

CIN U40108TC2003SGC015820

**CHHATTISGARH STATE POWER TRANSMISSION COMPANY LIMITED**

(A GOVT OF CHHATTISGARH UNDERTAKING)

O/o :- SE(EHT:C)DN CSPTCL BILASPUR

Address- Raipur Road Tifra Bilaspur (C.G.) Pin- 495223

website www. cseb. gov.in E-mail:- shyam.s.sharma@cseb.gov.in Fax/Phone 07752427074

NO. SE/EHT:CONST/DN/WAB/ 1177

BILASPUR DATED: 21-08-17

**ISSUED WORK ORDER**

The following Estimate has been sanctioned by the ED(C&P) CSP Trans. Co. LTD Raipur vide letter No. 02-12 /Deposit work/1044 Raipur dtd. 26.08.17 .The details of which are as hereunder:-

Sl. No.	Name of work	Estimate No. date & Amt.	Allocation No.
01	Estimate for construction of 2x132KV feeder bay at 220KV S/s Gerwani to Proposed TSS Korichapar for Traction supply of M/s IRCON International Ltd. Bilaspur	44-401-3427-17-0084 dt 24.08.2017 Rs. 42.09/- Crores SAP Gr.No Z274440117.0002, I/o Z274011700078	L110702

The work is hereby entrusted to Shri G.R. Jaiswal , A.E.(EHT: Const)S/Dn CSPTCL, Raigarh. The requirement of material for the above said work to be submitted to this office immediately for arranging the same on priority basis. The weekly/ fortnightly report in prescribed Proforma to be submitted to this office regularly.

The work may be taken up after conformation of deposit of payment as mentioned above in to CSPTCL account & afterwards executing division may ensure to take care of all the requirements, as per Guide line of task Force Report issued by CEA in Aug.2005 regarding planning criteria, before execution of work.

Separate M.A.S. Register and other relevant records should be maintain for the work in proper manner and as per standing instruction. Please ensure that completion report is furnished within three months after completion

SuperIntending Engineer  
EHT/Const/Dn, CSP Trans Co  
SUPERINTENDING ENGINEER  
BILASPUR  
(EHT Const)DN., CSPTCL, BILASPUR

Copy to:-

01. The ED(EHT C&LM) / (Trans.)/(C&P) CSPTransCo.Ltd Raipur.
02. The Superintending Engineer(EHT C&M)/(C&P) CSPTCL, Bilaspur/Raipur
03. The Regional Accounts Officer, CSPTCL, Bilaspur
04. The Executive Engineer(Stores) CSPTCL, Bilaspur
05. Shri G.R. Jaiswal , A.E.(EHT: Const)S/Dn CSPTCL, Raigarh ,for information and necessary action along with a copy of sanction estimate
06. The D.A./ T.S./G.S./P.S. / Cash of this division.

*with signature*

2-27

**IRCON**  
**CSPTCL, BILASPUR**  
 RANO. 1065  
 Dt. 01-08-2017  
 OFFICE OF THE EXECUTIVE DIRECTOR (COMMERCIAL & PLANNING)  
 1st Floor, State Load Dispatch Building, Danganyra, Raipur (C.G.) - 492013  
 Website: www.csrb.co.in, E-mail: csrb@csrb.co.in Ph: 2574831 Fax: 2574698

GST. No. - 22AADCC5773E12X  
 Raipur, dated **26 AUG 2017**



- WORKS  
 B & P No. 02-12/PL/BS/RA/1065/10267  
 TECH. To.
1. The CB (P&P), CSPTCL, Raipur.
  2. The EE (EHT:C) Dn., CSPTCL, Bilaspur.
  3. The EE (EHT:C) Dn., CSPTCL, Bilaspur.
  4. The SE (EHT:C&M), CSPTCL, Bilaspur.
  5. The EE (EHT:C) Dn., CSPTCL, Bilaspur.
  6. The EE (Store), CSPTCL, Bilaspur.
  7. The EE (Workshop), Bihilai.
  8. The RAO, CSPTCL, Bilaspur.
  9. The Drawing Section O/o CE (P&P) CSPTCL, Raipur.
  10. Estimate file.

Sub: Estimate for construction of 132 KV DCDS line from 220 KV S/s Gerwani to proposed TSS Korchapar for traction supply of M/s IRCON International Ltd., Bilaspur (C.G.).

The Executive Director CSPTCL, Raipur has accorded technical sanction to the above estimate vide Estt. No. 44-401-3427-17-0084, dtd. 24.08.2017, SAP Gr. No. Z274440117.0002, SAP LO.No. Z27401170008 (EHT:C), amounting to Rs. 42.09/- (Rs. Forty Two Crore, Nine Lakhs only) under Deposit work Scheme (Scheme code 401). A copy of the sanctioned estimate is enclosed herewith.

The work may be taken up after the confirmation of deposit of mentioned amount by M/s IRCON International Ltd. (Chhattisgarh Rail Project) in to CSPTCL's account. Executing division may ensure to take care of all requirements as per guide line of Task Force Report issued by CEA in Aug. 2005 regarding planning criteria, before execution of the work.

The payment shall be made to CSPTCL A/c. The details of account is as under:-

Bank Name:- State Bank of India, Bilaspur  
 Branch Code:- 6276  
 IFS NO/RTGS Code:- SBIN00062276  
 Account No:- 31118564465  
 Account Name:- RAO, CSPTCL, Bilaspur (Chhattisgarh)

Please confirm the above payment to this office and ensure that completion report is furnished within three months after completion of work.  
 Encl: As above.

*[Signature]*  
 Suptdg. Engineer (R&D)  
 O/o Executive Director (C&P)  
 CSPTCL, Raipur

Copy to:- M/s IRCON International Ltd. 1nd floor, Rama Port Vyapar Vihar Road, Bilaspur (C.G.) 495001.  
 please pay estimated amount in to CSPTCL account within 30 days without deduction of income tax(TDS)  
 Note:- The SE (EHT:C&M) CSPTCL, Bilaspur please issue the necessary demand note to M/s IRCON International Ltd. for deposit of the required amount in to CSPTCL account within 30 days without deduction of T. D.S. and inform the details of deposit to all concern and to this office also.

**REPORT**

<b>Name of Work</b>	Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS korchapar for traction supply of M/sircon International Bilaspur (C.G.)
<b>Cost of Work</b>	Rs. 42.09 Cr. (Forty Two Crore Nine Lakhs Only)
<b>History &amp; Scope</b>	The competent authority vide U.O. note No. 1175 dtd. 21.08.2017 has accorded approval for sanction of estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS korchapar for traction supply of M/sircon International Bilaspur (C.G.). Accordingly the estimate has been prepared on the basis of approved SoR 2017-18.
<b>Scheme</b>	Deposit Work Scheme (401)
<b>Operating Division</b>	(i) E.E. (EHT-C), Dn. CSPTCL, Bilaspur
<b>Allocation</b>	L110702

*[Signature]*  
SUPDT. ENGINEER (PL)  
O/o ED(C&P) CSPTCL : RAIPUR

*[Signature]*  
EXECUTIVE ENGINEER (PL)  
O/o ED(C&P) CSPTCL : RAIPUR

**ESTIMATE TECHNICALLY SANCTIONED**  
Estt.No. 44-401-3427-17-0082 dtd 24.08.2017  
Sap Gr. No. -Z274440117.0002  
Internal Order No. - Z27401170008 (EHT:C)  
For Rs. 42.09 Cr. (Forty Two Crore Nine Lakhs Only)  
Allocation No. L110702

*[Signature]*  
Executive Director (C&P)  
CSPTCL, Raipur

## ABSTRACT

Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS  
Korchapar for traction supply of M/s/Ircon International Bhaspur (C.G.)

S.N	Particulars	R.L	
		No. of loc.	Amount (Rs.)
1	Supply of towers, conductor, ground wire, insulators, accessories and hardware etc. (Schedule - A).		122509320.79
2	Store incidental charges @ 10.5% on item No. 01		12863478.68
3	Line erection work as per schedule B		56993173.00
4	Contractors overhead and profit @ 10% on item NO. 3		5699317.30
5	Schedule -E & F"Tree Cutting on Revenue Land and Railway Crossing, Power/Traffic"		5335140.00
6	Sub - Total (1+2+3+4+5)		203400429.77
7	Way leave clearance & forest compensation cost as per schedule 'C'		49714000.00
8	Schedule for charges for expenditure for land use schedule- D		45018156.91
9	Tree Compensation on Revenue Land schedule- G		694260.00
10	Sub - Total (6+7+8+9)		298826846.68
11	Contengencies @ 3% HQ Est/Engg 3.82% and special T&P/Vehical @ 1% Total 7.82% on item No. 10		23368259.41
12	Sub - Total (10+11)		322195106.09
13	Supervision Charges @ 15% on item No.12		48329265.91
14	GST @ 18% on item No. 6 with its centages @7.82% (Excluding Land, Forest Compensation, Revenue Land Tree Compensation & its Centages) and item No.13.		48174409.67
15	Building and other worker welfare cess @ 1% on item No. 6 with its centages @7.82% (Excluding Land, Forest Compensation, Revenue Land Tree Compensation & its Centages)		2193063.43
16	Total (12+13+14+15)		420891845.11
	Say Rs.		42.09 Crore

*Kum*  
Supntending Engineer (PL)  
O/o ED(C&P), CSPTransCL, Raipur

*Chauhan*  
Executive Engineer(PL)  
O/o ED(C&P), CSPTransCL, Raipur

1,00 218.61

SCHEDULE "A"

(Material element) Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Garwani to proposed TSS Korichapur for traction supply of M/s/iron International Bilaspur (C.G.)

Tentative Route Length 45(approx.)  
No. of Tower Locs - 140+18 G

S.No	Description	Unit	QTY.	RATE	AMOUNT
<b>Supply of tower, Superstructure with Stubs &amp; Towers</b>					
I	DN 2 Type tower & Stub	Nos	70		
II	DN 30 Type tower & Stub	Nos	25		
III	DN 60 Type tower & Stub	Nos	45		
IV	3 Mtr extension for DN 2	Nos	23		
V	3 Mtr extension for DN 30	Nos	9		
VI	3 Mtr extension for DN 60	Nos	14		
VII	6 Mtr extension for DN 2	Nos	15		
VIII	6 Mtr extension for DN 30	Nos	6		
IX	6 Mtr extension for DN 60	Nos	9		
X	9 Mtr extension for DN 2	Nos	14		
XI	9 Mtr extension for DN 30	Nos	6		
XII	9 Mtr extension for DN 60	Nos	8		
XIII	18Mtr extension for DN60	Nos	0.		
XIV	Stub setting Template for DN - 2	Nos	3		
XV	Stub setting Template for DN - 30	Nos	2		
XVI	Stub setting Template for DN - 60	Nos	2		
XVII	132 KV Truncated Gantry column	Nos	54		
	132 KV Truncated Gantry Beam	Nos	36		
<b>XVIII Supply of tower</b>					
a	Cost of Raw steel	MT	800	47024	37619200.00
b	Cost of fabrication	MT	800	12594	10075200.00
c	Cost of Galvanization	MT	800	25202	20161600.00
d	GI Bolts & Nuts with washer	MT	33.0	84207	2778831.00
TOTAL					70634831.00
<b>2 CONDUCTOR &amp; GROUND WIRE</b>					
I	ACSR Panther	KM	272.7	151359	41275599.30
II	95 Kg/mm sq 7/3.60mm groundwire	KM	46.0	66077	3039542.00
TOTAL					44315141.30

*CVN*  
24/08/17

**SCHEDULE "A"**

(Material element) Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS Korchhapar for traction supply of M/s/rcon International Bilsapur (C.G.)

S.No	Description	Unit	QTY.	RATE	AMOUNT	Tentative Route Length 45	
						No. of Tower Locs.-140+18 G	
<b>3 CONDUCTOR ACCESSORIES</b>							
a	Midsparn joint	Nos	170	420	71400.00		
b	Vibration dampers	Nos	1680	388	651840.00		
c	Repair sleeves	Nos	60	178	10680.00		
<b>TOTAL</b>					<b>733920.00</b>		
<b>4 GROUNDWIRE ACCESSORIES</b>							
a	Suspension Assembly	Nos	70	357	24990.00		
b	Tension assembly	Nos	176	388	68288.00		
c	Midsparn joint	Nos	30	73	2190.00		
d	Repair sleeves	Nos	20	94	1880.00		
f	Copper earth bond	Nos	246	409	100614.00		
e	Vibration dampers	Nos	280	357	99960.00		
<b>TOTAL</b>					<b>297922.00</b>		
<b>5 CONDUCTOR HARDWARE</b>							
a	Single tension	Nos	1040	1154	1200160.00		
b	Double tension	Nos	96	2204	211584.00		
c	Single Suspension	Nos	420	1469	616980.00		
d	Double Suspension	Nos	12	2729	32748.00		
<b>TOTAL</b>					<b>2061472.00</b>		
<b>6 DISC INSULATOR</b>							
a	70 KN	Nos	4320	472	2039040.00		
b	90 KN	Nos	10572	504	5328288.00		
<b>TOTAL</b>					<b>7367328.00</b>		
<b>7 MISCELLANEOUS</b>							
a	Enamelled danger board	Nos	140	294	41160.00		
b	Enamelled Number plate	Nos	140	294	41160.00		
c	Phase Plate (Set of 3)	Nos	140	294	41160.00		
d	Earthing set	Nos	140	2939	411460.00		
e	7/8 W/G galvanised G. Wire	MT	2.0	64439	128878.00		
f	Anticlimbing devices	set	140	8291	1160740.00		
g	Reinforcement Steel	MT	205	63600	13038000.00		
<b>TOTAL</b>					<b>14862558.00</b>		
<b>GRAND TOTAL</b>					<b>140273172.30</b>		
<b>After Deducting 14.5% of Taxes</b>					<b>122509320.79</b>		

Supretending Engineer (PL)  
O/o ED(C&P), CSPTransCL, Raipur

Executive Engineer(PL)  
O/o ED(C&P), CSPTransCL, Raipur

24/08/17

**SCHEDULE " B "**

Our Element) Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS  
Raipapur for traction supply of M/s/Tron International Bilaspur (C.G.)

S.No	Description	Unit	Qty.	RATE	AMOUNT
1	Preliminary survey & measurement of SR etc.	KM	45	8396	377820.00
2	Detail survey and profiling	KM	45	12594	566730.00
3	Check Survey including site clearance	Km	45	8396	377820.00
4	Soil classification	Loc	40	5772	230880.00
5	Excavation in different soil				
i	Normal / Intermediate soil /B.C	Cum	9660	315	3042900.00
ii	wet soil	Cum	4800	357	1713600.00
iii	Partially submerged	Cum	700	357	249900.00
iv	Fully submerged	Cum	500	357	178500.00
v	SFR/DPR	Cum	4320	840	3628800.00
vi	Hard Rock	Cum	10	1616	16160.00
vii	Sandy soil	Cum	0	360	0.00
6	Setting of template & stub setting tower and gantry	Loc	158	6297	9994926.00
7	Concreting 1:1.5:3 Ratio mix M:20 including cost of materials i.e cement, sand, metal, backfilling, muffling, coupling & curing etc.	Cum	2330	10495	24453350.00
8	Concreting 1:3:6 Ratio mix M:10 including cost of materials i.e cement, sand, metal, backfilling, muffling, coupling & curing etc.	Cum	290	7871	2282590.00
9	Labour charges for reinforcement including cost of binding wire	MT	205	6297	1290885.00
10	Erection of Tower	MT	800	8396	6716800.00
11	Stringing of conductor and ground wire for 132KV DCDS line with 6 Nos. ACSR Panther conductor and 01 groundwire.	KM	45	83960	3778200.00
12	Peripheral Welding of Nut Bolts of towers.	Loc	158	10495	1658210.00
13	Revetment including Base padding stone masonry wall to cover painting including cost of stone sand water etc.	CUM	380	12594	4785720.00
14	Back filling of revetment	CUM	190	136	25840.00
15	Counter poise earthing	Mtr	150	840	126000.00
13	Fixing of ACD, Danger board, Number Plate, phase plate & final checking	Loc.	158	3149	497542.00
	<b>TOTAL</b>				<b>56993173.00</b>

Supertending Engineer (PL)  
O/o ED(C&P), CSPTransCL, R

Executive Engineer(PL)  
O/o ED(C&P), CSPTransCL, Raipur

24/08/17

SCHEDULE "C"

Draft Estimate for construction of providing 132 KV connectivity from 220/132 KV S/S  
 Gerwani to proposed TSS Korichapar for traction supply of M/s S.F.C.R

Route Length : 45 KM

Tentative No. of Loc : 140+18 G

(WAY LEAVE CLEARANCE AND FOREST COMPENSATION) / Railway Crossing Charges

S.No.	Item	Unit	Qty	Rate	Amount
1	Registration fee for demand of forest land for its use other than forestry work,	Hectare	10	7500.00	75000.00
2	Processing fee applicable for diversion of forest land	Hectare	10	30000.00	300000.00
3	Net Present Value	Hectare	10	1043000.00	10430000.00
4	Compensatory afforestation	Hectare	20	660300.00	13206000.00
5	Medicinal Plantation	Hectare	10	660300.00	6603000.00
6	Van Vidohan Charges including stacking, transportation charges etc.	Hectare	10	100000.00	1000000.00
7	Compensation of trees, Way leave clearance	KM	45	400000.00	18000000.00
8	local expenses like demarkation and construction of Munara etc. as per demand of local forest officer etc.	per Hect.	10	10000.00	100000.00
9	Railway crossing charges		0		0
<b>TOTAL</b>					<b>49714000.00</b>

# SCHEDULE-D

## ESTIMATED LAND COMPENSATION FOR PROPOSED TRANSMISSION LINE

### ABSTRACT

Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S Gerwani to proposed TSS korchhapar for traction supply of M/s/Ircon International Bilaspur (C.G.)

Total line length:- 45 KM(approx.)

Total Towers:-140 Nos. + 18 Nos. Gantry

Towers on Govt Land:- Nil		Towers on Private Land:- 140 Nos. + 18 Nos. Gantry		
S.NO.	Item	No. of Villeges	Area of land (Hectare)	Compensation Amount (In Rs)
1	Total Land covered by tower foundations (a+b)	14	1.479	2903316.61
	(a) Government land covered by tower foundations. (From Annex-1)	0	0	0.00
2	(b) Private land covered by tower foundations. (From Annex-1)	15	1.479	2903316.61
	Total Land covered by Conductors. (a+b)	14	121.5	42114840.30
	(a) Government land covered by Conductors. (From Annex-2)	0	0	0.00
	(b) Private land covered by Conductors. (From Annex-2)	14	121.5	42114840.30
<b>TOTAL (1+2)</b>			<b>122.97900</b>	<b>45018156.91</b>

## SCHEDULE "G"

Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S  
Gerwani to proposed TSS korichapar for traction supply of M/s/Trcon  
International Bilaspur (C.G.)

Route Length : 45 KM approx.  
Tentative No. of Loc : 140+18 G

(TREE COMPENSATION ON REVENUE LAND )

S.No.	Item	Unit	Qty	Rate	Amount
1	Compensation for trees etc on revenue land	km	45	15428.00	694260.00
TOTAL					694260.00

**SCHEDULE "E"**

**Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S  
Gerwani to proposed TSS korichapar for traction supply of M/s/Icon  
International Bilaspur (C.G.)**

Route Length : 45 KM approx.  
Tentative No. of Loc : 140+18 G  
( RAILLAY CROSSING , POWER/TRAFFIC )

S.No.	Item	Unit	Qty	Rate	Amount
2	Railway crossing - Power/Traffic block charges etc.	per hour	4	1259400.00	5037600.00
TOTAL					5037600.00

## SCHEDULE "F"

Estimate for construction of 132 KV DCDS Line from 220/132 KV S/S  
(Gerwani to proposed TSS korichapar for traction supply of M/s/Icon  
International Bilaspur (C.G.)

Route Length : 45 KM approx.

Tentative No. of Loc : 140+18 G

( TREE CUTTING ON REVENUE LAND )

S. No.	Item	Unit	Qty	Rate	Amount
1	Tree cutting Charges	km	45	6612.00	297540.00
TOTAL					297540.00