



LUCKNOW METRO RAIL CORPORATION LIMITED

Administrative building, Vipin Khand, Gomti Nagar, Lucknow - 226010

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LMRC/CE/CONTRACT/LKSG-02/2017-18

Date: 08/12/2017

To,
All Bidders

Subject: - Addendum-1 & Reply to Pre-bid queries for tender LKSG-02.

Ref: - Tender LKSG-02: Manufacture, Supply, Installation, Testing And Commissioning of Signage And Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station To Munshipulia + Amausi Station) and four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Project.

Dear Sir,

Please find enclosed herewith the Addendum-1 & Reply to Pre-bid queries to the tender document for tender LKSG-02 along with the summary sheet.

Further, the tender submission/Opening dates are revised as below:

Date & time of Submission of Tender	18.12.2017 up-to 15:00 Hrs
Date & time of Opening of Tender	18.12.2017 @ 15:30 Hrs

Enclosure: As Above

(Deepak Gupta)
Chief Engineer/Contract

Contract No. LKSG-02 : Reply to Pre-Bid Queries

Contract No-LKSG-02: Manufacture, Supply, Installation, Testing and Commissioning of Signage and Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station to Munshipulia + Amausi Station) and Four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Corporation.

S. NO.	Clause No./ Page No.	Existing Provision	Bidder's Query	LMRC's Reply
1	Clause: 1.1.3.2 A-1 of NIT Page-2,3, Vol.-1	"Similar Work" for this contract shall be work involving Manufacturing, Supply, installation, testing and commissioning works of signage and graphics in Metro Stations/ Airport/ Stadium/ Petroleum Sector.	As per clause 1.3.2 of Minimum eligibility criteria Part A1 of Work experience, it is mentioned that "Similar work" for this contract shall be work involving manufacturing, supply, installation, testing and commissioning works of signages and graphics in Petroleum Section as well. Since the petroleum Sector is very wide area which also includes the similar signage execution work done for the products like oil, petroleum, Petrochemicals, Lubricant etc. for public limited company like Castrol India Ltd., which is owned by British Petroleum-50.90%. Please Confirm.	Work involving manufacture, supply, installation, testing & commissioning of signages & graphics for public limited company like Castrol India Ltd., which is owned by British Petroleum can be considered for similar work. However, works of Manufacture / installation of advertisement boards / hoardings etc. for use of revenue generation shall not qualify for "Similar Work".
2	Clause 11.2.1 of GCC Page. - 51 & of SCC Page- 16, Vol.-2	<u>SCC Volume-2</u> 11.2.1 Mobilisation advance Deleted	Will the contractor get the advance payment of 10% of the contract value, which shall be paid interest free against acceptable Advance Bank Guarantee (ABG) by the employer from a schedule commercial bank in India.	Please refer S. No. 28 Clause 11.2.1 of SCC. (No mobilisation advance is payable)
3	Clause: 1.1.3.2 A-1 of NIT Page-2,3 & Vol.-1	"Similar Work" for this contract shall be work involving Manufacturing, Supply, installation, testing and commissioning works of signage and graphics in Metro Stations/ Airport/Stadium/Petroleum Sector.	whether Manufacturing, Installation of High mast Signage in Petroleum Sector and Road Signage (RR Sheet) is Acceptable	Manufacture, Installation of High mast signage in Petroleum Sector shall qualify as "Similar Work". Road Signage (RR Sheet) shall not qualify as "Similar Work".
4	Clause: 1.1.3.2 A-2 of NIT Page-2,3 and Annex. 3 & Annex. 5 of ITT Vol.-1	Tenderer has to deploy minimum staff as per Annex. 3 of ITT. Tenderer should have in house availability of minimum plants & machinery mentioned in Annex-5 of ITT.	Whether Vendors/ Associates machine and Equipment are acceptable	Referred clause is self explanatory.
5	Clause: 1.1.3.2 A-1 of NIT Page-2,3, Vol.-1		Signage work of LMRC involves manufacturing of various different state of art signage's, please clarify whether parties who have not carried out any signage work but have provided only High mast Signages at Retail Outlets are also considered eligible to participate.	As per Tender Conditions.
6			The signage's required as per your tender can be manufactured with only high quality machinery & tools as it requires development and manufacture of signage's of international standard but manufacturing of advertisement boards is neither a sophisticated work nor it involves use of high quality machinery in such scenario does experience of providing advertisement Signage's such as hoardings etc. are also considered eligible. Kindly clarify..	Works of Manufacture / installation of advertisement boards / hoardings etc. for use of revenue generation shall not qualify for "Similar Work".
7			There are various materials/techniques of manufacturing of signage's which has great impact on cost analysis of material. The cost of manufacturing same board may vary about 30 to 40% by using sub standard material & machinery hence we request that sample of few signage's and materials may also be made mandatory to be submitted along with the tender so as to have justified competition. Kindly consider & ask all parties to provide sample for Signage decided by you for onwards evaluation by LMRC before opening of price bid.	As per Tender Conditions. Specification & BOQ has been provided as part of the tender document. Materials/ work shall be provided/ executed as per specifications and approved drawings.



S. NO.	Clause No./ Page No.	Existing Provision	Bidder's Query	LMRC's Reply
8	-	-	Third party inspection is proposed for plants & machinery before grant of approval vide Annex.-5(as per clause C 13)/(Resources proposed for the project-plant & equipments).	As per Tender Conditions. Contractor have to submit Annexure-5 signed by the Authorized signatory.
9	Annexure-5 of ITT Page-31, Vol.-1	-	Some Plants and machinery has been mentioned in the Bid Document which should be possessed by the bidder. In this connection, we would like to know the following:-	
			(a) What documentary evidence is required to be submitted along with the bid documents for ownership of the factory and plant & machinery? Either factory license, electricity bill & purchase of machinery is sufficient.	As per Tender Conditions.
			(b) Whether factory visit will be conducted by LMRC Officials or any third party to ensure the factory premises, the facility and the plant & machinery and if so.	As per Tender Conditions.
			(c) At what point of time such inspection is proposed to be carried out by the LMRC/3rd Party whether before opening of the tender who have purchased the tender or after opening of the tender i.e. technical bid.	As per Tender Conditions.
10	Clause: 1.1.3.2 A-1 of NIT Page-2,3, Vol.-1	-	The Bid is invited for providing the signages. Whether Media boards i.e. advertising, hoardings will also be considered eligible for qualification.	Works of Manufacture / installation of advertisement boards / hoardings etc. for use of revenue generation shall not qualify for "Similar Work".
11	-	-	Kindly confirm finish product/sample inspection and approval at what stage before award of work will be done by LMRC or TPI.	Kindly refer Appendix-1 (Contract Key dates & completion Dates) of Employer's Requirement (Volume-3) wherein KD-1 is for Signage Presentation, KD-2 for Pre-final Design Submission, KD-3 for final Shop drawing submission, KD-5 for Product inspection at factory, which have to be carried out & adhered to.
12	Clause: 1.1.3.3 Page-4-5, Vol.-1	-	Bid Capacity: While calculating bid capacity, whether entire commitments have to be considered or only commitments which are related to our factory production will be considered for example we have some trading business as well, the commitment of such trading can be accrued or not.	As per Tender Conditions.
13	-	-	Whether unsuccessful bidders on technical parameters will be informed about the grounds of their disqualification on technical parameters.	Kindly refer Clause E2.1 of ITT
14	Clause: 1.1.3.2 A-1 of NIT Page-2,3, Vol.-1	-	Under qualification criteria, clause 1.1.3.2, minimum eligibility criteria A-1 Similar work is as "similar work for this contract shall be work involving Manufacture, supply, in Metro Station/ Airport/ Stadium/ Petroleum Sector. In our assessment, similar work should include any kind of signage experienced and should not be restricted.	As per Tender Conditions.
15	Clause: 1.1.3.2 A-1 & B (iv) of NIT, Page-2,3 & 4 Vol.-1	-	Qualification Criteria, Clause 1.1.3.2 A-1 for work experience and clause -4 under Financial standing, are contrary to each other. Whereas the former clause defines certain values of signage work to have been performed by a bidder in last 7 years in 01/02/03 contracts, the latter clause requires experience of having executed a certain amount of sigange work on an average in last 5 years. Any one of the above two clauses should be specified in tender as they run contrary to each other.	Referred clause is self explanatory.



S. NO.	Clause No./ Page No.	Existing Provision	Bidder's Query	LMRC's Reply
16	Clause: 1.1.3.3 of NIT Page-4,5 , Vol.-1	-	Bid capacity Criteria clause 1.1.3.3 takes into consideration only vlaue of signages works in last 5 years. In our assesment, bid capacity should consider all civil engineering works/ works contract that a bidder may have performed in last 5 years. It should not be restricted to only signage works.	As per Tender Conditions.
17	Clause: 1.1.3.2 B (i) of NIT Page-3,4 Vol.-1	-	Under financial standing, clause B for liquidity, you have referred to both Net current asset and/ or banking reference, to demonstrate that a bidder has access to cash flow of Rs. 2.48 Crores. We understand a bidder can either have net current assets of more than required value or have a banking reference also to meet/add up to the required value. Please confirm if our above understanding is correct.	Yes your understanding is correct.
18	Clause: 1.1.3.2 A-1 of NIT Page-2,3 , Vol.-1	"Similar Work" for this contract shall be work involving Manufacturing, Supply, installation, testing and commissioning works of signage and graphics in Metro Stations/ Airport/ Stadium/ Petroleum Sector.	Similar work for this contract shall be work involving Manufacturing, Supply, Installation, testing and commissioning works of signages and graphics in Metro station/ Airport/ Stadium/ Petroleum/ Any Govt. Sector.	As per Tender Conditions.
19	Clause: 1.1.3.2 A-1 of NIT Page-2,3 and 2nd Bullet under Notes of Clause 1.1.3.2 A Vol.-1	-	<p>The para given for similar work has emphasized on experience of working for Govt organizations that too only for four such sectors which requires similar interface of public as required for LMRC in such case the subsequent note discussed above is violation of the basic essence of qualification criteria, tenderer having worked for private parties should not be considered eligible to participate specially for signages use for revenue generation either at Airport Hoardings OR for signages at distributorship for selling the products viz Castrol signages which are the product of the petroleum companies for revenue generation to retain customers. As per our understanding, the private parties means the private parties engaged in the Oil companies such as ESSAR Oil, Reliance Petrol Pumps, IGL(Inderprastha Gas Limited), GGL (Green Gas Limited) which are ventures of the oil companies. Whereas Castrol is a product of oil companies which is sold through their distributors for revenue generation while retail marketing.</p> <p>As far as we could understand from first para is that LMRC is basically interested to work with such parties who are well experienced in providing signages for high volume traffic areas involving movement of thousands of commuters/ passenger if that is true then qualification of parties not having such experience should not be allowed to participate.</p> <p>However if private client experience is to be allowed that should be allowed only for those parties who have worked as sub contractors/petty contractor of main contractor working for the organizations allowed in first para that is contractors working in Metro stations/Airports/Stadiums/Petroleum Sector.</p>	Please refer Annexure-7 of Addendum-1.



Summary Sheet of ADDENDUM No.-1: Contract LKSG-02

Contract No-LKSG-02: Manufacture, Supply, Installation, Testing and Commissioning of Signage and Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station to Munshipulia + Amausi Station) and Four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Corporation.

S. NO.	Existing Clause / Pg. No.	Clause in Existing Tender Document	Revised Clause	Revised Clause placed as Annexure/ Pg. No.
1	Part-A Signage Specific Technical Specifications, Pg. 1 to 6, Volume 4A	Part-A (Pages 1 to 6)	Revised Part-A (Pages 1 R1 to 6 R1)	Annexure-1, Pg 1 R1 to 6 R1
2	Clause 1.19.1 Part-B General Technical Specifications, Pg. 12, Volume 4A	1.19.1 Self Adhesive Vinyl should be of cast translucent type. Vinyl should be of approved from only 3M, LG or Equivalent.	1.19.1 Self Adhesive Vinyl should be of cast translucent type. Vinyl should be of approved from only 3M, LG or Equivalent 3M/ Avery. Anywhere else in the tender document vinyl make mentioned other than this such as "3M" only or "3M equivalent" shall be read as "3M / Avery" make.	Annexure-2, Pg 12 R1
3	Clause 2.4 Part-B General Technical Specifications, Pg. 13, Volume 4A	2.4 LED specifications State of art, branded GE / OSRAM /Philips make LEDs as per relevant standards.	2.4 LED specifications State of art, branded GE / OSRAM /Philips / Havells/ Syska make LEDs as per relevant standards.	Annexure-3, Pg 13 R1
4	Item No. 11 of BOQ, Pg. 10, Volume -6	11 CHANNEL LETTER SIGNS Providing and fixing SS sheet channel letter signs for station name with logo, backlit with LEDs	11 CHANNEL LETTER SIGNS Providing and fixing SS Aluminium sheet channel letter signs for station name with logo, backlit with LEDs	Annexure-4, Pg 10 R1
5	Item No. 12.12 of BOQ, Pg. 12, Volume -6	12.12 900 mm diameter lolipop type	12.12 900 mm diameter lolipop type with SS Frame & Support Structure complete as per drawings attached as Annexure-6 of Addendum-1.	Annexure-5, Pg 12 R1
6	Tender Drawings, Volume-5		<i>Lollipop type signage drawing added.</i>	Annexure-6
7	2nd Bullet under Notes of Clause 1.1.3.2 A of NIT, Volume-1The 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.The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client related with above sectors , 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.	Annexure-7, Pg 3 R1



S. NO.	Existing Clause / Pg. No.	Clause in Existing Tender Document	Revised Clause	Revised Clause placed as Annexure/ Pg. No.
8	Annexure-3 of ITT, Pg. 27 - 28, Volume - 1	Annexure-3 : RESOURCES PROPOSED FOR THE PROJECT – PERSONNEL	"Notes" under the table of Project Personnel has been revised.	Annexure-8, Pg 27 R1 to 28 R1
9	Clause 1.1.2 of NIT, Pg. 1, Volume - 1	<p>Key Detail:- Last date of issue of Addendum : 30.11.2017 Date & Time of Submission of : 11.12.2017 up-to 15:00 Hrs. Tender Date & Time of Opening of : 11.12.2017 @ 15:30 Hrs. Tender</p>	<p>Key Detail:- Last date of issue of Addendum : 08.12.2017 Date & Time of Submission of : 18.12.2017 up-to 15:00 Hrs. Tender Date & Time of Opening of : 18.12.2017 @ 15:30 Hrs. Tender</p>	Annexure-9, Pg 1 R1



PART A-SIGNAGE SPECIFIC TECHNICAL SPECIFICATIONS

(Indicative signage images are shown for reference purposes. Signage design, colours, graphical content may change during detailed design stage on basis of selected prototypes)

General:

Signage enclosures should be made out of special Aluminium profiles of alloy 6063 – T5 with inbuilt hinges and wiring raceways. The profiles should be structurally robust to withstand outdoor wind loads verified by "finite element stress analysis". Powder coating to minimum 80 microns with 10 year warranty. The structure should be provided with concealed hinges and a stainless steel stay to facilitate electrical maintenance. The structure shall be consisting of tamper proof positive lock system for signage door closure at all times. The structure shall be provided with EPDM gasket to seal the door shutter and prevent dust ingress, rain ingress and insects i.e. IP 54 / IP 65 compatible.

The box shall be lit with LEDs of Phillips / GE- / Osram / Havells/ Syska make and shall be fitted with mains terminal block having a fuse and earthing point with a separate rocker switch to cut off supply during maintenance. LEDs should be guaranteed for 5 years and all wires to be of FRLS grade.

Artwork graphical messages for signage shall be CNC cut cast vinyl of 3M / Avery equivalent make pasted on 4mm thick PMMA sheet which should be further attached to main frame / shutter frame using UV stabilised adhesives of 3M / Avery equivalent after allowing for thermal expansion.

Robust corrosion protected MS suspenders should be designed to sustain outdoor wind loads. The suspenders should also be equipped with levelling mechanism for easy and effective installation at site.

LMRC has desired that the signage contractor's design of the signage box shall be of sleek look and size not more than 55mm thick, uniformly lit with no hot spots or light leakages. Artwork and colour for the signage shall impart a unique identity for Lucknow metro and functionally conveying the correct message with eye catching aesthetical appeal.

1. BACKLIT STATION NAME CHANNEL LETTERS SIGNAGE



Sizes:

As per detailed design. Letters in Hindi and English with logo included. Letter heights from 500 to 600mm to Logo height 1000 to 1300mm. Sign length upto 11500mm.

Construction of sign:

Made out of 3mm thick aluminium sheet, duly powder coated for exterior grade finish, face covered with diffuser polycarbonate pasted with 3M / **Avery** vinyl as per graphic colour selection. Channels letters to be profiled and to have aluminium PVC profile all around the edges.

Illumination of Sign:

Lit with high performance branded LED (Phillips / GE/ Osram / **Havells/ Syska**) modules with concealed driver unit to attain a minimum lux level of 45 candelas. Wiring arrangement to be concealed type.

Fixing of sign:

Fixing arrangement will include Hilti / Fischer / Canon anchor fasteners and grouting chemicals suitable for holding substrate behind the sign.

Applicability – station name identification sign.

2. DOUBLE & SINGLE SIDED BACKLIT SIGNAGE (ILLUMINATED)



Sizes:

Various as per detailed design. Signage height 300mm and signage lengths ranging from 300mm to 2100mm

Construction of sign:

Made out of aluminium anodized extruded slim line profiles duly powder coated for exterior grade finish. Box size thickness to be maximum 55mm. Signage substrate shall be made up of spectrum 'PET-G' of 3mm thick **acrylic sheet** pasted with 3M / **Avery** Black Out film with coloured graphics as per design with illuminated side sheet will be pasted with 3M/ **Avery** VHB 25 mm and 2.3mm thick tape. Non illuminated side of the single sided lit signage shall be covered with aluminium composite panel sheet of minimum 3mm thickness.

Illumination of Sign:

Lit with high performance branded LED (Phillips / GE/ Osram / **Havells/ Syska**) modules with concealed driver unit to attain a minimum lux level of 45 candelas. The internal lighting system shall be easily accessible for maintenance purposes. Wiring arrangement to be of concealed type i.e. suitable routed through the fixing members with appropriately sized holes.

Fixing of sign:

4 types of fixing arrangements as per detailed design i.e. suspended, projected, face mounted or post mounted. Fixing hardware and accessories will include corrosion protected / powder coated / SS (as per detailed design) heavy duty, rigid, vibration free suspenders, projection supports or posts complete with base plates, concealed joints and bridging sub structures where needed. For post

mounted systems the structure shall be strong to take crush load typical of public area.

Fixing arrangement will include Hilti / Fischer / Canon anchor fasteners with matching colour head caps and grouting chemicals suitable for holding substrate behind the signs.

Applicability – Way finding and egress directional signs.

3. DOUBLE & SINGLE SIDED SIGNAGE (NON ILLUMINATED)



Sizes:

Various as per detailed design. Signage height 300mm to 900mm and signage width ranging from 450mm to 1500mm

Construction of sign:

Aluminium Box type signage - Made out of aluminium anodized extruded slim line profiles duly powder coated for exterior grade finish. Box size thickness to be maximum 55mm. Signage substrate shall be made up of powder coated aluminium panel with 3M / **Avery** vinyl cut graphics / screen printed graphics as per design.

Aluminium panel type signage – Made out of flush fitted powder coated aluminium panel with 3M / **Avery** vinyl cut graphics / screen printed graphics as per design

Illumination of Sign:

Non illuminated type

Fixing of sign:

Post mounted. Fixing hardware and accessories will include corrosion protected / powder coated / SS (as per detailed design) heavy duty, rigid, vibration free posts complete with base plates, concealed joints. For post mounted systems the structure shall be strong to take crush load typical of public area.

Fixing arrangement will include Hilti / Fischer / Canon anchor fasteners with matching colour head caps and grouting chemicals suitable for holding substrate and providing concrete foundation where needed.

Applicability – Directional way finding and information signs.

4. VINYL SIGNS



Sizes:

Various as per detailed design. Signage height 150mm to 500mm and signage width ranging from

300mm to 3300mm

Construction of sign:

Sticker type self adhesive signage made out of 3M/ **Avery** cut vinyl profiled graphics as per design.

Illumination of Sign:

Non illuminated type

Fixing of sign:

Face mounted, pasted with self adhesive high strength glued vinyl graphics sticker.

Applicability – Information signs

5. FACE PLATE SIGNS



Sizes:

Various as per detailed design. Signage height 150mm to 1200mm and signage width ranging from 150mm to 1200mm

Construction of sign:

Made out of SS 304 grade sheet minimum 2mm thick, etched to designed graphics and screen printed with colours as per design.

Illumination of Sign:

Non illuminated type

Fixing of sign:

Face mounted. Fixed with SS screws / anchor fasteners with SS head caps and pasted with high strength double sided **3M/ Avery** adhesive tapes backing.

Applicability – Facility Information signs, room name signs, statutory warning signs and prohibitory signs.

6. TRAFFIC SIGNS.



Sizes:

Various as per detailed design. Signage height minimum 2100mm

Construction of sign:

Facility Signs boards made up of 4mm ACM with built-in MS Powder coated back support frame (50x50x3.6mm). Board will be clad with all round edges aluminum 2mm thick Trim. Both side of ACM face will be pasted with Type XI retro reflective 3M / **Avery** sheeting and will be revettless. Matter will be screen/digital printed as per drawing. **Maximum** Size of the board will be 600mm to 750mm dia **750 x 750 mm or 750 dia.**

Illumination of Sign:

Non illuminated type – reflective type

Fixing of sign:

Post mounted. The board will be fixed on 80NB MS medium PU powder coated single post as per drawing. The fixing M-20 concrete foundation in pit size will be 600x600x750mm.

Applicability – roadside traffic signs.



7. STATION TOTEM / PYLON SIGNAGE.



900-1200mm wide and 5000mm tall as per detailed design

Construction of sign:

made out internal frame of minimum SHS 91x91x72x72mm MS Steel with base plate 600x300mm x 20mm thick 2 nos. as per drawing & PU powder coated and clad with 4mm ACM on aluminium angle 38x38x3mm through out length. Top sign portion will be with back lit LMRC logo through cut letters fitted with LED inside. Through-cut ACM fitted with 20mm thick acrylic letters as per LMRC diagram to be mounted with VHB tape from inside of signages. Top circular logo will have one station name board 1150mm in dia with a total depth of 200mm and is made out of 3mm PET-G acrylic sheet pasted with 3M / Avery vinyl and signage matter will be made out of 3M / Avery Translucent vinyl.

Illumination of Sign:

Lit with high performance branded LED (Phillips / GE/ Osram / Havells/ Syska) modules with concealed driver unit to attain a minimum lux level of 45 candelas. Wiring arrangement to be concealed type.

Fixing of sign:

Post mounted. The totem to be installed on 3.5 cubic mtr. as per drawing. RCC foundation using Hilty Fischer nut bolts and chemical fasteners etc.

Applicability – Station Name Totem – Identification sign

8. FLOOR GRAPHICS

The floor graphics made out of 3M Envision 480CV3 as base cast Vinyl Sheet duly printed on Gold standard (Ultra Chrome GS3) ink for out door application printed inks should maintain overall graphics and it should be certified by OEM printing machine and further one layer fully covered with 3M luster transparent over-laminate 3645 as a protector liner and all edges of the graphics shall be sealed by using a 3M edge sealer and plaster on platform.

shall be admissible on this account.

1.15.2 Nothing extra whatsoever shall be admissible for any variations of the required erection arrangements from sites to site of work.

1.16 Variations in erection arrangements of Post Mounted Signages

1.16.1 The quoted rates of contractor for the Post Mounted signages shall be for erection of the post mounted signs on base/floor of any medium, RCC or CC floor etc. with or without floor finishes of any type. Nothing extra whatsoever shall be admissible on this account

1.16.2 Nothing extra whatsoever shall be admissible for any variations of the required erection arrangements from site to site of work.

1.17 Variations in fixing arrangements of Face fixed Signages

1.17.1 The quoted rates of contractor for the Face fixed. signages shall be for face mounting the signs at all heights and to any medium, RCC Beams/ Slabs or Brick Wall etc. with or without cladding. Nothing extra whatsoever shall be admissible on this account.

1.17.2 Nothing extra whatsoever shall be admissible for any variations of the required face fixing arrangements from site to site of work.

1.18 CRCA mild M.S. Sheets

1.18.1 The CRCA mild M.S sheets to be used in the work shall conform to IS 513- normal D-grade type mild steel.

1.19 Plotter cut self Adhesive Vinyl sheet graphics/text

1.19.1 Self Adhesive Vinyl should be of cast translucent type. Vinyl should be of approved from only 3M, LG or Equivalent **3M/ Avery. Anywhere else in the tender document vinyl make mentioned other than this such as "3M" only or "3M equivalent" shall be read as "3M / Avery" make.**

1.19.2 The Plotter cut Self Adhesive Vinyl sheet graphics/text work shall be got executed from specialized agency.

1.19.3 The graphics for the Self Adhesive Vinyl sheet should be plotted in accordance with specified artwork accurately on a computerized plotter cutter. The edges of the plotter cut vinyl sheet should be clean and smooth. Vinyl sheet should be plotted in a dust free environment.

1.19.4 The final applied graphics shall be free from any kinds of wrinkles, air bubbles and placement/orientation problems.

2. SPECIFICATIONS FOR ELECTRICAL WORKS

2.1 Wiring for Indoor Signs

2.1.1 All lights mounted in an individual internally lit sign shall be switched ON & OFF in group, through a switch and controlled through a M.C.B. (The switches controlling circuits and M.C.Bs. are not in the scope of this tender.) The contractor shall provide a Bakelite connector on each sign for connection to



feeding wire outside, which shall be extendable in flexible conduit upto a distance of 2.0 M. from the sign. This extendable wiring shall either be laid within the provision made in the supporting structure or in flexible conduit.

- 2.1.2 The contractor shall also ensure that all the connections inside the sign are made through Bakelite connectors and thimbles & screws are used for end terminations of wires. Thimbles wherever installed shall be properly covered with insulated sleeves and no temporary taping is done at any point.
- 2.1.3 The interconnecting wiring between light fixtures within the sign shall not be less than 2.5 Sq.mm and shall be LSZH, PVC insulated 1.1 KV grade, with multi-stranded copper conductor.
- 2.1.4 An earth terminal shall be provided on each of the lit sign, which shall be connected with the earthing conductor laid along with incoming circuit wiring.
- 2.1.5 All wiring within the sign enclosure shall be covered with flexible conduit, which shall be properly fixed with clamps, saddles etc. in such a way that no shadow is cast on the illuminated surfaces. In no case any loose wiring shall be left inside the sign enclosure.

2.2 Wiring for Outdoor Signs

- 2.2.1 The pole box proposed within the pillar of TOTEM shall have provision of one SPN M.C.B. of 6A (10 KA breaking capacity) for control/ Isolation of incoming and outgoing cable/ wires. The wiring within the sign from pole box shall be provided by the contractor, which shall be of 2.5 sq.mm. LSZH, PVC insulated 1.1 KV grade, with multi-stranded copper conductor for phase and neutral and 1.5 sq.mm. with solid copper conductor wire for earth. The incoming cable upto pole box shall not be in the scope of this tender, but its terminations shall be the responsibility of the contractor. An earth terminal for connecting the earth wire shall be provided in the pole box.

2.3 Index of Protection

Since most of the lights/ luminaries are to be installed within the signs the following Index of Protection are proposed for different locations to ward off ingress of dust, vermins and moisture:

- | | | | |
|-------|---------------|---|-----------|
| (i) | Indoor signs | - | I.P. – 52 |
| (ii) | Outdoor signs | - | I.P. – 65 |
| (iii) | Pole Box | - | I.P. – 65 |

2.4 LED specifications

State of art, branded GE / OSRAM /Philips /Havells/ Syska make LEDs as per relevant standards.

3. CONCRETE WORKS

3.1 General



LKSG-02: Manufacture, Supply, Installation, Testing and Commissioning of Signage and Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station to Munshipulia + Amausi Station) and Four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Project.

Annexure-4

Item	Description	Sign Code	Unit	Qty.	Rate	Amount
10	VINYL SIGN					
	Providing and Fixing Vinyl Signage,as per specifications & grafix.All shop drawings and coordination with other services is in scope.					
10.1	300 mm X 300 mm	NIL-FAC-V1	Nos	52	₹ 3,980	₹ 206,960
10.2	1000 mm X 150 mm	NIL-FAC-V2	Nos	52	₹ 4,975	₹ 258,700
10.3	1500 mm X 300 mm	NIL-FAC-V3	Nos	26	₹ 9,950	₹ 258,700
10.4	2100 mm X 300 mm	NIL-FAC-V4	Nos	13	₹ 12,935	₹ 168,155
10.5	600 mm X 450 mm	NIL-FAC-V5	Nos	78	₹ 5,544	₹ 432,432
11	CHANNEL LETTER SIGNS					
	Providing and fixing SS Aluminium sheet channel letter signs for station name with logo, backlit with LEDs and face of the signs treated with colour acrylic / epoxy resin faced as per design complete with fixing in place with heavy duty anchor system. Supply of illuminated channel letters. The sign shall comprises of 3D Built up LMRC logo of appropriate size (height nearly 1200mm) and channel letters in required fonts of Hindi and English in 500 mm Font Height depicting the station name fixed on either side of the logo supported on a rigid supporting system in steel/Wall Fixing. The Sign and the logo shall have hallow lit effect by LED's					

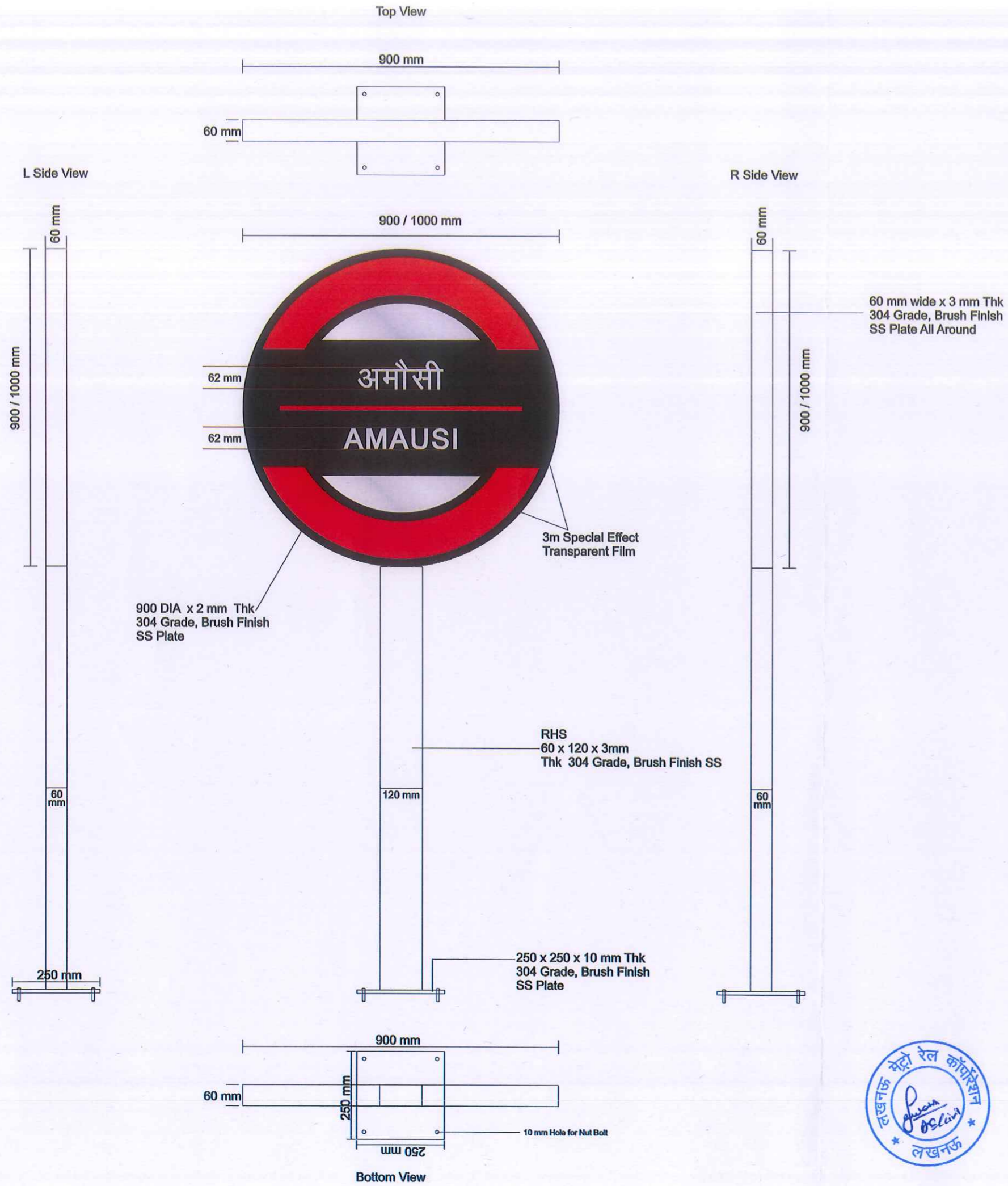


LKSG-02: Manufacture, Supply, Installation, Testing and Commissioning of Signage and Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station to Munshipulia + Amausi Station) and Four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Project.

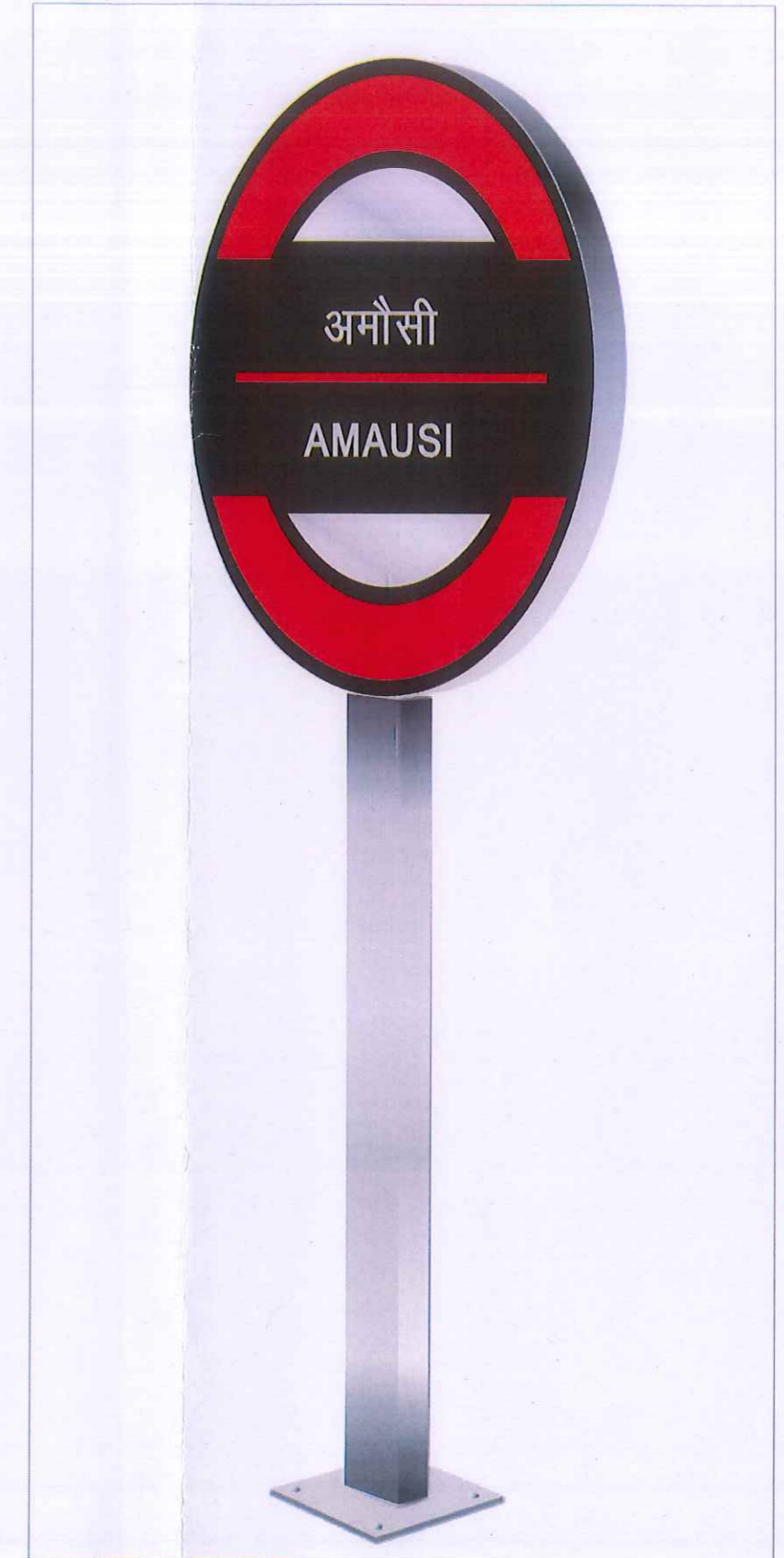
Annexure- 5

Item	Description	Sign Code	Unit	Qty.	Rate	Amount
12.3	400 mm X 150 mm	NIL-FAC-FP4	Nos	390	₹ 4,162	₹ 1,623,180
12.4	300 mm X 300 mm	NIL-FAC-FP5	Nos	390	₹ 5,821	₹ 2,270,190
12.5	600 mm X 900 mm	NIL-FAC-FP6	Nos	195	₹ 31,840	₹ 6,208,800
12.6	900 mm X 300 mm	NIL-FAC-FP7	Nos	65	₹ 16,915	₹ 1,099,475
12.7	900 mm X 600 mm	NIL-FAC-FP8	Nos	13	₹ 31,840	₹ 413,920
12.8	1200 mm X 300 mm	NIL-FAC-FP9	Nos	13	₹ 21,890	₹ 284,570
12.9	1200 mm X 1200 mm	NIL-FAC-FP10	Nos	156	₹ 81,590	₹ 12,728,040
12.10	450 mm X 600 mm	NIL-FAC-FP11	Nos	13	₹ 16,915	₹ 219,895
12.11	1200 mm X 1800 mm	NIL-FAC-FP12	Nos	13	₹ 121,390	₹ 1,578,070
12.12	900 mm diameter lollipop type <u>with SS Frame & Support structure complete as per drawing attached as Annexure-6 of Addendum-1.</u>	NIL-FAC-FP13	Nos	104	₹ 106,804	₹ 11,107,616
12.13	Any size (other than item nos 12.1 to 12.12)	NIL-FAC-FP14	Sqm	13	₹ 56,660	₹ 736,580
13	PHOTOLUMINESCENT SIGNS					
	Providing and Fixing face mounted face plate type of photoluminescent type of signs, self glowing type screen printed graphics on aluminium plates 1.5mm thick.					





3D View



(ii) At least two "similar work"*** each of value of **Rs. 6.50 crores** or more.

OR

(iii) At least three "similar work"*** each of value of **Rs. 5.20 crores** or more.

**** "Similar work" for this contract shall be work involving Manufacturing, supply, installation, testing and commissioning works of signages and graphics in Metro Stations/Airport/Stadium/ Petroleum Sector.**

A-2 The tenderer has to deploy minimum staff as per Annexure-3 of ITT. Tenderer should have in house availability of minimum plants & machinery mentioned in Annexure- 5 of ITT.

NOTE:-

- The tenderer shall submit details of work executed by them in the Performa of Appendices-17 of F.O.T. for the works to be considered for qualification of works experience criteria.
- For the above, documentary proof such as completion certificates from client clearly indicating the nature/scope of work, actual completion cost and actual 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 **related with above sectors**, 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.
- Value of successfully completed portion of any ongoing work up to **31.10.2017** will also be considered for qualification of work experience criteria.
- For completed works, value of work done shall be updated to **31.10.2017** price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year. **Selling rate of exchange at the close of business of the State Bank of India on the day twenty eight days before the latest date of Tender Submittal shall be considered for calculating equivalent value in INR.**
- Criteria for work experience for "manufacture, supply, installation, testing and commissioning works of signage and graphics" shall be satisfied by a single entity.

B. Financial Standing: The tenderers will be qualified only if they have minimum financial capabilities as below:

- (i) **T1 – Liquidity:** It is necessary that the firm can withstand cash flow that the contract will require until payments received from the Employer. Liquidity therefore becomes an important consideration.



CONSTRUCT CONTRACT: LKSG-02

Instructions to Tenderers

Annexure-3 [As per clause C12.1]

RESOURCES PROPOSED FOR THE PROJECT – PERSONNEL

The figures indicated below are the minimum number of Project-Personnel required which are to be deployed as per the minimum level of supervision and qualification/experience of site-staff is given under Annexure-4.

S. No.	Designation of Project Personnel	Minimum no. of Project Personnel required
A. Signage Design Team		
1	*Expatriate Consultant	1
2	Architect	1
3	Graphic Designer	2
4	Production Designer	1
5	Structural Consultant	1
6	Electrical Engineer	1
B. Signage Production Team		
7	Chief Production Manager	1
8	Production Engineer	2
C. Signage Installation Team		
9	Project Manager/ Site Installation Incharge	1
10	Site Engineers	2
11	Site Coordinating Architect	1
12	Station Signage Supervisor	1 for 2 stations each
13	Quality control and Quality Assurance Engineer	1
14	SHE Manager	1

NOTES:

- i) The contractor shall deploy resources as per the above-mentioned minimum requirement and also confirm to deploy manpower over and above the minimum numbers indicated above, if the work requires so.
- ii) *** The Expatriate consultant at S.No.1 shall be deployed for minimum period of 2 Months or till the finalization of designs.**



- iii) The performance of project personnel deployed will be evaluated periodically by Employer during the contract period. In case the performance of any of the project personnel is not satisfactory, the Contractor shall replace them with good personnel immediately as per directions of the Engineer.

UNDERTAKING:

- i) We confirm to deploy project-personnel required to achieve progress of work as per approved work program.
- ii) We confirm to deploy manpower requirement of SHE Organization as required under Conditions of Contract on Safety, Health & Environment (SHE) version 1.2, and also confirm to deploy manpower over and above the minimum numbers, if the work requires so.

SIGNATURE OF AUTHORIZED SIGNATORY
ON BEHALF OF TENDERER



NOTICE INVITING TENDER (NIT)

1.1 GENERAL

1.1.1 Name of Work:

Lucknow Metro Rail Corporation (LMRC) Ltd. invites Open Tenders from eligible applicants, who fulfil qualification criteria as stipulated in Clause 1.1.3 of NIT, for the work, " **LKSG-02: Manufacture, Supply, Installation, Testing And Commissioning of Signage And Graphics for Nine Elevated Stations (from K.D. Singh Babu Stadium Station To Munshipulia + Amausi Station) and four Underground Stations (Hussainganj, Sachivalaya, Hazratganj and CCS Airport Station) on N-S Corridor of Lucknow Metro Rail Project**".

The brief scope of the work and site information is provided in ITT clause A1 (Volume-1) & Employer Requirements (Volume-3).

1.1.2 Key details :

Approximate cost of work	INR 13 Crores
Tender Security amount	INR 13 Lakhs
Completion period of the Work	09 Months
Tender documents on sale	From 03.11.2017 to 17.11.2017 (between 09:30 Hrs. to 17:30 Hrs.) on working days
Cost of Tender documents	23600/- (inclusive of 18% GST) (Demand Draft on a Scheduled Commercial bank based in India in favour of "Lucknow Metro Rail Corporation Ltd." payable at Lucknow.)
Last date of Seeking Clarification	21.11.2017
Pre-bid Meeting	24.11.2017 @ 11:00 Hrs.
Last date of issuing addendum	30.11.2017 08.12.2017
Date & time of Submission of Tender	11.12.2017 18.12.2017 up-to 15:00 Hrs.
Date & time of opening of Tender	11.12.2017 18.12.2017 @ 15:30 Hrs.
Authority and place for purchase of tender documents, seeking clarifications and submission of completed tender documents	Chief Engineer / Contract, Lucknow Metro Rail Corporation, Administrative Building, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal, Vipin Khand, Gomti Nagar, Lucknow-226010 (Email: cecontractlmrc@gmail.com)

