ANISO9001&14001COMPANY

## **TENDER DOCUMENT**

Date: 01.01.2024

EPIL/NE/CON/645/II/454

**FOR** 

Tender for "Execution of balance work of Border Flood Lighting along IBB in the state of Mizoram on Lump Sum Turnkey (LSTK) basis"

- Package -II

**VOLUME-III** 

**BILL OF QUANTITY** 

PAYMENT SCHEDULE

&

FORMAT OF PRICE BID

## **LOCATIONS OF PACKAGE-1**

SI. No.	Location					
1	kamlabagan					
2	Bindachara					
3	Tablabagh					
4	Balukasuri					
5	Guruchara					
6	Kalapani					
7	Lakhisuri					
8	Malsuri					
9	Dursuri					
10	Devasura					
11	Nakukchera					
12	Lambachera					
13	Saisenbasti					
14	Saisenchera					
15	New Mozam					
16	Baraharina					
17	Tarabani					
18	Badalchara					
19	Sivniachara					

## Tentative BOQ for reference only. Bidder has to finalise the BOQ as per the final scope of work, drawing etc.

SL NO.	DESCRIPTION OF ITEM	UNIT	Qty
1	SECTION - A : D.G. ROOM		
1.1	DG Set Room new construction	Job	0
1.2	DG Set Room Balance Work (Assuming 80% Balance Work) including Complete Paint, Bathroom repairing, installation of Bathroom Fitings, Water tank (Sintex), Water & Electric connection with wiring, Window repairing, Ceiling repairing, Ceiling fan &Lights required etc	Job	0
1.3	DG Set Room Balance Work (Assuming 70% Balance Work) including Complete Paint, Bath- room repairing, installation of Bathroom Fitings, Water tank (Sintex), Water & Electric connection with wiring, Window repairing, Ceiling repairing, Ceiling fan &Lights required etc	Job	0
1.4	DG Set Room Balance Work (Assuming 60% Balance Work) including Complete Paint, Bath- room repairing, installation of Bathroom Fitings, Water tank (Sintex), Water & Electric connection with wiring, Window repairing, Ceiling repairing, Ceiling fan &Lights required etc	Job	0
1.5	DG Set Room Maintanance (Assuming 50% Balance Work) including Complete Paint, Bathroom repairing, installation of Bathroom Fitings, Water tank (Sintex), Water & Electric connection with wiring, Window repairing, Ceiling repairing, Ceiling fan &Lights required etc	Job	0
2	SECTION - B : D.G. SET		
2.1	Complete servicing of DG Set with all required parts including battery etc. required to make the Dgset operational.	Job	0
2.2	SUPPLY,INSTALLATION,TESTING & COMMISSIONING OF 62.5 kvA D.G. SET Including All	Set	0
2.3	SUPPLY,INSTALLATION,TESTING & COMMISSIONING OF Manual Changeover between 2 Nos DG Sets.	Set	0
3	SECTION - C : Main MV Power Distribution Panel & FPB's		
3.1	M.V. POWER DISTRIBUTION PANEL BOARD WITH 200A BUS BAR	Job	0
3.2	Repairing of M.V. POWER DISTRIBUTION PANEL BOARD WITH 300A COPPER BUS BAR including Door lock, Indicator, Fuse, Paint etc.	Job	0
3.3	Repairing of MAIN FEEDER PILLAR PANEL including replacement of Main switch, Fuse conductor, Connector, Door lock, Paint with chamber repairing & Danger Plate numbering etc. coplete servicing for making it functional.	Job	0
3.4	Supply, Installation Testing And Comissioning of MAIN FEEDER PILLAR PANEL including Foundation complete in all respect	Set	0
3.5	Repairing of SUB FEEDER PILLAR PANEL including replacement of Main switch, Fuse conductor, Connector, Door lock, Paint with chamber repairing & Danger Plate numbering etc. coplete servicing for making it functional.	Job	0
3.6	Supply, Installation Testing And Comissioning of SUB FEEDER PILLAR PANEL including Foundation complete in all respect	Set	0

4 SECTION - D: 1.1 KV XLPE POWER CABLE - SUPPLY 4.1 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 240 Sqmm		
4.1 Supply of 1.1 kV 3.5 Core Al Armoured Cable 240 Samm		
··-   Cappi, or fit it of our chich introduct cable 2 to outfill	Meter	0
4.2 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 185 Sqmm	Meter	0
4.3 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 120 Sqmm	Meter	26752.5
4.4 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 50 Sqmm	Meter	28000
4.5 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 35 Sqmm	Meter	0
4.6 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 70 Sqmm	Meter	20000
4.7 Supply of 1.1 kV 3.5 Core Al. Armoured Cable 16 Sqmm	Meter	63075.2715
5 SECTION -E :LAYING OF XLPE POWER CABLE		
LAYING AND END TERMINATION WITH BRASS COMPRESSION GLAND AND AI. LUGS OF ONE NO.PVC POWER CABLE OF 1.1 KV GRADE SIZE 16 Sqmm -120 Sqmm	Meter	0
LAYING AND END TERMINATION WITH BRASS COMPRESSION GLAND AND AI. LUGS OF ONE NO.PVC POWER CABLE OF 1.1 KV GRADE SIZE 35 Sqmm - 240 Sqmm	Meter	0
Supply and making straight through joint with cast resin compound including ferrules and other jointing materials for following size of XLPE aluminium conductor cable of 1.1KV grade as required.		
5.4 3.5 Core Al. Armoured Cable 185 Sqmm		0
5.5 3.5 Core Al. Armoured Cable 120 Sqmm		0
5.6 3.5 Core Al. Armoured Cable 70 Sqmm		0
5.7 3.5 Core Al. Armoured Cable 50 Sqmm		0
5.8 3.5 Core Al. Armoured Cable 35 Sgmm		0
5.9 3.5 Core Al. Armoured Cable 16 Sqmm		0
Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Nos.	0
Supply and fixing of the following size ISI marked G.I.pipe of medium class for road crossing including road cutting of depth not less than 500mm and making good the same in original shape etc.complete as required.		
5.12 a) 50mm dia	Mtrs	0
5.13 b) 80 mm dia	Mtrs	0
5.14 c) 100 mm dia	Mtrs	0
6 SECTION - F : LUMINAIRE & LAMP SUPPLY		
6.1 SUPPLY AND FIXING OF LOOP BOX	Each	0
6.2 SUPPLY AND FIXING OF C.G. BOX	Each	0
Supplying & fixing totally enclosed outdoor type front openable LOOP BOX with hinged type door (one fold), and locking arrangement of size 600mm x 300mm x 160mm (deep) fabricated out of 2mm thick MS sheet with necessary clamp and required nos. blanking holes suitable for 3.5 x 50 Sqmm and 4 X 16 sqmm PVC UG cable including providing & fixing 4 nos. 100 Amp capacity Aluminium bars, 3 no."C" series 6 Amp 10KA SPMCB, drilling holes, connections, interconnections, painting, earthing including providing necessary water proof gasket arrangement to the box, Nut & Bolts, name plate & danger notice plate etc. complete as required.	Each	0
6.4 PROVIDING & FIXING OF M.V. DANGER NOTICE PLATE	Each	0
6.5 SUPPLY OF WIDE BEAM FOR 2xSON-T 250 watt LAMP WITH FRONT COVER	Set	0
6.6 SUPPLY OF NARROW BEAM FOR 1xSON-T 250 watt LAMP WITH FRONT COVER	Set	0
6.7 SUPPLY OF 240V HIGH PRESSURE SODIUM VAPOUR SON-T 250 watt LAMP	Nos.	0
6.8 INSTALLATION, TESTING & COMMISSIONING OF 2 NOS. 1xSON-T 250 watt LAMP & ONE NO. 2xSON-T 250 watt LAMP	job	0

SL NO.	DESCRIPTION OF ITEM	UNIT	Qty
6.9	Supply of LED floodlight luminaire 130W LED Graphite grey powder coated pressure die-castaluminium LED housing designed to act as heat sink for efficient dissipation of heat LEDs are provided with secondary lens optics to get optimum optical performance. Constant current LED driver used is specially designed to have builtin surge voltage, open/short circuit protections. External surge protection provided for additional safety. Luminaire is provided with a MS mounting bracket fixed on pressure die cast aluminium housing for aiming adjustment. Luminous flux 15,600 lm ± 10%, Luminiaire efficasy 120 lm / W, Correlated Color Temperature 3045K±175K, Beam Angle Asymmetric, Power factor > 0.95, THD < 15%, Built-in Surge protection 4 KV and External Surge protection 10 KV, ngress Protection IP66, Impact Protection IK08		0
6.10	Installation, testing & commissioning of 3no.130W LED flood lighting fitting on the existing pole bracket including wiring through the existing pole with 3x1.5 Sqmm with accessories from top slots of pole to fittings including connections, interconnection etc. complete as required.		0
7	SECTION - G : POLE, ACCESSORIES & POLE ERRECTION		
7.1	Painting of pole with numbering	Job	0
7.2	Erection of Pole of 11 meter length in cement concreate 1:3:6	Job	0
7.3	Supply and erection of <b>9 Mtr Octagonal pole</b> with suitable for mounting of 3 nos. Flood Light Luminaire, necessary holes, G.I. nuts and bolts, washers, arrangement for fixing of earthing studs (2 nos.) for earthing, fixing of suitable nipples for holding of loop box etc. <b>as required as per specifications and drawings.</b>	Nos.	0
7.4	Casting of foundation for 9 Mtr poles inlcuding excavation of pole pit. The concrete mix for RCC foundation of Octagonal pole shall be M20. The scope shall also include grouting of foundation bolts including curing & provision for passage of cable and finishing the surface.	Nos.	0
7.5	Providing and making steel pole collar with cement concrete (1 cement : 3 coarse sand : 6 stone aggregate 20mm) of specified size and shape including form work, plastering if required, curing etc as required. (volume of pole/ pipe not to be deducted)	Cum	0
7.6	Supplying and embedding following dia G.I. pipe (medium class) in pole collar/ foundation (during casting) for cable entry including bending the pipe to the required shape complete as required.		0
8	SECTION - H : EARTHING		
8.1	Strip Earthing for S.T. Pole with necessary G.I. Nuts, Bolts & Washers as per relevant I.S. Code & Direction of Engineer-in-Charge. Rod Earthing with 16mm dia GI Rod 1.5mtr Long complete with GI Nuts. Bolts Washers.		0
8.2	SUPPLY AND FIXING 25 mm x 5 mm G.I. STRIP FOR EARTHING CONNECTION INTO 40 mm DIA G.I. PIPE PROTECTION	Mtrs	0
8.3	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Mtrs	0
8.4	PROVIDING BRICK, CEMENT, SAND ETC. FOR EARTH STATION	Set	0
8.5	PROVIDING SPECIAL EARTH STATION WITH 600 mm x 600 mm x 3 mm THICK COPPER EARTH PLATE WITH ALL OTHER ACCESSORIES FOR D.G. SET INSTALLATION	Set	0
8.6	ANTI CLIMBING DEVICES ON STEEL TUBULAR POLES	Set	0
9	SECTION - I : OPERATION AND MAINTENANCE		
9.1	OPERATION AND MAINTENANCE OF 2 NOS. D.G. SETS, FLOOD LIGHT & ELECTRICAL INSTALLATION FOR 12 MONTHS WITHOUT DIESEL AND LUBRICANT	Job	0
9.2	COST OF DIESEL AND LUBRICANT FOR 12 MONTHS ( 2 hrs. RUN PER DAY )	Set	0

Validate Print Help
Tender Inviting Authority: ENGINEERING PROJECTS (I) LTD. (A GOVT. OF INDIA ENTERPRISES)

Name of Work: Execution of balance work of Border Flood Lighting along IBB in the state of Mizoram on Lump Sum Turnkey (LSTK) basis - Package -II, (Approximately 88 KM)

NIT No:	EPIL/NE/CON/645/II/454	Date: 01.01.2024

Name of the Bidder/ Bidding Firm / Company :

## PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

In case, nothing is filled in GST coloumn, it will be considered that the Bidder's quoted cost is exclusive of GST during evaluation and to determine bidder's position. In this case, GST at applicable rate will be added to bidder's quoted cost to determine bidder's total cost and bidder's position will be determined accordingly. If the bidder becomes successful and work is awarded to the bidder, only the quoted cost will be paid to the bidder during billing which shall be deemed to be inclusive of GST.

In case, Bidder has quoted GST more than the rate applicable, only the applicable rate of GST with the Basic quoted cost will be paid to the bidder during billing , if the bidder becomes the succesful and the work is awarded to the bidder. However, in this case, bidder's position will be determined on his Total Quoted Cost (Basic Cost+GST).

Incase, Bidder has quoted GST less than applicable rate, the applicable rate of GST shall be levied on basic/taxable value and accordingly position of the bidder shall be determined. However, the total quoted price i.e. basic/ Taxable value + GST by bidder shall be deemed as peice inclusive of applicable GST and incase bidder becomes successful and work is awarded, the price quoted shall be paid as inclusive of GST (applicable) during billing.

SI. No.	Item Description	Quantity	Units	Estimated Amount, inclusive GST Rs.	Amount quoted by the Bidder inclusive of all, except GST Rs.	GST % quoted by bidder %	AMOUNT Without GST Rs.	TOTAL AMOUNT With GST Rs.	TOTAL AMOUNT In Words (With GST)
1	Execution of balance work of Border Flood Lighting along IBB in the state of Mizoram on Lump Sum Turnkey (LSTK) basis – Package –II	1.000	Lump Sump	35,94,65,727.00			-		INR Zero Only
2	Value offered for the items available in designated site/ store for utilising in the project	1.000	Lump Sump				-	·	INR Zero Only
Total in Figures			1	1			-	-	INR Zero Only
Quoted Rate in Words	INR Zero Only								