HERITAGE ASSESSMENT REPORT

NAME:	Bretag/Green Farm Complex	**PLACE:**	26566

ADDRESS:	Ngarrindjeri Country
	Monarto Safari Park
	63 Monarto Road
	Monarto SA 5254

This heritage assessment considers that the place meets criteria (b) and (d). Refer to Summary of State Heritage Place for final approved wording, including criteria statements.

Lime Kilns, Bretag/Green Farm Complex.

Source: DEW Files, December 2023

ASSESSMENT OF HERITAGE SIGNIFICANCE

Statement of Heritage Significance:

Built by local agriculturalist George Green in the 1880s, the Green Farm Lime Kilns, Monarto are uncommon surviving examples of the lime kilns that were established across country areas of South Australia during the second half of the nineteenth century. Lime production, known as lime burning, was fundamental to the development of South Australia's early building industry, providing quicklime for

mortar and plaster. The lime kilns were built to service the construction of buildings at the farm and for the local district and supplemented the farm's income while utilising the limestone cleared from paddocks. The Green Farm Lime Kilns at Monarto are an exceptional example of the class, displaying characteristics at a higher level of integrity and intactness than is typically found in the state.

Relevant South Australian Historical Themes

2. Peopling Places and Landscapes

>   2.3 Adapting to diverse environments

5. Developing South Australia's Economies

>   5.3 Developing primary production

>   5.8 Developing manufacturing, engineering and construction and service industries

Comparability / Rarity / Representation:

The Bretag/Green Farm Complex is associated with nineteenth century mixed farming and lime production in South Australia. Each association is considered in turn.

Mixed Farming

Mixed farming emerged in wheat growing areas of the colony during the second half of the nineteenth century. Principal characteristics of a mixed farm include:

- Farmstead,
- Stables and/or coachhouse,
- Workshops and associated outbuildings,
- Water tanks,
- Animal enclosures,
- Chaff house or wheat store.

Mixed farming enterprises may also include:

- Blacksmith's shop,
- Dairy,
- Bakery,
- Cellar.

There are over 200 State Heritage Places entered in the South Australian Heritage Register (the Register) that are associated with farming. A selection of places that are complexes and have early associations with mixed farming in South Australia include:

- Kirkala Station Site (known as Kirkala Station Site, including Homestead, School (sometime Shearers' Dining Room), Stables, Blacksmith's Shop and Cottage), Poochera Road, Streaky Bay (SHP 14227),
- Hughes Park Homestead Complex (known as Hughes Park Homestead Complex, including Dwelling, Dairy, Blacksmiths, Stables, Petrol House, Coach

House, Cottages, Offices, Garage and Manager's House), Hughes Park, Near Watervale (SHP 13024),

- Dwelling – 'Ziegeler's Cottage' Farm Complex (known as Ziegeler's Farm Group, including pug and pine cottage, remains of underground room, two stone dwellings, stone tank, thatched sheds and dam), Truro Road, Neales Flat (SHP 11007),
- Woolmit Homestead Complex (including stone main house, cottage, kitchen, sheds, walled yard, woolshed and ruinous structures), Woolmit Road, Reedy Creek (SHP 13730),
- Booborowie Homestead, Shearing Shed, Water Tank, Stables and Outbuildings, Booborowie (SHP 19122),
- Dwelling – 'Clayton Farm' (known as Clayton Farm Complex, including Dwelling, Shearing Shed, Hay Shed, Chaff Shed, Stables, Blacksmithy, Cottage and Workshop) Clayton Farm Road, Bordertown (SHP 13291),
- Sunnybrae Farm Historic Site (known as Sunnybrae Farm Complex (Part of former Islington Sewage Farm), including Manager's Residence and Dairyman's Quarters, Cheese Room and Cellars, Stables, Cow Shed and Smoke House), Tikarala Road, Regency Park (SHP 10757).
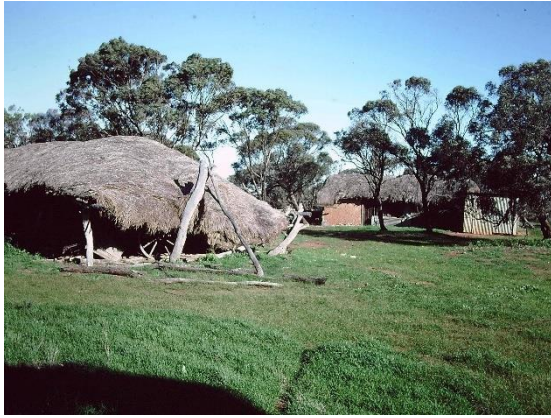

Clayton Farm Complex (SHP 13291) hay and chaff shed (left) and homestead (right).

Source: DEW Files

Booborowie Homestead (SHP 19122)

Source: DEW Files

Ziegeler's Farm Group (SHP 11007) including pug and pine cottages (left).

Source: DEW Files

Lime Manufacturing

Lime manufacturing emerged as an important industry in the second half of the nineteenth century and was critical in providing the colony's building industry with lime for mortar, lime plaster, limewash and concrete. Two types of lime kiln operated during this period. The first and most common were small-scale lime kilns providing lime for local use, often built in association with farmsteads. The second were commercial enterprises producing lime for export, usually to the Adelaide market. Irrespective of the scale of the operation, most nineteenth century lime kilns were 'D' type kilns or variations of it. The lime kilns at the Bretag/Green Farm Complex are 'D' type kilns.[1]

Key characteristics of nineteenth century lime kilns are:

- proximity to raw materials,
- often located on farms,
- brick and/or limestone construction,
- 'D' type form,
- built into the face of a bank of hillside,
- firing area with recessed floor,
- multiple firing portals,
- fire brick lining,
- intermittent output operating in pairs,
- wood fuelled.

Additional characteristics associated with commercial lime kilns are:

- bagging and storage areas,
- associated quarry,
- burner shed,
- transport infrastructure.

There are eight State Heritage Places associated with lime production in the Register. Four are small-scale lime kilns:

- Old Lime Kiln and Quarry (known as Former Lime Kiln and Dolomite Quarry) Days Road, Woodside (SHP 12900). Built 1871 and used until 1915, the quarry and kiln supplied a large area of the district, employing 37 people at its peak,
- The Peake Historic Site – Ruins of Overland Telegraph Station, Police Station, Homestead, Smelter and Cemetery, Oodnadatta (SHP 13624). The complex includes the ruins of two stone lime kilns, used for the construction of the Overland Telegraph Station and thought to be among the oldest in the state,
- Dwelling – 'The Folly', Balhannah (SHP 12928). Includes a brick lined kiln build into a small hill adjacent to the main house,
- Dingley Dell Homestead Site, Flinders Ranges (SHP 11760). Ruins of two, nineteenth century, square lime kilns rendered in lime mortar.

Four are commercial lime kilns:

- Lime Kiln, Stansbury (SHP 16680). Operational from c.1897 until the 1950s, the kilns began as an adjunct to a farmstead before expanding into a commercial enterprise producing lime for the Adelaide market. Site elements associated with the lime manufacturing process include bagged storage areas, the burner shed, engine foundation, blower and air delivery pipes. The kilns at Stansbury meet Heritage Places Act 1993 criteria (a), (d) & (g),
- Lime Kiln and Jetty, The Esplanade, Wool Bay (SHP 10112). Established c.1900-1910, it is the largest wood burning lime kiln on the Yorke Peninsula. Exported lime for the Adelaide market,
- Former Lime Kilns, Lime Kiln Road, Tailem Bend (SHP 13808). Built c.1908, is one of the few commercial lime kiln complexes remaining in South Australia outside of the Yorke Peninsula. The four kilns built of rubble limestone and brick are the largest and best-preserved examples of early twentieth century lime kilns in the state. The kilns at Tailem Bend meet *Heritage Places Act 1993* criterion (b),
- Lime Kiln Ruins, Bower (SHP 11024). Three brick-lined lime kilns built in the 1920s by the mid-Murray's largest lime manufacturer, the Bower Lime Works. The lime kilns at Bower meet *Heritage Places Act 1993* criteria (a) and (b).

There are also four local heritage places associated with lime production:

- Former Kulpara Lime Kiln, Barunga West (LHP). Early twentieth century complex consisting of three open-topped kilns, two skillion roofed storage/bagging areas, a concrete floored storage/bagging area and an office.
- Ninnes Historic Well, Windmill and Tank, Thomas Plains (LHP),
- Farm cottage and outbuildings, Mount Gambier (LHP),
- James Quarry Lime Kiln, Naracoorte (LHP).

The commercial lime kilns on the Register retain a high level of intactness, while those that demonstrate nineteenth century small-scale lime operations all survive in ruinous condition.

Lime Kiln Ruins, Bower (SHP 11024)

Source: DEW Files, 1996

Former Lime Kilns, Tailem Bend (SHP 13808)

Source: DEW Files

Lime Kiln and Jetty, Wool Bay (SHP 10112)

Source: DEW Files

Lime Kiln, Stansbury (SHP 16680)

Source: DEW Files, 2007

Assessment against Criteria under Section 16 of the *Heritage Places Act 1993.* All Criteria have been assessed using the 2020 Guidelines.

(a) it demonstrates important aspects of the evolution or pattern of the State's history.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

The place should be closely associated with events, developments or cultural phases which have played a significant part in South Australian history. Ideally it should demonstrate those associations in its fabric.

Places will not normally be considered under this criterion if they are of a class of things that are commonplace, or frequently replicated across the State, places associated with events of interest only to a small number of people, places associated with developments of little significance, or places only reputed to have been the scene of an event which has left no trace or which lacks substantial evidence.

Bretag/Green Farm Complex is associated with two historic themes: Peopling Places and Landscapes and its subtheme, Adapting to diverse environments; and Developing South Australia's Economies and its subthemes, Developing primary production and Developing manufacturing, engineering and construction and service industries.

The Bretag/Green Farm Complex demonstrates the growth of mixed farming in wheat growing areas in nineteenth century South Australia. George Green built the farm between 1867 and 1899 as a wheat and then later mixed farming enterprise, one of many such farms established during the nineteenth century in South Australia. With the exception of the rebuilt cottage and lime kilns, the Bretag/Green Farm Complex exists in a ruinous condition. When compared to other places such as the Clayton Farm Complex in Bordertown (SHP 13291) and Ziegler's Farm Group (SHP 11007), little physical fabric remains at the Bretag/Green Farm Complex to demonstrate a strong association with mixed farming.

Lime manufacturing emerged as an important industry in the second half of the nineteenth century providing the building industry with lime for mortar, plaster, concrete and limewash. Most early lime kilns were small-scale and built to service the construction of either one building or to supply a local community. In areas abundant with limestone, farmers often established lime kilns to supplement the farm income while utilising stone cleared from their paddocks. The prevalence of commercial-scale lime manufacturing and the advent of rail transport at the end of the nineteenth century, together with an increase in cement production in the twentieth century, brought about the demise of most small-scale lime kilns in South Australia.

The lime kilns at the Bretag/Green Farm Complex were built by George Green during the 1880s as part of his mixed farming enterprise, producing lime for his farm and the surrounding district until his retirement in 1899. When compared to other places associated with the theme such as the Old Lime Kilns and Quarry in Woodside (SHP 12900) and the Lime Kiln at Stansbury (SHP 16680), the lime kilns at the complex only operated for a short period of time, and as such cannot be considered to demonstrate a strong association with the theme at a state level.

It is recommended that the nominated place **does not fulfill** criterion (a).

(b) it has rare, uncommon or endangered qualities that are of cultural significance.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

The place should demonstrate a way of life, social custom, industrial process or land use which is no longer practised, is in danger of being lost, or is of exceptional interest. This encompasses both places which were always rare, and places which have become scarce through subsequent loss or destruction.

Places will not normally be considered under this criterion if their rarity is merely local, or if they appear rare only because research has not been done elsewhere, or if their distinguishing

characteristics have been degraded or compromised, or if they are at present common and simply believed to be in danger of becoming rare in the future.

The Bretag/Green Farm Complex is associated with the practice of mixed farming. Mixed farms became commonplace in the second half of the nineteenth century in wheat growing areas of the state as farmers sought to supplement farm income and self-sufficiency. As there are over 200 State Heritage Places entered in the Register associated with farming, many of which retain greater integrity and intactness, the Bretag/Green Farm Complex cannot be considered to demonstrate qualities of cultural significance that are rare, uncommon or endangered of becoming lost.

It is recommended that the nominated place **does not fulfill** criterion (b).

The Lime Kilns, Bretag/Green Farm Complex are uncommon surviving examples of nineteenth century lime kilns demonstrating the industrial process of small-scale lime burning. Lime production, known as lime burning, was once a common industrial process that played a critical role in the development of South Australia's building industry in the nineteenth century. Lime was a necessary ingredient in mortar and plaster, with nearly every nineteenth century building using these products somewhere in their structure.

Most lime in the nineteenth century was produced in small-scale kilns built to service the construction of a particular building or local district. Many were established by enterprising farmers looking to supplement income while utilising the stone cleared from paddocks. Commercial lime kilns began to emerge in the late 1880s, with some smaller operations such as the lime kilns at Stansbury expanding to service the Adelaide market. The advent of rail transport and the increased production of cement in central locations in the early twentieth century resulted in the demise of most small-scale lime kilns. Over time, most of these disused kilns fell into disrepair, and few intact lime kilns from the nineteenth century remain to demonstrate the process of lime burning. While lime is still produced today, it is manufactured using different industrial-scale processes.

George Green built his 'D' type lime kilns in the 1880s to produce lime for his farmstead and the surrounding district. Of the small-scale lime manufacturers that demonstrate lime burning in the nineteenth century, including the Former Lime Kiln and Dolomite Quarry at Woodside (SHP 12900) and the two stone lime kilns at the Peake Historic Site in Oodnadatta (SHP 12624), the lime kilns built by Green display a higher degree of integrity and intactness. While the lime kilns entered in the Register under criterion (b) demonstrate commercial lime production, the lime kilns at the Green Farm Complex demonstrate a similar level of integrity and intactness to them. It is for these reasons that the Lime Kilns, Green Farm Complex are considered to be an uncommon demonstration of nineteenth century small-scale lime kilns that enable a once common industrial process to be readily understood and appreciated.

It is recommended that the Lime Kilns, Bretag/Green Farm Complex **fulfils** criterion (b).

(c) it may yield information that will contribute to an understanding of the State's history, including its natural history.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

The place should provide, or demonstrate a likelihood of providing, information that will contribute significantly to our knowledge of the past. The information should be inherent in the fabric of the place. The place may be a standing structure, an archaeological deposit or a geological site.

Places will not normally be considered under this criterion simply because they are believed to contain archaeological or palaeontological deposits. There must be good reasons to suppose the site is of value for research, and that useful information will emerge. A place that will yield the same information as many other places, or information that could be obtained as readily from documentary sources, may not be eligible.

The Bretag/Green Farm Complex was established on a section of mallee scrub in the Hundred of Monarto in 1867. For almost 100 years the complex operated as a mixed farm and several structures were built to this end, namely two cottages, a blacksmith's shop, stables, grain store, stockyards and lime kilns. In 2001, a preliminary archaeological study recording the above-ground physical fabric of the Bretag/Green Farm Complex was undertaken by Flinders University's Department of Archaeology. The above-ground physical fabric of the Bretag/Green Farm Complex is thus considered to be well-documented. Any archaeological deposits associated with the Bretag/Green Farm Complex are unlikely to make a meaningful additional contribution to an understanding or appreciation of important aspects of the state's mixed farming history.

In 2010, volunteers uncovered buried portions of the lime kilns down to the natural ground level and made repairs to the masonry. As the ground immediately surrounding the lime kilns has been significantly disturbed, the kilns are no longer considered likely to yield further information about nineteenth century lime manufacturing in South Australia that is not already well documented through a variety of primary and secondary sources.

It is recommended that the nominated place **does not fulfil** criterion (c).

(d) it is an outstanding representative of a particular class of places of cultural significance.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

The place should be capable of providing understanding of the category of places which it represents. It should be typical of a wider range of such places, and in a good state of integrity, that is, still faithfully presenting its historical message.

Places will not be considered simply because they are members of a class, they must be both notable examples and well-preserved. Places will be excluded if their characteristics do not clearly typify the class, or if they were very like many other places, or if their representative

qualities had been degraded or lost. However, places will not be excluded from the Register merely because other similar places are included.

The Bretag/Green Farm Complex is associated with the class of place known as nineteenth century mixed farms. Principal characteristics of the class include site elements such as farmsteads, stables or coach houses, workshops, water tanks, animal enclosures, and wheat stores. A blacksmith's shop, dairy, bakery and cellar may also be present. While the Bretag/Green Farm Complex demonstrates a range of the typical site elements of a nineteenth century mixed farm, most of these elements exist in in a ruinous condition, compromising the integrity of the place. As the Bretag/Green Farm Complex demonstrates low integrity, it cannot be considered to be an outstanding representative of the class, nineteenth century mixed farms.

It is recommended that the nominated place **does not fulfill** criterion (d).

The lime kilns at the Bretag/Green Farm Complex are a member of the class of place known as nineteenth century lime kilns. Lime kilns were critical to the colony's early building industry, providing lime for mortar, plaster and concrete. Agriculturalist George Green built the lime kilns during the 1880s to produce lime for his farm and the surrounding district. The Lime Kilns, Bretag/Green Farm Complex demonstrates many of the principal characteristics of nineteenth century lime kilns (see Comparability/Rarity/ Comparison), including:

- proximity to raw materials, in this instance limestone and mallee wood,
- often located on farms, in this instance the Bretag/Green Farm Complex,
- brick and/or limestone construction,
- 'D' type form,
- built into the face of a bank of hillside,
- firing area with recessed floor,
- multiple firing portals,
- fire brick lining, in this case double brick lining of the eastern kiln,
- intermittent output operating in pairs,
- wood fuelled.

During the twentieth century many of the fire bricks used to line the eastern kiln were repurposed for other buildings on the property including the restored Bretag cottage in the 1920s, however the fire bricks in the western kiln remain. In 2010 volunteers removed the soil surrounding the lower portions of the lime kilns and repaired portions of the masonry.

In comparison to other nineteenth century lime kilns in South Australia, the Lime Kiln at Stansbury (SHP 16680) also demonstrates many of the principal characteristics of the class. However, the Stansbury kiln was only a single kiln operation but includes additional related infrastructure such as a bagging area. Nineteenth century kilns in South Australia more typically operated in pairs as demonstrated by the Peake Historic Site – Ruins of Overland Telegraph Station, Oodnadatta (SHP 13624) and the Dingley Dell Homestead Site, Flinders Rangers (SHP 11760). Consequently, the lime kilns at the Bretag/Green Farm Complex are considered to be an exceptional example of a

nineteenth century lime kiln, displaying characteristics that are of a higher quality of integrity and intactness than is typically found in the state.

It is recommended that part of the nominated place **fulfils** criterion (d).

(e) it demonstrates a high degree of creative, aesthetic or technical accomplishment or is an outstanding representative of particular construction techniques or design characteristics.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

> *The place should show qualities of innovation or departure, beauty or formal design, or represent a new achievement of its times. Breakthroughs in technology or new developments in design would qualify, if the place clearly shows them. A high standard of design skill and originality is expected.*

> *Places would not normally be considered under this criterion if their degree of achievement could not be demonstrated, or where their integrity was diminished so that the achievement, while documented, was no longer apparent in the place, or simply because they were the work of a designer who demonstrated innovation elsewhere.*

The built structures that once comprised the Bretag/Green Farm Complex, including the lime kilns, were typical of vernacular farm or light industrial buildings constructed in South Australia in the second half of the nineteenth century. While built by skilled stonemasons and bricklayers, the Bretag/Green Farm Complex has experienced significant natural and manmade degradation, and as a result many early construction materials and techniques are no longer demonstrated by the fabric of the place. Due to its ruinous condition, the Green Farm Complex cannot be considered an outstanding representative of particular construction techniques or design characteristics.

It is recommended that the nominated place **does not fulfil** criterion (e).

(f) it has strong cultural or spiritual association for the community or a group within it.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

> *The place should be one which the community or a significant cultural group have held in high regard for an extended period. This must be much stronger than people's normal attachment to their surroundings. The association may in some instances be in folklore rather than in reality.*

> *Places will not be considered if their associations are commonplace by nature, or of recent origin, or recognised by a small number of people, or not held very strongly, or held by a group not widely recognised, or cannot be demonstrated satisfactorily to others.*

The Bretag/Green Farm Complex has cultural associations for the group of people dedicated to its preservation, including the Monarto Ruins Restoration Committee, a group established in 2008 to stabilise and care for the Bretag/Green Farm Complex ruins. This group has an attachment to the Bretag/Green Farm Complex ruins and has

regular interactions with the place. While this group's contribution to the stabilisation and survival of the complex are substantial, the group is not one that would be considered to resonate with the wider South Australian community. Additionally, the Monarto Ruins Restoration Committee has only existed for a relatively short period of time, so the attachment this group has to the place is not considered to be enduring.

As the place failed to meet the first threshold test, no further tests are considered under criterion (f).

It is recommended that the nominated place **does not fulfil** criterion (f).

(g) it has a special association with the life or work of a person or organisation or an event of historical importance.

Criterion arguments have considered the *Guidelines for State Heritage Places*:

> *The place must have a close association with a person or group which played a significant part in past events, and that association should be demonstrated in the fabric of the place. The product of a creative person, or the workplace of a person whose contribution was in industry, would be more closely associated with the person's work than would his or her home. Most people are associated with many places in their lifetime, and it must be demonstrated why one place is more significant than others.*

> *Places will not generally be considered under this criterion if they have only brief, incidental or distant association, or if they are associated with persons or groups of little significance, or if they are associated with an event which has left no trace, or if a similar association could be claimed for many places, or if the association cannot be demonstrated. Generally the home or the grave of a notable person will not be entered in the Register unless it has some distinctive attribute, or there is no other physical evidence of the person's life or career in existence.*

The Bretag/Green Farm Complex is associated with its long-term owners George Green and the Bretag family, namely Friedrich August, Friedrich Wilhelm and Hugo Wilhelm Bretag, and the Monarto Safari Park (previously Monarto Zoological Park). Each is considered in turn.

The Bretag/Green Farm Complex was established by George Green in 1867. George Green has local significance due to his contributions to the Monarto Methodist Church, the Local Board of Health and the District Council of Monarto. During the 1920s the Bretag/Green Farm Complex was purchased by Friedrich August Bretag. Bretag and his descendants Friedrich Wilhelm and Hugo Wilhelm were well-known agriculturalists in the local area, with extensive holdings within and outside the Hundred of Monarto. While Green and the Bretag family played influential roles in the establishment and development of the Monarto and the eastern Murray plains region, their respective contributions to the state's history are considered to be local rather than state.

The Monarto Safari Park was established on land incorporating the Bretag/Green Farm Complex in 1983. The Monarto Safari Park is significant because of its contributions to

animal conservation and tourism in South Australia. Any association the Park has with the Bretag/Green Farm Complex is incidental and as such is not considered to have a special association with the Park.

It is recommended that the nominated place **does not fulfil** criterion (g).

PHYSICAL DESCRIPTION

Indicative site plan showing the key features of the Bretag/Green Farm Complex.

Source: EnvMaps

1. Green cottage ruins
2. Bretag cottage
3. Goose shed and stockyard ruins
4. Blacksmith's shop ruins
5. Water tanks (2)
6. Lime kilns
7. Horse stable and dairy compound ruins
8. Converted grain store

Located within the Monarto Safari Park, the Bretag/Green Farm Complex comprises the ruins of eight nineteenth century vernacular structures, namely:

- Green cottage ruins, rectangular ruins comprised of limestone rubble and mud mortar walls, with remains of Callitris pine vertical support posts and white-washed lime and mud render,
- Bretag cottage, two-roomed limestone cottage with bullnose verandah to the southern elevation,
- Goose shed and stockyard ruins, three-sided rubble limestone structure with gables to the northern and southern elevations and a square timber-framed window opening on the northern side. Remains of a U-shaped limestone rubble fence built from large, stacked stones to the south and east,

- Blacksmith's shop ruins, rectangular ruins comprised of limestone rubble walls rendered with a mixture of mud and limestone render. At the centre is a stone- and brick-lined forge alcove supported by timber beams with a collapsed brick furnace and beehive oven attached,
- Underground water tanks, two rubble limestone rainwater tanks, one circular and one square,
- Lime kilns (see below),
- Horse stable and dairy compound ruins, comprised of stables and horse yard, chaff storage and cutting room, a square underground tank, two circular water tanks, room, and a cream separator room,
- Converted grain store, rectangular building of rubble and coursed limestone with corrugated iron gable roof. Lime mortar flooring and lime rendered to the interior.

Two attached, rectangular D-type lime kilns are set into a hillside near the centre of the complex, flanked by earthen ramps. The kilns are built from coursed and rubble limestone with double fire-brick lining to the interior of the firing chamber of the western kiln and remnant fire brick lining to the eastern kiln. The firing chambers measure 5 x 4 x 2.5 metres each. The firing chambers are supported by bricks and iron bars, with ash boxes beneath. Four fire and red brick archways are spaced along the front wall.

Elements of Significance:

Elements of heritage significance include (but are not necessarily limited to):

- Two masonry lime kilns with double-brick lining,
- Setting within the hillside, with earthen ramps on either side.

Elements not considered to contribute to significance of place include (but are not necessarily limited to):

- Green cottage ruins,
- Bretag cottage,
- Goose shed and stockyard ruins,
- Blacksmith's shop ruins,
- Underground tanks,
- Horse stable and dairy compound ruins,
- Converted grain store.

HISTORY

The Emergence of Mixed Farming

The founders of South Australia envisaged a primarily agricultural colony. Under Edward Gibbon Wakefield's theory of 'systematic colonisation', the land was surveyed in contiguous blocks with surveys preceding land sales to prevent the dispersal of colonists into remote areas.[2] The basic unit of survey was the hundred, a parcel of approximately 100 square miles, in turn subdivided into a patchwork of small farm units averaging 80 acres, just large enough to support a single family.[3] This approach was to provide as many people as possible with access to land and encourage an equitable distribution of wealth.

Mixed farms became commonplace in the second half of the nineteenth century as wheat growers supplemented farm income and sought to become self-sufficient.[4] Farmsteads often included a cow for dairy products, sheep for meat and poultry for meat and eggs. Sheep and chickens were often fed the lower-quality grain not fit for sale.[5] Enterprising farmers also took up trades such as blacksmithing. Structures were often built to support these activities.

The South Australian Lime Industry

Lime kilns were used to reduce local limestone, a sedimentary rock comprising calcite or calcium carbonate ($CaCO_3$), or seashells, into powdered common lime or quicklime. Lime was essential to the building industry as a key component of mortar, lime plaster, whitewash and cement. Limestone is comprised of calcium carbonate ($CaCO_3$), which when burnt breaks down in a process known as calcination to create lime (calcium oxide CaO).[6] The lime could then be slaked with water to form calcium hydroxide ($Ca[OH]_2$), which is mixed with sand to make mortar or used in other lime-based building products.[7]

Lime was used in nearly every nineteenth century building in South Australia in one form or another and lime kilns were established in areas where limestone, dolomite or sea shells were abundant.[8] Lime kilns were mostly small-scale and built to service one building operation or to supply a particular district.[9] Many were established by farmers to supplement income while utilising the surface stone cleared from paddocks.[10]

The most common variety of lime kiln in South Australia was the intermittent kiln, which was loaded, fired, then allowed to cool before reloading.[11] Subtypes included flare kilns, where the fuel and stone were kept separated, and mixed feed kilns, where the fuel and stone were loaded in alternating layers, with the thickest layer of fuel, usually composed of brush and kindling, forming the base.

In mixed feed kilns, the load was lit from the bottom and allowed to burn without further attention.[12] Firing took between 48 and 90 hours, with the degree of burning achieved judged by forcing an iron bar through the lime from the top, and by observing the shrinkage of the load.[13]

Due to the time and labour required to operate intermittent kilns they typically worked in pairs to produce an almost continuous output, one kiln being fired while the other was cooling.[14] Continuous kilns, which were designed so that fresh fuel and stone could be placed in the kiln and burnt lime withdrawn without interrupting the continuous burning process, resolved these issues.
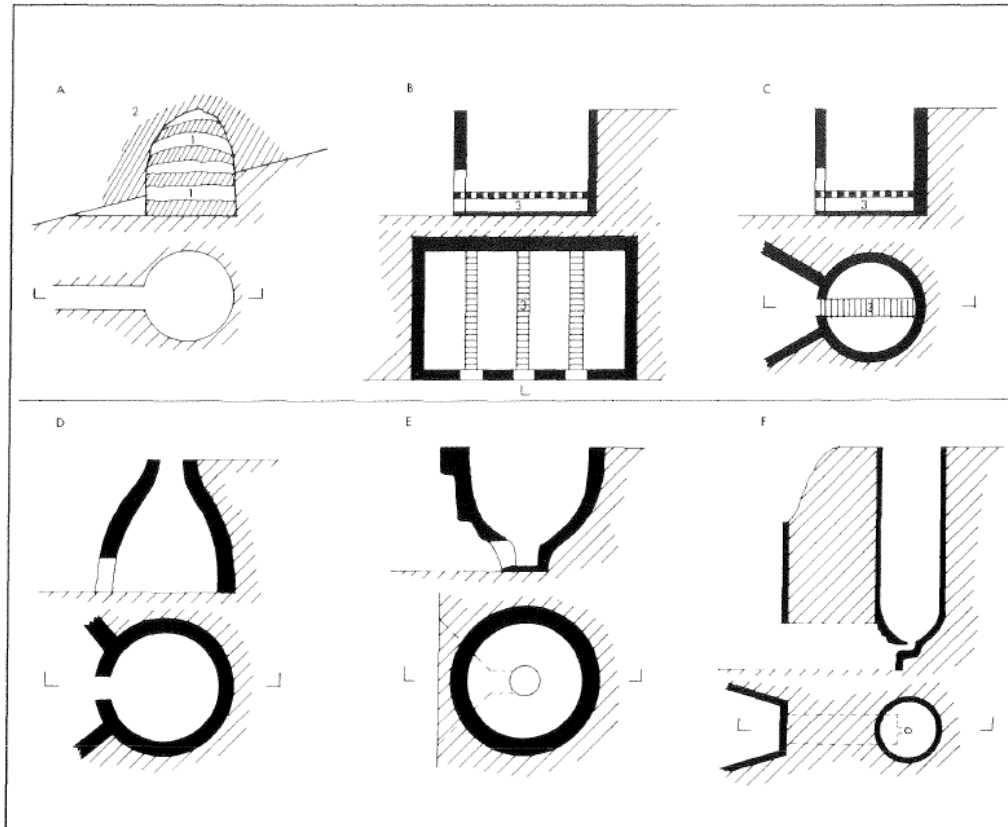

Figure 1. Diagram of the major kiln forms. A. Pit-burn kiln; B. D-type kiln; C. Small cylindrical shaft kiln; D. Inverted cone (bottle) kin; E. Inverted bell kiln; F. Continuous feed shaft kiln. The lime kilns at the Bretag/Green Farm Complex are D-type kilns (top centre).

Source: Michael Pearson, *The Lime Industry in Australia – An Overview*, p.29.

The most common form of intermittent kiln was the D-type kiln and its variations, the bottle kiln and the inverted bell-shaped kiln (Figure 1). D-type kilns, so named as they resemble a 'D' in plan,[15] were dug into the face of a bank with a vertical masonry wall built across the front of the pit, creating a firing chamber. Two or three ash boxes were built below the kiln floor and covered by iron bars or brick. The ash boxes opened through the front wall of the kiln, with an arched fire door or doors above, which allowed fuel and stone to be loaded and lime unloaded. D-type kilns were typically 4 to 7 metres long, 2 to 4.5 metres broad and 3 to 4 metres deep.[16]

Commercial scale lime kilns emerged in the late 1880s, producing lime predominately for the Adelaide market. This coincided with the advent of rail transport and, after the turn of the century, the increasing production of cement in central locations bringing about the demise of most country lime kilns in South Australia.[17]

The Hundred of Monarto

The hundred of Monarto is located approximately 65km south east of Adelaide and comprises part of the eastern plains between the Mount Lofty Ranges and the River Murray. The Ngarrindjeri people are traditional owners of most of the Hundred and prior to European arrival, numerous camping places were located near the river where there was a supply of food and water.[18] One known camping place was located at a water reserve on Salt Creek, near the boundary between the hundreds of Monarto and Mobilong. As agricultural settlement spread into the hundred in the late 1840s, Ngarrindjeri people lost access to food, water and cultural sites. Many Ngarrindjeri people moved to Mount Barker or Murray Bridge to seek work or provisions administered by the government.[19]

The hundred of Monarto was surveyed in 1845, proclaimed on 30 November 1847,[20] and named after a Ngarrindjeri elder known to Europeans as Queen Monarta.[21] At the time of European settlement, the hundred was comprised of mallee scrub and soils considered inferior for agriculture and substantial deposits of surface limestone. Bringing the land into production was difficult due to the extent of clearing required, low rainfall and the lack of surface water.[22] Many farmers excavated large, underground tanks to store water.[23]
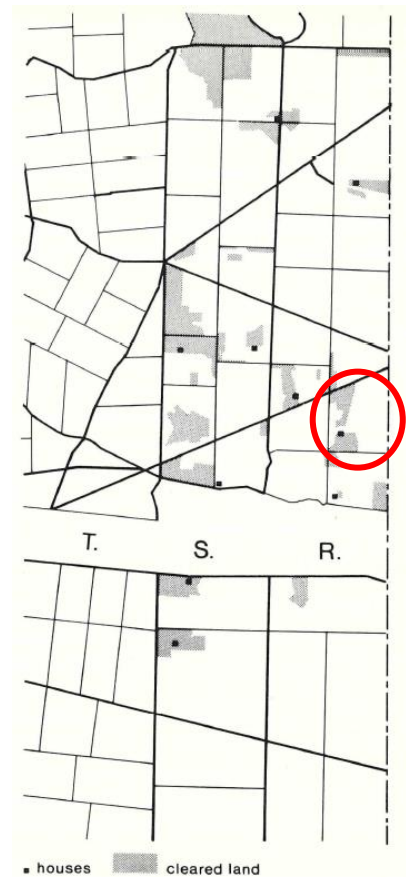

Figure 2. Cleared land and established houses in the eastern portion of the hundred of Monarto in 1870. George Green's section is circled in red.

Source: Williams, p.142

In 1867, to encourage settlement into the mallee scrub, the drier eastern plains of the hundred were surveyed and put up for public auction under the regulations of the *Scrub Lands Act 1866*.[24] The Act allowed blocks of up to one square mile in certain defined areas to be offered on 21-year leases. The leases were auctioned with the highest bid becoming the annual rental, with the right to buy at the statutory minimum price of one pound per acre. The lessee was required to clear one twentieth of the land each year for 20 years or until all the arable land had been cleared.[25] By 1870, 32 leases had been taken up within the hundred of Monarto.[26]

Bretag/Green Farm Complex

On 11 July 1867, portions of sections 245 and 252-255 were purchased as leaseholds at public auction by George Green who intended to grow wheat.[27] By 1870, Green had successfully cleared a large portion of section 253 and built a home (Figure 2).[28] Over the following decades, Green established an experimental 'Trial Farm,'[29] gradually expanding operations to include sheep and dairy farming, blacksmithing

and lime production. The first structure built by Green was most likely a shelter constructed with mallee root walls and a mallee branch roof, which was still standing in c.1892 (Figure 3). To the immediate south-east of the shelter, Green built a wattle and daub family homestead, using Callitris pine posts and golden wattle slats.[30] The walls were in-filled with a mixture of small limestones, mud and straw before being plastered with a coat of lime mortar. Later, Green extended the homestead east, building a cottage with a large living room and kitchen, fireplace, and two bedrooms. This extension was constructed of limestone, insulated with mud mortar and rendered inside and out with lime mortar and whitewashed.[31] Nearby, Green built a small limestone room with freestone corners and shallow skillion roof, with a half-cellar attached on its southern side.[32]

To the north-east of the family residence, Green constructed two intermittent D-type, mixed feed lime kilns which were used to burn lime for the local building industry.[33] The two limestone kilns were built at different times after 1882, with the eastern kiln erected first. Both kilns were originally double lined with firebricks sourced from Nairne brickmaker J. S. Watts.[34] Green's fuel of choice was likely mallee which grew in abundance nearby. During the twentieth century, many of the fire bricks from the eastern kiln were salvaged to build other structures across the site.

Figure 3. George and Jemima Green at the Trial Farm c.1892. Structures from left to right (indicated by arrows): Limestone room with cellar at rear, earth and stone cottage, wattle and daub cottage, blacksmith's shop, and the mallee root shelter.

Source: Monarto Safari Park

Green put Sections 245 and 253 up for sale in March 1899, along with his adjacent holdings on sections 256, 254, 252 in the hundred of Monarto, and section 210 in the hundred of Mobilong. The property totalled 1,020 acres of 'valuable' farming and

grazing land, with improvements including a dwelling house of five rooms and cellar, a blacksmith's shop, two lime kilns, two permanent wells, three cement-lined tanks and one large tank for stock. The property was sub-divided into six paddocks which were all 'exceedingly well fenced' and 'mostly sheep-proof.'[35] The property failed to sell, and the property remained with Green until his death on 22 December 1905.[36]

In 1906, Green's estate was sold at a clearing sale, including stock comprising 98 mixed merino sheep and five draught horses, implements and sundries.[37] The land was sold for a lump sum of £1,000 along with an allotment in Murray Bridge.[38] The new owners were Monarto farmers James Hutton and John Thomas Winch who share farmed the property.[39] Hutton was also a chaff and grain merchant, operating out of nearby Murray Bridge.[40]

In 1921, the farm was acquired by Friedrich August Bretag.[41] The Bretag family settled in the Monarto area at the same time as Green, with Friedrich's grandfather, Johann Karl Wilhelm, and father, Johann August, purchasing scrub leases nearby in the hundred of Monarto.[42] The farm remained in the Bretag family for almost fifty years, passing to Johann's son Friedrich Wilhelm (Bill) in 1927, and subsequently to his youngest son, Hugo Wilhelm Bretag in 1931.[43]

During the 1920s, Bill Bretag extended the homestead considerably to accommodate his wife Caroline and their four children Fred, Nora, Hulda and Hugo.[44] To do so, he filled in the cellar, built up its walls to create a new room, and added an additional room with a fireplace and chimney on its eastern side. Bill added a porch with bullnose verandah to the southern side, as well as a lean-to kitchen, also with a fireplace, and utility room on the northern side with galvanised iron walls. The new four-roomed cottage was covered with a corrugated-galvanised-iron half-hipped roof.[45] The kitchen had a chimney with open fireplace. Fire bricks taken from Green's long-retired lime kilns were used to build the kitchen fireplace and chimney and to form the keystone segmental arches over the windows on the southern elevation.[46]

Following Bill's death in 1944, his son Hugo took over the property. Hugo grew grain and bred prize-winning pigs,[47] while his wife Rita baked bread, biscuits and cake using a beehive oven in the former blacksmith's shop. In 1947, Hugo and Rita converted the stable and stable yard into a dairy. Hugo and family friend Herb Braendler built a room to the south of the stable to house a cream separator. In 1950, the grain store was converted into a two-roomed residence and in 1953, deterioration of the original homestead led the Bretag family to move into a new timber house.[48]

In 1973, the property was acquired by the state government as part of their plan to establish a satellite city at Monarto. When this project failed in the early 1980s, the allotment was offered back to the Bretag family. Like many other families who had re-established elsewhere, the Bretags did not accept the offer, leaving the land unoccupied. In 1983 the state government established the Monarto Zoological Park (now Monarto Safari Park), which opened to the public in 1993. Today the Bretag/Green Farm Complex forms part of the Zoo, serving interpretive and educational purposes.

In 2001, a preliminary archaeological study was undertaken by Flinders University's Department of Archaeology and in 2010 some of the structures on the site were excavated and partially repaired, including the lime kilns and the underground water tanks.[49] The Monarto Ruins Restoration Committee was established in 2008 to stabilise and care for Bretag/Green Farm Complex ruins.

Chronology

Year	Event
Late-1830s	Early European settlers divide the area now comprising the hundred of Mintaro into pastoral leases of between 60 and 160 acres.[50]
1839	John Watts starts his brickmaking business, producing some of the first South Australian bricks in Hindmarsh.
1845	The first survey of the area which becomes the hundred of Monarto is conducted by Corporal Henry Ide of the Royal Sappers and Miners.
1847	The hundred of Monarto is proclaimed in November.
1858	The Watts family move to Nairne and continue their brickmaking business.
1863	The boundaries of the hundred of Monarto are revised in December.
1866	The *Scrub Lands Act* is passed.
1867	**The leases for sections 245, 252, 253 and 254 of the hundred of Monarto are advertised for sale and subsequently purchased by agriculturalist George Green (b.1830-d.1905).**
1869	The Monarto Post Office opens.
1870	The Monarto School opens.
1871	The Monarto Methodist Church is built. Green is a trustee.
1876	The stump jump plough is invented by Richard Bowyer and Clarence Herbert Smith.
1879	Joseph Samuel Watts joins the family brickmaking business in Nairne.
1880s	**Green constructs the lime kilns at the Bretag/Green Farm Complex on section 253.**
1882	The District of Monarto is proclaimed. Green is elected one of the first councillors.[51] The first meeting is held at the Wesleyan Methodist Church.
1885	Green becomes Chairman of the District Council of Monarto (serving until 1889).
	The District Council of Monarto builds its Chambers on part of section 206.
1886	**Green receives a Land Grant for section 253 in the hundred of Monarto in October (CT 507/184).**
1889	Green is appointed Chairman of the Local Board of Health.[52]
1891	Green retires as councillor and is appointed J.P. of Monarto.[53]
1892	The South Australian Portland Cement Company is founded.

1906	**Following Green's death in 1905, farmers James Hutton (b.1878-d.1937) and John Thomas Winch acquire the Green Farm. Winch leaves the venture in 1911.**
1911	The Monarto School closes.
1913	Monarto South School opens.
1921	**Friedrich August Bretag (b.1882–d.1959) acquires the Green Farm.**
1927	**Friedrich Wilhelm (Bill) Bretag (b.1876 –d.1944) acquires the Green Farm in October (CT 1856/113).**
	Bill Bretag extends Green's room and half-cellar into a two-roomed cottage.
1931	**Friedrich August Bretag builds a masonry above-ground tank adjacent to the stable.**
1935	The District Council of Monarto holds its last meeting before amalgamating with the District Council of Mobilong.
1946	**Hugo Wilhelm Bretag (b.1918 – d.2003) acquires the property.**
1947	**The horse stable is converted to a dairy. A milk separator room (creamery) is added by Hugo Bretag and Herb Braendler.**
1950	**Hugo Bretag converts the grain store into a small house. A brick stove is added to the building.**
1953	The homestead is vacated by the Bretag family.
1959	The Monarto South School closes.
1970s	The Dunstan Labor government proposes to establish a satellite city at Monarto on 16,000-hectares, with a projected population of 200,000.
1972	Land in the Monarto area is acquired by the state government and placed under the control of the Monarto Development Commission.
1973	**Section 253 is acquired along with others by the Monarto Development Commission.**
1976	Plans for the satellite city are deferred due to lack of funds.
1980	Plans for the Monarto satellite city are abandoned.
1982	Land controlled by the Monarto Development Commission is returned to the administration of the District Council of Murray Bridge.
1983	**Section 253 is transferred to the Minister for Environment and Planning.**
1983	The Monarto Zoological Park is established by the state government.
1990s	The roof is removed from the stable compound.
1993	The Monarto Zoological Park opens to the public.
2001	**A preliminary archaeological investigation undertaken by the Department of Archaeology at Flinders University commences at the Bretag/Green Farm Complex in February.**

2008	The Monarto Ruins Restoration Committee is established by Tim Jenkins and Allan Bretag.
2009 – 2010	**Repairs to the Bretag/Green Farm Complex ruins begin in 2010 with assistance and funding from the Construction Industry Training Board.**
	Slumped earth surrounding the lime kilns is removed and the masonry walls are cleaned and partially repaired.
	Horse stable compound is partially repaired.
	The underground water tanks are excavated and repaired. The square tank is completely rebuilt in its original location.
2019 - 2020	**The two-roomed cottage built by Bill Bretag is repaired as a result of a bequest from Rita Bretag.[54]**
	The Monarto Zoological Park becomes known as the Monarto Safari Park.

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SITE RECORD

NAME:	Bretag/Green Farm Complex	PLACE NO.:	26566

FORMER NAME:	George Green's 'Trial Farm'
DESCRIPTION OF PLACE:	Mixed farm complex and two limestone and brick D-type lime kilns.
DATE OF CONSTRUCTION:	c.1882 – c.1899
REGISTER STATUS:	Nomination: 3 February 2023
	Provisional Entry: 27 June 2024 (Green Farm Lime Kilns, Monarto, SHP 26598)
CURRENT USE:	Interpretive display by Zoos SA
	1983 -
PREVIOUS USE(S):	Mixed farming
	c.1882 – c.1970
	Lime manufacture
	c.1882 – c.1899
BUILDER:	George Green
	c.1882 – c.1899
LOCAL GOVERNMENT AREA:	Rural City of Murray Bridge
LOCATION:	Monarto Safari Park

	Street No.:	63
	Street Name:	Monarto Road
	Town/Suburb:	Monarto
	Post Code:	5254
LAND DESCRIPTION:	**Title Reference:**	CT 6297/539 D122491 A11
	Hundred:	Monarto

| **NAME:** | Bretag/Green Farm Complex | **PLACE NO.:** | 26566 |

View of George Green's farmstead ruins. The Bretag cottage is on the left and the blacksmith's shop ruins are in the centre. Note the abundant surface limestone scattered across the site.

Source: DEW Files, Dec 2023

The Bretag cottage.

Source: DEW Files, Dec 2023

Southern elevation of the Bretag cottage.

Source: DEW Files, Dec 2023

Door and window detail of the Bretag cottage, note the use of the firebricks from the kilns to window surrounds.

Source: DEW Files, Dec 2023

Interior details of the Bretag cottage.

Source: DEW Files, Dec 2023

The remains of the fireplace, kitchen and utility room addition built by Bill Bretag in the 1920s.

Source: DEW Files, Dec 2023

The blacksmith's shop ruins with the Bretag cottage in the background.

Source: DEW Files, Dec 2023

Internal views of the blacksmith's cottage, including the remains of the beehive oven (right).

Source: DEW Files, Dec 2023

Remains of the blacksmith's shop forge and beehive oven.

Source: DEW Files, Dec 2023

Green cottage ruins from the South.

Source: DEW Files, Dec 2023

Green cottage ruins from the east.

Source: DEW Files, Dec 2023

Goose shed ruins.

Source: DEW Files, Dec 2023

Remains of the stone stockyard fence with the Bretag cottage in the background.

Source: DEW Files, Dec 2023

Stone water tanks built by George Green.

Source: DEW Files, Dec 2023

Converted horse stable and chaff house compound.

Source: DEW Files, Dec 2023

Western elevation of the converted horse stable.

Source: DEW Files, Dec 2023

Interior of the converted grain store.

Source: DEW Files, Dec 2023

Western elevation of the converted grain store.

Source: DEW Files, Dec 2023

Eastern elevation of the converted grain store.

Source: DEW Files, Dec 2023

Remains of the horse stables and yard. The layout of the original horse stables can be discerned from the foundations, as well as the timber posts that would have once held up the roof.

Source: DEW Files, Dec 2023

Cream separator room built by Hugo Bretag and Herb Braendler in 1947 (left) and the only post remaining from the horse yard access gate.

Source: DEW Files, Dec 2023

Stone water tank built by Friedrich August Bretag in 1931.

Source: DEW Files, Dec 2023

The D-type lime kilns built by George Green in the late nineteenth century.

Source: DEW Files, Dec 2023

Lime kiln fire door archways.

Source: DEW Files, Dec 2023

View of the eastern lime kiln firing chamber through the front archway. The elevated chamber is held up by iron bars and bricks, with the ash box below.

Source: DEW Files, Dec 2023

Fire brick stamped 'J.S. Watts'. Bricks like this are scattered around the site.

Source: DEW Files, Dec 2023

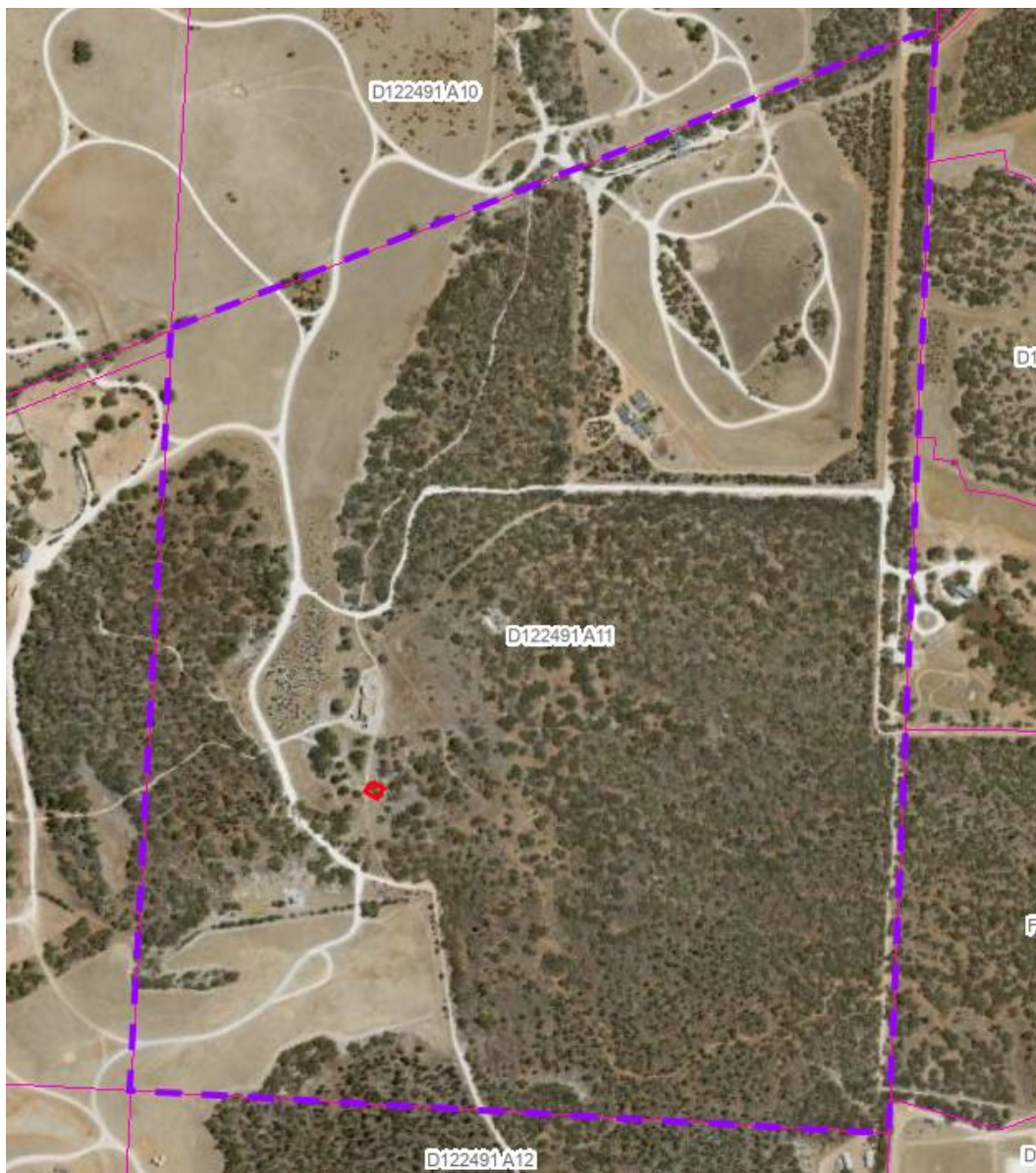**Interior of the eastern lime kiln.**

Source: DEW Files, Dec 2023

Interior of the western lime kiln. This kiln retains its double-layered fire brick lining.

Source: DEW Files, December 2023

SITE PLAN

NAME:	Bretag/Green Farm Complex	**PLACE NO.:**	26566

Bretag/Green Farm Complex, 3401 Old Princes Highway, Monarto SA 5254 (CT 6297/539 D12249 A11, Hundred of Monarto)

N ↑

LEGEND

 Parcel boundaries (Indicates extent of Listing)

 Outline of Elements of Significance for State Heritage Place

SITE PLAN (DETAIL)

NAME:	Bretag/Green Farm Complex	**PLACE NO.:**	26566

N ↑

LEGEND

 Outline of Elements of Significance for State Heritage Place

[1] Identifying the variety of early lime kilns (intermittent or continuous) and their method of operation (mixed feed or flare) is difficult to determine by the kiln's physical fabric alone. See Michael Pearson, 'The Lime Industry in Australia – An Overview,' *Australian Historical Archaeology*, vol. 8 (1990), p. 31.

[2] D.W. Meinig, *On the Margins of Good Earth: The South Australian Wheat Frontier, 1869-1884* (Adelaide: Rigby Limited, 1962), p.9.

[3] Meinig, *Margins of Good Earth*, p.9.

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[5] Alan Jones, 'Farmers and their towns,' *Terowie Workshop: exploring the history of South Australian country towns*, ed. A.F. Denholm, Susan Marsden and Kerrie Round (Adelaide: University of Adelaide, 1991), p.94.

[6] Pearson, 'The Lime Industry in Australia,' p.28.

[7] Lime is still used today for a variety of purposes, including mortars and plasters in the building industry, in agriculture to open and lighten clayey soils and improve other soils in various ways, and in a variety of chemical and industrial processes.

[8] R.K. Johns, 'Limestone, Dolomite and Magnesite Resources of South Australia,' Geological Survey of South Australia, Department of Mines, Bulletin No.38 (1963), p.12.

[9] Pearson, 'The Lime Industry in Australia,' p.33.

[10] Weidenhofer Architects, 'Heritage of the Yorke Peninsula: General Report,' Department for Environment, Heritage and Aboriginal Affairs (September 1998), p.31.

[11] Pearson, 'The Lime Industry in Australia,' p.28.

[12] Quoted in Jane Harrington, *An archaeological and historical overview of limeburning in Victoria*, Heritage Council Victoria (2000), p.9.

[13] Pearson, 'The Lime Industry in Australia,' p.28.

[14] Pearson, 'The Lime Industry in Australia,' p.31.

[15] A 'D' type kiln did not always need to have rounded sides. See Pearson, 'The Lime Industry in Australia,' p.30.

[16] Pearson, 'The Lime Industry in Australia,' p.30.

[17] Pearson, 'The Lime Industry in Australia,' p.32.

[18] Lucy Abbott and Mervyn Hein, *Range to River: recollections of Rockleigh, Pallamana and Toora* (Tailem Bend: Abbott and Mein, c.1989), p.9. Quoted in the 'Eastern Plain Heritage Survey,' p.55.

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[25] PIRSA, 'The Measure of the Land.'

[26] Williams, *South Australian Landscape*, p.140.

[27] Williams, *South Australian Landscape*, p.139. And *South Australian Weekly Chronicle*, 'Advertising,' 8 June 1867, p.8.

[28] Cooper's sketch, SGO 1702 and 1745½ 1870 (in).

[29] His property was described as such in his wife Jemima's obituary notice. See *The Express and Telegraph,* 'Family Notices,' 3 October 1896, p.4.

[30] Monarto Safari Park, 'Bretag Homestead,' interpretive signage.

[31] Monarto Safari Park, 'Bretag Homestead,' interpretive signage.

[32] Tim Owen and Jody Steele, 'Monarto Zoological Park Archaeological Project 2001.' unpublished paper with later annotations by Allan Bretag (2023), Department of Archaeology, Flinders University, Adelaide (2001).

[33] Owen and Steele, 'Monarto Zoological Park Archaeological Project 2001.'

[34] Brick maker Watts & Son opened a factory in Nairne in the early 1860s. The bricks used at Green Farm, stamped 'J.S. Watts' in the frog, refer to the company's second-generation brick maker Joseph Samuel, who was running the Nairne factory from 1882. This indicates the kilns were built after that time. See Joseph Samuel Watts and Estelle Watts, 'Watts brick business, 183801985' (Nairne: J.S. Watts, 1990), p.2-4.

[35] *The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser*, 'Advertising,' 31 March 1899, p.2.

[36] *The Express and Telegraph*, 'Advertising,' 17 September 1902, p.4. And *The Register*, 'The Country,' 27 December 1905, p.3. And *The Advertiser*, 'Family Notices,' 10 January 1906, p.6.

[37] *The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser*, 'The Southern Districts,' 23 February 1906, p.3.

[38] *The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser*, 'The Southern Districts,' 2 March 1906, p.2.

[39] *Advertiser*, 'Obituary,' 16 January 1937, p.16.

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[41] SAILIS, CT 507/184.

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[51] *The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser*, 'Government Gazette Items,' 13 October 1882, p.3.

[52] *South Australian Weekly Chronicle*, 'Monarto,' 19 January 1889, p.13.

[53] *The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser*, 'Our District,' 2 October 1891, p.3.

[54] Monarto Safari Park, 'Bretag Homestead,' interpretive signage.