



Our Reference

LHDA Engineering Panel of Experts

Date:

February 2018

**REQUEST FOR EXPRESSIONS OF INTEREST FOR ENGINEERING PANEL OF EXPERTS
LESOTHO HIGHLANDS WATER PROJECT – PHASE II**

The Lesotho Highlands Water Project (LHWP) is a multi-disciplinary, multi-phase, bi-national project undertaken by the Governments of the Kingdom of Lesotho and of the Republic of South Africa in accordance with a Treaty signed between the two countries in 1986. The Project scope includes a concrete-faced rockfill dam (CFRD) 165m high, a 38km long water transfer tunnel, a road bridge over 500m long and 100m high, and all associated enabling infrastructure (roads, bridges, power supply, telecommunications, site establishment, operators facilities). LHDA intends to appoint an engineering Panel of Experts (PoE) to independently verify, determine and assure that all the physical components of the Project are designed and constructed to provide the most functional, economical and cost effective structures, consistent with internationally recognised standards. The duty of the PoE is to provide technical advisory services to enable LHDA to effectively fulfil its quality assurance and risk management function during the implementation of the Project by:

- Reviewing technical criteria, designs and reports submitted by engineering consultants
- Assessing construction methods and programmes proposed by the consultants and contractors
- Reviewing construction progress and performance against designs and specifications

Therefore at least one expert in each of the following disciplines is anticipated:

- Design and construction of major bridges
- Design and construction of concrete-faced rockfill dams (CFRDs), including hydraulic structures
- Tunnelling and tunnel structures (design and construction) for water and hydropower projects
- Geology and geotechnical engineering
- Mechanical and electrical engineering for water and hydropower projects
- Construction and contract law for major civil engineering projects (this may be an individual or a firm with one or more practicing professionals who specialize in this discipline)

The LHDA now invites eligible persons to indicate their interest in providing the services. Applicants shall be fluent in English and possess:

- Appropriate and relevant qualifications combined with extensive practical experience
- Professional accreditation with appropriate and regionally- or internationally-recognized institutions
- Over 25 years' experience within the specified field and publication of at least 5 technical papers that were published internationally or presented at international conferences
- Experience on similar PoE assignments will be a significant advantage.

In addition, experts shall meet specific requirements as below:

- Bridge expert** shall have over 20 years' experience in the design and construction supervision of bridges, including structures greater than 400m long and 100m high
- CFRD expert** shall have over 20 years' experience in the design and construction supervision of bulk water infrastructure including CFRD exceeding 140m in height
- Tunneling expert** shall have over 20 years' experience in the design and construction of tunnels at least 4m diameter, including water transfer or hydropower tunnels in hard rock, excavated by tunnel boring machine and by drill and blast methods
- Geology and geotechnical engineering expert** shall have over 20 years' experience in the investigation, analysis, design and construction of excavations, foundations and tunnels for major civil engineering projects, including experience of construction in basalt rock
- Electro-mechanical expert** shall have over 20 years' experience in the design, manufacture and installation of large hydraulic control equipment (gates, valves, penstocks) and small hydropower equipment
- Construction and contracts expert** shall have over 20 years' experience in construction of heavy civil engineering projects, including the procurement and contract administration of major works (e.g. dams, tunnels and major bridges) of at least USD 250 million, under the FIDIC 'red book' form of contract. Prior experience as the FIDIC Engineer would be an advantage.

Qualified persons are requested to provide CVs clearly demonstrating that they meet the above criteria. Persons employed by firms already engaged under any engineering contract on LHWP Phase II are not eligible for appointment on the PoE. Any potential conflict of interest should be declared with the application.

Clarifications may be requested by email to procurement@lhwp2pmu.co.ls. Electronic submissions (in *.pdf* or other unalterable format) are requested on or before **19 March 2018** at **15:00** local time with the subject-line "**EOI for LHWP2 Engineering Panel of Experts**" to the email address indicated above. Shortlisted applicants will be invited for interviews and negotiations.