### Vaal Gamagara Regional Water Supply Scheme Phase 2 (VGRWSS-II): Upgrade of Existing Scheme

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Natasha Higgitt Tel: 021 462 4502 Email: nhiggitt@sahra.org.za CaseID: 14233 Date: Monday September 16, 2019 Page No: 1

#### **Interim Comment**

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Sedibeng Water

Project Background The Vaal Gamagara Regional Water Supply Scheme (VGRWSS) is a water supply scheme located in the Northern Cape Province that was completed in 1968 by the Department of Water Affairs, now Department of Human Settlements, Water and Sanitation (DHSWS), and transferred to Sedibeng Water in 2008. Secondary to the expected increased water demand are water supply interruptions that are amplified due to the aging infrastructure. The infrastructure, being 50 years old, is nearing the end of its useful life. Due to the condition of the pipelines, the full design capacity can no longer be supplied through this infrastructure. Total collapse in water supply will probably happen in the next 5 years if the infrastructure is not replaced/rehabilitated. Feasibility studies were undertaken to determine the best option to rehabilitate and increase the capacity of the scheme to cater for increased water demands. Sedibeng Water subsequently proposed the upgrading of the VGRWSS via the following two phases: Phase I – upgrading the scheme from the Roscoe Reservoir to Blackrock (already in construction phase); and Phase II – upgrading the scheme from Delportshoop to Olifantshoek. The Basic Assessment Report specifically deals with the upgrading of the VGRWSS Phase II. Project Location The VGRWSS-II starts at the Delportshoop Water Treatment Works (WTW) and runs past the towns of Ulco, Lime Acres and Postmasburg before ending at Olifantshoek, in the Northern Cape. The project infrastructure is mostly located inside the existing VGRWSS pipeline servitude, which is situated along privately-owned properties that are primarily used for mining and agricultural practices. Project Description The following project components associated with the proposed upgrading of the VGRWSS- II are described in the Basic Assessment Report (BAR): Delportshoop abstraction works and WTW; Pipeline from Beeshoek Connection to Roscoe; Pipeline between Clifton and Beeshoek Connection; Rising Main from Delportshoop to Kneukel; Rising Main from Kneukel to Trewill; Rising Main from Trewill to Clifton; Gravity Main from Roscoe to Olifantshoek; Delportshoop, Kneukel and Trewill Pump Stations; Clifton, Gloucester Reservoirs; Trewill Sump and Kneukel Sump; and Ancillary infrastructure (access roads, fibre optics)

Nemai Consulting has been appointed by Sedibeng Water to conduct an Environmental Authorisation (EA) Application for the proposed upgrade to the existing Vaal Gamagara Regional Water Supply Scheme Phase 2, between Oilifantshoek and Delportshoop, Northern Cape Province.



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A draft Basic Assessment Report (DBAR) has been submitted in terms of the National Environmental Management Act, No 107 of 1998 (NEMA) and NEMA Environmental Impact Assessment (EIA) Regulations. The proposed activities include abstraction works, various pipelines, rising and gravity mains, pump station, reservoirs, sump and ancillary infrastructure.

Banzai Environmental (Pty) Ltd and the McGregor Museum Archaeology Department have been appointed to provide heritage specialist input into the EA process as required by section 24(4)b(iii) of NEMA and section 38(8) and 38(3) of the National Heritage Resources Act, Act 25 of 1999 (NHRA).

# Butler, E. 2018. Palaeontological desktop assessment of the proposed upgrade of the Vaal Gamagara regional water supply scheme: phase 2 and groundwater abstraction.

The proposed project area is underlain by several rock formations including Kalahari Group of high sensitivity (HS), Dwyka Group of low sensitivity (LS), Matsap Subgroup (LS), Gamagara Formation (LS), Ongeluk Formation of moderate sensitivity (MS), Abestos Hills (MS), Campbell Rand Subgroup (MS) and the Vryburg Formation of moderate to high sensitivity.

Recommendations provided in the report include the following:

- The EAP and ECO must be informed that a High Palaeontological Sensitivity is allocated to the Kalahari Formation and a moderate to High to the Vryburg Formation;
- A Phase 1 PIA document of the Kalahari and Vryburg Formations must be conducted;
- "Chance Find Protocol" must be completed during the first month of excavation; and
- These recommendations must be incorporated in the EMPr of this project.

The DBAR provides further recommendations (page 185), such as the need for the Phase 1 PIA is included as part of the conditions of the EA to be completed in the first month of the project. Additionally, the DBAR notes that a detailed palaeontological study must be undertaken during deep excavation to assess the value and prominence of fossils in the development area.

Morris, D and Henderson, A. 2019. Heritage Impact Assessment for the proposed Upgrade of the Vaal Gamagara Regional Water Supply Scheme Phase 2.

An unknown number of heritage resources were identified within the proposed project area. The able privuded

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on page 9 and 10 of the HIA does not provide adequate descriptions of the observations and therefore it is unclear as to how many heritage resources were identified. Some heritage resources include burial grounds and Stone Age lithics.

Recommendations provided in the report include the following:

- Provision for on-going heritage monitoring in an environmental management plan which also provides guidelines on what to do in the event of any major heritage feature being encountered during any phase of development; and
- Should unexpected finds be made (e.g. precolonial burials; ostrich eggshell container cache; or localised Stone Age sites with stone tools, pottery, ash midden with bone/pottery; military remains), the relevant Heritage Authority should be contacted.

#### **Interim Comment**

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit requests that the submitted HIA be revised to include adequate descriptions of heritage resources identified. Photographs must be provided of each site including landscape shots showing where the site is located within the context of the area. Additionally, GPS co-ordinates provided in the table on page 9 and 10 of the HIA must not include non-heritage sites i.e. "No access gate locked".

Terms such as "Farm" or "Flakes" are not acceptable descriptions of heritage resources. The impact to each site must be noted as per section 38(3)c of the NHRA and it must be stated if any heritage site will be impact and how they will be impacted by the proposed development. Relevant mitigation measures must be provided to ensure there will be no negative impacts to the identified heritage resources as per section 38(3)g of the NHRA.

Additionally, a Phase 1 PIA inclusive of a site visit of the sections of the proposed project area that ae located in the Kalahari and Vryburg Formations must be conducted as part of the EA application i.e. before the Final BAR is submitted to the competent authority for review.

SAHRA will provide further comments upon receipt of a revised HIA and the requested field PIA.

SAHRA advises the applicant to extend the EA application process in terms of section 19(1)b of the NEMA

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Regulations in order to comply with this comment.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Natasha Higgitt Heritage Officer South African Heritage Resources Agency

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Phillip Hine Acting Manager: Archaeology, Palaeontology and Meteorites Unit South African Heritage Resources Agency

ADMIN: Direct URL to case: http://www.sahra.org.za/node/527631