



Tender No. TDL/EN/BHU-KRJ-TRACKWORK/BHU-UP-LINE-CONNECTION

For

P-Way linking and other related works for connection of UP loop line of Bhaupur station (IR) with New Bhaupur station of DFCC in connection with construction of Bhaupur –Khurja New BG line of EDFC-1 between New Bhaupur and New Khurja station of EDFC & in between CNB-TDL-GZD Section of North Central Zonal Railway.

**E-TENDER DOCUMENT
TECHNICAL BID
PACKET-A
JANUARY-2020**

**Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE)
Under
MINISTRY OF RAILWAYS**

AGRA OFFICE: -

Chief General Manager/Tundla/DFCCIL,
3/20, 3rd Floor, KPS Tower, Mayur Complex, Nagla Padi,
Near Tulsi Cinema, NH-02,
Agra -282002

CORPORATE OFFICE: -

DFCCIL, 5th Floor, Pragati Maidan Metro Station Building Complex,
New Delhi-110001.

GENERAL INFORMATION/DATA SHEET

TENDER NOTICE NO	TDL/EN/BHU-KRJ-TRACKWORK/BHU-UP-LINE- CONNECTION DATE: 25.01.2020
Name of the work	P-Way linking and other related works for connection of UP loop line of Bhaupur station (IR) with New Bhaupur station of DFCC in connection with construction of Bhaupur –Khurja New BG line of EDFC-1 between New Bhaupur and New Khurja station of EDFC & in between CNB-TDL-GZD Section of North Central Zonal Railway.
(a) Tender Value	₹ 113986486.32/-
(b) Completion Period	03 months
(c) Earnest Money	₹ 2279723/-
(d) Date and Time of Issue of Tender	From 27.01.2020
(e) Last date and Time of submission of Tender	On or before date 28.02.2020 and time up to 15:00 hrs
(f) Date and Time of Opening of Tender (Technical bid -Packet A)	On or before date 28.02.2020 and time up to 15:30 hrs
(g) Validity of offer	120 days
(h) Retention Money / Security Deposit	5 % of Contract Value
(i) Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 30(thirty) days from the date of issue of Letter Of Acceptance (LOA), amounting to 5% of the contract value in the form as give in clause 16.4 of GCC

SUMMARY OF PRICES

Name of work:- P-Way linking and other related works for connection of UP loop line of Bhaupur station (IR) with New Bhaupur station of DFCC in connection with construction of Bhaupur –Khurja New BG line of EDFC-1 between New Bhaupur and New Khurja station of EDFC & in between CNB-TDL-GZD Section of North Central Zonal Railway.

Sl. No.	Description of works	DFCCIL updated cost in Rs	Rates to be quoted in figures & words (Clearly mention above / below / at par on updated DFCCIL Estimated cost given in column 5)
1	2	5	6
1.	Execution of all works as per Schedule "A"- Supply of Permanent Way Materials	95090133.79 % age (in figures) (In words)
2.	Execution of all works as per Schedule "B"- Permanent Way Work Execution	18896352.53 % age (in figures) (In words)
	Grand Total (A+B)	113986486.32	

Notes:

- (i) The above prices are inclusive of all taxes, duties including GST etc.
- (ii) The tenderer should quote single percentage above/ at par / below for each schedule.
- (iii) If the uniform percentage quoted by the Tenderer does not clearly indicate whether the rates are above / at par / below the estimated rates then through sign convention it will be considered to be on plus side and evaluated accordingly.
- (iv) Rate of item payable to contractor shall be as per following example:-

SCHEDULE -1
SCHEDULE OF PRICES & TOTAL PRICES

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
SCHEDULE 'A' –(Supply of Permanent Way Materials)						
1	NS-1	Supply of Machine-crushed stone ballast on cess at its final location of laying as directed by Engineer as per RDSO specifications for track ballast IRS-GE-1 of June,2004 with latest correction slips from stacked in specified quantities at location new BPU Yard/outside Railway /DFCC limits/along the alignment on either side obstruct as per site requirements. Final Rate includes inspection charges by DFCCIL/Engineer if any. Note 1:Payment will be made on actual stack measurement for gross quantities without any deduction for voids in following stages : (i) 95% on receipt at site, acceptance, measurement, account, proper storage and protection against loss, damage or deterioration: and (ii) Balance 5% after training out.	Cum.	17246.00	2092.66	36090088.23
2	NS-2	Extra over item No. 1 (NS-1) if Ballast is to be stacked in private land in case sufficient railway Land is not available. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Cum.	2587.00	53.68	138876.12
3	NS-3	supply of Glass filled Nylon-66 insulating Liner for use with ERC MK-V on Concrete Sleepers (RT-7008) suitable to 60Kg UIC Rail For 1676 mm gauge suitable for 25T Axle Load as per RDSO drawing no . RDSO-T-8222 & 8223 with latest alterations if any at final location of track linking as directed by Engineer . Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL	Sets	22500.00	45.91	1032902.24

Signature of tenderer (s)
with seal

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		approved agency.				
4	NS-4	Supply of 10mm Composite GRSP compatible with Toe load , Sleeper and Rail profile suitable for 25T Axel load on PSC Sleepers as per RDSO Drawing No. T-7010 with latest alterations if any at final location of track linking as directed by Engineer. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Nos.	22500.00	76.83	1728781.63
5	NS-5	Supply of Elastic fastening clips (ERCMK-V) compatible with Rail/sleeper assembly having normal Toe load on the Rail of 1045 Kg suitable for 25 T Axel load on PSC Sleeper as per RDSO Drwg. No. RDSO T-5919 with latest alterations if any, at final location of track linking as directed by Engineer. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Each	45000.00	96.08	4323633.59
6	NS-6	Supply of fish Bolts with nuts for 60 Kg rails as per RDSO Drawing No. T-1899 with latest alterations if any, at final location of linking/laying as directed by Engineer and unused fish bolts will be stacked as per directions of employer for which no extra payment of lead/transportation will be paid. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Nos.	288.00	85.10	24507.49
7	NS-7	Supply of Fish Plates one meter Long as per Standard drawing of RDSO Drg. No T-5916 with latest alterations if any at final location of linking/laying as directed by Engineer and unused fish plates will be stacked as per directions of employer for which no extra payment of lead/transportation will be paid. Final Rate includes inspection	Nos.	96.00	2191.72	210404.97

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with seal

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.				
8	NS-8	Supply of joggled fish plates (2No. Per set) with 4 pair clams, 4 no. bolts & nuts and 8 nos special washers and wooden blocks for 60 kg Rail as per RDSO Drg No.T-4016/T-5849 with latest alterations if any at final location of linking/laying as directed by Engineer. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Sets	100.00	4968.09	496809.49
9	NS-9	Supply of Mono Block Per Stressed concrete (PSC) Sleepers for 25T Axle Load as per RDSO drawing no. T7008 including transportation at their final location of laying as directed by Engineer. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Nos.	11250.00	3153.95	35481938.37
10	NS-10	Supplying at their final location of laying as per Engineer's directions including leading, loading, unloading transportation up to site and stacking of special PSC turnout sleepers and approach sleepers for 1 in 12 -555R-60E1 (1 in 20 canted) LH Turnout for 1676mm gauge and 25T Axle load for ballasted track for B.G. 60 Kg. (UIC) Rail, complete set (96 Nos) with contractor's labour, materials, tools and plant equipment and Machinery transport etc. complete. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.	Sets	4.00	395717.24	1582868.99
11	NS-11	Supply of 60 Kg 1 in 12 -555R-60E1 (1 in 20 canted) tangential LH Turnout (without Lead Rail and without PSC sleepers) at final location of laying as directed by engineer for 1676mm gauge and	Sets	4.00	3243702.0	12974808.00

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with seal

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		25T Axle load for ballasted track including all fastenings & fittings (e.g. GRSP,GFN Liners, ERC Clips, Plate Screws, Washers etc) with thick web switch device shall consist of rails, one left hand and one right hand and two switch rails, one left hand and one right hand, complete set of PSC sleepers along with all fittings e.g. slide chairs, base plates/special base plates, brackers, rail pads, insulting bushes, washers, all stretcher bars, various blocks, bolts and nuts, any special fittings like spiring setting device etc. Coated slide chairs (Ni-Cr) with the addition of rollers on slide chairs shall be provided conforming to well established international standard and any other related components (e.g. Tongue rail, check rail, Crossing, check rail, stock rail for switch, extended leg for CMS crossing & torsion type back drive) as per DFCCIL approved drawing no. VAEVKN04743-04 including transportation and inspection charges. (For switch rail, thick web section out of asymmetrical rail section shall be used. and both, switch and stock rails shall be of special grade steel of minimum 880 grade as per IRS: T-12-2009 and have hardened heads). Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.				
12	NS-12	Supply of Improved Switch Expansion Joint at final location of insertion as directed by engineer for 80mm Gap (Max) 60 Kg 90UTS 880 Grade SAIL rails for BG track as per RDSO dwg no. T-6902 including all relevant fixtures and fittings, ERC Clips, GRSP, GFN liners, MS Brackets, all Bolts and Nuts, CI Chair, split pin, washer, plate screw,	Sets	2.00	502257.34	1004514.68

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Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		sleepers with all fittings required, complete with all components listed in the relevant RDSO drawings with latest amendments up to date complete including transportation and unloading and inspection charges. Final Rate includes inspection charges for inspection by RITES/DFCCIL/Any other DFCCIL approved agency.				
		TOTAL COST OF SCHEDULE 'A' ITEMS				95090133.79

Payment Conditions for schedule "A"

1) 90% payment shall be made on receipt ,acceptance, accountal and taking into custody of complete materials. The invoices shall be accompanied by following:
a) Supplier's challan and manufacturer's challan
b) Inspection certificate issued by Employer's/Engineer's nominated inspecting agency
c) Quality assurance documents
d) Indemnity bond for entire cost of material supply
2) The remaining 10% payment will be made after commissioning of the portion of the work or handing over the materials to the employer's representative required for maintenance purposes.

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
SCHEDULE 'B' - Permanent Way Work Execution						
13	NS-13	Leading ballast from Cess and putting in track/formation by contractor's own means uniformly to form profile as per IRPWM in following phases: (i) laying of first two layers of each 100 mm thickness upto bed level of 200mm including each layer compacted by giving minimum 4 passes of static roller with load of 4KN/100mm width or similer (ii) providing final cushion of minimum 300mm under bottom of sleeper by gradually lifting of track by machine packing in 2 lifts of 40mm each and final lift of 20mm. (iii) Recouping shortages after each packing and finally making profile as per IRPWM.	Cum.	17246.00	145.27	2505246.44
14	NS-14	Cutting of 60 Kg Rails with contractors abrasive Disc Cutter complete including men, Material, Fuel etc. true to Squire.	Each	250.00	462.92	115729.92
15	NS-15	Drilling 26.5mm , 32mm Diameter holes with rail drilling machine in web of 60 Kg Rails in Track or On cess at correct Locations including Champharing.	Each	500.00	111.74	55870.84
16	NS-16	(Including loading, leading in all aspect and unloading at site at final location of linking as directed by Engineer.)				
	NS-16(a)	Upto 10 km	MT	817.61	434.18	354987.26
	NS-16(b)	Incremental rate for lead beyond 10 km (Procurement plant/SAIL Bhilai to final location of laying as directed by	MT-KM	654085.60	8.82	5769544.65

		Engineer. Calculation of Kms, will be considered as per Railway track KM./Railway time-table.)				
17	NS-17	Assembling and Installation of 60 Kg 1 in 12 -555R-60E1 (1 in 20 canted)Turnout , for B.G. 60 KG rails including leads Rails as per drawing no. VAEVKN04743-04 including katcha Packing with bars or off track tampers for 20 KMPH speed. Activities of rail cutting , drilling of holes and welding of joints are not included in this item and shall be paid seperately under relevent items.				
	NS-17(a)	60 Kg 1 in 12 -555R-60E1 (1 in 20 canted)Turnout	Nos.	4.00	70970.96	283883.85
18	NS-18	Flash butt welding of 60 KG rails (considering 13mtr rail) and panels, as per manual for flash butt welding of rails 1996, in track or outside track, in depot or in mid section for making panels including removing and refixing the fittings, creating required gap by pulling the rails, handling of rails. Note: 60% payment will be made after execution of work and 40% will be paid after satisfactory USFD testing by contractor for which no extra payment will be made.	Each	1042.00	4978.71	5187815.73
19	NS-19	De-stressing of LWR/CWR track with 60 Kg rails at appropriate rail temperature as per LWR manual and as per directions of the Engineer including adjustment of gaps at SEJ, squaring and correct spacing of sleepers disturbed during the work, including greasing of ERC as per IRPWM. Payment of cutting of rails	TKM	6.775	27542.65	186601.47

		shall be made separately under relevant item.				
20	NS-20	Painting of station number, super elevation and versine and at each station of curve on the inside web of outer rail with stencils of height in black enamel pain on surface of specified length painted with two coats of yellow enamel pain over a printer coat painted after cleaning teh surface free from dust and dirt.	Station	150.00	87.79	13169.18
21	NS-21	Fouling mark of size 1500*250*225 MM in M20 grade cement concrete including engraving the letters "FM", white washing with two coats and painting the latters in black enamel paint indicating the numbers of vehicles duly fixed at site.	Each	4.00	759.83	3039.31
22	NS-22	Providing rail post for curve/SEJ/IWR reference post or detonator post by cutting rail to suitable length and fixing in 1:3:6 cement concrete foundation of size 0.30mx0.30mx0.60m including required exevation and painting two coats with enamel paints of approved quality and colour and marking sign marks with all tools, plantsm machinary, cutting of rail, labour equipment etc. as per provisions of inanuzl and instruction of Engineer in charge, Note Rails will be issued free of cost by the employer.	Each	15.00	510.79	7661.86
23	NS-23	Provisionally ultrasonic tested Single shot auto thimble Alumino thermit welding of 60KG rail joints by pre-heat (SKV) welding technique using compressed air Petrol/LPG for pre-heating three piece moulds and	Each	50.00	5066.76	253338.21

		automatic tapping thimbles with all labour, materials including supply of portion , tools and plants aligning of rails, placing & fixing of mould, preheating , welding, mechanised trimmimg, grinding with profile grinder (including riser) , testing,marking , painting with one coat of high build epoxy paint (two pack conforming to RDSO certification no. M&C /PCN-111/88) on the welded area up to 10cm on either side. the work is to be completed in all respects as IRS: T-19-2012 with latest updates and in accordance with "RDSO Manual for fusion welding of Rails by Alumino Thermic Process with Up to date correction Slips. The work to be done under supervision of trained welding supervisor and carried out by Trained welder having valid competency certificate from RDSO/TPP , Lucknow.				
24	NS-24	Supplying and fixing Boards for LWR, curves and Turnouts made of 16 gauge M.S. Sheet with ISA 40x40x5 MM frame and ISA 75x75x6 MM posts as per drawings duly painted and lettered with luminous paint.	Each	15.00	2505.44	37581.66
25	NS-25	Linking of BG track with 60kg rails with all necessary fittings on PSC sleepers after spreading laying, squaring on already spread ballast up to 1660 sleeper density including shifting pairing of loose rail panel available at final location of laying. Cutting of rails, drilling fish bolts holes and chamfering wherever required, Jim crowing of bent rails fixing of rubber pads, liner, supplying				

		and applying grease on fish plates & ERC with ERC duly painted and using 'C' Graphite confirming to IS-408-1981 oiling of bolts and nuts, PSC sleeper shall be available at final location of laying. Rates include gauging, aligning to pre-decided alignment in curves and straight leveling of link BG track including removing of kinks of rails if any, with all labour, T & P consumable item etc. as a complete finish job to bring track to good track geometry to convert LWR and providing LWR reference posts as per satisfaction of Engineer/his representative. The rates will also include kachcha and first packing and making track fit for 20Kmph speed with making ballast profile as per IRPWM.				
		NOTE: Fabrication, bending, fixing of guard rail, fixing of check rail shall be considered as the normal track for the linking where for the purpose of payment i.e. two times of that portion linking. Rate also include marking on curves for station no., super elevation and providing reference posts.				
	(a)	Track linking	Rmt	6775.0	458.63	3107229.85
26	NS-26	Linking of BG switch expansion joints 60kg on PSC sleepers and oiling of bolts and nuts. Rates including gauging, aligning of rails if any with all labour T & P consumable items etc. as a complete finished job to bring track to good track geometry as per direction of Engineer In-charge. SEJ sleepers, SEJ fittings shall be available at final location of laying	Sets	2.00	7332.27	14664.54

		and rates will include providing reference posts with kachcha and first packing and making ballast profile as per IRPWM.				
27	NS-27	Fabrication and fixing of Dead End as per RDSO drawing including painting of sleeper with contractor's red paint. Fixing with longer size bolts as directed by Engineer In-charge. Leading of Dead End rails and sleepers from Nominated place at site/store as a complete job.	Each	2.00	13007.21	26014.42
28	NS-28	Dismantling of BG Track of any classification, turnouts, trap points, diamond xing etc, laid on wooden/ST/PSC sleepers and stacking of released material upto 1000m and small fittings at location as directed by engineer as a complete job including all lead, lift, ascend, descend, crossing of track or any other obstruction as a complete job as per direction of Engineer In-charge/his representative.				
	(a)	BG Track	TRM	515.00	140.51	72361.66
29	NS-29	Dismantling and removal of existing dead end/sanded Dead end from the existing track including levelling of bed up to formation level loading leading and stacking of dismantled material from the site of work to the store/ at nominated place in respective yards or at location as directed by engineer.	Each	2.00	10162.79	20325.58
30	NS-30	Three rounds of through packing including boxing and dressing to provide required ballast cushion	RMT	6775.00	119.71	811036.84

		300mm and stipulated profile for LWR, curves/single rails as per IRPWM/LWR manual as directed by the Engineer In-charge including 1st, 2nd and 3rd packing at required interval including squaring of sleepers, ensuring correct spacing, gauge alignment, longitudinal and cross level with boxing etc. complete to bring the track to required tolerance as to make the track fit for the speed of 100KMPH including all lead, lift, handling and re-handling etc. on newly laid track as a complete job.				
31	NS-31	<p>Three round of through packing including boxing, dressing, providing required ballast cushion 300mm and stipulated profile for LWR, curves/single rails as per IRPWM/LWR Manual as directed by Engineer-In-charge after kachcha packing and first packing for turnouts at required interval squiring of sleepers ensuring correct spacing gauge alignment and longitudinal and cross level with boxing etc. .complete to bring the track to required tolerance so as to make the track fit for the normal speed including all lead, lifts, handling, re-handling etc. of track and points and crossing under working traffic conditions or on newly laid track as a complete job.</p> <p>NOTE:- (i)40% payment will be made on completion of 3rd packing after ensuring the track parameter within the range define in IRPWM for the speed of 50kmph. (ii) 40% payment will be made after</p>				

		3rd required boxing, dressing and stipulated ballast profiling as per IRPWM. (iii) 20% balance payment will be made after picking up stacks and maintaining the track in good geometry up to 7 days after commissioning of line for traffic.				
	(a)	For BG 60 Kg 1 in 12 -555R-60E1 (1 in 20 canted)Turnout with PSC sleeper.	Sets	4.00	11437.93	45751.73
32	NS-32	Fixing and Removing Joggled fish plate on weld, rail joint with fixing of wooden block removing existing track ballast and again in putting and packing the wooden block.	Per Pair	100.00	244.98	24497.56
		TOTAL COST OFSCHEDULE 'B' ITEMS				18896352.53

Payment Conditions for schedule "B"

(1) Rates for all the items of this estimate shall include day as well as night working and lighting arrangement with all necessary equipments including generators etc. as per requirement and to the satisfaction of the Engineer.
(2) For welding work, 60% payment will be made after execution of work and 40% will be paid after satisfactory USFD testing by contractor as per RDSO USFD weld testing manual for which no extra payment will be made.
(3) The welds found defective in USFD, shall have to be replaced by the contractor at his own cost
(4) No lead will be paid for ballast, rail, sleepers and fittings.
(5) The payment of rail cuts and drilling holes will be done as per final layout of mainline/loop line /sidings and turnouts etc. Rail cuts/ hole drilling required for temporary working will not be paid
(6) All the necessary temporary and permanent board/indicators shall be provided by contractor as directed by site engineer as per IRPWM for which no separate payment will be made.
(7) Kilometre post and gradient post shall be provided by contractor as directed by site engineer as per IRPWM for which no separate payment will be made.

(8) Inspection kit shall be provided by the contractor at time of inspection for which no separate payment will be made.

Explanatory Notes for BOQ:

- (i) The rates shall also be inclusive of all taxes legally livable and / or any other taxes, license fee and royalty charges etc. if any.
- (ii) The above quantity is approximate:-The DFCCIL reserve the right to increase / decrease the same.
- (iii) Contractor should check the proposed work location/ site physically to examine the site conditions and quantum of work, before quoting the rates.