

कार्यालय कार्यपालकअभियंता (वै०) एफ-13, लो० नि० वि०, मुकरबाचौक, जी. टी. करनालरोड, दिल्ली- 110033 दूरभाष नं० 27691020, फैक्स नं०. 27691020 e-mail: eeepwddelhif13@gmail.com		O/O THE EXECUTIVE ENGINEER (E) F-13, PWD, Mukarba Chowk, G.T. Karnal Road, Delhi-110033 Phone-27691020, Fax No.27691020 e-mail: eeepwddelhif13@gmail.com
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No. NIQ-01/E.E(E)/F-13/PWD/2020-21

dated:- 19/12/2020

e-Quotation

NOTICE INVITING QUOTATION

Executive Engineer(E), Flyover Project Division F-13, PWD (GNCTD), Mukarba Chowk, Delhi-110033, Telephone no. 011-27691020 E-mail Id:- eeepwddelhif13@gmail.com on behalf of President of India invites item rate e-quotation from “Approved and Eligible contractors” of composite category in appropriate class of CPWD or those of appropriates list of MES, BSNL and other State Govt. Department and other experienced contractors who deals in work of ‘SITC of Solar System” for the following works:-

Name of work:- *Comprehensive Development of corridor (Outer Ring Road) between Mukarba Chowk to Wazirabad Chowk (SH-Installation of 24KWp Solar PV in the premises of PWD Office Mukarba Chowk).*

Estimated Cost	Rs. 0.00
Earnest Money	EMD for declaration
Time Allowed	20 Days
Last Date of uploading of Quotation	At 15: 00 Hours on 19/12/2020
Date & Time of Opening of Quotation	At 15: 30 Hours on 28/12/2020

1. List of documents to be scanned and uploaded within the period of bid submission:

a) Proforma for earnest money deposit declaration duly filled (**as per annexure-A.**)

2. The eligibility criteria mentioned as below:-

The firms who fulfill the following requirement shall be eligible to apply (Joint ventures are not accepted)

a) The approved and eligible contractors registered with CPWD in appropriate class of composite category.

Note:- 1st lowest contractor from composite category shall submit MOU with specialized agency in SITC of Solar System as per NIQ eligibility criteria with in 5 days after opening of NIQ.

OR

b) Those of appropriate list of MES, BSNL and other State Govt. department in appropriate class who have satisfactorily completed the similar nature works as mentioned below during the last seven years ending previous day of last date of submission of bids.

i) Three similar works each costing not less than the amount equal to 40% (i.e. 1.97 Lakh)

OR

ii) Two similar works each costing not less than the amount equal to 60% (i.e. 2.96 Lakh)

OR

iii) One similar completed work of aggregated cost not less than amount equal to 80% (i.e. 3.94 lakh)

Similar nature works means works of “SITC of Solar System”

- c) Experience certificates issued by competent authority not below the rank of Executive Engineer in case of Govt./PSU work and Regional Manager/General Manager in case of Private work.(In case of work in private sector bidders has to upload copy of order/copy of agreement and related TDS certificates). All the certificates uploaded must be verifiable.
- d) Certificate of Registration for GST and Acknowledgement of upto date filed return.

The NIQ documents can also be seen on our website:- <https://govtprocurement.delhi.gov.in/ID>. no.

**Executive Engineer(E),
F-13, PWD, Mukarba Chowk,
G.T. Karnal Raod, Delhi-33**

Copy to:-

- 1 The Chief Engineer (F), PWD, 4th Floor, MSO Building, I.P. Estate, New Delhi-02 for information please.
- 2 The Project Manager F-1, PWD, Mukarba Chowk, Delhi-33 for information please.
- 3 The Executive Engineer, F-11, PWD, Mukarba Chowk, Delhi-33 for information please.
- 4 The Assistant Engineer (E), F-132, PWD, Mukarba Chowk, Delhi-33 for information.
- 5 The Account Division/DDO, F-131, PWD, Mukarba Chowk, Delhi-33 for information.
- 6 Notice Board.

Executive Engineer(E),

Terms and Conditions:-

1.	The work shall be carried out as per direction of Engineer-in-Charge.
2.	Agency should quote his rates inclusive of all prevailing taxes & fees, statutory G.S.T. etc.
3.	Necessary recoveries such as income tax, labour cess etc. as applicable will be deducted from the Gross amount of Bill.
4.	The work shall be executed as per specification.
5.	The Rates includes transportation, T&P, Stationery, Water Charges etc. in the above rates.
6.	Payment will be made after completion of work in all respect.
7.	The work shall be executed within 20 days from date of issue of Work order.
8.	The system should be workable after completion of work.
9.	The material mentioned in Item no. 1 (i to iv) and 14, will be provided by the department to the contractor free of cost.

List of approved makes of materials

S. No.	Materials	Makes
1.	Cables	LAP/KEI/Polycab/RR/Havells
2.	Cable Gland	Stripwell/commet
3.	Chemical Earthing	Om Electroteck/JMV/SRL
4.	MS Conduit	BEC/AKG/NIC/Steelcraft
5.	DWC /HDPE pipe	REX/Duraline/Jemini/Mahashakti
6.	Strut Channel	MK tubes/Advance

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Performa for Earnest Money Deposit Declaration

Whereas, I/we ----- (name of agency) -----

have submitted bids for ----- (name of work) -----

I/We hereby submit following declaration in lieu of submitting Earnest Money
Deposit

(1) If, after the opening of tender, I/we withdraw or modify my/our bid during the
period of validity of tender (including extended validity of tender) specified in
the tender documents,

or

(1) If, after the award of work, I/we fail to sign the contract, or to submit
performance guarantee before the deadline defined in the tender documents,

I/we shall be suspended for one year and shall not be eligible to bid for CPWD/PWD
tenders from date of issue of suspension order.

Signature of the contractor(s)

Schedule of Quantity

State:- Delhi
Branch:- B&R

Division:-F – 13
Sub Division F – 132

Name of Work: Comprehensive Development of corridor(Outer Ring Road) between Mukarba Chowk to Wazirabad Chowk (SH-Installation of 24KWp Solar PV in the premises of PWD Office, Mukarba Chowk).

S. No.	Description	Qty.	Unit	Rate	Amount
1	Installation, testing and commissioning of followings:- (i)- 325 Wp (minimum rated) poly Crystalline silicon photovoltaic (PV) modules high power solar cells on existing metal frame.Solar cells used in Solar Photo Voltaic module shall be as per IEC 61215/IS: 14286 & IEC 61853 amended upto latest standard. Each PV module used shall have a RF identification tag. Efficiency of SPV modules shall be greater than 16%. It shall perform satisfactorily in relative humidity upto 100% with temperature variation between (-) 10 Degree C to (+) 65 Degree C. etc. i/c interconnection DC wires with MC4 connectors with IP 67 protection complete as required as per specification. (Qty. 76 Sets.)				
	(ii) 20 KVA solar string inverter to convert DC power produced by solar module, in to AC power. The inverter should be grid interactive and equipped with MPPT (Maximum power point Tracker) & protection conform to IEC61683/IS 61683 , IEC 60068-2 (1,2,14,30) or equivalent BIS standard complete as per specification reqd. The inverter out put should be compatible with the grid frequency. (1 no. set)				
a	Max DC array input operating voltage:950 V				
b	type of solar charge controller : MPPT				
c	output wave form :pure sine wave				
d	total harmonic distortion : < 3% with resistive load				
e	output voltage : 415 +/- 3%				
f	output frequency : 50 hz +/- 0.5 hz				
g	power factor :> 0.9 lagging				
h	inverter efficiency ; > 98%				
i	operating temperature : 0- 50 degree C				
j	Relative humidity : 95 % non condensing				
k	protection of enclose : IP 65 (minimum) outdoor				
l	inverter should be capable of complete automatic operation including wake - up synchronization and shutdown				
m	built in meter and data logger to monitor plant performance with remote monitoring over IP.				
n	inverters shall comply MNRE standards				
o	display parameters : as per OEM				
	(iii)-factory assembled wall / floor mounted outdoor AJB (Array Junction Box) (Qty - 1 set)				
	incomer				
a	15 Amp.1P MCCB Thermal released having short circuit and earth fault protection with rotary handle (Ics = 100 % Icu)= 6 set				

b	4 in 4 out				
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	out going				
a	LED Indication lamps				
c	CLASS 2 surge protector - 1 set				
	(iv)- Factory assembled wall / floor mounted outdoor distribution board dust & vermin proof powder coated self supported suitable for 3 phase 4 wire , 415 volt AC supply and having suitable front area and space for CT operated energy meter fabricated out of 2 mm thick CRCA sheet with locking arrangement i/c supplying & fixing of following accessories as below i/c bus bars inter connection , arrangement for cable entry / support / termination 2 nos earthing stud inter connection with 20 mm X 3 mm copper strip (externally) painting etc as required. (Qty. 1 set)				
	incomer				
a	63 Amp.4P MCCB Thermal released having short circuit and earth fault protection with rotary handle (Ics = 100 % Icu)= 1 set				
b	100 amp capacity 4 strip copper bus bar = 1 set				
	out going				
a	63 Amp, 4P 35KA MCCB Thermal released , short circuit and earth fault protection with rotary handle (Ics = 100 % Icu)= 1 set				
c	415 A, 20KA, CLASS 2 surge protector - 1 set				
d	LED multifunction meter (V,A,F,PF,KW,KVA,KVAR,KWH,KVAH,KVARH,Run hours,on hours , interrupts,RPM,% Unbalance (V,A) class accuracy 0.5 complete with accessories i/c CT/PT as required = 1 set				
e	LED Indication lamps with 2 amp MCB switch for protection for RYB = 1 set	1.00	job		
2	Supplying, laying, connection and testing of following sizes of PVC insulated copper multi strand conductor DC cable with connector with IP 67,suitable for 1800 DC voltage ,Heat resistant upto 120 C , UV resistant,fixing with pvc button belt/ tie with existing structure/cable tray or in the existing surface / recessed steel / pvc conduit as required.				
	1 C X 4 sq mm (cable for string of dc power)	150	Mtr		
3	Supplying and laying of following sizes of XLPE insulated or PVC sheathed armoured aluminium /copper conductor power cable of 1.1 KV grade in the existing RCC/HUME/METAL PIPE/HDPE on cable tray / surface as required.				
a	4 C X 16 sq mm Copper XLPE Cable	3	Mtr		
b	3.5 C X 35sq mm Al. XLPE cable	100	Mtr		
4	Supply, installation, testing & commissioning of maintenance free (chemical earthing) copper bonded earthing electrode of minimum 3 meter length and minimum 17 mm dia and other necessary accessories, copper bonding should not be less than 0.25 mm including boring in soil / hard rock of suitable dia and refilling with ground enhancing compound minimum 4 kg with brick chamber of size not less than 300 mm x 300 mm complete as required. (Earthing resistance should not be more than 5 ohm etc as reqd.)	10	Sets		
5	Providing and Fixing 1 no. Copper Coated LA conventional	1	Set		

6	Supplying and laying / fixing of 1100v . 1x50 sq mm pvc insulated & pvc sheathed flexible copper conductor cable (as per IS 694-1990) in existing pipe/ on surface of wall horizontal / vertical run from the air terminal to earth pits complete i/c connection , testing etc as required.	5	Mtr		
7	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metrenbelow ground as strip earth electrode, including connection/ erminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut `bolt & spring washer spaced at 50mm)	15	Mtr		
8	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	85	Mtr		
9	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. 100 mm width X 50 mm depth X 1.6 mm thickness	60	Mtr		
10	Providing, boring and laying of HDPE pipe of 120 mm dia confirming to IS 14930, with presure rating of 4 kg.f/Cm2 by trenchless technology with nodding method by making bore in the horizontal direction across the road as per the direction of engineer-in-charge with moling equipment including jointing, cleaning, nodding of pipe including providing suitable cover on mouth of pipe i/c excavation of pits of required size of depth 1.2 mtrs. to 2 mtr. refilling etc. as reqd.	17	Mtr		
11	Supplying and Fixing of MS Strut Channel of size 41x41x2mm thick (U shape) for fixing of Solar Modules, on the existing MS frame work i/c alliging, etc.,as reqd.	180.00	mtr		
12	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. in the existing trench, complete as required. 63 mm dia (OD-63 mm & ID-51 mm nominal)	45.00	mtr		
13	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required. 50 mm	100.00	mtr		
14	Erection of 1.85m high x 0.60m wide x 2.90m long MS cage for protection of AC panel, DC panel & invertor, etc made out of 40x40x4mm thick MS angle iron frame workwith 2 nos. doors in front, 8 SWG (1 inch x 3 inch) MS jali on 3 sides and 1.6mm thick MS sheet on top and doors,i/c godown locking arrangement, hinges, handles etc. duly grouted in cement concrete, etc., as reqd.	1.00	job		
	Total				

**Executive Engineer(E),
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