



FIJI ELECTRICITY AUTHORITY

BIDDING DOCUMENT

Monasavu Half Life Refurbishment

**132kV Disconnecter Foundation Pads for Wailoa,
Cunningham and Vuda Substations**

TENDER NO: MR 10/2016

INVITATION FOR BIDS

Date: 30th January, 2016
Tender No: MR 10/2016

The Fiji Electricity Authority ("The Employer") invites sealed bids from reputable and suitable Construction companies carry out design and construction of 30 foundation pads for 132kV disconnectors at our Wailoa, Cunningham Road and Vuda Substations.

All bids for the contract shall be submitted on the appropriate forms provided and shall include the completed price schedule, technical schedule and schedules of experience etc. The bid shall be on the basis of a lump sum contract based on firm prices.

Bidders may obtain further information from, and inspect and acquire the bidding documents, at

132kV Disconnector Foundation Pads
Tuvitu Delairewa
General Manager Corporate Services
2 Marlow Street, Suva, FIJI.
Phone: 679 3224 185
Email: TDelairewa@fea.com.fj

The deadline for submission of bids shall be 1600hrs (local time) on Wednesday, 10th February, 2016.

During evaluation of bids the Authority may invite a bidder or bidders for discussions, presentations and any necessary clarification before awarding the contract price proposal.

Mandatory site visit is planned for as follows:

1. Vuda Substation - Wednesday 3rd Feb, 2016 at 10am
2. Cunningham Road Substation – Thursday 4th February at 10am
3. Wailoa Substation – Friday 5th February at 11am

Section 1 - Instructions to Bidders

- A. General**
- 1. Scope of Bid** 1.1 The Fiji Electricity Authority (hereinafter referred to as "the Employer"), wishes to receive bids for Design and Construction of 132kV Disconnecter Foundation pads , as defined in these bidding documents (hereinafter referred to as "the Works").
 - 2. Eligible Bidders** 2.1 This invitation is open to all Bidders who have sound Financial Background, and have previous experience in handling such projects.
 - 3. Eligible Materials, Equipment and Services** 3.1 The materials, equipment, and services to be supplied under the Contract shall be from reputable companies as specified by FEA. Upon request, bidders may be required to provide evidence of the origin of materials and services .
 - 4. Qualification of the Bidder** 4.1 To be qualified for award of Contract, bidders shall:

 - (a) submit a written power of attorney authorizing the signatory of the bid to commit the bidder; and
 - 5. One Bid per Bidder** 5.1 Each bidder shall submit only one bid either by itself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.
 - 6. Cost of Bidding** 6.1 The bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for those costs.
 - 8. Clarification of Bidding Documents** 8.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing by fax (hereinafter the term "fax" is deemed to include electronic transmission such as facsimile, cable and telex), or email at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which it receives earlier than 10 days prior to the deadline for submission of bids. Copies of the Employer's response, including a description of the inquiry, will be forwarded to all purchasers of the bidding documents.
 - 9. Amendment of Bidding Documents** 9.1 At any time prior to the deadline for submission of bids, the Employer may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.

9.2 Any addendum thus issued shall be part of the bidding documents pursuant to Sub-Clause 9.1, and shall be communicated in writing or by fax to all purchasers of the bidding documents. Prospective

bidders shall acknowledge receipt of each addendum by email and fax to the Employer.

- 10. Language of Bid** 10.1 The bid, and all correspondence and documents related to the bid, exchanged between the bidder and the Employer shall be written in the English language.
- 11. Bid Form and Price Schedules** 11.1 The Bidder shall complete the Bid Form and the appropriate Price Schedules furnished in the bidding documents in the manner and detail indicated therein, following the requirements of Clauses 12, 13, 15 and 16.
- 12. Bid Prices** 12.1 Bidders shall give a breakdown of the prices in the manner and detail called for in the Schedules of Prices.
- 13. Bid Currencies** 13.1 The prices shall be quoted in the Fijian currency VIP
- 14. Bid Validity** 14.1 Bids shall remain valid for a period of **60 days** from the date of Deadline for Submission of Bids
- 15. Format and Signing of Bid** 15.1 The bidder shall prepare one original and two (2) copies of the technical proposal and the financial proposal, clearly marking each one as: "ORIGINAL PROPOSAL", "COPY NO. 1 – PROPOSAL", etc. as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.
- 15.2 The inner and outer envelopes shall
- (b) be addressed to the Employer at the following address:
- Tuvitu Delairewa
General Manager Corporate Services
2 Marlow Street, Suva, FIJI.
Phone: 679 3224 185
Facsimile: 679 331 1882
Email: TuvituD@fea.com.fj
- and
- (c) bear the following identification:
- 132kV Disconnecter Foundation Pads for
Wailoa, Cunningham and Vuda Substations
- Bid Tender Number: MR 11/2016
DO NOT OPEN BEFORE 1600 hrs 10th February, 2016
- 15.3 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 16. Deadline for** 16.1 Bids must be received by the Employer at the address specified

**Submission of
Bids**

above no later than **1600 hours (local time) Wednesday, 10th February, 2016.**

17. Late Bids

- 17.1 Any bid received by the Employer after the deadline for submission of bids will be rejected and returned unopened to the bidder.
- 17.2 No bid may be modified by the bidder after the deadline for submission of bids.

Tender submission

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 FEA Head Office, 2 Marlow Street, Suva, Fiji.

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

This tender closes at 4:00pm on Wednesday 10th February, 2016. Any request for extension of the closing date by the bidders must be made 24hrs prior to the current closing date. It is the prerogative of the FEA to either accept or decline the request.

**Site Inspection will be held at the Vuda Substation-10.00am, Wednesday 3rd February, 2016
Cunningham Rd Substation-10.00am, Thursday 4th February, 2016
Wailoa Substation-11.00am, Friday 5th February, 2016**

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

MR 10/2016 – Momi and Nawai Substation Earthing

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 will be returned to the Tenderers unopened.

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

TENDER SUBMISSION CHECK LIST

The Bidders must ensure that the details and documentation mention below must submitted as part of their tender Bid

Tender Number _____

Tender Name _____

1. Full Company
Name: _____
(Attach copy of Registration Certificate)

2. Director/Owner(s): _____
3. Postal
Address: _____

4. Phone
Contact: _____
5. Fax Number: _____

6. Email
address: _____
7. Office
Location: _____
8. TIN Number: _____
(Attach copy of the VAT/TIN Registration Certificate – Local Bidders Only)

9. Company Registration
Number: _____
(Attach copy of the Business License)

10. FNPF Employer Registration
Number: _____
(For Local Bidders only)

11. Contact Person: _____

I declare that all the above information is correct.

Name: _____ Position: _____ Sign: _____

Date: _____

Section 2

Employer's Requirements – Part I

Scope of Works

PART 1 - SCOPE OF WORKS

1. GENERAL DESCRIPTION

The scope of works for this contract for **132kV Disconnecter Foundation Pads – Civil Works** is to carry out civil works for new foundation Pad works for 132kV Disconnectors at Wailoa, Cunningham Rd and Vuda Substations.

These Substations are existing operational substation site. The main item for civil and electrical works under the scope includes:

1. Architectural design
2. Structural design of the foundation pads suitable to take loads of 20Tonne steel structures at a wind speed of 70m/s
3. The existing 132kV Structures shall all be energized so extra care needs to be taken.
4. Remove soil and rushed metal from the existing Disconnecter pads
5. Dig for new foundations.
6. Lay new weed mats
7. Carry out laying of structural steel
8. Lay Electrical conduit for the earthing 50mm from each structure
9. Lay 150mm Electrical conduit for the control panels (1 for Disconnecter and another for the earth panel)
10. Place and align all 24 bolts as per Plan – 30mm² 8.8 Grade 50cm per bolts, bidder to provide the bolts.
11. Concrete 6 stand foundation pads using ready mix 25MPA, one sample test per pad.
12. CAD weld 160mm² (40X4mm) earth flat strip and shape to the Disconnecter
13. Once the old Disconnectors shall be removed and new 132kV disconnectors installed the top layer padding to be done. This depends on the outage. Expected 8 units replacement per year. There shall be 10mm fall from level point.
14. Removal all wood
15. Place crushed metal 40mm².
16. Place earth mat and connect
17. Water blast and clean concrete base

2. SITE CLEARANCE

All unwanted materials, debris, etc. shall be removed from the employer's premises.

Unwanted foundations shall be demolished or up-rooted. The Contractor shall clear all areas required for the work. All unwanted materials, debris, etc. shall be removed from the employer's premises.

3. SITE FORMATION AND UPKEEPING

The whole of the excavations shall be carried out to the widths, lengths and depths shown on the approved drawings and in accordance with BS CP-8004 and BS 6031 or AS 3789. If top layer of soil is not suitable for the construction it shall be removed or stabilised. The Contractor is to provide all strutting and shoring necessary for the safe execution of the Works. Materials from the excavation may, if approved by the Employer's

Representative, be used by the Contractor in the construction Works. Other excavated material shall be back filled where required or deposited where directed by the Employer. Surplus materials shall be removed from the Site by the Contractor. The Contractor shall at all times keep the site free from all surplus materials, rubbish and offensive matter.

The bottom of all excavated areas shall be trimmed, levelled and well rammed. Concrete shall not be deposited thereon until the bottom has been inspected and approved by the Employer's Representative.

All excavation works are to be kept dry and clean, in order that work is not affected or interfered with by water entering the excavations. The Bidder is to allow in his Tender for the costs of pumping, de-watering or other methods of dealing with the water during and after excavation. No concrete, masonry, brickwork or other materials shall be placed or built until the surfaces are properly drained.

If it is required to fill the land, the Contractor shall get approval for the filling material and method of construction before the commencement of work. Filling for trenches, excavations and levelling of the site shall be deposited in layers not exceeding 250 mm uncompacted thickness, each layer watered when necessary and well rammed or otherwise compacted to within 95% of the maximum dry density obtained by the use of a Proctor Standard Compaction Test. Any fill material used within 500 mm of concrete structures cement bound materials shall have a soluble sulphate content not exceeding 2.5 g per litter when tested in accordance with BS 1377 or AS 1289, special precautions shall be taken to protect the concrete or cement bound materials to the approval of the Employer's Representative. Where excavations whether in rock or other material, are made to a greater depth than detailed, the intervening space shall be brought up to the proper level in plain concrete at the Contractor's expense.

Any formation encountered in the excavations which is not sufficiently strong to carry the loads which will be imposed on it, shall be excavated to an adequate load bearing stratum and replaced with mass concrete. Unless otherwise described, directed or permitted, imported filling shall consist of pervious naturally occurring material, free from mud, silt, clay, peat, vegetable or injurious matter and water soluble salts harmful to copper and other metals. Filling shall be imported only from approved areas.

Stone chipping used for substation surfacing are to be clean hard crushed stone graded from 16 - 40 mm. The formation in areas where stone chipping are to be used shall be well compacted to the approval of the Employer's Representative, and treated with an approved total weed killer, used in accordance with the manufacturer's instructions. Approved weed mats has to be installed in the entire yard before stones chips are installed. Geo mat and geo fabric may also be used in areas where water is present. Stone chipping shall be laid and lightly compacted to a minimum finished thickness of 100 mm.

4. Ducts

All cable ducts shall be laid in straight lines and regular gradients between cable pits, as directed. All ducts shall be kept clear from earth, debris and other obstructions during and after laying. Cable ducts may be pitch fiber, PVC, plastic or other material approved by the Employer's Representative and obtained from an approved manufacturer.

5. Concrete Beds and Casings

Concrete beds and casings to cable ducts and under roads, buildings, floors and foundations shall be of lean concrete and of 600mm minimum thickness. Elsewhere the ducts shall be laid on and surrounded with approved granular material of 150mm minimum bed thickness and 300 mm minimum cover.

5.8 MISCELLANEOUS WORK

Shall be carried out according to the relevant clause of this specification.

Section 3

Form of Proposals and Appendices

1 NOTES ON SCHEDULES

The Schedules are intended to provide the Employer with essential supplementary information in an organized format. Examples of more commonly used Schedules are given herein. Others may be devised and added in accordance with the requirements of the Instructions to Bidders.

All the Schedules are essential for bid evaluation and some in contract execution; they should all be incorporated in the Contract, and appropriate changes introduced with the approval of the Employer or its representative.

2 SCHEDULE OF PRICES & CONDITIONS OF PAYMENT

2.1 CONTRACT PRICE

The Contract Price is comprehensive in that, in consideration of the Contractor meeting all obligations, conditions and liabilities under the Contract, including the Contractor's allowance for the cost of supply of all labour, materials, plant, supervision required to complete the Contract Works, overheads and profit, subject only such adjustment as is provided for the Contract.

2.2 PAYMENTS TERMS

1. All payments shall be due and payable by the Employer in accordance with the payments terms detailed below.
2. The payments shall be made on completion of milestones as identified and agreed by both the Employer's Representative and the Contractor.
3. The payments will be made based on the following schedule:

	<i>Particulars</i>	<i>Milestone</i>	<i>Payment (% of contract price)</i>
1	Advance payment		NIL
2	Progressive Payment	1. Completion of 6 foundation stands per Disconnecter 2. Completion of CAD Weld, concrete slab (150mmX 6.3mX3.5m), crush metal and removal of all debris per disconnectors	95%
3	Retention	12 months after issuing of performance certificate	5%

SUMMARY OF PRICES – BIDDER TO SUBMIT AS PART OF THE TENDER PROPOSAL

No.	Substation	No. of Pads	Price per unit VIP	LUMP SUM VIP
1	Wailoa Substation	20		
2	Cunningham Road Substation	4		
3	Vuda Substation	6		
			TOTAL	

TOTAL CONTRACT PRICE:

Main Offer: (in words) – price shall be VIP

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Signature of Tenderer

Witness

1 OTHER DOCUMENTS & DRAWINGS TO BE SUBMITTED WITH BID

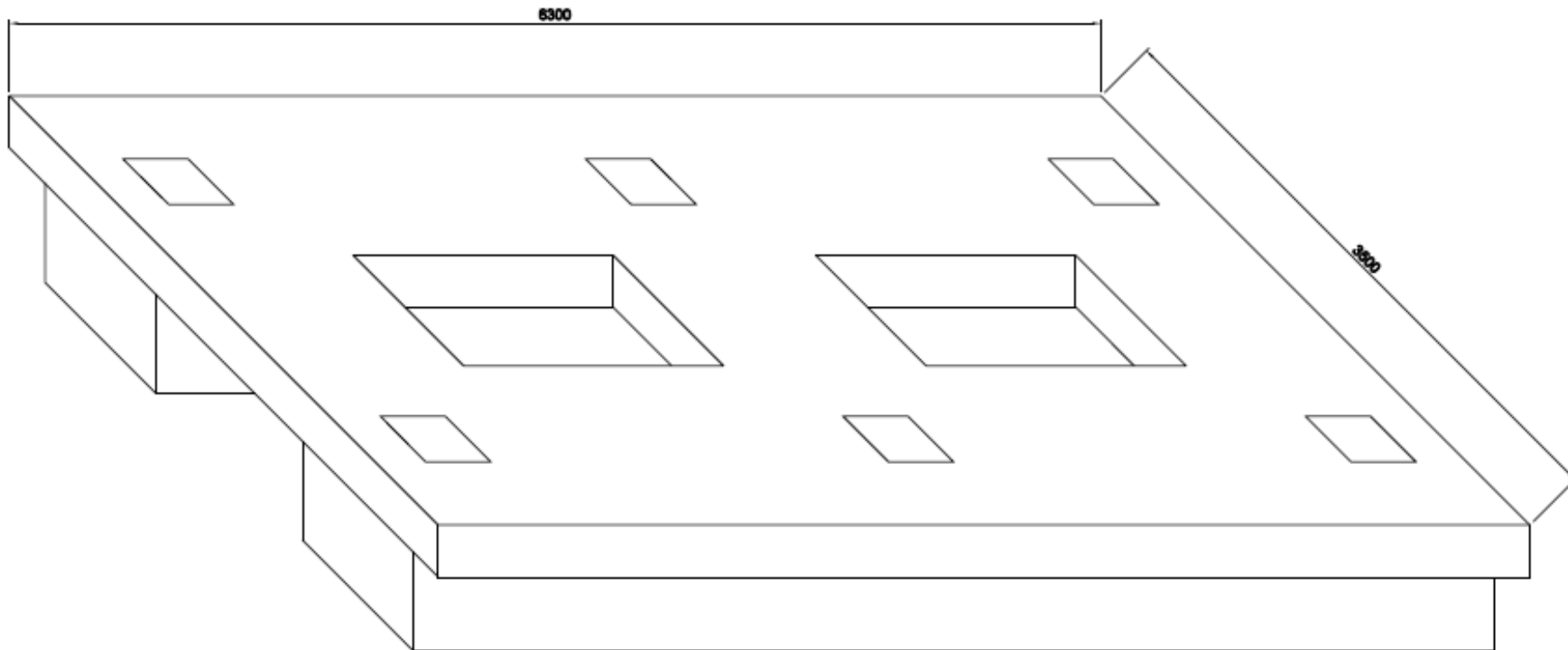
As a minimum, the following documents & drawings shall be submitted with the Bid.

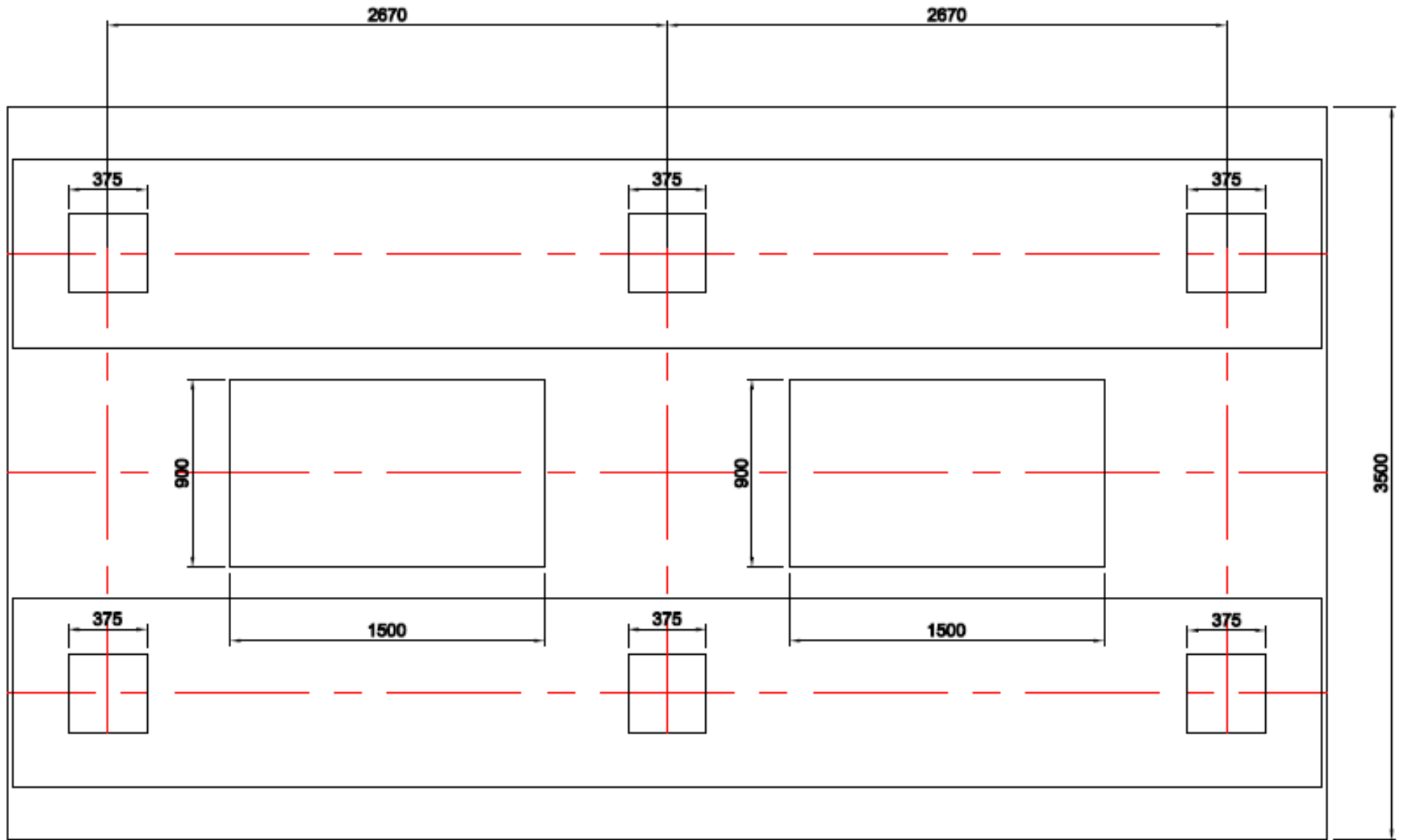
1. Evidence of Bidder’s experience in works similar to this

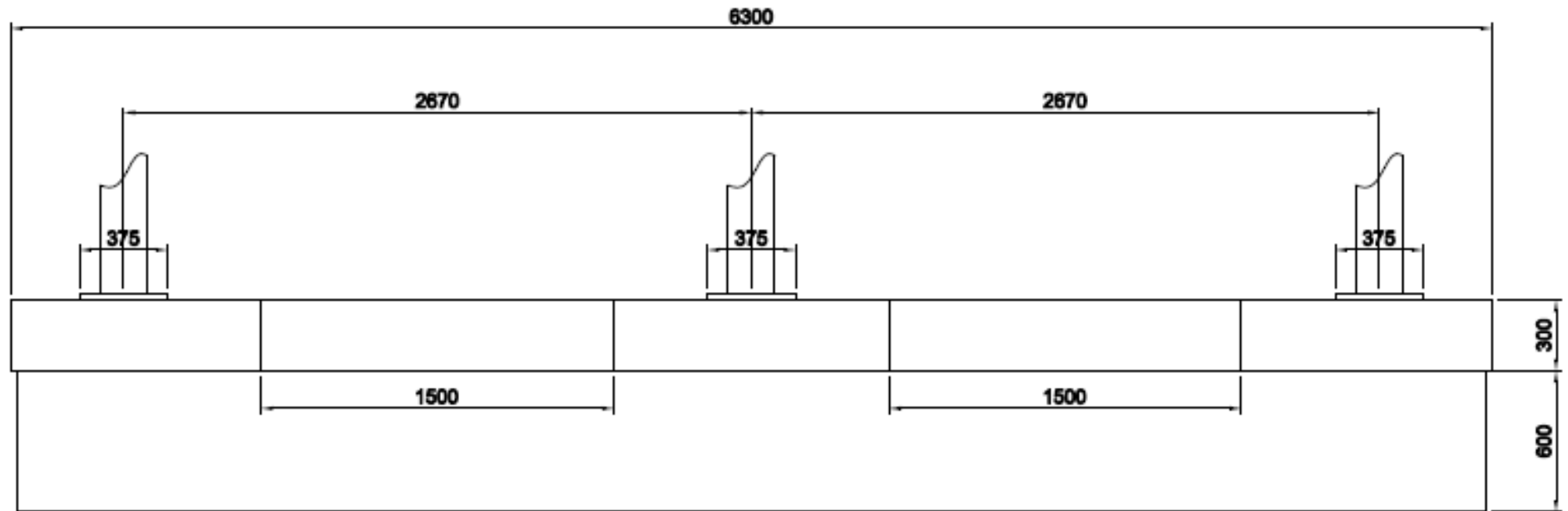
Section 4

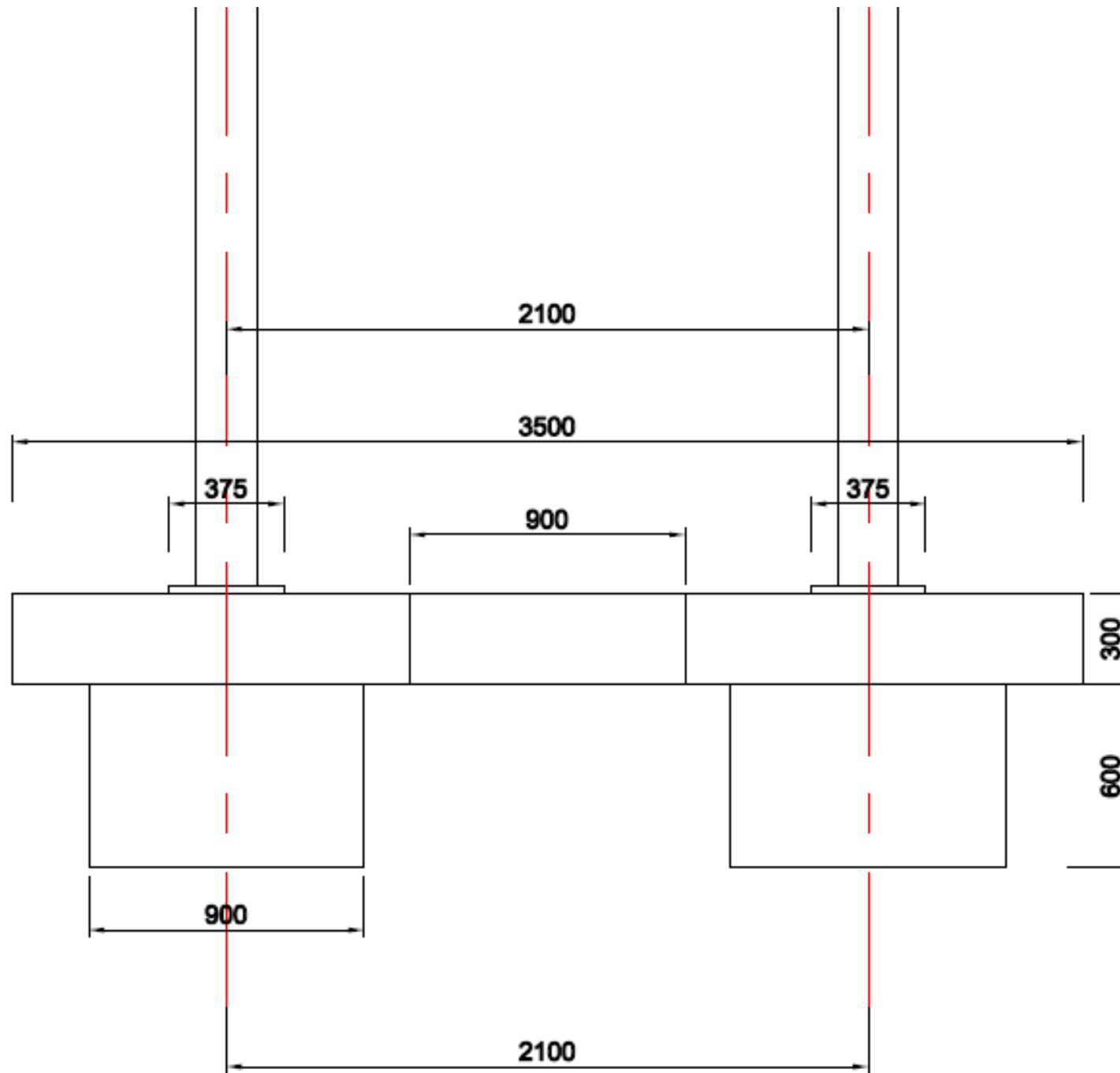
Drawings

Drawings 1 – Final layout

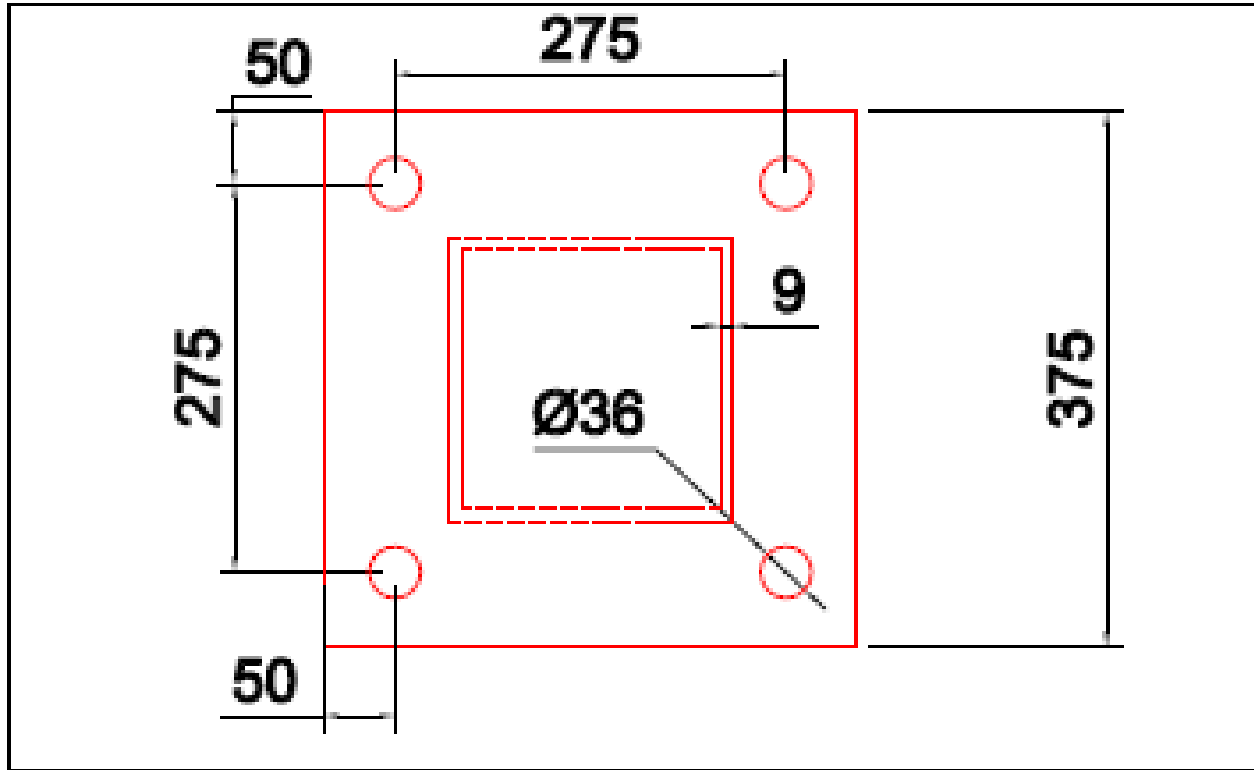








BOTTOM PLATE



PLAN VIEW