FINANCIAL PART (PDF FILE)

To be signed and uploaded with BOQ (MS Excel File) as FINANCIAL PART of the Tender by the Tenderer.

Letter of Tender – Financial Part

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Tenderer must prepare this Letter of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.

Note: All italicized text is to help Tenderers in preparing this form.

Date of this Tender submission: [*insert date (as day, month and year) of Tender submission*]

Tender No.: HORC/HRIDC/SYS-1/2023

To:

GM/IE&A,
Haryana Rail Infrastructure Development Corporation Limited (HRIDC),
Plot no.143, 5th floor,
Railtel Tower, Sector-44
Gurugram – 122003

Tel: +91 8860124749

We, the undersigned, hereby submit the second part of our Tender, the Tender Price and Price Schedule. This accompanies the Letter of Tender – Technical Part.

In submitting our Tender, we declare that:

(a) **Tender Validity Period**: Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) after the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(b) ****Tender Price:** The total price of our Tender including Provisional Sum is: [*insert the total price of the Tender in words and figures in INR*];

(c) **Commissions, Gratuities, Fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

Name of the Tenderer: [*insert complete name of the Tenderer*]

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: *[*insert complete name of person duly authorized to sign the Tender*]

Title of the person signing the Tender: [*insert complete title of the person signing the Tender*]

Signature of the person named above: [*insert signature of person whose name and capacity are shown above*]

Date signed [*insert date of signing*] **day of** [*insert month*], [*insert year*]

*: Person signing the Tender shall have the power of attorney given by the Tenderer. The power of attorney shall be attached with the Letter of Tender.

** The total price of Tender including Provisional Sums quoted in this Letter of Tender-Financial Part shall be same as given in Worksheet BOQ3 (Price Schedule –Summary Sheet) of MS-Excel File which includes cost of Schedule 'A" plus Schedule 'B' and plus Provisional Sum.

Appendix A to Financial Part: Schedule of Adjustment Data

1. Price adjustment

1.1 The amounts payable to the Contractor for Works shall be adjusted in accordance with the provisions of this Clause 1.0, Sub-Clause 13.7 of GCC and Sub-Clause 13.7, Specific Provision, Part B, Section IX-PCC.

1.2 The Contract Price shall be adjusted for increase or decrease in rates and prices of labour, materials, Electrical equipment and other commodities or inputs in accordance with the principles, procedures and formulae specified below:

a) Base month for the purpose of Price Adjustment shall be the month in which the Tender is opened. The 1st Quarter will start from Base month;

b) For Schedule-A, Price adjustment shall be applied on completion of the specified stage of the respective item of work.

The following expressions and meanings are assigned to the Cost Centre of Price Schedule 'A':

Cost Centre	Description of Cost Centre	Price Adjustment
1	**2**	**3**
E1	Surveys, Investigation, Studies, Design and Documents, O & M Manuals, As Built Drawings and Training of staffs	Not Applicable
E2	OHE Works	Applicable
E3	Traction Substations (TSS)	Applicable
E4	Sectioning Post (SP)	Applicable
E5	Sub Sectioning Post (SSP)	Applicable
E6	SCADA	Applicable
E7	Spares and Tools	Applicable only for Sub Cost Centre E7.1 & E7.2
E8	Annual Maintenance contract for 3 Years	Not Applicable

c) The following expressions and meanings are assigned to the value of the work done for electrification works under Price Schedule 'A':

i) OHE = Value of work done for the completion of a stage under cost Centre 'E2-Overhead Equipment Work' of Price Schedule 'A';
ii) TSS = Value of work done for the completion of a stage under cost Centre 'E3-Traction Sub-Station' of Price Schedule 'A';
iii) SP = Value of work done for the completion of a stage under cost Centre 'E4 - Sectioning Posts (SP)' of Price Schedule 'A';
iv) SSP = Value of work done for the completion of a stage under cost Centre 'E5 - Sub Sectioning Posts (SSP)' of Price Schedule 'A';

v) SCADA = Value of work done for the completion of a stage under cost Centre 'E6-SCADA' of Price Schedule 'A';

vi) SPARES = Value of work done for the completion of a stage under Sub Cost Centre 'E7.1-Supply of spares for OHE works' & 'E7.2-Supply of spares for Traction Power Installation' of Price Schedule 'A';

d) Price adjustment for changes in cost for electrification works under Price Schedule 'A' shall be paid in accordance with the following formula:

i) **VOHE** = 0.85 OHE x [PLB x (LBi – LBo)/LBo + PC x (Ci – Co)/Co + PSST x (SSTi – SSTo)/SSTo + PCU x (CUi – CUo)/CUo + PINS x (INSi – INSo)/ INSo] + PSWGR x (SWGRi – SWGRo)/SWGRo]; + POTH x (OTHi – OTHo)/OTHo

ii) **VTSS** = 0.85 TSS x [PLB x (LBi – LBo)/LBo + PTR (TRi – TRo)/TRo + PC x (Ci – Co)/ Co + PSST x (SSTi – SSTo)/SSTo + PSWGR x (SWGRi – SWGRo)/SWGRo+ POTH x (OTHi – OTHo)/OTHo];

iii) **VSP** = 0.85 SP x [PLB x (LBi – LBo)/LBo + PC x (Ci – Co)/ Co + PSWGR x (SWGRi – SWGRo)/SWGRo+ PSST x (SSTi – SSTo)/SSTo] + POTH x (OTHi – OTHo)/OTHo

iv) **VSSP** = 0.85 SP x [PLB x (LBi – LBo)/LBo + PC x (Ci – Co)/ Co + PSWGR x (SWGRi – SWGRo)/SWGRo+ PSST x (SSTi – SSTo)/SSTo + POTH x (OTHi – OTHo)/OTHo

v) **VSCADA** = 0.85 SCADA x [PLB x (LBi – LBo)/LBo + PELEX x (ELEXi – ELEXo)/ELEXo+ POTH x (OTHi – OTHo)/OTHo];

vi) **VSPARE** = 0.85 SPARE x PSST x (SSTi – SSTo)/SSTo + PCU x (CUi – CUo)/CUo + PINS x (INSi – INSo)/ INSo] + PSWGR x (SWGRi – SWGRo)/SWGRo];+ + PTR (TRi – TRo)/TRo+ [POTH x (OTHi – OTHo)/OTHo];

Where:-

VOHE = Increase or decrease in the cost under cost centre 'E2' of Price Schedule 'A' of Over Head Equipment and other related works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VTSS = Increase or decrease in the cost under cost centre 'E3' of Price Schedule 'A' of Traction Sub-Station and other related works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VSP = Increase or decrease in the cost under cost centre 'E4' of Price Schedule 'A' of Sectioning Post (SP) and other related works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VSSP = Increase or decrease in the cost under cost centre 'E5' of Price Schedule 'A' of Sub Sectioning Post (SSP) and other related works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VSCADA = Increase or decrease in the cost under cost centre 'E6' of Price Schedule 'A' of SCADA and related works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

VSPARE = Increase or decrease in the cost under Sub Cost Centre 'E7.1-Supply of spares for OHE works' & 'E7.2-Supply of spares for Traction Power Installation' of Price Schedule 'A' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (e);

PLB, PC, PSST, PCU, PINS, PSWGR, PTR, PELEX, and POTH are the percentages of Labour, Cement, Structural Steel, Copper Wire, Insulators, Electrical Switch Gears, Transformer, Electronic Items and All Other Commodities respectively for the relevant item as specified in sub-paragraph (e);

LBo = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called "CPI") for the Base month;

LBi = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration

Co = The wholesale Price Index as published by the Ministry of Commerce & Industry, Government of India (hereinafter called "WPI") for cement, lime, plaster for the Base month;

Ci = The WPI for cement, lime, plaster for the average price index of the 3 months of the quarter under consideration**.**

SSTo= Price of BLOOMS –Retail (SBLR) 150mmx150mm published by IEEMA for the Base month;

SSTi = = Price of BLOOMS –Retail (SBLR) 150mmx150mm published by IEEMA for the average price index of the 3 months of the quarter under consideration;

CUo= Copper: (CU) Price of Copper Wire Rod published by IEEMA for the Base month;

CUi = Copper: (CU) Price of Copper Wire Rod published by IEEMA for the average price index of the 3 months of the quarter under consideration;

INSo = The WPI for insulators for the Base month;

INSi = The WPI for insulators for the average price index of the 3 months of the quarter under consideration;

SWGRo = The WPI for MANUFACTURE OF ELECTRICAL EQUIPMENT for the Base month;

SWGRi = The WPI for MANUFACTURE OF ELECTRICAL EQUIPMENT for the average price index of the 3 months of the quarter under consideration;

TRo= The WPI for transformers for the Base month;

TRi= The WPI for transformers for the average price index of the 3 months of the quarter under consideration.

ELEXo = The WPI for MANUFACTURE OF ELECTRONIC COMPONENTS electronic items for the Base month;

ELEXi = The WPI for MANUFACTURE OF ELECTRONIC COMPONENTS for the average price index of the 3 months of the quarter under consideration;

OTHo = The WPI for all commodities for the Base month;

OTHi = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

e) The following percentages shall govern the price adjustment of the Contract Price for electrification works:

Component	SCHEDULE 'A'					
	OHE (Cost Centre E2)	TSS (Cost Centre E3)	SP (Cost Centre E4)	SSP (Cost Centre E5)	SCADA (Cost Centre E6)	Spares (Sub Cost Centre E 7.1 & E 7.2)
Labour (PLB)	10%	2.3%	5.2%	6%	14%	-
Cement (PC)	10%	3%	3%	4%	-	-
Structural steel (PSST)	31%	2.5%	3.8%	5%	-	8%
Insulators (PINS)	6.5%	-	-	-	-	4%
Copper wire (PCU)	35%	-	-	-	-	12%
Transformer (PTR)	0.5%	72.5%	55%	48%	-	15%
Electrical Switch Gear (PSWGR)	-	9.5%	16%	27%	-	12%
Electronic (PELEX)	-	-	-	-	76%	-
All other commodities (POTH)	7%	11.2%	17%	14%	10%	49%
Total	100%	100%	100%	100%	100%	100%

f) The following expressions and meanings are assigned to Sub Schedules under Price Schedule 'B':

Sub Schedule	Description of Sub Schedule Cost	Price Adjustment
1	2	3
B1	General	Applicable
B2	Concrete	Applicable
B3	Ferrous	Applicable
B4	Non Ferrous	Applicable
B5	Catenary & Contact wire	Applicable
B6	Insulators	Applicable
B7	SCADA at Harsana Kalan IR SSP	Applicable
B8	Non Schedule (NS) Items	Not Applicable

g) The following expressions and meanings are assigned to the value of the work done for electrification works under Price Schedule 'B':

i) **GEN** = Value of work done for the completion of a stage under Sub Schedule 'B1 -General' of Price Schedule 'B';
ii) **CON** = Value of work done for the completion of a stage under Sub Schedule 'B2 -Concrete' of Price Schedule 'B';
iii) **FER** = Value of work done for the completion of a stage under Sub Schedule 'B3 -Ferrous' of Price Schedule 'B';
iv) **NFER=** Value of work done for the completion of a stage under Sub Schedule 'B4 -Non-Ferrous' of Price Schedule 'B';
v) **CATCO =** Value of work done for the completion of a stage under Sub Schedule 'B5 - Catenary and contact' of Price Schedule 'B';
vi) **INS** = Value of work done for the completion of a stage under Sub Schedule 'B6 -Insulators' of Price Schedule 'B';
vii) **SCADA** = Value of work done for the completion of a stage under Sub Schedule 'B7-SCADA' of Price Schedule 'B';

h) Price adjustment for changes in cost for electrification works under Price Schedule 'B' shall be paid in accordance with the following formula:

i) **VGEN** = 0.85 GEN x [PLB x (LBi – LBo)/LBo + PSST x (SSTi – SSTo)/SSTo + PCU x (CUi – CUo)/CUo + PSWGR x (SWGRi – SWGRo)/SWGRo]; + POTH x (OTHi – OTHo)/OTHo];

ii) **VCON** = 0.85 CON x [PLB x (LBi – LBo)/LBo + PC x (Ci – Co)/Co + OTH x (OTHi – OTHo)/OTHo]

iii) **VFER** = 0.85 FER x [PLB x (LBi – LBo)/LBo + PSST x (SSTi – SSTo)/SSTo] + POTH x (OTHi – OTHo)/OTHo]

iv) **VNFER** = 0.85 NFER x [PLB x (LBi – LBo)/LBo + PINS x (INSi – INSo)/ INSo+ PCU x (CUi – CUo)/CUo+ PSWGR x (SWGRi – SWGRo)/SWGRo+ POTH x (OTHi – OTHo)/OTHo]

v) **VCATCO** = 0.85 CATCO x [PCU x (CUi – CUo)/CUo] ;

vi) **VINS**= 0.85 INS x [PINS x (INSi – INSo)/ INSo] ;

vii) **VSCADA** = 0.85 SCADA x [PLB x (LBi – LBo)/LBo + PELEX x (ELEXi – ELEXo)/ELEXo+ POTH x (OTHi – OTHo)/OTHo];

Where:-

VGEN = Increase or decrease in the cost under Sub Schedule 'B1-General' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VCON = Increase or decrease in the cost under Sub Schedule 'B2-Concrete' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VFER = Increase or decrease in the cost under Sub Schedule 'B3-Ferrous' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VNFER = Increase or decrease in the cost under Sub Schedule 'B4-Non-Ferrous' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VCATCO = Increase or decrease in the cost under Sub Schedule 'B5-Catenary and Contact Wire' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VINS = Increase or decrease in the cost under Sub Schedule 'B6-Insulators' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

VSCADA = Increase or decrease in the cost under Sub Schedule 'B7-SCADA' of Price Schedule 'B' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (i);

PLB, PC, PSST, PCU, PINS, PSWGR, PELEX and POTH are the percentages of Labour, Cement, Structural Steel, Copper Wire, Insulators, Electrical Switch Gears, Electronic Items and All Other Commodities respectively for the relevant item as specified in sub-paragraph (i);

LBo = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called "CPI") for the Base month;

LBi = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration

Co = The Wholesale Price Index as published by the Ministry of Commerce & Industry, Government of India (hereinafter called "WPI") for cement, lime, plaster for the Base month;

Ci = The WPI for cement, lime, plaster for the average price index of the 3 months of the quarter under consideration**.**

SSTo= Price of BLOOMS –Retail (SBLR) 150mmx150mm published by IEEMA for the Base month;

SSTi = = Price of BLOOMS –Retail (SBLR) 150mmx150mm published by IEEMA for the average price index of the 3 months of the quarter under consideration;

CUo= Copper : (CU) Price of Copper Wire Rod published by IEEMA for the Base month;

CUi = Copper : (CU) Price of Copper Wire Rod published by IEEMA for the average price index of the 3 months of the quarter under consideration;

INSo = The WPI for insulators for the Base month;

INSi = The WPI for insulators for the average price index of the 3 months of the quarter under consideration;

SWGRo = The WPI for MANUFACTURE OF ELECTRICAL EQUIPMENT for the Base month;

SWGRi = The WPI for MANUFACTURE OF ELECTRICAL EQUIPMENT for the average price index of the 3 months of the quarter under consideration;

ELEXo = The WPI for MANUFACTURE OF ELECTRONIC COMPONENTS electronic items for the Base month;

ELEXi = The WPI for MANUFACTURE OF ELECTRONIC COMPONENTS for the average price index of the 3 months of the quarter under consideration;

OTHo = The WPI for all commodities for the Base month;

OTHi = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

i) The following percentages shall govern the price adjustment of the Contract Price for electrification works under Schedule 'B':

Component	SCHEDULE 'B'						
	General (B1)	**Concrete (B2)**	**Ferrous (B3)**	**Non-Ferrous (B4)**	**Catenary and Contact wire (B5)**	**Insulators (B6)**	**SCADA (B7)**
Labour (PLB)	23%	20%	6%	7%	0%	0%	10%
Cement (PC)	0%	70%	0%	0%	0%	0%	0%
Structural steel (PSST)	20%	0%	90%	0%	0%	0%	0%
Insulators (PINS)	0%	0%	0%	10%	0%	100%	0%
Copper wire (PCU)	20%	0%	0%	20%	100%	0%	0%
Electrical Switch Gear (PSWGR)	20%	0%	0%	50%	0%	0%	0%
Electronic (PELEX)	0%	0%	0%	0%	0%	0%	80%
All other commodities (POTH)	17%	10%	4%	13%	0%	0%	10%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table A. Foreign Currency (FC)

Not applicable as Tenderers are required to quote rates and prices only in INR.

Table B. Summary of Payment Currencies

For …… [insert name of Works]

Name of Payment Currency	A Amount of Currency	B Rate of Exchange (local currency per unit of foreign)	C Local Currency Equivalent C = A x B	D Percentage of Net Tender Price (NTP) 100xC / NTP
For Schedule 'A'				
Local currency (INR)		**1.00**		
Foreign Currency #1 _____				
Foreign Currency #2 _____				
Foreign Currency #3 _____				
For Schedule 'B' expressed in Local currency (INR)		**1.00**		
Net Tender Price				**100.00**
Provisional Sums Expressed in Local Currency (INR) in million	100,000,000.00	**1.00**	100,000,000.00	**Not Applicable**
TOTAL TENDER PRICE (including provisional sum)				

Note: *The Tenderer is required to propose and submit the schedules given in tables above as part of the Tender. The rates of exchange shall be the reference rate twenty-eight (28) days prior to the deadline for submission of Tenders published by the Reserve Bank of India (RBI) on its website https://www.rbi.org.in . In case the exchange rate of particular currency on given date is not available on RBI web site, it will be as per the web site https://www.fbil.org.in of Financial Benchmark India Private Limited (FBIL). In the case, where a Tenderer is required to convert a monetary amount from a currency other than those currencies for which the RBI/FBIL reference rate is not published, the INR equivalent shall be worked out using the rate of exchange as published by the central bank of the country issuing the said currency. In case the exchange rate of that currency is not directly available in INR on the website of the central bank of the country issuing the said currency then the currency will be first converted to USD as per that web site and then converted from USD to INR as Per RBI or FBIL reference rates.*

Appendix B to Financial Part: Price Schedules

1 Preamble

1.1. The Price Schedules shall be read in conjunction with the Instructions to Tenderers, the General Conditions, the Particular Conditions and the Employer's Requirements (General Specifications, Particular Specifications, Tender Drawings , ESHS manual) and the Addenda/Corrigenda (if any).

1.2. **Schedule 'A'** comprises scope of work to be executed under lump sum contract as detailed in Part 2- Employers' Requirements of Tender Document. The Tenderer has to quote a single lump sum amount against Schedule 'A'. Payment to the Contractor will be made in accordance with payment stages/Milestones defined for each Cost Centre detailed in Clause 5.0 below unless otherwise specified in the Contract.

1.3. **Schedule 'B'** comprises of items for "PSI works for IR Connectivity at New Prithla, Sultanpur, Asaudah, New Harsana Kalan, feeder from Harsana Kalan IR SSP to New Harsana Kalan OHE**.** The work has to be carried out as per the description of items given in Schedule 'B' and directions of the Engineer. Cost of design and drawings of all the temporary works, temporary road diversion is deemed to be included in the rates quoted for the relevant item of Schedule 'B' unless otherwise specified in the Contract. Schedule 'B' is further divided into eight Sub-Schedules i.e. Schedule 'B1', Schedule 'B2', Schedule 'B3', Schedule 'B4', Schedule 'B5', Schedule 'B6', Schedule 'B7' and Schedule 'B8' . The Tenderer has to quote the percentage Excess (+) or Less (-) over the total Estimated amount of Schedule 'B1', Schedule 'B2', Schedule 'B3', Schedule 'B4', Schedule 'B5', Schedule 'B6', Schedule 'B7' and Schedule 'B8' (which is shown as "Estimated Rate" against each Schedule in BOQ2 of MS excel file on eProcurement portal). The payment against this Schedule 'B' will be made on the basis of quantities executed, measured and certified. Under this Schedule, the Contractor is required to carry out other electrification works, which are not covered in Schedule 'A', as per site requirements and as per the direction of the Engineer.

1.4. The Schedules may not generally give a full description of the works to be performed and the plant or equipment to be supplied under each item. Tenderers shall be deemed to have read the Employer's Requirements and the other sections of the Tender Documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling the rates and prices.

1.5. The price quoted in the Price Schedules for Schedule 'A' and Schedule 'B' are for complete and finished items of the work in all respects. The Price quoted in the Price Schedule shall, except otherwise specifically provided, shall include all design, manufacture, supply, installation, testing commissioning and include all necessary survey work, plants , tools, machinery, Contractor's equipment, labour, compliance of labour laws, supervision, materials, transportation, handling, loading & unloading, storage, sampling, inspection, testing, fuel, oil, consumables, electric power, water, all leads & lifts, dewatering, all temporary works including temporary accesses, staging, form works and false works, stacking, provision and maintenance of all temporary works area, construction of temporary store and buildings, fencing, barricading, lighting, drainage

arrangements, erection & maintenance of inspection facilities above and below ground such as brick, concrete and steel etc., reinstatement, remedy of any defects during the Defects Notification Period, safety measures for workmen and road users, preparation of design and drawings pertaining to permanent and temporary works, & temporary diversion works, traffic diversion works, mobilisation and demobilisation, establishment and overhead charges, labour camps, insurance cost for labour and works, contractor's profit, all taxes including Goods and Service Tax (GST), insurance, royalties, duties, cess, octroi, other levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract.

1.6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the Price Schedule, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Work.

1.7. To the extent acceptable to the Employer for the purpose of making payments or partial payments, valuing variations or evaluating claims, or for such other purposes as the Engineer may reasonably require, the Contractor may provide the Engineer with a breakdown of any composite or lump sum items included in the Schedules.

1.8. The Provisional Sums included and so designated in the Price Schedules shall be expended in whole or in part at the direction and discretion of the Engineer. The Provisional Sum shall be used to cover the Employer's share of the DAAB members' fees and expenses, in accordance with Clause 21. No prior instruction of the Engineer shall be required with respect to the work of the DAAB in accordance with Sub-Clause 13.4 of Part B-Specific Provisions - Particular Conditions of Contract. The Contractor shall submit the DAAB members' invoices and satisfactory evidence of having paid 100% of such invoices as part of the substantiation of those statements submitted under Sub-Clause 14.3. in accordance with Sub-Clauses 13.4 of the General Conditions.

1.9. The prices shall be quoted against Schedule 'A' and Schedule 'B' in the Price Schedule (Excel Workbook) uploaded on the eProcurement portal.

1.10. The prices quoted shall be comprehensive and must include for complying in all respects with the Price Schedule, Instruction to Tenderers, the General Conditions, the Particular Conditions, Employer's Requirements, Specifications and Drawings and for all matters and things necessary for the proper design, manufacture, supply, installation, testing commissioning, completion, and making good of any defect in part or of the whole of the Works.

1.11. No claims for additional payment shall be allowed for any error or misunderstanding by the Contractor of the work involved.

2 Variations in Price Schedule 'A' and Schedule 'B'

2.1 Variations in Price Schedules shall be dealt in accordance with Sub Clause 13.3 of Section VIII-General Conditions of Contract and Section IX- Particular Conditions of Contract.

2.2 The through Chainages mentioned in the Scope of the Works/Tender Drawings can undergo some

minor corrections, without any impact on the overall length/Scope of the Works.

3 Measurement and Payment

3.1 The measurement shall be made as per Price Schedules i.e. Schedule 'A', Schedule 'B' and other relevant provisions of the Contract such as Employer's Requirements and the Drawings.

3.2 If during execution of the Contract, it is decided by the Employer/Engineer that one or more items of Work/Milestone of a Cost Centre in a particular Price Schedule is not required to be executed, the proportionate amount against that particular Item of Work/Milestones shall not be paid. The Engineer's decision in this regard shall be final.

3.3 The Payment shall be made as per Clause 14 [Contract Price and Payment] of the General Conditions and Particular Conditions.

3.4 The Employer shall make interim payments to the Contractor in accordance with the provisions of Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions and Particular Conditions, as certified by the Engineer on the basis of the progress achieved for the items of works/stages/Milestones of the works.

3.5 The Contractor shall base its claim for interim payment in accordance with Sub-Clause 14.3 [Application for Interim Payment] of the General Conditions and Particular Conditions for each stage for various items of work on the basis of actual progress of work executed (i.e. Milestones achieved) till the end of the month for which the payment is claimed in relation to the Contractor's total executed quantity, supported with documents and updated programme in accordance with the Employer's Requirements.

3.6 The Employer may carry out necessary tests, either directly or through an independent agency, of the Works done by the Contractor for which payment has been accepted and certified by the Engineer. The payment shall depend upon the outcome of such tests.

3.7 Format for the Contractor's application for payment shall be agreed between the Engineer and the Contractor.

3.8 All necessary supplementary details to support progress claims, including all certified Request for Inspection in hard bound copy, shall be included with application for payment. Sketches, drawings, approvals, calculations, test reports etc. shall accompany an application for payment to be substantiated and certified by the Engineer and submitted to the Employer.

3.9 Even if no work is executed during the month, or the Contractor does not choose to issue an application for payment, a 'NIL' application shall be submitted.

3.10 For the purposes of payment, the Contractor shall submit to the Engineer a detailed Price Schedule indicating a further breakdown for each stage of payment contained in the Price Schedules within forty-two (42) days after the receipt of the Letter of Acceptance. Such cost breakdowns shall be subject to approval of the Engineer who shall review and evaluate with comments and/or issue approval within twenty-eight (28) days of receipt of same. The Contractor shall resubmit the cost breakdown structure corresponding to the Engineer's comments for review, if required.

3.11 The Engineer is not obliged to issue an Interim Payment Certificate until such breakdown structure of payment schedule has been submitted and accepted by the Engineer.

4 Methodology for Claiming Payment

4.1 The Contractor shall prepare his monthly application for payment in the agreed format in six hard copies and one soft copy. This shall be accompanied by supplementary details in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates] of the General Conditions. All hard copies shall bear the original signatures of the Contractor's Representative and be submitted to the Engineer.

4.2 If these are found in order, in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions, then the Engineer shall forward three certified copies of the application along with certified supplementary details to the Employer, with his recommendation for payment; otherwise, all documents shall be returned to the Contractor for rectification and resubmission.

5 Price Schedules

5.1 Schedule "A'- Breakup of Lump Sum cost of Electrification Works under various Sub-Heads shall be as follows:

Sub-Head	Description	Percentage of the quoted lump sum cost of Schedule 'A'	No. of Cost Centre	Total Cost of each Sub-Head
1	**2**	**3**	**4**	**5**
E	Electrification Works	100	8	E= 1xLS*

*LS = Total lump sum accepted cost of Works for Schedule 'A'

5.2 Apportionment of Contract Price for payments under various Cost Centre for Sub-Head 'E'- Electrification Works

Cost Centre	Description of Cost Centre	Percentage (%) of Cost Centre 'E'	Total Cost of Cost Centre	Total Cost of Sub-Head 'E'
1	**2**	**3**	**4**	**5**
E1	Surveys, Investigation, Studies, Design and Documents, O & M Manuals, As Built Drawings and Training of staffs	3.57	E1= 0.357x 'E'	100% of SCH 'A'
E2	OHE Works	55.87	E2=0.5587x 'E'	
E3	Traction Substations (TSS)	17.00	E3=0.17x 'E'	
E4	Sectioning Post (SP)	5.67	E4=0.0567x 'E'	

E5	Sub Sectioning Post (SSP)	5.33	E5=0.0533x 'E'	
E6	SCADA	1.05	E6=0.0105x 'E'	
E7	Spares and Tools	3.63	E7=0.0363x 'E'	
E8	Annual Maintenance contract for 3 Years	7.88	E8= 0.0788x 'E'	
	Total	100%		

Note: Value of 'E' shall be as defined in Sub-Clause 5.1 above.

The percentage figures as filled in column (3) for the apportionment of the Contract Price for completion of the Works corresponding to the various Sub-Heads and Cost Centres are fixed and payment will be released for different Cost centre as per above percentage break-up of Contract Price.

5.2.1 Stages of Payment i.e. Milestones of Cost Centre 'E1'- Survey, Investigations, Management plans, Studies, Design & documents, O&M manual and as built drawings, training of staff

Cost Centre	Survey, Investigations, Management plans, Studies, Design & documents, O&M manual and as built drawings, training of staff			
Weightage of Cost Centre 'E1', (X)	3.57%			
Sub Cost Centre	**Item of Work**		**Milestones**	**Weightage (Y) (%)**
	No.	**Description**		
E 1.1 Surveys of entire section for OHE & ROCS Works	E1.1.1	Surveys of entire section detailing all utilities and Geo-Technical investigations for, 2x25 kV AC Traction Electrification, ROCS in Tunnel, Viaduct, Major Bridge, Transmission Lines and associated works	Surveys of entire section detailing all utilities and Geo-Technical investigations for, 2x25 kV AC Traction Electrification, ROCS in Tunnel, Viaduct, Major Bridge, Transmission Lines and associated works	2
E1.2 Preliminary design & Documents	E1.2.1	Submission and approval of Inception Report including Design manual	Submission and approval of Inception Report including Design manual	2
	E1.2.2	Submission and approval of System Requirement Specification (SRS)	Submission and approval of System Requirement Specification (SRS)	3
	E1.2.3	Submission and approval of Management Plans	Submission and approval of Management Plans	5
	E1.2.4	Traction Simulation study report	Traction Simulation study report	6
	E1.2.5	Traction power Supply system design with supportive calculations	Traction power Supply system design with supportive calculations	4
	E1.2.6	OHE Works with supportive calculations	OHE Works with supportive calculations	4
	E1.2.7	Earthing & Bonding scheme	Earthing & Bonding scheme	2
	E1.2.8	ROCS works	ROCS works	2
	E1.2.9	SCADA System	SCADA System	2

Cost Centre		Survey, Investigations, Management plans, Studies, Design & documents, O&M manual and as built drawings, training of staff		
Weightage of Cost Centre 'E1', (X)		3.57%		
Sub Cost Centre	**Item of Work**		**Milestones**	**Weightage (Y) (%)**
	No.	**Description**		
E1.3 Detailed Design & Documents	Submission and approval of Detailed Design & Documents for Electrical works including layout Plans, Design Manuals and GFC(Good for Construction Drawings) and other Construction Reference Drawings like Combined Service Drawing etc.			
	E1.3.1	OHE Works	OHE Works	15
	E1.3.2	Traction Power Supply Works	Traction Power Supply Works	25
	E1.3.3	ROCS Works	ROCS Works	4
	E1.3.4	Traction and Auxiliary SCADA works	Traction and Auxiliary SCADA works	5
E1.4 As Built Drawings	E1.4.1	Submission and approval of As-Built Drawings for Completed works	Submission and approval of As-Built Drawings for Completed works	6
E 1.5 Operation & Maintenance Manuals	E1.5.1	Submission & Approval of Operation & Maintenance Manuals	Submission & Approval of Operation & Maintenance Manuals	3
E1.6 RAMS Plan	E1.6.1	RAMS Demonstration tests, reports, Establishing FRACAS and Defect Notification stage RAMS Plan	RAMS Demonstration tests, reports, Establishing FRACAS and Defect Notification stage RAMS Plan	3
E 1.7 Miscellaneous	E1.7.1	Any other design compliance and document required to be prepared as part of the contract	Any other design compliance and document required to be prepared as part of the contract	2
E1.8 Training	E1.8.1.	Training	Training	4
E1.9 Permits and approvals	E1.9.1	Obtaining permits and approvals as required from various Statutory & Government Bodies	Obtaining permits and approvals as required from various Statutory & Government Bodies	1

Cost Centre		Survey, Investigations, Management plans, Studies, Design & documents, O&M manual and as built drawings, training of staff		
Weightage of Cost Centre 'E1', (X)		3.57%		
Sub Cost Centre	**Item of Work**		**Milestones**	**Weightage (Y) (%)**
	No.	**Description**		
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E1.1.1 will be equal to LS*X*Y= LSx0.0357x0.02.

2 Adjustment to Contract Price pursuant to GCC 13.7 shall NOT be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

5.2.2 Stages of Payment i.e. Milestones of Cost Centre 'E2'- OHE Works

Cost Centre		**OHE Works**		
Weightage of Cost Centre 'E2', (X)		55.87%		
Sub Cost Centre	**Item of work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
E.2.1 Contact Wire	E 2.1.1	Supply of Contact Wire	Supply of Contact Wire	15.63
E.2.2 Catenary Wire	E 2.2.1	Supply of Catenary Wire	Supply of Catenary Wire	13.43
E2.3 Feeder wire	E 2.3.1	Supply of Feeder conductor (NFW)	Supply of Feeder conductor (NFW)	1.72
E2.4 Steel Structure	E 2.4.1	Supply Galavanised steel structure, Traction Mast and Portal and SPS including Guy Rod Assembly	Supply Galavanised steel structure, Traction Mast and Portal and SPS including Guy Rod Assembly	20.46
E2.5 Cantilever Assembly	E 2.5.1	Supply of Cantilever Assembly without Insulator	Supply of Cantilever Assembly without Insulator	6.98
E2.6 Auto Tension Device	E 2.6.1	Supply of Automatic Tensioning Device (ATD) Assembly along with counter weight assembly with SS wire Rope with Guide Tube etc	Supply of Automatic Tensioning Device (ATD) Assembly along with counter weight assembly with SS wire Rope with Guide Tube etc	1.62
E2.7 Insulators	E 2.7.1	Supply of all types of Insulators	Supply of all types of Insulators	3.04
E2.8 Motorised Isolator, Control Cable & PTFE	E 2.8.1	Supply of double pole motorised Isolators and single pole motorised Isolators with control cable with Jumpers, Section Insulators & PTFE.	Supply of double pole motorised Isolators and single pole motorised Isolators with control cable with Jumpers, Section Insulators & PTFE.	2.65
E2.9 Jumper, Anticreep wire, LS wire & Termination	E 2.9.1	Supply of Anticreep wire, along Feeder & Cross Feeder wires, Large span wire, Dropper assembly, All type Jumpers with clamps, All type Termination, NFW Suspension Clamp, 25 kV	Supply of Anticreep wire, along Feeder & Cross Feeder wires, Large span wire, Dropper assembly, All type Jumpers with clamps, All type Termination, NFW Suspension Clamp, 25 kV	5.88

Cost Centre		**OHE Works**		
Weightage of Cost Centre 'E2', (X)		55.87%		
Sub Cost Centre	**Item of work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
		power Cables, LT power cable with ACO panel, Insulating sleeve.	power Cables, LT power cable with ACO panel, Insulating sleeve.	
E2.10 Auxiliary Transformers	E 2.10.1	Supply of Auxiliary Transformers	Supply of Auxiliary Transformers	0.42
E2.11 ROCS works	E 2.11.1	Supply of ROCS Conductor rails, Support Bracket, including anchor Bolts, Cantilever assembly, Transition Element and Insulator etc	Supply of ROCS Conductor rails, Support Bracket, including anchor Bolts, Cantilever assembly, Transition Element and Insulator etc	6.23
E2.12 Balance Materials	E 2.12.1	Supply of Balance Materials i.e Retro Reflective Number Plate, Caution Board, Neutral Section Board, Engine stop Board, Warning Board, Sigma Board, Sectioning Diagram Board, Safety Screen Panel, Splices, D.O Fuse assembly, Nuts & Bolts, Protective Safety screen Panels etc to complete the entire works.	Supply of Balance Materials i.e Retro Reflective Number Plate, Caution Board, Neutral Section Board, Engine stop Board, Warning Board, Sigma Board, Sectioning Diagram Board, Safety Screen Panel, Splices, D.O Fuse assembly, Nuts & Bolts, Protective Safety screen Panels etc to complete the entire works.	0.32
E2.13 Foundation	E 2.13.1	Supply and Erection of Foundation, Grouting with Muffing including Nominal reinforcement with materials.	Supply and Erection of Foundation, Grouting with Muffing including Nominal reinforcement with materials.	12.66

Cost Centre		**OHE Works**		
Weightage of Cost Centre 'E2', (X)		55.87%		
Sub Cost Centre	**Item of work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
E2.14 Erection of Steel Structure	E 2.14.1	Erection of Galvanised Steel Structure (Mast/Portal/TTC), ROCS Support Bracket with Anchor Bolt, Cantilever, Conductor rail & Transition element and Insulators etc	Erection of Galvanised Steel Structure (Mast/Portal/TTC), ROCS Support Bracket with Anchor Bolt, Cantilever, Conductor rail & Transition element and Insulators etc	2.19
E2.15 Erection of Cantilever erection	E 2.15.1	Erection of OHE Cantilever assembly along with Insulator	Erection of OHE Cantilever assembly along with Insulator	0.66
E2.16 Erection of Balance Materials	E 2.16.1	Erection of Auxiliary Transformer, PTFE, Isolator, Section Insulator, Wiring, Droppering, ATD, .Cross Feeder, Along Feeders, Terminations, Guy rod, Jumpers, Cut in Insulators, insulating sleeves, Erection of protective screen, number plate, warning boards etc	Erection of Auxiliary Transformer, PTFE, Isolator, Section Insulator, Wiring, Droppering, ATD, .Cross Feeder, Along Feeders, Terminations, Guy rod, Jumpers, Cut in Insulators, insulating sleeves, Erection of protective screen, number plate, warning boards etc	2.33
E2.17 Earthing and Bonding	E 2.17.1	Supply and Erection of AEC, BEC (If Required), Earth electrode, GI Earth Strips, Lightening Protection, Safety screen, Earth Terminations etc.	Supply and Erection of AEC, BEC (If Required), Earth electrode, GI Earth Strips, Lightening Protection, Safety screen, Earth Terminations etc.	1.82
E2.18 Testing & Commissioning	E 2.18.1	Final Adjustment, SED Checking including Tower Wagon checking/Pantograph run, Commissioning/ Energisation of OHE system, Current collection test, completion of any other residual works of OHE system and electrical signage and integrated testing as required	Final Adjustment, SED Checking including Tower Wagon checking/Pantograph run, Commissioning/ Energisation of OHE system, Current collection test, completion of any other residual works of OHE system and electrical signage and integrated testing as required	1.96
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E2.1.1 will be equal to LS*X*Y= LSx0.5587x0.1563

2 Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

4 Payment will be made on pro rata completion of Track Km Length (TKM) as per weightage(s) given in the Cost Centre.

5.2.3 Stages of Payment i.e. Milestones of Cost Centre 'E3'- Traction Sub Station (TSS)

Cost Centre	Traction Sub Station (TSS)			
Weightage of Cost Centre 'E3', (X)	17%			
Sub Cost Centre	Items of Work		Milestone	Weightage (Y) (%)
	No	Description		
E 3.1 Ferrous Item	E 3.1.1	Supply of Steel structures and Small Parts Steel (SPS)	Supply of Steel structures and Small Parts Steel (SPS)	2.42
E 3.2 Traction Transformer	E 3.2.1	Supply of Scott connected Traction Transformers	Supply of Scott connected Traction Transformers	59.57
E 3.3 Auto Transformer	E 3.3.1	Supply of Auto Transformers and 25KV/240V Auxillary Transformers.	Supply of Auto Transformers and 25KV/240V Auxillary Transformers.	12.37
E 3.4 CB, CT, PT & Isolator Motorised	E 3.4.1	Supply of Three Pole Motorized Isolator, Double Pole Isolators including motorised, Switchgears and control gears, Circuit Breaker, interrupters, CT and PT with fittings and Fasteners.	Supply of Three Pole Isolator, Double Pole Isolators including motorised, Switchgears and control gears, Circuit Breaker, interrupters, CT and PT with fittings and Fasteners.	7.68
E 3.5 Control Relays Panels	E 3.5.1	Supply of Control and Relays Panels fully assembled	Supply of Control and Relays Panels fully assembled	1.38
E 3.6 Balance Materials	E 3.6.1	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, PFC equipment and power quality control devices, drop Jumpers, Conductor busbar, Termination Assemblies, D.O fuse assembly etc.	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, PFC equipment and power quality control devices, drop Jumpers, Conductor busbar, Termination Assemblies, D.O fuse assembly etc.	6.59
E 3.7 Foundation	E 3.7.1	(a) Completion of Earthwork, Fencing, and Foundation, Baffle wall, Cable Treach & cover, Brick work and Plastering - 3.89	(a) Completion of Earthwork, Fencing, and Foundation, Baffle wall, Cable Treach & cover, Brick work and Plastering - 3.89	3.89

Cost Centre	Traction Sub Station (TSS)			
Weightage of Cost Centre 'E3', (X)	17%			
Sub Cost Centre	Items of Work		Milestone	Weightage (Y) (%)
	No	Description		
E 3.8 Erection of Ferrous Item	E 3.8.1	Erection of Steel structures and SPS	Erection of Steel structures and SPS	0.10
E 3.9 Traction Transformer	E 3.9.1	Erection of Traction Transformers with accessories	Erection of Traction Transformers with accessories	0.10
E 3.10 Erection of Auto Transformer	E 3.10.1	Erection of Auto Transformers with accessories and 25KV/240V Auxillary Transformers.	Erection of Auto Transformers with accessories and 25KV/240V Auxillary Transformers.	0.20
E 3.11 Erection of CB, CT, PT & Isolator Motorised	E 3.11.1	Erection of Circuit Breaker, interrupters, isolators, CT, PT Control relay panel, Control & monitoring Equipment .	Erection of Circuit Breaker, interrupters, isolators, CT, PT Control relay panel, Control & monitoring Equipment .	0.41
E 3.12 Control Room Building	E 3.12.1	a) Construction of control room building and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water recharge pit & drainage works etc. and casting of Roads inside the TSS – 1.19% and b) Tower wagon shed work with inspection pit and Electricals works etc - 1.74 %	a) Construction of control room building and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water recharge pit & drainage works etc. and casting of Roads inside the TSS – 1.19% and b) Tower wagon shed work with inspection pit and Electricals works etc - 1.74 %	2.93

Cost Centre	Traction Sub Station (TSS)			
Weightage of Cost Centre 'E3', (X)	17%			
Sub Cost Centre	Items of Work		Milestone	Weightage (Y) (%)
	No	Description		
E 3.13 Balance Materials	E 3.13.1	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat, Earthing & Bonding system, Buried rail, Lighting Protection system, Fire extinguisher, Power Distribution boards, Cabling, ACSR conductors, 8 SWG GI wire, All type connectors & Splices, Insulators, Battery, Battery chargers, Signage & safety equipment's etc. as required for commissioning of TSSs	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat, Earthing & Bonding system, Buried rail, Lighting Protection system, Fire extinguisher, Power Distribution boards, Cabling, ACSR conductors, 8 SWG GI wire, All type connectors & Splices, Insulators, Battery, Battery chargers, Signage & safety equipment's etc. as required for commissioning of TSSs	0.40
E 3.14 Testing and Commissioning	E 3.14.1	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	1.96
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E3.1.1 will be equal to LS*X*Y= LSx0.17x0.0242

2 Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

4 Payment will be made on Pro rata completion of each payment stage as per weightage (s) given in this Cost Centre

5.2.4 Stages of Payment i.e. Milestones of Cost Centre 'E4'- Sectioning Post (SP)

Cost Centre	Sectioning Post (SP)			
Weightage of Cost Centre 'E4', (X)	5.67%			
Sub Cost Centre	Item of work		Milestone	Weightage (Y) (%)
	No	Description		
E 4.1 Ferrous Item	E 4.1.1	Supply of Steel structures and Small Parts Steel (SPS)	Supply of Steel structures and Small Parts Steel (SPS)	1.65
E 4.2 Auto Transformer	E 4.2.1	Supply of Auto Transformers and 25KV/240V LT Auxillary Transformers	Supply of Auto Transformers and 25KV/240V LT Auxillary Transformers	55.12
E 4.3 CB, CT, PT & Isolator	E 4.3.1	Supply of Circuit Breaker, interrupters, CT, PT and isolators.	Supply of Circuit Breaker, interrupters, CT, PT and isolators.	10.63
E 4.4 Control Relays Panels	E 4.4.1	Supply of Control and Relays Panel with protective relays and Fault locator Panel.	Supply of Control and Relays Panel with protective relays and Fault locator Panel.	6.10
E 4.5 Balance Materials	E 4.5.1	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Buried rail, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, drop Jumpers, Conductor busbar, Termination Assemblies, D.O fuse assembly, GI Earth Strip etc to complete the work.	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Buried rail, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, drop Jumpers, Conductor busbar, Termination Assemblies, D.O fuse assembly, GI Earth Strip etc to complete the work.	17.00
E 4.6 Foundation	E 4.6.1	Completion of Earthwork, fencing and foundation work	Completion of Earthwork, fencing and foundation work	3.63
E 4.7 Control Room Building	E 4.7.1	Construction of control room building, inside road and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water recharge pit & drainage works etc.	Construction of control room building, inside road and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water recharge pit & drainage works etc.	1.72

Cost Centre	Sectioning Post (SP)			
Weightage of Cost Centre 'E4', (X)	5.67%			
Sub Cost Centre	**Item of work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
E 4.8 Erection of Ferous Item	E 4.8.1	Erection of Steel structures and SPS	Erection of Steel structures and SPS	0.10
E 4.9 Erection of Auto Transformer	E 4.9.1	Erection of Auto Transformers and 25KV/240V Auxillary Transformers	Erection of Auto Transformers and 25KV/240V Auxillary Transformers	1.00
E 4.10 Erection of CB, CT, PT & Isolator	E 4.10.1	Erection of Switchgears and control gears, Circuit Breaker, interrupters, Isolators, CT, PT, Control Cables and Erection & Commissioning of Control & Relay panel and control cabling .	Erection of Switchgears and control gears, Circuit Breaker, interrupters, Isolators, CT, PT, Control Cables and Erection & Commissioning of Control & Relay panel and control cabling .	0.70
E 4.11 Balance Materials	E 4.11.1	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat/Earthing & Bonding system, Buried rail, Lighting Protection system, Insulators, Fire Extinguisher, Power Distribution boards, Cabling, Battery, Battery chargers, Signage, GI Earth Strip & safety equipment etc. as required for commissioning of Power Supply installation	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat/Earthing & Bonding system, Buried rail, Lighting Protection system, Insulators, Fire Extinguisher, Power Distribution boards, Cabling, Battery, Battery chargers, Signage, GI Earth Strip & safety equipment etc. as required for commissioning of Power Supply installation	0.40
E 4.12 Testing and Commissioning	E 4.12.1	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	1.95
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E2.1.1 will be equal to LS*X*Y= LSx0.0567x0.0165

2 Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

5.2.5 Stages of Payment i.e. Milestones of Cost Centre 'E5'- Sub Sectioning Post (SSP)

Cost Centre	Sub Sectioning Post (SSP)			
Weightage of Cost Centre 'E5', (X)	5.33%			
Sub Cost Centre	**Item of Work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
E 5.1 Ferrous Item	E 5.1.1	Supply of Steel structures and Small Parts Steel (SPS)	Supply of Steel structures and Small Parts Steel (SPS)	2.90
E 5.2 Auto Transformer	E 5.2.1	Supply of Auto Transformers and 25KV/240V LT Auxiliary Transformers	Supply of Auto Transformers and 25KV/240V LT Auxiliary Transformers	49.00
E 5.3 Circuit Breaker, Current Transformer, Potential Transformer & Isolator	E 5.3.1	Supply of Switchgears and control gears, Circuit Breaker, interrupters, CT, PT and isolators.	Supply of Switchgears and control gears, Circuit Breaker, interrupters, CT, PT and isolators.	16.30
E 5.4 Control Relays Panels	E 5.4.1	Supply of Control and Relays Panels with protective relays and earth fault locator panel.	Supply of Control and Relays Panels with protective relays and earth fault locator panel.	11.00
E 5.5 Balance Materials	E 5.5.1	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Buried rail, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, drop Jumpers, Conductor busbar, connectors and Splices, Termination assemblies, GI Earth Strip etc. to complete the work.	Supply of all other balance material including cables, AL/CU Busbars, Earthing material, Buried rail, Lightning Arresters, Battery set, Battery Chargers, Insulators, ACDB & DCDB, drop Jumpers, Conductor busbar, connectors and Splices, Termination assemblies, GI Earth Strip etc. to complete the work.	7.80
E 5.6 Foundation	E 5.6.1	Completion of Earthwork, fencing and foundation work	Completion of Earthwork, fencing and foundation work	5.10
E 5.7 Control Room Building	E 5.7.1	Construction of control room building, inside road and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water	Construction of control room building, inside road and its E&M works i.e Building electrification, Ventilation, Access control system and switch yard lighting including trenching, oil soak pit, water	3.10

Cost Centre		Sub Sectioning Post (SSP)		
Weightage of Cost Centre 'E5', (X)		5.33%		
		recharge pit & drainage works etc.	recharge pit & drainage works etc.	
E 5.8 Erection of Ferrous Item	E 5.8.1	Erection of Steel structures and SPS	Erection of Steel structures and SPS	0.20
E 5.9 Erection of Auto Transformer	E 5.9.1	Erection of Auto Transformers and 25KV/240V Auxillary Transformers	Erection of Auto Transformers and 25KV/240V Auxillary Transformers	1.00
E 5.10 Erection of CB, CT, PT & Isolator	E 5.10.1	Erection of Switchgears and control gears, Circuit Breaker, interrupters, Isolators, CT, PT, Control Cables and Erection relay panel and control cabling.	Erection of Switchgears and control gears, Circuit Breaker, interrupters, Isolators, CT, PT, Control Cables and Erection relay panel and control cabling .	1.00
E 5.11 Balance Materials	E 5.11.1	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat/Earthing & Bonding system, Buried rail, Lighting Protection system, Insulators, Fire Extinguisher, Power Distribution boards, Cabling, Battery, Battery chargers, Signage, GI Earth Strip & safety equipment etc. as required for commissioning of Power Supply installation	Erection of all other balance indoor/outdoor equipment including Bus-bars, Earth mat/Earthing & Bonding system, Buried rail, Lighting Protection system, Insulators, Fire Extinguisher, Power Distribution boards, Cabling, Battery, Battery chargers, Signage, GI Earth Strip & safety equipment etc. as required for commissioning of Power Supply installation	0.60
E 5.12 Testing and Commissioning	E 5.12.1	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	Number plates, Other facilities, EIG Sanction and Testing and Commissioning of all equipment and Energisation.	2.00
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E5.1.1 will be equal to LS*X*Y= LSx0.0533x0.0290

2 Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Cost Centre.

4 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

5.2.6 Stages of Payment i.e. Milestones of Cost Centre 'E6'- SCADA

Cost Centre		**SCADA**		
Weightage of Cost Centre 'E6', (X)		1.05%		
Sub Cost Centre	**Item of work**		**Milestone**	**Weightage (Y) (%)**
	No	**Description**		
E6.1 SCADA system Hardware	E 6.1.1	Supply and erection of SCADA system Hardware, Web server, UPS, Battery sets, GPS receiver, Earthing and Furniture along with associated equipment/materials at OCC.	Supply and erection of SCADA system Hardware, Web server, UPS, Battery sets, GPS receiver, Earthing and Furniture along with associated equipment/materials at OCC.	23.00
E6.2 SCADA software at remote control centre of boundary post of Northern Railway and DFFCIL	E 6.2.1	Installation of software of SCADA system and modifications/ Upgradation of SCADA software at remote control centre of boundary post of Northern Railway and DFFCIL	Installation of software of SCADA system and modifications/ Upgradation of SCADA software at remote control centre of boundary post of Northern Railway and DFFCIL	11.00
E6.3 RTU for TSS, SP & SSP	E 6.3.1	Supply and erection of Remote Terminal Units(RTUs) along with	Supply and erection of Remote Terminal Units(RTUs) along with	64.00
E 6.4 Testing & Commissioning	E 6.4.1	System Acceptance Testing and commissioning of SCADA system including Integrated Testing	System Acceptance Testing and commissioning of SCADA system including Integrated Testing	2.00
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E6.1.1 will be equal to LS*X*Y= LSx0.0105x0.23

2 Adjustment to Contract Price pursuant to GCC 13.7 shall be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on pro rata completion of each Milestone as per weightage given in this Cost Centre.

5.2.7 Stages of Payment i.e. Milestones of Cost Centre 'E7'- Spares and Tools

Stages of Payment i.e. Milestones of Cost Centre 'E7'- Spares and Tools				
Cost Centre		**Spares and Tools**		
Weightage of Cost Centre 'E7', (X)		3.63%		
Sub Cost Centre	**Item of Work**		**Milestone**	**Weightage (Y) (%)**
	No.	**Description**		
E 7.1 Supply of Spares for OHE works	E 7.1.1	OHE & ROCS conductors, Jumpers, Droppers and OHE Fittings etc.	OHE & ROCS conductors, Jumpers, Droppers and OHE Fittings etc.	10.98
	E 7.1.2	Steel Structures	Steel Structures	6.16
	E 7.1.3	Cantilevers with Insulators	Cantilevers with Insulators	5.66
	E 7.1.4	Tower Wagons(90% payment on supply and rest 10% on successful commissioning of Tower Wagon	Tower Wagons(90% payment on supply and rest 10% on successful commissioning of Tower Wagon	38.26
	E 7.1.5	Balance items	Balance items	3.87
E7.2 Supply of Spares for Traction Power Installation:	E 7.2.1	Auto Transformers & Transformer spare parts	Auto Transformers & Transformer spare parts	15.80
	E 7.2.2	Interrupters	Interrupters	4.54
	E 7.2.3	Circuit Breakers	Circuit Breakers	4.54
	E 7.2.4	Isolators	Isolators	2.24
	E 7.2.5	Balance items	Balance items	2.24
E 7.3 Special Tools & instruments/ Equipment,	E 7.3.1	Supply of Special Tools & instruments/ Equipment, Drone etc	Supply of Special Tools & instruments/ Equipment, Drone etc	4.59
	E 7.3.2	Supply of Portable diagnostic modules for SCADA	Supply of Portable diagnostic modules for SCADA	1.12
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E7.1.1 will be equal to LS*X*Y= LSx0.0363x0.1098

2 Adjustment to Contract Price pursuant to GCC 13.7 shall NOT be applicable to the payments of Works executed under Sub Cost Centre E 7.3.

3 Payment will be made on pro rata completion of each Milestone as per weightage given in this Cost Centre.

5.2.8 Stages of Payment i.e. Milestones of Cost Centre 'E8'- Annual Maintenance Contract (Comprehensive) for 3 Years

Cost Centre		Annual Maintenance Contract (Comprehensive) For 3 Years		
Weightage of Cost Centre 'E8', (X)		7.88%		
Sub Cost Centre	Item of Work		Milestone	Weightage (Y) (%)
	No	Description		
E 8.1 First Year Comprehensive Maintenance	E 8.1.1	Price of First year of Comprehensive Maintenance Contract	Price of First year of Comprehensive Maintenance Contract	31.00
E 8.2 Second Year Comprehensive Maintenance	E 8.1.2	Price of Second year of Comprehensive Maintenance Contract	Price of Second year of Comprehensive Maintenance Contract	33.00
E 8.3 Third Year Comprehensive Maintenance	E 8.1.3	Price of Third year of Comprehensive Maintenance Contract	Price of Third year of Comprehensive Maintenance Contract	36.00
			Total	**100.00**

Notes:

1 The value of each Milestones will be total lump sum accepted cost of Works for Schedule 'A' (LS) multiplied by X * Y. For example, the value of Milestone E8.1.1 will be equal to LS*X*Y= LSx0.0788x0.31

2 Adjustment to Contract Price pursuant to GCC 13.7 shall NOT be applicable to the payments of Works executed under this Cost Centre.

3 Payment will be made on completion of each Milestone as per weightage given in this Cost Centre.

4 The yearly amount shall be divided into 12 equal instalments and shall be paid on monthly basis after Certification by the Engineer.

5.3 Schedule 'B' OHE works for IR Connectivity and Feeder (Harsana Kalan IR SSP to New Harsana Kalan OHE)

Schedule 'B' is subdivided into eight Sub-Schedules as given below:

S. No.	Sub-Schedule	Description	No. of Items	Material (M) (INR)	Erection (E) (INR)	Total (INR)
1	**2**	**3**	**4**	**5**	**6**	**7=5+6**
1	B 1	General	90	1,60,57,831.07	48,30,511.36	2,08,88,342.43
2	B 2	Concrete	7	1,23,82,571.93	30,24,427.64	1,54,06,999.57
3	B 3	Ferrous	27	5,57,42,010.60	37,69,809.60	5,95,11,820.20
4	B 4	Non Ferrous	32	1,73,76,646.62	12,10,187.21	1,85,86,833.83
5	B 5	Catenary & Contact wire	02	5,05,86,222.31	-	5,05,86,222.31
6	B 6	Insulators	06	94,21,462.35	-	94,21,462.35
7	B 7	SCADA at Harsana Kalan IR SSP	03	18,89,146.86	-	18,89,146.86
8	B 8	Non Schedule (NS) Items	16	1,36,54,015.50	-	1,36,54,015.50
Grand Total for IR & DFC Connectivity in INR						**18,99,44,843.05**

5.3.1 Sub-Schedule 'B1': General

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	Preparation of designs and drawings for overhead equipment, TSWR and as built drawings. All designs, LOP, CSD, Foundations, cable trench, gantry connections, FOB, ROB, SPS, Turnout, Cross Overs, Overlaps, PTFE, fencing, gate, earthing, control room building, gantry for interrupter, motorised Isolators etc including cross feeder and along feeders etc required for OHE works and SP at Sultanpur and Asaudah.	TKM	0.00	17175.77	15.5	0.00	2,66,224.44	2,66,224.44
2	Supply without insulator and erection of mounting arrangements for span wire. All components including adjusters, terminal fitting and mast attachments required to attach a span wire or a head span wire or a cross span wire or a support span wire for supporting contact wire to the structure.	Each	6272.86	797.76	10	62,728.60	7,977.60	70,706.20
3	Marking/painting of temperature & 'Y'-Measurement of OHE mast at BWA locations including cost of paint	Each	0.00	113.97	36	0.00	4,102.92	4,102.92

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
4	Supply without insulator and erection of material for termination of Single conductor of Over head equipment or terminating wire including terminating wire on structure along with mast anchor fittings, clevis assembly, adjuster, anchor double strap, ending clamp for catenary or contact wire and fittings including 9 ton assembly fitting.	Each	4727.68	749.97	8	37,821.44	5,999.76	43,821.20
5	Extra on erection under power block @100% on Item 4	Each	0.00	749.97	4	0.00	2,999.88	2,999.88
6	Supply without Insulator and erection of material for termination of all 25KV Feeder / return conductor including all materials required for termination along with mast anchor fitting, adjuster, strain clamp and fitting and 9 ton insulator assembly.	Each	5966.96	749.97	14	83,537.44	10,499.58	94,037.02
7	Supply without insulator and erection of anti-creep with Cadmium copper catenary wire in polluted area including all materials for anticreep including adjuster, mast anchor fitting at its termination on either side, structure ending clamp, fittings etc	Each	5474.78	2420.86	10	54,747.80	24,208.60	78,956.40
8	Extra on erection under power block @100% on Item 7	Each	0.00	2420.86	5	0.00	12,104.30	12,104.30

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
9	Supply without Insulator and erection of cut-in (9Tonne) Insulator including components required for cut-in insulators assembly, Terminal fittings for conductor etc.	Each	1349.09	520.17	418	5,63,919.62	2,17,431.06	7,81,350.68
10	Extra on erection under power block @100% on Item 9	Each	0.00	520.17	218	0.00	1,13,397.06	1,13,397.06
11	Supply without Insulator and erection of a suspension (9 Tonne) Insulator including 9 ton suspension insulator assembly for suspension of feeder wire etc in cluding supply of all components, clamps, nuts bolts etc. including armour tape.	Each	1398.11	308.81	21	29,360.31	6,485.01	35,845.32
12	Supply without Insulator and erection of 25 kV Post Insulator including supply of all components and fittings,(Out rigger) support jumpers including nuts bolts etc	Each	1009.85	238.96	32	32,315.20	7,646.72	39,961.92
13	Transfer of equipment from one mast or support to another including dismantling of erected bracket from old structure and consequent adjustment to OHE require such as respacing of dropper(including cost of dropper wire) levelling etc.	Each	1576.55	2167.18	166	2,61,707.30	3,59,751.88	6,21,459.18
14	Extra on erection under power block @100% on Item 13	Each	0.00	2167.18	166	0.00	3,59,751.88	3,59,751.88

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
15	Erection of an additional bracket assembly/ assemblies on a mast or support include dismantling of an existing bracket assembly and erection of multiple cross arm where ever required and erection of bracket assembly on multiple cantilever cross arm along with any consequential adjustment to traction overhead such as respacing of droppers, levelling including nut, bolts, washers etc.	Each	0.00	1924.55	170	0.00	3,27,173.50	3,27,173.50
16	Extra on erection under power block @100% on Item 15	Each	0.00	1924.55	170	0.00	3,27,173.50	3,27,173.50
17	Re-adjustment of head-span include readjustment of head span polygon to enable the additional equipment to be suspended form head span.	Each	0.00	2124.91	100	0.00	2,12,491.00	2,12,491.00
18	Extra on erection under power block @100% on Item 17	Each	0.00	2124.91	100	0.00	2,12,491.00	2,12,491.00
19	Dismantling of overhead equipment (Catenary, Contact, Dropper, Cantilever, Jumpers, Connectors and 9 Ton Insulator) include dismantling of equipment along with termination, tensioning devices, guy rod assemblies, bracket assemblies, associated SPS etc.	Km	0.00	11437.03	2.0	0.00	22,874.06	22,874.06
20	Extra on erection under power block @100% on Item 19	Km	0.00	11437.03	2.0	0.00	22,874.06	22,874.06

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
21	Dismantling of Feeder/ Return Conductor include dismantling of feeder including guy rods, terminations, suspension assemblies, supermast and associated SPS.	Km	0.00	4957.52	0.5	0.00	2,478.76	2,478.76
22	Extra on erection under power block @100% on Item 21	Km	0.00	4957.52	0.5	0.00	2,478.76	2,478.76
23	Splicing & extension of an anchored overhead equipment include splicing of terminated overhead equipment for extension and consequent adjustment of affected equipment. The extended overhead equipment shall be deemed as starting from the centre line of the structure preceding the old terminating structure and the extended overhead equipment including nuts, bolts and washers etc.	Each	0.00	2124.91	20	0.00	42,498.20	42,498.20
24	Extra on erection under power block @100% on Item 23	Each	0.00	2124.91	20	0.00	42,498.20	42,498.20
25	Dismantling of a Section Insulator Assembly include dismantling of contact wire, catenary wire, droppers and dismantling of section insulator and splicing of catenary/ contact wire and necessary adjustment to droppers(including dropper material).	Each	1313.79	2124.91	10	13,137.90	21,249.10	34,387.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
26	Extra on erection under power block @100% on Item 25	Each	0.00	2124.91	10	0.00	21,249.10	21,249.10
27	Slewing and putting back of OHE in original shape include temporary slewing or lowering of erected OHE and/ or on adjusted to ground for special work and restoration and readjustment of the equipment after completion of special works.	Span	0.00	1722.36	50	0.00	86,118.00	86,118.00
28	Dismantling of Guy Rod include dismantling of guy rod of all fittings and SPS.	Each	0.00	694.09	50	0.00	34,704.50	34,704.50
29	Dismantling of Cantilever include dismantling of catenary/contact wire, anticreep wire (if any), fitting and SPS supporting the cantilever.	Each	0.00	687.03	110	0.00	75,573.30	75,573.30
30	Extra on Dismantling under power block @100% on Item 29	Each	0.00	687.03	110	0.00	75,573.30	75,573.30
31	Dismantling of Mast/TTC/Gantry include dismantling of foundation 150 mm below the ground level and cutting of mast/structure and finishing the ground by proper compaction and stacking of Mast/Gantry properly.	MT	0.00	4587.13	10	0.00	45,871.30	45,871.30
32	Extra on Dismantling under power block @100% on Item 31	MT	0.00	4587.13	10	0.00	45,871.30	45,871.30

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
33	Dismantling of Portal include Dismantling of foundation 150 mm below the ground level and cutting of portal and finishing the ground by proper compaction and stacking of portal, boom properly.	MT	0.00	6426.00	10	0.00	64,260.00	64,260.00
34	Extra on Dismantling under power block @100% on Item 33	MT	0.00	6426.00	10	0.00	64,260.00	64,260.00
35	Dismantling of Copper/ Aluminium Jumper include dismantling of all clamps, PG clamps, nut bolt etc.	Each	0.00	360.00	20	0.00	7,200.00	7,200.00
36	Extra on Dismantling under power block @100% on Item 35	Each	0.00	360.00	20	0.00	7,200.00	7,200.00
37	Shifting of ATD with BWA from one mast/ Support to another including nut, bolts, washers etc.	each	0.00	3091.30	20	0.00	61,826.00	61,826.00
38	Extra on Dismantling under power block @100% on Item 37	Each	0.00	3091.30	20	0.00	61,826.00	61,826.00
39	Dismantling of ATD with BWA include all fittings, attachment and SPS and anchoring of OHE at Structure.	Each	0.00	2049.51	20	0.00	40,990.20	40,990.20
40	Extra on Dismantling under power block @100% on Item 39	Each	0.00	2049.51	20	0.00	40,990.20	40,990.20

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
41	Adjustment on Bracket Assembly for lower/raising the height of contact and catenary wire where encumbrance is changed	Each	0.00	2093.82	73	0.00	1,52,848.86	1,52,848.86
42	Extra on Dismantling under power block @100% on Item 41	Each	0.00	2093.82	73	0.00	1,52,848.86	1,52,848.86
43	Adjustment on Bracket Assembly for lower/raising the height of contact and catenary wire where encumbrance is not changed	Each	0.00	1914.77	73	0.00	1,39,778.21	1,39,778.21
44	Dismantling OHE Termination Assembly including all fittings and SPS etc.	Each	0.00	1149.54	23	0.00	26,439.42	26,439.42
45	Extra on Dismantling under power block @100% on Item 44	Each	0.00	1149.54	23	0.00	26,439.42	26,439.42
46	Dismantling of anchor Assembly include dismantling of anchor terminations and SPS.	Each	0.00	894.76	20	0.00	17,895.20	17,895.20
47	Extra on Dismantling under power block @100% on Item 46	Each	0.00	894.76	20	0.00	17,895.20	17,895.20
48	Loading, Leading, Transportation, Unloading and stacking of steel structure, conductor, cantilever assembly, ATD, etc form dismantling site to concerned Engineer in charge store	MT	0.00	3343.50	100	0.00	3,34,350.00	3,34,350.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
49	Dismantling of an Isolator including dismantling of connections to the overhead equipment and associated SPS	Each	0.00	1152.53	10	0.00	11,525.30	11,525.30
50	Dismantling of a Post/ Pedestal Insulator including dismantling of connection to the overhead equipment and associated SPS.	Each	0.00	374.98	40	0.00	14,999.20	14,999.20
51	Loading of all type of Steel Structures include BFB/ RSJ, B -series, spl structure, N,O & R type) trailor/ truck over and above the requirement given by the contractor for the completion of work or actual qty utilised in the completion of work.	MT	0.00	207.71	200	0.00	41,542.00	41,542.00
52	Unloading of all type of Steel Structures include BFB/ RSJ, B -series, spl structure, N,O & R type) trailor/ truck over and above the requirement given by the contractor for the completion of work or actual qty utilised in the completion of work.	MT	0.00	112.13	200	0.00	22,426.00	22,426.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
53	Unloading of all type of Copper & Aluminium conductors include for all type of copper conductors (contact wire, catenary wire, dropper, briddle wire, jumpers etc) and aluminium conductors (spider conductors etc) into tower wagon/ trailer/truck over above the requirement given by contractor for the completion of work or actual qty utilised in the completion of work.	MT	0.00	101.10	12	0.00	1,213.20	1,213.20
54	Loading of all type of Copper & Aluminium conductors include for all type of copper conductors (contact wire, catenary wire, dropper, briddle wire, jumpers etc) and aluminium conductors (spider conductors etc) into tower wagon/ trailer/truck over above the requirement given by contractor for the completion of work or actual qty utilised in the completion of work.	MT	0.00	101.10	12	0.00	1,213.20	1,213.20
55	Supply and erection of copper control cables include installation and connecting up of cables for control and indication from the equipment (interruptor, motorised isolators etc) to the terminal board and terminal connectors at both end. If required to the conduits may be provided where it is necessary	m	394.14	12.87	7900	31,13,706.00	1,01,673.00	32,15,379.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
56	Supply and erection of LT power cables copper (for motorised isolators, interruptor and other applications) with route markers	m	425.51	18.38	7500	31,91,325.00	1,37,850.00	33,29,175.00
57	Excavation of trench for laying LT power cables and control cables with brick protection (class designation not below 7.5) and back filling with sand and earth etc with route marker as per drawing.	m	224.15	0.00	7500	16,81,125.00	0.00	16,81,125.00
58	Supply and laying GI/HDPE pipe under road/ground/ floor/Railway Tracks in already excavated trench as per site and as per drawing.	m	369.39	0.00	400	1,47,756.00	0.00	1,47,756.00
59	Provision of wooden key box with glass front in frame with hinges	Nos	2701.00	0.00	4	10,804.00	0.00	10,804.00
60	Supply and erection of electric shock treatment chart and first aid coloured calendar	Nos	58.00	0.00	14	812.00	0.00	812.00
61	Supply and erection of protective screen include fabrication of protective screen and angle, Tee, expanded metal (jali), GI sheet, paints etc.	sqm	7684.47	830.48	100	7,68,447.00	83,048.00	8,51,495.00
62	Supply and erection of Aerial Earth Wire 92 sqmm ASCR including mast fittings and terminations.	TKM	56651.63	2832.58	1.2	67,981.96	3,399.10	71,381.05
63	Extra on erection under power block @100% on item-62	TKM		2832.58	1.2		3,399.10	3,399.10

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
64	Supply and erection of Negative feeder Wire 288 sqmm AAAC	TKM	185554.32	19167.50	1.2	2,22,665.18	23,001.00	2,45,666.18
65	Extra on erection under power block @100% on item-64	TKM		19167.50	1.2		23,001.00	23,001.00
66	Supply and erection of termination assembly for NFW	Nos	9698.00	987.00	2.0	19,396.00	1,974.00	21,370.00
67	Supply of suspension clamp assembly for NFW	Nos	2980.00		24	71,520.00		71,520.00
68	Supply without Insulator and erection of material for termination of all 25KV Feeder / return conductor including all materials required for termination along with mast anchor fitting, adjuster, strain clamp and fitting and 9 ton insulator assembly.	Nos	5,967.02	749.90	6	35802.12	4499.40	40,301.52
69	Supply without insulator and erection of materials for termination of copper cross feeder with gantries include mast anchor fitting, clavis, 9 ton adjuster, feeder ending clamp, double clavis and other component as necessary along with 9 ton insulator assembly and termination of cross feeder at either end. fitting component required for termination of one cross feeder at both ends constitute one set.	Set	5,676.81	749.90	10	56768.10	7499.00	64,267.10

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
70	Supply & Erection of 25kV Vacuum type Interrupter include single pole outdoor type interrupter and components and erection of the same complete with supporting frame and terminal connectors and grouting on foundation block etc. Including enabled number plate.	Nos	3,40,198.50	3,516.09	10	3401985.00	35160.9	34,37,145.90
71	Supply and Erection of 25kV Potential Transformers Type-I include complete fitting with accessories, terminal connectors and fixing boards including enabled number plates with fixing bolts and all SPS.	Nos	87,193.38	788.50	9	784740.42	7096.5	7,91,836.92
72	Supply and Erection of 42KV Lightning Arrestors (station class) include all fittings, accessories and terminal connectors along with enabled number plate and all SPS.	Nos	29,646.85	510.96	8	237174.80	4087.68	2,41,262.48
73	Supply and Erection of 7.5 KV Lightning Arrestors include all fittings, accessories and terminal connectors along with enabled number plate and all SPS.	Nos	1,382.43	266.51	0	0	0	0.00
74	Supply and Erection of Terminal Boards in control cubicles include wall mounted terminal boards with six numbers of two way terminal blocks for connecting the cables form the outdoor equipment.	Nos	9,924.11	374.95	3	29772.33	1124.85	30,897.18

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
75	Supply and Erection of an Iron clad 15A, 110 V.D.C Fuse Box complete with 2 fuse carriers and bases.	Nos	3,123.71	86.39	3	9371.13	259.17	9,630.30
76	Supply and erection of an Iron clad 230 V.A.C Fuse Box. The fuse box shall contain 4 fuse carriers and bases.	Nos	3,455.11	86.39	3	10365.33	259.17	10,624.50
77	Supply and Erection of Lead Acid Batteries.(40 AH) include 110 V, 40 AH laid acid batteries complete with stands, accessories and tool board with all connectors. This will also include supply of electrolyte, tool board with thermometer, hydrometre and rench.	Nos	83,759.84	5,633.47	2	167519.68	11266.94	1,78,786.62
78	Supply and Erection of Battery chargers for 110 V, 40 AH laid acid batteries complete with connecting lead and plug for connection to 230V AC supply.	Nos	81,547.95	768.28	2	163095.90	1536.56	1,64,632.46
79	Supply and Installation of cables (copper) for Heater supply from interruptor to 230 V AC fuse box and from fuse box to LT distribution board inside the control cubicle and also include terminal connectors at both ends.	Metre	186.29	12.87	400	74516.00	5148	79,664.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
80	Supply and Installation of cables (copper) for Catenary indication from potential transformer to terminal board in the control cubicle including terminal connectors at both ends with all fasteners on structural members and conduit etc.	Metre	268.64	12.87	400	107456	5148	1,12,604.00
81	Supply and Installation of cables (copper) for L.T. Power supply, laying in trenches, and connecting LT Power supply cable between LT supply auxiliary transformer at switching station and LT distribution board inside the control cubicle along with suitable cable boxes and connectors at both ends.	Metre	425.52	18.38	95	40424.40	1746.1	42,170.50
82	Supply and Installation of copper cables for 110V D.C. supply between 110V battery charger and battery, between battery and the D.C fuse box and between D.C fuse box and terminal board including terminal connectors.	Metre	268.64	18.38	150	40296.00	2757	43,053.00
83	Supply, Erection, oil- filtration, testing and commissioning of L.T. supply auxiliary transformers (25 kVA).	Nos	1,83,561.81	8,403.34	2	367123.62	16806.68	3,83,930.30
84	Supply, Erection, oil- filtration, testing and commissioning of L.T. supply auxiliary transformers (10 kVA).	Nos	67,906.00	11,320.00	0	0	0	0.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
85	Supply and laying of 2 core 70 sqmm, 1.1 kV grade LT XLPE insulated armoured copper conductor cable, making good the damages and termination with copper crimping socket/plug. Provision of cable route markers, testing and commissioning etc. Laying include excavation of trench, filling the trench with earth/sand with protective bricks etc as per drawing, from auxiliary transformer to Panel Board.	m	737.80	184.15	0	0	0	0.00
86	Supply and laying of 2 core 130 sqmm, 1.1 kV grade LT XLPE insulated armoured copper conductor cable, making good the damages and termination with copper crimping socket/plug. Provision of cable route markers, testing and commissioning etc. Laying include excavation of trench, filling the trench with earth/sand with protective bricks etc as per drawing, from auxiliary transformer to Panel Board.	m	1,521.63	184.15	0	0	0	0.00

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
87	Supply and erection of Iron clad 230 V.A.C Fuse Box and mounting near auxiliary transformer on mast. The fuse box shall contain 2 nos. 63 A double pole MCB (one being spare). The GI pipe of 75 mm dia pipe about 2-3 m long as per site condition and having round bend at one end for cable exit 300 mm below the ground level and upper end properly sealed, shall be provided along with necessary clamps etc.	Nos	4,955.11	270.54	0	0	0	0.00
88	Supply without Insulator & erection of 25 kV D.O. fuse switch complete with all mounting accessories and terminal connectors.	Nos	9,675.08	439.28	2	19350.16	878.56	20,228.72

SUB-SCHEDULE 'B1': GENERAL								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
89	Supply and Erection of materials for internal and external lighting of Switching Station Building (SP/SSP). This include fixing of GI conduit on wall and drawings of wire circuit with cast iron switch boxes concealed in wall with switches plug etc. provision of main board and distribution board and connections. provision of light fittings, exaust fan, out door luminiers complete with tubes, bulb etc. Provision of earthing station and connection between earthing station to main board with 8 SWG GI wire. All material i.e light fitting, exhaust fan switch sockets, sealing rose etc shall be ISI mark. Provision of 150 watt HPSV street light fitting complete in respect including lamp on wall of the building, complete testing of wiring and earthing etc.	Nos	25,752.11	6,034.52	3	77256.33	18103.56	95,359.89
90	Design and drawings for Modification in Harsana Kalan IR SSP and Feeders from Harsana Kalan IR SSP to New Harsana Kalan HORC OHE (Feeder Length Approximate 5 TKM)	Nos	33,147.30	0.00	0	0.00	0	0.00
	Total of Sub-Schedule 'B1': General					**1,60,57,831.07**	**48,30,511.39**	**2,08,88,342.46**

5.3.2 Sub-Schedule 'B2': Concrete

SUB-SCHEDULE 'B2': CONCRETE								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	Supply and erection of concrete of foundation and Plinth in all type of soil using M-15 Grade concrete for Main Foundation and M -20 for Grouting and Muffing as per RDSO Drawing including excavation, dressing and compaction of earth etc.	Cum.	7097.31	1760.71	1,493	1,05,96,283.83	26,28,740.03	1,32,25,024
2	Supply and erection of concrete of foundation and Plinth in all type of soil using M-15 Grade concrete for Main Foundation and M -20 for Grouting and Muffing including Reinforced concrete along with excavation, dressing and compaction of earth etc.	Cum.	9458.66	2102.90	77	7,28,316.82	1,61,923.30	8,90,240
3	Supply of materials and construction of Super Structure of SP/SSP building (Control cubicles) include RCC work, precast RCC slab, concrete flooring, cable trench, brick masonry, plastering work, doors, window grills, Rolling shutter, water pipe line ventilators and painting, white washing and colour washing, acid proof or painting of floor and wall in battery room, spreading of stone metal, provision of RCC pipe etc. The window glasses shall be minimum 5 mm thick toughened glass, plastering work 1: 4 cement sand ratio, minimum concrete grade M-20 and minimum brick compressive strength class 10.	Nos	215951.91	50639.47	3	6,47,855.73	1,51,918.41	7,99,774

SUB-SCHEDULE 'B2': CONCRETE								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
4	Brick work in foundation plinth, retaining walls and drainage. Brick class designation minimum 10.	Cum.	3191.80	748.46	100	3,19,180.00	74,846.00	3,94,026
5	Plastering of retaining wall with 1:4 cement & sand mortar.(Erection include material)	Sqm	95.52	22.40	300	28,656.00	6,720.00	35,376
6	Supply & Spreading of Ballast/Gravel in the Switch Yard of 20 mm nominal size (single sized) and having minimum 150 mm layer depth on the finished ground	Sqm	1144.19	6.22	45	51,488.55	279.90	51,768
7	Earth work in excavation and dumping at site of SSP/SP upto required level include all material and labour, necessary tools & plants including transportation, watering, ramming, levelling and compaction to more than 95%.	cum	107.91		100	10,791.00	0.00	10,791
	Total of Sub-Schedule 'B2': Concrete					**1,23,82,571.93**	**30,24,427.64**	**1,54,06,999.57**

5.3.3 Sub-Schedule 'B3': Ferrous

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	Supply and erection of fabricated and galvanised structures (O,N & R type portals) with all necessary components. Portal for High rise OHE include Erection, Alignment and setting before grouting, wherever required of portals assembly of boom components and erection of the same including galvanised bolts, nuts, washers etc.	MT	140052.71	8561.82	110	1,54,05,798.10	9,41,800.20	1,63,47,598.30
2	Extra on erection under power block @100% on Item 1 erection of steel	MT	0.00	8561.82	55	0.00	4,70,900.10	4,70,900.10
3	Supply and erection of Structure steel (traction masts) fabricated and galvanised of all Type : B-Series Mast. B- series Traction mast for conventional and high rise OHE include Erection, Alignment and setting before grouting of individual traction mast	MT	118127.05	2503.84	183	2,16,17,250.15	4,58,202.72	2,20,75,452.87
4	Extra on erection under power block @100% on Item 3 erection of steel	MT	0.00	2503.84	92	0.00	2,30,353.28	2,30,353.28
5	Supply only of fabricated steel other than masts (SPS)	MT	172307.95	0.00	15	25,84,619.25	0.00	25,84,619.25

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
6	Supply and erection of a Guy Rod Assembly include both conventional and High rise OHE, of various lengths for traction masts, feeder line towers or supports complete with mast/ portal guy rod fittings, guy rod with adjustments and parts be grouted in the anchor block and erection of dwarf or stub mast with anchor plates drilled and welded in position, where required, for anchorage, SPS works, complete with bolts and nuts etc.	Each	10626.05	1142.06	74	7,86,327.70	84,512.44	8,70,840.14
7	Supply and erection of 25 kV Caution Boards, Warning Board, Number Plate, PTFE Board, Sigma Board etc. including all type boards, SPS items, nuts, bolts etc	Each	340.68	101.41	168	57,234.24	17,036.88	74,271.12
8	Supply without insulator and erection of Single bracket assembly on the traction mast or support on drop arm and shall include those on high/low level platform, in the vicinity on the turnouts, over bridges or and at locations with reduced encumbrance or terminating wires. All components including galvanised steel tubes, dropper wires, bolts and nut etc.	Each	14911.84	1035.82	360	53,68,262.40	3,72,895.20	57,41,157.60
9	Extra on erection under power block @100% on item 8	Each	0.00	1035.82	181	0.00	1,87,483.42	1,87,483.42

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
10	Supply and erection of Regulating Equipment ATD (3-Pulley type) with counter weight assembly for conventional/Regulated OHE 2400 Kgf Tension include counter weight assembly (for both conventional and high rise OHE) including 9 Ton adjuster with double strap assembly normal/ anti-theft guide tube assembly and regulating equipment and stainless steel wire rope(various length as required) required for the regulating equipment and SPS works including nuts, bolts, washers etc.	Each	83702.91	4259.18	36	30,13,304.76	1,53,330.48	31,66,635.24
11	Extra on erection under power block @100% on item 8	Each	0.00	4259.18	18	0.00	76,665.24	76,665.24
12	Supply without Insulator and erection of materials for termination of Double conductor include all materials necessary for the termination of two overhead equipment conductors on a traction mast or structure, including appropriate mast anchoring, clavis assembly, two adjusters, ending clamps for catenary and contact wires, anchor double strap assembly, equalising/ compensating plate and fittings including 9- ton insulator (cost of insulator will be paid in section-5) assembly and terminating wire if any.	Each	10883.51	1132.40	50	5,44,175.50	56,620.00	6,00,795.50

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
13	Extra on erection under power block @100% on item 12	Each	0.00	1132.40	25	0.00	28,310.00	28,310.00
14	Supply and erection of a structure bond include GI flat (40x 6 mm) required to provide a structure bond connecting a traction mast or structures to the nearest non-track circuited rail, or earth electrode, including shaping and drilling of the bond and erection of all fasteners (GI) at both ends. provision of heat shrinkable PVC tube for structure bond under track circuit rail.	Each	1373.12	316.30	317	4,35,279.04	1,00,267.10	5,35,546.14
15	Supply and erection of a longitudinal bond including GI flat (40x 6 mm), GI fasteners etc. required to provide longitudinal bond connecting two rails at the rail joint at the locations including shaping and drilling of the bond and erection of all fasteners at both ends.	Each	774.98	282.50	60	46,498.80	16,950.00	63,448.80
16	Supply & erection of a transverse and special bond including GI flats (50x 6 mm), fasteners etc. required to provide transverse bond connecting rails of the same/ adjacent tracks at locations. Including GI flat to provide special bonds at level crossing, FOB, ROB, bridge/protective screen etc. including shaping and drilling of the bond and erection of all fasteners at both ends	Each	1765.81	338.03	21	37,082.01	7,098.63	44,180.64

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
17	Supply & erection of a steel Rod Copper cladded 3 m Long, 19.3 mm dia earth electrode include embedded into the ground by driving or otherwise complete with protective concrete box and lugs suitable for directly connecting to GI flat .	Each	3097.31	1202.42	287	8,88,927.97	3,45,094.54	12,34,022.51
18	Supply and erection of earth bus for PTFE, Auxiliary Transformer etc include GI flats (50 x 6 mm) for providing earth bus. The earth bus either buried at a depth of 300 mm below ground level . It shall be include connecting the earth bus to earth electrode and to various floor or wall mounted equipment or structure to be earthed and also connections to non track circuited rail, wherever required. The connection of earth strip to each strips to each other shall be made either by riveting or by welding. The connection of earth strip to various equipment, structures, fencing shall be made with GI bolts, nuts, spring washer, locknuts etc.	Metre	327.68	84.51	21	6,881.28	1,774.71	8,655.99
19	Supply and erection of galvanised traction masts, main masts of switching stations fabricated in various lengths.	MT	1,10,502.09	2,503.84	10	1105020.9	25038.4	11,30,059.30

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
20	Supply & erection of a single earth electrode copper cladded steel rod 19.3 mm dia and minimum 3 mtr length including excavation, back filling and compaction of earth with all connectors	Nos	3,097.31	1,202.42	68	210617.08	81764.6	2,92,381.64
21	Supply and erection of earth bus for include GI flats (50 x 6 mm) for providing earth bus. The earth bus either buried at a depth of 300 mm below ground level . It shall be include connecting the earth bus to earth electrode and to various floor or wall mounted equipment or structure to be earthed and also connections to non track circuited rail, wherever required. The connection of earth strip to each strips to each other shall be made either by riveting or by welding. The connection of earth strip to various equipment, structures, fencing shall be made with GI bolts, nuts, spring washer, locknuts. etc.	Metre	327.68	84.51	500	163840	42255.0	2,06,095.00
22	Supply and erection of 8 SWG G.I. wire for earthing	Metre	28.61	21.73	100	2861	2173.0	5,034.00
23	Supply and erection of fencing panels at switching stations include GI fencing panels as per drawing with height of 2.4 mtr with all GI fasteners etc	Metre	5,976.18	94.17	400	2390472	37668.0	24,28,140.00
24	Supply and erection of fencing GI uprights and embedded in foundation as per drawing	MT	1,65,270.73	4,512.70	6	991624.38	27076.2	10,18,700.58

SUB-SCHEDULE 'B3': FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
25	Supply and erection of anticlimbing device for Switching stations include galvanised steel fixtures mounted on fencing panels and GI barbed wire as per drawing	Metre	397.89	9.66	100	39789	966.0	40,755.00
26	Supply and erection of anticlimbing device for L.T. Supply Transformer Stations. include galvanised steel fixtures mounted on fencing panels and GI barbed wire.	Nos	1,651.38	357.35	4	6605.52	1429.4	8,034.92
27	Supply and erection of anti monkey menace. Include hot dipped galvanised wire with GI angle 16 x16x8 mm with all GI bolts nuts barbed wire etc.	Nos	6,589.92	357.35	6	39539.52	2144.1	41,683.62
	Total of Sub-Schedule 'B3': Ferrous					**5,57,42,010.60**	**37,69,809.60**	**5,95,11,820.20**

5.3.4 Sub-Schedule 'B4': Non-Ferrous

SUB-SCHEDULE 'B4': NON-FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	supply and erection of Large span wire (150 sqmm)	Metre	1147.65	51.25	2200	25,24,830.00	1,12,750.00	26,37,580.00
2	Extra on erection under power block @100% on item 1	Metre	0.00	51.25	700	0.00	35,875.00	35,875.00
3	Erection of Contact wire, Catenary wire, Large Span wire and Supply and erection of Droppers, Jumpers, PG Clamps, Splices, parallel clamp, dropper clip with Nut Bolts, ending clamps, anchor, large span wire clamp, 9 ton adjuster, anchor double strap assembly, compensating/ equalising plate etc.	TKM	107747.91	30100.63	14	15,08,470.74	4,21,408.82	19,29,879.56
4	Extra on erection under power block @100% on item 3	TKM	0.00	30100.63	7	0.00	2,10,704.41	2,10,704.41
5	Supply and Erection of Copper 25KV Feeder/ Return conductor (150 sqmm) for cross feeder/along feeder including erection of suspension assembly, termination and SPS complete with nut bolt etc.	Km	202434.34	5512.10	5.24	10,60,755.94	28,883.40	10,89,639.35
6	Supply and erection of light weight section insulator assembly	Each	134226.00	3130.06	20	26,84,520.00	62,601.20	27,47,121.20
7	Extra on erection under power block @100% on item 6	Each	0.00	3130.06	12	0.00	37,560.72	37,560.72
8	Supply & Erection of Short Neutral section assembly (PTFE)	Each	607005.76	4839.79	4	24,28,023.04	19,359.16	24,47,382.20

SUB-SCHEDULE 'B4': NON-FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
9	Supply without Insulator and erection of 25 KV single pole motorised isolator without earth contact assembly along with copper busbar	Each	117602.19	2898.53	13	15,28,828.47	37,680.89	15,66,509.36
10	Extra on erection under power block @100% on item 9	Each	0.00	2898.53	6	0.00	17,391.18	17,391.18
11	Supply & erection of large copper jumpers including drop jumper for cross feeder copper wire 150/160 sqmm include all clamps and GI nut bolts etc.	Each	5779.49	525.39	62	3,58,328.38	32,574.18	3,90,902.56
12	Extra on erection under power block @100% on item 11	Each	0.00	525.40	33	0.00	17,338.20	17,338.20
13	Supply of Earth wire include 19/2.5 mm galvanised steel stranded wire with termination, clamps, adjuster etc . It shall also include connecting by means suitable terminal spades, the end of earth screen wire to the main members of the column of portals, Gantries across which these wires are strung or to 50/6 mm G.I flat earth leads.	KM	99,575.72	2,689.25	0.5	49787.90	1344.60	51,132.49
14	Supply without Insulator and erection of a 25 KV single pole isolator without earth contact assembly.(1600 Amp) for switching station.	Nos	41,717.05	2,898.51	10	417170.50	28985.10	4,46,155.60
15	Supply without Insulators & erection of 25kV Double Pole Isolator.	Nos	68,029.85	3,201.28	10	680298.50	32012.80	7,12,311.30

SUB-SCHEDULE 'B4': NON-FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
16	Supply & erection of large copper jumpers including for cross feeder copper wire 150 sqmm include all clamps and GI nut bolts etc.	Nos	5,779.18	525.38	50	288959.00	26269.00	3,15,228.00
17	Supply & erection of small copper jumpers of 50 sqmm copper include supply of parallel clamp bimetallic strips wherever required and bolted type connector wherever required	Nos	677.46	525.38	12	8129.50	6304.60	14,434.08
18	Supply of materials and erection of Large copper jumper and drop jumper 160 Sq. mm between Aluminium bus and cross feeders	Nos	7,267.76	525.38	12	87213.12	6304.56	93,517.68
19	Supply and erection of copper strips for equipment earthing.	Metre	624.47	71.24	45	28101.15	3205.80	31,306.95
20	Supply & erection of : Aluminium bus-bars 36mm x 28mm.include bending shaping and clamping to insulators, connectors or terminals etc.	Metre	449.40	69.05	400	179760.00	27620.00	2,07,380.00
21	Supply & erection of Solid copper bus-bars 18mm. Include bending shaping etc.	Metre	2,025.50	97.96	80	162040.00	7836.80	1,69,876.80
22	Supply and erection of Aluminium bus-bar connectors:- Bus terminal (6480) including nut bolts etc at junctions and terminations	Nos	3,090.17	42.36	80	247213.60	3388.80	2,50,602.40

SUB-SCHEDULE 'B4': NON-FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
23	Supply and erection of Aluminium bus-bar connectors:- Bus splice (6490) including nut bolts etc at junctions and terminations	Nos	3,414.97	42.35	80	273197.60	3388.00	2,76,585.60
24	Supply and erection of Aluminium bus-bar connectors:- Bus tee connector (6500) including nut bolts etc at junctions and terminations	Nos	3,444.93	37.85	80	275594.40	3028.00	2,78,622.40
25	Supply and erection of Aluminium bus-bar connectors:- Terminal connector 36/20 (6530) including nut bolts etc at junctions and terminations	Nos	3,108.50	37.85	80	248680.00	3028.00	2,51,708.00
26	Supply and erection of Aluminium bus-bar connectors:- Tap connector (6520) including nut bolts etc at junctions and terminations	Nos	3,108.50	42.30	80	248680.00	3384.00	2,52,064.00
27	Supply and erection of Aluminium bus-bar connectors:- Flexible bus splice (6550) including nut bolts etc at junctions and terminations	Nos	9,042.07	42.30	80	723365.60	3384.00	7,26,749.60
28	Supply and erection of Aluminium bus-bar connectors:- Terminal connector Bolted Type (6830-1) including nut bolts etc at junctions and terminations	Nos	2,458.69	37.85	80	196695.20	3028.00	1,99,723.20
29	Supply & erection of solid copper bus-bar connectors: Bus terminal (6310) including nut bolts etc at junctions and terminations	Nos	2,046.22	42.35	80	163697.60	3388.00	1,67,085.60

SUB-SCHEDULE 'B4': NON-FERROUS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
30	Supply & erection of solid copper bus-bar connectors: Bus splice (6320) including nut bolts etc at junctions and terminations	Nos	2,258.21	42.35	80	180656.80	3388.00	1,84,044.80
31	Supply & erection of solid copper bus-bar connectors: Bus tee joint (6330) including nut bolts etc at junctions and terminations	Nos	6,138.66	42.34	80	491092.80	3387.20	4,94,480.00
32	Supply & erection of solid copper bus-bar connectors: Bus terminating tee (6351) including nut bolts etc at junctions and terminations	Nos	4,156.96	42.31	80	332556.80	3384.80	3,35,941.60
	Total of Sub-Schedule 'B4': Non ferrous					**1,73,76,646.62**	**12,10,187.21**	**1,85,86,833.83**

5.3.5 Sub-Schedule 'B5': Catenary and Contact Wire

SUB- SCHEDULE 'B5': CATENARY AND CONTACT WIRE								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	Supply 150 sqmm Hard Drawn Grooved Copper Contact Wire	TKM	1130172.62	0.00	25	2,82,54,315.50	0.00	28254315.50
2	Supply 120 Sqmm, Cadmium copper catenary wire	TKM	970952.47	0.00	23	2,23,31,906.81	0.00	22331906.81
	Total of Sub-Schedule 'B5': Catenary and Contact Wire					**5,05,86,222.31**	**0**	**5,05,86,222.31**

5.3.6 Sub-Schedule 'B6': Insulators

SUB-SCHEDULE 'B6': INSULATORS								
Item No.	**Description**	**Unit**	**Material Rate (INR)**	**Erection Rate (INR)**	**Qty.**	**Materials amount (M) in INR**	**Erection amount (E) in INR**	**Total Amount in (M+E) in INR**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9 = 7+8**
1	Stay Arm Porcelain Insulators	Each	3341.31	0.00	380	12,69,698.56	0.00	12,69,697.80
2	Bracket Porcelain Insulators	Each	2875.71	0.00	380	10,92,769.80	0.00	10,92,769.80
3	9-Ton Porcelain Insulators	Each	4217.35	0.00	585	24,67,150.22	0.00	24,67,149.75
4	Supply of Post & Operating rod insulators	Set	44233.90	0.00	87	38,48,349.53	0.00	38,48,349.30
5	Supply of 25 kV Post Insulator	Nos	8,483.25	0.00	72	610794.00	0.0	6,10,794.00
6	Supply of Post & Operating rod insulators for single pole Isolator	Set	22,116.95	0.00	6	132701.70	0.0	1,32,701.70
Total of Sub-Schedule 'B6': Insulators						**94,21,462.35**	**0.00**	**94,21,462.35**

5.3.7 Sub-Schedule 'B7': SCADA at Harsana Kalan IR SSP

SUB-SCHEDULE 'B7': SCADA AT HARSANA KALAN IR SSP					
Item No.	**Description**	**Unit**	**Qty.**	**Rate in INR**	**Total Amount in INR**
1	**2**	**3**	**4**	**5**	**6 = 4x5**
1	Design and drawings of all work of supply, erection, testing and commissioning of SCADA for the remote control centre and the controlled station include supply of requisite number of copies of designs, drawings, operating, maintenance and trouble shooting manuals, technical booklets and completion drawings.	Lumpsum	1	197332.55	1,97,333
2	Supply, erection, testing and commissioning of Remote station equipment (RTU) at remote station for Sub-sectioning Post (SSP) including power supply units, separate earthing, interconnecting cables, wiring etc. and all materials necessary for proper functioning of RTU including testing of materials and equipment at manufacturer's works. This will also include necessary transducers, summation CT, PT, supply change over arrangement, digital analogue modules, limit settings, CPU cards, surge arrester, relays and contactors etc.	Nos	1	908444.86	9,08,445
3	Modification/upgradation, testing and commissioning in existing standard SCADA software at RCC equipment for configuration, integration/hooking up of additional RTU with master station equipment/RCC.	Nos	1	783369.45	7,83,369
				Total of Sub-Schedule 'B7': SCADA at Harsana Kalan IR SSP	**18,89,146.86**

5.3.8 Sub-Schedule 'B8': Non-Schedule (NS) Items

SUB-SCHEDULE 'B8': NON-SCHEDULE (NS) ITEMS					
Item No.	**Description**	**Unit**	**Qty.**	**Unit Rate of Supply & Erection in INR**	**Total Amount in INR**
1	**2**	**3**	**4**	**5**	**6 = 4x5**
1	Supply and erection of OHE caution board with supply of fixing material (Clamp, back flat strip & fastener) for "caution clearance to OHE near by rectified" Board Size 400mmx270mmx2mm	Nos.	60	758.27	45,496.20
2	Fabrication, developing and supply of sectioning diagram, schematic and TSWR board developing the sectioning diagram, schematic diagram & TSWR diagram with computerised digital printing on adhesive vinyl of adequate size as required.	Square foot	500	548.39	2,74,195.00
3	Setting up of earthing Station with buried rail at Switching post include supply of 75x8 mm GI flat for connection between buried rail and earth electrode and for connection between buried rail and running rail including nurs, bolts, copper rivets, spring washers, drilling of holes in flat /rail along with excavation and compaction of buried rail pit. .	Job	3	65,313.00	1,95,939.00
4	Supply & Erection of Safety item with supply of fixing material (Plastic/wooden/gitti & Screw) for supply & erection of electric shock treatment chart (Glass framed) size 22"x28" complete with aluminium angle beading 1"x1" all around	Nos.	12	736.02	8,832.24

SUB-SCHEDULE 'B8': NON-SCHEDULE (NS) ITEMS					
Item No.	**Description**	**Unit**	**Qty.**	**Unit Rate of Supply & Erection in INR**	**Total Amount in INR**
1	**2**	**3**	**4**	**5**	**6 = 4x5**
5	Provision of First Aid box and stretcher with wooden box and hanging arrangement etc.	Nos.	4	11,869.00	47,476.00
6	Provision of Wooden key box with glass front in frame with hinges and locking arrangement 18x24x6 inch.	Nos.	3	2,701.00	8,103.00
7	Supply of hand Gloves (Tested for 25 kV AC)	Nos.	6	1,155.00	6,930.00
8	Provision of Portable fire fighting Dry Chemical powder 5 Kg ISI mark	Nos.	3	3,270.00	9,810.00
9	Provision of Portable fire fighting- CO2 fire extinguisher 10 Kg	Nos.	3	14,527.00	43,581.00
10	Provision of Portable fire fighting- Fire bucket 10 Ltrs	Nos.	8	320.00	2,560.00
11	Provision of Portable fire fighting- Fire bucket Stand	Nos.	4	2,139.00	8,556.00
12	Supply & Erection of Electric Shock treatment chart & its first aid coloured calendar in Hindi & English Size-550mm x 900mm with plastic at top & bottom	Nos.	6	58.00	348.00
13	Supply of AC and DC distribution board.	Nos.	3	41,787.07	1,25,361.21
14	Erection of AC and DC distribution board.	Nos.	3	886.83	2,660.49

SUB-SCHEDULE 'B8': NON-SCHEDULE (NS) ITEMS					
Item No.	**Description**	**Unit**	**Qty.**	**Unit Rate of Supply & Erection in INR**	**Total Amount in INR**
1	**2**	**3**	**4**	**5**	**6 = 4x5**
15	(1) Hiring of AC vehicles Innova Crysta on monthly basis for the use of GC/HRIDC officials at Manesar/Gurugram for 2500 km per month. The rates are inclusive of all duties, GST, royalties, cost of maintenance, major/minor repairs, cost of lubricants, fuel, drivers, and other taxes etc for the complete job. Toll tax and parking charges shall be paid extra on certification of official using vehicle. Vehicles shall not be more than one year old.	vehicle month	96	69,345.00	66,57,120.00
	(2) Extra charge beyond 2500 km per month per vehicle (96x500=48000)	km	48000	13.09	6,28,320.00
16	(1) Hiring of AC vehicles Bolero/Ertiga (SUV) on monthly basis for the use of GC/HRIDC officials at Manesar/Gurugram for 2500 km per month. The rates are inclusive of all duties, GST, royalties, cost of maintenance, major/minor repairs, cost of lubricants, fuel, drivers, and other taxes etc for the complete job. Toll tax and parking charges shall be paid extra on certification of official using vehicle. Vehicles shall not be more than one year old.	vehicle month	96	51,670.91	49,60,407.36
	(2) Extra charge beyond 2500 km per month per vehicle (96x500=48000)	km	48000	13.09	6,28,320.00
	SUB-SCHEDULE 'B8': Non Schedule (NS) Items : 1,36,54,015.50				
	Grand Total of Schedule 'B': (B1+ B2+B3+B4+B5+B6+B7+B8) = 18,99,44,843.05				

Total Estimated amount for Schedule 'B': INR 18,99,44,843.05

Price Schedule

(Please refer Price Schedule uploaded on e-Procurement portal)

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Tender Inviting Authority: Haryana Rail Infrastructure Development Corporation Limited

Name of Work: Contract Package SYS-1:Design, Supply, Installation, Testing & Commissioning of 2x25kV, 50Hz, AC, High Rise Overhead Electrific... Supply System and SCADA in connection with laying of New BG Double Railway Line of Haryana Orbital Rail Corridor (HORC) Project from Km (-)2.14 to Km 125.98 In... ...head Conductor System (ROCS) in Tunnel Portion i.e from km 24.850 to km 29.580 and its connectivity to IR/DFC networks at New Prithla, Patli, Sultanpur, Asaudah ... ...alan including modifications in New Prithla, Sultanpur, Asaudah and New Harsana Kalan Station Yards (approximately 145 RKM and 320 TKM).

Contract No: HORC/HRIDC/CSYS-1/2023

Name of the Bidder/ Bidding Firm / Company :	

PRICE SCHEDULE: Sch...

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

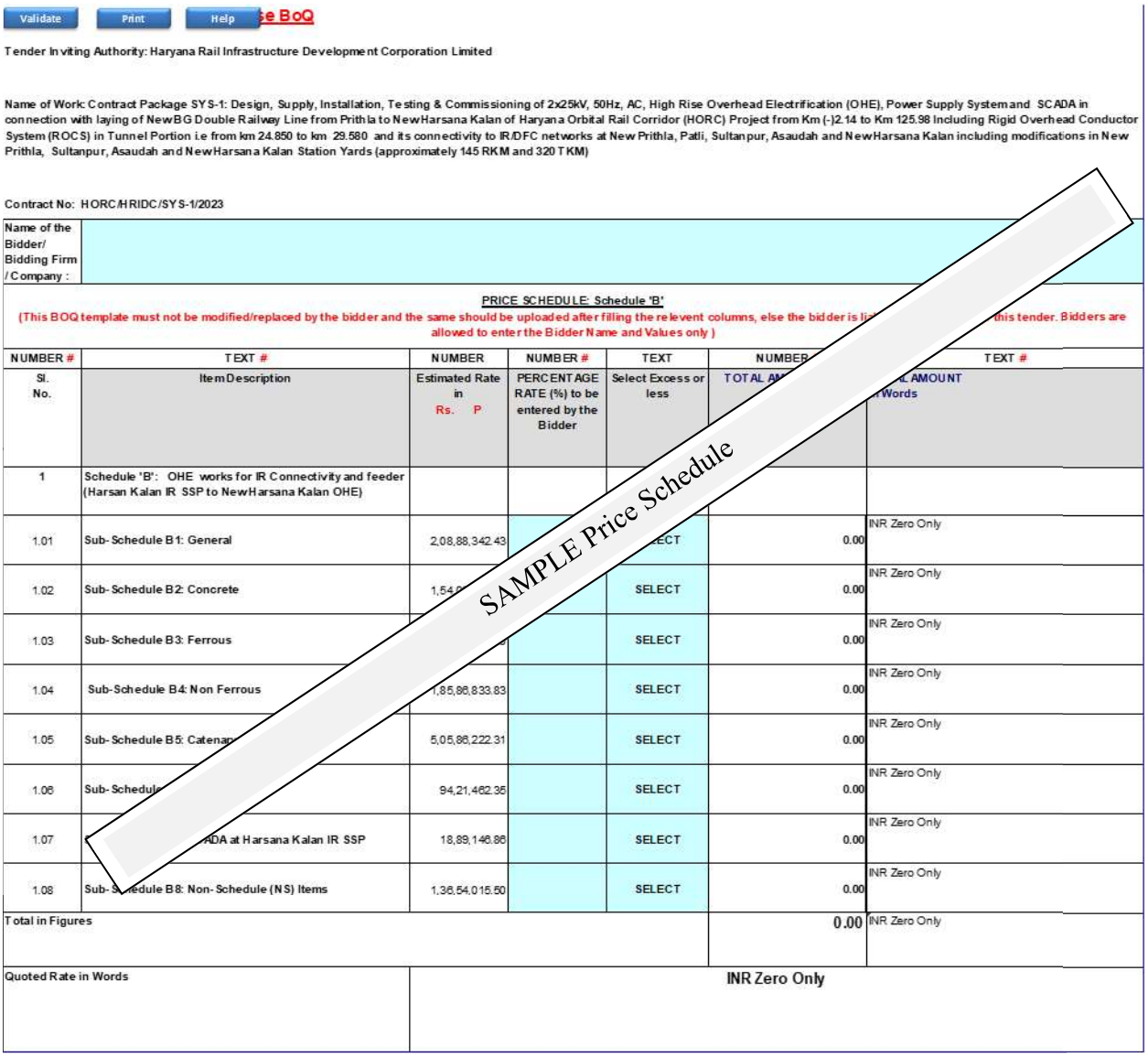
NUMBER #	TEXT #	TEXT #		NUMBER #	TEXT #
Sl. No.	Item Description	Uni...	...TE In ...res To be ...ntered by the Bidder in Rs. P	TOTAL AMOUNT With Taxes Rs. P Rs. P	TOTAL AMOUNT In Words
1.01	Schedule A: Lumpsum component of W...	Lump Sum		0.00	INR Zero Only
Total in Figures				0.00	INR Zero Only
Quoted Rate in Words					INR Zero Only

SAMPLE Price Schedule

Tenderer is only required to fill the information in the boxes highlighted with cyan colour in Price Schedule (Excel sheet)

Price Schedule

(Please refer Price Schedule uploaded on eProcurement portal)



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Tender Inviting Authority: Haryana Rail Infrastructure Development Corporation Limited

Name of Work: Contract Package SYS-1: Design, Supply, Installation, Testing & Commissioning of 2x25kV, 50Hz, AC, High Rise Overhead Electrification (OHE), Power Supply System and SCADA in connection with laying of New BG Double Railway Line from Prithla to New Harsana Kalan of Haryana Orbital Rail Corridor (HORC) Project from Km (-)2.14 to Km 125.98 Including Rigid Overhead Conductor System (ROCS) in Tunnel Portion i.e from km 24.850 to km 29.580 and its connectivity to IR/DFC networks at New Prithla, Patli, Sultanpur, Asaudah and New Harsana Kalan including modifications in New Prithla, Sultanpur, Asaudah and New Harsana Kalan Station Yards (approximately 145 RKM and 320 TKM)

Contract No: HORC/HRIDC/SYS-1/2023

Name of the Bidder/ Bidding Firm / Company :						
PRICE SCHEDULE: Schedule 'B' (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 li this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER	NUMBER #	TEXT	NUMBER	TEXT #
Sl. No.	Item Description	Estimated Rate in Rs. P	PERCENTAGE RATE (%) to be entered by the Bidder	Select Excess or less	TOTAL AM	L AMOUNT Words
1	Schedule 'B': OHE works for IR Connectivity and feeder (Harsan Kalan IR SSP to New Harsana Kalan OHE)					
1.01	Sub-Schedule B1: General	2,08,88,342.43		ECT	0.00	INR Zero Only
1.02	Sub-Schedule B2: Concrete	1,54,9		SELECT	0.00	INR Zero Only
1.03	Sub-Schedule B3: Ferrous			SELECT	0.00	INR Zero Only
1.04	Sub-Schedule B4: Non Ferrous	1,85,86,833.83		SELECT	0.00	INR Zero Only
1.05	Sub-Schedule B5: Catenar	5,05,86,222.31		SELECT	0.00	INR Zero Only
1.06	Sub-Schedul	94,21,462.35		SELECT	0.00	INR Zero Only
1.07	ADA at Harsana Kalan IR SSP	18,89,146.86		SELECT	0.00	INR Zero Only
1.08	Sub-S edule B8: Non-Schedule (NS) Items	1,36,54,015.50		SELECT	0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				

SAMPLE Price Schedule

**Tenderer is only required to fill the information in the boxes highlighted with cyan colour in Price Schedule (Excel sheet)*

Price Schedule

(Please refer Price Schedule uploaded on e-procurement portal)

Contract No: HORC/HRIDC/SYS-1/2023

Name of the Bidder/ Bidding Firm / Company :	

PRICE SCHEDULE-SUMMARY SHEET

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

NUMBER #	TEXT #	NUMBER #	TEXT #
Sl. No.	Item Description	TOTAL AMOUNT With Taxes Rs. P Rs. P	TOT...
1.01	Schedule A: Lumpsum component of Works	0.00	INR Zero Only
1.02	Schedule B: OHE works for IR Connectivity and feeder (Harsan Kalan IR SSP to New Harsana Kala... OHE)	0.00	INR Zero Only
1.03	Provisional Sum	10,00,00,000.00	INR Ten Crore Only
Total in Figures		10,00,00,000.00	INR Ten Crore Only
Quoted Rate in Words		INR Ten Crore Only	

**Tenderer is only required to fill the information in the boxes highlighted with cyan colour in Price Schedule (Excel sheet)*