



LUCKNOW METRO RAIL CORPORATION LIMITED

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No. LMRC/CE-Contract/AGDD-01(R1)/2019-20

Date: 05.08.2019

To,
All Bidders,

Subject: - Reply to Pre-bid queries & Addendum-01 for tender AGDD-01(R1).

Ref: - **Tender AGDD-01(R1):** Engagement of Detailed Design Consultant (DDC) For Civil, Architectural, E&M, Traction and Power supply Works for Sikandra to Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot.

Dear Sir,

Please find enclosed herewith the Reply to Pre-bid queries and Addendum-01 to the tender AGDD-01(R1). Further, the tender submission/Opening dates are revised as follows:

- Last date of issuing addendum : **05.08.2019**
- Date & time of Submission of Tender : **21.08.2019 up-to 15:00 Hrs**
- Date & time of opening of Tender (Technical Bid) : **21.08.2019 @ 15:30 Hrs.**

Enclosure: As Above

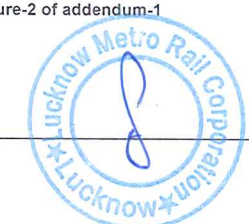


(Deepak Gupta)
Chief Engineer/Contract

Reply to Pre-bid Queries: Tender AGDD-01(R1)

AGDD-01(R1): Engagement of Detailed Design Consultant (DDC) For Civil, Architectural, E&M, Traction and Power supply Works for Sikandra to Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot".

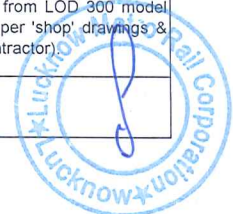
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
1	Vol-1/ITT/Clause 3.2 c) Page no. 10	To achieve targeted timeline of project, the superstructure of the viaduct shall be double "U" Girder (One for each track) given with full span construction method and precast pier caps except at isolated locations due to site constraints. However, if any other design alternative as per clause 3.3 of Scope of Work: Part-1 (Vol-3) is suggested/ proposed, it should be quoted clearly by the bidder in its bid substantiating with detailed analysis with respect to economy, time, ease of construction, serviceability etc. For technical evaluation by LMRC. Bidder may also be called for detailed presentation for the same by LMRC, if needed. In case, suggested/proposed design alternative for the superstructure of the viaduct other than double "U" Girder is not considered acceptable by the LMRC after technical evaluation and bidder is not agreeable to design with double "U" Girder, offer of the bidder shall be summarily rejected on technical grounds and will not be considered further for financial opening.	Please be apprised that SYSTRA has been granted two below mentioned patents and also of SYSTRA's rights under the same: 1. Indian Patent No. 200681 under Indian Patent Application No. 202/CAL/2002 filed on 08.04.2002 for a period of 20 years commencing from 08.04.2002 for "an invention entitled VIADUCT FOR A RAILWAY LINE" 2. Indian Patent No. 279832 under the Indian patent Application No. 3200/KOLNP/2007 filed on 13.02.2006 for a period of 20 years commencing from 13.02.2006 for "an invention entitled U-SHAPED SPAN FOR RAILWAY TRACK" Please ensure that any design and/or structure either prepared or used by you does not violate and / or infringe any rights of SYSTRA under either of the above-mentioned patents. The above-mentioned Patents provide statutory protection in favour of SYTRA, inter-alia, under The Patents Act, 1970 and any violation thereof, shall amount to infringement of said Patents which in turn will entitle SYSTRA to initiate all appropriate legal proceedings for safeguarding its rights granted under the aforementioned Patents, SYTRA will exercise all its rights and remedies to protect and enforce its Patents. All the rights and remedies of SYSTRA are hereby reserved. However, SYSTRA at its discretion may negotiate and grant a License for the use of its rights under either of the above-mentioned patents. Kindly modify this clause in light of the above.	In case tenderer intends to use any patented design of any firm/agency, requisite license as per rule may be obtained.
2	Technical Package, Clause 3.1 b, Page no 9	b. Tender security (EMD) in original in a separate envelope. It must be noted on behalf of the JV / Consortium, the B.G (if EMD is in form of B.G.) must be on behalf of the JV/Consortium and issued on behalf of the name of JV/consortium.	Generally, in similar projects, client allow bidder to submit Bank Guarantee in the name of Lead Partner of Joint Venture. So, we request client to accept Bank Guarantee issued on behalf of the name of lead partner.	Agreed. Please refer Annexure-2 of Addendum -1
3	Volume-1/ITT/ Page no.21	Annexure-1: Form for BG	We have submitted Bank Guarantee format to our Banks and received below comments where bank has suggested changes without which Bank will not issue BG: 1. Notwithstanding Clause to be added: Notwithstanding Anything Contained Herein above • OUR LIABILITY UNDER THIS BANK GUARANTEE SHALL NOT EXCEED _____ (_____ ONLY) • THIS BANK GUARANTEE SHALL BE VALID UPTO _____, WE ARE LIABLE TO PAY THE GUARANTEED AMOUNT OR ANY PART THEREOF UNDER THIS BANK GUARANTEE ONLY AND ONLY IF THE EMPLOYER SERVES UPON THE BANK A WRITTEN CLAIM OR DEMAND ON OR BEFORE _____, WHEREAFTER IT CEASES TO BE IN EFFECT IN ALL RESPECTS WHETHER OR NOT THE ORIGINAL BANK GUARANTEE IS RETURNED TO US. (to be added) This guarantee cannot be assigned nor transferred to any other third party, without the prior written consent of the Guarantor 2. Clause 3(c): That any account settled between the LMRC and the Tenderer shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us. (to be deleted) 3. Name of Client with address on the top of Bank Guarantee format (to be added) 4. Clause 3(e): That the expression 'the Tenderer' and 'the Bank' herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assigns. ('the Tenderer' and to be deleted). We would request your good self to accept the above-mentioned changes and allow us to submit Bank Guarantee with above mentioned clause amended in it. Please refer vetted format from bank attached with this letter as Annexure.	Please refer Annexure-3 of Addendum-1.
4	Technical Package, Clause 3.2 d, Page no 10	d. An organization chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline-as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas – as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required.	We would request the following: 1. In clause 3.2 (d), it is mentioned that DDC shall deploy the key staff of Design, Expertise and Project management team with 10 years, Leaders of key areas with 13 years and Expatriate with 13 of relevant experience in the concerned field. We understand that Design and Design Review experience of similar projects will be counted as relevant experience. 2. Also, we would request you to change the experience of 10 years for key staff of Design, Expertise and Project management team to 7 years and experience of Leaders of key areas with 13 years and Expatriate with 13 of relevant experience to 10 years as accepted in previous tenders.	1. Design review experience of similar projects will not be considered as design experience. 2. Please refer Annexure-2 of addendum-1



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
5	Technical Package, Clause 3.2 f, Page no 10	Experience required for 14 key areas have been given in para 3.2 d. CV of leaders for 14 key areas as mentioned in the clause will be evaluated technically.	Based on our previous experience of similar DDC project, we would request you to mentioned below mentioned 5 positions out of 14 Leaders of key areas as Leaders and rest as part of Expertise team working under supervision of above said experts. 1. Architectural Expert 2. Civil Structural Design – Viaduct & elevated station 3. Civil Structural Design – UG station 4. Building Services – E&M 5. 750-volt DC system and Digital protection expert for traction electrification.	Please refer Annexure-2 of addendum-1
6	Technical Package, Clause 3.2 d, Page no 10	Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	We would request client to allow bidder to submit CV of key staff with Education Degree at this stage and delete the requirement of Experience certificates as it is very tough for Professionals to get experience certificates from all employers they had worked for in the past durations.	Agreed.
7	Clause 3, Technical Package, 3.2 j, Page No 11	The majority of key staff should be regular member of the tenderer for at least 6 months	We understand that Key staff are the Leaders of expertise team in key areas as defined in clause 3.2 (f). Please confirm.	Yes, your understanding is correct.
8	Clause 3, Technical Package, 3.5, Page no 12	3.5 The DDC shall establish an office in Lucknow / Agra and deploy required staff and facilities there in consultation with LMRC accordingly the payment for the item no.8 of Schedule A will be made.	We would request LMRC to allow consultant key staff to work from their respective Design offices in Delhi/ NCR region with a project coordination team of Engineers with 5-7 years' experience for each key area located at Lucknow/Agra office location.	As per tender conditions. Please also refer Clause 5.1(b) of Part-1 of Scope of Work, Vol.-2 (Pg. 21) also.
9	Technical Package, Page no 43	Appendix-9: Details of Consultancy works in hand	As per NIT/ clause 1.1.4 notes, bidder need to provide value of existing commitment for ongoing works during period of 48 months from 01.06.2019. Whereas in form Appendix-9, existing commitment for ongoing works during period of 60 months from 01.06.2019 is asked. Please clarify.	Refer Annexure-4 of Addendum-1
10	Vol 1, Clause 3.2 (g), Page 11	Expatriate Experts for the 6 key areas. Services expatriate requirement as per Sr no 1,2,3,4,5 &6	You would agree that with growing Indian Metro Rail Industry and so many detailed design projects being executed across the country, Indian Experts with expertise of International standards in Design of Civil, Architecture, E&M, Power supply and traction are readily available in India. So, we would request you to delete the requirement of expatriate experts in the bid.	Refer Annexure-2 of Addendum-1
11	Volume-I/ GCC & SCC	Conflict of Interest: Unless otherwise agreed in writing by LMRC, the DDC and his personnel shall have no interest in nor receive remuneration in connection with the project.	We understand that General consultant service contract of Agra Metro may be floated in Future and in that case, bidders participating and successful in DDC project may face a situation of conflict of interest to participate in GC contract. So, for healthy competition, we would request you to allow that in case same firm is selected as General Consultant and also selected as Detailed Design Consultant for Agra Metro then the General Consultant shall have to get the Proof Checking of Detailed Design from a third party at their own cost.	Not agreed. As per Tender Conditions.
12	Clause 7 & 8, Technical Package, Page no.17 & 18	Evaluation of Proposal & award of contract.	We would request client to consider QCBS (80:20) basis for evaluation of this bid.	As per Tender Conditions.
13	NIT/ Page no 1	Date and Time of submission of tender 14.08.2019 @ 15:00 hrs	We would request to extend the bid due date by three weeks from current submission date.	Refer Annexure-1 of Addendum-1
14	GCC/Clause 20/ Page 54	Payment to the consultant LMRC shall pay the amount to DDC in Partial payments on monthly basis for the performance of the services as describe in volume 3 of tender document.	Generally, in similar projects clients allow DDC (JV/ Consortium) to receive payments in JV/ Consortium account or Lead Member of JV/ Consortium account as requested in JV/ Consortium agreement provided with bid by DDC. We would request LMRC to accept the same.	Agreed.



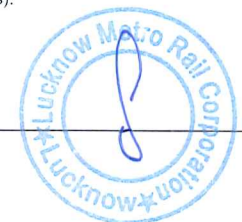
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
15	Clause 2, Part-1A of Volume 2 (Scope of work)/ Page 1	Working 3D BIM Models requirements There shall be proper coordination and interface between various consultant, contractor, Vendors, GC & BIM team. Bidder needs to model existing infrastructure systems in sufficient details as to provide integration with the works under contract. Bidder needs to create 3D BIM engineered intelligent models using discipline specific modelling/engineering applications. The 3D models shall be made available on the common data environment (CDE) platform of Agra metro. Levels of development (LOD)/Level of information (LOI) of model must be followed as per the LMRC'S information requirement and applicable standards, methods & procedures. Submission and review of the model happens within common data environment (Autodesk BIM 360). Bidder shall be ensured that the 3D BIM model shall be clash free with respect to all the disciplines.	(a) Please confirm which Level of development (LOD)/Level of information (LOI) needs to be followed (LOD 300/ LOD 350). (b) Please provide details of "LMRC'S information requirement and applicable standards, methods & procedures". (c) Please confirm if licenses for CDE platform will be made available by client.	(a) LOD 200 (schematic stage drawings) to LOD 350 ('shop' drawing stage) shall be required to be followed and later 3D BIM model to be updated with 'as-built' drawings. (b) The DDC should be familiar with operations of a digital project system enabling a fully integrated solution for employer & contractors. The DDC will be required to work on a digital delivery for built assets based on international standards and methodologies including: • PAS 1192-2 2013 - "Specification for information management for the capital/delivery phase of construction projects using building information modeling" • PAS 1192-3 2014 - "Specification for information management for the operational phase of assets using building information modeling" • AIA Document E203TM-2013, Building Information Modeling and Digital Data Exhibit • CIC BIM Protocol 2018 • BIM Forum LOD Specification 2018" (c) Bidder has to procure licenses for CDE platform
16	Clause 3.5 e), Part-1A of Volume 2 (Scope of work)/ Page 4	Modelling of following discipline to be created: • Earthwork systems.....& "all others".	Please define "all others".	Others generally includes all underground utility services, life safety, fire protection , AFC, etc.
17	Clause 2.1 iii) b), Part-1 of Volume 2 (Scope of work)/ Page 4	Detailed architectural planning including type of finishes for all elevated stations and issue of GFC drawings which will include Bar Bending Schedules also.	In detail design drawings, basic bar bending schedule (BBS) used to be included. Shop drawings are prepared by contractor, which includes detailed BBS. Please confirm about level of detailing of BBS to be done by DDC.	As per Tender Conditions.
18	Clause 2.1 iii) e), Part-1 of Volume 2 (Scope of work)/ Page 4	Detailed architectural and structural design of property development area at identified locations (up to 3 floors) including design of building services (E&M, fire detection & suppression, Air conditioning, main water supply, sewerage and plumbing etc. (upto outside the structure embedded elements). The property development can be integrated with stations or stand alone. External architectural finishing of property development area is also included in the scope, but internal finishes are not included.	Please provide possible numbers of such PD areas (up to 3 floors).	Refer Annexure-7 of Addendum-1.
19	Clause 2.1 iii) v), Part-1 of Volume 2 (Scope of work)/ Page 5	Modify designs and drawings, if such modifications are considered necessary due to side condition and un-foreseen conditions.	If submitted design/ drawings are approved by client/ GC and available with contractor. There needs to be agreed time limit for modification due to site condition. For un-foreseen condition, there needs to be agreed limit for number of times of modifications. After that, any modification should be considered as "Rework". Please clarify, confirm.	As per Tender Conditions
20	Clause 3.24, Part-1 of Volume 2 (Scope of work)/ Page 19	The DDC shall study all the sub-soil data made available to for all-additional borings, geophysical surveys, and field and laboratory tests that it may require for the performance of its services, the DDC will inform the LMRC for arranging of these additional investigations. The cost of such additional investigations will be paid by LMRC. The DDC shall prepare a Geo-technical survey report incorporating the additional Geo-technical data and shall submit to the LMRC for acceptance.	The clause should be: "The DDC shall study all the sub-soil data made available to. For all-additional..."	As per Tender Conditions.
21	Clause 9, Part-1 of Volume 2 (Scope of work)/ Page 31	Submission of documents The DDC shall deliver all the drawings and documents produced/prepared in connection with this contract except the rough note/draft etc. They will be packaged as directed by the LMRC.	As per Part 1A (3D BIM work for DDC), detailed 3D model is to be submitted, through which 2D drawings can be extracted. Please confirm if no of hard/ soft copies and size of drawings as mentioned in this clause, will remain same.	As per Tender Conditions.
22	Clause 6.5 (Page 24), Clause 9.7 (Page 34) Part-1 Clause 3.5 b) (Page 4) Part-1A of Volume 2 (Scope of work)	Cl. 6.5: Drawings excluded from the DDC's scope of drawings include: - Shop drawings..... - As-built drawings; and Cl. 9.7: Three sets if "as-built" drawings prepare by the contractor endorsed by the DDC (A1). Cl. 3.5 b): Based on 'as-built' drawings 'as-built' model shall be updated by the DDC, in case required.	Cl. 6.5 and Cl. 9.7 of Part-1 contradicts with Cl. 3.5b) of Part-1A. DDC will submit 3D BIM model to client, through which 2D drawings can be extracted. If contractor is preparing 'as-built' drawings, it would be through 3D BIM model. DDC will verify 'as-built' drawings with updated 3D BIM 'as-built' model. If contractor is submitting 2D drawings only as 'as-built' drawings, that means contractor is not working in BIM platform. Please confirm.	Yes, contractor will not develop 3D BIM model, but will work on fro 4D, 5D BIM. 'As-built' drawings will be prepared by the contractor, but 3D BIM model has to be updated further from LOD 300 model stage prepared by the DDC, also as per 'shop' drawings & 'as-built' drawings (prepared by the contractor)
23	Vol.2/ Scope of Work/ Part-1A 3.4.1; Pg no. 2	All 3D model data together with all 2D drawings extractions needs to be spatially coordinated with the Geospatial System.	Level of Detailing (LOD) and Level of Information (LOI) of Modelling in Architecture is not clear.	BIM Forum LOD Specification 2018



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
24	Vol.2/ Scope of Work/ Part-1A/1; Pg no. 1	To be further utilized on 5D BIM platform by OSO.	Please provide a list of attributes for 5D works for future reference.	This will be provided at execution stage.
25	Vol.2/ Scope of Work/ Part-1A 3.5-e); Site/ Campus (Civil and Landscape) Pg no. 6	These components include, but not limited to, topographic grading, landscape including hardscape, planting stock (including roof), cutting & filling and other site and campus features.	Please clarify BIM requirements for landscape works (2D and 3D). Also, clarify if separate package for landscape is required.	Both 2D and 3D This is bidder's call, but has to be BIM compliant.
26	Vol.4/ Reference Doc/ Part-III/ G 3.1/ Pg 6		Please clarify if landscaping required along station alignment or along stations only.	Landscaping is required along both alignment and stations
27	Vol.2/ Scope of Work/ Part-1A 3.5-e); Pg no. 4	The DDC shall properly use available "intelligent Objects" to embody information about the building/ structure	Generic Intelligent Objects shall be used.	Generic Objects cannot be used everywhere. Creation of intelligent objects may also be required.
28	Vol.2/ Scope of Work/ Part-1/ 2.1 (iii); e); pg no. 4	The Property Development can be integrated with stations or stand alone.	Scope and Extent of Property Development is not clear.	Please refer Clause 2.1 (iii) (e) of Scope of Work, Part-1 of Vol.-2. Scope for property development out side station area is not in scope.
29	Vol.2/ Scope of Work/ Part-1/3.25; pg no. 19	Design and prepare drawings for Property Development when integral part of the station taking into account the requirement of various services.	Please clarify if design and drawings required for PD shall be conceptual or detailed.	Design & Drawings required for PD shall be detailed.
30	Vol.2/ Scope of Work/ Part-1/ 2.1 (iii); e); pg no. 4	Administrative office of Agra Metro is also to be planned.	Please clarify the scope and extent for DDC.	Scope of Agra administrative building is not in the scope of this tender. Also refer Annexure-7 of Addendum-1.
31	Vol.2/ Scope of Work/ Part-1/6.3,6.5; pg no. 23-24	-	Submission stages are not clear like Concept/PD/DD/Tender/GFC etc.	As per Tender Conditions.
32	Vol.2/ Scope of Work/ Part-3; 3.6; pg no. 9	Supply of model on wooden base approx. 8X4 feet plan size.....	Scale of Model not clear.	Detailed model at 1:200 scale is required..
33	Vol.4/ Reference Doc/ Part-III/ G 2.6	-	Extent of Parking for Stations is not clear.	DDC to suggest design extent of parking as per DPR & as per site feasibility.
34	General	Variation	Bidder could not find relevant clauses, where bidder could claim for re-work (after receiving sub stage approval like Concept, Tender design etc.) on either of the following grounds: a) Change in design as per revised Client's requirement with respect to finishing scheme, finishing material etc b) Change in design due to change in permanent/temporary land boundary, due to issue in acquiring the committed land or any other cause. c) Change in design due to unmapped site utility, discovered during construction. d) Design change due to delayed receipt of inputs from Client/ SWC or authorities etc.	As per tender conditions.
35	Vol 2, Part 2.1, Appendix A, clause 4.4	Site Meetings	Apart from Expatriates, if personnel from Bidder's Head Office visit for site meetings, the same shall be reimbursed as per the actual expenses incurred?	Not Agreed.
36	Vol 2, Part 2.2, Clause 3.25	Property Developments	To assess and estimate the design cost of the Property Developments, as planned in DPR, Bidder shall be requiring a copy of DPR or relevant text/drawings from the DPR. Please facilitate the same.	DPR can be downloaded from LMRC's website.
37	Vol 1, Clause 3.2, Page 11	Services expatriate requirement as per Sr no 2,3,4&5	Please remove the Building Services expatriate requirement. For reference as the same have been removed in Kanpur Metro also.	Please refer Annexure-2 of Addendum-1.
38	Vol 2, Clause 1, Page 1	3D BIM modelling work to be further utilized on 5D BIM Platform by OSO.	Please provide the detailed requirement for 5D.	This will be provided at execution stage.
39	Vol 2, part 1, Clause 2.1 e, Page 4	Property development (PD) mentioned 3 floors	Please define the PD area to be developed. DDC Scope for Architecture and E&M are to provide space provision and high side requirement at plant/capacity, Architectural Interior layout, lighting, air conditioning, other interior services etc. The design of PD areas should not be in DDC scope of work. The same to be carried out by tenant. Please clarify.	It will be decided during detail design stage so as to maximise revenue from PD. As per tender conditions.
40	Vol 2, part 1, Clause 2.1 e Page 4	Administrative building of Agra Metro	Please define the built-up area for Architectural, Structural and E&M services of Administrative building of Agra Metro.	Scope of Agra administrative building is not in the scope of this tender. Also refer Annexure-7 of Addendum-1.
41	Vol 2, part 3, Clause 3.5, Page 9	Civil and structural design.	Please define number and type of Staff quarters.	Scope of staff quarters is not in the scope of this tender.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
42	Vol 2, part 1 Pg. No 21, clause 4.5	Such construction work site visits by DDC shall be paid separately.	Please clarify, the site visit called by LMRC be extra of schedule of payments and what would be visit charge per person per day.	Please refer Annexure-8 of Addendum-1. Kindly refer Clause 4.5, Pg. 18 of Appendix-A of Scope of work Part 2.1, wherein for site visits by DDC, no extra payments shall be made.
43	Vol 2, clause 3.13, page 110/167	Existing Utilities	Request to remove the modification and diversions of existing utilities.	As per Tender Conditions.
44	Vol 3 Page 13-14, Item 5a, S No 04	Submission of documents, models etc to the local authorities such as DFS.	Please clarify the word DFS stands for	DFS stand for:- Department of Fire Safety
45	Vol 3 Pg.No 17, Item 6b	Progress Schedule (Weeks from issue of LOA)	Duration (in Weeks) of E&M schedule are same as of architectural schedule, which shall not be same in the case of UG & Elevated, request to give appropriate and valid time so that E&M follows the architectural schedule. E&M submission shall be always 2-4 weeks after Architectural submission.	As per Tender Conditions.
46	Vol 3 Pg.No 17, Item 6b	* Payments after approval of DFS	*(star) have not been marked on any item number. please clarify.	Please Refer Annexure-12 of Addendum-1
47	Vol 4, Part 4, Clause H 1.10, Page 4	Manuals to be included by DDC	DDC shall review the manuals prepared by Contractors. Please clarify.	As per Tender Conditions.
48	General	Indian Green Building Council (IGBC)	Please clarify the scope of IGBC for DDC, if in case it is not in the scope of DDC, we would like to take up for better in-house coordination and incorporation of IGBC requirement from concept developed by us.	IGBC norms shall be adopted in design & specifications.
49	General	-	Kindly confirm whether the Public Tunnel main line to be considered or not.	Query is not clear.
50	Vol 3, Part-1A, Clause 2/Page 1	Level of development /Level of Information must be followed as per LMRC's information requirement...	Please provide LMRC's information requirement and LOD details	BIM Forum LOD Specification 2018 & Refer S. No. 15 of this Reply.
51	Vol 3, Part-1A, Clause 3.1/Page 1	Bidder need to model existing infrastructure and systems in sufficient details...	Existing infrastructure will be modelled in LOD 100 (to facilitate integration) wherever required. What will be the format of the input for existing infrastructures and systems (utilities, roads...)? Who will provide those input?	LOD 200. Format of the input shall be decided after award of work. DDC required to pickup information for existing infrastructure. Information available with LMRC or in the scope of contract shall be shared.
52	Vol 3, Part-1A, Clause 3.1/Page 1	To work on LMRC digital Platform (BIM 360)	SYSTRA has its own internal CDE (Smart hub/Project wise). Models will be uploaded on BIM 360 platform on regular basis.	BIM 360 to be adopted as per the tender, updation to be done regularly as decided by LMRC.
53	Vol 3, Part-1A, Clause 3.4.1/Page 2	DDC need to model all design and construction information as individual discipline model and then collaborate it in single master 3D composite model, allowing for 2D drawings to be extracted.	As Standard Practice, 2D drawings are created in the Discipline model itself (e.g. Architecture drawings will be created in the Architecture BIM Model). We link other discipline models as reference (e.g. Arch and structure models are attached as reference in MEP models and vice versa). Single master 3D composite model is used for Clashes, Interface etc.	Accepted.
54	Vol 3, Part-1A, Clause 3.5(b)/Page 4	Based on as built drawing as built model shall be updated by DDC, in case required	As build models is generally updated by the Contractor who prepares the as built drawings. Please clarify.	As per tender conditions.
55	Vol 3, Part-1A, Clause 3.5/Page 5	Electrical: - The DDC will provide a 3D BIM created.....These components include but are not limited to all major electrical equipment, transformers, switch gear, generators, panel board, lights, conduits, hangers, Cable trays, race ways & other electrical equipment.	Hangers are added in the shop drawings generally prepared by Contractors. (As shop drawings are not DDC's scope) Moreover, Whether Hangers are required only for electrical not for mechanical pipes & Ducts?	Updation of Model has to be done by DDC as per shop drawing provided by contractor Modelling of all Mechanical items is required, tender conditions to be followed
56	Vol-2/Scope of Work/Part-4	Optimization/Simulation study, which will include prescribing of the power supply arrangements for above corridors including depot, under normal & emergency conditions and voltage drop at farthest end in each case.	In general, Depot is not considered in Traction Simulation Study through software. However separate information about Depot TPS sizing will be provided based on the assumption of train operation in Depot. Kindly confirm.	Confirmed.
57	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 1/ Page no.1	ii. Power for auxiliaries at stations and along the line, tunnel and the depots. This will be worked out by the DDC based on station E&M design by using ETAP or equivalent software	In general practice Auxiliary load calculations for station & tunnel are performed by E&M design team. Based on the information received AC load flow/design shall be performed. Kindly confirm.	Traction DDC will interface with E&M team for input data for AC load flow/ design
58	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 1/ Page no.1	DC and AC simulation study re-running in such cases will be limited to not more than two revisions (i.e., Revision-0 shall be the first simulation and thereafter two revisions).	Simulation study is a sophisticated, specialized task which will involve substantial additional expenditure for each repeat run. It is carried out after seeking approval of all Input parameters. Further small/ minor changes in power supply arrangement may not require repeat of simulation study. The scope of Task 1 may therefore be limited to not more than total two simulation studies (AC, & DC) (i.e. Rev 0 and thereafter one revision only). Any additional simulation study beyond 2 iterations/runs would lead to increase in bid cost and if imperative to be carried out, it needs to be at an extra cost. Please confirm.	Agreed (i.e., Revision-0 shall be the first simulation and thereafter one revisions).



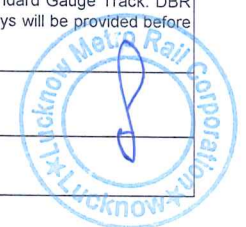
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
59	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 1/ i) / Page no.3	The possibility of equipping DC Substation with Inverter unit should also be explored and advised for consideration. Locations of most burnt energy for each track should be found and advised for future energy storage energy storage system possibilities	In DC System, it is a standard practice to provide either the Inverter unit or energy storage system like Batteries for recuperation of regenerated energy. It is, therefore requested to define either Inverter or energy storage system (costlier) system for recuperation of regenerated energy.	DDC will suggest the location for inverter unit based on cost analysis and other metro system during design stage
60	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 1/ i) / Page no.3	i) simulations must cover whole weekday time table. the detail of energy regenerated and utilized should be brought out in the study	It is worthwhile to mention that simulation is performed for 2 hours. which is normal peak hour period on every day either on morning or evening. It is not carried out for whole weekday timetable. It is requested to amend the clause accordingly.	As per tender conditions.
61	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 1/ j) / Page no.3	Simulation is to be carried out for different headway..... The idea is to operate the trains in a scenario where all the regenerative braking energy generated by trains is consumed within the system by the other trains and minimum input energy is required	Bidder's understanding is regenerated energy saving will be studied only for the headway mentioned in Clause 2.4 of volume 4 – page 4, Part VII, Design Criteria (at headway of 4.6 min, 3.8 min, 3.0 min and 1.9 min). Kindly confirm.	As per tender conditions.
62	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 7/d) / Page no.6	Final Validation of relay settings after completion of the construction work	In our opinion, DDC scope should be limited to providing design of protection system and co-ordination based upon load flow study & fault level calculation. Final relay setting is in the scope of construction contractor in coordination with vendor. DDC will review and examine the relay settings proposed by the Construction Contractor. Kindly confirm.	As per tender conditions. Relay settings are done by construction contractor, but the same is validate by DDC.
63	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 12/ Page no.7	Plan, detail design control, co-ordinate and execute the design phase of the contract of production of drawings, documents and reports to meet the key schedule dates included in the Agreement and as directed by the Employer's Representative.	Our understanding of the scope of work in this task is to provide detailed conceptual drawings based upon which construction contractor will develop Good For construction drawings. Kindly Confirm	As per tender conditions. Construction reference drawings to be issued by DDC and working shop drawings to be prepared by traction contractor.
64	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 13/ a) / Page no.7	Make available their service as and when required during the construction contract available to modify the construction designs and drawings as necessary to incorporate site conditions and unforeseen conditions, to attend meetings/interface meetings connected with work whenever required	As the DDC work requires the expertise and group of multiple discipline experts to perform the job with full technical skills available with the firm. In that case it should be more beneficial to perform the DDC activity from Firm's design office only. So, it should not be necessary to have the office at project site. However, whenever required, DDC experts may visit to have frequent discussion with Employers representative. The attendance of DDC Experts for construction period including design support will be charged as per fee under Task 14 i.e., Schedule-B of financial proposal. Kindly confirm.	As per tender conditions.
65	Vol-2/Scope of Work/Part-4 Clause 2.1 Task 14/ Page no.8	The attendance of Expatriate Expert of DDC at Employer's office/Site, only if required by Employer will be payable separately on man-days/visits basis as per rates agreed in the accepted financial proposal- Schedule-B of the Financial Proposal.	The attendance of DDC at site for construction period design support will be provided for maximum 4 years from the date of issue of LOA or 3 years from the date of issue of date of award of construction contract, whichever is earlier. Kindly confirm.	As per tender conditions.
66	Vol-2/Scope of Work/Part-4, Task 2 / Page no.3	Detail design of 750V DC Traction Electrification for its installations including preparation of Structure Erection Drawings, Power Supply system for all extensions of corridor, Traction Sectioning Diagram covering mainlines and depots & finalization of locations of different type of TSS and location of traction interrupters, disconnection switches giving due consideration to location of turn-out and cross over. This will also include the interface management of design for installation of traction electrification with track designers and the contractors. Preparation of sectioning diagram covering mainlines and Depots & finalization of locations of Feeding arrangements giving due consideration to site conditions.	We kindly request to clarify the scope clearly. Installation is done by traction contractor. So, it should not be in DDC scope. Also is it understood that Cl. 3.6.1, Pg.11 states that the installation drawings shall be in scope of traction contractor only. In addition, interface management during installation should be in scope of traction contractor only.	DDC will prepare Traction Sectioning Diagram covering mainlines and depots & finalization of locations of different type of TSS and location of traction interrupters, disconnection switches giving due consideration to location of turn-out and cross over. This will also include the interface management of design for installation of traction electrification with track designers and the contractors. DDC will validate Traction Electrification for its installations including structure erection drawings for Power Supply System.
67	Vol 2/Scope of Work/Part-4, Task 13/ Page no.7	The DDC will be required to make their services available to make additional details available, modify drawing and issue clarifications whenever required during the construction phase. This would involve attending meeting at Employer's office/Site whenever required.	During construction stage any modifications in the drawings shall be in scope of traction contractor and not DDC. Please confirm.	As per tender conditions.
68	Vol-2/Scope of Work/Part-4, Cl. 3.2.4 iii / Page no.7	Similarly a special care shall be made at the junction of mainline and depot	In DC Traction System, Main Line will be always kept on floating system. It is requested to confirm whether entire depot will be kept at earth potential or what will be the return potential of different parts of the depot	It shall be defined during design stage.
69	Vol-2/Scope of Work/Part-4, Cl. 3.4.1 e / Page no.8	The power supply at RSS shall be received from UPPTCL/Torrent Power supply network. The short circuit fault level of grid at 66 kV voltages are as follows 132 kV, 4500 MVA, 40 KA	Please confirm the Short circuit fault level at 132 kV as from 4500 MVA fault level is 19.68 KA, whereas given fault is 40 KA.	Fault level of grid shall be at 132kV voltage level in place of 66kV voltage level. Input data Short circuit fault level at 132kV shall be provided during design stage.
70	Vol-2/Scope of Work/Part-4, Cl. 3.4.3 / / Page no.9	33 kV network description 33 kV cables will be laid from the RSS along the viaduct and tunnel and will consist of two separated networks. - Traction Network, - Auxiliary network Each network will consist of two cables, each one having the possibility to be fed from each RSS having the capability	Proposed scheme of feeding 33 kV with two separate Traction and Auxiliary network is better but costlier. Other schemes of feeding 33 kV for Traction and Auxiliary Network are also available which are more cost effective . Please confirm that DDC is permitted to explore other schemes to feed the 33 KV cable	DDC will advise better system based on cost analysis and the system prevalent in other metro system.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
71	Vol-2/Scope of Work/Part-4, Cl. 3.4.(c) / / Page no.9	The DDC's design shall take into account the installation requirements of the system wide information.	It is understood that installation drawings shall be prepared by traction contractor. Kindly confirm.	Please follow tender conditions, Construction Reference Drawings to be issued by DDC and Working/ Shop drawings to be prepared by Traction contractor.
72	Vol-2/Scope of Work/Part-4, Cl. 3.6.1 / Page no.11	DDC shall prepare the DC traction electrification design drawings and plan for its installations for preparation of detailed construction drawings, structure erection drawings, DC traction electrification sectioning layout, cross over and turnout layout drawings and positive and negative current carrying feeder cable layout drawings, including earth panels layout and its cable connectivity details by the construction contractor."	It is understood that installation drawings shall be prepared by traction contractor. Kindly confirm.	Please follow tender conditions, Construction Reference Drawings to be issued by DDC and Working/ Shop drawings to be prepared by Traction contractor.
73	Vol-2/Scope of Work/Part-1, Cl. 3.5/ Page no.5	The DDC will provide a 3D BIM created with electrical traction system components that embody proper object information and parametric relationships in accordance with good engineering practice. These components include, but are not limited to, traction substation, overhead wiring, current collector, track, traction system.	It is understood that Installation drawing for the traction system will be in the scope of Traction Contractor based on the actual GA drawing of the vendors, So it should be in the scope of work of traction contractor only.	As per Tender Conditions.
74	Volume 1 Clause 1.2.2 Point F	Detailed design of BMS SCADA (Automation system) up to OCC level for all building services (E&M, VAC/ECS, TVF, firefighting/fire detection etc.) at stations including evacuation criteria and fire norms being followed in LMRC and Proposed arrangement whereby more than two trains can run between stations and clearance from U.P. fire services as defined in the scope of works part I & II for entire tunnels, stations, Ramps etc including all related submissions, value engineering, Reviews and all other items scope of work till issue of completion certificate.	As per our understating and general practice in metro system, control and monitoring of all building services (E&M, VAC/ECS, TVF, firefighting/fire detection etc.) shall be carried out by BMS SCADA system at station level and at OCC which is separated from Power SCADA system. There shall not be any interface of building services/BMS SCADA with Power SCADA system. Kindly confirm	There shall not be any interface of building services/ BMS SCADA with Power Supply SCADA system.
75	Volume 2 Part 4 (power supply traction) Scope of work Clause 2.1, Task 3/ Page no.3	Preparation of earthing, bonding and Stray current management plan of 750 V DC plan	As per DC traction system requirement, stray current monitoring system (central evaluation unit and stray current monitoring software) shall be at OCC only. Kindly confirm the provision of stray current monitoring system at BCC.	Please follow tender conditions, monitoring of stray current at BCC & OCC shall be finalized during design stage, consider the cost implication.
76	Volume 2 Part 4 (power supply traction) Scope of work Clause 2.1, Task 10/ / Page no.6	Design drawing and specification of SCADA system	Kindly specify the location of OCC and BCC for Agra metro corridor 1	It shall be defined during design stage.
77	Volume 2 Part 4 (power supply traction) Scope of work Clause 2.1, Task 10 (c) / Page no.7	DDC shall interface with signalling & telecommunication contractor for provision of design for power supply requirements.	Provision of Separate & Dedicated UPS shall be considered for Power SCADA system at OCC and BCC. Kindly confirm the same.	It shall be defined during design stage.
78	Volume 4 Reference documents Part VII Design criteria (Power supply traction) Clause 3.6.1	Asset management system "Capitalization of broken amperes"	Need clarification for equipment maintenance based on Capitalization of broken amperes.	It shall be defined during design stage.
79	Volume 1: Clause 3 g &h, Page 11	3(h) Recovery of Rs. 75,000/- per expatriate per day	3(h) Penalties given are too high and conflicting with Clause 10 SCC (20 (c) of GCC) page 61, Volume 1 which states that Penalty @ 2 lakh per man month will be recovered for the non-deployment of the Expatriate expert as per the agreed program.	Refer Annexure-5 of Addendum-1
80	Volume 1: Form of Tender: Point no. 9, page 32	Liquidated damages will be levied....	Please add the last line in para "If delays are attributable to Consultant"	As per tender conditions.
81	Volume 1: Requirement under conditions of Contract, Point VII, Page 33	PII – twice the Contract value. - Valid until two years after commission of work	PII should be equal to Contract value PII should be valid up to one year after the date of issue of completion certificate as per point VI of Appendix-1 (Requirement under conditions of contract) which states that duration of liability for whole works would be 12 months from date of issue of completion certificate for whole works. Would also request to accept the Umbrella Insurance policy available with consultant for PII requirement.	As per tender conditions.
82	Volume 1: Clause 11, GCC, Page 52	Liability of DDC to LMRC	Please add following in last sentence: "excluding indirect and consequential losses".	As per tender conditions.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
83	Volume 1: Clause 25, Page 52, Assignment and Sub-contract	The DDC shall not assign obligation to Sub-consultant	Whether Sub-consultancy to JV partner or within group company in either/ both cases would be considered as Sub-consultancy. Please confirm	Within JV partner or group company it will not considered as Sub -consultant.
84	Volume 2: Clause 5.1, Page 19	Organization of Detailed Design Consultant: Last para" Minimum design organization shall be as per Contract requirements and the same may be augmented from time to time....."	Bidder understand that any augmentation shall be payable as per Contract rate. Please clarify.	As per tender conditions.
85	Volume 3: Note 1, Page 19	Liquidated damages	Percentage of Liquidated damages to be corrected. In note 1 it is written that liquidity damages will apply at these stages @0.5% of contract Price while in Appendix-1/ Vol 1 it is written as 0.35% of contract value.	Refer Annexure-12 of Addendum-1
86	Others:	Variation	Contract need to capture the process of variation in case of additional work to be carried out and such work is not governed under the Contract/scope items.	Such cases shall be dealt as per Schedule C (optional items) of 'Financial Package' (BOQ).
87		Escalation	Provision of Escalation of man day rate in case of deputation of Expats beyond the duration stipulated in RFP. Please provide. Provision of escalation/ revision of DDC lump Sum fees if project is suspended at any point of time after award for continuous duration of 120 days. Please provide. Provision of escalation of Construction support period extend beyond stipulated time period. Please provide.	As per tender conditions.
88	Vol-I, NIT, Clause 1.1.3.2, A.1	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M. NOTE: Tenderer shall also be considered eligible under para A.1 above if he submits Letter of Consent along with necessary supporting documents from a firm(s) satisfying eligibility criteria for Architectural & E&M Works as stated, to work as Sub-Contractor of Tenderer for Architectural & E&M Works.	A separate independent JV for DDC of Elevated Metro viaduct and DDC of Elevated Metro stations having past experience and satisfying eligibility criteria given in the NIT independently may please be allowed for JV / Consortium of Structural designs.	As per tender conditions. Kindly also refer Annexure-1 of Addendum-1.
89	Vol-II, Scope of Works –Part-2.1, Clause 5.1	DDC can have his full-fledged office either in Lucknow or in Agra in his own premises. However, in case DDC does not plan to have full-fledged office in Agra he has to deploy 1 coordinator well versed with design aspects along with 2 to 3 supporting staff in different fields for which office space of approximately 50 sqm shall be provided by LMRC/Agra Metro Cell in its premises. DDC to note that only space will be given by LMRC/Agra Metro Cell and furniture, computers, plotters etc. including consumables will have to be arranged by DDC at his cost.	DDC should be allowed to carry out their works from their HO. Representative will be deployed at Lucknow/ Agra as required by LMRC.	As per tender conditions.
90	Vol-I, NIT, Clause 1.1.3.2, A.1	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M. NOTE: Tenderer shall also be considered eligible under para A.1 above if he submits Letter of Consent along with necessary supporting documents from a firm(s) satisfying eligibility criteria for Architectural & E&M Works as stated, to work as Sub-Contractor of Tenderer for Architectural & E&M Works.	Elevated Metro stations completed as a sub consultant by different partners of JV / Consortium for Structural, Architectural & E&M design may please be considered eligible. Also ongoing projects with fees received more than 90% of the total fees may please be considered eligible.	As per Tender Conditions. Kindly also refer Annexure-1 of Addendum-1.
91	Vol-I, NIT, Clause 1.1.3.2, A.1	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of min 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	DDC of elevated LRTS stations completed as a sub consultant by different partners of JV / Consortium for Structural, Architectural & E&M design may please be considered eligible.	As per Tender Conditions. DDC experience of LRTS Stations will not be qualify as experience for Metro Stations.
92	Vol-I, NIT, Clause 1.1.3.2, A.2	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural & E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	JV partner may please be considered eligible having ongoing works wherein the consultant can submit the WO/Contract Agreement, bill wise details of payment received till date – certified by C.A.(minimum Rs. 5 crores which will justify substantial completion), T.D.S certificates for all payments received till date and the copy of last bill paid by client.	As per Tender Conditions Kindly also refer Annexure-1 of Addendum-1.
93	Vol-IV, Reference Doc, Section D5.1	The railway loading applied to structures on the Project shall be in accordance with attached axle configuration of modern rolling stock except as detailed below.	Axle Configuration may please be provided along with the maximum no of successive cars.	16 t axle load is proposed with Standard Gauge Track. DBR duly Approved by Ministry of Railways will be provided before Detail Design Stage.
94	Vol-IV, Tender Drawings	-	Length of elevated stations and under ground stations appears to be 80m and 140m respectively. Please confirm.	As per Tender Conditions
95	NIT, Clause 1.1.2	Date & time of Submission of Tender 14.08.2019 @ 15:00 Hrs.	The time line given for the submission of tender is too short. Last Date of submission of tender may please be extended to 28.08.2019.	Refer Annexure-1 of Addendum-1



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
96	Vol-III, Financial Package,	-	Direct Payment to individual JV partners as per the progress of submission may please be considered.	As per Tender Conditions
97	7.4.6	Evaluation of Technical Proposal & other technical data: 7.4.6.1 The Employer will evaluate the technical suitability and acceptability of the proposals as per the employer's requirements. The evaluation shall be based on the documents submitted as per clause - 3.2 and tender security as per clause 5.0. Tenderer(s) may be asked to make a presentation of their proposal to LMRC team for evaluation 7.4.6.2 Where a tenderer's technical submittal has major inadequacies his tender will be considered to be non-compliant and will be rejected. 7.4.7 Tenders not considered substantially responsive and not full-filling the requirements of the tender document as evaluated as per item 7.4.1 to 7.4.6 shall be rejected by Employer and shall not be allowed subsequently to be made responsive by correction or withdrawal of the nonconforming deviation or reservation. 7.4.8 If any tender is rejected, pursuant to Clause 7.4.7 above, the Financial Package of such tenderer shall be returned unopened. 7.4.9 The decision of the Employer as to which of the tenders are not substantially responsive shall be final	Criteria for Technical Evaluation is required to be made more elaborated.	Referred clause is self explanatory.
98	Clause 1.3.1.A.1 of NIT, Vol.-1	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e.	For Technical Evaluation of the Bidder, transit projects other than metro be also considered.	As per Tender Conditions Kindly also refer Annexure-1 of Addendum-1.
99	Clause 1.3.1.A.2 of NIT, Vol.-1	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural & E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	For Technical Evaluation of the Bidder, transit projects other than metro be also considered.	As per Tender Conditions Kindly also refer Annexure-1 of Addendum-1.
100	Clause 1.3.1.A.3 of NIT, Vol.-1	Tenderer (either a single/ JV/ Consortium) should have done design / design review of minimum 15 track kms of 750 volts DC or above Traction Electrification on viaduct/ long bridges/ underground section including Railway depot workshop on a Metro Rail System, design / design review of at least 02 no. of 66 KV or above voltage Receiving Substations, design/ design review of at least 06 numbers of indoor type 33 kV (or 24 or 22 or 11 kV)/ 750 volts DC or 1500 volts DC traction substations and 33kV (or 24 or 22 or 11 kV)/415V ac auxiliary power sub-stations on and design / design review of at least two SCADA works for traction/ auxiliary power supply on underground/ elevated Metro Rail System or Suburban Rail System/ Monorail system.	This clause is required to be removed, since civil DDC do not design or review design of traction system.	As per Tender Conditions.
101	3.1.b	Tender Security (EMD) in original in a separate sealed envelope. It must be noted that in case of a JV/consortium, the B.G. (if EMD is in form of B.G.) must be on behalf of the JV/consortium and issued on behalf of the name of JV/consortium	As per Micro, Small and Medium Enterprises Development Act, 2006, the EMD should be waived off if any of the JV partners is registered with Ministry of Micro, Small and Medium Enterprises.	As per Tender Conditions.
102	1.3.1.A.	Notes: The tenderer shall submit details of works executed by them in the Performance of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted. In case of joint venture / Consortium, full quantum of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the quantum of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered	JV partner, who is fulfilling the Financial criteria may be considered Technically eligible provided the JV/ Consortium as a whole qualifies the Technical eligibility criteria.	Yes, your understanding is correct. Kindly also refer Annexure-1 of Addendum-1.



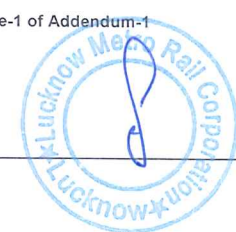
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
103	1.1.3.2.A	Notes: <ul style="list-style-type: none"> The tenderer shall submit details of works executed by them in the Performa of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted. In case of joint venture / Consortium, full quantum of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the quantum of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered. 	<i>To increase the participation of more consultants and to add value to explore the innovative design ideas it is suggested to consider On-going works also as a criteria for Technical Evaluation. Therefore, the note below in red may be added to the clause.</i> Notes: <ul style="list-style-type: none"> The tenderer shall submit details of works executed by them in the Performa of Appendix 11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted. Ongoing Works will be eligible for technical evaluation if consultancy fees received for that ongoing project > 4.0 Cr. Copy of Agreement/Work Order, Details of payment received certified by C.A., T.D.S certificates for all payments received by client shall be submitted. In case of joint venture / Consortium, full quantum of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the quantum of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered. 	Commissioned portion of Ongoing work experience will be considered. Kindly also refer Annexure-1 of Addendum-1.
104	1.1.2	Date & Time of Submission of tender: 14.08.19 @ 15:00 Hrs	The Date of submission of tender be extended by 6 weeks.	Refer Annexure-1 of Addendum-1
105	Clause A.1, AGDD-01(R1)/Vol-1/N IT, Pg. 2	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	Most International metro projects have entailed tunnelling, hence we request that the viaduct experience of 4km be accepted for any rail system (including metro projects) instead of just for metro projects. Similarly, the metro station experience be acceptable for any kind of metro station: either elevated or underground	As per Tender Conditions.
106	Clause 1.1.3.1 Eligible Applicants, AGDD-01(R1)/Vol-1/N IT pg. 1	"A non-Indian firm is permitted to tender only in a joint venture or consortium arrangement with any other Indian firm having minimum participation interest of 26% or their wholly owned Indian subsidiary registered in India under Companies Act-1956 with minimum 26% participation."	Please clarify if foreign tenderers are obliged to submit their proposals with an Indian partner. Are Indian branch offices of foreign firms allowed to enter the tender as a single firm?	Referred clause is self explanatory.
107	Clause 1.1.3.2 Minimum Eligibility Criteria, AGDD-01(R1)/Vol-1/N IT pg. 2	"The tenderers will be qualified only if they satisfy the criteria as given in Para A.1, A.2 and A.3 below during last Seven years ending 31.05.2019: ..."	Please inform if ongoing works can be used as "work experience" that are requested according to this item.	Commissioned portion of Ongoing work experience will be considered.
108	Clause A.2, AGDD-01(R1)/Vol-1/N IT, Pg. 3	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural & E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	While the pre-qualification requirement for viaduct length has been specified as 4 km, we suggest that a similar length be specified for underground works as well. The station lengths should be included in the underground tunnelling length	As per Tender Conditions.
109	Clause 7.5.5, AGDD-01(R1)/Vol-1/I TT, Pg. 18	For the purpose of comparative evaluation of tenders received shall be compared amongst various Tenderers to determine the lowest evaluated tenderer.	Instead of awarding on least cost basis, we request that the evaluation be carried out on QCBS (Quality cum Cost basis) selection criteria 80:20. In which case marks can be assigned to experience and personnel CVs	As per Tender Conditions.
110	Clause A.3, 2 nd Notes (1 st point, last sentence), AGDD-01(R1)/Vol-1/I TT, Pg.3	In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted.	Considering that Internationally TDS certificates and other proof demanded may not be available to prove work done for Private Client, we request that this requirement be changed to "In case the work is executed for private client, copy of work order, bill-wise details of payment received certified by C.A., and a certificate from Private Client and Main Client (Government) certifying completion of work should be submitted"	Refer Annexure-1 of Addendum-1
111	Annexure-4, AGDD-01(R1)/Vol-1/I TT, Pg. 30	Annexure 4: Sample Format for Banking Reference for Liquidity	Considering that some of the bidders may be International firms, we request that this requirement be done away with for International firms	Banking references will only be required, if the Net Current Assets / Liquidity in Appendix-10 of FOT is negative.
112	Clause 8, Supply of Personnel, AGDD-01(R1)/Vol-1/ GCC & SCC pg. 52	The qualifications and experience of the personnel who are sent by DDC to work on the project shall be acceptable to LMRC. For this, he will submit CVs and qualifications of the experts proposed for LMRC's approval.	We understand that the CVs of Key personnel will be provided by successful bidder after signing the contract. Kindly clarify that the consultant shall provide the key personnel's CV on Proposal Stage or after signing the contract.	Kindly refer Clause 3.2 (f) of ITT of tender document.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
113	Volume-2 / Part-1A	This document outlines the general requirements that governs DDC for BIM processes.	The current and new international standard ISO 19650 (or overridden BS 1192) published at the beginning of 2019 is not quoted in the aforementioned document. Shall ISO 19650 be applicable and utilized for all BIM processes and deliverables given the standard outlines discrepancies/additional processes from the tender document?	(a) LOD 200 (schematic stage drawings) to LOD 350 ('shop' drawing stage) shall be required to be followed and later 3D BIM model to be updated with 'as-built' drawings. (b) The DDC should be familiar with operations of a digital project system enabling a fully integrated solution for employer & contractors. The DDC will be required to work on a digital delivery for built assets based on international standards and methodologies including: • PAS 1192-2 2013 - "Specification for information management for the capital/delivery phase of construction projects using building information modeling" • PAS 1192-3 2014 - "Specification for information management for the operational phase of assets using building information modeling" • AIA Document E203TM-2013, Building Information Modeling and Digital Data Exhibit • CIC BIM Protocol 2018 • BIM Forum LOD Specification 2018" (c) Bidder has to procure licenses for CDE platform
114	Clause 2.1.iii.e, AGDD-01(R1)/Volume-2/Scope of Work/Part-1, pg. 4 & Clause 3.9. ii, pg. 10	These Services generally include, but are not limited to:..... & The DDC shall prepare drawings with sufficient detail to fully describe the architectural design of the stations, ancillary facilities, and property development within station premises, including mechanical and electrical equipment and any structures visible to the public	Please kindly clarify the extent of "Property Development" given the excluded items quoted in Part-2.1 / 4.2.2. Is there any building programme for Agra Metro Administrative Office?	Scope of property development out side station area is not in scope. Agra administrative building is also not in the scope of this tender. Kindly also refer Annexure-7 of Addendum-1.
115	Clause 3, AGDD-01(R1)/Volume-2/Scope of Work/Part-2.1, pg. 2	Existing Data available with LMRC	Please kindly provide the predicted passenger loads (commuter traffic data, entraining-detraining passengers) for stations enabling us to execute preliminary calculations for pre-bid analysis and conceptual sizing of the stations.	For passenger forecast, Kindly refer DPR and supplementary documents to DPR of Agra Metro available on LMRC' website.
116	Table 2, AGDD-01(R1)/Volume-4/Reference Documents/Part-VI, pg. 8	Table 2, Volume-4 / Reference Documents / Part-VI:	Please kindly provide the required car numbers per headway to determine the total train length and platform length for the stations.	Please refer DPR and supplementary documents to DPR of Agra Metro available on LMRC' website.
117	Clause E2.3.1: Geologic Studies, AGDD-01(R1)/Volume-4/Reference Documents/Part-II, pg. 4	"Geologic studies shall include, but not be limited to, a review of pertinent and existing literature, aerial photographs, and remote-sensing data; a detailed field reconnaissance of the site; and preparation of project-specific maps and cross-sections. Project-specific geologic maps shall be prepared at about 1:5,000 scale, and geologic cross-sections shall be prepared at about 1:5,000 scale, both horizontal and vertical. Suitable base maps for geologic maps shall be utilised."	Please clarify the scope of geological services expected from the DDC. Are investigation works expected to be carried out by the DDC or have geological investigation been carried out and relevant information will be provided to the DDC after the award of the contract.	Geotechnical investigation have been carried out at the time of preparation of DPR for Agra Metro. Geotechnical investigations details along the corridor, DPR may please be referred.
118	General		Please clarify if stamp duty is expected to be paid by the DDC bidder and inform if there are any other taxes that shall be included in the proposals.	Please refer Clause 4.6 of ITT of tender document.
119	NIT, Date & Time of Submission of Tender	Last date and time of submission of Tender on 14 th Aug 2019 @ 15:00 Hrs	We request you to please provide at least 3 weeks for tender submission from last date of clarifications.	Refer Annexure-1 of Addendum-1.
120	General	-	1. Please confirm whether LMRC is planning to appoint General consultant for the Agra Metro Rail Project. 2. If yes, kindly confirm if the appointed DDC can participate in the GC tender, where the design review of the detailed design carried by the DDC can be reviewed by the other Consortium members of GC.	1. Not yet decided. 2. No.
121	ITT, clause 3.1 (f)	-	Please confirm Education qualifications of key experts.	Refer Annexure-2 of Addendum-1.
122	ITT, clause 3.1 (g)	-	Definition of Expatriate means only Foreign Experience or Foreign passport holding shall be considered as Expatriate. Please confirm	Expatriate means expert holding foreign passport.
123	ITT, clause 3.1 (l)	LMRCL is planning to setup a digital progress monitoring software package, BIM 5D. DDC shall implement Building Information Modelling (BIM) system for executing and delivering the services set out in this Agreement. All station designs (including architectural design, structure design, E&M services design, interior fit outs, plumbing design etc.) and viaduct designs/proof checking shall be done using BIM modelling. DDC shall implement the necessary hardware, software and human resources towards this.	Please list out the softwares for BIM which DDC have to procure for this project with duration.	As per tender conditions.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
124	Appendix A Part 2.1, Page 6 Scope of work 2.1(a)	Prepare and update during construction Combined Services Drawings (CSD), Structural Opening Drawings (SOD) (including Walls and Floors) and Structural-Electrical-Mechanical Drawings (SEM) and identify embedded items/openings indicating system-wide information for the purpose of E&M, VAC and BMS co-ordination	1. CSDs are usually prepared using shop drawings of contractors. Please, confirm that DDC will issue CSDs after receipt of all major vendor's i.e. Civil, E&M, Traction, S&T, PSD, VAC etc. 2. Dimension of SEM is vendor specific as the scheme of application and cable schedule of a vendor decides size of the cut out. Please confirm that dimension of these cut outs will be available to DDC at the stage when the scheme of all major services (i.e. S&T, PSD, AFC etc.) are finalized. 3. DDC will provide an exhaustive list of I/P and O/P. However the list will be finalized after award of BMS contract to the vendor. Please confirm	As per tender conditions.
125	Appendix A Part 2.1, Page 7 Scope of work 2.1(a)	Layout of Earthing and Lightning Protection System	With respect to lightning protection please confirm that IS 2309 is not applicable as it has been superseded by IEC 62305-1 (2010) as notified by BIS in Gazette of India.	Latest/ applicable standards shall be applicable for this protection system.
126	Clause H.1.13.2, Section H1, Building Services, Vol-4	Software for electrical load analysis, electrical system analysis like load flow, voltage drop, short circuit analysis, protection, relay co-ordination, grounding, transient stability study, cable sizing, lighting design, water flow analysis & pump design, refrigeration load analysis etc. shall be provided by DDC free of charge	These softwares are licensed software. Please clarify details of purchase of software.	DDC will provide electrical load analysis, electrical system analysis like load flow, voltage drop, short circuit analysis, protection, relay co-ordination, grounding, transient stability study, cable sizing, lighting design, water flow analysis & pump design, refrigeration load analysis.
127	Clause 2.1, Design Criteria, Vol-4 Part VII	The months of thunderstorm and the Isoceraunic level of the region (average thunderstorms per year in Bangalore Region, as per IS2309 may be considered.)	1. Why should average thunderstorms per year in Bangalore Region be considered? 2. With respect to lightning protection please confirm that IS 2309 is not applicable as it has been superseded by IEC 62305-1 (2010) as notified by BIS in Gazette of India.	Average thunderstorm shall be as per Agra Region to be considered and latest standard shall be applicable.
128			Please include exhaustive list of Standards and quotes in the boundary of which traction power supply should be designed.	The design has to be as per the latest/ applicable standards.
129			Please confirm duration of involvement in the project. In case of any delay in project which are not due to DDC, how long shall DDC be associated to the project.	As per Clause 1.1.2 of NIT, completion period is 48 months. In case of delay, time extension etc. shall be dealt with as per relevant Clauses of GCC/SCC.
130	Clause 3.2 (f) of Volume 1.	Key Staff Architectural -One for Underground Station & Elevated Station	One architect only is required.	Refer Annexure-2 of Addendum-1
131	Clause 3.2 (g) of Volume 1	Requirement of Expatriate Experts for 6 Key Areas	Indian/ Indian Experts working in various international metro projects are now available for all fields. Hence, requirement of expatriate may be waived off.	As per Tender Conditions. Kindly also refer Annexure-2 of Addendum-1
132	Clause 3.2 (h) of Volume 1	Recovery of Rs 75,000/- per Expatriate per day if any Expatriate is not mobilized	As per Special Conditions of Contract (SCC), Clause 20 (c), penalty@ Rs 2 lakh per man month will be recovered for the period of non deployment of the Expatriate expert, It may be clarified.	Refer Annexure-5 of Addendum-1
133	Clause 2.1 (e) of Volume-2 of Part 1.	Property Development Design of Building Services	PD cannot be planned without knowing the extent of area, utilization etc. The quotation may exclude this requirement as It cannot be planned in advance.	Scope of property development out side station area is not in scope . Kindly also refer Annexure-7 of Addendum-1
134	Clause 3.9 (ii) of Volume-2 of Part 1	Site Design, Landscape Design and Urban Design	Details of Urban design requirements need to be clarified.	Urban design includes relationship of stations and depot with existing surrounding structures.
135	Clause 3.9 (ix) of Volume-2 of Part 1	Providing Continue Support Perspective, 3 D Rendering	Perspective sketches, drawings and 3 D rendering will be provided from BIM package (Revit etc). This may be clarified in Tender.	3D rendering should be acceptable from REVIT etc.
136	Clause 6.4.1) of Volume-2 of Part 2.1	Load Flow Study for Low Voltage System Requirement	Requirement needs to be confirmed as this requires separate software package.	As per tender conditions.
137	Clause 3.3) of Volume-2 of Part-3	Layout	The layout of Depot has many short comings and needs to be modified for Pit Wheel lathe, ETU etc all requirements.	Layout of depot as provided in the tender document is tentative. Detail design of depot is part of scope of this tender.
138	(Clause 6.8) of Volume-2 of Part-3 clause 2 of Part 1A.	Details of Programs/Manual to be Shared before Using	It is requested to provide list of packages (Design and analysis packages, layout packages and BIM packages) available with Employers representative under CDE (common data enjoyment) of Employers information requirement.	BIM and CDE package already mentioned.
139	Clause 1.1.3.2, A of NIT, Page 2	Work Experience The tenderers will be qualified only if they satisfy the criteria given in Para A.1, A.2 and A.3 below (during last seven years ending 31.05.2019)	The Client is requested to kindly allow the Consultants to showcase the projects carried out in the last 10 years ending 31.05.2019 instead of 7. This is normally adopted by many agencies/Clients.	As per tender conditions.
140	Clause 1.1.3.2, A.1 and A.2 of NIT, Page 2 & 3	Work Experience A.1 Tenderer should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category, i.e., Structural, Architectural and E&M. A.2 Tenderer should have done Structural, Architectural and E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	With the given criteria, the Client is requested not to limit the requirement to 2 different works. It is requested to kindly allow any number of different works carried out under each category, i.e., structural, architectural and E&M. This may please be considered and confirmed.	As per Tender Conditions. Kindly also refer Annexure-1 of Addendum-1



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
141	Clause 1.1.3.1 v. and Clause 1.1.3.2 (A.1) / (A.2) / (A.3) Notes of NIT, Page 2 and 3 of Vol-1	<p>v. Non Substantial Partners in case of JV/Consortium</p> <p>A.1 Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Elevated Section, Elevated Stations, Ramps & Depot connection.</p> <p>A.2 Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Underground Section & Underground Stations.</p> <p>A.3 Work experience of Detailed Design Consultant (DDC) for Power Supply & distribution system, 750V DC traction electrification and SCADA System.</p> <p>Notes: Tenderer shall also be considered eligible under Para A.1, A.2 and A.3 above if he submits Letter of Consent along with necessary supporting documents from a firm (s) satisfying eligibility criteria for Architectural & E&M works as stated, to work as Sub-Contractor of Tenderer for Architectural and E&M Works.</p>	<p>We understand that condition of having minimum 26% participation is not applicable on the given note 2 of A.1, A.2 and A.3.</p> <p>Thus, a work experience of a sub-contractor having participation lesser than 26% can also satisfy criteria as given in Para A.1, A.2 and A.3 by submitting a Letter of Consent.</p> <p>We understand that a Sub-contractor's letter of consent is acceptable only for Architecture and E&M works and not for Structural and this applies to both A.1 and A.2.</p> <p>Please confirm.</p>	<p>Your understanding is correct.</p> <p>Kinldy also refer Annexure-1 of Addendum-1.</p>
142	Clause 1.1.3.2, A.1, A.2 and A.3 of NIT, Page 3	<p>Work Experience</p> <p>A.1 Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Elevated Section, Elevated Stations, Ramps & Depot connection.</p> <p>A.2 Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Underground Section & Underground Stations.</p> <p>A.3 Work experience of Detailed Design Consultant (DDC) for Power Supply & Distribution System, 750V DC Traction Electrification and SCADA System.</p>	<p>The tender is silent on the ongoing projects except in form of Tender Appendix-11. The Consultants would like to submit that the ongoing similar projects shall also be considered eligible assignments with a completion of more than 40% of NIT cost of work i.e. INR 26.00 Crores (approx.) under each category.</p> <p>This requirement is being followed by the renowned agencies such as DMRC, CMRL etc.</p> <p>This may please be considered.</p>	<p>Commissioned portion of Ongoing work experience will be considered.</p> <p>As per tender conditions.</p>
143	Clause 2.1 of IIT, Volume 1	<p>Power of Attorney</p> <p>The Tenderer shall submit a written power of attorney authorizing the signatory(ies).....In case of Foreign Partners, Power of Attorney and Board Resolution...duly notarized by the notary public of country of origin and should be either stamped by Embassy/High Commission or Member Countries of Hague convention may submit these document with "Apostille" stamp.</p>	<p>It is submitted that Apostille of the documents in any country is a time-consuming process. Therefore, it is requested that in case of Foreign Partners, the duly notarized Power of Attorney and Board Resolution may kindly be accepted at the Tender submission stage while, the Apostille stamp by Embassy/High Commission or Member Countries of Hague convention of such documents can be done and submitted upon the successful award of the project.</p>	<p>Agreed.</p>
144	Clause 3.2 f of IIT, Page 11 of Vol-1	<p>Key Areas</p> <p>11) 750V DC system and Digital Protection & control expert for traction electrification application – One.</p> <p>13) AC & DC Traction Simulation Study Expert / Sub-consultant – One.</p>	<p>The Consultants would like to mention that there are a number of competent professionals who are Experts in both Points 11 & 13.</p> <p>Therefore, the Consultants request the Client to allow flexibility in proposing same or different experts for the said positions.</p>	<p>As per Tender Conditions.</p> <p>Kindly also refer Annexure-2 of Addendum-1.</p>
145	Clause 3.2 (Foot note) of IIT, Page 11 of Vol-1	<p>The above details should be submitted separately for Architectural, Civil Design, Building Services, Traction & Power Supply services. The offer should cover the entire scope of work as laid out in tender documents.</p>	<p>It should be noted that many contents of the technical package of various disciplines are interlinked and common also, thus are better explained, when presented in a unified format.</p> <p>Therefore, Consultants request the Client to change the foot note to: "The above details should be submitted for Architectural, Civil Design, Building Services, Traction & Power Supply services. The offer should cover the entire scope of work as laid out in tender documents."</p>	<p>As per tender conditions.</p>
146	Clause 3.2 e (ii) of IIT, Page 10 of Vol-1	<p>Tunnel Design Works</p> <p>(ii) Tunnel design, which should include Tunnelling by TBM, NATM & Cut & Cover. Design of Underground Metro Station and its building services.</p> <p>To substantiate work experience in these fields, technical proposal should be submitted as per Appendix 11 of FOT.</p>	<p>The referenced point asks the Consultants to substantiate work experience of tunnel design as per Appendix 11.</p> <p>But, the Appendix 11 does not contain any section under "Name of Work" for Tunnel works.</p> <p>A sub-head of Tunnel works may kindly be added in Appendix-11.</p>	<p>Refer Annexure-13 of Addendum-1</p>
147	Clause 3.2 f of IIT, Page 11 of Vol-1	<p>Expatriate Experts</p> <p>DDC will provide expatriate experts for the 6 key areas as listed below.</p>	<p>It should be noted that Indian Professionals have experience of similar projects and are in fact more competent than their expatriate counterpart due to the experience gained in Indian context.</p> <p>Therefore, Consultants request the Client to remove the requirement of expatriate experts and may allow any nationality experts to propose under these 6 key areas.</p>	<p>Kindly refer Annexure-2 of Addendum-1</p>



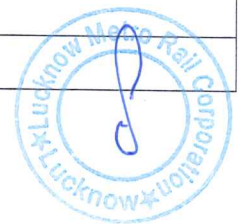
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
148	Clause 1.2 of Scope of Work, Part-1, Page 4 of Vol-2	Scope of Work Sikandra - Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra; consists of 6.569 Km Elevated Section with 06 + 01 (future) Elevated Stations.	06+1 (future) Elevated stations are mentioned in scope, whereas, in brief scope of work and even in the name of project only 06 elevated stations are mentioned. Kindly clarify if 01 (future) station is also in the current scope of work. If yes, please indicate the exact scope of services for this station. Also clarify, which one of the 14 stations is considered for future development.	Please refer Sheet 5 of 19 of Vol-5 (GAD) of tender document for future station. Preliminary design for future station will be required.
149	General Arrangement Drawings, Vol-5	General Arrangement Drawings	The provided GAD does not contain any architectural layouts of elevated or underground stations. The Consultants request the Client to kindly provide layouts of the elevated and underground stations.	The same shall be planned & designed by the DDC as per DPR/Scope of work.
150	General	General	LMRC is requested to kindly provide the station concept & GA drawings and Geotechnical reports.	Station concept & GA Drawings shall be planned & designed by the DDC as per DPR/Scope of work. Geotechnical Report is provided in the DPR of Agra Metro
151	Volume-1, Page 10, Pt. 3.2.c	"U" Girder The superstructure of viaduct shall be double 'U' Girder".	LMRC is requested to kindly clarify if "U" Girder is to be adopted as the superstructure, whether the DDC has to design it or will LMRC provide the drawings of "U" Girder.	DDC has to design superstructure.
152	General	General Alignment Drawings	In the General Alignment drawings, requirement of obligatory spans is not shown. It is requested to provide the same.	The same is in the scope of work of DDC as per Clause 1.2.2 (b) of ITT of tender Document.
153	Clause 1.2.2 d) & e) of IIT, Page 7, and Clause 3.4 a) and 3.8 of Part 2.1, Volume-2, and 3.8 of Part 2.2, Volume-2 and Clause 3 of Part 2.2 / Volume-2	Proof Checking of Detailed Structural Design (Civil)	The scope of work for structural design prior to award of construction contracts is not clear. We understand that DDC has to do only the proof checking of the design & drawings provided by the Contractor after the award of construction contracts. However, it is mentioned in Clause 3.4 of Part 2.1/Volume-2 that "The DDC shall prepare detailed designs based on the requirements provided in the concept report issued to it" & "The DDC shall perform all civil and structural design ... & GAD" in Clause 3.8 of Part 2.2/Volume-2, Please clarify. In continuation to above query, Clause 3 of Part 2.2/Volume-2 related to DDC services prior to the award of construction contracts, it is understood that the DDC shall perform proof checking of structural design & scheme of construction suggested by contractor.....". Since the Contractor will be on board only after the award of construction contracts, LMRC is requested to kindly clarify that so how can DDC proof check the design & drawings of the Contractor before award of contract.	Clause 3.4 (Appendix-A) of part 2.1, Vol-2 is for detailed scope of work for Building services and provisions are self explanatory. Clause 3.8 of Part 2.2, Vol-2 is for services to be provided by DDC prior to award of Construction contracts i.e. for preparation of specifications, Drawings and cost estimate. Clause is self explanatory
154	ITT, Clause 3.2 (d), Page no. 10 of Volume 1	Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed	The Consultants would like to submit that all the experts do not necessarily possess the Experience Certificates. It is thus requested that the Consultants may be allowed to submit the Experience Certificates / appointment letters from their respective employers to the extent possible and in case of non-availability, "Signed Undertaking from the staff mentioning that details given in CV are correct" should also be accepted. This is a practice, which is also adopted by other Agencies/Clients.	Agreed. Kindly also refer Annexure-2 of Addendum-1.
155	ITT, Clause 3.2 (d), Page 10 of Volume 1	"The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The Leader of the expertise team in each of the key areasshall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity.	There is disparity in the requirement of years of experience 10 and 13 years. Kindly clarify. The Consultants would like to submit that stipulated number of years of experience is on a higher side. The same may kindly be reduced considering the introduction of metro system or operations in India.	Refer Annexure-2 of Addendum-1
156	ITT, Clause 3.2 (g), Page 10 of Volume 1	CVs of the Expatriate experts shall be approved by the Engineer prior to their deployment in the project.	The Consultants understand that CVs of Expatriate Experts are not required to be submitted at the bidding stage and will be submitted after the award of the project. Kindly confirm.	Your understanding is correct.
157	ITT, Clause 3.2 (d), Page no. 10 of Volume 1	For expatriate experts of the Key areas, minimum international experience of 13 years in the relevant area is required.	The Consultants understand that international experience means the experience outside home country. This may please be clarified.	Your understanding is correct.
158	ITT, Clause 3.2 (j), Page no. 12 of Volume 1	Key Staff "The majority of the key staff shall be regular members of the tenderer / subcontractor for at least six months."	As numbers of Freelance Experts / Independent Consultants are available, who are having rich experience in carrying out similar assignments, hence, the Client is requested to omit the said clause for all the experts, as this will restrict the competent and qualified Independent Key Personnel to participate in this tender who can certainly add value to the project. This may please be considered and confirmed.	As per tender conditions.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
159	Clause 1.1.3.2 (A.1) of NIT, Page 2 of Vol-1	A.1 Work Experience of Detailed Design Consultant (DDC) for structural, Architectural and E&M works of Elevated Section, Elevated Stations, Ramps & Depot connection:- Tenderer (either a single entity / JV / Consortium) should have done structural, architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category, i.e., structural, architectural and E&M.	As underground stations come with added challenges and are more complicated, the Consultants request the Client to change "A.1" criteria with below: A.1 Work Experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M works of Elevated Section, Elevated Stations, Ramps & Depot connection:- Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M Design of minimum 4.0 km of viaduct length and minimum 4 elevated or underground metro stations.	As per tender conditions.
160	SCC Clause No.3 and GCC Clause No.14	Commencement of Services It is stated that the date of Commencement shall be the date of issue of Letter of Acceptance (LOA) by LMRC.	In this regard, it is submitted that the Client's instructions to commence the services from the date of issues of Letter of Acceptance is not correct and feasible, as the Consultants need more time to mobilize their staff. The Client may kindly provide at least 3 weeks to the Consultant to commence their services from the date of Contract signing.	As per tender conditions.
161	SCC Clause No.4 and GCC Clause No.16.1	Liquidated Damages for Delay It is mentioned that in case of delays without valid reason the DDC shall be liable to pay liquidated damages as given in SCC. The maximum limit of Liquidated Damages shall be 10% of the Fixed Lump Sum Price of the Contract.	In this regard, it is suggested that the maximum limit of 10% of Contract Value towards Liquidated Damages is very high and the Client may kindly consider to reduce this figure to 5%, which is normally kept in all projects funded by renowned agencies like World Bank, ADB and Other State Govt. etc. Further, in case of delay, due to the reason not attributable to the Consultant, the Consultant shall not be liable to pay any penalty.	As per tender conditions.
162	Clause No.6 of SCC	Price Adjustment As per Clause No.6 of SCC, the Consultant shall be paid Lump Sum Price.	The rates are fixed, being a lump-sum based Contract for 48 months. If due to any reason, without any fault of the Consultant, the duration of the assignment gets extended beyond 48 months, then the Consultant should be entitled to receive the escalated rates. Hence, the Client may kindly include an Escalation Clause in the Contract.	Time extension due to delay reasons not attribute to DDC, shall be dealt with relevant clause of GCC/SCC.
163	Clause No.36 of GCC, Page 58	Professional Indemnity Insurance As per Clause 36 of GCC, the DDC shall effect and maintain Professional Liability Insurance (PII) equal to the twice of contract value.	In this regard, it is submitted that the normal practice in all projects funded by renowned agencies like World Bank, ADB, AfDB, the amount towards Professional Liability Insurances is equal to value of the contract and NOT twice. In view of the above, the Client may kindly consider to modify this clause by stating that the Consultant shall take PLI cover equivalent to Consultancy Contract amount.	As per tender conditions.
164	Additional Point	Extension of Date	It is requested that the date of submission of the proposal may please be extended and a period of at least three weeks may please be granted for the preparation of the proposal from the date of issue of clarifications so that our Experts can prepare a comprehensive proposal addressing all the issues of the RFP document / ToR.	Refer Annexure-1 of Addendum-1.
165	Clause 20, on Page 54	Payment to the Consultant As soon as practicable and not later than fifteen (15 days) after the end of each calendar month during the period of the Services, the Consultant shall submit to the Employer, induplicate, itemized bills, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials of the amounts payable for such month. Separate monthly bills shall be submitted in respect of amounts payable in foreign currency and in local currency. LMRC shall pay the amount (which shall cover the sum total of all costs incurred by the DDC as set out in Special Conditions of Contract) to the DDC in partial payments on monthly basis for the performance of services as described in Volume 3 (Financial Packages) of tender documents. Service Tax will be paid extra if applicable.	In case of JV, we request the client to please clarify whether the payment will be made to the lead Member of Consortium or all members according to their share. Please clarify.	In case of JV payment will be made to the JV entity. Whereas for consortium payment may be made either to the lead Member of Consortium or all members according to their share.
166	Clause iii. Tenderers shall not have a conflict of interest under Clause 1.1.3 QUALIFICATION CRITERIA: sub clause 1.1.3.1 Eligible Applicants:	Tenderers shall not have a conflict of interest. Tenderers found to have a conflict of interest shall be disqualified. Tenderers shall be considered to have a conflict of interest with one or more parties in this bidding process, if: (a) a tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement for implementation of the project; (b) a tenderer's associate(s)/affiliate(s) (inclusive of parent firms) mentioned in subparagraph (a) above; or (c) a tenderer lends, or temporarily seconds its personnel to firms or organisations which are engaged in consulting services for the preparation related to procurement for implementation of the project, if the personnel would be involved in any capacity on the same project.	We request the client to confirm upon the award of the Detailed Design consultancy contract, the appointed consultancy firm/ members of the JV will have conflict interest for future assignments for General consultancy services for the Agra Metro assignment.	Confirmed.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
167	Clause 3.2 (g.) under clause 3. TECHNICAL PACKAGE, Page 11	-	We would like to know the Expatriate here means expert holding foreign passport will be considered as Expatriate expert or an Expert who has worked outside India?	Expatriate means expert holding foreign passport.
168	Clause 3.2 (d.) and (f) under clause 3. TECHNICAL PACKAGE page 10	An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	Please confirm the minimum educational qualification for the leaders for 14 key areas mentioned on page 10.	Refer Annexure-2 of Addendum-1.
169	Clause 3.2 (d.) and (f) under clause 3. TECHNICAL PACKAGE page 10	An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	Please define the years of professional experience for the leaders for 14 key areas mentioned on page 10.	Referred clause is self explanatory. Kindly also refer Annexure-2 of Addendum-1.
170	Clause 3.2 (d.) and (f) under clause 3. TECHNICAL PACKAGE page 10	An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	Please define the years of relevant experience for the leaders for 14 key areas mentioned on page 10.	Referred clause is self explanatory. Kindly also refer Annexure-2 of Addendum-1.
171	Clause 3.2 (h.) and (f) under clause 3. TECHNICAL PACKAGE page 11	If any Expatriate is not mobilized as per tender stipulations, a recovery of Rs. 75,000/- (Seventy-Five Thousand Only) per expatriate per day or part thereof shall be made from their bills.	We believe the non-mobilization penalty or recovery of Rs. 75,000/- per expatriate per day is too high. We request the client to reconsider the penalty amount.	As per tender conditions.
172	APPENDIX-1 [REQUIREMENTS UNDER CONDITIONS OF CONTRACT (GCC & SCC)] Point no. vii Amount of Professional Indemnity Insurance (PII) on Page 33	-	We request the client to limit the Amount of Professional Indemnity Insurance (PII) to INR equal to the contract value	As per tender conditions.
173	Clause ii. Page 1,	all members of the Group shall be jointly and severally liable for the performance of whole contract.	We request the client to confirm the number of the members of the Joint Venture (JV)	No such limit.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
174	Clause 5.2 on page 13	In case of joint venture/consortia, Bank Guarantee or FDR for tender security shall be in the name of joint venture/consortia and not in name of individual members.	We request the client to consider separate Bank Guarantees from the individual members of the Joint Venture for the required value based on percentage of participation, as per the Banking norms, Banks generally does not provide Bid Security in name of Joint Ventures. They are comfortable to give the Performance Security in the name of JV, as the JV at that point of time have LoA as a proof for the unincorporated JV for a particular assignment.	Refer Annexure-2 of Addendum-1.
175	NIT Clause No. 1.1.3.2, A of minimum eligibility criteria at page no. 2	Work Experience: The tenderers will be qualified only if they satisfy the criteria as given in para A.1, A.2 and A.3 below (during last Seven years ending 31.05.2019):	It is requested, the tenderers will be qualified only if they satisfy the criteria as given in para A.1, A.2 and A.3 below (during last Ten years ending 31.05.2019):	As per tender conditions.
176	NIT Clause No. 1.1.3.2, A.1 of minimum eligibility criteria at page no. 2	Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Elevated Section, Elevated Stations, Ramps & Depot connection: - Tenderer (either a single entity/JV/ Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M. Notes: - Tenderer shall also be considered eligible if criteria as listed under para A.1 above are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design. - Tenderer shall also be considered eligible under para A.1 above if he submits Letter of Consent along with necessary supporting documents from a firm(s) satisfying eligibility criteria for Architectural & E&M Works as stated, to work as Sub-Contractor of Tenderer for Architectural & E&M Works.	We understand this Clause in three different following ways. a) If a bidder is bidding as Single entity, then he can used maximum 02 Nos. of Projects to satisfy the all condition of eligibility "Detail design of minimum 4 km viaduct length and minimum 4 elevated metro station in maximum 02 different work with all services i.e. Structural, Architectural and E & M". OR b) For example, If the three bidders are bidding as JV/ then they can used maximum 06 Nos. of Projects (2 Nos. for each partners) to satisfy the all condition of eligibility "Detail design of minimum 4 km viaduct length and minimum 4 elevated metro station in maximum 2 different work with all services i.e. Structural, Architectural and E & M". OR c) If the bidder is bidding as a single entity or JV/consortium then they can used maximum 06 Nos. of Projects (2 Nos. for each Category i.e. Structural, Architectural and E & M) to satisfy the all condition of eligibility "Detail design of minimum 4 km viaduct length and minimum 4 elevated metro station in maximum 2 different work with all services i.e. Structural, Architectural and E & M". Please confirm the correct elaboration of this Clause. And Also, whether the 4km viaduct and 04 Nos. of stations would be satisfied with single project or multiple projects as per above description.	Your understanding as per elaboration (c) is correct. The viaduct & Station requirement for structural works is to be satisfied in Maximum 2 Nos. of projects by single partner of JV. Kindly also refer Annexure-1 of Addendum-1.
177	NIT Clause No. 1.1.3.2, A.2 of minimum eligibility criteria at page no. 3	Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Underground Section & Underground Stations: - Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural & E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	It is requested to consider the experience of Structural, Architecture and E & M detailed design work from 3 projects instead of 2 projects. We understand this Clause in three different following ways. a) If a bidder is bidding as Single entity, then he can used maximum 02 Nos. of Projects to satisfy the all condition of eligibility "Detail design of minimum 3 Underground metro station in maximum 02 different work with all services i.e. Structural, Architectural and E & M". OR b) For example, If the three bidders are bidding as JV/ then they can used maximum 06 Nos. of Projects (2 Nos. for each partners) to satisfy the all condition of eligibility "Detail design of minimum 3 underground metro station in maximum 2 different work with all services i.e. Structural, Architectural and E & M". OR c) If the bidder is bidding as a single entity or JV/consortium then they can used maximum 06 Nos. of Projects (2 Nos. for each Category i.e. Structural, Architectural and E & M) to satisfy the all condition of eligibility "Detail design of minimum 3 underground metro station in maximum 2 different work with all services i.e. Structural, Architectural and E & M".	As per tender conditions. Kindly also refer Annexure-1 of Addendum-1.
178	Clause No. 1.1.3.2 Note Bullet Point No. 1 of NIT at Page No. 3 R1	The tenderer shall submit details of works executed by them in the Performa of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, <u>copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client</u> shall be submitted.	In case of private project specially in foreign country, it is very difficult to receive all the details such as bill wise details of all payment received, TDS certificate and final/last bill paid by Client. Documentary proof of Contract agreement or completion certificate duly signed by Client should be sufficient. Please confirm.	Refer Annexure-1 of Addendum-1.



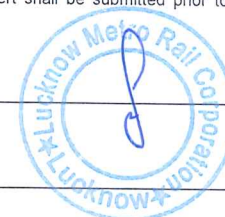
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
179	Clause No. 3.2 j of ITT at Page No. 11	The name, background and professional experience of each key staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment. (The majority of the key staff shall be regular members of the tenderer/subcontractor for at least six months).	As per recent scenario, it is very difficult to propose in house team for majority of members of expertise team. Company cannot bind the employees for long period. It is requested to remove this clause and allow the bidder to propose the key professional whether the regular employee of company or working in other firm having desired qualification and experience.	As per tender conditions.
180	Clause no. 3.2 d of ITT at page no. 10	An organization chart together with clear description of the responsibilities of each key staff member within the overall work program. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	As per this clause, only minimum relevant experience of key professional is required, no minimum qualification is required. Please confirm. As per this clause expatriate means having minimum international experience of 13 years in the relevant area. If key professional Indian but having international experience more than 13 years in the relevant area, will be consider please confirm.	Refer Annexure-2 of Addendum-1. Expatriate means expert holding foreign passport.
181	Clause no. 3.2 f of ITT at page no. 10	The technical proposal will be evaluated based on the capabilities /technical strength of Key staff proposed to be deployed. Important key areas of the DDC's responsibilities listed below shall be headed by leaders of 14 Key areas. Experience required for <u>the leaders for 14 key areas</u> have been given in para 3.2 d. CVs of leaders for 14 key areas as mentioned in the para below will be evaluated for technical evaluation.	As per the list of key experts given in clause 3.2 f, the total positions of key leaders are 14 and 06 Nos. of expatriate in clause no. g. As per our understanding the total numbers of Key expert including expatriate is 14. Please confirm. Whether we need to submit the CV of the 14 Key Experts (including expatriate) or not. Please confirm. If yes, please provide the CV format.	Refer Annexure-2 of Addendum-1 As per revised para 3.2(f) CV's of leaders for 8 key areas as mentioned will be evaluated for technical evaluation. CV's of 3 No. expatriate expert shall be submitted prior to their deployment
182	Clause no. 5.2 of ITT at page no. 13	In case of joint venture/consortia, <u>Bank Guarantee or FDR for tender security shall be in the name of joint venture/ consortia and not in name of individual members.</u> The Tender Security, in form of Bank Guarantee shall remain valid minimum upto 06.04.2020. The tender security shall be submitted in a sealed envelope clearly marked on top "Tender Security for AGDD-01(R1)".	We request you to kindly also allow the bidders to submit Bank Guarantee (EMD) in the form of Bank Guarantee in the name of individual members as per their percentage of share.	Refer Annexure-2 of Addendum-1
183	Clause no. 7.5.5 of ITT at page no. 18	The total Value of above two quoted by the tenderer converted to Indian Rupees as per tender provision shall be compared amongst various Tenderers to determine the <u>lowest evaluated tenderer.</u>	As per this clause we understand that the RFP selection method of consultant is least cost base selection. Since the number of foreign companies is working in Metro sector in India having vast experience, credential and in-house team of key professionals so it is requested to change the selection method to QCBS (Quality and Cost Base Selection)- 80:20.	As per tender conditions.
184	Clause 1.1.2, Page 1 of NIT	Key Details Approximate cost of Work INR 26.0 Crores	We understand that this is the approximate cost of DDC services (comprehensive design services)	This is the cost of entire work (total amount of summary sheet of Financial Package/BOQ, Vol.-3)
185	Clause 1.1.3.2, Page 2 of NIT	Should have done Structural ,Architectural and E & M design of minimum 4.0 Km viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category (i.e. Structural ,Architectural , E & M) Tenderer shall also be considered eligible if criteria listed above are satisfied separately by different partners of JV/Consortium for Structural, Architectural and E & M works.	We request LMRC to consider works wherein design services are completed , however construction works are ongoing. We can furnish word order/agreement and part completion certificate for the works for LMRC team's review.	Commissioned portion of ongoing works will also be considered.
186	Clause 3.2 (d), Vol -1 Page 15 of 71	An organization chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field.	We request that total experience of key members may be kept minimum 12-15 years and relevant experience be 5-7 years.	Refer Annexure-2 of Addendum-1
187	Clause 3.3, Vol-1, Page 51 1.1 Clause 3.3, Page 61 of Vol-01	Mobilization Advance The Employer shall cause to be paid to the Consultant an advance payment as specified in the SCC, and as otherwise set forth below. The following provisions shall apply to the advance payment and the advance guarantee. payment a) An advance payment of (#) in foreign currency and of (#) in local currency, each not exceeding ten percent of the contract value in respective currencies, shall be made within 30 days after the submission of Bank guarantee as per GCC clause 3.3 against advance payment.	However Volume 3 Pg 8 Schedule of Payment does not reflect this mobilization advance- Please clarify	Mobilization advance is an 'advance', which shall become payable only after the submission of Bank guarantee as per GCC clause 3.3.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
188	Clause 32, Page 56, Vol-01	last para : The parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal insofar as such waiver can validly be made	"We understand that a waiver of right to appeal is only to the extent that it is waived off by conduct viz., failure to file any appeal with the appropriate forum within the prescribed time frame against the arbitration award. If not and the Clause intends to fully curtail the right to appeal against the awards resulting from arbitration, we request LMRC to kindly allow the right to appeal by making necessary modification to the last line of Clause 32 'Conciliation and Arbitration', as it is a statutory right given to the parties to arbitration."	Refer Annexure-5 of Addendum-1
189	9. clause 33, Page 60 Vol.-01	All disputes relating to this agreement or claims arising out of or relating to this agreement or breach, termination or the invalidity thereof or on any issue whether arising during the progress of the services or after the completion or abandonment thereof or any matter directly or indirectly connected with this agreement shall be referred to Arbitrator(s) appointed by Director, LMRC on receipt of such request from either party. Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is upto Rs.50 Lakhs and to a panel of three Arbitrators, if total value of claims is more than Rs.50 Lakhs. LMRC shall provide a panel of three Arbitrators which may also include LMRC Officers for the claims upto Rs.50 Lakhs and a panel of five Arbitrators which may also include LMRC Officers for claims of more than Rs.50 Lakhs. Licensee shall have to choose the sole Arbitrator from the panel of three and / or one Arbitrator from the panel of five in case three Arbitrators are to be appointed. LMRC shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third Arbitrator from the panel only. The Arbitrator(s) shall be appointed within a period of 30 days from date of receipt of written notice / demand of appointment of Arbitrator from either party.	We request LMRC to kindly modify the clause to enable the appointment of arbitrator to be mutual as against the appointment mechanism adopted by LMRC in the RFP which is likely to raise the question of impartiality and bias. In order to avoid dispute with regards to the independence and impartiality of arbitrator the clause shall be accordingly modified to be appointed by either Indian Council of Arbitration, New Delhi or mutually between the Parties."	Refer Annexure-5 of Addendum-1
190	Clause 2.1 (m), Page 72 , Vol-02	Prepare necessary Technical Documentation, Presentation and assist LMRC to obtain necessary approvals for E&M, VAC and BMS Systems from the Approving / Statutory authorities like DFS, Pollution Control Board (for D.G. Sets, Cooling towers etc.), etc.	The 2 statements are conflicting , Please clarify whether DDC is required to provide assistance to LMRC for obtaining required statutory approvals by providing required drawings and documents and LMRC will have its own team for Liaison with statutory approvals or whether DDC is expected to have their own statutory team for liaison with statutory approvals.	DDC to assist LMRC in getting approvals from authorities.
	2.2 Task 2.2.18, Page 124, Vol-02	Getting all statutory approvals from local bodies shall be the responsibility of the DDC. LMRC will provide assistance if required. Nothing extra payable on this account.	It is understood that all required statutory fees will be paid by LMRC.	Refer Annexure-14 of Addendum-1
191	Clause 6.4.3, Page 85, Vol-02	Original calculations shall be submitted to the Employer's Representative for proof checking.	The statements at different locations of Vol. 2 are conflicting with regards to proof checking. It is understood that Proof checking agency will be appointed by LMRC /Employer and DDC is required to actively coordinate with Proof checking agency for getting designs approved at each stage of work.	As per Tender Conditions. Clause pertains to building services.
	Clause 2.1.2, Page 99, Vol-2	The DDC scope generally includes following:- Proof checking of Detailed structural Design (civil) and construction scheme of underground stations, ventilation / service shafts / midway shaft including diaphragm walls, piling and other related permanent or temporary structures of Design & Build contracts including all related submissions, value Engineering, reviews and all other items of Scope of Work till issue of completion certificate		Para 3.3 & Para 4.1 of part 2.2, Vol-2 are modified in Addendum-1. Kindly refer Annexure-9 & 10 of Addendum-1
	Clause 3.3, Page 102, Vol-2	Design Alternatives The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations, the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.		
192	Clause 3.1, Page 4, Vol-2	The DDC should have sufficient experience in dealing with interface management with Contractors, General Consultants (GC) and 5D BIM implementation team. They shall ensure day to day basis interface and communication with all the stakeholders.	Please clarify that 5D BIM implementation team is appointed by Employer /LMRC and that ensuring required interface and communication is in scope of DDC	As per Tender conditions
193	Clause 2.1 e), Page 4 , Vol-02	Detailed architectural and structural design of Property Development area at identified locations (up to 3 Floors) including design of Building Services (E&M, fire Detection & suppression, Air Conditioning, main water supply, sewerage and plumbing etc. (up to outside the structure and embedded elements). The Property development can be integrated with stations or stand alone. External architectural finishing of Property development area is also included in the Scope but internal finishes are not included. Administrative office of Agra Metro is also to be planned	Please inform on approximate Built up area to be considered for Property development as part of scope for this project. Also give details of Built up area of Administrative office of Agra Metro as it is mentioned to be part of scope for this project.	Scope of property development out side station area is not in scope . Agra administrative building is also not in the scope of this tender. Kindly refer Annexure-7 of Addendum-1.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
194	Clause 3.5 e), Page 4, Vol-02	e) Modelling of the following disciplines to be created: Earthworks systems Stations Viaducts Tracks Signals Electrical and Telecommunications Structural Mechanical & Plumbing Architectural & all others	We request that BIM modelling be restricted to components wherein complicated interface is foreseen - e.g. Stations , conflicts with existing utilities. This will be very helpful in terms of time management and maintaining schedules for deliverables.	As per Tender Conditions.
195	General	-	There is no mention of particular BIM software or LOD -we assume REVIT for modelling and generation of 2D drawing files and Navis works for clash detection are acceptable , being universally used applications. We understand that LOD 350 will be adequate.	BIM Forum LOD Specification 2018 BIM Software to be used as mentioned in the tender. Revit is a BIM software package & can be used.
196	Page 8, Vol-03	Payment Schedule Approval of above by LMRC	No time allocation has been specified for LMRC approvals. However it maybe noted that without LMRC approval-DDC cannot work on progressive stages of work & there are LD impositions for DDC deliverables per stage. Hence it is requested that 2 - 4 weeks time be allotted for LMRC approval or that DDC's time period for subsequent stage works be considered only post official approval from LMRC on preceding stage works.	As per Tender Conditions.
197	Clause 2.4, Page 4 , Vol-03	Train Operation Plan 3 Cars/Train for 40 years horizon 2024,2031,2041,2051	Please inform w r t approximate length of platform to be considered for Elevated and Underground stations -as per 3 Cars/Train or whether longer length is to be considered for additional cars in future.	As per Tender Conditions.
198	General	-	The Scope of works document does not mention Environmental clearance , EIA report clearance or Green building certification anywhere, hence we assume that these are not part of the scope , pls. clarify.	Enviromental/EIA report clearance is not covered in the scope of work. However, for green building certification, DDC has to adopt IGBC provisions in design and extend necessary suport to LMRC for obtaining the green building certification.
199	General	-	There is no mention in the documents provided w r t remuneration for additional works or revisions required by LMRC team post approvals being issued for stage deliverables. We understand that such revisions being instructed from DDC post approval of stage deliverables will be adequately compensated as per mutually agreed rate between LMRC and DDC	As per Tender Conditions
200	Vol-1/NIT Clause No. 1.1.3.2 Notes Bullet Point No. 1 of NIT at Page No. 3 R1	The tenderer shall submit details of works executed by them in the Performa of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted.	In this regard Documentary proof of Contract agreement and completion certificate is sufficient. Please confirm. In this regard substantially say 90% completed works can also be considered.	The refered clause is self explanatory. Kindly also refer Annexure-1 of Addendum-1. Commissioned portion of ongoing works will also be considered.
201	Vol-1/ITT 3. Technical Package at page no.9	"3.1 (b) Tender Security (EMD) in original in a separate sealed envelope. It must be noted that in case of a JV/consortium, the B.G. (if EMD is in form of B.G.) must be on behalf of the JV/consortium and issued on behalf of the name of JV/consortium.	We request that separate BG will be given by each JV partner based on their percentage of participation.	Refer Annexure-2 of Addendum-1
202	Vol-1/ITT Clause no. 3.2 p at page no. 12	CVs of leaders for 14 key areas and 6 expatriate experts (Total 14) as mentioned in the above para will be evaluated for technical evaluation. Requirement of 6 Expatriate experts	CVs of leaders for 14 key areas and 6 expatriate experts (Total 14) as mentioned in the above para will be evaluated for technical evaluation. Kindly confirm. It is requested that the requirement of 6 Expatriate experts may be relaxed. Since India has got all relevant experience. In case client still feel that expatriate expert is required then requirement shall be reduced to total of 2 man months for 1.Architectural expatriate spread over period of two years. Each visit can be of 5 days as per requirement. Total no. of visits can be fixed. This practice has been recently followed by NCRTC in recent tenders.	Refer Annexure-2 of Addendum-1 As per revised para 3.2(f) CV's of leaders for 8 key areas as mentioned will be evaluated for technical evaluation. CV's of 3 No. expatriate expert shall be submitted prior to their deployment
203	Vol-1/ITT at page no.12	3.5 The DDC shall establish an office in Lucknow/Agra and deploy required staff and facilities there in consultation with LMRC accordingly the payment for the Item no.8 of Schedule A will be made.	Please clarify that office will be either opened in Lucknow or Agra. The local office will have senior staff for coordinatng each discipline. The Expatriate/Indian expert will operate from their office of origin. In Lucknow/ Agra they will visit as and when required.	As per Tender Conditions



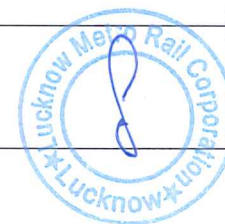
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
204	Vol-1/ITT Clause no. 7.5.5 of ITT at page no. 18 of Volume 1	For the purpose of comparative evaluation of tenders received, the total of the fixed lump sum price quoted by the tenderer converted to Indian rupees as per tender provision shall be compared amongst various tenderers to determine the lowest evaluated tenderer.	As per this clause we understand that the RFP selection method of consultant is least cost base selection. Since the number of companies is working in Metro in India Therefore, to select the best it is requested to change the selection method to QCBS (Quality and Cost Base Selection)- 80:20. Please consider the same for evaluation of bid.	As per Tender Conditions
205	Vol-1/NIT at Page 3R1	In case of joint venture / Consortium, full value of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the value of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered.	NIT Notes: In case of JV in earlier project, the credential in proportion of their participation percentage (%) should be considered irrespective of scope of work.	As per Tender Conditions
206	Volume-2/Scope of Work/Part-1at page no.5	2. EXTENT OF SERVICES 2.1 Services to be Provided iii) b) Detailed architectural planning including type of finishes for all elevated stations including track structure within the stations and issue of GFC drawings which will include Bar Bending Schedules also.	Bar bending schedule shall be excluded from scope as same can be better prepared by the contractor team.	As per Tender Conditions
207	/Volume-2/Scope of Work/Part-1 page no. 10	The vertical and horizontal alignment of the entire stretch inclusive of its geometrics and pier locations will be provided by LMRC in hard and soft copies and will be reviewed by the DDC and changes along with revised plans will be suggested by DDC. The final approval of alignment and pier locations will be given by LMRC	Only review of vertical and horizontal alignment. Redesign if any shall be carried out by LMRC.	As per Tender Conditions
208	Volume-2/ Scope of Work/Part- 2.1 – Appendix A at Page no.18	4.5 Site Visits At the request of the Employer's Representative, the DDC shall visit the site to provide his expert opinion on the performance, quality, progress etc., of the Works and to report whether the work is progressing generally as designed. The result of such visits shall be reported to the Employer's Representative immediately, if urgent actions are required, and shall be included in the DDC's monthly reports in all cases. This shall also be covered under construction support activity by DDC for which no extra payments shall be applicable.	Please confirm that DDC will be paid out of pocket expenses, air fare and absence from head office expenses.	As per referred clause no extra payment will be made.
209	Volume-2/Scope of Work/Part-1 at page no. 21	5 ORGANISATION OF THE DETAILED DESIGN CONSULTANT 5.1 General b)	We understand that DDC will be establishing only Coordination office either in Agra or Lucknow. Detailed Design will be carried out from head office of each JV partner.	Referred clause is self explanatory. As per tender conditions.
210	Volume- 1/Instructions to Tenderer (ITT) at Page no.10, Clause No. 3.2.d	d. An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	Please clarify what is meant by "Sufficient Proof" for Experience for staff deployed for this project, because generally all experience certificates are in the name of the Firm not in the name of Key Personnel. Letter from firm stating that the employee has worked on the relevant projects should be sufficient Please clarify the clause.	Agreed.
211	Volume- 1/Instructions to Tenderer (ITT) at Page no.11, Clause No. 3.2.j	The name, background and professional experience of each key staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment. (The majority of the key staff shall be regular members of the tenderer/subcontractor for at least six months).	Please allow consent letter from the key staff member. The key staff member will work with us when the work is awarded to us. Please clarify the clause.	As per Tender Conditions.
212	Volume-3 Financial Package	Schedule –A	We understand from Schedule A that for underground only detailed of Arch & MEP services will be done by DDC. The civil & structural work design of Temporary and permanent for UG stations & tunnel will be done by Contractor(s) appointed by the contractor. Please confirm.	Confirmed
213	-	-	Please clarify that if a bidder is successful for this Tender as DDC, whether he will be allowed to act as contractor's DDC for other packages.	It will lead to 'Conflict of Interest'



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
214	-	-	If the Architectural and MEP Consultant have the experience of Underground Stations then the requirement for Elevated Station may be relaxed as complexity involved in design Underground stations are much more than the elevated stations.	As per Tender Conditions.
215	Revised NIT, Clause – 1.1.3.2 A Work Experience; Page No. 2	Work Experience of Detailed Design Consultant (DDC) for Structural, Architecture and E&M works	We hope Proof checking experience also would be considered as it needs same level of technical expertise and experience. Please confirm. We have enclosed eligibility criteria for the DMRC Phase IV DDC and DDC Kochi Metro Phase II (replies to Pre – Bid Queries) for your ready reference.	As per Tender Conditions.
216	Revised NIT, Clause – 1.1.3.2 Minimum Eligibility Criteria, Notes; Page No. 3	In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by Chartered Accountant (CA), T.D.S certificates for all payments received and copy of final/last bill paid by client shall also be submitted.	For reputed Private Client - Documentary proof such as certificates from client clearly indicating the nature/scope of work for such work should be submitted. Please consider	Kindly refer Annexure-1 of Addendum-1.
217	Revised NIT, Clause – 1.1.3.2 Minimum Eligibility Criteria, B, Financial Standing, T1 – Liquidity; Page No. 4	Annexure – 4 (Bank Reference for Liquidity)	We understand if the bidder has required working capital which is certified in the annual financial statements of bidder and have the positive net worth, in that case the Bank certificate regarding banking reference for liquidity is not required. Please Confirm	Confirmed.
218	Volume 1; Instructions to Tenderers (ITT), Clause – 3.2 (j); Page No. 11	The name, background and professional experience of each key staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment. (The majority of the key staff shall be regular member of the tenderers / Subcontractor for at-least 6 months.)	Kindly allow us to source the best possible talent available as per the requirement of the TOR with their consent letter stating their availability for the assignment.	As per Tender Conditions.
219	Volume 1; Instructions to Tenderers (ITT), Clause – 3.5; Page No. 12	The DDC shall establish an office in Lucknow/Agra and deploy required staff and facilities there in consultation with LMRC accordingly the payment for the Item no.8 of Schedule A will be made.	We request to allow the DDC to carry out the services from its Registered Office.	As per Tender Conditions.
220	Volume 1; Special Conditions of Contracts; Clause - 33; Page No. 60	Arbitration: All disputes relating to this agreement or claims arising out of or relating to this agreement or breach, termination or the invalidity thereof or on any issue whether arising during the progress of the services or after the completion or abandonment thereof or any matter directly or indirectly connected with this agreement shall be referred to Arbitrator(s) appointed by Director, LMRC on receipt of such request from either party. Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is up to Rs.50 Lakhs and to a panel of three Arbitrators, if total value of claims is more than Rs.50 Lakhs. LMRC shall provide a panel of three Arbitrators which may also include LMRC Officers for the claims up to Rs.50 Lakhs and a panel of five Arbitrators which may also include LMRC Officers for claims of more than Rs.50 Lakhs. Licensee shall have to choose the sole Arbitrator from the panel of three and / or one Arbitrator from the panel of five in case three Arbitrators are to be appointed. LMRC shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third Arbitrator from the panel only. The Arbitrator(s) shall be appointed within a period of 30 days from date of receipt of written notice / demand of appointment of Arbitrator from either party.	We recommend that arbitrators (sole arbitrator or panel of arbitrators) should be a neutral person unrelated to both the parties.	Refer Annexure-5 of Addendum-1
221	Volume 1; General Conditions of Contracts; Clause -35 (iv); Page No. 57	The Consultant shall indemnify the Employer against any damage, expense, liability, loss or claim, which the Employer might incur, sustain or be subject to arising from any breach of the Consultant's design responsibility and / or warranty set out in this Clause.	We recommend that the indemnity provided by the consultant be capped up to the total contract fee.	As per Tender Conditions.



S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
222	Volume 1; General Conditions of Contracts; Clause - 36; Page No. 58	Professional Indemnity Insurance (PII) The DDC shall effect and maintain professional Indemnity Insurance (PII) with AOA (any one accident) limit in INR equal to the twice of contract value in respect to all works covered under scope of work to be carried out by, or on behalf of them with AOY (any one year) limit of two incidents in a year	Professional Indemnity Insurance (PII) is recommended to be taken in INR equal to the value of contract.	As per Tender Conditions.
223	-	Change in Applicable Law and Taxes and Duties	We recommend that the following provision be inserted to take into account the impact of change in law/tax on contract price: "In case of any change in any applicable laws/Taxes and Duties or any change in interpretation or application of any law that occurs in the course of performance of the Contract, which directly or indirectly increases liability of the Consultant in performance of this Contract, an equitable adjustment of the Contract value shall be made to take into account any such change by addition to the Contract value	As the contract price is exclusive of taxes, there is no need for insertion of clause regarding impact of change in law & taxes.
224	-	Exit Clause - Termination	No termination rights have been provided to the consultant. There shall be at least 30 days written notice to be served by the either parties for terminating the contract. There should be ground to terminate the Contract because of non-payment by serving 30 days' notice. Employer shall pay to the consultant its fees for the satisfactory services provided prior to the effective date of termination.	As per Tender Conditions.
225	Revised NIT, Clause - 1.1.2 Key Details; Page No. 1	Due date and time of Submission of tender 14.08.2019 @15:00 Hrs	Kindly extend the due date of Submission of tender to 30.08.2019	Refer Annexure-1 of Addendum-1
226	1.1.3.1 (ii) (a) Eligible Applicants: Page 1 Volume 1	A non-Indian firm is permitted to tender only in a joint venture or consortium agreement either with an Indian firm having minimum participation interest of 26% or their wholly owned Indian subsidiary registered in India under Companies Act.	We request to kindly clarify the number of JV members allowed to form a JV. Given the complex nature of work along with several other components with very specific technical requirements, kindly allow for a maximum of 4 JV members to form a JV.	There is no limit on No. of JV Partners.
227	1.1.3.2 Minimum Eligibility Criteria A1 Work experience	Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Elevated Section, Elevated Stations, Ramps & Depot connection Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural and E&M design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.	We request to revise this requirement to 3 km Viaduct and 3 Elevated stations	As per tender conditions. Please also refer Annexure-1 of Addendum-1
228	1.1.3.2 Minimum Eligibility Criteria A.2 Minimum Eligibility Criteria	Tenderer (either a single entity / JV / Consortium) should have done Structural, Architectural & E&M design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M	We request to revise this requirement to U/G 2 Stations	As per tender conditions. Please also refer Annexure-1 of Addendum-1
229	-	Work experience of Detailed Design Consultant (DDC) for Power Supply & distribution system, 750V DC traction electrification and SCADA System:- design / design review of minimum 15 track kms of 750 volts DC or above Traction Electrification on viaduct/ long bridges/ underground section including Railway depot workshop on a Metro Rail System.	15 track km shall be revised to cumulative 10 km of all projects executed.	As per tender conditions.
230	-	design / design review of at least 02 no. of 66 KV or above voltage Receiving Substations, design/ design review of at least 06 numbers of indoor type 33 kV (or 24 or 22 or 11 kV)/ 750 volts DC or 1500 volts DC traction substations	1 project shall be qualified 4 No.s of indoor sub station – 750V DC shall be qualified	As per tender conditions.
231	-	33kV (or 24 or 22 or 11 kV)/415V ac auxiliary power sub-stations on and design / design review of at least two SCADA works for traction/ auxiliary power supply on underground/ elevated Metro Rail System or Suburban Rail System/ Monorail system.	One SCADA works for traction/ auxiliary power supply on underground/ elevated Metro Rail System or Suburban Rail System/ Monorail system.	As per tender conditions.
232	AGDD-01(R1)/Vol-1/NIT Page 3 R1	In case of joint venture / Consortium, full quantum of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the quantum of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered.	their relevant design experience duly supported by CA Letter.	As per tender conditions.



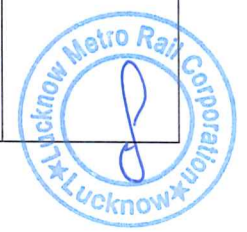
S. No.	Reference Clauses	Existing Provision	Details / Clarifications Required	LMRC's Reply
233	1.2.1 INSTRUCTIONS TO TENDERER (ITT)	Detailed project report (DPR) of above corridor is available in the office of AGM/Consultancy, LMRC / Lucknow, which may be consulted on any working day between 9:30 hrs. to 17:30 hrs.	Detailed Project Report shall be made available to Tenderer. DPR and all its drawings shall be provided in editable format with A-CAD drawings.	DPR can be downloaded from LMRC's website. Softcopy of tender drawings will be provided with
234	3.2 (h) TECHNICAL PACKAGE	If any Expatriate is not mobilized as per tender stipulations, a recovery of Rs. 75,000/- (Seventy Five Thousand Only) per expatriate per day or part thereof shall be made from their bills.	Recovery shall not be more than Rs. 25,000/- per expatriate per day.	As per tender conditions.
235	3.5 Page 12 INSTRUCTIONS TO TENDERER (ITT)	The DDC shall establish an office in Lucknow/Agra and deploy required staff and facilities there in consultation with LMRC accordingly the payment for the Item no.8 of Schedule A will be made -	We understand that the DDC will have to open an office in Lucknow/Agra for day to day coordination, the key experts presence shall be intermitted and full time deputation at Lucknow/Agra is not required. Please Confirm / clarify	The refered clause is self explanatory. As per tender conditions.
236	1.2.2 (l) Volume - 1 Page 8	LMRCL is planning to setup a digital progress monitoring software package, BIM 5D. DDC shall implement Building Information Modelling (BIM) system for executing and delivering the services set out in this Agreement. All station designs (including architectural design, structure design, E&M services design, interior fit outs, plumbing design etc.) and viaduct designs/proof checking shall be done using BIM modelling. DDC shall implement the necessary hardware, software and human resources towards this.	Setting of Digital Process Monitoring Station and required software, hardware will be by LMRCL. DDC scope is limited to implementation of BIM in design deliverables.	All required hardware and software to be procured by DDC as specified in the tender document.
237	3.2 (d) Page 10	For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	Expatriate expert shall with experience of 10 years shall be acceptable.	Refer Annexure-2 of Addendum-1
238	ITT Clause 3.2 (g) Page 10 Volume-1 & Schedule B Page 7 Volume 3	Further DDC will provide expatriate experts for the 6 key areas as listed below	Please confirm stay of expatriate experts required at DDC Project office is in one stretch.	Stay of expatriate experts will be as per work requirement.
239	Volume 2 4.7 Page 21 Liaison Work	The DDC shall assist LMRC to co-ordinate and liaise with all concerned local authorities and private and Government agencies to obtain approvals, testing and clearances as deemed necessary, depending on the conditions prevalent at site.	DDC will assist LMRC with all technical documentation support for getting statutory approvals.	Agreed.
240	1.1.2 Revised - NOTICE INVITING TENDER (NIT)	Date & time of Submission of Tender - 14.08.2019 @ 15:00 Hrs.	Considering the complexity and quantum of bid, we request you to extend bid submission deadline at least by 30 working days from the current due date.	Refer Annexure-1 of Addendum-1
241	-	-	In case the work is executed for private client, we request you to accept Work Order / Letter of Award / Agreement/ Completion Certificate and/or CA certified payment format as documentary proof, thereby reducing the bulk of bid submission	Refer Annexure-1 of Addendum-1
242	-	-	We request you to also consider the projects like "Feasibility Study / Technical Study / DPR for Bus Hubs" along with DDC Projects as the complexity involved is similar in nature.	As per tender conditions.
243	3.3 - Mobilisation Advance Page 51 Volume 1		Mobilisation Advance shall be 10%.	Kindly refer Clause no. 11 (sub Clause 3.3) of SCC, Pg. 61 of tender document.
244	-	-	AGREEMENT wording shall be revised to CONTRACT	Query is not clear.
245	CONTRACT PACKAGE: AGDD-01(R1) 2(b)		Wording shall be added - These obligations of confidentiality shall equally be applicable to LMRC also.	As per tender conditions.
246	6 Decisions PART I: GENERAL CONDITIONS OF CONTRACT (GCC)	On all matters properly referred to in writing by DDC, LMRC shall give a decision in writing within a reasonable time.	Rewording of "a reasonable time" to 7 working days.	As per tender conditions.
247	-	-	Any engineering task by DDC, which is either outcome of change in decision by LMRL leading to negative progress of the job, or changes or change in any input data or extension of contract period shall be separately compensated to DDC by LMRC.	As per tender conditions.



Summary Sheet of ADDENDUM No.-1: Contract AGDD-01(R1)

AGDD-01(R1): Engagement of Detailed Design Consultant (DDC) For Civil, Architectural, E&M, Traction and Power supply Works for Sikandra to Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot”.

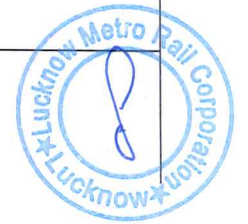
S. NO.	Existing Clause / Pg. No.	Clause in Existing Tender Document	Revised Clause	Revised Clause placed as Annexure/ Pg. No.
1	Clause 1.1.2 'Key Details' of NIT, Vol.-1, Pg. 1	Last date of issuing addendum: 29.07.2019 . Date & time of Submission of Tender : 14.08.2019 @ 15:00 Hrs. Date & time of opening of Tender: 14.08.2019 @ 15:30 Hrs.	Last date of issuing addendum: 29.07.2019 05.08.2019 Date & time of Submission of Tender: 14.08.2019 21.08.2019 @ 15:00 Hrs. Date & time of opening of Tender: 14.08.2019 21.08.2019 @ 15:30 Hrs.	Annexure-1, Page 1R1
2	1st Note of Clause 1.1.3.2 A1 & A2 'Minimum Eligibility Criteria' of NIT, Vol.-1, Pg. 2-3R1	<i>1st Note of Clause 1.1.3.2 A1</i> • Tenderer shall also be considered eligible if criteria as listed under para A.1 above are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design. <i>1st Note of Clause 1.1.3.2 A2</i> • Tenderer shall also be considered eligible if criteria as listed under para A.2 above are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design.	<i>1st Note of Clause 1.1.3.2 A1</i> • Tenderer shall also be considered eligible if criteria for structural work is satisfied by single partner of JV as listed under para A.1 above, whereas for Architectural & E&M design it can be are satisfied separately by by different partners of JV / Consortium for Structural, Architectural & E&M design. <i>1st Note of Clause 1.1.3.2 A2</i> • Tenderer shall also be considered eligible if criteria for structural work is satisfied by single partner of JV as listed under para A.2 above, whereas for Architectural & E&M design it can be are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design.	Annexure-1 Page 2R1 & 3R2
3	1st Note of Clause 1.1.3.2 'Minimum Eligibility Criteria' of NIT, Vol.-1, Pg. 3R1	• The tenderer shall submit details of works executed by them in the Performa of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted.	• The tenderer shall submit details of works executed by them in the Performa of Appendix-11 of FOT for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, Copy of work order, bill of quantities, T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted. bill wise details of payment received certified by C.A., and a certificate from Government / Private Client certifying completion of work should be submitted.	Annexure-1, Page 3R2
4	Clause 3.1 (b) of ITT, Vol.-1, Pg. 9	b. Tender Security (EMD) in original in a separate sealed envelope. It must be noted that in case of a JV/consortium, the B.G. (if EMD is in form of B.G.) must be on behalf of the JV/consortium and issued on behalf of the name of JV/consortium.	b. Tender Security (EMD) in original in a separate sealed envelope. It must be noted that in case of a JV/consortium, the B.G. (if EMD is in form of B.G.) must be on behalf of the JV/consortium/ Lead Member and issued on behalf of the name of JV/consortium/ Lead Member .	Annexure-2, Page 9R1
5	Clause 3.2 (c) of ITT, Vol.-1, Pg. 10	c. To achieve targeted timeline of project, the superstructure of viaduct shall be double “U” Girder (One for each Track) given with full span construction method and precast pier caps except at isolated locations due to site constraints. However, if any other design alternative as per Clause 3.3 of Scope of Work: Part-1 (Vol-3) is suggested/proposed, it should be quoted clearly by the bidder in its bid substantiating with detailed analysis with respect to economy, time, ease of construction, serviceability etc. for technical evaluation by LMRC. Bidder may also be called for detailed presentation for the same by LMRC, if needed.	c. To achieve targeted timeline of project, the superstructure of viaduct shall be double “U” Girder (One for each Track) given with full span construction method and precast pier caps except at isolated locations due to site constraints. However, if any other design alternative as per Clause 3.3 of Scope of Work: Part-1 (Vol-3) is suggested/proposed, it should be quoted clearly by the bidder in its bid substantiating with detailed analysis with respect to economy, time, ease of construction, serviceability etc. for technical evaluation by LMRC. Bidder may also be called for detailed presentation for the same by LMRC, if needed.	Annexure-2, Page 10R1



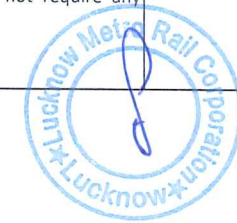
6	Clause 3.2 (d) of ITT, Vol.-1, Pg. 10	d. An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification and experience of staff deployed.	d. An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than 10 <u>7</u> years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than 13 <u>10</u> years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of 13 <u>10</u> years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification (<u>minimum Masters degree for S.no. 2) & 3) of 3.2 f & minimum Graduate degree in respective fields for other key areas</u>) and experience of staff deployed.	Annexure-2, Page 10R1
7	Clause 3.2 (f) of ITT, Vol.-1, Pg. 10	The technical proposal will be evaluated based on the capabilities /technical strength of Key staff proposed to be deployed. Important key areas of the DDC's responsibilities listed below shall be headed by leaders of 14 Key areas. Experience required for the leaders for 14 key areas have been given in para 3.2 d. CVs of leaders for 14 key areas as mentioned in the para below will be evaluated for technical evaluation. 1) Architectural - One for underground station, & elevated station. 2) Civil Structural Design- One for Viaduct, special spans, ramps, & elevated stations. 3) Civil Structural Design - One for underground stations 4) Civil Structural Design- One for Depot 5) Proof checking of Detailed Structural Design (civil) and construction scheme of underground stations – One 6) Building services – One for E&M 7) Building services – One for VAC/ECS 8) Building services – One for TVS 9) Building services – One for Fire Fighting/Fire Detection etc. 10) Power Supply & Distribution – One for power systems 11) 750V DC system and Digital Protection & control expert for traction electrification application – One 12) SCADA Expert – One 13) AC & DC Traction Simulation Study Expert/Sub-consultant – One 14) Earthing, Bonding, EMC/EMI study and Stray Current Expert – One	The technical proposal will be evaluated based on the capabilities /technical strength of Key staff proposed to be deployed. Important key areas of the DDC's responsibilities listed below shall be headed by leaders of 14 <u>8</u> Key areas. Experience required for the leaders for 14 <u>8</u> key areas have been given in para 3.2 d. CVs of leaders for 14 <u>8</u> key areas as mentioned in the para below will be evaluated for technical evaluation. 1) Architectural - One for underground station, & elevated station <u>& Depot.</u> 2) Civil Structural Design- One for Viaduct, special spans, ramps, & elevated stations <u>& Depot</u> 3) Civil Structural Design / <u>Proof checking of Detailed Structural Design (civil) of underground stations</u> - One for underground stations 4) Civil Structural Design- One for Depot Deleted 5) Proof checking of Detailed Structural Design (civil) and construction scheme of underground stations- One Deleted 6) 4) Building services – One for E&M, Fire Fighting & Fire-Detection. 7) 5) Building services – One for VAC/ECS 8) 6) Building services – One for TVS 9) Building services – One for Fire Fighting/Fire-Detection etc. Deleted 10) Power Supply & Distribution – One for power systems Deleted 11) 7) 750V DC system and Digital Protection & control expert for traction electrification application/ Power Supply & Distribution / SCADA Expert / Earthing, Bonding, EMC/EMI study and Stray Current Expert – One 12) SCADA Expert – One Deleted 13) 8) AC & DC Traction Simulation Study Expert/Sub-consultant – One 14) Earthing, Bonding, EMC/EMI study and Stray Current Expert – One Deleted	Annexure-2, Page 10R1 to 11R1



8	Clause 3.2 (g) of ITT, Vol.-1, Pg. 11	Further DDC will provide expatriate experts for the 6 key areas as listed below. 1 Architectural - one for underground station & elevated station - 365 Man days 2 Building services – one for E&M - 30 Man days 3 Building services – one for VAC/ECS - 60 Man days 4 Building services – one for TVS - 60 Man days 5 Building services – one for Fire Fighting/Fire Detection etc. - 30 Man days 6. Power Supply & Distribution, 750V DC Third rail traction electrification and SCADA System - 10 Man days Experience required for Expatriate experts for 6 key areas have been given in para 3.2 d. CVs of the Expatriate experts shall be approved by the Engineer prior to their deployment in the project. The payment for the expatriate expert will be made on man day basis for the period of their stay in India.	Further DDC will provide expatriate experts for the 6 <u>3</u> key areas as listed below. 1 Architectural - one for underground station & elevated station - 365 <u>180</u> Man days 2 Building services – one for E&M Deleted - 30 Man days 3 Building services – one for VAC/ECS Deleted - 60 Man days 4 <u>2</u> Building services – one for TVS 60 <u>45</u> Man days 5 Building services – one for Fire Fighting/Fire Detection etc. Deleted - 30 Man days 6- <u>3</u> . Power Supply & Distribution, 750V DC Third rail traction electrification and SCADA System - 10 <u>45</u> Man days Experience required for Expatriate experts for 6 <u>3</u> key areas have been given in para 3.2 d. CVs of the Expatriate experts shall be approved by the Engineer prior to their deployment in the project. The payment for the expatriate expert will be made on man day basis for the period of their stay in India.	Annexure-2, Page 11R1
9	Annexure-1 of ITT, Vol.-1, Pg. 21-22	Annexure -1 FORM OF BANK GUARANTEE FOR TENDER SECURITY	<i>Additional Clause 5 added to format of Bank Guarantee:-</i> 5. Notwithstanding anything contained herein above: ~ Our liability under this bank guarantee shall not exceed _____ (_____ only). ~ This Bank Guarantee shall be valid upto _____, We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if the employer serves upon the bank a written claim or demand on or before _____, Whereafter it ceases to be in effect in all respects whether or not the original Bank Guarantee is returned to us. This guarantee cannot be assigned nor transferred to any other third party, without the prior written consent of the Guarantor.	Annexure-3, Page 22R1
10	Appendix 9 of FOT, Vol.-1, Pg. 43	<i>Appendix-9: Details of Consultancy works in hand</i> <i>Heading of last column:</i> Value of work to be done in 2023-24 (1st April 2023 to 31st May 2024)	<i>Heading of last column is corrected as:</i> Value of work to be done in 2023-24 (1st April 2023 to 31st May 2024 <u>2023</u>)	Annexure-4, Page 43R1
11	S. No. 9 'Clause 33' of SCC, Vol.-1, Pg. 60 -61	Arbitration	<i>Arbitration Clause revised.</i> <i>Please refer revised Clause.</i>	Annexure-5, Page 60R1 to 61B
12	S. No. 10 'Clause 20' of SCC, Vol.-1, Pg. 60 -61	<i>Sub Clause (c)</i> Penalty @ 2 lakh per man month will be recovered for the period of non deployment of the Expatriate expert as per the agreed programme.	<i>Sub Clause (c)</i> Penalty @ 2 lakh per man month Rs. 75,000/- (Rupees Seventy Five Thousand Only) per expatriate per day will be recovered for the period of non deployment of the Expatriate expert as per the agreed programme.	Annexure-5, Page 61C
13	Para below Clause 3.5-(e) Scope of Work/ Part-1A ; Pg no. 4	The DDC shall properly use available “ intelligent objects” to embody information about the building/ structures/ tracks etc component requirements and properties (e.g., material properties, functional information, dimensions, uniform at assembly information, etc). The following sections describe more specific information that shall be included in, but not limited to, the following models:	The DDC shall properly use available “ Generic intelligent objects” to embody information about the building/ structures/ tracks etc component requirements and properties (e.g., material properties, functional information, dimensions, uniform at assembly information, etc). The following sections describe more specific information that shall be included in, but not limited to, the following models:	Annexure-6, Page 4R1
14	Clause 1.2 of Scope of Work Part-1, Vol.-2, Pg.-4	1.2 Description Sikandra – Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra; Consists of 6.569 Km Elevated Section with 06 + 01 (future) Elevated Stations.	1.2 Description Sikandra – Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra; Consists of 6.569 Km Elevated Section with 06 + 01 (future) Elevated Stations and depot connection as per General Alignment Drawings (GADs), Volume-5.	



15	Clause 2.1 (e) of Scope of Work Part-1, Vol.-2, Pg.-4	e) Detailed architectural and structural design of Property Development area at identified locations (upto 3 Floors) including design of Building Services (E&M, fire Detection & suppression, Air Conditioning, main water supply, sewerage and plumbing etc. (upto outside the structure and embedded elements). The Property development can be integrated with stations or stand alone. External architectural finishing of Property development area is also included in the Scope but internal finishes are not included. Administrative office of Agra Metro is also to be planned.	e) Detailed architectural and structural design of Property Development area <u>within metro station premises</u> at identified locations (upto 3 Floors) including design of Building Services (E&M, fire Detection & suppression, Air Conditioning, main water supply, sewerage and plumbing etc. (upto outside the structure and embedded elements). The Property development can be integrated with stations or stand alone. External architectural finishing of Property development area is also included in the Scope but internal finishes are not included. Administrative office of Agra Metro is also to be planned.	Annexure-7, Page 4R1
16	Clause 4.1 of Scope of Work Part-1, Vol.-2, Pg.-20	4.1 Contract Drawings Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works.	4.1 Contract Drawings Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works. <u>DDC shall give reinforcement schedules in the form of Good for Construction (GFC) drawings which will also include details requirements for the construction contractor to prepare concrete reinforcing bar bending schedules for stations (elevated).</u>	Annexure-8, Page 20R1
17	Clause 4.5 of Scope of Work Part-1, Vol.-2, Pg.-20-21	Site Visits of construction sites: At the request of the LMRC the DDC shall visit the site to provide his expert opinion on the performance, quality, progress etc., of the Works and to report whether the work is progressing generally as designed. The result of such visits shall be reported to the LMRC immediately, if urgent actions are required, and shall be included in the DDC's monthly reports in all cases. Such construction work site visits by DDC shall be paid for separately.	Site Visits of construction sites: At the request of the LMRC the DDC shall visit the site to provide his expert opinion on the performance, quality, progress etc., of the Works and to report whether the work is progressing generally as designed. The result of such visits shall be reported to the LMRC immediately, if urgent actions are required, and shall be included in the DDC's monthly reports in all cases. <u>Such construction work site visits by DDC shall be paid for separately. This shall also be covered under construction support activity by DDC for which no extra payments shall be applicable.</u>	Annexure-8, Page 21R1
18	Clause 3.3 of Scope of Work Part-2.2, Vol.-2, Pg.-8	3.3 Design Alternatives The DDC shall perform Design Alternatives. DDC should also review the station locations & requirement of land for the station given by LMRC with respect to adoptability of the suggested design and suggest change. The DDC shall develop alternative layouts and designs for the substructure, superstructure and architecture of the underground stations. The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations, the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.	3.3 Design Alternatives The DDC shall perform Design Alternatives. DDC should also review the station locations & requirement of land for the station given by LMRC with respect to adoptability of the suggested design and suggest change. The DDC shall develop alternative layouts and designs for the substructure, superstructure and architecture of the underground stations. The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations; the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.	Annexure-9, Page 8R1



19		<p>4.1 Contract Drawings Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works. DDC shall give reinforcement schedules in the form of Good for Construction (GFC) drawings which will also include details requirements for the construction contractor to prepare concrete reinforcing bar bending schedules for stations (elevated).</p>	<p>4.1 Contract Drawings Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works. DDC shall give reinforcement schedules in the form of Good for Construction (GFC) drawings which will also include details requirements for the construction contractor to prepare concrete reinforcing bar bending schedules for stations (elevated). <u>The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations, the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.</u></p>	Annexure-10, Page 17R1
20	Table under 'SCHEDULE B' of Vol.-3, Pg. 7	-	Refer Revised Table.	Annexure-11, Page 7R1
21	Table under 'Item 6 (b) SCHEDULE OF PAYMENTS E&M Design of Depot' of Vol.-3, Pg. 17	Activity at S.No. 4 Submission of Documents., Models, etc, to Local authorities such as DFS etc for their approval.	Activity at S.No. 4 *Submission of Documents., Models, etc, to Local authorities such as DFS etc for their approval.	Annexure-12, Page 17 R1
22	Note of 'Item 6 (b) SCHEDULE OF PAYMENTS E&M Design of Depot' of Vol.-3, Pg. 17	*Payments after the approval of DFS.	*Payments after the approval of DFS (<u>Department of Fire Safety</u>).	
23	Table under 'Payment Schedule of Item No. 7 of Schedule A' of Vol.-3, Pg. 18-19	S. No. of Activities	S.No. of Activities corrected.	Annexure-12, Page 18R1 to 19R1
24	Notes of 'Payment Schedule of Item No. 7 of Schedule A' of Vol.-3, Pg. 19	<p>1. '**' The liquidated damages will apply at these stages @ 0.5% of the contract price of the Price per week of delay.</p> <p>3. Balance payment stated at SNo.10 to be released after completion of activities of DDC during construction phase and handing over of the installation by the construction contractor to employer.</p> <p>4. Whenever 'Stage payment' is indicated (column 3) for particular activity, 70% payment for that activity will be made for presentation and submission and the balance 30% on approval by employer. This will apply to activities at serial numbers 1, 4, 5, 7, 8, and 9.</p>	<p>1. '**' The liquidated damages will apply at these stages @ 0.5% <u>0.35%</u> of the contract price of the Price per week of delay.</p> <p>3. Balance payment stated at SNo. 10 <u>11</u> to be released after completion of activities of DDC during construction phase and handing over of the installation by the construction contractor to employer.</p> <p>4. Whenever 'Stage payment' is indicated (column 3) for particular activity, 70% payment for that activity will be made for presentation and submission and the balance 30% on approval by employer. This will apply to activities at serial numbers 1, 4, <u>5, 6, 7, 8, 9</u> and <u>10</u>.</p>	Annexure-12, Page 19 R1



25	Appendix- 11 WORK EXPERIENCE of FOT, Pg. 45	Table for Consultancy Experience	Table revised for Work Experience of Tunnel Works. Refer revised table.	Annexure-13, Page 45 R1
26	Task 2.2.18 of Part-3, Scope of Work. Vol.-2, Page 5	Task 2.2.18 Getting all statutory approvals from local bodies shall be the responsibility of the DDC. LMRC will provide assistance if required. Nothing extra payable on this account.	Task 2.2.18 Getting all statutory approvals from local bodies shall be the responsibility of the DDC. LMRC LMRC <u>DDC</u> will provide assistance if required. Nothing extra payable on this account.	Annexure-14, Page 5 R1
27	2nd Para of Clause 2 of Part-4, Scope of Work, Vol.-2, Page 1	Agra Metro Rail Project:- Corridor-1:- Sikandara to Taj East Gate- 14.25 km (Under Ground = 7.681 km & Elevated = 6.569 km) with 13 stations, (Elevated = 6 No's, Under Ground = 7 No's), Depot cum workshop at PAC and 02 RSS.	Agra Metro Rail Project:- Corridor-1:- Sikandara to Taj East Gate- 14.25 km (Under Ground = 7.681 km & Elevated = 6.569 km) + <u>depot connection as per General Alignment Drawings (GADs) - Volume-5</u> , with 13 stations, (Elevated = 6 No's, Under Ground = 7 No's), Depot cum workshop at PAC and 02 RSS.	Annexure-15, Page 1 R1
28	2nd Para of Clause 1.1 of ITT, Vol.-1, Page 7	Present tender consists of Detailed Design Consultancy of Civil, Architectural and Traction and Power supply Works for Sikandra – Taj East Gate, Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot at PAC, including Service Buildings And External Development Works Like Roads, Drains, Boundary Wall etc.	Present tender consists of Detailed Design Consultancy of Civil, Architectural and Traction and Power supply Works for Sikandra – Taj East Gate, Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section + <u>depot connection as per General Alignment Drawings (GADs) - Volume-5</u> , with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot at PAC, including Service Buildings And External Development Works Like Roads, Drains, Boundary Wall etc.	Annexure-16, Page 7 R1
29	Table under Clause 1.2.1 of ITT, Vol.-1, Page 7	Elevated (km) 6.569	Elevated (km) 6.569 + <u>depot connection as per General Alignment Drawings (GADs) - Volume-5</u>	



Revised - NOTICE INVITING TENDER (NIT)

1.1.1 General

Lucknow Metro Rail Corporation (LMRC) Ltd., who has been assigned to carry out interim works Agra Metro Rail Project, invites Open Tenders in two packet bidding process on competitive basis from eligible applicants from all countries and all areas, who fulfils qualification criteria as stipulated in clause 1.1.3 of NIT, for the work, "Contract AGDD-01(R1): Engagement of Detailed Design Consultant (DDC) For Civil, Architectural, E&M, Traction and Power supply Works for Sikandra to Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot". The brief scope of the work and site information is provided in ITT Clause 1.2 & Reference document (Volume -4).

1.1.2 Key details:

Approximate cost of work	INR 26.00 Crores (Approx.)
Tender Security amount	INR 26.00 Lakhs (Rupees Twenty Six Lakhs only)
Completion period of the Work	48 months
Tender documents on sale	From 28.06.2019 to 19.07.2019 (between 09:30 Hrs to 17:30 Hrs) on working days
Cost of Tender documents	INR 23,600/- (inclusive of 18% GST) (Demand Draft in favour of "Lucknow Metro Rail Corporation Ltd.") payable at Lucknow.
Last date of Seeking Clarification	23.07.2019
Pre-bid Meeting	23.07.2019 @ 15:00 Hrs
Last date of issuing addendum	29.07.2019 05.08.2019
Date & time of Submission of Tender	14.08.2019 @ 15:00 Hrs. 21.08.2019 @ 15:00 Hrs.
Date & time of opening of Tender	14.08.2019 @ 15:30 Hrs. 21.08.2019 @ 15:30 Hrs.
Authority and place for purchase of tender documents, seeking clarifications and submission of completed tender documents	Chief Engineer / Contracts Lucknow Metro Rail Corporation, Administrative Building, Vipin Khand, Gomti Nagar, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal, Lucknow-226010, Uttar Pradesh, India E-mail: cecontractlmrc@gmail.com

1.1.3 QUALIFICATION CRITERIA :

1.1.3.1 Eligible Applicants:

- i. The tenders for this contract will be considered only from those tenderers (proprietorship firms, partnerships firms, companies, corporations, consortia or joint ventures) who meet requisite eligibility criteria prescribed in the sub-clauses of Clause 1.1.3 of NIT. In the case of a JV or Consortium, all members of the Group shall be jointly and severally liable for the performance of whole contract.
- ii. (a) A non-Indian firm is permitted to tender only in a joint venture or consortium agreement either with an Indian firm having minimum participation interest of 26% or their wholly owned Indian subsidiary registered in India under Companies Act-



1956 with minimum 26% participation.

- (b) A tenderer shall submit only one bid, either individually as a tenderer or as a partner of a JV/Consortium. A tenderer who submits or participates in more than one bid will cause all of the proposals in which the tenderer has participated either as sole tenderer or member of JV/consortium will be disqualified. No tenderer can be included as subcontractor while submitting a bid individually or as a partner of a JV/consortium in the same bidding process subsequently or at the tender stage. A tenderer, if acting in the capacity of subcontractor in any bid may however participate in more than one bid, but only in the capacity as subcontractor.
- iii. Tenderers shall not have a conflict of interest. Tenderers found to have a conflict of interest shall be disqualified. Tenderers shall be considered to have a conflict of interest with one or more parties in this bidding process, if:
- (a) a tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement for implementation of the project;
- (b) a tenderer's associate(s)/affiliate(s) (inclusive of parent firms) mentioned in subparagraph (a) above; or
- (c) a tenderer lends, or temporarily seconds its personnel to firms or organisations which are engaged in consulting services for the preparation related to procurement for implementation of the project, if the personnel would be involved in any capacity on the same project.
- iv. A firm, who has purchased the tender document in their name, can submit the tender either as individual firm or as partner of a joint venture/consortium.
- v. NON SUBSTANTIAL PARTNERS IN CASE OF JV/CONSORTIUM
- a. Lead partner must have a minimum of 26% participation in the JV/Consortium.
- b. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium. Partners having 26% or more percentage participation shall be termed as substantial partner.
- c. In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.

1.1.3.2 Minimum Eligibility Criteria:

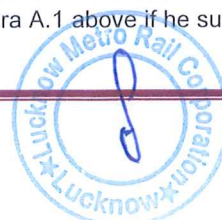
A. **Work Experience:** The tenderers will be qualified only if they satisfy the criteria as given in para A.1, A.2 and A.3 below (during last Seven years ending 31.05.2019):

A.1 **Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Elevated Section, Elevated Stations, Ramps & Depot connection:-**

Tenderer (either a single entity / JV / Consortium) should have done **Structural, Architectural and E&M** design of minimum 4.0 km of viaduct length and minimum 4 elevated metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.

Notes:

- Tenderer shall also be considered eligible if criteria **for structural work is satisfied by single partner of JV** as listed under para A.1 above, **whereas for Architectural & E&M design it can be** are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design.
- Tenderer shall also be considered eligible under para A.1 above if he submits Letter of



Consent along with necessary supporting documents from a firm(s) satisfying eligibility criteria for Architectural & E&M Works as stated, to work as Sub-Contractor of Tenderer for Architectural & E&M Works.

A.2 Work experience of Detailed Design Consultant (DDC) for Structural, Architectural and E&M Works of Underground Section & Underground Stations:-

Tenderer (either a single entity / JV / Consortium) should have done **Structural, Architectural & E&M** design of minimum 3 underground metro stations in maximum 2 different works under each category i.e. Structural, Architectural and E&M.

Notes:

- Tenderer shall also be considered eligible if criteria **for structural work is satisfied by single partner of JV** as listed under para A.2 above, **whereas for Architectural & E&M design it can be** are satisfied separately by different partners of JV / Consortium for Structural, Architectural & E&M design.
- Tenderer shall also be considered eligible under para A.2 above if he submits Letter of Consent along with necessary supporting documents from a firm(s) satisfying eligibility criteria for Architectural & E&M Works as stated, to work as Sub-Contractor of Tenderer for Architectural & E&M Works.

A.3 Work experience of Detailed Design Consultant (DDC) for Power Supply & distribution system, 750V DC traction electrification and SCADA System:-

Tenderer (either a single/ JV/ Consortium) should have done design / **design review** of minimum 15 track kms of 750 volts DC or above Traction Electrification on viaduct/ long bridges/ underground section including Railway depot workshop on a Metro Rail System, design / **design review** of at least 02 no. of 66 KV or above voltage Receiving Substations, design/ design review of at least 06 numbers of indoor type 33 kV (or 24 or 22 or 11 kV)/ 750 volts DC or 1500 volts DC traction substations and 33kV (or 24 or 22 or 11 kV)/415V ac auxiliary power sub-stations on and design / **design review** of at least two SCADA works for traction/ auxiliary power supply on underground/ elevated Metro Rail System or Suburban Rail System/ Monorail system.

Notes:

- Tenderer shall also be considered eligible if criteria as listed under para A.3 above are satisfied separately by different partners of JV/ Consortium for Power Supply & distribution system, 750V DC Third rail traction electrification and SCADA system design.
- Tenderer shall also be considered eligible under para A.3 above if he submits Letter of Consent along with necessary supporting documents from a firm (s) satisfying eligibility criteria for Power Supply & distribution system, 750V DC Third rail traction electrification and SCADA system as stated to work as Sub-Contractor of Tenderer.

Notes:

- The tenderer shall submit details of works executed by them in the Performa of **Appendix-11 of FOT** for the works to be considered for qualification of work experience criteria. Documentary proof such as certificates from client clearly indicating the nature/scope of completed work, and date of completion for such work should be submitted. **The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, Copy of work order, bill of quantities, T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted. bill wise details of payment received certified by C.A., and a certificate from Government / Private Client certifying completion of work should be submitted.**
- In case of joint venture / Consortium, full quantum of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the quantum of work as per their relevant design experience duly supported by proof such as MOU/Client Certificate in such JV/Consortium shall be considered.



consultant or designer with those of a contractor and/or manufacturer, all relevant information must be provided regarding such relationship, along with an undertaking to the effect that the member agrees to limit their role to that of a consultant and/or designer and to disassociate themselves, their associates/affiliates and/or parent firm from working in any other capacity (including tendering relating to any goods or services for any part of the work) on this work other than that of consultant and/or designer.

- 2.5 If, in connection with the performance of the consulting services, tenderer/ any group member intend to borrow, hire temporarily, personnel from contractors, manufacturers or suppliers, the applicant must include all relevant information about such personnel in their proposal. In such case, the applicant will be acceptable only if those contractors, manufacturers, and suppliers disassociate themselves from this work (including tendering relating to any goods or services for any other part of this work) other than that of consultant.
- 2.6 Each Tenderer, or any associate will be required to confirm and declare in the Tender submittal that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this Contract. They will have to further confirm and declare in the submittal that no agency commission or any payment which may be construed as an agency commission has been, or will be paid and that tender price will not include any such amount. The proforma of this undertaking is prescribed in Appendix-12 of FOT. If the Employer subsequently finds to the contrary, the Employer reserves the right to declare the Tenderer as non-compliant, and declare any Contract if already awarded to the Tenderer to be null and void.
- 2.7 Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a Tender will be an offence under laws of India. Such action will result in the rejection of the Tender, in addition to other punitive measures.
- 2.8 Each Tenderer, or any associate will be required to confirm and declare in the Tender submittal that that they have not been blacklisted or deregistered by any central / state government department or public sector undertaking and also that none of their work was rescinded by the client after award of contract during last 3 Years. The proforma of this undertaking is prescribed in Appendix-13 of FOT.
- 2.9 It should be noted that the Detail Design Consultant (DDC) cannot work as a designer / consultant to the Design Build Contractors of this project, without prior approval of LMRC.

3. TECHNICAL PACKAGE

- 3.1 The technical package, clearly labelled TECHNICAL PACKAGE will comprise of:
- Issued tender documents Volume 1, Volume 2, Volume 4 & Volume 5 duly signed and stamped on each page along with addendums.
 - Tender Security (EMD) in original in a separate sealed envelope. It must be noted that in case of a JV/consortium, the B.G. (if EMD is in form of B.G.) must be on behalf of the JV/consortium/Lead Member and issued on behalf of the name of JV/consortium/Lead Member.
 - Attested copy of Power of Attorney to submit Tender,
 - Power of Attorney from each member,
 - The Memorandum of Understanding MOU (See Clause 2.2 and 2.3) for the consortium or joint venture in case of more than one member,
 - Tax Certificates (Clause 3.3), and
 - Technical Proposal.
- 3.2 The Technical Proposal should cover in detail- Detailed design services which include (but not limited to) the following:-
- Understanding and comprehension of the work involved.
 - The general approach and methodology proposed for carrying out the services covered in the Scope of Work, including such detailed information as deemed relevant. In addition, the technical proposal shall contain:



- A detailed overall work programme and a bar chart indicating the duration and timing of assignment of each key staff or other staff member assigned to the project.
- c. To achieve targeted timeline of project, the superstructure of viaduct shall be double "U" Girder (One for each Track) given with full span construction method and precast pier caps except at isolated locations due to site constraints. However, if any other design alternative as per Clause 3.3 of Scope of Work: Part 1 (Vol-3) is suggested/proposed, it should be quoted clearly by the bidder in its bid substantiating with detailed analysis with respect to economy, time, ease of construction, serviceability etc. for technical evaluation by LMRC. Bidder may also be called for detailed presentation for the same by LMRC, if needed.

In case, suggested/proposed design alternative for the superstructure of the viaduct other than double "U" Girder is not considered acceptable by the LMRC after technical evaluation and bidder is not agreeable to design with double "U" Girder, offer of the bidder shall be summarily rejected on technical grounds and will not be considered further for financial opening.

- d. An organisation chart together with clear description of the responsibilities of each key staff member within the overall work programme. The DDC shall deploy the key staff of the Design team, Expertise team & Project Management team such that they have relevant experience of not less than ~~40~~ 7 years in the concerned field. The leader of the expertise team in each of the key areas of discipline- as listed in para 3.2 f shall not have less than ~~43~~ 10 years of relevant experience and have handled minimum 2 projects of similar nature & complexity. For expatriate experts of the key areas- as listed in para 3.2 g, minimum international experience of ~~43~~ 10 years in the relevant area is required. Sufficient proof shall be submitted to substantiate the qualification (minimum Masters degree for S.no. 2) & 3) of 3.2 f & minimum Graduate degree in respective fields for other key areas) and experience of staff deployed.
- e. The DDC must have experience of
- (i) Viaduct design which should include full span design and erection with overhead launching girder. Design of elevated Metro Station and its building.
 - (ii) Tunnel design which should include Tunnelling by TBM, NATM & Cut & Cover. Design of Underground Metro Station and its building services.
 - (iii) Detailed Design Consultancy Services for Power supply & Distribution system, 750 volts DC or above Traction Electrification and SCADA system.

To substantiate work experience in these fields, technical proposal should be submitted as per Appendix 11 of FOT.

- f. *The technical proposal will be evaluated based on the capabilities /technical strength of Key staff proposed to be deployed. Important key areas of the DDC's responsibilities listed below shall be headed by leaders of ~~44~~ 8 Key areas. Experience required for the leaders for ~~44~~ 8 key areas have been given in para 3.2 d. CVs of leaders for ~~44~~ 8 key areas as mentioned in the para below will be evaluated for technical evaluation.*

- 1) **Architectural - One for underground station, & elevated station & Depot.**
- 2) **Civil Structural Design- One for Viaduct, special spans, ramps, & elevated stations, & Depot**
- 3) **Civil Structural Design / Proof checking of Detailed Structural Design (civil) and construction scheme of underground stations - One for underground stations**
- 4) ~~Civil Structural Design - One for Depot Deleted~~
- 5) ~~Proof checking of Detailed Structural Design (civil) and construction scheme of underground stations - One Deleted~~
- 6) **4) Building services - One for E&M, Fire Fighting & Fire-Detection.**
- 7) **5) Building services - One for VAC/ECS**



8) ~~6)~~ **Building services – One for TVS**

~~9) Building services – One for Fire Fighting/Fire Detection etc. Deleted~~

~~40) Power Supply & Distribution – One for power systems Deleted~~

44) 7) **750V DC system and Digital Protection & control expert for traction electrification application/ Power Supply & Distribution / SCADA Expert / Earthing, Bonding, EMC/EMI study and Stray Current Expert – One**

~~42) SCADA Expert – One Deleted~~

13) 8) **AC & DC Traction Simulation Study Expert/Sub-consultant – One**

~~44) Earthing, Bonding, EMC/EMI study and Stray Current Expert – One Deleted~~

g. Further DDC will provide expatriate experts for the 6 3 key areas as listed below.

S. No.	Description of Key Areas	Minimum Stay in India for Expatriate Leader
1	Architectural – one for underground station & elevated station	365 <u>180</u> Man days
2	Building services – one for E&M Deleted	30 Man-days
3	Building services – one for VAC/ECS Deleted	60 Man-days
<u>4 2</u>	Building services – one for TVS	60 <u>45</u> Man days
5	Building services – one for Fire Fighting/Fire Detection etc. Deleted	30 Man-days
<u>6 3</u>	Power Supply & Distribution, 750V DC Third rail traction electrification and SCADA System	40 <u>45</u> Man days

Experience required for Expatriate experts for 6 3 key areas have been given in para 3.2 d. CVs of the Expatriate experts shall be approved by the Engineer prior to their deployment in the project. The payment for the expatriate expert will be made on man day basis for the period of their stay in India.

- h. If any Expatriate is not mobilized as per tender stipulations, a recovery of Rs. 75,000/- (Seventy-Five Thousand Only) per expatriate per day or part thereof shall be made from their bills.
- i. A task list of deliverables and delivery dates, and the person responsible for performing the deliverable.
- j. The name, background and professional experience of each key staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment. (The majority of the key staff shall be regular members of the tenderer/subcontractor for at least six months).
- k. The details of the name, background and CV of any sub-contracted staff with their consent letter who will be employed on the project.
- l. The names and addresses of any firm who may be given sub-contracts with details of their experience.
- m. The details of equipment and laboratory facilities with such subcontractors/ sub consultants shall be provided.
- n. Software packages, if any proposed to be used for the work.
- o. Details of design facilities, together with their location.
- p. The more descriptive and detailed scope is defined in Scope of Works

The above details should be submitted separately for Architectural, Civil Design, Building Services, Traction & power supply services. The offer should cover the entire Scope of Work, as laid out in tender documents.



demand provided that in his demand the LMRC will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions (a), (b), (c) mentioned above, specifying the occurred condition or conditions.

5. Notwithstanding anything contained herein above

- Our liability under this bank guarantee shall not exceed _____ (_____ only)
- This Bank Guarantee shall be valid upto _____, We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if the employer serves upon the bank a written claim or demand on or before _____, Whereafter it ceases to be in effect in all respects whether or not the original Bank Guarantee is returned to us.

This guarantee cannot be assigned nor transferred to any other third party, without the prior written consent of the Guarantor.

Signature of Witness
 Name :
 Address :

Signature of
 Authorized Official of the Bank
 Name of Official
 Designation
 Stamp/Seal of the Bank

Notes:

1. The stamp paper of appropriate value shall be purchased in the name of the bank, who issue the Bank Guarantee.
2. Following bank details of LMRC may be required for SFMS, in the preparation of Bank Guarantees:

LMRC's bank details	
Beneficiary Name	LUCKNOW METRO RAIL CORPORATION LTD.
Beneficiary Address	Vipin Khand, Gomti Nagar, Lucknow, 226010 (UP)
Beneficiary Bank name	HDFC BANK
Bank Branch Address	TEKARI CHAMBERS, ASHOK MARG, LUCKNOW.
Account No.	50200009236810
IFSC Code of the Branch	HDFC0001267



FORM OF TENDER - APPENDIX 9

[As per clause 7.4.2 of ITT]

DETAILS OF CONSULTANCY WORKS IN HAND

AS on first day of the month of tender submission

Tenderers Name

Date.....

Name and brief particulars of contract (Clearly indicate the part of the work assigned to the applicant(s))	Name of client with telephone number and fax number	Contract Value In Rupees Equivalent (Give only the value of work assigned to the applicant(s) (Assume inflation as given in Appendix 8)	Value of balance work yet to be done in Rupee equivalent as on 31.05.2019	Date of Completion as per Contract Agreement	Expected Completion Date	Delay if any, with reason	Value of work to be done in 2019-20. (1 st June 2019 to 31 st March 2020)	Value of work to be done in 2020-21 (1 st April 2020 to 31 st March 2021)	Value of work to be done in 2021-22 (1 st April 2021 to 31 st March 2022)	Value of work to be done in 2022-23 (1 st April 2022 to 31 st March 2023)	Value of work to be done in 2023-24 (1 st April 2023 to 31 st May 2024 2023)
TOTAL											

Note:

- The above Annexure shall be certified by Chartered Accountant in original under his signature, stamp and membership number.



country or in India.

7. Clause 25 **Language of the Agreement shall be English.**

The Agreement shall be interpreted, construed and governed by the Laws of India, and the legal proceedings, if any, shall be under the jurisdiction of the Courts in Lucknow.

8. Clause 29 **Notices shall be delivered to:**

Managing Director
Lucknow Metro Rail Corporation,
Administrative Building,
Vipin Khand, Gomti Nagar,
Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal,
Lucknow-226010, Uttar Pradesh, India

Attention : Managing Director

Facsimile :

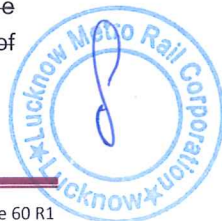
For the Consultant:

Attention:

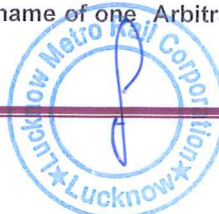
Facsimile:

9. Clause 33 **Arbitration:**

~~All disputes relating to this agreement or claims arising out of or relating to this agreement or breach, termination or the invalidity thereof or on any issue whether arising during the progress of the services or after the completion or abandonment thereof or any matter directly or indirectly connected with this agreement shall be referred to Arbitrator(s) appointed by Director, LMRC on receipt of such request from either party. Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is upto Rs.50 Lakhs and to a panel of three Arbitrators, if total value of claims is more than Rs.50 Lakhs. LMRC shall provide a panel of three Arbitrators which may also include LMRC Officers for the claims upto Rs.50 Lakhs and a panel of five Arbitrators which may also include LMRC Officers for claims of more than Rs.50 Lakhs. Licensee shall have to choose the sole Arbitrator from the panel of three and / or one Arbitrator from the panel of five in case three Arbitrators are to be appointed. LMRC shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third Arbitrator from the panel only. The Arbitrator(s) shall be appointed within a period of 30 days from date of receipt of written notice / demand of appointment of Arbitrator from either party.~~

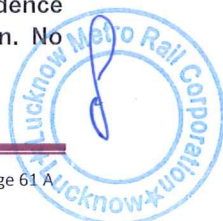


- a) ~~The decision of sole Arbitrator / panel of Arbitrators shall be binding on all the parties. The cost of arbitration shall be borne by respective parties equally. The venue of such arbitration shall be Lucknow. The parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal insofar as such waiver can validly be made.~~
- b) ~~Rules governing Arbitration Proceedings: The Arbitration Proceedings shall be governed by Indian Arbitration and Conciliation Act 1996, as amended from time to time including provisions in force at the time the references made. During the pendency of arbitration proceedings, the Licensee shall continue to perform and make due payments to LMRC as per the License Agreement.~~
- a) Only such dispute(s) or difference(s) in respect of which notice has been made under Clause 32 of GCC but could not be settled through Conciliation, together with counter claims or set off, given by the Employer, shall be referred to arbitration. Other matters shall not be included in the reference.
- b) The Arbitration proceedings shall be assumed to have commenced from the day, a written and valid demand for arbitration is received by Managing Director, Lucknow Metro Rail Corporation Rail Limited, Lucknow (MD/LMRC).
- c) The disputes so referred to arbitration shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996 & amended by the Arbitration & Conciliation (Amendment) Act, 2015 and any statutory modification or re-enactment thereof.
- d) Further, it is agreed between the parties as under:
Number of Arbitrators: The arbitral tribunal shall consist of:
(i) Sole Arbitrator in cases where the total value of all claims in question added together does not exceed Rs. 2.00 crores;
(ii) 3 (Three) arbitrators in all other cases.
- e) Procedure for Appointment of Arbitrators: The arbitrators shall be appointed as per following procedure:
(i) In case of Sole Arbitrator: Within 60 days from the day when a written and valid demand for arbitration is received by MD/LMRC, the Employer will forward a panel of 03 names to the Contractor. The Contractor shall have to choose one Arbitrator from the panel of three, to be appointed as Sole Arbitrator within 30 days of dispatch of the request by the Employer. In case the Contractor fails to choose one Arbitrator within 30 days of dispatch of the request of the Employer then MD/LMRC shall appoint anyone Arbitrator from the panel of 03 Arbitrator as sole Arbitrator.
(ii) In case of 3 Arbitrators:
1. Within 60 days from the day when a written and valid demand for Arbitration is received by MD/LMRC, the Employer will forward a panel of 5 names to the Contractor. The Contractor will then give his consent for any one name out of the panel to be appointed as one of the Arbitrators within 30 days of dispatch of the request by the Employer.
2. Employer will decide the second Arbitrator. MD/LMRC shall appoint the two Arbitrators, including the name of one Arbitrator for whom consent was given



by the Contractor, within 30 days from the receipt of the consent for one name of the Arbitrator from the Contractor. In case the Contractor fails to give his consent within 30 days of dispatch of the request of the Employer then MD/LMRC shall nominate both the Arbitrators from the panel.

3. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the parties out of the panel of 05 Arbitrators provided to Contractor or from the larger panel of Arbitrators to be provided to them by Employer at the request of two appointed Arbitrators (if so desired by them) and who shall act as Presiding Arbitrator. In case of failure of the two appointed Arbitrators to reach upon consensus within a period of 30 days from their appointment date, then, upon the request of either or both parties, the Presiding Arbitrator shall be appointed by the Managing Director/LMRC, Lucknow.
 4. If one or more of the Arbitrators appointed as above refuses to act as Arbitrator, withdraws from his office as Arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as Arbitrator for any reason whatsoever or dies or in the opinion of the MD/LMRC fails to act without undue delay, the MD/LMRC shall appoint new Arbitrator /Arbitrators to act in his/their place except in case of new Presiding Arbitrator who shall be chosen following the same procedure as mentioned in para (ii)(c) above. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous Arbitrator(s).
 5. The Employer at the time of offering the panel of Arbitrator(s) to be appointed as Arbitrator shall also supply the information with regard to the qualifications of the said Arbitrators nominated in the panel along with their professional experience, phone nos. and addresses to the Contractor.
- f) Qualification and Experience of Arbitrators (to be appointed as per sub-clause (e) above):
The Arbitrators to be appointed shall have minimum qualification and experience as under:
Arbitrator shall be;
a Working / Retired Officer (not below E-8 grade in a PSU with which LMRC has no business relationship) of any discipline of Engineering or Accounts / Finance department, having experience in Contract Management of Construction Contracts; or a Retired Officer (retired not below the SAG level in Railways) of any Engineering Services of Indian Railways or Indian Railway Accounts Service, having experience in Contract Management of Construction Contracts; or a Retired Officer who should have retired more than 3 years previously from the date of appointment as Arbitrator (retired not below E-8 grade in LMRC or a PSU with which LMRC has a business relationship) of any Engineering discipline or Accounts / Finance department, having experience in Contract Management of Construction Contracts or retired judge of any High Court or Supreme Court of India or reputed Chartered Accountant & should be member of ICAI, New Delhi. No person other than the persons appointed as per above procedure and having above qualification and experience shall act as Arbitrator
- g) No new claim shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defence thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.
- h) Neither party shall be limited in the proceedings before such arbitrator(s) to the evidence or arguments put before the Engineer for the purpose of obtaining his decision. No

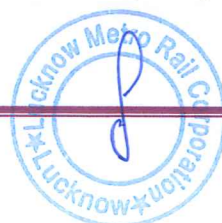


decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator(s) on any matter, whatsoever, relevant to dispute or difference referred to arbitrator/s. Neither party shall be limited in the proceedings before such arbitrators to the evidence nor did arguments previously put before during settlement through Conciliation proceedings.

- i) It is agreed by both the Parties that in the cases where Arbitral Tribunal is consist of sole Arbitrator, their disputes shall be resolved by fast track procedure specified in sub-section (3) of 298 of the Arbitration and Conciliation (Amendment) Act , 2015 or as amended up to date.
- j) If the contractor(s) does/do not prefer his/their specific and final claims in writing, within a period of 90 days of receiving the intimation from the Employer/Engineer that the final bill is ready for signature of the contractor(s), he/they will be deemed to have waived his/their claim(s) and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.
- k) Arbitration proceedings shall be held at Lucknow, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.
- l) The Arbitral Tribunal should record day to day proceedings. The proceedings shall normally be conducted on the basis of documents and written statements. All arbitration awards shall be in writing and shall state item wise, the sum and detailed reasons upon which it is based. A model Time Schedule for conduct of Arbitration proceedings in a period of 180 days / 365 days will be made available to Arbitral tribunal for their guidance. Both the Parties should endeavor to adhere to time schedule for early finalization of Award.
- m) The award of the sole Arbitrator or the award by majority of three Arbitrators as the case may be shall be binding on all parties. Any ruling on award shall be made by a majority of members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.
- n) A party may apply for correction of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award of a tribunal and interpretation of specific point of award to tribunal within 60 days of the receipt of award.
- o) A party may apply to tribunal within 60 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.
- p) Cost of Conciliation/ Arbitration:- The fees and other charges of the Conciliator / Arbitrators shall be as per the scales fixed by the employer from time to time irrespective of the fact whether the Arbitrator(s) is/are appointed by the Employer or by the Court of law unless specifically directed by Hon'ble Court otherwise on the matter, and shall be shared equally by the Employer and the Contractor. However, the expenses incurred by each party in connection with the preparation, presentation will be borne by itself.
- q) e) Jurisdiction of Courts: The Court at Lucknow shall have the exclusive jurisdiction to try all disputes between the parties arising out of this agreement.

10. Clause 20 Time for Payment

- (a) The consultant shall submit its bills on monthly basis for the works certified by the Engineer for payment.
- (b) All payments under this Contract for deployment of Expatriate Experts shall be made as per Schedule B of Financial package.



- (c) Penalty @ 2-lakh per man-month **Rs. 75,000/- (Rupees Seventy Five Thousand Only) per expatriate per day** will be recovered for the period of non deployment of the Expatriate expert as per the agreed programme.
- (d) If replacement of Expatriate experts by equal or better qualified experts, after approval by LMRC is not done, it will be considered as non-deployment of key personnel and penalty as per para (c) above will be recovered from the consultant.

11. Clause 3.3 **Advance Payment**

The following provisions shall apply to the advance payment and the advance payment guarantee.

- a) An advance payment of _____ (#) in foreign currency and of _____ (#) in local currency, each not exceeding ten percent of the contract value in respective currencies, shall be made within 30days after the submission of Bank guarantee as per GCC clause 3.3 against advance payment.
- b) No interest on advance payment will be charged by the Employer
- c) All advance payment will be recovered by the Employer in equal instalments against the bills for the first twenty four (24) months of the Service, until the balance payment thereon has been fully repaid. However, if for any month the advance recovery instalment is more than the amount billed, there will be no negative billing on this account and the balance of the recovery will be carried over to subsequent month or months
- d) The bank guarantee shall be in the amount and in the currency of the foreign/ local currency portion of the advance payment separately and at no time shall be less than the amount of outstanding advance.



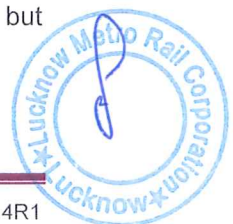
- Specific drawing packages are required from each discipline. The drawings need to comprise of 2D extractions of the 3D models from the engineering collaboration system (CDE).
- All CAD drawings need to be comprised of 2D drawings extracted from the 3D master model. Any subsequent design scheme changes that are required to be fully coordinated shall be modeled in 3D and the drawing extraction re-run to produce revised plots.
- All plot composition files need to be checked as prescribed by the workflow setup in the engineering collaboration system (CDE) before submission to the OSO/ GC/ Authority.

3.5 Mandatory Requirements to be fulfilled:

- a) All the changes and updates in the design happening in the construction drawings after the initial approval from GC/ Authority etc. should be documented and communicated to the GC/ Authority.
- b) Based on 'as-built' drawings 'as-built' model shall be updated by the DDC, in case required.
- c) All the updated drawings should be duly incorporated in the BIM model. Also, the BIM model along with the updated progress and quantity reports should be submitted along with every RA Bill submission.
- d) For seamless coordination and integration of drawing packages within BIM environment, the DDC shall reference each model to other discipline models in timely manner and clash detection software routines shall be run on the multi-discipline model. The reports of which will be included with transmittals during project delivery and on request of the OSO/ GC/ Authority.
- e) Modeling of the following disciplines to be created:
 - Earthworks systems
 - Stations
 - Viaducts
 - Tracks
 - Signals
 - Electrical and Telecommunications
 - Structural
 - Mechanical & Plumbing
 - Architectural
 - & all others

The DDC shall properly use available "**Generic** intelligent objects" to embody information about the building/ structures/ tracks etc component requirements and properties (e.g., material properties, functional information, dimensions, uniform at assembly information, etc). The following sections describe more specific information that shall be included in, but not limited to, the following models:

Architectural:



PART-1

(Viaduct & Elevated Stations)

SCOPE OF WORK

1 INTRODUCTION

1.1 Purpose of this Document

This document describes the General Scope of Services to be provided by the Detailed Design Consultant (DDC).

1.2 Description

Sikandra – Taj East Gate Corridor-1 of Proposed Agra Metro Project, Agra; Consists of 6.569 Km Elevated Section with 06 + 01 (future) Elevated Stations and depot connection as per General Alignment Drawings (GADs), Volume-5.

2. EXTENT OF SERVICES

2.1 Services to be provided

- i) The DDC shall perform the Services set out in this Agreement.
- ii) The DDC shall deliver sufficient designs and documents as per Schedule given in Reference Documents (Volume-4), to enable LMRC to float tender for construction work for each package.
- iii) These Services generally include, but are not limited to:
 - a) Conceptual Layout planning of all 6 elevated stations.
 - b) Detailed architectural planning including type of finishes for all elevated stations including track structure within the stations and issue of GFC drawings which will include Bar Bending Schedules also.
 - c) Cost effective detailed structural design of all required components of viaduct including special span wherever required and all elevated stations including track supporting structure within stations.
 - d) Detailed design of all building services like illumination, E&M, fire suppression and fire detection, plumbing, drainage, water supply, lifts, escalators, power supply and public telephones.
 - e) Detailed architectural and structural design of Property Development area within metro station premises at identified locations (upto 3 Floors) including design of Building Services (E&M, fire Detection & suppression, Air Conditioning, main water supply, sewerage and plumbing etc. (upto outside the structure and embedded elements). The Property development can be integrated with stations or stand alone. External architectural finishing of Property development area is also included in the Scope but internal finishes are not included. ~~Administrative office of Agra Metro is also to be planned.~~
 - f) Detailed designs of intermodal transfer facilities for road and pedestrian traffic, landscaping, traffic management plan including design of street furniture required for smooth traffic movement on completion of the project.
 - g) Deleted.
 - h) Deleted.



4.1 Contract Drawings

Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works. DDC shall give reinforcement schedules in the form of Good for Construction (GFC) drawings which will also include details requirements for the construction contractor to prepare concrete reinforcing bar bending schedules for stations (elevated).

4.2 System wide Information

- a) The DDC shall incorporate full and final information relating to systemwide equipment and services into the CSDs Before the design of the relevant items as per agreed schedule is started by DDC, the details from System contractors shall be provided by LMRC for which DDC will indicate the details of input required at least 14 days before the report by DDC. However, DDC will also interface with other DDC's / contractors for obtaining necessary inputs. . The timing for issue of the CSDs will be determined by the LMRC dependent upon the award of the E & M Contracts. Final systemwide requirements defined by CSDs and those required by Systems and by E & M Contractors shall be incorporated into the SEM and SOD drawings and architectural/Structural drawings for construction. The DDC shall prepare and issue intermediate submissions of the structural requirements as necessary to meet the construction schedule. The DDC shall review relevant systemwide contractor shop drawings that affect the DDC design. The DDC shall review to ensure compatibility and, after review shall revise and issue all the necessary drawings as and when required by the LMRC. This shall be a continuous updating process in conjunction with design development extending towards the completion of the structural works. Where any system drawing creates difficulties or is not feasible in the design, it shall be specifically with details would be brought to the notice of LMRC.
- b) The DDC shall design the embedded items and include these works in the respective civil contracts as directed by the LMRC. The interface between the civil contractor's work and the systemwide contractor's work shall be clearly defined.
- c) DDC will interface with systemwide consultants/ contractors for ensuring the proper coordination in designing and developing the station / viaduct.

4.3 Construction Methods and Temporary Works

The DDC shall review shop and working drawings, and material samples of architectural items of the construction contractor. Furthermore the DDC shall assess, and report to the LMRC, the construction contractor's proposed construction methods and temporary works design with respect to their effect on the permanent works and give their views to improve the method etc. submitted by the contractor.

4.4 Site Meetings

DDC shall attend site meetings when requested by the LMRC, during the design stage and for the clarification/ correction of design and drawings.

4.5 Site Visits of construction sites:

At the request of the LMRC the DDC shall visit the site to provide his expert opinion on the performance, quality, progress etc., of the Works and to report whether the work is progressing generally as designed. The result of such visits shall be reported to the LMRC



immediately, if urgent actions are required, and shall be included in the DDC's monthly reports in all cases. ~~Such construction work site visits by DDC shall be paid for separately.~~ This shall also be covered under construction support activity by DDC for which no extra payments shall be applicable.

4.6 As-Built Drawings of the Works

- The DDC shall provide the GFC and review the as-built drawing and information submitted by the contractors to the LMRC on a continuous basis prior to the issuance of the Certificate of Completion by LMRC for the construction contract.
- For as-built drawings prepared by contractor and where there is deviation from GFC drawings prepared by DDC due to specific and unforeseen local underground site conditions, the DDC shall prepare relevant calculations reconciled with as-built conditions and information necessary for the maintenance of the works.
- For as-built drawings deviating from Contract drawings due to the sole Contractor, the DDC shall only review Contractor submittals (including as-built drawings and supporting calculations).

4.7 Liaison Work

The DDC shall assist LMRC to co-ordinate and liaise with all concerned local authorities and private and Government agencies to obtain approvals, testing and clearances as deemed necessary, depending on the conditions prevalent at site.

5 ORGANISATION OF THE DETAILED DESIGN CONSULTANT

5.1 General

- a) The DDC shall establish an efficient organisation for carrying out all services according to programme requirements. The organisation shall provide effective management of the tasks of the contract including those that must be carried out concurrently by separate disciplines and teams. The organisation shall also ensure that all information that becomes available during the design period is directed to the appropriate design teams and effective checking procedures are continuously maintained to ensure that required standards are met. Proper coordination between the different disciplinary of DDC will be maintained. All the design and drawings will be certified by all the expert of concerned disciplines like Structural, Architectural, E&M Systems, Fire detection/Suppression system etc.
- b) **DDC can have his full-fledged office either in Lucknow or in Agra in his own premises.** However, in case DDC does not plan to have full-fledged office in Agra he has to deploy 1 coordinator well versed with design aspects along with 2 to 3 supporting staff in different fields for which office space of approximately 50 sqm shall be provided by LMRC/Agra Metro Cell in its premises. DDC to note that only space will be given by LMRC/Agra Metro Cell and furniture, computers, plotters etc. including consumables will have to be arranged by DDC at his cost.
- c) The DDC shall furnish the CV's of all the key persons as identified so in the QA Plan who shall be working on this project and seek approval. If LMRC judges that the continuation of any person is not in the interest of the project, a written notice will be given to DDC who will promptly remove the person within a week. LMRC can withdraw



The DDC shall study all the available information made available to it in the Scope of Services, carry out all necessary analyses, and request any further information or data which is necessary for its design development from LMRC.

3.2 Additional Information

The DDC, shall, if so required, advise LMRC to carry out any additional topographical surveys, hydrological surveys, traffic surveys/studies, geo-technical investigations and utility investigations etc. If DDC is asked to carry out the same by LMRC. The cost of such additional investigations will be paid separately on actual basis by LMRC either through DDC or directly to the agency hired for such work / Investigations.

3.3 Design Alternatives

The DDC shall perform Design Alternatives. DDC should also review the station locations & requirement of land for the station given by LMRC with respect to adoptability of the suggested design and suggest change. The DDC shall develop alternative layouts and designs for the substructure, superstructure and architecture of the underground stations. ~~The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations, the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.~~

The alternative designs should also cover Building Services.

Each design alternative shall be presented in sufficient detail to clearly define the proposed design alternative including:

- A description of the proposed design alternative and the comparative advantages and disadvantages of each. Clearly illustrated sketches, drawings, diagrams, calculations,
- Published reports or other means that allows evaluation shall accompany the written description.
- A detailed estimate of the amount of savings in construction cost.
- If the design alternative is approved by the LMRC, all further work of detailed design, drawings, etc. will be done as per the approved alternatives without any extra cost to LMRC.

3.4 Detailed Design

The detailed design of the specified works and the incorporation of all system wide requirements are the responsibility of the DDC.

The DDC shall incorporate in its design, the relevant seismic criteria and earthquake design, as required by the design criteria as per the best practices and approved by LMRC.

The DDC's design shall take into account the installation requirements of the systemwide information listed in Section 3.6 of this Document, which will involve the provision of openings, conduits, fixings, bases, drainage system, plinths and loadings. Provision of earth electrodes, earthing bonds to steel reinforcement is to be catered for.

3.5 Requirements for Earthing, Bonding and Corrosion Protection

The DDC shall incorporate the relevant requirements of design criteria as approved by LMRC in its design.



alone Property development area mentioned in DPR for all stations be given.

3.26 Extent of Design Services

For manpower planning purposes, the schedule dates are indicated in **Financial Package** (Vol.-3 of tender documents). The DDC shall be responsible for managing and adjusting its manpower to accommodate variations in schedule during the estimated design period, and such variations shall not constitute a claim for extended design services unless these variations are not due to the DDC.

4 SERVICES TO BE PERFORMED BY THE DDC DURING CONSTRUCTION:

Services during construction shall be deemed to commence for each construction package on award of the construction contract. For manpower planning purposes, estimated schedule dates are indicated in Financial Package (Vol.-3 of tender documents).

4.1 Contract Drawings

~~Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the LMRC. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design onto drawings to be issued to the Contractor. The LMRC will then issue the drawings to the contractor for construction of the Works. DDC shall give reinforcement schedules in the form of Good for Construction (GFC) drawings which will also include details requirements for the construction contractor to prepare concrete reinforcing bar bending schedules for stations (elevated).~~

The DDC shall perform proof checking of structural design and scheme of construction suggested by the Contractor for underground stations, the objective of which will be to reduce construction cost without adversely affecting required transit system functions such as capacity, service life, reliability, economy of operation or ease of maintenance and which shall not require any extension of design or construction time.

The detailed design of the specified works and the incorporation of all systemwide requirements are the responsibility of the DDC. The design shall be developed from outline specifications and design criteria approved by LMRC. Any critical difficulty identified shall be immediately drawn to the attention of LMRC, but not withstanding that, the DDC shall remain totally committed to the overall correctness, safety economy and integrity of the design, if necessary actively seeking advice, information and clarification so as to avoid abortive work.

4.2 Systemwide Information

The DDC shall incorporate full and final information relating to systemwide equipment and services into the CSDs Before the design of the relevant items as per agreed schedule is started by DDC, the details from System contractors shall be provided by LMRC for which DDC will indicate the details of input required at least 14 days before the report by DDC. However, DDC will also interface with other DDC's / contractors for obtaining necessary inputs. . The timing for issue of the CSDs will be determined by the LMRC dependent upon the award of the E & M Contracts. Final systemwide requirements defined by CSDs and those required by Systems and by E & M Contractors shall be incorporated into the SEM and SOD drawings and architectural/Structural drawings for construction. The DDC shall prepare and issue intermediate submissions of the structural requirements as necessary to meet the construction schedule. The DDC shall review relevant systemwide contractor shop drawings that affect the DDC design. The DDC shall review to ensure compatibility and, after review shall revise and issue all the necessary drawings as and when required by the LMRC. This shall be a continuous updating process in conjunction with design development extending towards the completion of the structural works. Where any system drawing creates difficulties or is not feasible in the design, it shall be specifically with details would be brought to the

Schedule B

Sr. No.	For Stay of Expatriate Experts	Unit	Quantity	Rate in INR/Foreign Currency	Amount in INR/Foreign Currency
(1)	(2)	(3)	(4)	(5)	(6)
1.	Architectural - for underground station & elevated station	Man days	365 <u>180</u>		
2.	Building services for E&M	Man days	30	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
3.	Building services for VAC / EGS	Man days	60	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
4. <u>2</u>	Building services - for TVS	Man days	60 <u>45</u>		
5.	Building services for Fire Fighting / Fire Detection etc.	Man days	30	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
6. <u>3</u>	Power Supply & Distribution, 750V DC Third rail traction electrification and SCADA System	Man days	40 <u>45</u>		
	Sum Total		555 <u>270</u>		

- Sum Total of Schedule B shall be carried forward in summary sheet of BOQ.
 - Payment will be made as per actual stay of expatriate expert & as per payment schedules as given in Financial Package (Part-III).
 - If our tender is accepted we will provide Performance Guarantee as stipulated in the General Conditions of Contract.
 - Unless and until a formal Agreement is prepared and executed this tender together with your Letter of Acceptance thereof shall form a binding Contract between us. We understand that you are not bound to accept the lowest or any tender you may receive and that tender may be accepted in whole or in part(s) as given under Schedule A & Schedule B.
- Yours faithfully,

Signature of Authorized Signatory
on behalf of tenderer (With Company Seal)

Full Name _____
Designation _____
Address _____

Note: If the Tenderer consists of more than one entity, they should also appear as signatories or they submit the POA in favour of authorized signatory on behalf of tenderer.



CONTRACT AGDD-01(R1)

Item 6 (b) SCHEDULE OF PAYMENTS E&M Design of Depot (40% of item No. 6)

The LMRC Shall make payments to the DDC based on the Stage Payments for each activity as approved and accepted by the Employer's Representative for Depot. The stage payments will be made on completion of the corresponding activities, after deducting liquidated damages, if any

S. No.	Activity Completed	Stage Payment of Lump Sum	Accumulative Payment	Progress Schedule (Weeks from Issue of Letter of Acceptance)	Liquidated Damage to be imposed if yes
1	Delivery of First Review Submission as per clause 8.4 of Appendix "A" and its approval	12%	12%	4	-
2	Delivery of Tenders Drawings, BOQs. Cost estimate and Specifications for Electrical and Mechanical works including utilities	20%	32%	6	Yes
3	Final Review Submission as per clause 8.6 of Appendix A	8%	40%	12	-
4	* Submission of Documents., Models, etc, to Local authorities such as DFS etc for their approval.	5%	45%		-
5	Issue of "Good for Construction Drawing" as per clause 8.7 of Appendix A	20%	65%	24	Yes
6	Acceptance of originals as per Clause 8.8 of Appendix A	8%	73%		-
7	Issue of the Combined Services Drawings (CSD)	7%	80%		-
8	Issue of No Objection Certificate to CSD by LMRC	5%	85%		-
9	Interaction for explanation of Design Basis, codes followed, reports & calculations performed using presentations, handouts, site visits & hands on experience on software utilization for LMRC personal	5%	90%		-
10	Construction Support activity during the period of construction	5 %	95%		-
11	Review and acceptance of "As Built Drawings"	5%	100%		

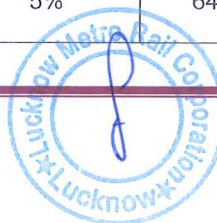
*Payments after the approval of DFS (Department of Fire Safety).



Payment Schedule of Item No. 7 of Schedule A

Employer shall make payments to the DDC based on stage payments as following, as per the completion of stages. The stage payments will be made on completion of corresponding activities and as approved and accepted by Employer's representative, after deducting Liquidated Damages, if any:

SN	Activity Completed	Stage payment in percentage of amount towards traction design	Cumulative Payment in percentage	Progress schedule(in Weeks from date issue of Letter of Acceptance)
1	2	3	4	5
1	Submission & approval and presentation of Inception report as per section 8.1, Scope of Work for Traction & Power Supply	5%	5%	2
2	Submission of report of power supply arrangement & Traction Simulation study and Design of third rail and its installations as per task 1 & 2, Scope of Work for Traction & Power Supply	10%	15%	4
3	Submission of necessary inputs required to be incorporated in respective tenders of systems (i.e. Structure, Track, Signalling, Rolling Stock, Telecom, E&M etc.) for DC traction electrification	4%	19%	4
4	Acceptance of study reports, submitted at Serial Number 2 above.	5%	24%	5
5	Detail design basis report and Balance Design Submission as per section 8.2, Scope of Work for Traction & Power Supply	5%	29%	5
6	Intermediate submission and approval including details required for submission to Statuary Authority (as applicable) as per section 8.4 to 8.6, Scope of Work for Traction & Power Supply, in part as under:			
a)	Technical specifications & drawings for the construct tender. BOQ with take-off sheets, Initial construction cost estimates with their rate analysis/basis.	10%	39%	7
b)	Other details required in intermediate submission including details to be submitted to Statuary Authority etc (as applicable)	5%	44%	8
6-7	Final review submission and approval as per section 8.7, Scope of Work for Traction & Power Supply	5%	49%	9
7-8	Delivery of final design as per section 8.9, Scope of Work for Traction & Power Supply			
a)	Delivery of construct tender documents complete for floating of construct tender.	10%	59%	10 to 12 ^{*1} Liquidation damages apply at this stage
b)	Completion of process of issue of clarification/addendums/corrections/modifications prior to construction tender	5%	64%	13



	opening.			
c)	Completion of process of issue of clarifications/ addendums/ correction/ modifications during tender technical/ financial evaluation stage.	5%	69%	15
8 9	Delivery of documents as per section 8.10, Scope of Work for Traction & Power Supply	5%	74%	18
9 10	Submission of documents for construct contractor & Good for construction drawing as per section 8.11, Scope of Work for Traction & Power Supply			
a	For 06 station (i.e. Jama Masjid, Agra Fort, Taj Mahal, Fatehabad Road, Basai, Taj East Gate), 01 Depot & 01 Receiving cum Auxiliary main substation (RSS)	8%	82%	24 to 28 ^{‘*’} Liquidation damages apply at this stage
b	For 07 station (i.e. Sikandara, Guru Ka Taal, ISBT, RBS College, Raja Ki Mandi, Agra College, Medical College), & 01 Receiving cum Auxiliary main substation (RSS)	8%	90%	36 to 42 ^{‘*’} Liquidation damages apply at this stage
40 11	Extending design support during construction period as per task 14, Scope of Work for Traction & Power Supply	Balance 10%	100%	Please refer Note-3 below

Note:

1. ‘*’ The liquidated damages will apply at these stages @ 0.5% 0.35% of the contract price of the Price per week of delay.
2. Key dates of acceptance of reports/design submission are dependent upon submission of proper & complete document by DDC duly incorporating the comments/ observation of Employer in time by the DDC.
3. Balance payment stated at SNo.40 11 to be released after completion of activities of DDC during construction phase and handing over of the installation by the construction contractor to employer.
4. Whenever ‘Stage payment’ is indicated (column 3) for particular activity, 70% payment for that activity will be made for presentation and submission and the balance 30% on approval by employer. This will apply to activities at serial numbers 1, 4,-5 6,-7, 8, 8, 9 and 9- 10
5. The invoices for payment will be raised by DDC at intervals of not less than a month.



FORM OF TENDER - Appendix- 11

WORK EXPERIENCE

Tenderers Name

Date.....

For qualification of Minimum Eligibility Criteria as per clause no. 1.1.3.2 of NIT of Contract AGDD-01(R1).

Specific Consultancy Experience					
Contract Number _____ of _____ required Information					
Contract Identification					
Award date					
Completion date					
Employer's Name					
Employer's Address: Telephone / Fax number: E Mail:					
<u>Nature of Work</u>		<u>Completed Portion of On-Going Works till 31.05.2019</u>		<u>Completed Works</u>	
A) Length of Viaduct Design Completed (in Kms)					
B) Design of :		Nos. of Stations		Nos. of Stations	
		Elevated	Underground	Elevated	Underground
(i) Structural works					
(ii) Architectural Works					
(iii) E&M Works					
<u>(iv) Tunnel by TBM (in Kms)</u>					
<u>(v) Tunnel by NATM (in Kms)</u>					
<u>(vi) Tunnel by Cut & Cover (in Kms)</u>					
C) Design / Design Review of :-					
(i) 750V DC or above Traction Electrification on viaduct / bridges / underground section (in Kms)					
(ii) 66kV or above Voltage receiving Sub-station (Nos.)					
(iii) Indoor type 33 kV (or 24 or 22 or 11 kV) / 750V DC/ 1500V DC traction Sub-station (Nos.)					
(iv) 33 kV (or 24 or 22 or 11 kV) / 415V AC Ancillary Power Sub-station (Nos.)					
(iv) SCADA works for traction / Ancillary power supply on U/G or Elevated Metro / Suburban Rail / Monorail System (Nos.)					
Role in Contract (Individual/JV-Consortium member)		Individual		JV Member	
If JV member specify percentage participation in contract (Please refer Note-1)		% participation			



works for depot and workshop including ancillary buildings, tower wagon shed, and depot control centre and telecommunication store cum office will be designed in consultation with designated contractors, within the space provided in the conceptual layout.

- Task 2.2.13 Support the tendering process by responding to questions or clarifications during the tender invitation process.
- Task 2.2.14 Plan, design, detail, control, co-ordinate and execute the design phase of the works for production of drawings, documents and reports to meet the key schedule dates included in the Agreement and as directed by the Employer's Representative;
- Task 2.2.15 Prepare and submit a Design Quality Control Plan to the Employer's Representative for acceptance;
- Task 2.2.16 Maintain a Quality Control activity and an effective internal procedure for checking the accuracy of work and assuring compliance with contract requirements;
- Task 2.2.17 Make available their services as and when required during the depot construction contracts. Assist the Employer's Representative's Site supervision staff in clarification of queries resulting from the design; to review and incorporate Contractor prepared "As-Built" drawings.
- Task 2.2.18 Getting all statutory approvals from local bodies shall be the responsibility of the DDC LMRC. LMRC DDC will provide assistance if required. Nothing extra payable on this account.

3 SERVICES TO BE PERFORMED BY THE DDC PRIOR TO THE AWARD OF CONSTRUCTION CONTRACTS

3.1 Available Information

The DDC shall study all the available information made available to it in the Scope of Services, carry out all necessary analyses, and request any further information or data which is necessary for its design development from LMRC.

3.2 Design Alternatives

The DDC shall perform: a design alternatives of the conceptual design drawings as provided with the Contract. If needed this may include change in site layout, building sizes. Maintenance equipment and facilities, type of structure etc. the object of which should be to reduce construction cost without adversely affecting required system functions such as ease of maintenance and which shall not require any extension of design or construction time.

Design alternatives so decided shall be presented within 2 weeks of the date of acceptance of tender.

This shall be presented in sufficient detail including:

- A description of the difference between the conceptual design and the proposed design alternative and the comparative advantages and disadvantages of each. Clearly illustrated sketches, drawings, diagrams, calculations, published reports or other means that allows evaluation shall accompany the written description.
- A detailed estimate of the amount of savings in construction cost and/or time

PART-4 (Power Supply & Traction)

SCOPE OF WORK

1. INTRODUCTION

1.1 Purpose of this Document

This document describes the General Scope of Services to be provided by the Tenderer here after referred to as "Detailed Design Consultant (DDC)".

2. EXTENT OF SERVICES

The DDC shall perform the services set out in the activities for Power supply & Distribution system, 750 volts DC Traction Electrification and SCADA system in the tender with delivery/ completion schedule as detailed in the Schedules of Financial Proposal (Volume-3). This section comprises the detailed scope of work for following corridor.

Agra Metro Rail Project:-

Corridor-1:- Sikandra to Taj East Gate- 14.25 km (Under Ground = 7.681 km & Elevated = 6.569 km) + depot connection as per General Alignment Drawings (GADs), Volume-5, with 13 stations, (Elevated = 6 No's, Under Ground = 7 No's), Depot cum workshop at PAC and 02 RSS.

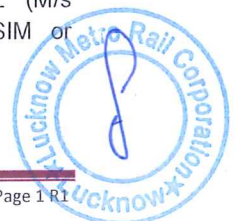
2.1 These Services generally include, but are not limited to:

Task 1:- Report on Power Supply arrangement-Load Flow and Traction Simulation Study

This would involve working out power requirement (both traction & auxiliary) for above corridor including depot. The power requirements for property development, if any, is also to be worked out based on inputs by LMRCL.

The scope of work under this task would involve.

- a) Optimization/Simulation study, which will include prescribing of the power supply arrangements for above corridors including depot, under normal & emergency conditions and voltage drop at farthest end in each case. This study will take into account emergency conditions arising due to failure of one or more power sources, transmission grid network and/or power supply equipment. The overall reliability of the power supply system, under various conditions, shall be analyzed and reliability percentage indicated in the report. The study would cover composite power supply arrangement detailing as a minimum the various power receiving point of employer, corresponding power supply points of power supply authority, method of extending supply from substation of power supply authority to Agra Metro Project's receiving substation, implementation of internal 33kV network of the Employer including location and area of ASS, TSS and RSS, sectioning arrangements, cable cross sections, other technical details.
- b) While making the power supply study, the following requirements shall be taken into account:
 - i. **Power for Traction:** This will be worked out with consideration of regenerative braking by DDC under a Traction Simulation Study using validated software's e.g. OPEN POWERNET, MARCADET (M/s RATP) SIMNET and FABEL (M/s ENOTRAC), SINANET and WEBNET(M/s ELBAS/DNV KEMA), RAILSIM or equivalent for above mentioned corridors.



CONTRACT No. AGDD-01(R1)
INSTRUCTIONS TO TENDERER (ITT)

1. INTRODUCTION

1.1. General description of work

Lucknow Metro Rail Corporation (LMRC) has been authorized to proceed with the implementation of Mass Rapid Transit System (MRTS) for Agra Metro Project for construction of Corridor-1 from Sikandra to Taj East Gate.

Present tender consists of Detailed Design Consultancy of Civil, Architectural and Traction and Power supply Works for Sikandra – Taj East Gate, Corridor-1 of Proposed Agra Metro Project, Agra, Uttar Pradesh, India; Consisting of 6.569 Km Elevated Section + depot connection as per General Alignment Drawings (GADs) - Volume-5 with 06 Elevated Stations, Ramps, 7.681 Km Underground Section with 07 Underground Stations and Car Maintenance Depot at PAC, including Service Buildings And External Development Works Like Roads, Drains, Boundary Wall etc.

1.2. Brief Scope of work

1.2.1 The Elevated portion, Underground portion & depot of Sikandra to Taj East corridor is as below:

Corridor	Elevated (km)	Underground (km)	Total Length (km)	Elevated Stations	Underground Stations	Depot
Sikandra to Taj East Gate	6.569 + depot connection as per General Alignment Drawings (GADs) - Volume-5	7.681	14.25	06 Nos.	07 Nos.	At PAC Depot

Detailed project report (DPR) of above corridor is available in the office of AGM/Consultancy, LMRC / Lucknow, which may be consulted on any working day between 9:30 hrs. to 17:30 hrs.

1.2.2 Broadly the following works as listed below but not limited to, shall be carried out by DDC. However, for detailed Scope of work, kindly refer to Volume-2 of Tender Document:-

- a. Conceptual planning and architectural works in elevated & underground stations.
- b. Detailed structural Design of viaduct including special spans and elevated stations including all related submissions, value engineering, reviews and all other items of scope of work till issue of completion certificate. Underground stations are proposed to be constructed on Design & Build basis where contractor will propose the structural design as per the scheme of construction adopted by him.
- c. Design of E&M works ventilation and air-conditioning (E&M, VAC/ECS, TVS, Fire Fighting/Fire Detection etc.).
- d. Proof checking of Detailed structural Design (civil) and construction scheme of underground stations, ventilation / service shafts / midway shaft including diaphragm walls, piling and other related permanent or temporary structures of Design & Build contracts including all related submissions, value Engineering, reviews and all other items of Scope of Work till issue of completion certificate.
- e. Proof checking of Detailed Structural Design (civil) and construction scheme of cut & cover Tunnel & Ramp.
- f. Detailed Design of BMS-SCADA (automation system) up to OCC level for all Building Services (E&M, VAC/ECS, TVF, TVS, Fire Fighting/Fire Detection etc.) at stations, including evacuation criteria & fire norms being followed in LMRC and proposed arrangement whereby more than two trains can be run between stations and clearance from U.P. Fire Services as defined in Scope of works Part-I & II for the entire tunnels.

