, utilising local materials. Both culverts are capped along the visible western end by a concrete lintel. As can be seen for Culvert #2, this concrete lintel edges timber planks, which may be original or at the least are early timber road and culvert construction methods. The use of timber planks as well as the sandstone reflects the availability of both materials during the period of road construction.

3. HISTORICAL SUMMARY

One of the largest works of its kind undertaken by the Department of Public Works was the formation of the road from Grafton, then an important shipping port on the Clarence River, to Glen Innes. It was commenced about 1863 and the difficulty (as with most of these roads running inland from coastal districts) was the heavy cutting work entailed in crossing the Great Dividing Range (DMR, 1976: 49). Old Glen Innes Road was the main access road from Grafton to the New England tablelands and the gold fields of Dalmorton until the Gwydir Highway was completed in 1960.

Access to the New England Region from the Pacific Coast was originally rather difficult. In the 1830s for example, Grafton had already been established as a cedar getting port and was the main port servicing the grazing lands of the interior. In the 1840s, New England Pastoralists desired a route to the coast for their wool to be sent to market. Initial tracks or 'roads' often followed the Aboriginal pathways. One of those early routes followed Cunglebung Creek to the north of Dalmorton; and another followed the ridgeline above Little River. The Little River Valley was a much better gradient for a road for vehicles, but it did require significant construction work. After several alternatives were raised, the Commissioner and Engineer for Roads in New South Wales visited the district and decided in favour of the Little River route. It was upgraded to the status of a government road in 1865 and reported as open and '*... used by a large proportion of the traffic*' in 1870. The initial construction of the route along the river from Buccarumbi through Dalmorton to Newtown Boyd is unclear. An earlier route north of the Little River Valley through Copmanhurst was in use by 1851. In 1866 the tender for construction of the road over the 'Big Hill' was granted to H P Wiseman and David Houison was appointed as the Chief Engineer (Cosmos Archaeology, 2018).

The *Clarence and Richmond Examiner* reported favourably on the road construction and also on the difficulties of working the numerous cuttings and a tunnel of '*... 66 yards (60.35m) long through the mountain*'. This tunnel has since become widely and incorrectly known in the district as the Convict Tunnel, based on its primitive construction rather than any historical evidence. Contractors blasted and hand cut this tunnel in 1866–67, but the road between Glen Innes and Grafton did not fully open until 1873 (Cosmos Archaeology, 2018).

A stagecoach service operated by Cobb and Co., ran between Grafton and Glen Innes along this route. The journey originally took three days with stopovers at Buccarumbi and Newton Boyd. By the turn of the century, there were two hostels at the Buccarumbi location, one on either side of the Nymboida River to cater for travellers when the river could not be crossed. In the early 1900's, this route was also used by bullock teams hauling timber through to the wharves at South Grafton, and the road was used for transporting wool from the highlands to the wharves on the Clarence River (Cosmos Archaeology, 2018).

There were two notable bridges along the route (refer to Figure 18 and Figure 19) as well as the tunnel at Dalmorton. At Buccarumbi, a high-level bridge was completed in 1875 after

seven years of building. The bridge with its huge cylinders was 754 feet (230m) long and 45 feet (13.7m) high. However, it collapsed in a March 1946 flood, when the Nymboida River rose to a record height of 52 feet (16m) (Cosmos Archaeology, 2018). Today there are remains of the old bridge pillars visible in the river waters and on the southern bank.

The second historical bridge was the Bawden Bridge (named after Thomas Bawden the local Parliamentary Member), constructed over the Orara River in 1874. It is one of the oldest lattice truss design bridges in NSW, 77 metres long with timber beam approaches (Cosmos Archaeology, 2018). It is a decorative structure which can only be appreciated from below the road surface. Crossing a deep gorge, it is supported by three tall piers made from pairs of tubes fabricated from curved and shaped wrought iron plates riveted together, and with cross ties shaped to form a vertical set of elliptical holes. At one stage there was a hotel (The Urara Hotel) sited adjacent to the bridge crossing and operated by a Mr Thomas Aish (*Clarence and Richmond Examiner and New England Advertiser* Saturday 2 October 1880).



Figure 18: Buccarumbi Bridge, Grafton Glen Innes Road c.1900-1910 – prior to collapse. (State Library of NSW ML PXE 711 / 618)



Figure 19: Bawden Bridge over Orara River (Gina Scheer April 2018).

A traveller's report from February 1873 describes travelling via horse from South Grafton to Buccarumbi on what he called the Little River Road via the gold claims / gold lines south and west of Chambigne. He noted the bridge across the Nymboida at Buccarumbi but had no mention of general road conditions:

"From Chambigne I made across to the Little River Road and after doing a few stiff hills, and pushing through scrub, I reached the main line, within one mile of Small's Inn, at Buccarumbi. I found the bridge across the Nymboida progressing very slowly and the punt quite inadequate to the traffic requirements of the road" (The Herald's special reporter, 1873: 5)

In August 1888, a traveller reported that the eastern part of the road from Grafton was so much better than that portion from Newton Boyd to Glen Innes (Clarence and Richmond Examiner, 1898: 3) In December 1921, road conditions were reported by a traveller who took four passengers in an (unidentified) demonstrator model car from Grafton to the Glen Innes railway station, a distance of 110 miles driven in five hours. The report stated that:

"Mr. C. M. Carder, manager of the White Car Company reports that the portions of the South Grafton-Glen Innes Road within the Nymboida Shire are in excellent condition, that within Severn Shire very bad.The Big Hill, which means a rise of 2500 feet in seven miles, is, he continues, very washed out in places. No repairs have been effected on it since the flood. Concrete sub-ways were put in, but insufficient cement was used, and the bottoms are worn away already. From the top of the Hill to Glen Innes the surface is good." (Grafton Argus and Clarence River General Advertiser, 1921: 3).

A 1927 parish map shows the alignment of the road through Chambigne, refer to Figure 20 and compare this with the current map of the road, refer to Figure 21. It is defined here as a 'T.S.R.' (Travelling Stock Reserve) and a road 500 links wide. The date of notification for the road in this location is 25 November 1927. It is interesting that two earlier parish maps, 1903 and 1918 do not show the road at all.



Figure 20: 1926 Parish Name: Chambigne, Sheet reference: 1, Edition number: 4 (NSW Lands and Registry Services, Historical Lands Record Viewer, accessed at <https://hlrv.nswlrs.com.au/>)

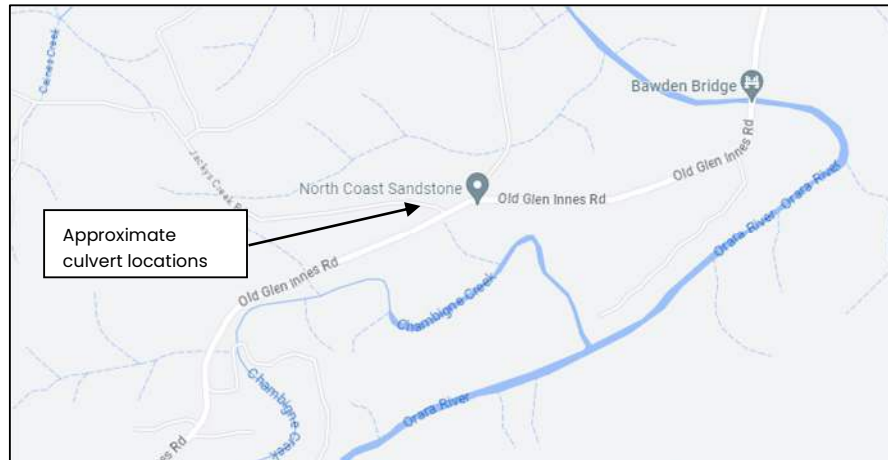


Figure 21: The current alignment of the road (Google maps, accessed at <https://www.google.com/maps/place/Jackys+Creek+Rd,+Chambagne+NSW+2460/>)

The full alignment of the Old Grafton Glen Innes Road runs from the Gwydir Highway intersection near Bald Knob at Glen Innes and ends at Waterview Heights at South Grafton refer to, Figure 22:



Figure 22: The extent of the Old Grafton Glen Innes Road, shown in yellow on this map (Map of old Glen Innes Grafton Road, NSW, Bonzle.com accessed at <http://www.bonzle.com/c/a?a=p&p=172689&cmd=sp>)

3.1 Culverts

No mention is made in the historical records regarding the numbers of culverts or their construction as part of the Old Grafton – Glen Innes Road. The road was constructed between 1865 and 1873, and the Grafton end appears to be part of the later works, as the tender for construction of the road over the ‘Big Hill’ was granted in 1866. As no construction information was sourced and CVC confirmed there is no maintenance information regarding the culverts, the following general information is provided for historical roads and culverts in NSW.

Culverts and drainage were a part of the historic road system throughout NSW. In March 1865, the Chief Engineer for the Roads and Bridges Branch of the Department of Public Works submitted a report on the state of the Roads in the Colony of New South Wales to Parliament (Department of Main Roads (DMR), 1976). In the report, one of his aims was “...the final determination of the direction of the roads and the clearing of some, followed by drainage and culverting where most required” (DMR, 1976: 45). During this period culverts were made with decks of square logs, eight to nine inches in thickness. As these culverts were generally wider than the adjacent roads, post and rail fences could be dispensed with (DMR, 1976: 47). The Department of Public Works constructed culverts up to a 15 feet (4.57m) span and classified them in the following way:

- Iron Decked;
- Stone, Brick, or Concrete;
- Timber; and,
- Pipe (Cosmos Archaeology, 2011: 16).

At the end of 1893, the number of culverts in New South Wales was 27,010 with a total length of 78 miles. Six years later the number of culverts in the colony had increased to 36,158, their total length being 101 miles. Of the 36,158 culverts, 1,012 were constructed of stone, brick or concrete, 22,978 of timber and 12,168 were pipe (Cosmos Archaeology, 2011: 16). It was not stated what material was used in the construction of the pipes.

In 1905, the culvert classifications in the Annual Statement for the Department of Public Works had more detail:

- Stone, brick, or concrete arched;
- Stone, brick, or concrete walls, with iron or timber deck; **(this fits the description of the two culverts assessed in this report)**
- Timber, all classes;
- Monier Pipe; and,
- Stoneware Pipe.

In 1905, there were 27 Monier Pipe culverts in NSW and 12,977 Stoneware pipe culverts (Cosmos Archaeology, 2011: 16). In 1906, the Department of Public works stopped giving reports on culverts, as the road responsibility shifted to the local governments of the municipalities.

There has been mention of either brick or sandstone culverts for all of the historic roads in NSW, including the Great North Road and the Old Windsor Road. For the Great North Road which was constructed using convict labour during the 1820s and 1830s, a 1999 Conservation Management Plan noted that the culverts observed were of the same type as the subject culverts in this assessment:

“The most common surviving type of culvert is the stone box culvert, in which the lintel, four sides and the outlet are built of stone blocks and slabs and natural stone where it occurred.

The earlier and more primitive examples are composed of roughly hewn rectangular stones and are usually relatively small, while the culverts from the impressive sections built under (Engineer) Simpson's and (Surveyor) Finch's supervision are larger and much more elaborate, some with handsome curved lintels, races and spillways” (Lavelle & Karskens, 1999: 12).

A review of a number of previous reports assessing culverts, and research of the State Heritage Inventory has provided relevant information to allow a comparison to be made with the two culverts located.

3.2 Comparison

A search of the NSW heritage inventory database reveals that there are 59 culverts listed as local heritage items for Local Councils and for Transport for NSW across the State. The full list of the heritage listed culverts is attached with this report, refer to **Appendix A**.

Of the items noted on that list, there are only eleven described as stone or sandstone culverts and not all of these have completed inventory sheets. The information available on the listings does not include description or structural information, with the exception of the following, which relates to one of two sandstone culverts located on the Old Windsor Road. This assessment was made in 2015 and photographs are included overleaf:

"It is likely that the culvert in this section of Old Windsor Road was present by the time the Government Stock Yard was installed on the north side of Meurants Lane in 1800 (Casey & Lowe 1993b: 4) although it may have been constructed as part of the 1797 programme of road upgrades undertaken by the residents in the region. An earlier bridge was located 0.25km north of the culvert as shown on the Survey plan of 1885, but has since been demolished, leaving no trace (Casey & Lowe 1993b: 17). Very old sandstone culvert on both sides of a disused portion of the Old Windsor Road. Constructed of sparrow-pecked, hammer-dressed sandstone. The mouth of the culvert on the eastern side (upstream) of the road has collapsed to three courses from the top. A clay pipe runs under the base of the road at ground level. It was recorded as having four courses visible in 1993 (Casey & Lowe). The west side of the culvert is ... Seven courses visible although the first course is almost obscured by silt. It appears as though the lintel has moved across to south on the western side" (NSW State Heritage Inventory, Sandstone Culvert, approx. 200m south of Meurants Lane, accessed at [HMS - View Item \(nsw.gov.au\)](https://www.nsw.gov.au/heritage/pwh/Details.aspx?cid=10170)).

Sandstone Culvert, approx 200m south of Meurants Lane

f t p e

I WANT TO ▾

All Addresses ▾

Significance ▾


Owner(s) ▾

Description ▾

Listings ▾

History ▾

Report/Study ▾



Quick View

Listing Type: s.170

Primary Address:
 Old Windsor Road GLENWOOD NSW 2768

Local Govt. Area: Blacktown

Figure 23: Photograph showing seven courses of sandstone, mortared accompanying the SHI listing for the Sandstone Culvert, approx 200m south of Meurants Lane

Another sandstone culvert (with no information contained on its listing and no dates) is located at Forbes in NSW. It is included as a comparison of a more engineered item, than the subject culverts. The heritage inventory listing contains the following photographs taken in 1993, which show a culvert more like a bridge than a drain, refer to Figure 24 and Figure 25:

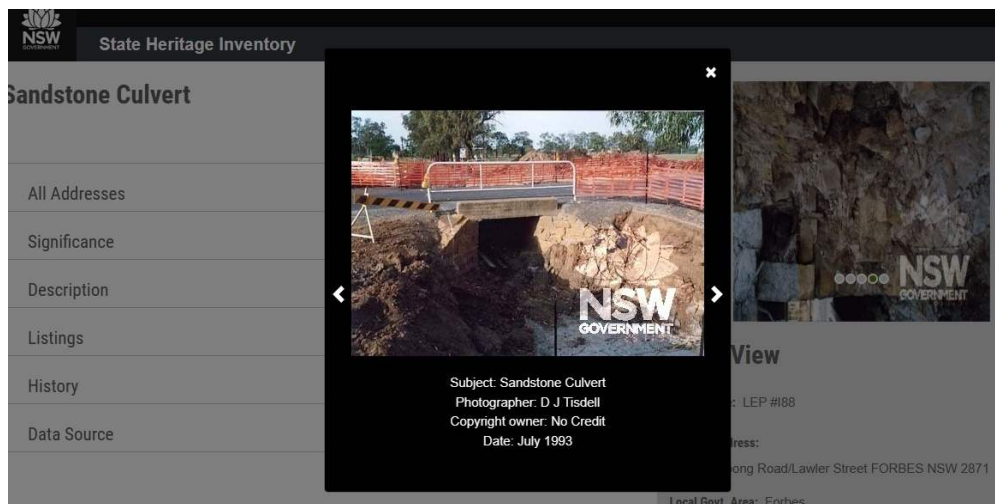


Figure 24: As noted in the above caption, this photograph was taken by D. J. Tisdell, in July 1993 and included in the SHI form for Sandstone culvert.

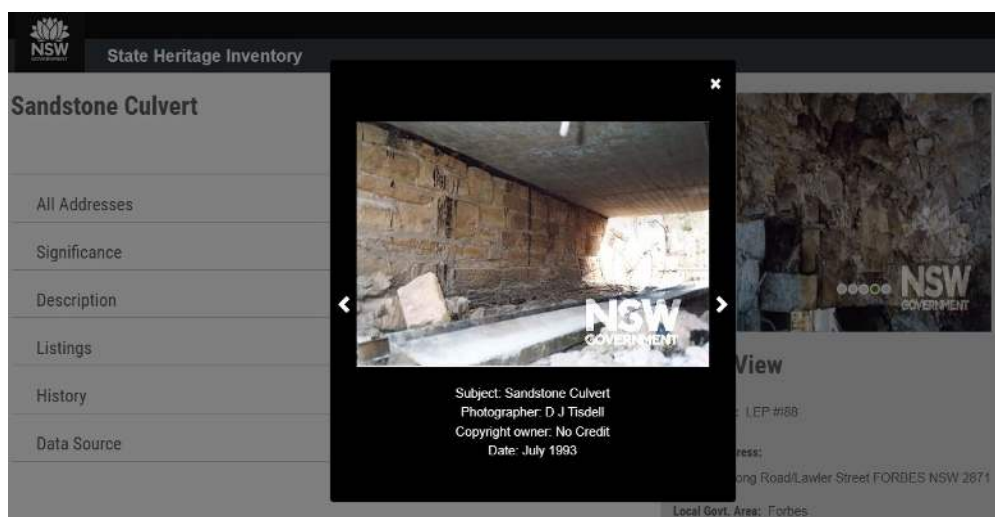


Figure 25: An internal view of the culvert, photograph taken by D. J. Tisdell in July 1993 and included with the SHI form.

In summary, the pair of sandstone culverts constructed as part of the Old Glen Innes Grafton Road are not an unusual item, but they appear to be representative of the type of box culvert constructed throughout the NSW road system during the 19th and 20th centuries.

4. ASSESSMENT OF HERITAGE VALUES AND STATEMENT OF SIGNIFICANCE

4.1 Introduction

Accurate assessment of the cultural significance of sites, places and items is an essential component of the NSW heritage assessment and planning process. A clear determination of a site's significance allows informed planning decisions to be made for a place, in addition to ensuring that heritage values are maintained, enhanced, or at least minimally affected by development. Assessments of significance are made by applying standard evaluation criteria.

In New South Wales, two levels of significance exist in the heritage management system: Local and State. State heritage significance applies in relation to a place, building, work, relic, moveable object or precinct. It means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. Local heritage significance applies in relation to a place, building, work, relic, moveable object or precinct. It means significance to a local area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

The *NSW Heritage Act* is the relevant legislation for historical heritage and archaeology. The *Act* notes that if an item is primarily of State heritage significance, it can also be of local heritage significance; an item that is primarily of local heritage significance, however, may not necessarily be of State heritage significance (NSW Heritage Branch, 2009: 7).

The *Burra Charter: Australia ICOMOS Charter for Place of Cultural Significance* is the widely accepted reference document for heritage conservation standards in Australia. The Charter sets a standard of practice for those who provide advice, make decisions about or undertake works to places of cultural significance, including owners, managers and custodians. It contains a set of thirty-four principles, defined as Articles, which can be directly applied for management of heritage items, or places. The definition of 'place' used throughout the *Burra Charter* means *site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views* (Definitions, The Burra Charter: Australia ICOMOS Charter for Places of Cultural Significance 1999, Article 1).

The Burra Charter notes that cultural significance of a place is embodied in its physical fabric, settings, contents, use, associated documents and its meaning to people through their use and associations with the place. Cultural significance and issues affecting future use of a place are best understood – and managed – by a methodical process of collecting and analysing information prior to making decisions. To assist with this, NSW Heritage have guidelines for assessing significance for a place / item based on the following seven assessment criteria, refer to the tables overleaf.

Table 1 – Significance Assessment Criteria (Heritage NSW: 2001)

| Heritage Criteria | Significance description |
|--|---|
| Criteria A; historical | An item is important in the course or pattern of NSW's cultural or natural history (or the cultural or natural history of the local area) |
| Criteria B; associational | An item has strong or special associations with the life or works of a person, or group of persons, of importance in NSW' cultural or natural history (or the cultural or natural history of the local area); |
| Criteria C; aesthetic, creative or technical | An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area); |
| Criteria D; social values | An item has strong or special associations with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons |
| Criteria E; scientific or archaeological value | An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area) |
| Criteria F; rarity value | An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area) |
| Criteria G; representative value | An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural and natural environments |

The subject of this Heritage Assessment is assessed as per these guidelines, see **Table 2**. Management of the heritage significance of the place is included in this report, see **Section 7**.

Table 2 – Significance Assessment of the culverts at Chambigne on Old Grafton Glen Innes Road

| Criteria | Significance assessment |
|---|--|
| SHR Criteria a) - [Historical significance] | <p>The sandstone box culverts as part of the c.1860s Old Grafton Glen Innes Road are historically important to the area. The culverts have historical significance due to their links to the road, rather than as standalone historical items, as they are utility structures to cope with drainage on the slopes of the road in this location, using local materials and in a standard and simple design. Their specific details have not been documented in the research undertaken for this study and therefore they are dated as part of the road itself. This proves difficult with historical sources noting the road was constructed during the 1860s and 1870s. Later additions to ensure the culverts remain roadworthy have not been documented by CVC.</p> <p>These two sandstone box culverts contribute to the history of the road and can provide further information on the construction dates of the road. They meet local heritage significance for their historical values.</p> |
| SHR Criteria b) - [Associative significance] | <p>The sandstone culverts will have links to the road builders and engineers of the late 19th or early 20th century who constructed the road and its culverts. However, they will not have a strong or special association as they are standard items of road construction.</p> |
| SHR Criteria c) - [Aesthetic significance] | <p>The sandstone culverts do not demonstrate important aesthetic characteristics and/or a high degree of creative or technical achievement. These culverts are a basic shape and design, well-constructed for their purpose and using local materials such as the sandstone blocks and stones and thick, hardwood timbers.</p> |

| Criteria | Significance assessment |
|--|---|
| | <p>While they have a historical appearance and some aesthetic values in this bushland setting, there are more elaborate and better designed culverts listed as local heritage items across the State.</p> <p>They are not considered to have significance for this criterion.</p> |
| SHR Criteria d) - [Social significance] | <p>There is no social significance identified for these sandstone box culverts.</p> |
| SHR Criteria e) - [Research potential] | <p>There is research potential to confirm the construction date of these sandstone box culverts, and also to establish, if this can be achieved, if all of the culverts along the Old Glen Innes Grafton Road are of the same box culvert type. Such a study would be of benefit to CVC and ensure that management of the items is comprehensive.</p> <p>Further research to establish the construction details and use of timber (which would apply more to road construction than to culvert construction) is also advised.</p> <p>Therefore, the subject box culverts meet the criteria for research potential at the local level for the Clarence Valley</p> |
| SHR Criteria f) - [Rarity] | <p>The sandstone box culverts have not been identified as rare items, as they are not in danger of removal. However, as historical elements, they will need to be retained and conserved and repaired where required. The exact number of such culverts for roads across the State is not certain, however, historical information dating to c.1899 show that there were 36,158 culverts constructed on Department of Public Works roads. Currently, there a total of 59 culverts which are listed as local heritage items on the NSW SHI.</p> <p>Therefore, they are <i>not considered</i> to have significance for this criterion.</p> |
| SHR Criteria g) - [Representative] | <p>The sandstone box culverts demonstrate the principal characteristics of this type of culvert, and are representative of such structures associated with roads and drainage across New South Wales. This type of culvert dates from the early 19th to the early 20th centuries. This type of culvert was used in the convict built c.1820s Great North Road heading north from Sydney and in fact the sandstone culverts were constructed on many roads, as referenced in the 1976 NSW Department of Main Roads history.</p> <p>The two box culverts meet local heritage significance for this criterion.</p> |

4.2 Integrity/Condition

The integrity / condition of a potential heritage item needs to be included in the heritage assessment, as well as the heritage criteria addressed above. As the NSW heritage guidelines state "The rarity of individual site types is an important factor, which should inform management decisions. The evaluation of knowledge from documents, maps and plans; how to assess the degree of disturbance and whether the value of the site for research will have been impaired as well as how to evaluate the site in comparison with

other similar sites assists in provision of best heritage management” (Heritage NSW, 2009: 12). The rarity of the sandstone culverts was not identified above, refer to the significance criterion (f).

The condition of both culverts can be summarised as follows:

- They are both predominantly sandstone structures of a basic type referred to as a box culvert.
- The road report referred to the road above sinking into the top of the culvert #1 via a pothole, and that this had obviously caused damage to the roof of the culvert. Apart from this problem, the condition of both culverts in relation to the sandstone blocks and concrete roof/lintel appears to be sound.
- Both of the culverts have a partial timber deck /roof visible, supporting the road above. Some of the timbers appear in reasonable condition, others appear to be termite affected. Culvert #1 has fallen timbers at its southern end.
- Each culvert roof has been replaced in part with a concrete slab which is visible from the northern side and forms part of the headwall (above the timber opening). The timber planks were visible in detail in Culvert #2 and while identification of the timbers was not possible, based on the viewing, hardwood local timber possibly Tallow wood would have been used.

4.3 Statement of Heritage Significance

The two sandstone box culverts meet local heritage significance for their history, research and representative values. The sandstone box culverts as part of the historical, c.1860s Old Grafton Glen Innes Road are historically important to the area as part of the initial road from the country to the coast. The culverts have research potential as more information is needed to confirm their construction date, and also to establish, via a study, if all of the culverts along the Old Glen Innes Grafton Road are of the same box culvert type. The sandstone box culverts are representative of such structures associated with roads and drainage across New South Wales, dating from the early 19th and early 20th centuries. As historical elements, they will need to be retained and conserved and repaired sympathetically (not replaced) where required.

5. HERITAGE STATUTORY REGULATIONS

5.1 STATUTORY REGULATIONS AND REQUIREMENTS

The NSW Heritage Act 1977 is the principal document governing the management of heritage items (relics and places containing relics) in NSW. Environmental heritage is broadly defined under Section 4 of The Act as comprising those places, buildings, works, relics, moveable objects, and precincts, identified as being of State or local heritage significance. Significance is based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. Items of identified heritage at a level of State significance are listed on the NSW State Heritage Register (and included on the State Heritage Inventory – see below) and are afforded automatic protection against any activities that may damage an item or affect its heritage significance under the Act.

Protection for heritage items listed on statutory registers in NSW is provided by the *NSW Heritage Act 1977* (amended 1998) and the *Environmental Planning and Assessment Act 1979*. Heritage listings are made on either statutory or non-statutory registers. Non-statutory registers include listings of items or places which have heritage significance, but these registers (such as the National Trust) do not provide legal protection for the items listed.

Other planning instruments that may include statutory listings for heritage items in NSW include Local Environmental Plans (LEP's), which are prepared in accordance with the requirements of the *NSW Environmental Planning and Assessment Act, 1979*. They are designed to integrate heritage management and conservation into the planning and development control process to ensure that development does not affect the significance of heritage items or conservation areas. Protection for heritage items listed on statutory registers in NSW is legislated within the *NSW Heritage Act 1977* (amended 1998) and the *Environmental Planning and Assessment Act 1979*.

Aboriginal places or objects that are recognised as having high cultural value (potentially of State significance) can be listed on the State Heritage Register and therefore are protected under the provisions of the *Heritage Act*. Aboriginal cultural heritage objects and sites are protected under the *NSW NPWS Act 1974*. Within the State, Heritage NSW are the approval body in conjunction with Aboriginal communities.

The NSW Heritage Act 1977 is the primary piece of State legislation affording protection to all items of environmental heritage (natural and cultural) in NSW. Under the Act, "items of environmental heritage" include places, buildings, works, relics, moveable objects and precincts.

The State Heritage Inventory (SHI) is a heritage database administered by NSW Heritage at the Department of Primary Industry and Environment. This database includes heritage listings from local and regional planning instruments, community-based heritage studies, State owned or managed heritage items as well as the State significant heritage items referred to above. This database was searched in relation to historical heritage items

located within the immediate area of culverts, and the results were the same as those shown below for the Clarence Valley Council LEP listings.

The entire *NSW Heritage Act 1977* protects heritage, but historical archaeological remains are additionally protected from being moved or excavated through the operation of the 'relics' provisions. Division 9 (s139) of the Act specifically deals with the protection of relics. It protects unidentified 'relics' which may form part of the State's environmental heritage, but which have not been listed on the State Heritage Register or protected by an Interim Heritage Order. In 2009, amendments were made to the Heritage Act for the definition of an archaeological 'relic'. "A relic is now an archaeological deposit, resource or feature that has heritage significance at a local or State level. An archaeological site is an area which contains one or more archaeological relics" (NSW Heritage Branch, 2009).

The subject culverts are not considered to be a relic under the Act but fall under the definition of a 'work'. A work is defined as an engineering structure, such as a building, bridge, road, culvert, train tracks, or similar items. As such, there is no requirement for a permit to undertake activities affecting the 'work' once a statement of heritage impact is prepared. In addition, under s136 of the Act, the Minister or Chairperson of the Heritage Council may order that work being carried out that would harm a 'work' not subject to an interim heritage order or listed on the State Heritage Register, be ceased.

5.1.1. Environmental Planning and Assessment Act 1979

The NSW Department of Planning and Environment (DPE) currently administers the *EPA Act*, which provides for environmental planning instruments to be made to legislate and guide the process of development and land use. Local heritage items, including known archaeological items, identified Aboriginal Places and heritage conservation areas are protected through listings on Local Environmental Plans (LEPs) or Regional Environmental Plans (REPs). The Act also requires that potential Aboriginal and historical archaeological resources are adequately assessed and considered as part of the development process, in accordance with the requirements of the NPW Act and the Heritage Act.

The relevant LEP is the Clarence Valley Council LEP 2013. Schedule 5, Items of Environmental Heritage was searched to identify heritage items listed on this planning instrument within the vicinity of the subject site and, as can be seen, there are two items listed at Chambigne for the Old Grafton Glen Innes Road:

| | | | | |
|----------------------------------|---|-------------------|-------|------|
| Chambigne O.B.X. Church (former) | Old Glen Innes Road | Lot 63, DP 752822 | Local | 1996 |
| Chambigne Bawden Bridge | Old Grafton to Glen Innes Road over Orara River | Road reserve | Local | 143 |

Neither heritage item is located within vicinity of the subject culverts.

5.1.2. Clarence Valley Council Planning Controls

The Local Environmental Plan (LEP) 2011 is the planning instrument administered by Clarence Valley Council and applicable to this part of the LGA. Clause 5.10 contains heritage protection controls that apply, and Schedule 5 lists items of environmental heritage including archaeological sites.

- The subject of this assessment is not listed as a local heritage item, however, this assessment notes it fulfills the criteria for local heritage listing due to historical, research and representative values. Therefore, it will be subject to the heritage planning controls in Clause 5.10 and heritage management is provided for its protection and future works in the following Section.

The relevant conditions of Clause 5.10 which may need to be addressed in any future works are as follows:

(2) Requirement for consent

Development consent is required for any of the following—

(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance)—

- (i) a heritage item,*
- (ii) an Aboriginal object,*
- (iii) a building, work, relic or tree within a heritage conservation area,*

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

(3) When consent not required

However, development consent under this clause is not required if—

(a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development—

- (i) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and*
- (ii) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or*

(c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or

(d) the development is exempt development.

(4) Effect of proposed development on heritage significance

The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5).

(5) Heritage assessment

The consent authority may, before granting consent to any development—

(a) on land on which a heritage item is located, or

(b) on land that is within a heritage conservation area, or

(c) on land that is within the vicinity of land referred to in paragraph (a) or (b),

require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

(7) Archaeological sites

The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies)—

(a) notify the Heritage Council of its intention to grant consent, and

(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

(10) Conservation incentives

The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that—

(a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and

(b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and

(c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and

(d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and

(e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.

6. MANAGEMENT AND CONCLUSION

There is heritage significance identified in this assessment for both sandstone box culverts observed at Chambigne, under the Old Grafton Glen Innes Road. Their heritage significance relates to historical, research and representative values. Transport for NSW, in their former guise as NSW Roads and Traffic Authority (RTA) provided guidelines in relation to roadworks and heritage items (2004) to ensure that its heritage items are managed in accordance with all relevant statutory requirements. These guidelines are no longer available, but the following information was referred to in another culvert report reviewed for this assessment (Cosmos Archaeology, 2011). The principles stated below are relevant to these culverts and reflect best heritage management in NSW:

- Carry out all works with due regard to heritage issues;
- Conserve original fabric wherever possible;
- Repair original items rather than replace them;
- Use sympathetic materials and construction techniques; and,
- Minimize damage to the surrounding environment.

These guidelines also state that “if original stone culverts or woodblock road surface can be left in-situ, do not remove them”.

Of particular relevance to the subject culverts are the following recommendations :

- Alterations to a heritage asset should be planned and executed to minimise negative impacts on its heritage significance, curtilage and setting.
- Alterations should only be undertaken when necessary to upgrade a heritage asset to meet current standards, or to adapt it for a compatible new use, or to ensure its ongoing viability;

There were specific heritage management requests from CVC regarding these culverts. In line with the above heritage management recommendations, and their local heritage values, the answers are provided in the table overleaf, refer to **Table 3**.

Table 3: Specific Heritage Management

| CVC request | Virtus response |
|--|--|
| The heritage assessment is to address the following: timber deck members are laid on a header course of different blocks and there is termite damage. Your advice on the likely age and significance of the timber is needed, and whether it could be removed or need to be reinstated to match. | The timbers appear to be hardwood, likely local timber and possibly Tallow wood, although this was not possible to identify. Replacement if possible with similar would be the best method, however given the termite damage, refer below to the use of concrete in relation to road support, which could be undertaken with suitable engineering advice. This is recommended due to: <ul style="list-style-type: none"> the culverts forming part of a busy road and concrete has previously been added to reinforce the northern side roof of both culverts. The visible concrete does not detract from the heritage values of the culverts. |
| Do you think it was a later addition etc. | No, as the timber fits the description of historical timbers used in culvert construction "culverts were made with decks of square logs, eight to nine inches in thickness". It is clear that concrete is the preferred material for this use in more recent years. |
| Large steel plates have been laid over it at present. It is desirable that concrete plates are laid over the structure (under the road) for structural safety in the future as the steel could corrode in the future (D. Wray, email to author 5 September 2022). | Agree, that concrete is preferred, if the timbers are termite damaged. Retention of the timber, if it is in good condition is preferred. It is evident that concrete plates have been laid at Culvert #1 as well as along the western edge of Culvert #2. Laying the concrete plates over the structure (and below the road surface) is necessary due to the functioning of the road. |

In conclusion, the two sandstone box culverts at Chambigne fulfill the criteria for local heritage listing for Clarence Valley Council and should be included on Schedule 5 of the LEP. Any works to these items will then need to be assessed under the heritage planning controls in Clause 5.10.

The following final recommendations are based on the information provided, the research undertaken and the results of the site inspection:

- The local heritage significance supports heritage listing for Clarence Valley Council. A copy of this report needs to be retained by CVC and consulted for works.
- Any proposed changes that are required to maintain the operations of the culverts needs to consider their heritage significance. This means that the existing configuration of the culverts are to be retained.
- The culverts should be retained and repaired, so that they remain operational.
- No replacement of sandstone is to take place.
- Reinforcement of the road deck above the culverts, will need to follow the advice of suitable structural engineers.

REFERENCES

Australia ICOMOS Burra Charter, The Burra Charter, 2013

Cosmos Archaeology, November 2011, Kangaroo Valley Culverts Moss Vale Road Statement of Heritage Impact, prepared for NSW Roads and Maritime Services, Southern Regional Office

Cosmos Archaeology, 2018, From the Tablelands to the Sea, A contextual history of the Former Pristine Waters Council Area (Ulmarra & Nymboida Shires) Clarence Valley Council LGA

NSW Department of Main Roads, 1986, **The Roadmakers, a History of Main Roads in NSW**

NSW Heritage, Assessing heritage significance, 2001

NSW Department of Planning and Environment, State Heritage Inventory accessed at https://www.hms.heritage.nsw.gov.au/App/Item/SearchHeritageItems?_ga=2.165972984.714120821.1658117920-344545924.1656901875 (Maclean, Clarence Valley and Tweed Shire Council heritage items)

NSW Land Registry Services, Historical Land Viewer, Parish of Chambigne, accessed at <https://hlrv.nswlrs.com.au/>

Trove: The Herald's special reporter, A Trip to the North, Clarence and Richmond Examiner and New England Advertiser, 25 February 1873, 5-6.

Trove: (no author named) Grafton Glen Innes Road, Clarence and Richmond Examiner, 20 August, 1898: 3

Trove: (no author named) Grafton Glen Innes Road, The Grafton Argus and Clarence River General Advertiser, 14 December, 1921: 3

APPENDIX A NSW HERITAGE INVENTORY LIST – CULVERTS

| Item Name | Address | Local Govt Area | Shr ID | Item Type | Record Owner |
|---|---|----------------------|--------|----------------------------|--------------|
| Abandoned tramway cutting (including culvert, embankment and sandstone walls) | Botanic Road, Mulbring Street and Plunkett Road (within Lawry Plunkett Reserve) MOSMAN NSW 2088 | Mosman | | Archaeological-Terrestrial | LGOV |
| Arched Stone Culvert | 19P Station Street and Blaxland Road - near junction of WENTWORTH FALLS NSW 2782 | Blue Mountains | | Built | LGOV |
| Boothtown Aquaduct Aquaduct Valve House No 1 & 2 | Albert Street GUILDFORD WEST NSW 2161 | Cumberland | | Complex / Group | LGOV |
| Brick Culvert | 461.579km West Tamworth to Uralla Railway NEMINGHA NSW 2340 | Tamworth Regional | | Built | SGOV |
| Brick Culvert | 490.809km West Tamworth to Uralla Railway WOOLBROOK NSW 2354 | Tamworth Regional | | Built | SGOV |
| Brick Culvert | Caloola Street NEWBRIDGE NSW 2795 | Blayney | | Built | LGOV |
| Brick Stormwater Culvert | 41 Wallarah Road NEW LAMBTON NSW 2305 | Newcastle | | Built | LGOV |
| Bridge and Culvert | Old Northern Road WISEMANS FERRY NSW 2775 | The Hills | | Unknown | LGOV |
| Chinaman's Creek culvert | Rossi Street YASS NSW 2582 | Yass Valley | | Built | LGOV |
| Couridjah Railway Culvert | 750m north of station COURIDJAH NSW 2571 | Wollondilly | | Built | SGOV |
| Culvert | Gara Road (southeast of intersection with Grafton Road) ARMIDALE NSW 2350 | Armidale Regional | | Built | LGOV |
| Culvert | Sallaway Road (at bottom of, as it crosses creek) GALSTON NSW 2159 | Hornsby | | Built | LGOV |
| Culvert and Retaining Wall | Eastern Valley Way, Over Scotts Creek CASTLE COVE NSW 2069 | Willoughby | | Built | SGOV |
| Culvert Bridge | Rockley Road ROCKLEY NSW 2795 | Bathurst Regional | | Built | LGOV |
| Culvert over unnamed creek near Bayview Golf Course | Pittwater Road MONA VALE NSW 2103 | Northern Beaches | | Built | SGOV |
| Culverts, Abercrombie Road | Abercrombie Road, Quarry Creek TUENA NSW 2583 | Upper Lachlan | | Built | LGOV |
| Cup and Saucer Creek Culvert | Bexley Road CAMPSIE NSW 2194 | Canterbury-Bankstown | | Built | SGOV |

| Item Name | Address | Local Govt Area | Shr ID | Item Type | Record Owner |
|---|---|--------------------|--------|-----------------|--------------|
| Emoh (Emu Store/Corderoy's Store) | 3431 Great Western Highway SOUTH BOWENFELS NSW 2790 | Lithgow | | Complex / Group | LGOV |
| Emu Plains Railway Culvert | Lamrock Street EMU PLAINS NSW 2750 | Penrith | | Built | SGOV |
| Galston Road stone culvert | Galston Road (under road curve at Lookout) GALSTON NSW 2159 | Hornsby | | Built | LGOV |
| George Street, triangle and culvert | Parramatta Park PARRAMATTA NSW 2150 | City of Parramatta | | Built | SGOV |
| Great North Road (retaining walls, culverts, road cutting) | Great North Road WISEMANS FERRY NSW 2775 | The Hills | | Built | SGOV |
| Haslams Creek Culvert | Parramatta Road SILVERWATER NSW 2128 | City of Parramatta | | Built | SGOV |
| Lawson Railway Culvert (Ln067) | about 30m west of Ferguson Ave Main Western Railway LAWSON NSW 2783 | Blue Mountains | | Built | SGOV |
| Lawson Railway Culvert (Ln070) | opposite 268 Great Western Highway Main Western Railway LAWSON NSW 2783 | Blue Mountains | | Built | SGOV |
| Lawson Railway Culvert (Ln075) | Opposite Charles Street Main Western Railway LAWSON NSW 2783 | Blue Mountains | | Built | SGOV |
| Lower Prospect Canal Reserve | GREYSTANES NSW 2145 | Cumberland | 1945 | Built | HNSW |
| Masonry Culvert & Retaining Wall, Old Bowenfels | Great Western Highway BOWENFELS NSW 2790 | Lithgow | | Built | SGOV |
| Newell Falls Culvert, Waterfall Way (Main Road 76) Group - Bellingen-Dorrigo Road | Waterfall Way DORRIGO MOUNTAIN NSW 2453 | Bellingen | | Complex / Group | LGOV |
| North Macquarie Marsh Channel Culvert No 1 And Main Channel Regulator | Macquarie River QUAMBONE NSW 2831 | Coonamble | | Built | SGOV |
| Oakey Park (Ida Falls Creek) Railway Culvert | Bell Road SOUTH BOWENFELS NSW 2790 | Lithgow | | Built | SGOV |
| Original Section of Road and Culvert; Road and Remnant Post and Rail Fencing | Old Windsor Road (within the road reserve) BELLA VISTA NSW 2153 | The Hills | | Unknown | LGOV |
| Porters Creek Culvert | Riverside Drive MACQUARIE PARK NSW 2113 | Ryde | | Built | SGOV |
| Railway Culvert | Main Western Railway (near Ferguson Avenue) LAWSON NSW 2783 | Blue Mountains | | Built | LGOV |
| Railway Culvert | Main Western Railway (near Frederica Street) LAWSON NSW 2783 | Blue Mountains | | Built | LGOV |

| Item Name | Address | Local Govt Area | Shr ID | Item Type | Record Owner |
|--|--|-------------------|--------|----------------------------|--------------|
| Railway Culvert | 286P Great Western Highway LAWSON NSW 2783 | Blue Mountains | | Built | LGOV |
| Railway culvert of Ida Falls Creek | Bell Street off LITHGOW NSW 2790 | Lithgow | | Built | LGOV |
| Railway Infrastructure, including Bridges, Culverts, Drains | Huntley Road SPRING HILL NSW 2800 | Orange | | Built | LGOV |
| Remnant sandstone kerbs, gutters and culverts | 53, 55, 183 Argyle Street PICTON NSW 2571 | Wollondilly | | Archaeological-Terrestrial | LGOV |
| Road culvert and sustaining wall at Emoh | 3431 Great Western Highway SOUTH BOWENFELS NSW 2790 | Lithgow | | Built | LGOV |
| Road Culverts | Grey Street GLEN INNES NSW 2370 | Glen Innes Severn | | Built | LGOV |
| RTA Bridge No.2757 | Gwydir Highway WARIALDA NSW 2402 | Gwydir | | Built | SGOV |
| Sandstone Culvert | Livorno Grove Refalo Reserve GLENWOOD NSW 2768 | Blacktown | | Complex / Group | LGOV |
| Sandstone Culvert | Bedgerebong Road/Lawler Street FORBES NSW 2871 | Forbes | | Built | LGOV |
| Sandstone Culvert, approx 200m south of Meurants Lane | Old Windsor Road GLENWOOD NSW 2768 | Blacktown | | Built | SGOV |
| Sandstone railway culvert | Lamrock Street EMU PLAINS NSW 2750 | Penrith | | Built | LGOV |
| Sandstone retaining wall and drain culvert | Corner Thames and Mort Streets BALMAIN NSW 2041 | Inner West | | Built | LGOV |
| Spring Hill - Railway infrastructure, including bridges and culverts | Railway reserve adjacent to Lot 341, DP 1176618; Lot 1, DP 152629; Lot 1, DP 195413; Lot 1, DP 828893 Huntley Road and Kinghorne Lane SPRING HILL NSW 2800 | Orange | | Built | SGOV |
| Stone arched culvert Willow Creek Kiama | Jamberoo Road KIAMA NSW 2533 | Kiama | | Built | LGOV |
| Stone culvert | Rangers Avenue MOSMAN NSW 2088 | Mosman | | Built | LGOV |
| Stone Culvert | 63 Mundarlo Road LOWER TARCUTTA NSW 2652 | Wagga Wagga | | Archaeological-Terrestrial | LGOV |
| Stone Culvert under former Loop Line | Station Street and West Parade COURIDJAH NSW 2571 | Wollondilly | | Complex / Group | LGOV |
| Stone Railway Culvert | Sir Henrys Parade FAULCONBRIDGE NSW 2776 | Blue Mountains | | Built | LGOV |

| Item Name | Address | Local Govt Area | Shr ID | Item Type | Record Owner |
|--|---|----------------------|--------|----------------------------|--------------|
| Stone Wall and Culvert - Bells Line of Road | Bells Line of Road KURRAJONG HEIGHTS NSW 2758 | Hawkesbury | | Built | SGOV |
| Towrang Bridge, Culverts | Hume Highway TOWRANG NSW 2580 | Goulburn Mulwaree | | Archaeological-Terrestrial | LGOV |
| Towrang Convict Stockade, Associated Sites and Road Formations | Derrick VC Rest Area Hume Highway TOWRANG NSW 2580 | Goulburn Mulwaree | 1905 | Archaeological-Terrestrial | HNSW |
| Underground Brick Culvert | Grey Street GLEN INNES NSW 2370 | Glen Innes Severn | | Built | LGOV |
| Wentworth Falls Railway Culvert (Wf036) | Station Street and Blaxland Road - Near Junction Of Access From Westside of Railway Overbridge Via Right Of Way Beside Railway Fence WENTWORTH FALLS NSW 2782 | Blue Mountains | | Built | SGOV |
| Wolli Creek Culvert | Bexley Road EARLWOOD NSW 2206 | Canterbury-Bankstown | | Built | SGOV |