

SOUTH AFRICAN HERITAGE RESOURCES AGENCY

CONSERVATION MANAGEMENT PLAN FOR “BLACKIE” A SPECIFICALLY DECLARED STEAM RAILWAY LOCOMOTIVE SAHRA/HO/07/2014

FIRST INTERIM DRAFT

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**CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”
A SPECIFICALLY DECLARED STEAM RAILWAY LOCOMOTIVE**

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CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

1. INTRODUCTION

- 1.1. The South African Heritage Resources Agency (SAHRA) requires a Conservation Management Plan (CMP) for the preserved steam locomotive “Blackie”, built in England in 1859.
- 1.2. This locomotive was the first railway locomotive to be imported and run in South Africa.
- 1.3. “Blackie” was declared at National Monument in 1936.
- 1.4. “Blackie” was previously mounted on a plinth in the concourse of Cape Town railway station but was removed prior to the 2010 FIFA Soccer World cup renovations of the station, and was put in storage in Firgrove.
- 1.5. PRASA’s intention is to display this locomotive in a glass enclosure on Station Square in front of Cape Town Station, facing Adderley Street.
- 1.6. B4 Architects have been appointed by SAHRA to investigate the proposals put forward by PRASA for the preservation and display of this locomotive and to prepare a Conservation Management Plan to cover all aspects of the restoration, relocation, display, future maintenance, management and monitoring of the locomotive.



CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

2. BACKGROUND

2.1. THE LOCOMOTIVE

- 2.1.1. The locomotive was built by Hawthorns & Co. at their Leith works as a 0-4-0T (side tank) locomotive to the standard British rail gauge of 4' 8½" (1465 mm) with two cylinders mounted between the frames and to the order of Messrs E & J Pickering & Co., contractors at the Cape of Good Hope, who were engaged in the building of the first railway in the Cape.
- 2.1.2. The Makers Number was No. 162.
- 2.1.3. The locomotive was built in 1859.
- 2.1.4. In 1873/4 the locomotive was rebuilt and modified by the removal of the side tanks, the provision of a cab roof supported on four posts, the addition of a pair of carrying (non-powered) wheels under the cab and the removal of the flanges on the rear pair of driving wheels.
- 2.1.5. Photographic evidence would suggest that either at that time or later a new boiler was fitted to the engine.

2.2. ARRIVAL IN SOUTH AFRICA

- 2.2.1. Shipped by its manufacturers in Scotland to South Africa the locomotive was off-loaded from the brig *Charles* on 8th September 1859, making it the first railway locomotive to arrive in the country.
- 2.2.2. The landing of the engine involved “dismantling” it – although it was almost certainly dismantled prior to its loading in Scotland – and being landed by lighters before being manhandled to a site at Alfred's Square, part of what is now the Grand Parade, where a shed was erected around it and where it was assembled by William Dabbs, a Scottish artisan who had accompanied the loco to the Cape.
- 2.2.3. Once the engine was in working order Dabbs became its driver and is recorded as having been so for its entire service life in Cape Town.

2.3. OWNERSHIP, IDENTITY AND OPERATIONAL HISTORY

- 2.3.1. *Blackie* was ordered and paid for by the company contracted to build the railway line from, what at the time was known as Papendorp (today's Woodstock), to Wellington.
- 2.3.2. The contractors were E & J Pickering & Co. and the contracting company was the Cape Town Wellington Dock & Railway Co. (CTWDRC), usually referred to as either the Cape Town Wellington Railway or the Cape Town Railway & Dock Co.
- 2.3.3. The first sod for the line at the Cape had been turned on 31 March 1859 by the Governor, Sir George Grey, amidst scenes of great rejoicing, but the first section of track between Fort Knokke and Salt River was only opened on 8 February 1861 - Twenty-three months to open one and a half miles of track!
- 2.3.4. Due to extremely poor performance in carrying out their contract, the Pickering company was dismissed in October 1861 and the works and all machinery, including the then unnamed and unnumbered engine, were taken over directly by the CTWDRC but the take-over did not go down well with Pickering's and the contractor incited their workers to riot.
- 2.3.5. Prior to this the CTWDRC had ordered and received the first 8 locomotives for operating its services.
- 2.3.6. These engines were quite similar in appearance to *Blackie* but were fitted with outside cylinders, 4-wheel tenders and splashers over the driving wheels.
- 2.3.7. With these engines already numbered and in service the contractor's engine was allocated the next available number and joined the roster as No.9.

- 2.3.8. Some histories incorrectly report that No.9 (*Blackie*) was badly damaged by the rioting Pickering workers and then repaired and modified. This is not correct - the locomotive attacked in this incident was one of the railway company's own tender engines, No.4 named *Wellington*.
 - 2.3.9. On the 1st of January 1873 the newly-formed Cape Government Railways (CGR) took over the assets and liabilities of the CTWDRC and also leased the Wynberg Railway.
 - 2.3.10. Shortly after the takeover, and after a number of discussions and submissions to the Cape Parliament, a decision was taken to convert the rail gauge for future expansion into the interior from the British standard gauge of 4' 8½" (1465 mm) to the cheaper to construct 3' 6" (1067mm) gauge (known as the Cape Gauge).
 - 2.3.11. At the same time the existing railway line from Cape Town to Wellington via Stellenbosch and Paarl was to be converted to the new Cape gauge.
 - 2.3.12. This conversion was completed in and, thus the existing locos would have no further use.
 - 2.3.13. Engine no. 9 remained on the Wellington line until late in 1873.
 - 2.3.14. However, in October 1873, the need for a small locomotive to assist in the construction work at the newly proclaimed harbour on the Kowie River at Port Alfred, resulted in the Chief Inspector of Public Works requesting a locomotive for use at Port Alfred, and on 24 December 1873 authority was granted for alterations to be made to the locomotive and for it to be shipped to Port Alfred.
 - 2.3.15. No.9 taken into the works at Salt River and modified and it is surmised that these alterations included the addition of a trailing axle to convert the locomotive into an 0-4-2.
 - 2.3.16. With this work completed the locomotive was dismantled and shipped to Port Alfred in 1874 to work on construction being undertaken on the West bank of the Kowie River.
 - 2.3.17. The provision of the additional wheel set created a problem when the locomotive was put to work in Port Alfred as the longer wheel-base caused fouling on the curves and to alleviate this the middle set of wheels had their flanges removed and a 3 kph (2 mph) speed limit enforced.
 - 2.3.18. *Blackie* served at Port Alfred until 1883 by which time it was considered to be life-expired.
 - 2.3.19. The nameless No.9 had become known colloquially as *Blackie* during its life in and around Cape Town but gained the official name **Frontier** on delivery to the Kowie.
- 2.4. **PRESERVATION**
- 2.4.1. After 1883 the engine was left to its fate, dumped in a siding, where it remained until 1897 when it was decided to move it to Grahamstown, give it a cosmetic overhaul and put it on display as one of the attractions at the large South African Exhibition which was to be held in Grahamstown where it was to remain on display until 1898 where-after it was put into local storage.
 - 2.4.2. In 1913, after Union and the formation of the South African Railways, *Blackie* was brought back to Cape Town and again cosmetically restored – this time in Cape Government Railway colours – and put on a display on a plinth on the station concourse between platforms C and D.
 - 2.4.3. During the electrification of the suburban lines at Cape Town in 1927-28 it was found the locomotive was in the way of the overhead equipment and the engineer in charge had the old locomotive removed by road to Salt River Workshops to be scrapped.
 - 2.4.4. Fortunately Mr A W Westley, the mechanical engineer at Salt River Workshops at that time, realised the historic importance of No.9 and put it on a plinth near the main gate to the workshops.

- 2.4.5. In 1935 the Historical Monuments Commission put in place the process to proclaim it to be a National Monument (Government Notice 529 of 1936) and it was once again moved back to Cape Town station.
- 2.4.6. In due course it was again moved when the new Cape Town station was built in the early 1960's and placed in the main concourse.
- 2.4.7. The locomotive was removed from the concourse by PRASA and placed in storage during the 2009-10 revamp of the station ahead of the soccer World Cup.
- 2.4.8. The locomotive remains in storage at the present time, pending the completion of the arrangements for a new display position at the Cape Town station.

CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

3. HISTORICAL SIGNIFICANCE

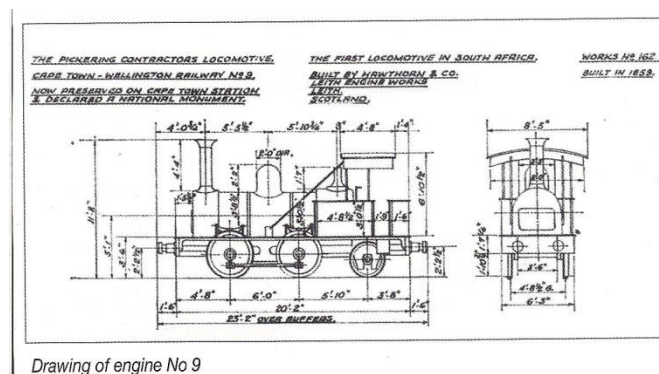
- 3.1. This locomotive was the first standard gauge steam locomotive in South Africa arriving in Cape Town in 1859.
- 3.2. “*Blackie*” was also the first standard gauge locomotive to operate in South Africa, albeit on construction trains.
- 3.3. Engine no. 9 may well have been at the head of the first construction train to reach the planned railhead at Wellington on 4 November 1863, but whether this was so cannot be confirmed.
- 3.4. “*Blackie*” was declared a National Monument in 1936.

CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

4. DESCRIPTION OF THE LOCOMOTIVE

- 4.1. Description
- 4.2. The locomotive was originally built as a 0-4-0T (side tank) locomotive with two cylinders mounted between the frames and an open cab.
- 4.3. The locomotive was subsequently modified to a 0-4-2T locomotive with a roofed cab.
- 4.4. In its current state the locomotive does not have side tanks.
- 4.5. **Dimensions** (final, modified form)

Length over buffers	7,087m	23' 3"
Height above rails (stack)	3,556m	11' 8"
Height above rails (cab)	3,162m	10' 4½"
Width (loco)	1,905m	6' 3"
Width (cab)	2,565m	8' 5"
Wheel-base over coupled wheels	1,829m	6' 0"
Wheel-base total	3,607m	11' 10'
Wheel gauge	1,465m	4' 8½"
Driving wheel diameter	1,372m	4' 6"
Trailing wheel diameter	0,914m	3' 0"
Boiler diameter	1,181m	3' 10½"
Boiler pitch	1,549m	5' 1"



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5. STATUS QUO REPORT ON CONDITION OF THE LOCOMOTIVE

5.1. To be determined after the inspection today.

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6. LIVERY FOR THE LOCOMOTIVE

6.1. ORIGINAL LIVERY

- 6.1.1. No contemporary record of the colour/colours of the locomotive on delivery has been discovered.
- 6.1.2. However it would seem that its colloquial nickname *Blackie* is almost certainly an indication that it was black.
- 6.1.3. As a contractor's piece of equipment it would certainly not have had any fancy and expensive paintwork applied which would reinforce this conclusion.

6.2. CURRENT DISPLAY LIVERY

- 6.2.1. The later application of a Cape Government Railways livery either dates back to its 1897 Grahamstown display days or, according to at least two narratives, to its return and restoration to go on display at Cape Town station in 1913.
- 6.2.2. It is currently in a Cape Government Railways livery (lined green).

6.3. RECOMMENDTION ON DISPLAY LIVERY FOR THE LOCOMOTIVE

- 6.3.1. Since the locomotive has been displayed in its current Cape Government Railways livery for between 80 and 100 years and this was the livery that it was in when it was proclaimed a national monument it is recommended that it continues to be displayed in a Cape Government Railways livery.

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7. REPAIRS / RESTORATION REQUIREMENTS

- 7.1. The locomotive will be inspected today to assess and record the current condition of the locomotive.
- 7.2. This inspection will also enable us to determine whether any repairs are needed and whether any reinforcement of weakened areas is required.
- 7.3. The inspection will enable us to determine whether painting is required.
- 7.4. We will get expert opinion on suitable paint specifications and preparation and application methodology.
- 7.5. After reviewing the condition of the locomotive we will get expert advice on whether any protective surface coatings are required to minimise possible future corrosion.
- 7.6. We will also confirm whether there are any hazardous materials that require removal and disposal.
- 7.7. The extent of the repairs and restoration work required can only be determined after the inspection today.
- 7.8. Records are to be kept of any repair or restoration work so that future generations will know what work has been undertaken.

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8. REQUIREMENTS FOR THE SATISFACTORY DISPLAY OF THE LOCOMOTIVE

- 8.1. In considering the display conditions proposed by PRASA the following points will be reviewed and recommendations made on minimising the risks for damage or accelerated deterioration of the locomotive:
 - 8.1.1. The effects of sunlight and possible fading of the paintwork over time and how display location should be provided with shade.
 - 8.1.2. Control of humidity inside the display enclosure and the provision of suitable ventilation to minimise corrosion.
 - 8.1.3. Access to the display enclosure for the purposes of regular monitoring and cleaning as appropriate of the locomotive and interior glass surfaces, as well as for any maintenance required.
 - 8.1.4. Review of the specifications for the glass enclosure and illumination of the locomotive during the hours of darkness.
 - 8.1.5. Consideration of appropriate security for the locomotive.
 - 8.1.6. Consideration of viewing conditions to enable the locomotive to be viewed satisfactorily under all conditions.
 - 8.1.7. Review of signage proposed by PRASA.
- 8.2. A review will also be carried of the process followed by PRASA in determining the proposed location and what alternate locations were considered and the reasons that they were eliminated.
- 8.3. A further review will also be carried to determine whether the proposed location is the most suitable available location in Cape Town for the display of the locomotive.
- 8.4.

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9. OVERVIEW OF THE PRASA DISPLAY PROPOSAL

9.1. This can only be done once we have had a chance to review the PRASA proposals.

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10. INVESTIGATION & REVIEW OF ALTERNATE DISPLAY PROPOSALS

10.1. To be investigated after the inspection today.

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11. RECOMMENDED DISPLAY PROPOSAL

11.1. To be tabled after consideration of all proposals and on-site inspections.

CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

12. RELOCATION & TRANSPORT PLAN

12.1. This can only be done once we have had a chance to review the PRASA proposals.

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13. MAINTENANCE & MANAGEMENT PLAN

13.1. This can only be developed after discussions with SAHRA and PRASA.

CONSERVATION MANAGEMENT PLAN FOR “BLACKIE”

14. MONITORING & REPORTING PLAN

14.1. This can only be developed after discussions with SAHRA and PRASA.

CONSERVATION MANAGEMENT PLAN FOR "BLACKIE"

15. CONCLUSION

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