

**Response to queries raised by Bidders for system bid document of MGS-SEBN & CPBH (Excluding NKWD-DGO section)**

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
1.	Part 2, Vol 9 Section V(B), Pg - 11 of 263, Cl-3.2.1 Design	The Contractor shall satisfy himself that the capacities, ratings and quantity of equipments as specified herein meet the Requirements of the Eastern Dedicated Freight Corridor, which are based on Simulation Report of New Karwandiya- Durgauti section.	We understand the design is based on Simulation Report of New Karwandiya- Durgauti section and fresh simulations studies are not required, if we have already conducted the simulations for New Karwandiya- Durgauti section. Please confirm.	Fresh simulation study is not required for equipment rating. Clause 3.2.1 is self explanatory.
2.	Part 2, Section V(A), Vol 3 Pg-22 of 130, Cl-4.0 (9) Requirements during Construction Phase	Where the Contractor temporarily requires additional land, for the period of construction to facilitate the construction, the contractor shall arrange for the same Entirely at his own cost and risk.	It is understood that the contractor is allowed to use the land in ROW, if available, for establishing temporary facilities for construction. Kindly confirm.	The contractor can use ROW for establishing temporary facilities for construction only after taking the permission of the Employer.
3.	Part 3, Section VII, Pg- 6 of 53, Sub-Clause -1.9 Errors in Employer's Requirements	..... (b) Payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.	We request you to specify the reasonable profit percentage that shall be payable to the contractor under the referred clauses for clarity.	The same will be decided by the Engineer during execution stage.
4.	Part 3, Section VII, Pg-17 of 53, Sub-clause-13.8 Adjustment for Changes in Cost	Values for "Ln", "Mn" and "Un" correspond to the date 49 days prior to the last day of the period.....	Cost indices on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates) shall not be appropriate for adjustment of prices. We would request you to kindly change the " <b>current cost indices or reference prices for period n</b> " to the relevant <b>RBI indices published in the month for which invoice is submitted</b> by the contractor. This shall help in making PV claims consistent with the actual expenditure incurred as the expenditure and indices correlate to the same period of time.	Request not agreed. The provisions of Bid document are self explanatory and shall prevail.

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5.	<p>Part 5 Price Schedule :</p> <p>Events linked with testing &amp; commissioning and supply of spares</p>	<p>Sub Cost Center C1.4, C2.11, C3.13, C4.9, C5.9, C6.7, C9.1, C9.2,C10.1, C10.2, D5.17, D6.1, D6.2, D7.1, D7.2, E6.1, E6.2, E7.1, E7.2, E7.3 and E7.4</p>	<p>The item nos. referred here are events linked with testing and commission and supply of spares. The cost centre weightages assigned to these items aggregate to a total of <b>7.6%</b> of the Contract price.</p> <p>The Contractor shall be entitled to claim payment against these events only at the end during the testing &amp; commissioning phase. It will seriously affect the cash flows of the contractor.</p> <p>We would request you to kindly modify the weightages to the referred cost-centres so as to reduce the overall payment linked to testing &amp; commissioning events to a maximum of <b>2% of the Contract price.</b></p>	<p>Request not agreed. The provisions of Bid document are self explanatory and shall prevail</p>
6.	<p>Part 1, Section I, Pg- 16 of 48, Cl-13.1</p> <p>Currencies of Bid and Payment.</p> <p>Part 3, Section VII, Pg-16 of 53, Sub-Cl-13.4</p> <p>Payment in Applicable Currencies.</p>	<p>The bidder shall quote a lump sum cost in Indian Rupees. Payments shall be made as per billing process laid down in Financial Bid Part-5 – Price Schedules of Bidding Document.</p> <p>The contract provides for payment of contract price in Indian Rupees only.</p>	<p>Request you to allow the Bidder to quote in 3 currencies i.e. INR and two other foreign currencies.</p>	<p>Request not agreed. The provisions of Bid document are self explanatory and shall prevail.</p>
7.	<p>Part 1, Section II, Pg-27 of 48, ITB - 16.1</p> <p>Bid Security</p>	<p>The bidder should submit along with the bid, a bid security for Rs. 3.31 crore (Rupees Three Crore Thirty One Lakhs only) in the following form:</p> <p>(i) FDR (Fixed Deposit Receipt)/ Demand Draft/ Banker's Cheque/ Pay Order for Rs. 1.00 crore and</p> <p>ii) Bank Guarantee as per format enclosed as BDF-9A for Rs. 2.31 crore.in favour of "Dedicated Freight Corridor Corporation of India Ltd., New Delhi" from Nationalized/ Indian Scheduled Commercial Bank in original form.</p>	<p>Request you to accept Bank Guarantee for complete Rs. 3.31 Crore as Bid Security.</p> <p>Kindly modify the tender conditions accordingly.</p>	<p>Request not agreed. The provisions of Bid document are self explanatory and shall prevail.</p>

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8.	Part 3, Section VII, Pg-17-22 of 53, Cl-13.8 Adjustment for Changes in Cost	<p>The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the amount certified in Payment Certificates for cost centers (sub clause 14.4), shall be determined from formulae.</p> <p>The formula for adjustment for changes in cost shall be as follows except for cost center for SN Item Cost center</p> <p>I) Contact/ catenary wire C2.1 &amp; C2.2</p> <p>II) Traction transformers /Auto transformers/ Power transformer C3.1 C3.2, C3.3, C4.1 &amp; C5.1 for which PVC formula has been given separately.</p> <p>For other cost centers the PVC formula will be as follows:  <math>P_n = a + b(L_n/L_0) + c(M_n/M_0) + d(U_n/U_0).....</math></p>	<p>In addition to the Contact wire and Transformers, Galvanised steel and Signalling cable forms the major part of supply scope and are directly dependent on commodities rates.</p> <p>Request you to provide separate PV formula for Steel structures and Signalling cables.</p>	Request not accepted. The provisions of Bid document are self explanatory and shall prevail
9.	Part 3, Section VII, Pg-25 of 53, Sub-Cl -14.9 Payment of Retention Money	<p>A Retention amounting to 10 (ten) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained including Rs. 1 Cr. Of Bid Security retained and adjusted as Retention Money reaches a limit of Retention Money of 5 (five) percent of the Contract Price. When the Retention Money with the Employer has reached 60% of the limit of the Retention Money, the contractor may, at his option, replace 50% of limit of Retention Money with an unconditional bank guarantee from the Bank, and valid for the period up to the end of the Defect Notification Period. After the issue of taking over certificate for the complete works, the balance amount of Retention Money can also be replaced with an unconditional Bank Guarantee from the Bank and valid for the period up to the end of Defect Notification Period.</p>	<p>Kindly allow the retention money to be replaced with unconditional bank guarantee from the Bank valid for the period up to the end of the Defect Notification Period on a quarterly basis i.e. every 3 months. Similar conditions are available in other DFC projects.</p>	Please refer addendum No.2 dated 16.12.2016.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response																		
10.	Part 5, Price schedule Pg-7 of 56, Price Schedule-B	<p>Apportionment of contract price for payments of Electrical, Signal &amp; Telecommunication and Building &amp; Structure works</p> <table border="1" data-bbox="447 305 1024 706"> <thead> <tr> <th data-bbox="447 305 506 451">S N</th> <th data-bbox="506 305 779 451">Cost Centre of Works</th> <th data-bbox="779 305 1024 451">Contract price as proportion of total lumpsum cost quoted in schedule A, expressed as percent</th> </tr> </thead> <tbody> <tr> <td data-bbox="447 451 506 492">1</td> <td data-bbox="506 451 779 492">Electrical Works</td> <td data-bbox="779 451 1024 492">56 %</td> </tr> <tr> <td data-bbox="447 492 506 532">2</td> <td data-bbox="506 492 779 532">Signalling Works</td> <td data-bbox="779 492 1024 532">36.5 %</td> </tr> <tr> <td data-bbox="447 532 506 597">3</td> <td data-bbox="506 532 779 597">Telecommunication Works</td> <td data-bbox="779 532 1024 597">6 %</td> </tr> <tr> <td data-bbox="447 597 506 662">4</td> <td data-bbox="506 597 779 662">Building &amp; Structure works</td> <td data-bbox="779 597 1024 662">1.5 %</td> </tr> <tr> <td data-bbox="447 662 506 706"></td> <td data-bbox="506 662 779 706">Total</td> <td data-bbox="779 662 1024 706">100 %</td> </tr> </tbody> </table>	S N	Cost Centre of Works	Contract price as proportion of total lumpsum cost quoted in schedule A, expressed as percent	1	Electrical Works	56 %	2	Signalling Works	36.5 %	3	Telecommunication Works	6 %	4	Building & Structure works	1.5 %		Total	100 %	<p>The given apportionment of contract price may not correctly reflect the actual cost composition and may lead to unbalance. Therefore we would request you to allow Bidder to fill Schedule B. Similar approach have been followed in other DFC tenders</p> <p>Kindly modify the tender conditions accordingly.</p>	Request not agreed. The provisions of Bid document are self-explanatory and shall prevail.
S N	Cost Centre of Works	Contract price as proportion of total lumpsum cost quoted in schedule A, expressed as percent																				
1	Electrical Works	56 %																				
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3	Telecommunication Works	6 %																				
4	Building & Structure works	1.5 %																				
	Total	100 %																				
11.	Part 2, Section V(A), Vol 6, Appendices Clause - 2.0 Pg-73 of 130, Appendix – 1 Utilities	The contractor will arrange the right of way/necessary working clearance of trees and other obstructions on either side of the alignment of the line including cutting/trimming of trees falling in the required corridor of Transmission Line and obtaining their statutory clearance. During the construction works, there may be unavoidable damage to crops, trees etc. both in erection of the line and making temporary approach roads to the line. Compensation of this account, if any will be paid directly by the contractor. Any avoidable or deliberate damage done to standing crops or private property by the contractor's laborers shall be contractor's responsibility.	<p>We understand that all statutory clearances and approvals from state boards shall be in scope of employer.</p> <p>If there is any change in compensation laws by government, after submission of bid, same shall be suitably reimbursed by employer to contractor.</p>	The provisions of Bid document are self explanatory and shall prevail.																		
12	High Sea Sales applicability	--	Kindly confirm the applicability of "High sea sales" in this project.	High sea sales is not applicable.																		
13	Part 2, Section V(B), Vol-9 PS Electrical Pg-140 of 263, Cl-18.2.3 Indicative Interface Matrix with IR	Indicative Interface Matrix with IR OHE works pertaining to yard modification of IR will be carried out by IR. IR will allow access and necessary power blocks to interface the DFC lines with the yard lines of IR at Chirailapathu, Bagha Bishunpur and Ganjkhwaja.	<p>The interface works with IR at Junction Stations will require Traffic blocks as well in addition to Power Blocks. We understand that the permission for traffic blocks from IR shall be obtained by DFCCIL similar to Power blocks and any cost towards the same shall be borne by DFCCIL.</p> <p>Please confirm.</p>	Please refer Appendix 13, Part 2, Section V(A), Vol 6. The same will be applicable for power block.																		

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14	Approach road drawings for TSS, SP and SSP Locations		Kindly clarify the scope of approach roads to the TSS, SP & SSP locations. We understand that the same shall be constructed by the Civil contractor.	TSS, SP, SSP locations may be approached through nearest LCs and existing roads available nearby. Specific approach roads are not being constructed for these locations by civil contractors. Temporary approach roads of civil contractors can also be used if available. In case, the approach road is not available, the Contractor shall make his own arrangements.
15	Part 3, Section VII, Pg-26 of 53, Particular Conditions Sub-CI-17.3 Employer's Risks	Sub-paragraph (h) – Delete	The deleted sub-clause, "any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions" shall be retained.	Request not agreed. The provisions of Bid document are self explanatory and shall prevail.
16	Part 2, Section V(B), Pg-80 of 263, CI-13.1.3 (b) ii (b) Proven Design for Non-Traction System	The proposed system / equipment to be used should be of Proven performance and should have been satisfactorily in use in adequate numbers (at least 70% of the estimated quantities) in Metro Rail, Railways or Airports during the last 3 years prior to date of tender opening of this project work. The Contractor shall submit necessary documentary proof in this regard.	Please clarify in detail regarding the submission of proof. Kindly confirm, whether it is required to provide manufacturer's credential or any previous project reference by contractor.  Please also provide approved make list for electrical equipment like MCBs, MCCBs, ACBs (if any).	The provisions of Bid document are self explanatory and shall prevail.
17	Part 2, Section V(B), Vol 9, PS Electrical, Pg-50 of 263, CI - 8.8.5.2 Aerial Earth Wire and buried earth conductor	The design of buried earth conductor, if required, shall be such that.....	Since installation of BEC will be the outcome of Simulation Study, may please clarify if the study eliminates BEC, then also is it required to be provided.	The provisions of Bid document are self explanatory and shall prevail.

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18	Part 2, Section V(B), Vol 9, PS Electrical, Pg-18 of 263, CI - 4.4.2 Proven Design & Cross Acceptance Criteria	The System, including all sub-systems and Equipment shall be of approved RDSO design/ specifications, wherever applicable and shall be subjected to prototype testing as per relevant RDSO Specifications.	May also allow for the procurement of materials from PGCIL/SEB approved vendor when the material is not covered by RDSO/CORE.	Request not agreed. The provisions of Bid document are self explanatory and shall prevail.																										
19	Land acquisition status		Please confirm the Land acquiring status for the following in terms of Percentage. 1. Parallel area 2. Detour area 3 TSS location 4. SSP location 5. SP Location 6. Junction and crossing station yards 7. Other buildings area. We also request DFCCIL to provide the land plans of TSS, SP and SSP location.	The land will be handed over progressively in due course. Tentative sizes of land for TSS, SP and SSP are given in Part 2, Section V(B), Vol 9, PS(Electrical) of Bid document.																										
20	Part 2, Section V(B), Vol 9, PS Electrical, Pg-28 of 263, CI - 6.4.5.5 Maximum Earth Resistance	Table 6.4-1 Maximum Earth Resistance <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">Earth resistance (ohms)</th> <th rowspan="2">Earth</th> </tr> <tr> <th>Each electrode</th> <th>Total system</th> </tr> </thead> <tbody> <tr> <td>RSS</td> <td>5</td> <td>0.5</td> <td></td> </tr> <tr> <td>TSS</td> <td>5</td> <td>0.5</td> <td></td> </tr> <tr> <td>SSP</td> <td>5</td> <td>0.5</td> <td></td> </tr> <tr> <td>SP</td> <td>5</td> <td>0.5</td> <td></td> </tr> <tr> <td>Other Locations</td> <td>10</td> <td>To meet the requirements of EN50122-1</td> <td></td> </tr> </tbody> </table>	Location	Earth resistance (ohms)		Earth	Each electrode	Total system	RSS	5	0.5		TSS	5	0.5		SSP	5	0.5		SP	5	0.5		Other Locations	10	To meet the requirements of EN50122-1		Maximum earth resistance for SP and SSP is specified as 0.5 ohms in Vol.III, Table 6.3-1. We would request to revise it to 2.0 ohms as per the Indian Railways Manual of AC Traction, Volume II, Part II, Para.5.  Please confirm that the maximum earth resistance for SP & SSP as well shall be acceptable within 2.0 ohms as per Indian Railway standards.  Kindly note that the value of Earth resistance has been revised to 2.0 ohms for SP and SSP locations in WDFC E&M tenders.	Refer Addendum No. 1 dated 06.12.2016.
Location	Earth resistance (ohms)			Earth																										
	Each electrode	Total system																												
RSS	5	0.5																												
TSS	5	0.5																												
SSP	5	0.5																												
SP	5	0.5																												
Other Locations	10	To meet the requirements of EN50122-1																												
21.	Part 2, Section V(B), Vol 7, PS Signalling, Pg-139 of 152, CI - 14.2.11	Obtaining all necessary approvals from the relevant authorities for design and construction of the Works.	If approvals are delayed due to reasons not attributable to the Contractor, the Contractor shall be provided extension of time for such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion]. Employer shall not claim delay damages as a result of such delay due to reasons not attributable to the Contractor.	The provisions of Bid document are self explanatory and shall prevail.																										

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22.	Part 2, Section V(B), Vol 7, PS Signalling, Pg-37 of 152, CI-(3) (a)	The foundations of signals must be made of concrete.	Kindly specify the minimum grade of the concrete that shall be used.	Refer addendum no. 2 dated 16.12.2016
23	Part 2, Section V(B), Vol 7, PS Signalling, Pg-141 of 152, CI- 14.6 (6)	Chain Link Fencing shall be provided around SER, TER and S&T Power Supply Equipment Rooms constructed under this Contract. The distance of this Chain Link Fencing from walls of SER, TER and S&T Power Supply Equipment Rooms shall be decided by Engineer during design stage.	Request you to clarify the distance from walls of SER, TER and S&T at which chain link fencing shall be provided at this stage rather than during execution stage as we need to estimate the cost of fencing	Refer addendum no. 2 dated 16.12.2016
24.	General	Horizontal Directional Drilling	We are not aware of space available in the ROW beyond the toe of the formation and hence we can't determine if space is available for construction of trench for Signalling or Telecom cables. Hence it is request that, except for road /platforms /railway track crossing, other HDD (Horizontal Directional Drilling) work may be treated as a variation.	ROW has been indicated in reference document Part IV.
25.	As per FIDIC Yellow Book 1999-Edition, CI-2.2 GC - General Conditions	Permits. Licenses or Approvals.....	Please add as deviation under PCC to include the following at the end of the reference to GC clause 2.2: "If Permits, Licenses or Approvals are delayed in spite of the best efforts from the contractor due to reasons not attributable to the Contractor / Employer, the Contractor shall be provided extension of time for such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion].	The provisions of Bid document shall prevail.
26.	As per FIDIC Yellow Book 1999-Edition, CI-2.5 GC – General Conditions	Employer's claim	Please add the deviation "...as soon as practicable as and not later than 28 days" in line with the provisions given for "Contractor's Claims" in Sub-Clause 20.1, paragraph 1.	The provisions of Bid document shall prevail.
27	General	Plinth level of SERs, TERs, and S&T power supply equipment room at cutting location.	Please clarify the building plinth level at cutting location whether it is at natural ground level or at rail level.	Plinth level shall be as mentioned in relevant para of Bid document irrespective of whether it is in cutting or embankment.

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28.	Part 2, Section V(B), Vol 7, PS Signalling, Pg-42 of 152, Cl- (i) Evaluators	A standby Evaluator with complete programming and configuration shall be provided for every Evaluator at Stations and Block Sections with arrangement for switch over using a single switch. After every change over, the track sections shall go in error state and shall have to be reset as per manual resetting procedure.	<p>In a scenario where an axle counter solution does not have track side electronics but indoor electronics system, please confirm that standby evaluator is required only for the system which delivers the axle counter track status to the interlocking and not for the indoor electronics system that interfaces with track detection points.</p> <p>In addition, please confirm that in case of an axle counter solution with inherent hot stand-by configuration, it is not necessary to have the track sections in an error state at change-over</p>	Refer addendum no. 2 dated 16.12.2016
29.	Part 2, Section V(B), Vol 7, PS Signalling, Pg-57 of 152, Cl-7.1 General Requirements	<p>6) The system shall enable interconnection with other TMS systems of adjacent sections/backup OCC/ OCC which will be provided by other contractors of EDFC. The Integration of TMS at OCC with other TMS system shall be in the scope of this System Contract.</p> <p>7) The system shall have all the capability built into it to be configured at a later stage for remote control of Signalling System for use as Centralized Traffic Control (CTC) System from OCC with minimum configuration changes and no hardware add-on. Alternatively it shall be possible to control the TMS provided in this contract from CTC, provided in OCC by other contractor. The Contractor shall seek clarifications in this regard from the Engineer in the early stages of the project. The decision of the Engineer in this regard shall be final</p>	<p>We need to have necessary SDK/API (Software development kit /Application package interface) including but not limited to protocol.to be made available to us in a time bound manner by the provider of the TMS system of adjacent sections. We request DFCCIL's confirmation that it will extend all assistance to the contractor get the above in time.</p> <p>We also wanted to mention that TMS &amp; CTC both are different by its individual nature of functionality. As per requirement of tender it is observed the TMS is required to be controlled through the future CTC with the same available hardware. For this purpose complete TMS will have to shut down for indefinite periods of time which is an impractical solution. Hence, we request you to delete this requirement of controlling the same TMS with CTC. For future server based CTC separate software having only controlling feature may be add on directly with interlocking without interfacing with TMS is more viable and practical solution. For that purpose CTC Central/Stations independent server shall be separately provided with the main CTC software in future.</p>	<p>For item no 6) Refer Item No. 11 at Pg 16 of 130 of Part2, Section V(A), Vol 2 ,General specification. It is the responsibility of Bidder/Contractor to coordinate with interfacing contractors for his design, manufacturing, installation, construction etc.</p> <p>For item no 7) Request not agreed. The provisions of Bid Document shall prevail.</p>
30	Part 2, Section V(B), Vol 7, PS, Signalling, Pg-97 of 152, Cl-8.3.14 Track crossing	(1) As far as possible, the cable shall be crossed from one side of the yard to the other, at minimum number of locations.	To reduce the No. of track crossing, Signaling cable can also be laid in both up & down trench in stations & block sections. Please advice	The provisions of Bid document shall prevail.



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31.	Part 2, Section V(B), Vol 8, PS Telecom, Pg-111 of 114, Annexure 4	Contract Spares	Spare items quantities mentioned for some of the items are exceptionally high. As per experience, much lesser spares will be needed. Please revise the quantity.	Request not agreed. The provisions of Bid document shall prevail.
32	Part 2, Section V(B) Vol 7, PS Signalling, Pg-120 of 152 Clause 11.3.6 (8) Special Tools and Test & Measuring Equipment.	Complete tool kit for maintenance of EI as per the recommendations of the manufacturer in a suitable carrying case. Nos. 1 at each EI	As per prevailing practice, it is recommended to provide tool kit for EI at Station area only and not at ALH as primarily processing is handled at station area while ALH is handling field input/output function. So it is recommended to have 1 toolkit per station and two toolkits per block section 1 for auto block East and 1 for Auto block West.	Request not agreed. The provisions of Bid document shall prevail.
33	Part 2, Section V(B) Vol 7, PS Signalling, Pg-149 of 152 Annexure 4 (8)	A common indication panel shall be provided in the gate hut, where indication for the 'On' and 'Off' aspect of gate signals for both the system as also the occupation/clearance of the controlling track circuit up to the point of approach warning shall be displayed. Direction of movement of the train shall also be displayed in the panel.	The signal & Track information along with approach locking / warning of Indian Railways (IR) lines should be brought up to new gate lodge to be provided under this tender by IR. Please clarify.	All interface works for LC gates commissioning are in the scope of this contract. Interfacing work shall be done as per approved LC Gate circuits. Final approval of LC Gate circuits shall be done by IR. Pl refer Para 6.1.6(1)(k) Vol 7, PS Signalling. The provisions of Bid document shall prevail.

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34	Part 1, Section I, Pg-17 of 48, Cl -16.5 Instructions to Bidders	16.5 The bid security may be forfeited: (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bids, except as provided in ITB 15.2 or (b) if a Bidder misrepresents or omits any material the facts in order to unfairly influence the procurement process; (c) if the successful Bidder fails to: i) Sign the Contract in accordance with ITB 34; ii) Furnish a performance security in accordance with ITB 33; iii) Accept the correction of its Bid Price pursuant to ITB 28.2;	We request you to reword the clause as follows:  16.5 The bid security may be forfeited if (a) a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bids, except as provided in ITB 15.2 (b) if a Bidder misrepresents or omits any material the facts in order to unfairly influence the procurement process; (c) The <b>bid security of the successful Bidder</b> may be forfeited if the successful Bidder fails to: (i) sign the Contract in accordance with ITB 34; ii) furnish a performance security in accordance with ITB 33; iii) accept the correction of its Bid Price pursuant to ITB 28.2;	The provisions of Bid document are self explanatory and shall prevail.
35.	Part 2, Section V(B), Vol 9, PS Electrical, Pg-12 of 263, Cl-3.3.2 (i) 25 kV OHE system for loop lines in stations and connection chords o Indian Railways	25kV Overhead Equipment (OHE) system for loop lines in Junction & Crossing Stations including the connection chords to Indian Railways. The conductor type, size and tensions are to be kept the same.	As per the tender conditions of other ongoing DFCC projects, it has been asked to use the 65mm <sup>2</sup> catenary and 107 mm <sup>2</sup> contact wire for the lines where a conventional 25kV OHE has to be erected because it is sufficient to consider that. Kindly clarify if we still need to abide as per tender for this.	The provisions of Bid document are self explanatory and shall prevail.
36.	Part 2, Section V(B), Vol 9, PS Electrical, Pg-28 of 263, Cl-6.4.5.5 Earth Resistance of SP and SSP	Maximum Earth Resistance for SP and SSP is given as 0.5 ohms.	In an area as small as given for SP and SSP, achieving the earth resistance as low as 0.5 ohms is not possible. Also as per the tender conditions of other ongoing DFCC projects, this value is given as 2 ohms. Kindly confirm if this value is okay to be considered for this project as well.	Refer Addendum no. 1 dated 06.12.2016.

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37	Part 2, Section V(B), Vol 9, PS Electrical, Pg-19 of 263, Cl - 4.7.1 Rolling Stock Characteristics	The headway of 12 minutes is for running of trains <b>6500 t/13000 t</b> in the ratio of 2:1.	As per tender conditions of New Durgauti to Karwandiya project, the same characteristic is given as "The headway of 12 minutes is for running of trains <b>6000 t/12000 t</b> in the ratio of 2:1." Also the headway and loading is different for stretch between Mughalsarai to Bhaupur (13 minutes headway). Moreover it is not practical to have headways as low as 12 mins for such heavy loading.  Having different input conditions on different sections of the same corridor will lead to non-uniformity in the design of the system. Therefore, kindly revise the input conditions in line with the existing intermediate New Durgauti to Karwandiya project.	Refer Addendum no. 2 dated 16.12.2016.
38	Part 2, Section V(B), Vol 9, PS Electrical Pg-25 of 263, Cl-6.1.1 Conceptual drawings of scheme of Power Supply	Conceptual drawings of Scheme of Power Supply for 2x25 kV AT system of the section, New Durgauti RSS/TSS, SP, SSP are given in Appendix A, B, C & D respectively.	We couldn't locate the mentioned appendices. Kindly provide with the missing portion.	All the Appendix are available in the Bid document.  Plz see page no. 131 to 134 of page 263, Part 2, Section V(B), Vol 9, PS (Electrical)
39	Part 2, Section V(B), Vol 9, PS Electrical Pg-35 of 263, Cl -7.1.2 (a) Capacity of Traction transformers	to enable uniform capacity of Traction Transformers to be used on the route.	As it is a further extension of section New Durgauti - Karwandiya, so we believe it should be okay to consider traction transformers of capacity as taken in the previous section without going for a simulation. Kindly clarify the same.	Please refer clause 7.2.2 where capacity of Traction Transformer is clearly written.
40	Part 2, Section V(B), Vol 9, PS Electrical Pg - 35 of 263, Table-7.2.2 % impedance of traction transformer	% impedance of traction transformer of rating 60 MVA is given as 11%.	As per the tender conditions of the other ongoing DFCC projects, this value is given as 11-13%. In order to keep uniformity with those projects and for cost optimization, we suggest changing the specified value to 11-13%. Kindly confirm the same.	Refer Addendum no. 1 dated 06.12.2016.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
41	Part 2, Section V(B), Vol 9, PS Electrical Pg - 41 of 263, Cl- 7.2.10 Protection scheme for RSS	Protection scheme for 220kV/132kV RSS should be based on principles followed by PGCIL following latest IE rule.	Kindly provide a suitable reference for the same.	Being a design build and Lump sum contract, the designated contractor shall study the relevant documents/standards and develop the system after taking approval of the Engineer.
42	Part 2, Section V(B), Vol 9, PS Electrical Pg-38 of 263, Cl-7.2.4 Rating of Auto- Transformer	Specification for 8 MVA autotransformer is furnished in annexure XIV of Vol. 9(PS Electrical). And in Table 7.2.4-1, power rating has to be given as 10 MVA.	The two statements are conflicting. Kindly clarify which value to be considered. If it is 12 MVA, then please provide the specification for the same.	Please refer clause number 7.2.4, part-2, Section-V(B), Vol-9 PS-Electrical which is self explanatory.
43	Part 2, Section V(B), Vol 9, PS Electrical Pg-44 of 263, Cl-8.1.1 (e) Auxiliary Transformer	Installation of 25kV/240V Auxiliary Transformers for LT Power Supply at level crossing gates, signal and telecommunication huts and station buildings including Automatic Change-over switch.	Kindly provide the rating as well as quantity for the auxiliary transformers to be provided.	This is a design work. The designated contractor should study and design the system and submit the rating and quantity to the Engineer for approval during execution.
44	Part 2, Section V(B), Vol 9, PS Electrical Pg-31 of 263, Cl-6.10.7 Earthing & Bonding	The contractor shall design earthing and bonding arrangement for OHE through computer based stimulation. Rail accessible and touch potential within safe limits under normal and fault conditions including configuring earthing and bonding for the entire system (including those on adjacent structure and IR lines running parallel to DFC alignment),	We assume that the simulation will only be restricted for the DFCC OHE. If some specific requirement for Earthing & bonding arises in IR due to the simulation of DFCC system, we will consider then. Kindly confirm the same.	Please refer Addendum No.2 dated 16.12.2016.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
45	Part 2, Section V(B), Vol 8, PS Telecom, Cl-2.1.4 Fibre Optic System	All the control circuits of New ERC Mughalsarai to New Sonnagar.....All works from / up to RCIL POPs to OCC will be carried out by the system Contractor.	<p>1) We understand that all the control circuits at temporary OCC, Mughalsarai will be extended to OCC Allahabad through RCIL equipments. The control circuits at OCC have digital and IP Phones whose extension through RCIL network will not be easily possible</p> <p>2) We request seamless integration of CP 203 at Mughalsarai with present scope without involving RCIL for transfer of channels</p> <p>3)Temporary OCC can be removed and all equipments can be shifted to OCC Allahabad</p> <p>4) If RCIL Network is used , we assume that DFFCIL will hire the required bandwidth for extension and required interface card at RCIL</p>	Refer Addendum no. 1 dated 06.12.2016.
46	Part 2, Section V(B), Vol 8, PS Telecom, Cl-5.3.7.6 Pg 25 of 114 Fibre Optic System	The Flexible Access Multiplex Equipment shall be provided with 1+1 Redundancy...provided in Flexible Access Multiplex Equipment.	AS per our understanding, redundancy of all channel levels (voice & data) will be received at network/channel level and port level redundancy will not be required. Please clarify the same.	Refer Addendum no.2 dated 16.12.2016.
47.	Part 2, Section V(B), Vol 8, PS Telecom, Cl-5.5.3.3.7 Pg. 31 of 114 Fibre Optic System	Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels	We understand that 1+1 protection for all channel levels are assumed at network side connectivity and not applicable at port level	Refer Addendum no. 2 dated 16.12.2016.
48.	Part 2, Section V(B), Vol 8, PS Telecom, Cl-7.3.7.2 Pg. 44 of 114 EPABX & DLT System	The Direct Line Telephone Network shall be built using PBXs at OCC and.....make Direct Line Telephone Network more reliable and non-blocking	We understand that PBX will be used for admin telephone network & DLT Network will have logical separation between two networks and have separate extension / line interface for both the network. Please confirm	The Bidder's understanding is correct.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
49	Part 2, Section V(B), Vol 8, PS Telecom, 9.5.5 Pg 66 of 114 Master Clock	The Master Clock System shall be capable of working from 230 volts +/- 20% AC 50 Hz supply.	Since we have 48 V stable power at all telecom locations , we request Master Clock system also to be made workable at 48 V	Operating voltage of sub master clock installed at stations shall be finalized at design stage as approved by the Engineer.
50	Part 2, Section V(B), Vol 8 PS Telecom CI - 11.2.2 Pg 72 of 114 48 V DC BATTERY BACKUP SYSTEM REQUIREMEN TS	Provision of suitable Earth Leakage Detection and Alarms shall be made individually at each location (OCC, Station, Auto Signal Location, LC Gate Location, etc.).	We understand that additional equipment for earth leakage detection will not be required and it will be an inbuilt system of the power system. Please confirm.	Refer Addendum No. 1 dated 06.12.2016.
51.	Part 2, Section V(B), Vol 8, PS Telecom, cl- 11.3.5 Pg 72 of 114. 48 V DC BATTERY BACKUP SYSTEM REQUIREMEN TS	The Battery Backup System shall include.....and vice versa and Load Distribution arrangement.	We understand the changeover logic system with change over from battery 1 to battery 2 and vice versa will be a passive device and not an automatic change over system. Please Clarify	The Bidder's understanding is correct.

S.N.	Reference to Bid Document	Available Terms						Clarification sought by Bidder	DFCC's Response	
52	Part 5, Price Schedules Pg-26 of 56 D- Payment procedure	Cost Centre	Item of work	Sub-Cost Centre	Stage Payment (Stage to be completed to Qualify for Payment of Sub-Cost Centre)	Weightage (%)	Cost	Payment Procedure	<p>We refer the payment procedure given in the price schedule and understand that the contractor shall be eligible for payment for supplies even for part quantities on a pro-rata basis.</p> <p>Kindly confirm.</p> <p>This shall improve the cash flow of the contractor</p>	The provisions of Bid document shall prevail.
			Supply of material	D2.1/ D3.1	Supply of Signalling Cable, Power cable and Quad Cable	24	3 % of the Contract Price for Price Schedule D [Signalling Works]	On supply of material at site as per approved quantity duly inspected by the appropriate authority and verified by the Engineer		
				D2.2/ D3.2	Supply of EI hardware equipment along with associated accessories	17				
				D2.3/ D3.3	Supply of power supply equipment and batteries along with associated accessories	3				
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		<p>Note:</p> <p>1. Payment will be made on completion of each Payment Stage as per weightage given in this schedule subject to approval to this effect by the engineer</p>								

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
53	Part 5 Price Schedules Preamble	Lump sum Cost shall be quoted in Schedule A. Apportionment of the quoted Lumpsum cost between Electrical Works, Signalling & Telecommunication and Building & structure Works is set out in Schedule B and is not negotiable. Costs are further pre-apportioned amongst cost centres and sub-centres for works of Electrical, Signalling and Telecommunication and Building & structure in Schedules C, D, E and F as indicated in respective Schedules. Stage payments shall be regulated accordingly.	<p>Many of the cost centres and sub-cost centres defined in the price schedule are for lumpsum items of group of activities. Stage payments for such lumpsum items are withheld until the all the activities mentioned in the cost centre are completed. This affect the contractor's cash flow adversely.</p> <p>Therefore, we request DFCC to allow bidder to propose further breakdown of these sub-cost centers for some major items and clearly identifiable activities, keeping the overall weightage (%) same. This shall ease out contractor's cash-flow and result in better progress.</p> <p>The same can be proposed as an annexure to the price bid by the successful bidder after the issue of LOA and before contract signing.</p>	Request not accepted. Provisions of Bidding document shall prevail.
54	General	Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.	<p>Ref: Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.</p> <p>During recently concluded 61st Electrical Standard Committee meeting (ESC meeting) held at Gangtok on 16th and 17th Sept, 2016, it has been advised to use of B-Series mast in place of K, BFB, RSJ in future Railway Electrification projects. Copy of the letter is enclosed.</p> <p>Kindly confirm if the same needs to be considered by bidder for this project.</p>	The provisions of bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.
55	General	Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.	<p>Ref: Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.</p> <p>During recently concluded 61st Electrical Standard Committee meeting (ESC meeting) held at Gangtok on 16th and 17th Sept, 2016, it has been advised to increase the height of OHE masts from 9.5 mtr to 9.8 mtr in all future Railway Electrification projects. Copy of the letter is enclosed.</p> <p>Kindly confirm if the same needs to be considered by bidder for this project.</p>	The provisions of bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.
56	General	Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.	<p>Ref: Letter no SWR/EL/W-698 from the office of the Chief Electrical Engineer, Hubli, Dated 23.09.2016.</p> <p>During recently concluded 61st Electrical Standard Committee meeting (ESC meeting) held at Gangtok on 16th and 17th Sept, 2016, it has been advised to shift from MCI fittings to only forged fittings for all new Railway Electrification works. Copy of the letter is enclosed.</p> <p>Kindly confirm if the same needs to be considered by bidder for this project.</p>	The provisions of bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.



S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response																		
57	Pat 2, Vol. 9, PS Electrical, Appendix-A to D	Schematic, TSS, SP & SSP drawings	The drawings are not legible. We request you to issue the drawings in A3 size or in AutoCAD format.	The drawings in pdf format is attached.																		
58	Part 3, Section VII, PC, Sub-clause 13.8, Price Variation Pg 17 of 53	Presently price variation formula for Copper conductor and Transformers are given	Steel structures required for OHE constitute a major portion of the cost in Electrical. We request to provide PV formula for Steel structures.	Request not accepted. The provisions of Bid document shall prevail.																		
59	Part 5, Price schedule, Schedule B Pg 7 of 56	Apportionment of contract price for payments of Electrical Signal & Telecommunication and Building and Structure works <table border="1" data-bbox="445 597 1018 1107"> <thead> <tr> <th>SN</th> <th>Cost Centre of Works</th> <th>Contract price as proportion of total lumpsum cost quoted in Schedule A expressed as percent</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Electrical Works (Schedule C)</td> <td>56%</td> </tr> <tr> <td>2</td> <td>Signalling Works (Schedule D)</td> <td>36.5%</td> </tr> <tr> <td>3</td> <td>Telecommunication Works (Schedule E)</td> <td>6%</td> </tr> <tr> <td>4</td> <td>Building &amp; Structure works (Schedule F)</td> <td>1.5%</td> </tr> <tr> <td></td> <td>Total</td> <td>100%</td> </tr> </tbody> </table>	SN	Cost Centre of Works	Contract price as proportion of total lumpsum cost quoted in Schedule A expressed as percent	1	Electrical Works (Schedule C)	56%	2	Signalling Works (Schedule D)	36.5%	3	Telecommunication Works (Schedule E)	6%	4	Building & Structure works (Schedule F)	1.5%		Total	100%	We request you to allow the bidder to decide % of cost center's based on their costing.	Request not accepted. The provisions of Bidding document shall prevail.
SN	Cost Centre of Works	Contract price as proportion of total lumpsum cost quoted in Schedule A expressed as percent																				
1	Electrical Works (Schedule C)	56%																				
2	Signalling Works (Schedule D)	36.5%																				
3	Telecommunication Works (Schedule E)	6%																				
4	Building & Structure works (Schedule F)	1.5%																				
	Total	100%																				
60	Part 2, Section V(B), Vol 9, PS Electrical Clause 8.8.1 Pg 50 of 263	Sizes of Conductor	OHE conductors of different sizes are specified. It is also mentioned that AEW and BEC of adequate size is to be used. Since, M/s L&T is already executing NEW KARWANDIYA – NEW DURGAUTI section, we request you to provide all the conductor sizes being used by M/s L&T. It will be better to follow the same technical specifications of different equipment's and sizes of conductors for synchronization.	The size of important conductors have already been mentioned in Clause 8.8 (Table No. 8.8 -1). The designated contractor has to develop further detailed design during execution.																		
61	General	Extension of time.	We request for an extension of 8 weeks to submit most economical bid.	Refer Addendum no.2 dated 16.12.2016.																		

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
62	Part 2, Section V(B) Vol 8, PS Telecom Cl-3.6.8, Pg-16 of 114	Inter-system EMC  IEC Code	Will the material be imported in IEC code of the client or contractor has to use its IEC code, requested to please confirm.	The clause 3.6.8 is self explanatory.
63	General	-	Can each consortium partner invoice the client through leader and paid directly into its account, requested to please confirm.	No. The A/c should be in the name of JV.
64	Part 3, Form - CF 6, Pg-43 of 53	Memorandum of Understanding for a Subcontracting Agreement.	Is the form Memorandum of Understanding for a Subcontracting Agreement CF-6, applicable to each subcontractor or only for Specialized Subcontractor, please clarify.	The MoU is applicable to every sub-contractor.
65	Part 3, Section VIII Contract Forms Sub-Clause 14.1, Pg-43 of 53	The Contract Price includes all duties, taxes, royalties, premiums for various insurances, licenses and fees that may be levied in accordance with the laws and regulations in force as on the Base Date on the Contractor's Equipment, Plant, Materials and supplies acquired for the purpose of the Contract and on the services performed under the Contract.	Is the customs duty exempted like for APL1 and APL2 package (World Bank Funded), please confirm.	No, Custom duty is not exempted. However, the bidder should further study the applicable taxes and duties on his own.
66	General	-	Is the service tax applicable or not, please confirm.	The bidder should study the applicable taxes and duties on his own.
67	Part-2, Section V(A), Vol 5, Installation, Testing and Commissioning Cl-12.4 (5) Pg 42 of 130	Access roads and parking areas shall be provided within the Site as required and shall be maintained in a clean, acceptable and stable condition.	Kindly confirm that the access road to TSS, SP and SSP is not in Contractor's scope of work	TSS, SP and SSP locations may be approached through nearest LCs and existing roads available nearby. Specific approach roads are not being constructed for these locations by civil contractors. Temporary approach roads of civil contractors can also be used if available. In case, the approach road is not available, the Contractor shall make his own arrangement.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
68	Part-2, Section V(A), Vol 5, Installation, Testing and Commissioning Cl-15.1 (1) Pg 48 of 130	The Contractor shall co-ordinate during the planning and execution of works with designated Contractors for other related activities e.g. Track, Civil work etc. for construction of the complete system of Dedicated Freight Corridor.	Request to kindly provide the civil schedule and milestone for completion of work as Electrical work is completely dependent on the front availability. Any delay will have financial impact at a later stage.	Please refer Sub clause 2.1 of Appendix to tender, Part 3, Section VII, Particular conditions of the Bid document.
69	General	Regarding High Sea Sales	Please confirm that High Sea Sales is applicable during execution	High Sea sales is not applicable.
70	Part-3, Section VII, Particular Conditions Pg 29 of 53	<b>Mobilization Advance:</b> The Employer shall pay on written request by the Contractor a Mobilization Advance up to (Ten) 10 per cent of the Contract Price at an interest rate of 4.5% per annum above the MCLR of State Bank of India for two years tenor as effective on the date of approval of payment of mobilization advance by the competent authority, compounded yearly. The Mobilization Advance shall be released in two installments as under:(a) Upto (Five) 5 percent: On Submission of Performance Security and commencement of mobilization process; and(b) Upto (Five) 5 percent: On Submission of the preliminary designs and details of utilisation of initial Mobilization Advance of 5% to the satisfaction of Engineer.The Advance Payment will be released on submission of unconditional Bank Guarantee for an amount equivalent to 110% of the component of the advance payment requested by the Contractor.Note:The Contractor shall have a onetime option to reduce the Bank Guarantee for the mobilization advance by the amount already recovered, once the 50% of mobilization advance has been recovered.	Bidder requests the Employer to accept 6 equal Bank Guarantee (BG) against 10% Mobilization advance and release the same one by one whenever the value of each BG has been recovered by the Employer.This system is functional in all govt. Agencies responsible for Railway Electrifications.	Request not accepted. The provisions of Bidding document shall prevail.
71	General	Detail Site Survey	As this project is design build basis for which bidder need to do detail Engineering, preliminary survey etc., bidder requests the Employer to accept queries up to 20 days before submission of the bid.	Please refer clause no. 6.1 of Part 1, Section I, Instruction to Bidders. However, it will be tried that queries raised upto 20 days before submission of the Bid are replied for the improvement of the Bid.
72	General	Regarding FOB, RUB, ROB	Please provide us the details of FOB, RUB, ROB and major and minor bridges details for effective design review.	These details are given in Plan & Profile provided in Part-4 'Reference Documents'. Please refer the same.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
73	General	Regarding Sale in transit	Our understanding is that a) DFCC will provide 'C' Form for the inter- state sale transactions. b) Road Permits / Way Bills will be issued by DFCC as applicable under the U.P. VAT laws.	DFCCIL will not provide "C" form regarding sale in transit. Also, No Road permits/Way bills will be issued by DFCCIL.
74	General	Bid Extension	As lot of documents are required for Technical/Financial Bid preparation, so you are requested to kindly extend the Tender due date by Eight Weeks	Refer Addendum no.2 dated 16.12.2016
75	Part 2, Section V(A), Vol 1, Scope of work Clause 4.3 Pg 7 of 130	The design of all the works will be operationally compatible with the other Indian Railways (IR) and DFCCIL sections connecting to the Project. All the Signalling & OHE works on IR stations/yards except interface works with DFC in connection with Yard remodelling shall be carried out by IR and is not a part of the scope of work of this contract.	We understand all modification works for the existing IR stations/ yards will be taken care by IR. Please confirm.	All interface (DFCC and IR) works shall be in the scope of this contract, however any modification work at existing IR station shall be done by IR.
76	Part 2, Section V(B), Vol 7, PS Signaling, CI - 1.3.1.1 Pg 5 of 152	Design and implementation of the Signalling works including Electronic interlocking and power supply arrangements at five junction stations viz New ERC(East receiving cabin)- Mughalsarai, New Ganjkhwaja, New Sonnagar & New Chirailapathu along with one DFC junction station at New Sonnagar Link and interfacing of S&T works at New Durgauti and New Karwandiya stations (under commissioning by DGON-KWDN system contractor).	Please provide detailed specifications of required Interfacing of S&T works at New Durgauti and New Karwandiya stations (under commissioning by DGON-KWDN system contractor).	This pertains to design stage and system contractor should study the interfacing requirement and submit the design.
77	Part 2, Section V(B), Vol 7, PS Signaling, Clause - 1.3.1.2 Pg 5 of 152	Design and Implementation of Absolute Block/Slot working on single/Double lines connecting DFCCIL and IR stations viz. New ERC Mughalsarai to ERC Mughalsarai, New Ganjkhwaja to Ganjkhwaja (IR), New Chirailapathu to Chirailapathu (IR) and New Sonnagar to BagahaBishunpur (IR) and New ERC-Mughalsarai to APL2 section at New Mughalsarai.	In view of clause 1.3.1.2; in view of the short distance between New ERS MGS –New MGS (APL2) can we suggest automatic working. In view of short distance between New ERC Mughalsarai to ERC Mughalsarai, New Ganjkhwaja to Ganjkhwaja (IR), New Chirailapathu to Chirailapathu (IR) and New Sonnagar to BagahaBishunpur (IR) can we suggest slot working in lieu of single/Double line block working? Please confirm this is acceptable. Kindly provide the scope of supply of block instruments at the IR station interface.	The provisions of Bidding document are self explanatory and shall prevail.
78	Part 2, Section V(B), Vol 7, PS Signaling, Clause - 1.6.2 Pg 7 of 152	The Signalling System's electronic equipment shall be designed and supplied for a Design Life of 20 years and associated wayside equipment shall be designed and supplied for Design Life of 30 years. The contractor is required to supply latest version of Signal & Telecom equipments as per the latest guidelines issued from RDSO at the time of procurement.	The design life of the Electronic Signaling System shall be minimum 15 years while the minimum design life of S&T equipment/ components shall not be less than that stipulated in the Finance Code of Indian Railways with latest amendment. Please amend clause accordingly.	Refer Para 4.2. Procurement of signaling equipments shall be done as per RDSO guidelines.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
79	Part 4, Reference document, General		Please provide Centre line chainage of New ERC MGS & New Durgauti station in Junction arrangement plan.	Refer Part 2, Section V(A), Vol I, scope of works, approximate center line chainages of stations are given
80	Part 4, Reference document, General		Please provide Centre line chainage & point chainages in Junction arrangement plan of New Ganjkhwaja. In proposed railway arrangement at Ganjkhwaja yard, crossover/ points are not shown towards MGS end. Please provide	Refer Part 2, Section V(A), Vol I, scope of works, approximate center line chainages of stations are given and other chainages can be worked out accordingly.
81	Part 4, Reference document, General		Junction arrangement plan of New Durgauti & New Karwandiya are required to interface existing DFCC stations with APL3 work. Please provide.	Query not clear. The provisions of Bid document shall prevail.
82	Part 4, Reference document, General		In New Karwandiya station, Hot axle siding is shown by dotted line which is missing in legend. Please clarify.	Dotted line is used for future provision in this plan.
83	Part 2, Section V(B), Vol 7, PS Signaling, Clause - 1.1.10 Pg 4 of 152	It is an objective of this contract to ensure that Signalling and telecommunication system shall be compatible with the existing S&T system in New Durgauti- New Karwandiya section of DFCCIL.	Please clarify details of the existing S&T system in New Durgauti- New Karwandiya section of DFCCIL to be interfaced.	EI is of SIEMENS make duly inspected by RDSO. Provision of Bidding document shall prevail.
84	Part 4, Reference document, General	Design and Implementation of a Train Management System (TMS) for supervision, management and monitoring of train traffic on the Mughalsarai- New Sonnagar & New Chiraillapathu section. This shall include the provision of Video Wall Display for Signalling and SCADA system for Mughalsarai to New Sonnagar & New Chiraillapathu including New Durgauti- New Karwandiya section. All interfacing work at existing EIs of New Durgauti – New Karwandiya Section of DFCCIL shall also be done by system contractor for exchanging information from EIs through appropriate Communication interface in respect of train management system works	Hardware & Software details are required for interfacing work at existing EI of New Durgauti to New Karwandiya. Please provide the detail.	The provisions of Bidding document are self explanatory and shall prevail.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
85	Vol 7, PS Signaling, General		We understand all modification works for the New Durgauti – New Karwandiya (under commissioning by DGON-KWDN system contractor) is not a part of the scope of work of this contract. Please confirm	The yard remodeling work at New Durgauti, New Karwandiya station is part of the scope of this contract and any other modification done in as New Durgauti-New Karwandiya section due to signaling design given by the contractor for this section affecting New Durgauti-New Karwandiya section shall be in the scope of this contract.
86	Part 2, Section V(B), Vol 7, PS Signaling, Cl - 6.1.6(1)(b) Pg 43 of 152	There are level crossing gates in New ERC Mughalsarai-New Sonnagar & New Chiraillapathu section, which are being replaced by ROB/RUB in a phased manner. It is anticipated that ROB/RUB work on few LC gates is not Likely to be completed before the commissioning of the section. Therefore, these LC gates will be required to be interlocked. List of level crossings is given at Annexure 3. Tentative Working of level crossing gates is given in Annexure 4.	There are 23 no. of LX are mention in Annexure-3. Please confirm the no. of LX to be taken in scope of work of this contract.	For bidding purpose, 23 no. of LC gates to be considered. The actual no. of LC gates may vary at the time of execution of the work. Refer Part 5, Price Schedule D9.
87	Part 4, Reference document, General		Chainages shown towards HWH end in New MGS connection plan are not readable. Please provide comprehensible reference inputs.	Please refer part yard plan of Mughalsarai provided in Part 4, Reference document.
88	Part 2, Vol 7, Section V(B) PS Signaling, Clause - 6.1.6 (1)(i) Pg 44 of 152	The gateman shall be provided with facility to put back the gate signals to ON in case of emergency.	As presently this is not the practice followed in IR presently, we understand .this is applicable only for the DFCC line. In the event of this being extended to IR lines consequent to the EDFC lines coming in vogue, we presume the necessary works for the IR lines will be carried out by IR. Please confirm	The provisions of Bidding document are self explanatory and shall prevail.
89	Part 2, Section V(B), Vol 7, PS Signaling, Cl- 12.5.1 Pg 126 of 152	The Contractor shall undertake design co-ordination with other contractor(s) and Indian Railways.	Contractor scope should be limited to provide clarification to Indian Railways as when needed. DFCC should own the responsibility in seeking the approval from Indian Railways. Please amend clause accordingly.	The provisions of Bidding document are self explanatory and shall prevail.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
90	Part 2, Section V(B), Vol 7, PS Signaling, Cl - 14.4.2 Pg 139 of 152	The Signalling & Telecommunication equipment particularly the electronic based equipment are sensitive to dust and the temperature. As such SERs, TERs and S&T Power Supply Equipment Rooms are required to be designed so that there is proper ventilation and the temperature inside the rooms does not raise much above the ambient temperature. These rooms should also be dust resistant so that the performance of the equipment does not degrade during its rated life cycle.	Please specify the temp range of SER, ALH & Power supply room.	It is a design factor and shall be proposed by the Bidder/Contractor. The provisions of Bidding document are self explanatory and shall prevail.
91	Part 2, Section V(B), Vol 7, PS Signaling, Cl - 9.7.6 Pg 113 of 152	After the successful Trial Run and after obtaining statutory clearances / approvals from CRS and or other relevant authorities, the Works shall be commissioned with the consent of the Engineer.	We understand that getting CRS approval is the responsibility of the DFCC official and not by contractor. The contractors; responsibility shall be only to provide all relevant documents as per prevailing practice on IR.	The understanding of the bidder is correct. The provisions of Bidding document are self explanatory and shall prevail.
92	Part 2, Section V(A) Vol 3, Design Procedure and Processes, Cl - 2.0 (9) Pg 21 of 130	After approval of the Engineer the Contractor may proceed to the next stage of the Project for obtaining notice of No Objection.	We presume that the Notice of No Objection is equivalent to the procedure of getting approval of the drawings. What will be the time period in days to issue approval / No objection Certificate for the preliminary design and detailed design?	The provisions of bidding document shall prevail.
93	Part 2, Section V(A), Vol 2, General, Clause - 16.0 (1) Pg - 17 of 130	The proposed alignment, yard plans listed in Part 4 "Reference Documents." are for reference purpose only.	If the drawings are only for reference then any deviation in the plan in future to be paid as variation. Please clarify.	Not accepted as this is a design build lump sum contract.
94	Part 2, Section V (B) Vol 7, PS Signalling Pg 4 of 152 Clause 1.1.5	The maintenance cost of the system should be kept to the minimum. The signaling system should therefore be designed to require minimal maintenance and a suitable maintenance strategy shall be agreed with the Employer. The strategy shall incorporate the use of diagnostic data acquisition and storage to support the system maintenance authority.	Please indicate target figure of maintenance cost of the system.	Request not agreed. This is to be assessed by the Bidder/Contractor as per the provisions of Bidding Document.
95	Part 2, Section V (B) Vol 7, PS Signalling Pg 4 of 152 Clause 1.1.8	It is an objective of this contract to minimize the energy cost. The signaling system shall be designed for minimum energy consumption.	Please indicate target figure of energy consumption of S&T system.	Request not agreed. This is to be assessed by the Bidder/Contractor as per the provisions of Bidding Document.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
96	Part 2, Section V (B) Vol 7, PS Signalling Pg 4 of 152 Clause 1.1.10	It is an objective of this contract to ensure that Signalling and telecommunication system shall be compatible with the existing S&T system in New Durgauti-New Karwandiya section of DFCCIL.	It's difficult to commit the compatibility without detailed specification of S&T supplier in such section. Please share the details of it with us.	Request not agreed. This is a design feature and to be assessed by bidder as per the clause given in Bid Document.
97	Part 2, Section V (B) Vol 7, PS Signalling Pg 5 of 152 Clause 1.2.4 5 of 152	It is a requirement that Digital Axle counter technology is used to provide primary track vacancy detection function at the Stations and the Block Sections. The Track vacancy detection system architecture including size, numbers and locations shall be determined by the contractor's design. The OFC, if used for communication between the Evaluator and the track devices shall be provided under PS Telecommunication.	For track vacancy detection function, Audio frequency Track circuit is also another solution. Please confirm if we can propose AFTC in place of DAC.	Request not agreed. The provisions given in Bid Document are sufficiently clear and shall prevail.
98	Part 2, Section V (B) Vol 7, PS Signalling Pg 5 of 152 Clause 1.2.5	The Power Supply for the Signalling System shall be provided using Integrated Power Supply (IPS)/Uninterrupted Power Supply (UPS). The power supply scheme including rating, quantity and locations of Power supply systems, shall be determined by the contractor's design.	Please confirm if we can propose integrated power supply system for both Signaling and Telecom System. Or do we need to prepare separated Power Supply System for Signal and Telecom respectively?	Request not agreed. Separate power supply system for both signaling and telecom system to be provided as given in Bid Document.
99	Part 2, Section V (B) Vol 7, PS Signalling Pg 6 of 152 Clause 1.3.1.4	Design and implementation of the Interlocking of existing LC Gates on proposed main line and link lines between DFCC Junction stations and IR stations. This shall include design and implementation of gateman's emergency control system and appropriate display system and power supply system. List of LC gates is placed at Annexure-3.	Please share the details of existing LC Gates so that we can design interlocking correctly.	Request not agreed. Tentative list of LC Gates is given at Annexure-3. For Bidding purpose, 23 no. of LC gates to be considered for interlocking. Refer Part 5, Price Schedule D9.
100	Part 2, Section V (B) Vol 7, PS Signalling Pg 7 of 152 Clause 1.6.2	The Signalling system's electronic equipment shall be designed and supplied for a Design Life of 20 years and associated wayside equipment shall be designed and supplied for Design Life of 30 years. The contractor is required to supply latest version of Signal & Telecom equipments as per the latest guidelines issued from RDSO at the time of procurement	We will use some general-purpose equipments such as Personal Computer for VDU. This kind of electronic device cannot meet design life of 20 years. Please give us your comment on that.	This is a general requirement for major signaling equipments and does not apply to VDU and batteries etc. In general, RDSO guidelines to be followed for all signaling equipments. Please read Para 4.2. Vol 7, PS Signalling alongwith Addendum No. 1 dated 06.12.2016.



S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
101	Part 2, Section V (B) Vol 7, PS Signalling Pg 7 of 152 Clause 1.6.2	The Signalling System's electronic equipment shall be designed and supplied for a Design life of 20 years and associated wayside equipment shall be designed and supplied for Design life of 30 years. The contractor is required to supply latest version of Signal & Telecom equipments as per the latest guidelines issued from RDSO at the time of procurement.	The latest guidelines issued from RDSO at the time of procurement are not available now. Please replace "at the time of procurement" with "at the time of tender".	The provisions of Bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.
102	Part 2, Section V (B) Vol 7, PS Signalling Pg7 of 152 Clause 1.6.2	The Signalling System's electronic equipment shall be designed and supplied for a Design life of 20 years and associated wayside equipment shall be designed and supplied for Design Life of 30 years. The contractor is required to supply latest version of Signal & Telecom equipment as per the latest guidelines issued from RDSO at the time of procurement.	It seems difficult to achieve the said Design life without correct maintenance work by employer. Please confirm the above precondition is acceptable.	The provisions of Bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.
103	Part 2, Section V (B) Vol 7, PS Signalling Pg 7 of 152 Clause 1.6.4	The Contractor shall prepare and supply all necessary training documentation and operation and maintenance manuals for the review of the Engineer.	Training plan is generally dependent on customer's requirement. Please indicate us general training plan of employer including at least "Duration", "Number of trainee", "Location of training".	Training plan is dependent on system design and signalling gears supplied by the contractor, It cannot be decided at this stage. Request not agreed. The provisions given in Bid Document shall prevail.
104	Part 2, Section V (B) Vol 7, PS Signalling Pg 7 of 152 Clause 1.6.5	Signaling and telecommunication shall be compatible with the existing S&T system in New Durgauti-New Karwandiya section of DFCCIL.	If the vendor is different from existing S&T system supplier, it's difficult to achieve component level compatibility. Please define the level of "Compatible".	Train operation should be seamless through the entire Mughalsarai-Sonnagar Section (including New Durgauti and New Karwandiya Section). The provisions given in Bid Document shall prevail.
105	Part 2, Section V (B) Vol 7, PS Signalling Pg 12 of 152 Clause 3.1.1(b)	The Signalling and Train Control System including all sub-systems and equipment shall be of proven design. The system/sub-system, equipment, hardware and software proposed by the Contractor shall have been in use and have established their satisfactory performance over a period of at least two years on the world wide railway/metro systems during last five years from the base date.	We understand Monorail, LRT, High Speed Rail, Suburban Rail, AGT are included in the definition of "railway". Please confirm if the above understanding is correct.	The provisions given in Bid Document are sufficiently clear and shall prevail.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
106	Part 2, Section V (B) Vol 7, PS Signalling Pg 12 of 152 Clause 3.1.1 (c)	Where similar equipment or sub-systems of a different rating are already proven in service, then the design shall be based on such equipment. In case these stipulations are not fulfilled, the Contractor shall furnish sufficient information to prove the basic soundness and reliability of the offered Subsystem.	Please indicate the definition of "similar".	The provisions given in Bid Document are sufficiently clear and shall prevail. Please read Para 4.2. Vol 7, PS Signalling alongwith Addendum No. 1 dated 06.12.2016.
107	Part 2, Section V (B) Vol 7, PS Signalling Pg 12 of 152 Clause 3.1.2(f)	Use of interchangeable, modular components	Does "interchangeable" mean "interchangeability with existing S&T supplier's components in New Durgauti-New Karwandiya section of DFCCIL?"	No. The provisions given in Bid Document are sufficiently clear.
108	Part 2, Section V (B) Vol 7, PS Signalling Pg 13 of 152 Clause 3.2.1	Signalling system shall be designed as per the requirement of Indian Railway General Rules and Indian Railway Signal Engineering Manual.	We understand all rules and manuals which contractor has to comply with are defined in the list of 4.1.1 (3), and no other implicit rules and manuals. Please confirm it.	This clause is to be read in conjunction with clause 4.1.2. Vol 7, PS Signalling.
109	Part 2, Section V (B) Vol 7, PS Signalling Pg 14 of 152 Clause 4.1.1 (1)	The generic standards or other equivalent standards which are specified as under shall be applied for Signaling system. (a) RDSO: Research, Design and Standards Organization, Ministry of Railways, India. (b) IEC: International Electro-technical Commission. (c) EN: European Standards Organizations CEN, CENELEC or ETSI. (d) ISO: International Standards Organization.	In case there are some contradictions between RDSO, IEC, EN and ISO standards, which standard takes a priority? Please define the order of priority.	IR standards and RDSO guidelines will have a priority in case of any contradiction.
110	Part 2, Section V (B) Vol 7, PS Signalling Pg 14 of 152 Clause 4.1.1 (3)	For the Signalling system, the following specified standards (with latest amendments) shall be followed:	Please confirm "latest amendments" means "latest amendments at the time of bidding".	The provisions of Bidding document shall prevail. Please refer sub-clause 1.5 and 5.4 of GCC.
111	Part 2, Section V (B) Vol 7, PS Signalling Pg 18 of 152 Clause 4.2.2	Equipment appearing in the list of applicable RDSO specifications at Para 4.1.2 and having RDSO approved vendor, if procured locally shall be from RDSO's "Approved list of firms for manufacture and supply" and as per relevant specification.	Can we propose the product from the vendor who does not have RDSO approval at the time of bidding, but will obtain it by the time of Revenue Operation of the Project?	Please read Para 4.2. Vol 7, PS Signalling alongwith Addendum No. 1 dated 06.12.2016.
112	Part 2, Section V (B) Vol 7, PS Signalling Pg 19 of 152 Clause 5.2.3	All the sub-systems and equipment to be used for this system shall be of proven design, in use on other similar railway/DFC project and reliability in accordance with RAMS standards.	Please indicate the definition of "similar".	Please read Para 4.2. Vol 7, PS Signalling alongwith Addendum No. 1 dated 06.12.2016.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
113	Part 2, Section V (B) Vol 7, PS Signalling Pg 23 of 152 Clause 5.8.10.4(1)	Availability/Establishment of repair/servicing facility in India. The Local Service Centre shall have test and repair facility with simulation test set-up, fault diagnostic system, test jigs, software for testing of cards/modules along with required test instruments and tools.	For import items, is it acceptable to test and repair in OEM's facility outside India?	The provisions of Bidding document shall prevail.
114	Part 2, Section V (B) Vol 7, PS Signalling Pg 23 of 152 Clause 5.8.10.4 (3)	Availability/Establishment of Customization facility to add/modify/re-engineer hardware/software of the subsystem as required by the Employer during the lifetime of the equipment for adding facilities/features with future yard modification/signaling equipment up-gradation etc.	For import items, is it acceptable to add/modify/re-engineer hardware/software of the subsystem in OEM's facility outside India?	The provisions of Bidding document shall prevail.
115	Part 2, Section V (B) Vol 7, PS Signalling Pg 23 of 152 Clause 5.9.1	All line replaceable units shall have weight that can be easily handled manually without posing any significant risk. The System shall allow the removal and reinstallation of LRUs without having to remove other LRUs, disconnect cables to other LRUs or disturb or power down other equipment.	Please indicate the figure of acceptable weight.	This shall be proposed by the Bidder/Contractor. The provisions given in Bid Document are sufficiently clear and shall prevail.
116	Part 2, Section V (B) Vol 7, PS Signalling Pg 23 of 152 Clause 5.9.6	The system shall maximize the use of remote means to conduct maintenance, fault finding and fault rectification activities and to access maintenance information.	Does it mean maintenance work has to be carried out from SER or OCC, and not allowed at site?	No. It shall be as per maintenance schedule and manuals provided by the bidder/Contractor.
117	Part 2, Section V (B) Vol 7, PS Signalling Pg 30 of 152 Clause 5.12.2	Failure Reporting and Corrective Action System (FRACAS) (1) The Contractor shall be required to establish a computer based Failure Reporting and Corrective Action System (FRACAS) during the RAM Demonstration phase. The FRACAS proposed by the contractor shall need the approval of the Engineer. (2) The FRACAS shall: (a) Provide a process for reporting, classifying analyzing failures, and planning corrective actions in response to those failures. (b) Collect data, record and analyse system failures. (c) Produce a history of failure and corrective actions.	Please give us more detailed Functional requirements of FRACAS so that we propose it.	This is to be proposed by bidder/contractor as per the provisions of bid document.

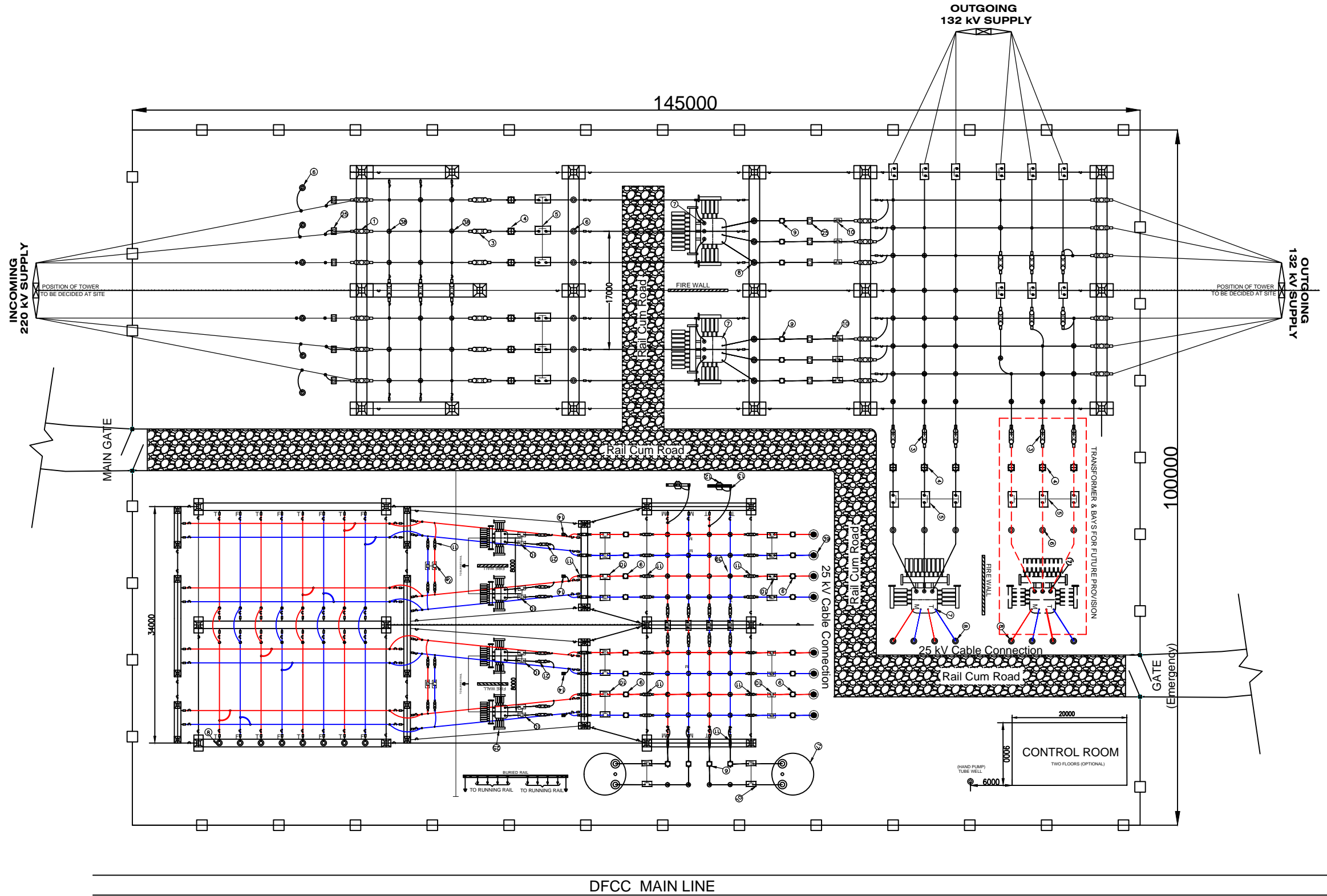
S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
118	Part 2, Section V (B) Vol 8, PS Telecom Pg 20 of 114 Clause 5.1.1 (1)	The OFC System shall be highly reliable system since it shall be the primary means of communications between OCC,.....	Please suggest the number of SDH Nodes to be considered in the BOM. Also indicate the number of SDH nodes i.e. STM-16 to be considered in First network and STM-4 to be considered in Second network.	This shall be calculated as per the network design provided by the bidder/Contractor. The provisions given in Bid document shall be followed.
119	Part 2, Section V (B) Vol 8, PS Telecom Pg 20 of 114 Clause 5.1.3	The OFC System shall be capable to transport all of the user communication requirements. The OFC System shall provide sufficient bandwidth to cater for the communication requirements of various systems under this Contract as well as outside the Contract and shall provide an additional spare bandwidth of at least 50% of the total used bandwidth for future system expansion.	As per the clause, you require 50% spare bandwidth. We are proposing STM-16 for First network and STM-4 for second network. Kindly clarify the Bandwidth is required in terms of STM-16/STM-4 or in terms of number of SDH Ports.	This shall be calculated as per the network design provided by the Bidder/Contractor. The provisions given in Bid document shall be followed.
120	Part 2, Section V (B) Vol 8, PS Telecom Pg 20 of 114 Clause 5.3.4.9	Control/Processor Card, Switch/Matrix Unit & Power Supply Modules of SDH Equipments shall be provided with 1+1 Protection.	As per ITU-T standards, if controller Module does not effect traffic, then redundancy of controller is not required. Hence, request you to kindly amend, the clause as per the ITU-T standards.	Refer Addendum no. 2 dated 16.12.2016.
121	Part 2, Section V (B) Vol 8, PS Telecom Pg 20 of 114 Clause 5.5.1.1(6)	Optical link budget calculation for all the transmission links;	Please indicate the distance between the stations i.e. for the first network (STM-16) and for the second network (STM-4). Distances are required to calculate the link engineering.	Refer Part-4 –Reference Documents.
122	Part 2, Section V (B) Vol 8, PS Telecom Pg 29 of 114 Clause 5.5.1.1 (10)		Request you to please provide the indicative network diagram with provision of First network and second Network.	Request not agreed. This shall be proposed by the bidder/Contractor.
123	Part 2, Section V (B) Vol 8, PS Telecom Pg 29 of 114 Clause 5.3.7.6	The Flexible Access Multiplex Equipment shall be provided with 1+1 Redundancy for all Channel levels (Voice, Data etc). Further 1+1 Protection for control & Power Supply Modules / Cards shall be provided in Flexible Access Multiplex Equipment.	1+1 redundancy for voice and data is not feasible in case of Flexible Access Multiplex. Neither it is required as per the requirement.	Refer Addendum no. 2 dated 16.12.2016.
124	Part 2, Section V (B) Vol 8, PS Telecom Pg 31 of 114 Clause 5.5.3.3.7	Flexible access multiplex equipment shall be provided with 1+1 protection for all channel levels.	Request you to kindly amend or delete this clause from tender.	

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
125	Part 2, Section V (B) Vol 8, PS Telecom Pg 32 of 114 Clause 5.5.3.4.5	Nx64 kbps synchronous data interfaces complying with ITU-T Rec. V.11 and V.35 interface; etc.....	V.35 etc interfaces is not required in DFCCIL requirement. Kindly amend or delete this clause from tender.	Request not agreed. The provisions given in Bid Document are sufficiently clear and shall prevail.
126	Part 2, Section V (B) Vol 8, PS Telecom	Laptops for maintenance.....	Can we provide the same laptops loaded with different sub-system management software.	Request not agreed. The provisions given in Bid Document shall prevail.
127	Part 2, Section V (B) Vol 8, PS Telecom	Redundancy of NMS	Redundancy of NMS for each sub-system is required. But there is not backup OCC. Can we proposed single NMs for each sub-system.	Request not agreed. The provisions given in Bid Document are sufficiently clear and shall prevail.
128	Part 2, Section V (B) Vol 8, PS Telecom Pg 34 of 114 Clause 6.1.7	At Junction Stations and Crossing Stations including stations of DGON-KWDN section, Wi-Fi facility, compliant with IEEE 802.11 g standards shall be provided for WAN connectivity to users (which also include drivers of passing trains) via Wireless Enabled Devices and Equipment. A minimum of 10 simultaneous users may use the Wi-Fi Connectivity at Stations.	Kindly provide the inputs whether you need licensed band and unlicensed band for wifi.	Wi-Fi is to be planned with Unlicensed band.
129	Part 2, Section V (B) Vol 8, PS Telecom Pg 34 of 114 Clause 6.1.7	This Wi-Fi Facility shall as a minimum cover Station Buildings and EDFC Tracks up to 500 meters in both directions.	Kindly provide the central point on which coverage of 500 meters is required. Please provide the total distance for Wi-Fi coverage on platform, and both sides of platform also.	The provisions given in Bid Document are sufficiently clear.
130	Part 2, Section V (B) Vol 8, PS Telecom Chapter 8	VIDEO SURVEILLANCE SYSTEM REQUIREMENTS	What would be the backbone network for CCTV system?	Video Surveillance system design shall be proposed by contractor.
131	Part 2, Section V (B) Vol 8, PS Telecom Pg 63 of 114 Clause 9.1.3	The synchronized time information shall be provided to other interfacing systems via the OFC System. Synchronization of the time information of other systems shall be achieved by means of the Network Time Protocol (NTP)	Kindly clarify how synchronization of OFC equipment is provide from NTP based clock.	Optimum solution to be provided by the bidder to meet the requirement given in Bid document.
132	Part 2, Section V (B) Vol 8, PS Telecom Pg 67of 114 Chapter 10	VHF Communication System	Kindly provide the location of installation of tower.	Station Building/SER Room are location where VHF tower is to be installed or at any other location as approved by Engineer.

S.N.	Reference to Bid Document	Available Terms	Clarification sought by Bidder	DFCC's Response
133	Part 2, Section V (B) Vol 8, PS Telecom Pg 67of 114 Chapter 10	VHF Communication System	Kindly provide the technical specifications i.e. safety factor, overturning factor etc for VHF Towers.	The provisions given in Bid Document are sufficiently clear and shall prevail.
134	Part 2, Section V (B) Vol 8, PS Telecom Pg 32 of 114 Clause .5.3.52	The NMS shall be equipped with a proven real-time, multi-tasking operating system to support centralized network management of the OFC equipment.....	Network management system for the SDH and PDH are different with different hardware and different software.	The provisions given in Bid Document are sufficiently clear and shall prevail.
135	Part 2, Section V (B) Vol 8, PS Telecom Pg 72 of 114 Clause 11.2.2	Provision of suitable Earth Leakage Detection and Alarms shall be made individually at each location (OCC, Station, Auto Signal Location, LC Gate location, etc.).	Earth leakage detection is not required in Telecom equipments i.e. equipments running on -48VDC are already earthed. Hence this will always give a False alarm. Request you to kindly amend or delete this clause from tender.	Refer Addendum no. 1 dated 06.12.2016.
136	Part 2, Section V (B) Vol 8, PS Telecom Pg 67of 114 Clause 11.3.13	Summary Alarm	Summary Alarm is not feasible. Kindly amend the clause.	The provisions given in Bid Document shall prevail.

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**SCHEMATIC DIAGRAM OF 220/132 KV AND 132/54 KV TRACTION SUBSTATION AT NEW DURGAUTI**



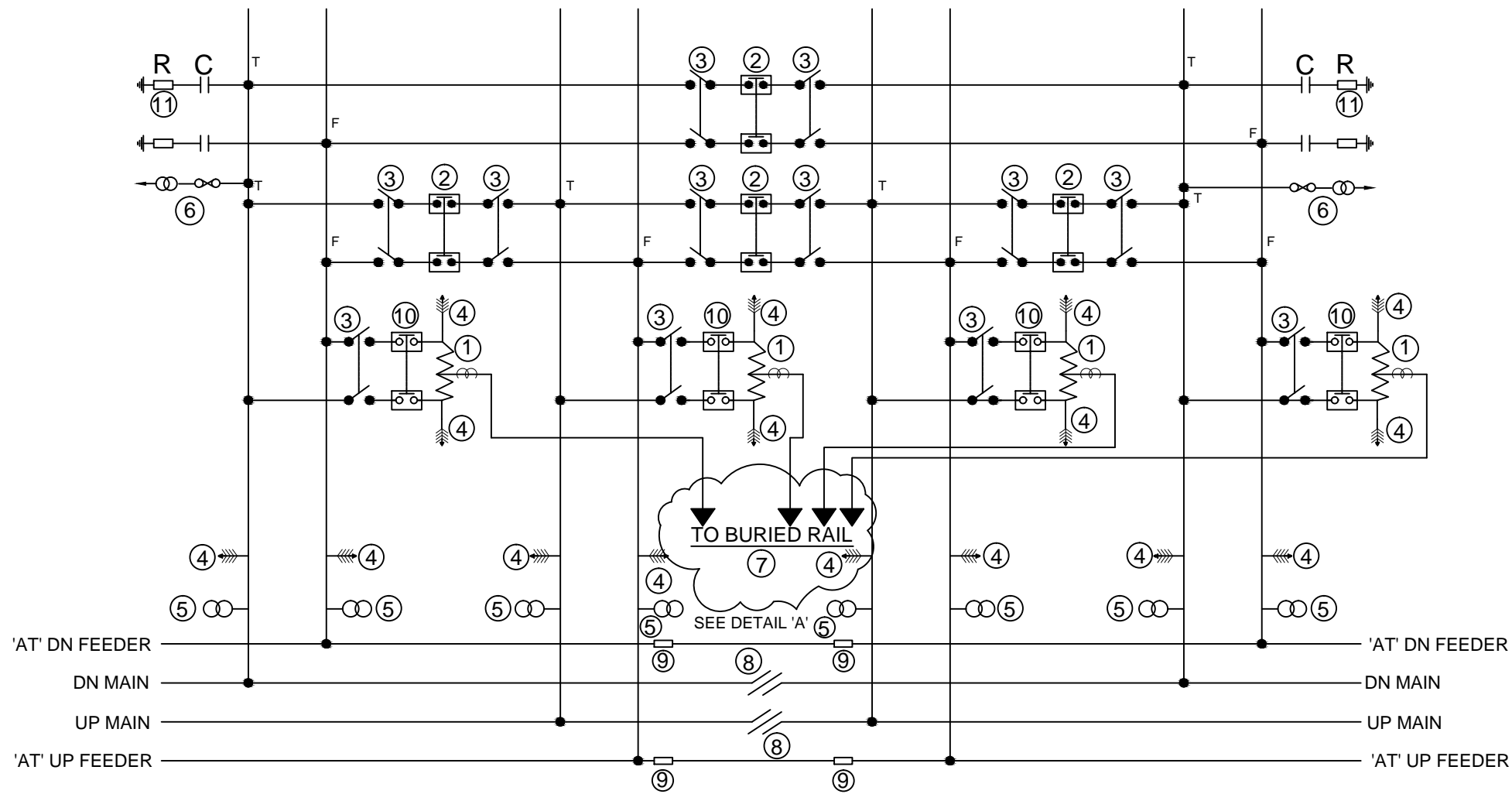
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.  
( A GOVERNMENT OF INDIA ENTERPRISE )

**EASTERN CORRIDOR**

PROJECT **MGS-DGO & KWDN-CPBH-SEBN**

Drg. No. **DFCC/EL/EC/MGS-SEBN/02**

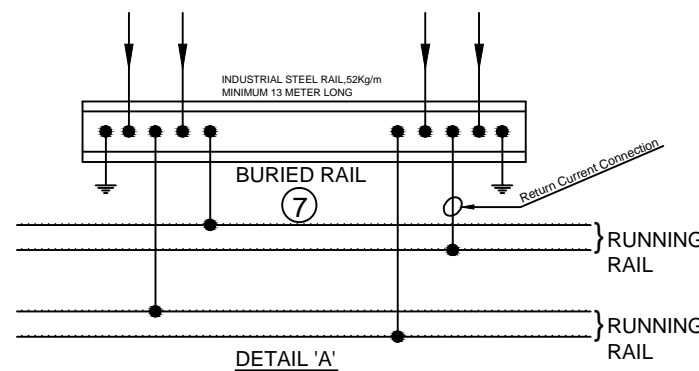
# SCHEMATIC DIAGRAM OF 2X25 KV SECTIONING AND PARALLELING POST (SP)



LEGENDS		
S.NO	SYMBOL	DESCRIPTION
1.		AUTO TRANSFORMER WITH BUSHING CT
2.		2 X 25 kV DOUBLE POLE INTERRUPTER
3.		2 X 25 kV DOUBLE POLE ISOLATOR
4.		LIGHTNING ARRESTOR
5.		25/110V POTENTIAL TRANSFORMER
6.		AUXILIARY TRANSFORMER 10 kVA, 25kV/240V WITH DROP OUT FUSE
7.		BURIED RAIL
8.		PTFE NEUTRAL SECTION
9.		CUT-IN INSULATOR
10.		2 X 25 kV DOUBLE POLE CIRCUIT BREAKER ALONG WITH PROTECTION CT & PT AS REQUIRED.

## NOTES:-

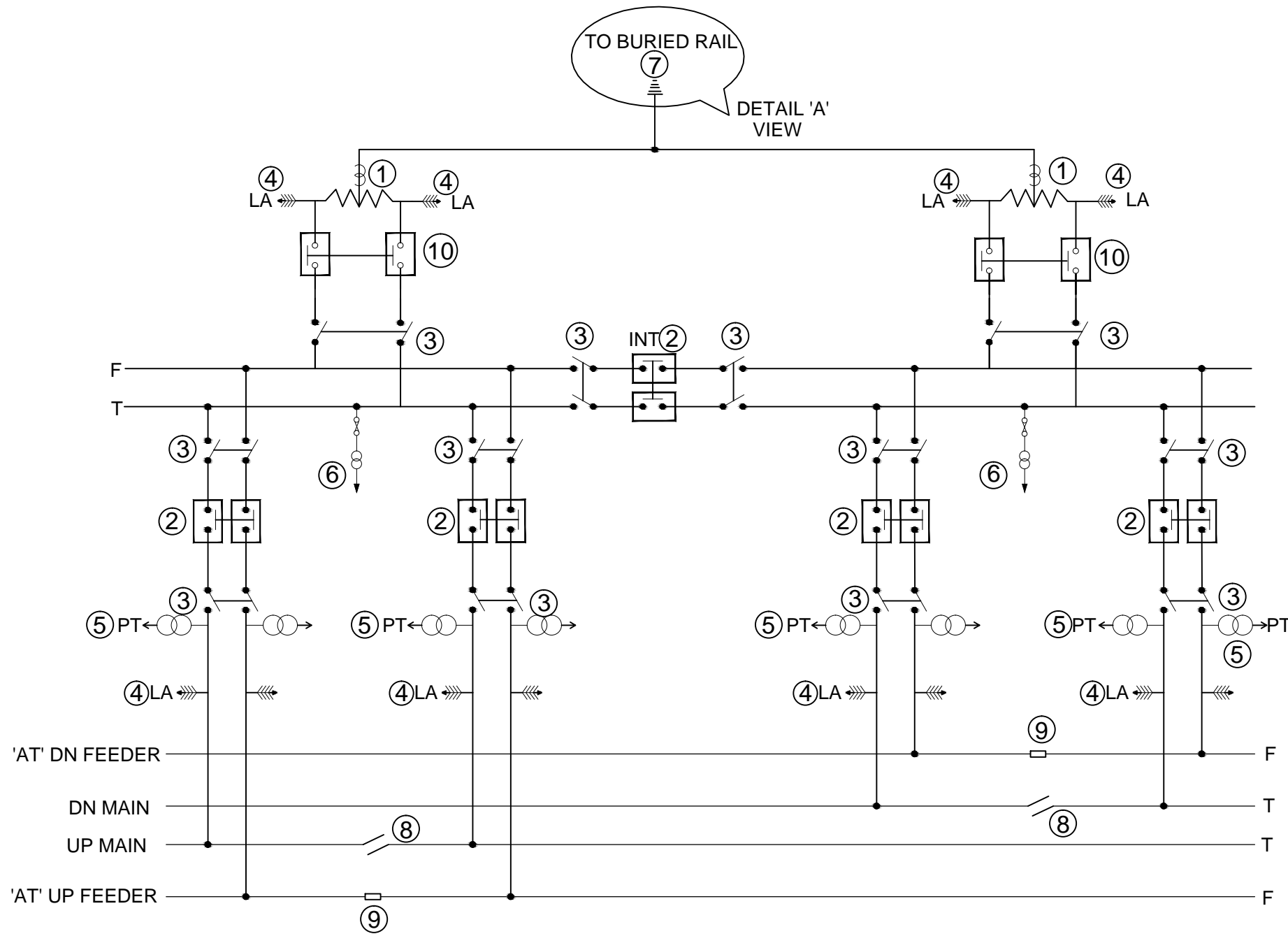
1. The drawing is indicative and shall be read in conjunction with the specifications & relevant standards if any.
2. The busbar inside the SP shall be rigid type.
3. All ratings/dimensions are indicative. The contractor shall provide the design as approved by the Engineer.



	DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.
	EASTERN CORRIDOR
PROJECT	MGS - DGO & KWDN-CPBH-SEBN
Drg.No.DFCC/EL/EC/MGS-SEBN/03	



# SCHEMATIC DIAGRAM OF 2 x 25 kV SUB-SECTIONING AND PARALLELING POST (SSP)

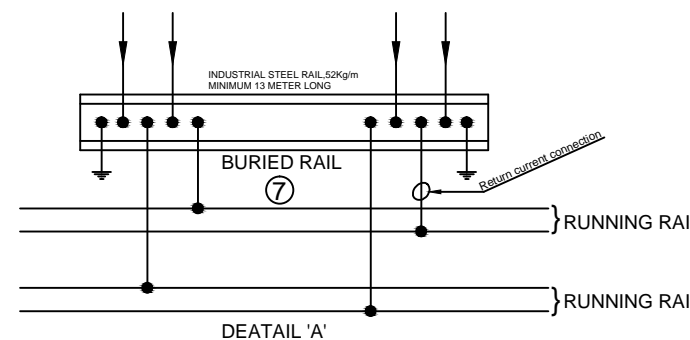


### LEGENDS

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1.		AUTO TRANSFORMER WITH BUSHING CT
2.		2 X 25 kV DOUBLE POLE INTERRUPTER
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4.		LIGHTNING ARRESTOR
5.		25/110V POTENTIAL TRANSFORMER
6.		AUXILIARY TRANSFORMER 10 kVA, 25kV/240V WITH DROP OUT FUSE
7.		BURIED RAIL
8.		INSULATED OVERLAP
9.		CUT-IN INSULATOR
10.		2 X 25 kV DOUBLE POLE CIRCUIT BREAKER ALONG WITH PROTECTION CT & PT AS REQUIRED.

### NOTES:-

1. The drawing is indicative and shall be read in conjunction with the specifications & relevant standards if any.
2. The bus bar inside the SSP shall be rigid type.
3. All ratings/dimensions are indicative. The contractor shall provide the design as approved by the Engineer.



	<b>DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.</b>
<b>EASTERN CORRIDOR</b>	
PROJECT	MGS - DGO & KWDN-CPBH-SEBN
<b>Drg.No.DFCC/EL/EC/MGS-SEBN/04</b>	