

Terms of Reference for Heritage (Archaeology and Paleontology)

Impact Assessment (HIA) within the Lesotho Lowlands Water Development Project Phase II (LLWDP II)

1. INTRODUCTION AND BACKGROUND

The LLWSS was designed to address the chronic shortage of potable water supply to the Lowlands area of the country and promote socioeconomic development to a design horizon of 2045. The original designs, which focused on bulk infrastructure only, were prepared with assistance from the EU in 2008. Under the Lesotho Lowlands Water Supply Scheme (LLWSS), the Lowlands area of Lesotho was divided into eight distinct zones covering all clusters of settlements with inhabitants of more than 2,500 persons. Accordingly, it covers urban, peri-urban, and rural areas. The original designs were completed in 2008. The first phase of investments constructed under the scheme comprised the multi-donor funded Metolong Dam and Water Supply Programme (MDWSP), which covered Zones 4 and 5. With funding from WSIP APL2, the GoL, with the assistance of a consultant, has updated the designs of the bulk water infrastructure for the remaining zones of the scheme based on a revised design horizon to year 2045 (from 2035 used in 2008). The updated designs incorporate changes that have taken place in the target areas since 2008. The scope of work for the design update covered only the bulk water infrastructure, including the water intake, treatment plant, transmission pipeline, and associated infrastructure and did not include detailed design and tender documentation for the distribution systems.

Based on the updated designs, implementation of the LLWSS program has been grouped into six packages, with two prioritized for the next phase of the program: Project Package 4 entailing Zones 6 and 7 (Mafeteng and Mohales' Hoek areas) and Project Package 2 entailing Zones 2 and 3 (Hlotse – Maputsoe and the villages en-route). The World Bank, through the current project, will finance investments in Zones 2 and 3 comprising a water intake, water treatment works, transmission mains, pumping stations, reservoirs, and distribution networks. This component is referred to as Lesotho Lowlands Water Development Project-Phase II (LLWDP II).

1.1 Objective

The Consultancy will focus on reviewing and revising part of ESIA and RAP together with the associated ESMP prepared by Aurecon in 2018 for Zone 2 & 3, focusing mainly on how LLWDP II construction activities will impact on the cultural heritage of the Project Area as it has been established that the Leribe District where the project is to be implemented has rich cultural heritage and paleontological material. The Consultant is expected to establish a protocol for chance to find of archaeological or cultural heritage/ property during construction. It is important that some paleontological survey be done to ascertain the significance of any fossil bearing profiles, and what may need to be done to conserve them.

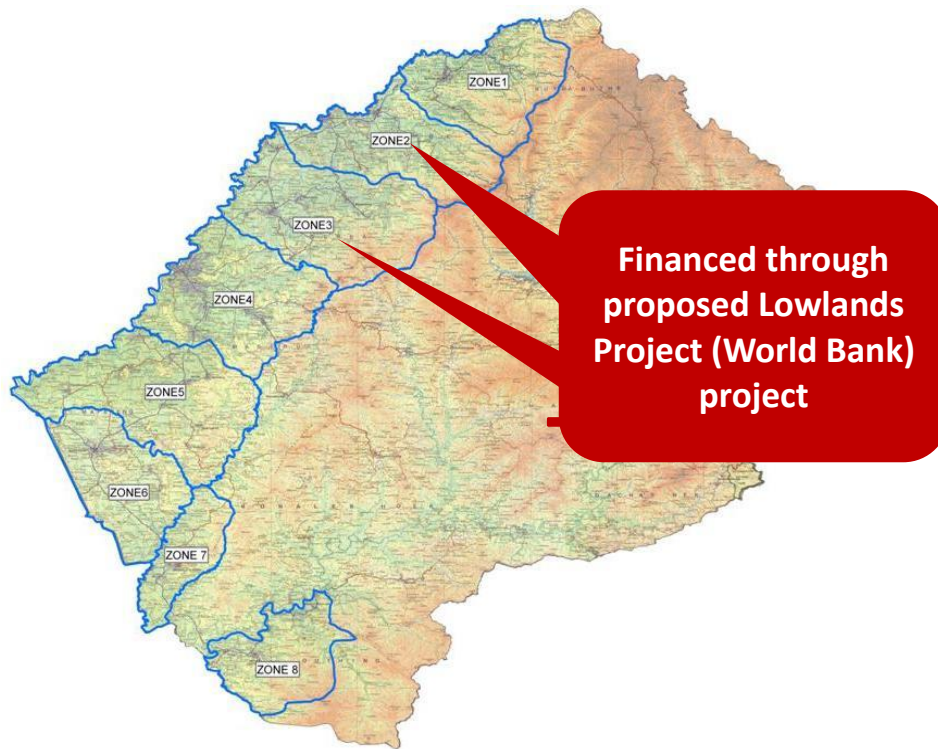
The study should be done in accordance with Historic Monuments, Relics, Fauna and Flora Act No. 41 of 1967 Section 9 (2), and Section 10 and National Heritage Resources Act No. 2 of 2012 Section 9 (2). This assignment should be done taking into consideration the designs and assessment studies completed in 2004, 2008 and 2010. This takes into account only the infrastructure and areas affected by the infrastructure funded by IDA.

2.0 Project Description

2.1 LLWDP II Areas

The project areas and communities to be serviced under this assignment includes Zone 2 (Part) and includes a mixture of urban, peri-urban and rural settlements and includes supply to all domestic, commercial, institutional and industrial customers within those areas.

This project area lies within the district of Leribe and includes communities adjacent to the bulk transmission system including Ha Setene, Khanyane, Hlotse, Tsikoane, and Maputsoe, served from proposed reservoirs Z2R1 Z2R2, Z2R3, Z2R4 and Z2R5 in addition to those which may be served from existing reservoirs, with 2045 population projection of around 191,060.



Map 1: The LWDP II Area

Figure 1: Extent of Lesotho Lowlands Water Supply Project (Zones 3 & 3) showing LWDP II

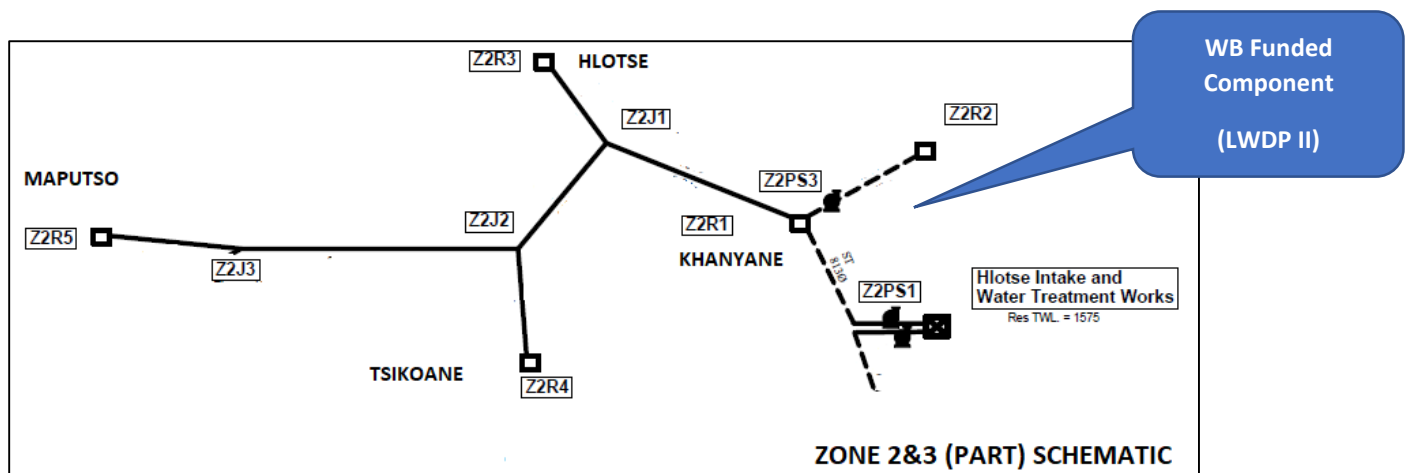


Figure 2: World Bank-funded component of LLWDP II

2.2 LWDP II Infrastructure

The World Bank, through the current project, will finance investments in Zones 2 and 3 comprising a water intake, water treatment works, 32 km of transmission mains, 2 pumping stations, 5 reservoirs, and distribution networks. This component is referred to as Lesotho Lowlands Water Development Project-Phase II (LWDP II) (see Table 1.1).

Table 1.1: Scope of the project addressed in the ESIA

Project components	Addressed in the Aurecon ESIA	Scope of World Bank funding
Intake works	Phase 1: 52.3 Ml/d Phase 2: 66.3 Ml/d	Phase 1: 50 – 60 Ml/d
Water Treatment Works	Phase 1 capacity: 40 Ml/d Phase 2 capacity: 60 Ml/d	Phase 1 capacity: 25 Ml/d Phase 2 capacity: 50 Ml/d
Pipeline length	144.2 km	32 km
Water storage reservoirs	25	5
Main pump station (Z2PS1)	1	1
Booster pump stations	14	1

3. Scope of Services

The Consultant shall work in close collaboration with the Lesotho Lowlands Water Development Project Phase II (LLWDP II) PIU Environment Specialist and the Department of Culture under the Ministry of Tourism, Environment and Culture..

4. Specific Tasks

The Consultant shall:

- 4.1 Conduct a desktop study and collect secondary data on the occurrence and distribution of heritage, archaeological and paleontological sites in the project area;
- 4.2 Conduct site visit to verify potential sites or areas that may be of heritage importance;
- 4.3 Describe and report on any site or area that may contain potential heritage resources that must be considered;
- 4.4 Assess and evaluate the potential impact on identified heritage, archaeology and paleontological resources according to the magnitude, spatial scale, timing, duration, reversibility, probability and significance;
- 4.5 Map all fossil sites
- 4.6 Compile Chance Find Procedure
- 4.7 Propose and explain mitigation measures;
- 4.8 Summarize residual impacts after mitigation. An impact summary table will be provided, discussing expected impacts before and after mitigation; and
- 4.9 Draft an impact statement of the proposed development on the potential heritage and paleontological resources

5.0 Expected Output

The HIA Report should include information on the issues listed below.

- Description of any relevant policies or legislation that the Developer will need to comply with.
- Provide the identification and mapping of all heritage (archaeological and paleontological) resources in the area affected;
- Determine the-- (i) nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and (ii) degree to which these

impacts- (aa) can be reversed; (bb) may cause irreplaceable loss of resources, and (cc) can be avoided, managed or mitigated;

- Provide an assessment of the impact of the development on heritage (archaeological and paleontological) resources;
- Provide an evaluation of the impact of the development on heritage resources (archaeological and paleontological) relative to the sustainable social and economic benefits to be derived from the development;
- Provide the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources (archaeological and paleontological);
- If heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- plans for mitigation of any adverse effects during and after completion of the proposed development.

6. Submission of Reports and Schedules

The Consultant must submit the inception report within one month from the date the contract has been awarded. The first draft report of the assignment is expected within second month of the award of contract and final draft at the end of the 3rd month.

7. Personnel Qualification

7.1 Key staff

Paleontologist

- At least have Master's degree in Paleontology.
- At least fifteen (15) years' experience in undertaking Paleontological and Archaeological Studies;
- At least five (5) years' experience in the preparation of Heritage Impact Assessments.
- Experience in delivery of similar assignments in Southern Africa will be an added advantage

7. Duration

This consultancy shall be completed within six(6) months from award of the contract.

8. Coordination

The Consult shall work in close collaboration with the Project Implementation Unit (PIU), Project Management Consultant, relevant GoL Departments such as the Department of Culture under the Ministry of Tourism, Environment and Culture throughout the service period.

9. Intellectual Property

All documents prepared under this consultancy will be the sole property of the Client.

ANNEX TO THE TERMS OF REFERENCE

Electronic copy of ESIA (Aurecon, 2018)