

# **SOUTH AFRICAN HERITAGE RESOURCES AGENCY**

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

**SAHRA/HO/07/2014**

**REQUIREMENTS FOR THE SATISFACTORY DISPLAY OF THE LOCOMOTIVE**

**b4**

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**27 March 2015**

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## CONSERVATION MANAGEMENT PLAN FOR "BLACKIE"

### 1. REQUIREMENTS FOR THE SATISFACTORY DISPLAY OF THE LOCOMOTIVE

1.1. In considering the display conditions proposed by PRASA the following points need to be considered in order to minimise the risks for damage or accelerated deterioration of the locomotive:

1.1.1. The effects of sunlight and possible fading of the paintwork over time and how display location should be provided with shade.

1.1.1.1. The locomotive needs to be protected from direct sunlight.

1.1.2. Control of humidity inside the display enclosure and the provision of suitable ventilation to minimise corrosion.

1.1.2.1. If the locomotive is to be displayed in the forecourt then it needs to be displayed inside a building that has acceptable climatic conditions any display enclosure must ensure that the Humidity level is controlled so that the Relative Humidity does not exceed approximately 40% and that the conditions are such that the Dew Point of the air within the enclosure is around 5° C.

1.1.2.2. This will require a dehumidification & climate control system.

1.1.3. Any display enclosure needs to provide adequate 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.

1.1.3.1. There needs to be sufficient space within the enclosure around the locomotive for maintenance staff to move about and clean both the inside of the enclosure as well as the locomotive without damaging the locomotive.

1.1.3.2. There also needs to be sufficient space above the locomotive between the cab roof and the underside of the display enclosure roof to allow for proper access for cleaning and maintenance to the lighting system.

1.1.4. Review of the specifications for the glass to the display enclosure.

1.1.4.1. The glass needs to be HPR laminated safety glass.

1.1.4.2. The glass is not to be tinted.

1.1.4.3. If thermal insulation is required the glazing needs to be a double glazed system.

1.1.5. Illumination of the locomotive during the hours of darkness.

1.1.5.1. The light sources should be concealed or shielded so as not to distract viewing.

1.1.5.2. The light should not reflect off the inner surfaces of the enclosure.

1.1.5.3. The lighting system must be designed so that there is no heat build-up on the locomotive from the display lighting.

1.1.6. Consideration of appropriate security for the locomotive.

1.1.6.1. Whether the locomotive is displayed within a display enclosure or displayed within a building or the concourse it needs to be protected by a perimeter alarm system and should also be under CCTV observation & monitoring linked to the alarm system.

1.1.6.2. There needs to be a Safety and security Management System in place.

1.1.7. Consideration of viewing conditions to enable the locomotive to be viewed satisfactorily under all conditions.

1.1.7.1. The locomotive must be visible both during daylight hours and at night.

1.1.7.2. If the locomotive is displayed in a glass display enclosure the enclosure must be designed to ensure that the locomotive is clearly visible without reflections distracting from the viewing under all lighting conditions.

1.1.8. Signage and Information displays

1.1.8.1. In order for "Blackie" to be a meaningful historic display the following points need to be considered:

1.1.8.1.1. Information signs to be provided as part of the display and incorporated in the design of any enclosure or display area.

1.1.8.1.2. It is recommended that an electronic video display be incorporated that will enable the history of "Blackie" and the development of the railways in South Africa to be displayed.

1.1.8.1.3. The social impact of the development of the railways should also be included in the display material.

1.1.9. A review of the process followed by PRASA in determining the proposed location and what alternate locations were considered and the reasons that they were eliminated is to be carried out.

1.1.10. Alternate locations are to be considered and assessed for suitability.

1.1.11. A review to be carried to determine whether the proposed location is the most suitable available location for the display of the locomotive or whether there is a better location.

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### **2. PREPARATION OF NEW DISPLAY LOCATION**

#### **2.1. PREPARATION OF NEW DISPLAY LOCATION**

2.1.1. In order to prepare the new display location to receive “Blackie” the following items need to be attended to:

- 2.1.1.1. Dependant on the chosen location the construction of the display building or modifications to the glazed partitions in the existing Concourse needs to be completed.
- 2.1.1.2. If the Concourse option (Option B4) or the Display Building (Option A3) are chosen then the Mosaic panels need to be relocated.
- 2.1.1.3. If the Concourse option (Option B4) is chosen then a new display plinth will have to be manufactured and installed.
- 2.1.1.4. Suitable lighting for the display location will need to be installed.
- 2.1.1.5. A CCTV and security alarm system will need to be installed and commissioned.
- 2.1.1.6. Provision will have to be made for the transport and relocation of “Blackie” to the new position and for mounting the locomotive on the plinth.

#### **2.2. COMMISSIONING OF NEW DISPLAY LOCATION**

2.2.1. Following the positioning of “Blackie” on its plinth in the new position the following items will need to be attended to:

- 2.2.1.1. Re-instatement of the locomotive cab roof and smokestack on “Blackie”.
- 2.2.1.2. Completion of the lighting installation.
- 2.2.1.3. Installation of safety cordon where applicable.
- 2.2.1.4. Final cleaning of “Blackie”.
- 2.2.1.5. Installation of display signage.
- 2.2.1.6. Installation and commissioning of Information display system.
- 2.2.1.7. Inspection and sign-off by SAHRA that the display complies with the requirements.