



Name of Project: Gatei Dam Water Supply

DESIGN BUILD AND FINANCE PROJECT

EXPRESSION OF INTEREST FOR FUNDING DESIGN AND BUILD FOR THE PROPOSED GATEI DAM WATER SUPPLY PROJECT.

TENDER NO. AWSB/EPCF/RE01/03/2017

1. General background

Athi water service board was established under water act 2002 in accordance with the provisions of the State Corporations Act Cap 446 of the Laws of Kenya, as an autonomous agency reporting to the Ministry of Water and Irrigation, it became operational on October 2004.

The Board was created to improve delivery of water services within areas of its jurisdiction which include Nairobi county, Kiambu county, and Gatanga constituency.

2. Project background

Water resources availability has been decreasing with time due to environmental degradation, increased water demand due to population explosion and irrigated agriculture within the rural setups besides industrial development in the city and towns. This has over stretched the available sources of water especially to the City of Nairobi and the immediate surrounding satellite towns. The existing water resources namely; Thika, Sasumua and Ruiru dams are not able to meet the present water demand. This has resulted in water rationing in most parts of the city and the surrounding satellite towns. Against this background, Athi Water Services Board prepared the water Masterplan for Nairobi and 13 satellite towns which identifies various interventions for implementation within specific timelines so as to meet the water demand up to the year 2035. Only some the identified interventions which will bring an additional 200,000 cubic meters per day have received funding from the Government of Kenya and development partners. In order to be able to address the financing gaps of other identified unfinanced projects AWSB now intends to construct another dam on Ndarugu river to supplement the existing sources on finance, design and build (DB) framework.

3. Project area

The proposed dam site is located immediately downstream of Ndarugu and Githobokoni river confluence approximately at Survey of Kenya coordinates N9895164; E264258 and at an elevation of approximately

1770m amsl at the bottom level. The proposed dam site is located approximately 40Km upstream of Ndarugu 1 Dam.

4. Previous investigations and reports

A report on the possibility of constructing a dam on Ndarugu River was carried out by Howard Humphreys (1986) (Regional Studies). This was validated by the Masterplan study prepared by EgisBCEOW Mangat Consultants. The dam Catchment area is 67Km² with the river originating from the Eastern Aberdares forest reserve. Raw water from the dam will be gravitated to a treatment works approximately 3km downstream of the dam. The net reliable yield based on 90% reliability based on annual occurrence of failures is 55,000m³/d (0.64m³/s). After full treatment, treated water will be conveyed by gravity via a pipeline of approximate length 56km and 70km distribution lines to Gatundu town, Kamwangi town and neighboring areas and terminal reservoirs at Ruiru and Thika. Water from the treatment plant and the reservoirs will be distributed by gravity to the demand centers of Gatundu town, Kamwangi, Utawala, Ruai, Syokimau/Mlolongo, Athi River and Kitengela.

5. Request for expression of interest

Athi Water Services Board hereby invites competing proposals to source for funds, build and transfer Gatei Dam and the ancillary treatment and transmission & Distribution pipelines from interested joint ventures of construction companies and consulting firms with capabilities to identify suitable financier for the project.

6. Scope of works

6.1 Sourcing of funds

The following should be taken into account when sourcing for funds

- i. Terms of Payment including interest rates, payment period and grant element
- ii. Credit terms to be within the limits acceptable by the Republic of Kenya-Ministry of Finance.

6.2 Dam design

- i. Carry out social economic, environmental, geotechnical and hydrological study of the proposed works.
- ii. Carry out detailed dam design including spillways and intake structure.
- iii. Carry out detailed treatment works design on the capacity 55,000 cubic meters per day.
- iv. Carry out detailed design of pumping house and electromechanical works.
- v. Carry out detailed design of water transmission and distribution mains.

6.3 Construction works

Construction phase should be done within the minimum period of 2 years and the terms and the constructed works must meet best industry standards.

7. Pre-Qualification Criteria

Athi Water Services Board now invites eligible joint ventures of contractors and consulting firms ('Consultants') to indicate their interest in sourcing of funds, providing the consulting services and construction of works. Interested Joint Ventures should provide information demonstrating that they have the required financial capabilities, backing technical qualifications and experience to perform the services and works. Pre-qualification/shortlisting criteria are;

- i. Experience in implementation of two "fund design and build" works of similar nature and complexity in the last 10 years.
 - ii. Necessary equipment for construction of Dam, Treatment Plant and Transmission Pipelines.
 - iii. Experience in similar Conditions i.e. in developing country.
 - iv. Availability of appropriate skilled staff including Dam Expert, Water Treatment Engineer, Hydraulic and hydrological Engineer, Structural Engineer, Geotechnical Specialists, land economist, Environmental Expert, Health and Safety Expert, Construction Manager, Construction Supervisors and Foremen for all the project components, etc.
8. Invitation for Proposals will be issued to qualifying shortlisted firms. Competitive Bidding will be conducted in accordance with the Government of Kenya ***Procurement Law and Regulations***.
9. Interested Joint Ventures may obtain further information at the addresses below between 0800hours to 1700hours from Monday to Friday excluding public holidays.
10. Prospective bidders are advised to register their details and seek for clarification if any via email info@awsboard.go.ke. The requests for clarifications deadline is **14 Days to the Closing date**, the response to clarifications will be posted to the AWSB website www.awsboard.go.ke,
11. Expression of interest must be delivered or emailed to the address below by **6th February 2018** not later than 12.00hrs East African Time.

Chief Executive Officer
Athi Water Services Board
3rd Floor, Africa Re Centre,
Hospital Road, Upper Hill
P.O. Box 45283-00100
Nairobi, Kenya,
Email : info@awsboard.go.ke.

Clearly Marked:

"EXPRESSION OF INTEREST FOR FUNDING DESIGN AND BUILD FOR THE PROPOSED GATEI DAM WATER SUPPLY PROJECT, TENDER NO. AWSB/EPCF/RE01/03/2017".