

# **Construction of 33kV Double Circuit**

# Tavua to Volivoli- Stage 3, 5 (Pole 50 to Pole 93)

**TENDER NO: MR19/2015** 

Bidder's Name:

**Bidder's Address:** 

**Bidder's Telephone Numbers:** 

**Bidder's Email Address (Optional):** 

Fiji Electricity Authority is seeking proposals from FEA Trained and Certified Contractors to carry out 33kV Power Line Construction for the "33kV Double Circuit- Tavua to Volivoli -Pole 50 to Pole 93". This will require a total of 45, 17m wooden power poles with a total length of 3.71km, 33kV Neon O/H double line to be strung.

#### **1.0 Notes:**

1. Bidders are to submit a breakdown of prices (unit rates) together with total included in this tender document.

By providing this information the FEA does not take liability of the actual conditions in field. The bidders / contractors shall verify the actual conditions and the geographic terrain during the site visits. The bidders shall self-evaluate the realities in the field and submit firm prices. **No variations shall be entertained.** 

- 2. Safety plan to be included in the tender bid
- 3. Lineman, cable jointer and Trainee/Line worker Certificate to be included in the tender bid
- 4. Safety report for the year 2014 shall be submitted with the tender
- 5. A list of Power Line Construction projects completed for FEA shall be submitted with the tender
- 6. Certification of equipment to be included in the bid
- 7. Vegetation Management Training certificate shall be submitted with the tender
- 8. Please pay specific attention to Clause xii under PART 6.1, Contractor Requirements: "Lineman Contractor shall ensure that the project has one Certified Lineman and 3 Registered Trainee Line Workers/ Lineman working on the project on a full time basis. Records of these personnel shall be submitted with the tender bid." Contractors unable to submit positive proof that they meet this key requirement shall not be considered

9. Please pay specific attention to Clause xxv under PART 6.1, Contractor Requirements: "Transportation of material – The Contractor shall transport all materials from FEA Navutu Stores to work site

#### 2.0 <u>Site Inspection Dates:</u>

- Site Visits for the "33kV Double Circuit-Tavua to Volivoli" shall be held from 9am till 1pm on Wednesday 18<sup>th</sup> February 2015. Interested Bidders are to report to Unit Leader Distribution Western in FEA's Navutu Depot, Lautoka. Name: Saimone Rogoimuri | Cell Phone:9992419
- 2. The site visit requirements for this tender are <u>compulsory</u> and attendance shall be recorded
- 3. Interested bidders shall provide their own Transport and shall not ride in FEA vehicles

#### 3.0 <u>Lodgement of Tenders in sealed envelopes marked</u>

It is mandatory for Bidder's to submit <u>two (2) hard copies</u> of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the FEA Head Office, 2 Marlow Street, Suva, Fiji.

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

This tender closes at 4:00pm, on Wednesday 25<sup>th</sup> February 2015.

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

Tender- MR 19/2015 – 33kV Double Circuit-Tavua to Volivoli

The Secretary, Tender Committee

Fiji Electricity Authority

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 not be accepted.

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

### 4.0 First Schedule

#### 4.1 Special Conditions of the Contract

The work shall comprise of the Construction and installation of 33kV power poles as per attached drawing # **A1-03-N57-005** 

Please enter unit rates and lump-sum prices in the table below.

The total Contract sum for the work shall be \$\_\_\_\_\_\_ VIP

| Power Line Construction- 33KV Double Tavua – Volivoli Pole 50 to Pole 93                                  |   |          |              |       |  |
|---|---|----------|--------------|-------|--|
| UNIT RATES:   |   |          |              |       |  |
| Item<br>No.   | Description   | Quantity | Unit<br>Rate | Total |  |
| Section C: Kings Road Tavua to Rabulu (Refer to drawing # A1-03-N57-005, Sheet 5 to 9) Pole 50 to Pole 93 |   |          |              |       |  |
| 1   | Excavate foundation holes for new wooden power poles to a depth of 3m, install new Wooden Power Pole [17m] complete with dressing and stringing of conductor as per drawing | 45       |              |       |  |
| 2   | Install ground stay   | 1        |              |       |  |

| LUMP SUM COSTS: |   |       |  |  |  |
|-----------------|---|-------|--|--|--|
| Item<br>No.     | Material Transport Cost                                   | Total |  |  |  |
| 1               | Transportation of materials from FEA Navutu Depot to Site |       |  |  |  |

| Item<br>No. | Vegetation Management                                 | Total |  |
|-------------|---|-------|--|
| 1           | Vegetation Management as per actual condition on site |       |  |

- The total number of 17m poles to be erected as per drawing is 45 poles. However, the exact number depending on the pace at which the Contractor progresses and also as per site conditions. This shall also apply to the accessories and materials to be used for the required poles.
- Power Pole replacement or upgrading of existing poles shall be carried out under FEA power shutdown and a Permit to Work. The power shutdown shall be customarily from 8.30am to 4.00pm
- All work on existing power lines to be upgraded or diverted will be carried out by FEA including final connections

#### 4.2 Work Schedule

(a) Latest date for commencement of the works: 7 days from issue of LPO

(b) Date of completion of Section C: 5 weeks from issue of LPO

(g) Date of practical completion of the works: 5 weeks from issue of LPO

(h) Date for final completion of the works: 5 weeks from issue of LPO

#### 4.3 Supervision of Contract

For the purpose of supervising the contract on behalf of the Authority, references in the General Conditions to the Authority shall include the Unit Leader Distribution Western or his designated officer. The Project Manager shall be the Unit Leader Distribution Western, the Project Engineer shall be the Construction, Operations & Maintenance Engineer Western, and the Project Supervisor shall be the Construction Coordinator Western.

#### 4.4 Insurance (Refer to Clause 14)

(a) Contractor's risk \$500,000

(b) Public Liability \$500,000

(c) Worker's Compensation \$250,000

The contractor shall indemnify FEA against any claims for liability, injuries, losses, damages etc that may arise during the execution of the works.

#### 4.5 Liquidated and Ascertained damages (Refer to Clause 20):

The liquidated and ascertained damages shall be \$200 per day

#### 4.6 Defects Liability Period (Refer to Clause 21):

The defects liability period shall be 6 months

#### 4.7 Retention Fund (Refer to Clause 24)

(a) Limit of retention fund: 10% of contract sum

(b) Nature of retention fund: cash

(c) Release of retention fund: Subject to no pending defect, and as per FEA Finance Policy.

#### **5.0 Second Schedule**

# 5.1 <u>Specifications for the Construction of 33kV Double Circuit-Tavua to Volivoli-Pole 50 to Pole 93</u>

#### **5.1.1 General**

This specification covers the Construction of 33kV Power Lines for the Supply to Momi Bay Resort-Nadi as per attached Drawing # **A1-03-N57-005** under conditions of Contract attached herein.

#### 5.1.2 Scope of Work

Work involved in this contract is broadly classified into seven parts:

- i. Scarfing of the 17m power pole to be carried out at Navutu Depot and transported to Site
- ii. Transportation of line hardware from Navutu Depot to Site after instruction from FEA
- iii. Excavate foundation holes for new 17m power poles to a depth of 3m at marked locations
- iv. Installation of 17m poles complete with dressing
- v. Stringing of conductors
- vi. Stay erection- ground and fly stay as specified
- vii. Vegetation clearing where required- this shall involve clearing of vegetation within 30m either side of the power line pole

#### 6.0 Third Schedule

#### **6.1 Contractor Requirements**

- Tender Bid Contractor shall submit a firm bid clearly listing unit costs for all items as per required and stated. Vegetation clearing and Transportation costs shall be submitted as a lump sum.
- ii. **Site Visit** Contractor shall participate in a site visit which is compulsory. Bids from tenderers who do not participate in the site visit shall be disqualified.
- iii. **Standards** All construction work shall be in compliance with FEA Standard Overhead Line Design & Construction Manual.
- iv. Safety Plan The tender bid shall include a Safety Plan that will be evaluated by the FEA's HSE Unit. Tender bids with incomplete, unacceptable, or without a Safety Plan will not be considered for award.
- v. **Safety Record** Tender bid shall include a brief report on Safety performance over the last two years. The report shall include all incidents and accidents.
- vi. **Sub-contracting** Subcontracting shall not be permitted, except where this is specifically presented in the tender bid, and only upon approval by FEA. Subcontractors shall be required to fulfil all requirements as if they were the contractor.
- vii. **Scope of works** Work involved in this contract is broadly classified into seven phases, and progress payments shall be processed accordingly.
  - a. Scarfing of the 17m power pole to be carried out at Navutu Depot and transported to Site
  - b. Transportation of materials from Navutu Depot to Site after instruction from FEA
  - c. Excavate foundation holes for new 17m power poles to a depth of 3m at marked locations
  - d. Installation of 17m poles complete with dressing
  - e. Stringing of conductors
  - f. Stay erection- ground and fly stay as specified
  - g. Vegetation clearing where required- this shall involve clearing of vegetation within 30m either side of the power line pole

- viii. **Contact** Contractor shall have a valid postal address, Office phone/fax/e-mail contact. The Principal shall be available by mobile phone at any time.
- **ix. Work Program** Contractor shall submit a work programme before starting of project. This shall be part of the contract. Work shall commence within seven (7) days after receiving an official FEA Local Purchase Order.
- x. **Training** Contractor shall ensure his employees have attended FEA Safety Manual Training and Pole Top Rescue Training at least once in the past 6 months, and records of this shall be submitted with the tender bid. In the event that the training has not been carried out, the Contractor shall ensure these training are carried **PRIOR** to induction for new project.

Copies of training records and valid certificates shall be provided with the tender. Bids without these documents will be disqualified

- xi. **Ground condition** Contractors are to note that sub-soil comprises soapstone and could contain other services like Telecom Fiji Ltd, Water & Sewerage, etc.
- xii. Lineman Contractor shall ensure that the project has one certified lineman and 3 registered Trainee Line Workers/ Linemen working on the project on a full time basis. Records of these personnel shall be submitted with the tender bid.
- xiii. **Invoicing** Contractor shall submit details of work completed to allow prompt approval of invoice.
- xiv. Safety Induction A Safety induction must be conducted before start of power line construction work. Contractor shall ensure that all employees who work on the project attend the Safety Induction. All contractor employees are to present a valid company ID card clearly showing a current photo, employee name, employee date of birth and employee job description.
- xv. **Instruction to Commence Work** Contractor shall NOT commence work on site unless an "Instruction to Commence Work" has been received from the Project Manager.
- xvi. **Signboards** One signboard (6'X 4') must be erected at the start of the works and one at the end of the works clearly stating :

| DANGER  |
|---|
|   |
| PROJECT: POWERLINE CONSTRUCTION- [Description of project] |
| CONTRACTOR:   |
| POWER LINE CONSTRUCTION WORK                              |

xvii.

- xviii. **Accident Reporting** All accidents and incidents shall be reported immediately to FEA using approved forms available in the FEA Safety Plan Template, or equivalent.
- xix. **Project Updates** Contractor shall meet with FEA Project Manager, Project Engineer and Project Supervisor on a weekly basis to discuss project progress and bottlenecks. These meetings shall be minuted for records, and circulated to the appropriate stakeholders.
- xx. Vegetation clearing Vegetation clearing shall be in accordance with FEA Vegetation Management Policy. Vegetation, which at a mature height will exceed 2m in height and will be within falling distance from the FEA lines are to be removed. Vegetation debris shall be disposed off neatly at a location agreed to by FEA. No debris shall be left by the roadside, or blocking drains.
- xxi. **Tidiness** The Contractor shall maintain the worksite in a neat and tidy condition.
- xxii. Consent for Vegetation clearing no vegetation shall be cleared unless specific instruction to do so has been received from the Project Supervisor. Notwithstanding this, the contractor shall inform the tree owner that he is required to clear the tree, and shall obtain the owner's confirmation that he has given FEA his consent to remove the tree, prior to proceeding with cutting the tree.
- xxiii. **Fires** No fires are to be lit at jobsites for the purpose of clearing vegetation or vegetation debris.
- xxiv. **Village Protocols** the contractor shall comply with protocols involved in working on land owned by Indigenous Fijians to ensure smooth work progress.

- xxv. **Transportation of material** The Contractor shall transport all materials from FEA Navutu Store to work site, EXCEPT concrete poles
- xxvi. **Security** Contractor shall be responsible for the safekeeping of all materials at work site, and will be required to pay for damage and/or loss.
- xxvii. **Damage to property** The Contractor shall ensure that there is no damage to roadways, footpaths, drains, water-courses, properties and other services. The Contractor shall make good to the satisfaction to the owner any damage caused by the contractor.
- xxviii. **Portable signboards** Portable signboards must be placed at 50m intervals.
- xxix. **Traffic and Pedestrian Control** The Contractor shall ensure that there is minimum disruption to the flow of traffic and pedestrian. FEA procedures on Traffic Control and Pedestrian Control shall be diligently exercised.
- xxx. Worksite protection Bollards/cone must be placed at 10m intervals.
- xxxi. **Barricades** Open trench/pole-hole is to be barricaded on a full time basis by the Contractor.
- xxxii. **Jobsite Safety Assessment** Contractor to carry out Jobsite Safety Assessment daily, and as and when required, and submit these to FEA on a weekly basis.
- xxxiii. **Contractor HSE Compliance** Contractor shall comply with FEA/Contractor HSE Manual at all times.
- xxxiv. **Credit of surplus material** The contractor shall transport and credit all unused materials to FEA Stores.
- xxxv. **Defects Rectification** The contractor shall rectify all defects within seven (7) days as per contract.
- xxxvi. **Project completion** The contractor shall complete work on time as per contract.
- xxxvii. **Project progress** If the Contractor fails to proceed with the works with reasonable diligence or suspends the works or refuses to comply with the reasonable direction from FEA by reason of which the works are materially affected and any such default continues for a period of seven (7) days after the issue of written notice, FEA may itself call any other person to complete the works at the Contractor's risk and expense.

- xxxviii. **Safe Work Procedure Training** Contractor must have completed Distribution Safe Work Procedure training.
- xxxix. **FEA/Contractor HSE Manual** Contractor shall comply with FEA/Contractor HSE Manual at all times

#### **6.2 FEA Requirements**

- i. FEA Project Supervisor shall obtain Road/footpath opening permits
- ii. FEA Project Engineer shall obtain clearance from Municipal Council, Telecom Fiji Ltd, Water Supply Department, and Sewerage Department
- iii. FEA's HSE Unit shall vet Safety Plan submitted by Contractor and approve after queries clarified by Contractor
- iv. FEA Project Engineer shall ensure that any FEA underground mains on the jobsite is clearly located, marked and identified to the Contractor
- v. FEA Project Engineer shall submit to the Project Manager all necessary approval documentation from Municipal Council, Fiji Roads Authority, Telecom Fiji Ltd, Water Supply Department and Sewerage Department. Upon receipt of these approvals, and the approved Safety Plan, the Project Manager shall issue an "Instruction to Commence Work" to the Contractor
- vi. FEA Project Supervisor and Project Engineer shall carry out regular site inspections to ensure compliance with HSE requirements, and submit Safety Visit Reports of the visit
- vii. FEA Project Supervisor and Project Engineer shall issue Non-Conformance Report if required, and follow up for verification of implementation of Action Items arising out of the Non-Conformance Report.

# 6.3 Payment Schedule

## Payment shall be made as per payment schedule:

| Phase | Description   | Percentage payment                                      |
|-------|---|---|
| 1     | Material Transportation to worksite   | 15%   |
| 2     | Vegetation Clearing   | 5%  |
| 3     | Excavation of new poles, pole scarfing, pole dressing, erection, stays, ABS | 50%   |
| 4     | Conductor Stringing   | 15%   |
| 5     | Transformer installation complete   | 5%  |
| 6     | Retention   | 10% to be released after 6 months pending zero defects. |