



Energy Fiji Limited

Transmission Unit

2 Marlow Street, Suva

Tender No. MR 367/2018 - ACCESS ROADS UPGRADE TO 132KV TRANSMISSION TOWER # 132 AND 132A NEAR NADRAU

TENDER SPECIFICATION

Energy Fiji Limited (EFL) invites bids from reputable contractors for the upgrade of existing Access Road to its Transmission Tower 132A on the Wailoa – Nadarivatu - Vuda 132,000V Transmission Line. This document serves to define the extent of works to be carried out.

Compulsory Site Visit shall be organized by the EFL **on Tuesday 2nd October 2018**. Interested Bidders are to report **at 08:30hrs at EFL Navutu Depot**. Bidders shall bring their own 4x4 vehicles for transportation to the site. Trip to the site is about 2 – 3 hours from Navutu. Site Visits shall be conducted by the Technical Officer Transmission, Rajiv Kumar (9906436) and **attendance shall be compulsory and recorded by EFL and signed by the interested bidders**.

SCOPE OF WORKS

The following is the scope of works for the restoration of 132kV Transmission Line Tower Access Road:

- Excavation of New Bench:** The existing access road has been partially washed away due to a land – slide. Earthworks are required for the excavation of a new 7meters wide road carriage way bench on the hill side along existing track between T132 and T132A. The 7m wide carriageway shall exclude any backfilled areas.
- Re-Grading:** The existing access road has had cut and formed during the year 2017. The scope of works in this tender includes, another round of grading on this road in order to remove and dispose all Vegetation that has grown over this period.
- Crowning & Coning of Carriageway:** Carry out crowning / coning along the entire length of the access road carriageway. Crowned / Coned access road carriageway shall be a minimum of 5000mm wide. The typical carriageway cross section shall have minimum 5% to 10% slopes (crowning / coning), from the center line to both the edges, for immediate water drainage to the side edge drains. For those sections of the carriageway where one edge is higher than the other, then the above mentioned slopes shall be applicable from one edge to another. The carriageway surface shall be free of any mud and loose soil.
- Side Edge Drains:** Side Edge drains shall be formed running along both sides of the access road carriageway, wherever possible and as and were required and shall be provided throughout the entire length of the access road carriageway to drain water away from the access road carriageway, to a low point and discharged into an existing river or creek. All drains shall be formed in a manner to keep the water table lower than the carriageway and its edge drains. Soil excavated to form the edge drains shall not be put on the access road carriageway. Excavated soil shall be placed in such a manner that it does not wash back into the drains and/or the access road carriageway. The side edge drains shall smoothly integrate with the access road carriageway, and should not be a sudden/steep vertical drain. This shall ensure that any vehicles which accidently slip into the drain can be easily towed out. Side Edge drains shall not encroach into the 5000mm wide access road carriageway, and shall be formed outside the carriageway boundary. Drainage costs/prices quoted by the bidders shall



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include the construction of new drainage and soil batter cutting/forming as and where required. The bidders shall verify for themselves, the **quantities of new drainage, existing drainage and side batter cutting/forming during the site visits. Separate** rates shall not be provided for de-silting existing drainage and cutting/forming new drainage and side batter slopes.

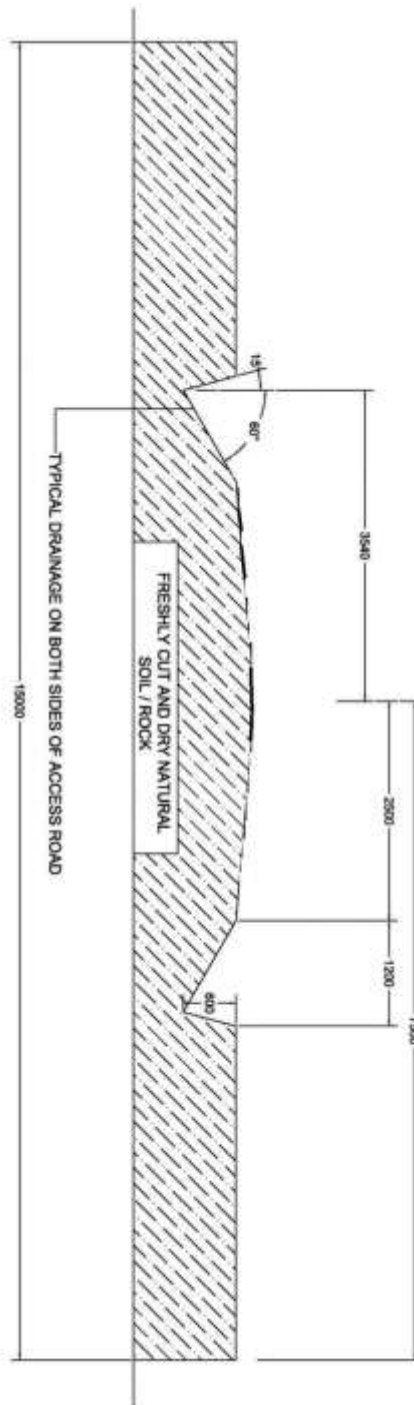
5. Installation of Culverts and concrete headwall as and where required. Bidders are required provide unit rates for culvert and headwall installation. Bidders are required to submit sample drawings for concrete headwall construction, compliant to FRA specifications for rural roads.

NOTES:

1. Schematic drawings for scope of works are attached herewith.
2. Bidders are to provide proof of ownership of machinery and equipment, such as LTA registration and third-party documents, and photographs of each machinery and equipment intended to be used on the project. If bidders intend to hire machinery and equipment from other parties, then bidders are to submit quotations for the same, together with LTA registration and third-party documents, and photographs of each hired machinery and equipment intended to be used on the project.
3. EFL desires the contractor to execute the works in an efficient and optimized manner to complete the works in the minimum possible timeframe. Multiple Works can be and shall be executed simultaneously. For example, One bulldozer can be carrying out the First-Cut, second bull dozer can be following the first and carrying out the Crowning & Coning, and one or more excavator(s) can be following behind carrying out the drainage and culvert installation works. The EFL desires the contractor to work 7 days a week if possible, and 6 days a week minimum in the worst case, and fully utilizing the entire day's daylight, if possible. Works shall be responsibly carried out by the contractor with minimal EFL supervision. For the purpose of this contract, the EFL mandates supervision when the contractor is working within 50m proximity of the EFL's Transmission Towers.
4. Liquidated Damages (LD) for delays in completion of works shall apply across each item defined in the scope of works. LD shall be applicable at the rate of 1% per day up to a maximum of 15%. The EFL shall consider loss of productive days due to inclement weather and other force majeure events, as defined by FIDIC Guidelines. The following time-frame shall be utilized for each item defined in the scope of works:

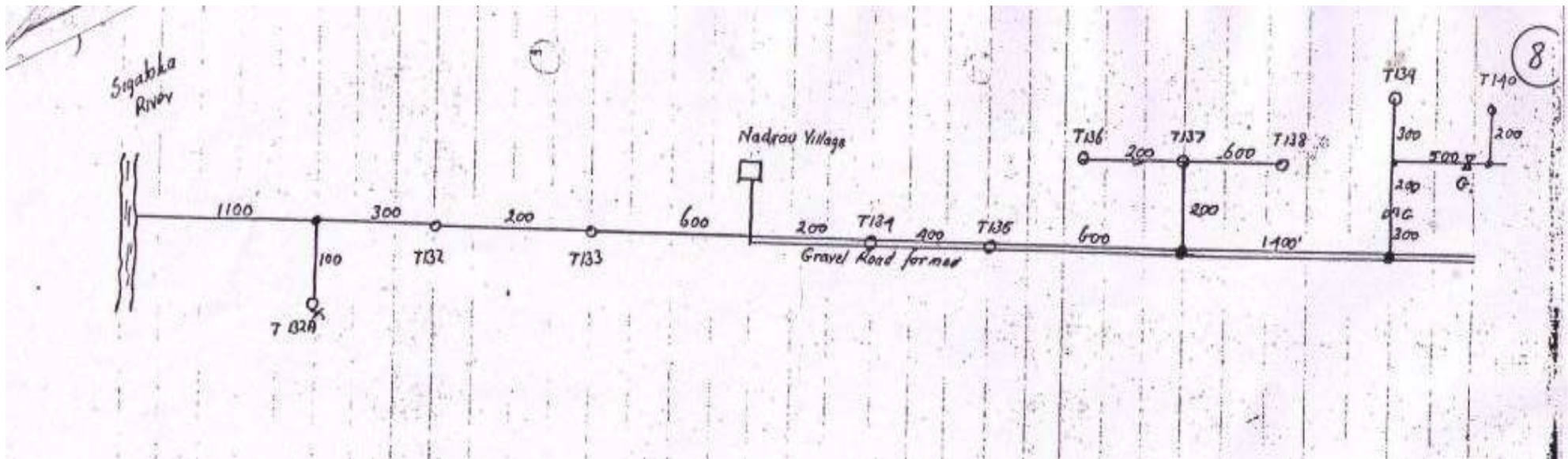
Workscope Item	Quantity	Contractual Timeframe for completion
Excavation of New Access Road bench between Tower 132 and Tower 132A	Lump – Sum	7 Calender Days
Grading of Access Road Carriageway	Per 1km	1 Calender Day
Crowning & Coning of Access Road Carriageway	Per 1km	1 Calendar Day
Side Edge Drains (both sides of access road carriageway)	Per 1km	1 Calendar Day
Steep & Slippery Section Treatment	Per 1km	2 Calendar Days
Side Vegetation Clearing (both sides of access road)	Per 1 km	1 Calendar Day

5. Landowners Consents and Sevusevu: The EFL shall liaise with the Landowners as and where required, and the contractor must seek and follow EFL guidance and accompaniment to observe the required traditional protocols of the land, as and where required. The cost of Yaqona for Sevusevu shall be borne by the contractor.



NOTE: ALL QUANTITIES ARE APPROXIMATE AND SUBJECT TO FINALIZATION DURING ACCESS ROAD UPGRADE WORKS. BIDDERS TO FAMILIARISE AND SATISFY THEMSELVES WITH THE EXTENT OF WORKS, DURING THE SITE VISIT.

TOWER LOCALITY DRAWINGS





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BIDDER'S PRICE SCHEDULES

- (i) Bidders are to compulsorily complete and submit the following price breakdown schedule for each stage, as per the following tables.
- (ii) Bidders shall submit any and all additional costs anticipated to be associated with the execution of the project.

Table # A: PROJECT COST SUMMARY

Stage-A : Access Road to Towers 132 – T132A

Approximate Access Road Route Length: 400m					
S.N.:	Scope of Work as defined in Tender Specification	Unit of Measurement	Bidder's Unit Rate FJD \$ (VEP)	Anticipated Quantity	Lump Sum Price FJD \$ (VEP)
1.	Excavation of New Access Road bench between Tower 132 and Tower 132A	meters		400m	
2.	Grading of Access Road Carriageway as per tender specification	meters		400m	
3.	Crowning & Coning of Carriageway as per tender specification	meters		400m	
4.	Side Edge Drains as per tender specification (Both sides of access road carriageway)	meters		800m	
5.	Culvert Installation 600mm dia x 2.44m long concrete pipe (Class 2 RRJ)	each		15	
6.	Headwall Construction (both sides of 600mm dia culverts)	each pair		5	
7.	Culvert Installation 900mm dia x 2.44m long	each		9	
8.	Headwall Construction (both sides of 900mm dia culverts)	each pair		3	
STAGE A TOTAL:					
FJD \$ (VEP)					



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BID DOCUMENTS SUBMISSIONS

This tender closes at 4.00pm (16:00hrs Fiji Time) on Thursday 11th October, 2018.

It is mandatory for bidders to submit **two (2) hard copies** of tenders in sealed envelopes.

Courier charges for delivery of Tender Document must be paid by the bidders.

The envelope bearing only the following marking:

Tender – MR 367/2018 – Access Roads Upgrade to 132kV Transmission Tower # 132 and 132A near Nadrau

The Secretary, Tender Committee
Energy Fiji Limited

Supply Chain Office

Private Mail Bag, Suva

It must also indicate the name and address of the tenderer on the reverse of the envelope.

All late tenders, unmarked Envelopes and envelopes without bidder's name and address on the reverse of the envelope will be returned to the Tenderers.

The lowest bid will not necessarily be accepted as the successful bid.

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224360 or (+679) 9991587.**

Bidders are requested to submit:

- 1. Valid Tax Compliance Certificate**
- 2. FNPf Compliance Certificate**
- 3. Business Registration Details**