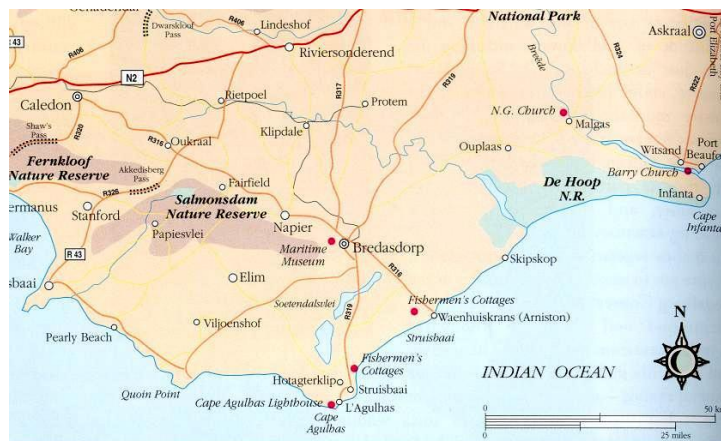


## A visit to Bredasdorp Brickworks 2006

Martin Green

It was an unexpected bonus of a trip to South Africa in 2006 to visit a brickworks in Bredasdorp where traditional Clamps were being used to fire the bricks. It offered the opportunity to examine a technique that was commonplace in the UK before the advent of more sophisticated and efficient permanent kilns. I was allowed to take photographs by the owner and I feel the illustrations taken on that visit give a good indication of the nature of the Clamp process, and the demands placed upon those responsible for the building, firing and emptying of the Clamp.



Bredasdorp is a small town to the north of Cape Agulhas, the southern-most tip of Africa, with the brickworks beside the R316 road to Napier.



The brickmaking process, of course, begins with the digging of the clay, with 'scaly clay' (the type of clay extracted at Bredasdorp) available on site. It is left to weather for a minimum of four weeks, crushed by the Hazemag rotor crushers, and then converted into the mixture ready for insertion into the brick-cutting machine. This includes the adding of a small amount of 'spiral duff' (powdered coal) and lime.



On emerging from the brick-cutting process, the 'green bricks' are removed from the conveyor and stacked to dry.



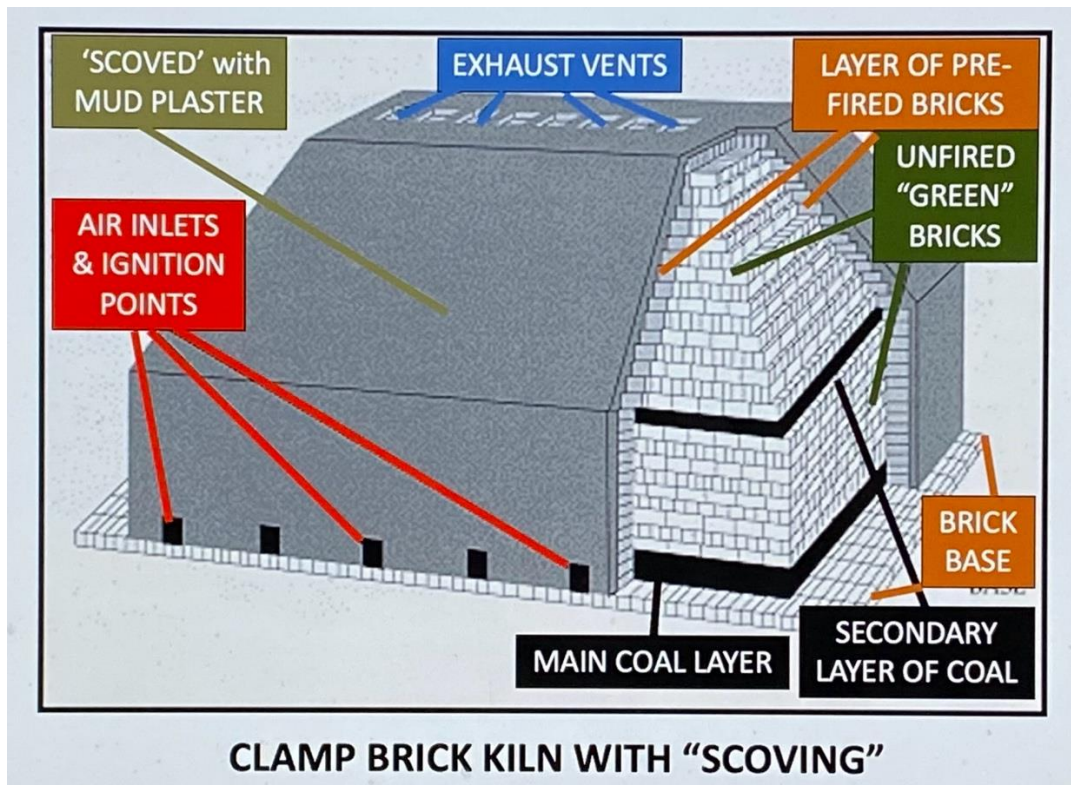
Drying lasts perhaps 1 week in the summer and 4 weeks in the winter, depending on weather conditions. These are generally favourable but plastic sheets are always close at hand in case of the approach of wet weather. The locals view the presence or otherwise of the sheets as the best weather forecast for the day!



Clamps are temporary structures, used for a solitary firing, and then re-built for subsequent firings.



The diagram below illustrates the structure of a Clamp, with 'scoving' on the outside to try and reduce heat loss.



The Bredasdorp workers used the term 'smearing' rather than 'scoving', and the mud applied was a mixture of the powdered clay collected from beneath the conveyor belts and mixed with water. This was a very laborious task performed with bare hands.



It takes about 3 weeks to build a Clamp Kiln with a load of up to 450,000 bricks. Larger loads tend to be used in the summer as dry green bricks are more regularly available. Up to 80% of output is concentrated in the summer months.

The kiln is coal-fired, with high quality 'small nuggets' obtained from Gauteng (Johannesburg).



The kiln burns for 10 days, with a 4 day cooling period, making a total of a minimum 5 weeks from start to finish.





Then, of course, the bricks have to be emptied from the kiln and loaded for the next stage of storage or transport. For each load there will be wastage - between 11% in the summer and 19% in the winter months. All these tasks represent highly labour-intensive activity, with 51 workers employed - 35 full time and 16 part-time (working only in summer months).



I was very grateful to the owner of the works to allow me such open access to the site and all the workers welcomed me warmly, despite being slightly bemused that anyone should want to photograph their brickworks. Little did they realise!