

SA Heritage Register

Nomination form



Government of South Australia

Department for Environment
and Water

NOMINATION FORM

To help your nomination be successful, please fill out this form with as much information as possible.

Feel free to expand the answer fields as much as you require or append information to the form.

It is important that you attach images and a map of what you are nominating by email or by fax.

Please note that places which have been nominated during past three years will not be reconsidered by the South Australian Heritage Council unless you can provide significant new information not provided through the previous nomination and assessment.

For assistance with this form you may contact:

Your local historical society or heritage adviser may be of assistance OR you may telephone an assessment officer in Heritage South Australia on (08) 8124 4960.

A. Nominated Place

1. Name	
Name of Place / Object:	Callington Smelting Works
Any other or former name(s):	Bremer Mine Smelting Works
Is the place already on another heritage list?	No. Associated with SA heritage No.'s 10449 / 10501, Former Powder magazine and settling tank, Bremer mine site Entire location of the Callington township was on the Register of the National Estate, from around 1980. This listing was apparently removed following the transfer of these listings to the Environment Protection and Biodiversity Conservation Act in the early 2000's, seemingly without reference to the historians and community involved.

2. Location					
Street Address:	22 Callington Road				
	Suburb / Town:	Callington	Post Code:	5254	
Local Council Name:	Mount Barker District Council				
Land Description: (if known)The location is across two titles being predominantly Callington Recreation Park and adjacent property, locally known as the Funky Horse Paddock. Both properties are owned by Mount Barker district Council, with the former being on the Community Land Register.	Title: Lot 15 and Lot 16	Volume:	Folio:	Parcel Type:	Parcel No:
	Plan Type: Deposited Plan; Filed plan	Plan No: 28329 160755	Section: 2001	Hundred: Kanmantoo	
GPS Location/s: (If known)	Longitude / Easting / X		Latitude / Northing / Y (Datum =)		

3. Ownership	
Name of Owner(s):	
Contact person:	

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(if different from owner explain relationship)	
Postal Address:	
Phone Number:	
Ownership History:	

4. Nominator (your details)	
Your Name/s:	
Organisation/Position:	
Daytime Phone:	
Fax:	
Postal Address:	
Email Address:	

B. Description

5. Description of nominated place or object	
<p>Description of the nominated place or object and its current condition:</p>	<p>The site contains the remains of the Callington Smelting Works which is believed to consist of at least two smelting furnaces and two calcining furnaces, associated paved floors and the slag heap resulting from the operations over fifteen years. The furnaces have been partially demolished to remove residual copper remaining when operations ended, with the calcining furnaces demolished at least to the furnace floor level, most likely in 1875. Over the intervening one hundred and forty five years demolition debris, the dumping of rubbish and the deposition of other material has largely buried many remains under a shallow layer of these materials. There are an undetermined number of unexcavated features likely to include further paved flooring, walling, drainage works and other associated remains.</p>
<p>Are you aware of any modifications or additions to the place or object? Can you provide dates for these changes?</p>	<p>Yes.</p> <p>Demolition at the abandonment of the site has left the structures partly buried and subject to historic robbing-out of materials, as evidenced by their reuse within the adjacent township of Callington. A military survey map (Kanmantoo Manoeuvre Area) of 1913 notes presence of "two stacks". An amount of slag material was excavated during the 1940's to repair erosion threatening the Princes Highway towards Kanmantoo.</p> <p>A poor resolution 1949 air photograph shows only disturbed areas and the slag heap.</p> <p>Internal road works within the Recreation grounds undertaken within the last decade may have impacted on areas of the site as this road passes within a metre of the most easterly calciner, on the southern side.</p> <p>Clearly the excavations undertaken since 2016 have altered the site, by revealing previously unknown structures and by the relocation of spoil into an area from which road fill was removed in the 1940's.</p>
<p>Do you believe there may be historical items under the ground? Should an archaeological investigation be considered?</p>	<p>Archaeological excavation has been undertaken, supervised by Dr Nicholas Grguric operating under permits No. 0005/15 and 0008/17, which expired December 31st, 2019. It is evident that there are a number of as yet unexcavated features on the site. The excavations thus far have revealed the of remains two smelters and two calcining furnaces and associated paved floors. Other features remaining buried including further floors and possibly walling and drainage works.</p>
<p>Date you inspected the place or object:</p>	<p>Multiple and ongoing dates, initially in late 1980's.</p>
<p>Have you had any contact with the Owner?</p>	<p>Yes. All work has been undertaken with the permission and assistance of the owner, [REDACTED] who have funded most works undertaken to date.</p>

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<p>Current use of the place or object:</p>	<p>The site is mostly within of the Callington Recreation Park grounds and is all on land owned by [REDACTED]</p>
<p>Original or former use(s):</p>	<p>Smelting operations treated ore from the nearby Bremer Mine, also referred to as the Callington Mine. Refined material produced here was often further refined at the Scott's Creek Smelters, near Dawesley, where there were more plentiful sources of fuel.</p>
<p>Are there any current or long-term threats to the nominated place or object?</p>	<p>Yes. The remains were generally been unappreciated by management committee and the wider community, until the recent excavation work began. Past Recreation Park activities have impacted on this site, including construction of an access road, possibly across the southern margin of area. These remnants will continue to degrade unless work is undertaken to conserve them. It is expected that the proposed listing will assist in seeking funding for the development and implementation of an appropriate conservation and management plan to stabilise and protect this site into the future.</p>
<p>Name of Builder:</p>	<p>Mauris Thomas Jnr and Charles Thomas who were the sons of Mauris Thomas Senior who, with his brother John, constructed the 1848 Bremer Smelting Works on the Bremer River near what later became known as Callington. The site of these earlier works has not been accurately determined but is approximately 500 metres to the north.</p>
<p>Any other information:</p>	<p>The remains in this location are a key site for the development of a wider district level appreciation of mining heritage which reaches from the 1845 Paringa and Kanmantoo mines through the Aclare Mine and on to the recently suspended operations at the open cut mine of Hillgrove Resources at Kanmantoo.</p>

C. History

6. Origins and history	
<p>Years of Construction:</p>	<p>Start: 1860 Finish: Early 1870's. By their nature furnaces are rebuilt on a regular basis hence the 1870's date.</p>
<p>Name of Designer / Architect:</p>	<p>Charles Thomas and Mauris Thomas Jnr.</p>

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History of the nominated place or object:	<p>1860. Construction undertaken, and operations began by mid-1860.</p> <p>1875. Ceased operations, almost certainly stripped of remaining copper and partially demolished at this time.</p> <p>1913. Military survey map records “two Stack” as visible on this site</p> <p>1949. No recognisable remains beyond scatter of debris and slag heap</p> <p>1980s. Partial excavation of paved floor bounded by low stone walls by unknown party, subsequently recovered and location lost.</p> <p>2015. Initial site survey conducted.</p> <p>2015 - 2019. A series of excavations conducted revealing the four furnaces on the site. Further work will continue to reveal more details of this site.</p>
Historical sources used to support your nomination: Please attach copies of pages from publications or newspaper articles as appropriate.	Please refer to the attached: The Callington Smelting Works Archaeological Project Report, Dr. Nicholas Grguric. (2018) Annex 1 to The Callington Smelting Works Archaeological Project Report: Excavation of Calciner 1, Dr. Nicholas Grguric. (2020)

D. Heritage Significance

7. Statement of State Significance - Why is the place or object important to South Australia?

The Callington Smelting Works were built in 1860 by Mauris and Charles Thomas, sons of Mauris Thomas. Mauris the Elder had, with his brother John, established the first commercial copper smelter in South Australia in 1848, some distance to the north of the later smelters, along the banks of the nearby Bremer River. The successful introduction of Welsh smelting practice encouraged and enabled the export of refined ore and copper, both to England and into Asian markets, and helped to ensure the financial viability of many copper mines, and the State itself. The growth of mining led directly to the immigration of large numbers of Cornish miners and Welsh smelters who influencing the economic and cultural development of the State of South Australia. The township of Callington was founded as a direct consequence of this development coupled with the discovery of what went on to become the Bremer Mine at Callington. This mine was known as the model mine because of the innovations and efficiency in its operation, with local Kanmantoo-Callington area referred to at the time as "The Cornwall of the Colony", before the rise of the Moonta, Wallaroo and Kadina axis.

The Callington Smelting Works consisted of two smelting furnaces and eventually two calcining furnaces. The former were of typical Welsh smelter design although they are constructed as mirror images of each other, presumably to assist loading and tapping operations. The variation in the designs of the two calcining furnaces built by Charles and Mauris Thomas indicate the evolving nature of this process as means were sought to deal with recalcitrant ore, shortages of fuel and the ongoing quest for greater efficiency. The involvement of several generations of this family reveal the transmission of the knowledge and skills and the adaptability needed for success in this industry. The Thomas Brothers went on to assist in the development of copper smelting operations in Queensland and New South Wales.

8. Significance Criteria

The South Australian *Heritage Places Act 1993* lists seven criteria by which places are assessed as 'State significant.' Please tick the criteria you feel the place demonstrates and explain your reasons.

It demonstrates important aspects of the evolution or pattern of the State's history.

The Callington Smelting Works demonstrate the development and progress of the mining industry (specifically the copper mining industry) in South Australia. The copper mining industry was a significant aspect of South Australia's economic development and success from the early 1840s onwards. The several discoveries of mineable metalliferous ores in Australia in the 1840s had such an impact that the State's population grew from 15,000 in 1841 to 64,000 in 1851 and saved the State from bankruptcy (Drew, in preparation). In 1850, minerals constituted 67% of the State's exports, with wool only representing 29% (Drew, in preparation). The Mount Barker Special Survey of 1845 which followed the discovery of rich copper ore resources in the Callington-Kanmantoo area gave rise to the Bremer mine which continued in operation until 1875. Early nearby settlements included Paringa Village, Staughton, St Ives, Tavistock, Kanmantoo, Callington, of which only the last two have persisted. There is clear evidence that many miners relatively quickly turned to farming on the newly opened areas, assisted by the large demand for timber for mining and smelting activities which materially encouraged the rapid conversion of wooded areas into productive pastures and cropping areas. The Callington Smelting Works was established in direct response to the Bremer mine, to process its ores, and thus was integral to the early success of not just that

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	<p>mine but the continued development of copper mining in the State as a whole. Of the 21 Welsh-style smelting works erected in South Australia between 1848 and 1874, by far the greatest concentration was in the Callington-Kanmantoo area (Drew, 2014: 23). Of the six smelting works that existed in this area, the Callington Smelting Works was the second one erected. It also produced the greatest volume of copper of all the smelters in the Callington-Kanmantoo area.</p>
<p>x <input type="checkbox"/> It has rare, uncommon or endangered qualities that are of cultural significance.</p>	<p>The design of the calcining furnace ('Feature 7' in the accompanying report) excavated at this site potentially represents technological advances in calcining technology hitherto unknown from contemporary literature or excavated sites elsewhere in the world. These design features include the bifurcated quenching vaults, with two fireplaces and a central longitudinal paved channel (Protheroe-Jones, 27/12/2018: Pers. Comm.). This makes the remains of the calcining furnace at Callington unique and rare. Smelting being an industry intimately associated with Welsh culture and community, both in Britain, and in South Australia, this rare example of Welsh technological development is of cultural significance.</p> <p>On this site slag was poured into moulds excavated directly into the earth, witnessed by the imprints of boots evident in the resulting blocks of slag strewn across the waste heap. This is unknown from any other Welsh smelter site within Australia or overseas, where the normal practice is to cast blocks into iron moulds of various shapes, such as is known to have occurred at the associated Scott's Creek Smelter at Dawesley.</p>
<p>x <input type="checkbox"/> It may yield information that will contribute to an understanding of the State's history, including its natural history.</p>	<p>The excavation of the two smelting furnaces and the calcining furnace has contributed new information to the history of the Callington Smelting Works and by extension, has contributed to a greater understanding of the history of copper smelting and the mining industry in general in South Australia. Because this is the first 19th Century copper smelting site to have been archaeologically excavated in South Australia, the findings are unique and provide a more detailed insight into the actual construction of a smelting works such as this than has been previously available.</p> <p>Furthermore, the evidence provided above of other substantial structural remains still to be archaeologically investigated at the site shows that it has a high potential to yield further information.</p>
<p>x <input type="checkbox"/> It is an outstanding representative of a particular class of places of cultural significance.</p>	<p>The unique design of the later calcining furnace is of relevance to the international history of the copper mining and smelting industry. No other example of this form of calcining furnace layout has as yet been discovered. The site overall shows a potentially unique local development of the calcining process, in the search for greater efficiency. The earlier calcining furnace largely follows well documented contemporary Welsh smelting practice, but with a variation to the vaulting, with two arches supporting the floor rather than the typical single arched vault.</p> <p>The smelting furnaces are well preserved examples of the Welsh Smelting practice typical of the mid-19th century.</p>
<p>x <input type="checkbox"/> It demonstrates a high degree of creative, aesthetic or technical accomplishment or is an</p>	<p>The substantial and quite well-preserved structural elements revealed by the archaeological excavation mean it is a unique representative of a mid-19th Century Welsh-style smelting works. Because</p>

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<p>outstanding representative of particular construction techniques or design characteristics.</p>	<p>these structures have been archaeologically excavated, they are now eminently interpretable, making them outstanding examples of this class of place. The earlier calcining smelter is a well-preserved example of the Welsh smelting technology of the time and conforms to the typical designs of the period. The later calcining furnace is the only known example of this design and potentially unique to this site. Its outstanding representativeness is heightened by the fact that it potentially represents technological advances hitherto unseen in contemporary documents or other excavated examples.</p> <p>The two smelting furnaces conform to the standard practice of the period and are in a particularly good state of preservation. Evidence of all the key features associated with the design and function of the smelters is present, making them excellent examples from which to learn about the process of copper smelting in the mid-19th century.</p>
<p><input checked="" type="checkbox"/> It has strong cultural or spiritual associations for the community or a group within it.</p>	<p>The Callington Smelting Works is of cultural significance to the South Australian community for the integral role it played in the economic success of the State. It is also of cultural significance to the Welsh community, and descendants of Welsh migrants who came to South Australia in the 19th century, many of whom would have found work in copper smelting.</p> <p>The site is also closely and directly linked to the community of the current town of Callington. The advent of copper mining in the Callington - Kanmantoo area lead directly to the birth of the Callington township itself, with workers in the mine and the smelters building and living there.</p> <p>Two History Festival events have been organised by the local community, with a third cancelled because of Covid 19 restrictions, in 2020. This indicates the high cultural value in which the community now holds this site.</p>
<p><input checked="" type="checkbox"/> It has a special association with the life or work of a person or organisation or an event of historical importance.</p>	<p>The Callington Smelting Works was built and operated by Mauris and Charles Thomas, the sons of Mauris Thomas, who in 1848, with his brother John, had built and operated the first commercial copper smelter in Australia on the Bremer River at Callington. The Thomas brothers learnt the skills of Welsh copper smelting from their father and had been with him in Chile where he had worked using his knowledge of Welsh copper smelting techniques. After leaving Callington, they played significant roles for another three decades in the Australian copper smelting industry in Queensland and New South Wales.</p>

E. Additional Information

9. Images/Maps/Diagrams/Site Plans

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A full range of images including maps, site plans, and photographs will help your nomination.

Please provide:

- a clear outline of the place or object being nominated within any maps or plans provided
- high quality images of the place or object (please list the total number of images being provided)
- the subject of each image
- the date each image was created
- the author of each image, and
- the copyright holder of each image (if known)

Paste images here:

A large, light grey rectangular area intended for pasting images. At the top of this area, there is a solid black horizontal bar, likely representing a redacted image or a placeholder for a specific image.

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Declaration

The South Australian Heritage Council is committed to transparency in relation to the listing process and wishes to enhance public confidence in the nomination, listing and decision-making process. The Council's policy is to make nominations for State heritage listing and submissions on provisional entries publicly available via webpage or to interested parties. The Council will adhere to the Privacy Principles and your name and personal details will not be released.

I, [REDACTED] nominate the Callington Smelting Works, 22 Callington Road, Callington 5254 5254[Enter place name and address here] to be heritage listed.

The information I have provided is correct to my/our knowledge.

Your Signature/s: [REDACTED]

Date: 25th May 2020

A heritage officer may contact you to discuss aspects of the nomination.

Nomination Form Checklist

Please check that your nomination includes:

- A clear indication of the location of the place or object (including map/s). Where a number of features are nominated, show the location of each and/or a boundary surrounding the significant elements of the site.
- A history of the place or object explaining important aspects relevant to the nomination.
This should generally help support arguments of cultural significance.
- A clear description of the nominated place or object/s.
- A statement of significance and indication on how the place or object satisfies one or more of the significance criteria.
- A heritage officer may contact you to discuss aspects of the nomination.

Email: DEWHeritage@sa.gov.au

Post: Executive Officer, South Australian Heritage Council
Department for Environment and Water
GPO Box 1047, Adelaide 5001