



TENDER NO - MR 176/ 2018

**PROJECT: UPGRADING OF 6.6KV TO 11KV GRID
GORDON STREET FEEDER FROM KNOLLY STREET
ZONE SUBSTATION, SUVA**

SCHEME: SR 06-15B



Notes :

1. Bidders to provide 2 hardcopies of tender bid.
2. Safety Plan to be included in tender bid, and will be part of evaluation.
3. Cable Jointer Certificate to be included in tender bid.
4. Safety Report for 2015, 2016 to be submitted with tender.
5. All ducting work shall be carried out BEFORE trenching along grass verge etc.
6. Contractor shall provide photo ID of all employees who will be working on the project, clearly indicating their Employment/FNPF number and Job Description.

The installation of the cable shall be carried out under direct EFL supervision. All work requiring EFL supervision shall be started and completed during normal working hours.



HSE REQUIREMENTS

The following documents are to be submitted with the Tender:

- 1). **Contractor HSE Specification** - it contains 10 clauses which contains the overall HSE requirements and the contractor needs to agree to this.
- 2). **Contractor HSE Plan** (Document HSE41C04) - The contractor shall fill in each part of the Plan.
- 3). The Contractor will list down all the plants and equipment to be used in the **Plant & Equipment Register** as well as chemicals in the **Chemical register**.
- 4). The **JSA & Risk Assessment** form will require the contractor to identify hazards which may not have been adequately addressed in EFL's existing procedures and outline proposed controls.

FIRST SCHEDULE

A. SPECIAL CONDITIONS OF CONTRACT

- The works shall comprise the installation of ducts and cable (including footpaths, sealed roads and grass verge) as per attached Drawing # A2 09 N48 324

Part	Location - FROM	Location - TO	Cable route distance (m)
1	Route length of Trenching from Knolly Street Sub	To Salvation Army Suva Central Corps driveway along Macgregor rd.	500m
2	To Salvation Army Suva Central Corps driveway along Macgregor rd.	The Domain Driveway along Duncan Road	500m
3	The Domain Driveway along Duncan Road	Opposite of Vatupua Lane along Service ST.	500m
4	Opposite of Vatupua Lane along Service ST.	Forum Secretariat Sub	545m
5	Junction of Richards Road	Richards Road Sub	135m
6	Junction of Hamilton Beattie Street	Hamilton Beattie Sub	54m
7	Peninsula Sub	Infront of Ministry of Rural & Maritime Development and Natural Disaster management office along Knolly street	500m
8	Infront of Ministry of Rural & Maritime Development and Natural Disaster management office along Knolly street.	Opposite of Spring Street Junction along Amy Street	500m
9	Opposite of Spring Street Junction Off Amy St	Opposite of ST John Ambulance Driveway along Amy Street	500m
10	Opposite of ST John Ambulance Driveway	Jehovah's Witness Fiji Branch Driveway along Waimanu Rd.	500m
11	Jehovah's Witness Fiji Branch Driveway along Waimanu Rd.	Vishal Bhartiya Sub along Stewart St	234m
12	Pender Street Junction off Macgregor RD	Gordon Street Sub along Macgregor Rd	265m
13	Eden street Junction off Amy Street	Eden street Sub	212m
14	High street Sub	Whaley's Sub	480m
15	Walu Street Junction off Waimanu Rd	Walu Street Sub	50m
16	Communication Fiji Limited (CFL) Driveway off Waimanu Rd	To FM96 Sub	38m

Part	Trenching, Cable Laying Joint Pit. Fibre Ducting, Pit installation and Reinstatement works	Cable Route	Price (VIP) Lump Sum

1	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable. Fibre ducting, Pit installation and Reinstatement Works	From Knolly Sub To Salvation Army Suva Central Corps driveway off Macgregor rd.	
2	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Salvation Army Suva Central Corps driveway along Macgregor rd to The Domain driveway along Duncan Rd	
3	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From The Domain driveway along Duncan Rd to opposite of Vatupua Lane off Service ST.	
4	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From opposite of Vatupua Lane off Service ST to Forum Secretariat Sub	
5	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Junction of Richards Road to Richards Road Sub.	
6	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Junction of Hamilton Beattie Street to Hamilton Beattie Sub.	
7	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Peninsula Sub to In front of Ministry of Rural & Maritime Development and Natural Disaster management office along Knolly street	
8	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From In front of Ministry of Rural & Maritime Development and Natural Disaster management office along Knolly street to opposite of Spring Street junction along Amy Street	
9	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From opposite of Spring Street junction to Opposite of ST John Ambulance driveway along Amy Street.	
10	Dig trench of 500m, make joint pit and lay 1 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From opposite of ST John Ambulance driveway along Amy Street to the driveway of Jehovah's Witness Fiji branch along Waimanu Road.	
11	Dig trench of 500m, make joint pit and lay 1 X	From driveway of Jehovah's Witness	

	240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	Fiji branch along Waimanu Road to Vishal Bhartiya Sub.	
12	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Junction of Pender Street off Macgregor Rd to Gordon Street Sub	
13	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Eden street junction off Amy ST to Eden Street Sub	
14	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From High Street Sub to Wahleys Sub	
15	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Walu Street Junction off Waimanu Rd to Walu Street Sub	
16	Dig trench of 500m, make joint pit and lay 2 X 240mm 3C AL XLPE cable Fibre ducting, Pit installation and Reinstatement Works	From Communication Fiji Limited (CFL) Driveway off Waimanu Rd to FM96 Sub.	



Note:

1. Ducts (supplied by EFL) will need to be laid across the road crossing and Drive Way.
2. Route comprises sealed road, footpath and grass verge.
3. Sub-seal comprise soapstone and services.
4. All works must be done in accordance to FRA specifications.

2. The Contract sum (refer clauses 4 and 23) for the works shall be \$VIP.

- a) Payable in a single lump sum upon final completion of the works; or
- b) payable at the completion of each stage as follows :
 - 30% upon completion of phase 1,
 - 30% upon completion of phase 2,
 - 30% upon completion of phase 3,
 - 10% retention fund.

3. (Refer clauses 5, 18, 19, 21 and 22)

- (a) Latest date for commencement of the works: 7 days from issue of LPO
- (b) Date of completion of Part 1 : 3 weeks
- (c) Date of completion of Part 2 : 3 weeks
- (d) Date of completion of Part 3 : 3 weeks
- (e) Date of completion of Part 4 : 3 weeks
- (f) Date of completion of Part 5 : 1 week
- (g) Date of completion of Part 6 : 1 week
- (h) Date of completion of Part 7 : 3 weeks
- (i) Date of completion of Part 8 : 3 weeks
- (j) Date of completion of Part 9 : 3 weeks
- (k) Date of completion of Part 10 : 3 weeks
- (l) Date of completion of Part 11 : 2 weeks
- (m) Date of completion of Part 12 : 2 weeks
- (n) Date of completion of Part 13 : 2 weeks
- (o) Date of completion of Part 14 : 3 weeks
- (p) Date of completion of Part 15 : 1 week
- (q) Date of completion of Part 16 : 1 week
- (r) Date of practical completion of the works. : 37 weeks from issue of LPO
- (s) Date for final completion of the works : 37 weeks from issue of LPO



4. 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 Central or his designated officer. The Project Manager, Project Engineer and Project Supervisor shall be the Construction Coordinator Central.

5. Insurance (refer clause 14)
 - (a) Contractor's risk \$500,000.
 - (b) Public Liability \$500,000.
 - (c) Worker's Compensation \$250,000.

6. Liquidated and ascertained damages (refer clause 20): \$200 per day.

7. Defects Liability period (refer clause 21): 6 months

8. Retention Fund (refer 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 EFL Finance Policy.



SECOND SCHEDULE

B. Specification for Distribution UG Power Cable installation for upgrading 6.6kV to 11kV Grid for New Ono Street Feeder ,Fibre ducting and Pit installation works as per drawing No: A2 /09 /N54 /328

1.0 General

Specification for Distribution UG HV Power Cable installation for upgrading 6.6kV to 11kV Grid for New Ono Street Feeder as per drawing No: A2 /09 /N454/328 and Fibre ducting, Pit installation works

2.0 Scope of Work

Work involved in this contract is broadly classified into three phases:

Phase 1. Trenching and ducting

Phase 2. Laying of power cable, Fibre conduits and Fibre Joint Pit.

Phase 3. Backfilling of trench

Phase 4. Reinstatement of driveway and footpath

2.1 Phase One - Trenching of cable route

The first phase comprises of the following works:

- Installation of ducts across roads and drive ways
- Ground excavation for the power cable.

Note - all ducting works is to be completed BEFORE excavation of grass verge. This is to ensure that trenched are kept open for a minimum duration.

2.2 Phase Two - Installation of power cable , Fibre conduits and Fibre Pit

The second phase will involve the installation of power cable. This involves manually pulling the cable along the trench using rollers (supplied by EFL), and through ducts.

All the work of phase two must be as per the specifications given in the drawing and it shall conform to all aspects of the standards outlined in the "Standard Overhead Line Design and Construction Manual" a guideline set by EFL.

This work shall be carried out under direct supervision of EFL personnel, and is to be done during normal working hours only. Set up of cable drums shall be done by EFL.

This phase shall be deemed complete once the cable has been tested healthy by EFL Technicians. In the event that the cable fails to pass the test, the Contractor shall be required to pay all costs associated with the location and repair of the damage/fault.

2.3 Phase Three - Backfilling of trenches

This phase of the contract involves the backfilling of trenches.

Various works for this phase will be:



- i) Apply suitable layer of sand bedding (to be supervised by EFL).
- ii) Backfill sand on top of cable to height specified by EFL site supervisor.
- iii) Backfill remainder of trench with trench soil.

All materials (cable and slab) are to be transported to work site by the contractor.

The contractor is responsible for ensuring that all unused excavated soil is laid neatly on top of the trench to allow for soil subsidence. All left over materials is to be returned to the Kinoya Stores and credited accordingly.

Sand shall be supplied by EFL.

All the works of phase three must be as per the specifications, and it shall conform with all aspects of the standards outlined in the "Standard Overhead Line Design and Construction Manual", guideline set up by EFL.

2.4 Phase Four - Reinstatement of driveway and footpath

This phase of the contract involves the reinstatement of driveway and footpath for the entire route.

Liaise with EFL for the proper approved materials and ensure compaction for all trenches to be done as per FRA standards



NOTE: All materials will be supplied by EFL

C : CONTRACTOR REQUIREMENTS

1. **Tender Bid** - Contractor shall submit a firm lump sum bid.
2. **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.
3. **Standards** - All construction work shall be in compliance with EFL Standard Overhead Line Design & Construction Manual.
4. **HSE Compliance** - The tender bid shall include all requirements from the EFL HSE Contractor Safety Management System. These will be evaluated by the EFL's HSE Unit. Tender bids with incomplete, unacceptable, or without the HSE requirements will not be considered for award.
5. **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.
6. **Sub-contracting** - Subcontracting shall not be permitted, except where this is specifically presented in the tender bid, and only upon approval by EFL. Subcontractors shall be required to fulfil all requirements as if they were the contractor.
7. **Scope of works** - Work involved in this contract is broadly classified into three phases, and progress payments shall be processed accordingly.
 - i) Ducting, trenching
 - ii) Cable installation, Fibre Conduits and Fibre Pits.
 - iii) Backfilling
 - iv) Reinstatement of footpath and driveway
8. **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.
9. **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 EFL Local Purchase Order.
10. **Training** - Contractor shall ensure his employees have attended EFL Safety Manual 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.
11. **Ground condition** - Contractors are to note that sub-soil comprises soapstone and could contain other services like Telecom Fiji Ltd, Water & Sewerage, etc.
12. **Invoicing** - Contractor shall submit details of work completed to allow prompt approval of invoice.



- 13. **Safety Induction** - A Safety induction must be conducted before start of power line construction work.
- 14. **Instruction to Commence Work** - Contractor shall NOT commence work on site unless an “Instruction to Commence Work” has been received from the Project Manager.
- 15. **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 :

<p>DANGER</p> <p>PROJECT: POWERLINE CONSTRUCTION - [Description of project]</p> <p>CONTRACTOR:</p> <p>POWER CABLE CONSTRUCTION WORK.</p> <p>Driver please reduces speed. Pedestrians please use other footpath/side of road</p> <p>THANKS</p>
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- 16. **Accident Reporting** - All accidents and incidents shall be reported immediately to EFL using approved forms available in the EFL Safety Plan Template, or equivalent.
- 17. **Project Updates** - Contractor shall meet with EFL 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.
- 18. **Tidiness** - The Contractor shall maintain the worksite in a neat and tidy condition.

19. **Transportation of material** - The Contractor shall transport all materials from Kinoya Stores to work site, EXCEPT concrete poles, which may be picked up from Humes Depot.
20. **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.
21. **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.
22. **Portable signboards** - Portable signboards must be placed at 50m intervals.
23. **Traffic and Pedestrian Control** - The Contractor shall ensure that there is minimum disruption to the flow of traffic and pedestrian. EFL procedures on Traffic Control and Pedestrian Control shall be diligently exercised.
24. **Worksite protection** - Bollards/cone must be placed at 10m intervals.
25. **Barricades** - Open trench/pole-hole is to be barricaded on a full time basis by the Contractor.
26. **Jobsite Safety Assessment** - Contractor to carry out Jobsite Safety Assessment daily, and as and when required, and submit these to EFL on a weekly basis.
27. **Credit of surplus material** - The contractor shall transport and credit all unused materials to Kinoya Stores.
28. **Defects Rectification** - The contractor shall rectify all defects within seven (7) days as per contract.
29. **Project completion** - The contractor shall complete work on time as per contract.
30. **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 EFL 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, EFL may itself call any other person to complete the works at the Contractor's risk and expense.
31. **Safe Work Procedure Training** - Contractor must have completed Distribution Safe Work Procedure training.



D: EFL REQUIREMENT

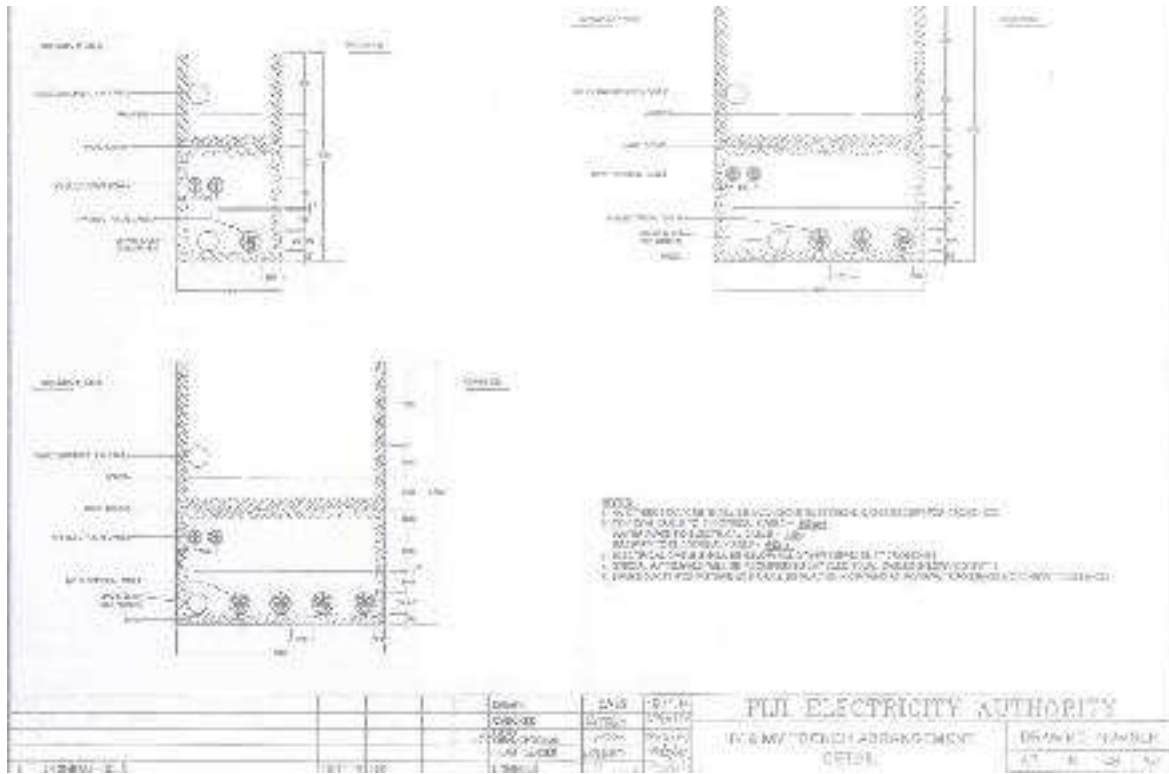
- EFL Project Supervisor shall obtain Road/footpath opening permits.
- EFL Project Engineer shall obtain clearance from Municipal Council, Telecom Fiji Ltd, Water Supply Department, and Sewerage Department.
- EFL’s HSE Unit shall vet Safety Plan submitted by Contractor and approve after queries clarified by Contractor.
- EFL Project Engineer shall ensure that any EFL underground mains on the jobsite is clearly located, marked and identified to the Contractor.
- EFL Project Engineer shall submit to the Project Manager all necessary approval documentation from Municipal Council, 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.
- EFL 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.
- EFL 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.

E : PAYMENT SCHEDULE

Payment shall be made as per payment schedule :

Phase	Description	Percentage payment
1	Ducting and Trenching	30%
2	Installation of Power cable Fibre Conduits and Fibre Pit	30% upon positive cable test results
3	Backfill & Reinstatement	30%
4	Retention	10% to be released after 6 months pending zero defects.

F. Standard HV Cable Trench





Submission of Tender

Two (2) hard copies of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the EFL Head Office, 2 Marlow Street, Suva, Fiji.

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

The Site visit for this tender will be on Tuesday 8th of May, 2018.

This tender closes at **4:00pm(16.00hrs Fiji time) on Wednesday 16th of May, 2018**

Each tender shall be sealed in an envelope with the envelope bearing only the following marking:

MR 176/2018

**UPGRADING OF 6.6KV TO 11KV GRID GORDON STREET FEEDER FROM KNOLLY STREET
ZONE SUBSTATION - Scheme: SR 06-15B**

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 on the envelope will be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act and must have the most current Tax Compliance Certificate.

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

Bidders are requested to submit a:

- Valid Tax Compliance Certificate
- FNPf Compliance Certificate