



उत्तर प्रदेश मेट्रो रेल कॉर्पोरेशन लि०

UTTAR PRADESH METRO RAIL CORPORATION LTD.

(Formerly Known as Lucknow Metro Rail Corporation Ltd.)
(भारत सरकार एवं उत्तर प्रदेश सरकार का एक संयुक्त उपक्रम)
(A JOINT VENTURE OF GOVT. OF INDIA & GOVT. OF U.P.)

UPMRC/CE-CONTRACT/KNPAGT-3/2020-21

Date: 03.12.2020

To,

All Bidders

Subject: - Reply to Pre-bid queries and Addendum-01 for tender KNPAGT-3.

Ref: - Tender KNPAGT-3: Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 corridors in elevated as well as underground section of Kanpur & Agra Metro Rail Project along with supply of Fastening systems and associated Ballasted/ Ballastless Track in 4 Depots.

Dear Sir,

Please find enclosed herewith the reply to pre-bid queries and Addendum-01 to the tender KNPAGT-3. Further, the submission and opening dates are revised as follows:

- Date & Time of submission of tender : **18.12.2020 upto 12:00 Hrs**
- Date & Time of opening of tender : **18.12.2020@ 12:05 Hrs**

(Deepak Gupta)
CE/Contract

(AN ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Company)

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Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|--|
| 1 | 2 | 3 | 4 | 5 |
| 1 | <p>Point no. (i) of Clause no. 6.4.4 (page no 49) of Chapter 6, Volume 3: Particular Specification</p> | <p>6.4.4 Design of Track Slab with MSS</p> <p>i. Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc. ii. The static and dynamic stiffness of the elastic pad must be</p> | <p>The Clause 6.4.8, points (1, 2 and 3) specify the functional requirement of MSS i.e. natural frequency less than 20Hz and insertion loss minimum 20Vdb at relevant frequency. Further, the clause no. 6.4.8, point (6) also mentions testing of MSS based on this functional requirement. As UP metro has already defined the functional requirement of MSS, we understand that the primary objective of the vibration study is to identify the locations where vibrations need to be mitigated which amounts to "Basic vibration study".</p> <p>A part of clause 6.4.4, point (i) reads "The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer". This scope amounts to detailed NV study and will have significant impact on the cost and scope of vibration study, cost of MSS (depending upon the thickness of the material according to the mitigation requirement), and the cost and scope of validation testing.</p> <p>On this background, we request you to delete following portion from the clause 6.4.4 – point (i) Location of MSS.</p> <p>"The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer".</p> | <p>The Employer has already identified tentative locations for provision of MSS in Kanpur and Agra both. The primary objective of the basic vibration study through Expert is to assess the requirement of vibration mitigation in the proposed areas identified by Employer and accordingly design the track structure with MSS to fulfill the requirement of the Tender and to achieve the vibration within the permissible limit.</p> |
| 2 | <p>Point no. 6 of Clause no. 6.4.8 (page no 51) of Chapter 6, Volume 3: Particular Specification</p> | <p>Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost.</p> | <p>This clause refers the validation of SN 1 to 4 (i.e. natural frequency, rail deflection and insertion loss) mentioned in the same section by site testing. However, as per the common practice followed world over, "insertion loss" value is the only measurement that is carried out to validate the effectiveness of installed MSS. The measurement of natural frequency and rail deflection is not carried out separately as insertion loss takes into account both these parameters.</p> <p>Compliance of rail deflection and natural frequency criteria specified in the tender can anyway be verified from the technical calculations of MSS. Hence, we suggest only a single parameter "insertion loss" to be measured by way of comparing vibration measurements at the tunnel walls of MSS and Non MSS section to validate the performance of MSS.</p> <p>Kindly confirm the acceptance of the same.</p> | <p>Please refer Annexure 20 of Addendum 1</p> |



Alias
 (STIEKc / Trade)

Reply to Pre-Bid Queries - KNPAGT-03

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| 3 | Point no. 6 of Clause no. 6.4.8 (page no 51) of Chapter 6, Volume 3: Particular Specification | Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost. | As UP metro has envisaged the use of MSS at three different section i.e. circular tunnel, box tunnel and viaduct station, one measurement at each of these location for both Kanpur and Agra metro (i.e. in all 6 measurements locations for track with MSS) will be done. Kindly confirm. | Please refer Annexure 20 of Addendum 1 |
| 4 | Point no. (f) of Clause no. 6.4.5 (page no 50) of Chapter 6, Volume 3: Particular Specification | Design of the transition zone to avoid the sudden change in stiffness of the track and smoothen out the rail deflection. Two transition zones are to be adopted at entry and exit of each section of MSS. The transition zones should consist of suitable number of sections of each 15 metres. | The quantity of MSS material for transition zone depends on the number of MSS track stretches, number of sections in transition zone and length of each transition zone. The track length of required transition zones is not mentioned separately in BOQ. Kindly provide the same to estimate the quantity of MSS material for the transition zones. | Please refer Annexure 28 of Addendum 1 |
| 5 | Point no. (i) of clause no 6.4.4 Chapter 6, Volume 3 of Particular Specifications, Page no 49 | Point no. (i) of clause no 6.4.4. mentions the requirement of basic vibration study. | Bidders have to carryout this vibration study in addition to the provision of MSS. The vibration study is generally carried out well before the design and supply of MSS material. Hence, the charges incurred on the vibration study ideally paid by the Employer on completion of such study. It is requested to either delete this clause or provide separate BOQ item | The cost of basic vibration study is deemed to be included in the item no 3 of bill no. BLT-1 of BOQ. As such no extra payment Shall be made for the same. |
| 6 | FORM OF TENDER - APPENDIX-1, Vol-1, P-136 | Amount of Professional Indemnity Insurance (PII). AOA (any one accident) limit equal to 6% of the contract value against Bill No. SPM1 & BLT1 of BOQ in respect of 'design and construct' with AOY (any one year) limit of 2 incidents in a year. In the Professional Indemnity Insurance Policy, the deductible amount shall not be more than 5% of | Please provide the amount for Professional Indemnity Insurance (PII), since the value of Bill No. SPM1 & BLT1 is not defined in Tender estimated value/BOQ | As per Tender Condition. Please refer Annexure 9 of Addendum 1. |
| 7 | Item no 9, 10, & 11 of Bill no BT-1 of BOQ Part II of Volume 5 | Item No. 9. Laying Plinth and installation of Track work for Plain Track on Washable Apron etc. 10. Installation of Track work on Steel Column in Workshop 11. Installation of Embedded Rail Type Ballastless Track in workshop | Item description is for laying of tracks only. Please clarify that under which BOQ item, quantities of Concrete, reinforcement steel and Structural steel etc will be paid OR these are inclusive in respective items. | As per Tender Conditions. Please refer Explanatory Notes of BOQ for these items |
| 8 | Vol-4, Tender drawings at SL. NO 16, 17, 18 | Drawings of Embedded track, Washable Apron and track on steel columns | Details / dimensions are insufficient for Depot Embedded track drg. to access the volume of concrete and other quantities. Please issue revise drawings. | Maximum Slab Height for Embedded Track and Track on Washable Apron shall be 250mm. Beyond this slab height, payment shall be made as per BLT Item No. 9 of BOQ for extra RCC. |
| 9 | General | Levelled surface for track laying in depots | Please confirm that Contractors will get levelled, well compacted and profiled surface for laying of track in depot areas. | As per Tender Conditions. Please refer clause 3.1.2 of PS volume 3. |


 Date: _____
 (S.T/E/G-C/Track)
 JGM/TM/2023

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| 10 | General | Inspection charges of materials | Please confirm the Material Inspection agencies and who will bear the Inspection cost for the same. | As per Tender Conditions. Please refer Chapter 9 of PS and other relevant clauses of Tender Document. |
| 11 | General | Employer's free issue material | Please provide the Depot location (At Kanpur & Agra) / Lead from site from where Employer's free issue will be provided to Bidders. Please clarify. | As per Tender Condition. Please refer clause 4.2.4 of PS. |
| 12 | General | Drainage System | We understand that provision of drainage on Viaduct and U/G sections is under scope of Civil (Viaduct) Contractor. Please clarify. | As per Tender Condition. Please refer Explanatory Notes to BOQ for related items. |
| 13 | General | Provision of Jumper (copper) cables | We understand that provision of 70sqmm copper cables from one plinth slab to adjacent plinth slab will be under scope of Traction contractor. Please clarify | As per Tender Condition. Please refer Explanatory Notes to BOQ of BLT-1 and clause 6.8 of PS |
| 14 | General | Provision of HDPE pipes for cable crossings | Please clarify the scope of provision of HDPE pipes for cable crossings. | As per Tender Conditions. Please refer chapter 3 of PS. |
| 15 | General | Provision of Stray bars for current mitigation in track slabs | Please clarify the scope of provision of Stray bars for current mitigation in track slabs. Drawings may please be provided accordingly. | The structural rebars shall be used for stray current mitigation purpose. Connection of all longitudinal rebars through last structural ring by welding at both ends of plinth / slab are to be done and further its connection to the plinth / slab jumper using MS GI plates, shall be required. |
| 16 | Clause 2 SCOPE point no (7), Page - 8, of PS Vol-3 | One 4-wheeler vehicle for Kanpur and Agra project shall be provided for Site Engineer and Employer. by the contractor to facilitate inspection and execution of track work during entire contractual period free of cost. One Night vehicle during installation of ballastless track shall be provided each for Kanpur and Agra free of cost. | Please clarify that (i) Separate vehicle will be require for Site Engineer (ii) separate vehicle for Employer (iii) Separate Night vehicle for Site Engineer (iv) Separate Night vehicle for Employer. Please clarify, how many vehicles in total will be require for Kanpur & Agra | 1. One Vehicle during entire Contractual Period excluding DLP. 2. One Vehicle in Kanpur during installation of ballastless track in the night. 3. One Vehicle in Agra during installation of ballastless track in the night. |

Amiz
(SITE/GC/Track)



Reply to Pre-Bid Queries - KNPA GT-03

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| 17 | Clause 6.4.1, Page 47, Vol-3 | <p>6.4.1 Objective: MSS is to be strip bearing type with adjoining filler material of same quality and specification having less stiffness.</p> | <p>a) As per RDSO Guidelines CT 38-2015, Clause 7.3.4 Page 80, the first resilient elements recommended for Floating Slab is Discrete Supports (Steel Springs or Elastomer Pads). As it is mentioned in RDSO CT38, Clause 7.3.4 Page 79, 2nd Para, it is recommended that after impact assessment, it is possible to know the required frequency range and attenuation level needed to comply with limiting vibration level as recommended in RDSO CT 38 Table 3.9 & Table 3.10, Page 40.</p> <p>b) As per RDSO CT 38, Table 7.2 Page 81, Floating Slab with Continuous and Full Support system has achievable frequency range of 15-22 Hz. Strip Type MSS as specified in RDSO CT 38 Table 7.2, is without any filler material and this is only for range 12-18 Hz. Therefore, if higher attenuation level and lower frequency range is required based on impact assessment, Contractor should have option to select suitable MSS type for lower frequency range (Discrete Pad or Discrete Steel spring system for less than 12 Hz) in accordance with RDSO CT 38 Table 7.2.</p> <p>c) Full surface (strip + filler) is non replaceable type MSS. If test measurement indicates non-compliance of RDSO Table 3.9 & Table 3.10, there will be no recourse for contractor to comply specified values in Table 3.9 and Table 3.10.</p> | Please refer Annexure 20 of Addendum 1 |
| 18 | Clause 6.4.4, Page 49, Vol-3 | <p>Cl. 6.4.4 Design of Track Slab with MSS</p> <p>i) Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc.</p> | <p>a) As per RDSO CT 38, Table 7.2 Page 81, Strip Type MSS as specified in RDSO CT 38 Table 7.2, is without any filler material. Strip Type MSS recommended by RDSO is essentially providing a line bearing support to the floating slab and not full surface support. Floating Slab with Continuous and Full Support system is different than strip support as recommended by RDSO.</p> <p>b) Full surface support type MSS has achievable frequency range of 15-22 Hz and only Strip type MSS has achievable frequency range of 12-18 Hz as specified in RDSO CT 38 Table 7.2. Attenuation level and lower frequency range is required based on impact assessment, Contractor should have option to select suitable MSS type for lower frequency range (Discrete Pad or Discrete Steel spring system for less than 12 Hz) in accordance with RDSO CT 38 Table 7.2.</p> <p>c) Specifying full surface MSS (like Strip+Filler) with a limited attenuation capability compared to discrete PUR pads & Steel Spring elements will impose significant technical constraints to Contractor to ensure MSS performance & attenuation in accordance with RDSO recommendation.</p> | Please refer Annexure 20 of Addendum 1 |
| 19 | Clause 6.4.8, Page 51, Vol-3 | <p>Cl. 6.4.8 Acceptance Criteria of Track Slab with MSS 4) Reduction in vibrations (Measured in Vdb) in comparison with the similar section where MSS has not been provided, should be minimum 20 Vdb.</p> | <p>Pls clarify what measure shall be taken if more than 20 VdB mitigation is required to comply with RDSO CT38 specified limits in Table 3.0 and Table 3.10.</p> | Track Contractor has to comply, achieve and fulfill the requirements given in the Tender Documents. Please refer Annexure 20 of Addendum 1. |


 (S/TE/GC/Track)



D. Singh
Lucknow

Reply to Pre-Bid Queries - KNPA GT-03

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|---------|--|--|---|--|
| 20 | Clause 6.4.8, Page 51, Vol-3 | <p>Cl. 6.4.8 Acceptance Criteria of Track Slab with MSS 6) Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost.</p> | <p>Full surface (strip + filler) is non replaceable type MSS. If test measurement indicates non-compliance of RDSO Table 3.9 & Table 3.10, there will be no recourse for contractor to comply specified values in Table 3.9 and Table 3.10.</p> | <p>Track Contractor has to comply, achieve and fulfill the requirements given in the Tender Documents. Please refer point no 5 of clause 6.4.8 of PS, Annexure 20 of Addendum 1.</p> |
| 21 | <p>Volume-1: Instruction to Tenderers C6.6 Regarding Fastening System for Ballastless Track C6.6.1.(i) Page No. 33</p> | <p>For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) and under observation & approval of RDSO/MOR or installed & commissioned in any MRTS project in India as per clause 1.2 of Annexure-C2 of criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract.</p> <p>The proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab.</p> | <p>Stray current is dependent on overall system design of the traction power supply and track structure as per clause 5.1 of EN 50122-2 standard. The requirement of EN 50122-2 is applicable to entire track structure. Therefore, we kindly request UPMRC to rephrase the clause as below:</p> <p>For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The track structure with the proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab</p> | <p>Please refer Annexure 4, 7 of Addendum 1</p> |



A/12
 (S T I / G C / T r a c k)

Reply to Pre-Bid Queries - KNPAAGT-03

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|---------|---|---|--|---|
| 22 | <p>Volume 3, Particular Specification (Including Appendices) 3. Interface 3.1.1.1 Page No. 14</p> | <p>3.1.1. Additional requirement of 750V DC Power Supply and Traction System (PST) of Kanpur and Agra Metro Rail Project</p> <p>Track Insulation: The rails forming the return current path shall be nominally insulated from earth in order to discourage stray earth currents. The insulation level between the structure earth and the rails shall be no less than 10 ohm/km of single track under normal operating conditions. The insulation level of each section shall be tested, on completion of the track works for the section, and the results recorded.</p> <p>The commissioning acceptance value shall be 100 ohm/km. Values less than this, but of the same order may be accepted by the Employer under exceptional conditions. The above track insulation level shall be maintained through points and crossing</p> <p>work. All the work related to track insulation shall be within scope of track work contractor.</p> <p>The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following:</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles | <p>The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Further, the requirement of "20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable.</p> <p>The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2.</p> <p>Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 Kohminstead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current.</p> | <p>Please refer Annexure 15 of Addendum 1</p> |





D Com/Track

Reply to Pre-Bid Queries - KNPA GT-03

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|---------|--|--|--|---|
| 23 | Volume 3 Particular Specification (Including Appendices) 3. Interface 3.1.1.3. (2) Page No. 15 | (2) The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following: - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles Necessary test certificates in this regard shall be shared with the Contractor. The Employer / Engineer may also like to witness the tests in the factory / laboratory. | The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles Further, the requirement of "20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable. The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2. Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 Kohm instead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current. | Please refer Annexure 16 of Addendum 1 |
| 24 | Volume-1: Instruction to Tenderers C6.6 Regarding Fastening System for Ballastless Track C6.6.1 (vii) Page No. 34 | MoU with Supplier: Submit copy of the MoU entered into between the Tenderer and the Supplier for supply of complete ballastless track fastening system as per tender specification. Single Point Warrantee for the complete ballastless track fastening system and its individual components supplied by Supplier shall be with Tenderer for the defect liability period. | The intended MOU with all the proposed EPC contractors is not feasible as it may breach the competition law. Same MOU with all proposed EPC contractors will not be, thus, appropriate. We, therefore, request UPMRC to allow the bidders to provide 'Manufacturer's Authorization Letter' as per standard practice followed in other tenders. | Please refer Annexure 8 of Addendum 1. |
| 25 | Volume-1: Instruction to Tenderers C6.7 Regarding Type of Plinth/Slab Track for Main Lines including Entry/Exit Lines to Depot C6.7.1. Page No. 34 | Tenderer can choose cast-in-situ plinth/slab type track structure or pre-cast type plinth/slab track structure for main line on elevated and in underground section without MSS. In case of MSS, track structure will be slab type only. Ballastless track structure in main line for turnout and scissor shall be cast-in-situ Slab type. | The drawings given in the tender document are of typical plinth Cast-in-situ type. Generally, for a Slab Structure with Pre-Cast Rail Seat the self-weight of the track structure is heavier than the typical plinth type track structure. We request UPMRC to kindly provide the Maximum Design Self Weight considered for the Civil Structure. | Maximum design dead weight for track structure (slab/plinth, fittings and rails) is 1.85 T/Track-m for viaduct. Maximum design dead weight in underground section can be permitted more depending upon design proposed by contractor duly complying clearances in underground section as per SOD. Contractor has to propose track structure accordingly. |

Anus - (STI/CC/Track)





APR
(STIE/GG/Tab)

| Reply to Pre-Bid Queries - KNPA GT-03 | | | | |
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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
| 26 | Clause 4.3, SCHEDULE OF KEY DATES FOR KNPA GT-3, Vol-3, Page 30, | Agriculture University to Barra 8 Package -2 (Double Pulia to Barra 8) i. Min 2 Km for any two stations - Mar 2023 ii. Min 2 Km for any two stations - Sep 2023 iii. For balance full stretch in viaduct - Feb 2023 | Kindly review the key dates for (iii) For balance full stretch in viaduct. It may be Feb 2024 instead of Feb 2023. | Please refer Annexure 19 of Addendum 1. |
| 27 | General Clause no 1.1.2 of NIT volume 1, page no 5 | Extension of time for Bid submission | In Consideration to (i) COVID 19 Impact on travelling restrictions & prestriction in office functioning's & (ii) Festivals during the month of Nov. 2020, we request Authority to provide some more time to submit complete and competitive bids. Hence, we request to consider to extend the bid submission date by 3 weeks i.e upto 15th Dec. 2020. | Please refer Annexure 1 of Addendum 1. |
| 28 | Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 Minimum eligibility criteria: A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: A1. Work Experience: i. At least one "Similar Work" of value of Rs. 212 Crores or more. or ii. Two "Similar Works" each of value Rs.132.50 Crores or more. or iii. Three "Similar Works" each of value Rs.106 Crores or more. "Similar Work" for this contract shall be work of: i. Construction of Ballastless Track with or without Supply of Fastening System for Ballastless Track. or ii. Supply of Precast concrete component of ballastless / Ballasted track such as precast plinth, slab, sleeper etc. with or without Supply of Fastening System for Ballastless / Ballasted Track. As per the clause A2 of minimum eligibility criteria, Construction of ballastless track has been considered while for annual turnover eligibility criteria as per clause B. T4 construction of Ballastless / ballasted track and supply of ballastless / ballasted track components / fastening system has been considered. Therefore, since ballasted track has already been considered in the turnover criteria please consider our request as said above and extend the condition for clause A2 also and amend the same so that more number of parties can participate in the tender. | Tender document Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 Minimum eligibility criteria: A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: A1. Work Experience: i. At least one "Similar Work" of value of Rs. 212 Crores or more. or ii. Two "Similar Works" each of value Rs.132.50 Crores or more. or iii. Three "Similar Works" each of value Rs.106 Crores or more. "Similar Work" for this contract shall be work of: i. Construction of Ballastless Track with or without Supply of Fastening System for Ballastless Track. or ii. Supply of Precast concrete component of ballastless / Ballasted track such as precast plinth, slab, sleeper etc. with or without Supply of Fastening System for Ballastless / Ballasted Track. As per the clause A2 of minimum eligibility criteria, Construction of ballastless track has been considered while for annual turnover eligibility criteria as per clause B. T4 construction of Ballastless / ballasted track and supply of ballastless / ballasted track components / fastening system has been considered. Therefore, since ballasted track has already been considered in the turnover criteria please consider our request as said above and extend the condition for clause A2 also and amend the same so that more number of parties can participate in the tender. | Please refer Annexure 2 of Addendum 1. | |

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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 29 | Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 (A) & (A2) Minimum Eligibility Criteria page no 6 | Tender document Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 Minimum eligibility criteria: A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: Clause A2. The Tenderer should have a past experience in construction of ballastless track for a track length of at least 80 kms (in case of double/multiple line, each line will be counted separately) either on MRTS or Railway System. Clause A2: All member of JV/Consortium shall have experience of value at least 10% of NIT Value from construction of ballastless/ballasted track with or without supply of track components OR supply of precast concrete components of ballastless track such as precast plinth, slab, sleepers etc. with or without supply of track components. Total value of work/works should be equal or more than 53 Crores in last 7 years ending 30.09.2020. Annexure-1 of NIT shall be used for submission of details under this para duly certified by Chartered Accountant and with documentary proof from the Clients. | The total length of ballastless track to be constructed in this project for which tender has been published is approximately 131.39 KM. Therefore, we request you to please amend the clause A2 of minimum eligibility criteria as follows: A2. The Tenderer should have a past experience in construction of ballastless track for a track length of at least 75 kms (in case of double/multiple line, each line will be counted separately) either on MRTS or Railway System. | As per Tender Conditions. |
| 30 | Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 (A2) notes (ii) Minimum Eligibility Criteria page no 6 | Tender document Volume 1: NIT Clause 1.1.4 Qualification Criteria and its sub clause 1.1.4.2 (A2) notes (ii) Minimum eligibility criteria: A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: Clause A2. The Tenderer should have a past experience in construction of ballastless track for a track length of at least 80 kms (in case of double/multiple line, each line will be counted separately) either on MRTS or Railway System. Clause A2: All member of JV/Consortium shall have experience of value at least 10% of NIT Value from construction of ballastless/ballasted track with or without supply of track components OR supply of precast concrete components of ballastless track such as precast plinth, slab, sleepers etc. with or without supply of track components. Total value of work/works should be equal or more than 53 Crores in last 7 years ending 30.09.2020. Annexure-1 of NIT shall be used for submission of details under this para duly certified by Chartered Accountant and with documentary proof from the Clients. | We request you to please amended this clause as follows : All member of JV/Consortium shall have experience of value at least 10% of NIT Value from construction of ballastless/ballasted track with or without supply of track components OR supply of precast concrete components of ballastless / ballasted track such as precast plinth, slab, sleepers etc. with or without supply of track components. Total value of work/works should be equal or more than 53 Crores in last 7 years ending 30.09.2020. Annexure-1 of NIT shall be used for submission of details under this para duly certified by Chartered Accountant and with documentary proof from the Clients. | As per Tender Conditions. |


 (STIEKc (Trade))



Reply to Pre-Bid Queries - KNPAAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|--|
| 31 | <p>Clause C 6.6 of ITT Regarding fastening system for Ballastless Track.</p> <p>Sub Clause 6.6.1 .i For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOJ-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab. and sub clause C6.6.3: For ballastless track fastening system whose transfer of forces to plinth/slab are other than through Anchor Bolts, in that case use of 2-hole fastening system shall be allowed for equal or less than 1000m radius of curve also. However, contractor has to submit detailed design calculation for fitness of the same for scrutiny and approval of Engineer.</p> | <p>Clause C 6.6 Regarding fastening system for Ballastless Track.</p> <p>Sub Clause 6.6.1 .i For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOJ-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab. and sub clause C6.6.3: For ballastless track fastening system whose transfer of forces to plinth/slab are other than through Anchor Bolts, in that case use of 2-hole fastening system shall be allowed for equal or less than 1000m radius of curve also. However, contractor has to submit detailed design calculation for fitness of the same for scrutiny and approval of Engineer.</p> | <p>MOR has approved a fastening system whose transfer of forces to plinth/slab are other than through anchor bolts and this system will satisfy all the compliance as prescribed in the Annexure C2 of RDSO. Even though this system does not have two layer insulations it satisfies the insulation requirement, for which we shall submit the detailed design calculation for scrutiny and approval of engineer.</p> <p>Since single layer insulated fastening systems have been successfully installed and are under operations in metros with 750 V DC traction like Bangalore & Gurgaon, which have similar insulation requirements, this approved system also can be used for the present projects without any technical complications.</p> | <p>A ballastless track fastening system whose transfer of forces to plinth / slab are other than through anchor bolts in precast track slab & precast track plinth system and duly complying Annexure C2 of RDSO (Performance criteria of fastening system for ballastless track, attached as Annexure 11 of ITT), can be considered if with the insulation provided for the proposed fastening system, the tenderer is able to justify through appropriate engineering analysis and demonstrate (through client certificates specifically mentioning insulation performance backed by technical data/reports) the achievement of the requirement of insulation as per EN 50122-2 and Tender Specifications for Stray Current Mitigation/Insulation with 3rd Rail 750 V DC Traction.</p> <p>In case, bidder is not able to successfully demonstrate the same, UPMRCL reserves the right to reject the bidder's offer. UPMRCL's decision in this regard shall be final and binding on the contractor.</p> |
| 32 | <p>BOQ: SPM2</p> | <p>In BOQ: SPM2: Supply of fastening system for ballastless track (Contract KNPAAGT – 3): provision</p> | <p>For providing the rate for only 2-holed system for complete project irrespective of radius of curve, no provision is made in the BOQ. We request you to please clarify as to how we should quote for an approved fastening system which has only two holed requirement for straight line as well as for sharp curves.</p> <p>We also request you to please explain how evaluation shall be carried out between 2&4 holed anchor bolt system against the only 2 holed version of fastenings without anchor bolts.</p> | <p>Bidders whose proposed ballastless track fastening system does not transfer track forces to plinth / slab through Anchor Bolts, can quote their rate of item no 1.1 of bill no SPM2 (2-hole fastening system) to the item 1.2 of bill no SPM2 (4-hole fastening system) also in the BOQ with a remark.</p> <p>That means rate of item no 1.1 and 1.2 of bill no SPM2 will be same for proposed 2 hole fastening system transferring forces to plinth / slab other than through anchor bolts.</p> |


 (ST/ETC/Track)

 DCM/Track

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|--|
| 33 | Volume 5 page no 35 | has been given for 2 Hole and 4 hole fastening system, | In case even if Contractor proposes to use fastening system other than that with anchor bolts for the project, anchor bolt fastening however becomes mandatory for turnout slabs, in MSS portions which is cast in-situ and also on column lines in depots. Hence it is requested that the BOQ may please be framed to accommodate both the types of fastening systems along with respective quantities. | Track Contractor is not required to supply ballastless track fastening system for ballastless turnout/scissor in mainline and column lines in Depot. Same will be provided by Employer free of cost. Please further refer Explanatory Notes of BOQ for Column Line. Ballastless Track fastening system for MSS portion is already covered under Bill no. SPM2 of BOQ, Vol 5. |
| 34 | | | Please clarify if Track contractor will be provided with any space in the depot or outside for manufacture of Pre cast elements for ballastless track. If so please suggest as to how much area can be made available in Kanpur and in Agra by UPMRCL. | Please refer Appendix 8 of GS |
| 35 | Clause 2.3 Volume 5 Bill No. BLT-1 Page no 36 & Explanatory notes Clause 2.3 of BLT-1, Item 1, Page no 12 | Volume 5 clause 2.3 Bill No. BLT-1: Installation of Ballastless Track Item 1: Laying plinth/slab as designed by contractor and installation of track work for plain track with UIC 60/60E1 head hardened rail with all fittings and fastenings etc. complete in all respect in underground i.e. box/NATM/circular tunnel. In the BOQ description it is mentioned as follows: Laying slab with derailment guard & installation of track work for plain track with UIC 60/60E1 head hardened rails with all fittings and fastenings etc. complete in underground bored tunnel and cut & cover section with necessary dowels for fixing of 3rd Rail. | The description as per Volume 5 clause 2.3 Bill No. BLT-1: Installation of Ballastless Track says laying plinth/slab.....however in the BOQ the description says slab.. for underground tunnels. Please clarify whether laying plinth will be permitted in the underground tunnels. | Please refer Annexure 25 of Addendum 1. |
| 36 | Clause no 1.1.2 of NIT volume 1, page no 5" | As per NIT date & time of submission of tender is 24.11.2020 @ 15:00 Hrs | We request you to please extend the due date of tender submission till 24.12.2020 @ 15:00 Hrs | Please refer Annexure 1 of Addendum 1. |

Amit
(STI/AC/Track)



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|---|---|
| 37 | Volume-1: Instruction to Tenderers C6.6 Regarding Fastening System for Ballastless Track C6.6.1.(i) Page No. 33 | For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening & track plinth/slab. | <p>Stray current is dependent on overall system design of the traction power supply and track structure as per clause 5.1 of EN 50122-2 standard.</p> <p>The requirement of EN 50122-2 is applicable to entire track structure.</p> <p>Therefore, we kindly request UPMRC to rephrase the clause as below:</p> <p>For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The track structure with the proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab.</p> | Please refer Annexure 4, 7 of Addendum 1. |



AMR
 STI/EG/ITM

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|---|
| 38 | <p>Volume 3 Particular Specification (Including Appendices) 3. Interface 3.1.1.1 Page No. 14</p> | <p>3.1.1. Additional requirement of 750V DC Power Supply and Traction System (PST) of Kanpur and Agra Metro Rail Project</p> <p>Track Insulation: The rails forming the return current path shall be nominally insulated from earth in order to discourage stray earth currents. The insulation level between the structure earth and the rails shall be no less than 10 ohm/km of single track under normal operating conditions. The insulation level of each section shall be tested, on completion of the track works for the section, and the results recorded. The commissioning acceptance value shall be 100 ohm/km. Values less than this, but of the same order may be accepted by the Employer under exceptional conditions. The above track insulation level shall be maintained through points and crossing work. All the work related to track insulation shall be within scope of track work contractor.</p> <p>The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following:</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles | <p>The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Further, the requirement of "20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable.</p> <p>The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2.</p> <p>Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 K-ohm instead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current.</p> | <p>Please refer Annexure 15 of Addendum 1.</p> |

Amiz.
(STI/IGC/Trak)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|---|--|
| 39 | Volume 3 Particular Specification (Including Appendices) 3. Interface 3.1.3. (2) Requirements in Fasteners Page No. 15 | <p>(2) The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following:</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Necessary test certificates in this regard shall be shared with the Contractor. The Employer / Engineer may also like to witness the tests in the factory / laboratory.</p> | <p>The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements</p> <ul style="list-style-type: none"> - 100 MΩ DC resistance in dry condition - 1 MΩ DC resistance in wet condition - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Further, the requirement of "20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable.</p> <p>The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2. Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 K-ohm instead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current.</p> | <p>Please refer Annexure 16 of Addendum 1.</p> |
| 40 | Volume-1: Instruction to Tenderers C6.6 Regarding Fastening System for Ballastless Track C6.6.1 (vii) Page No. 34 | <p>MoU with Supplier: Submit copy of the MoU entered into between the Tenderer and the Supplier for supply of complete ballastless track fastening system as per tender specification. Single Point Warranty for the complete ballastless track fastening system and its individual components supplied by Supplier shall be with Tenderer for the defect liability period.</p> | <p>The intended MOU with all the proposed EPC contractors is not feasible as it may breach the competition law. Same MOU with all proposed EPC contractors will not be, thus, appropriate. We, therefore, request UPMRC to allow the bidders to provide 'Manufacturer's Authorization Letter' as per standard practice followed in other tenders.</p> | <p>Please refer Annexure 8 of addendum 1.</p> |
| 41 | Volume-1: Instruction to Tenderers C6.7 Regarding Type of Plinth/Slab Track for Main Lines including Entry/Exit Lines to Depot C6.7.1 Page No. 34 | <p>Tenderer can choose cast-in-situ plinth/slab type track structure or pre-cast type plinth/slab track structure for main line on elevated and in underground section without MSS. In case of MSS, track structure will be slab type only. Ballastless track structure in main line for turnout and scissor shall be cast-in-situ Slab type.</p> | <p>The drawings given in the tender document are of typical plinth Cast-in-situ type. Generally, for a Slab Structure with Pre-Cast Rail Seat the self-weight of the track structure is heavier than the typical plinth type track structure.</p> <p>We request UPMRC to kindly provide the Maximum Design Self Weight considered for the Civil Structure.</p> | <p>Maximum design dead weight for track structure (slab/plinth, fittings and rails) is 1.85 T/Track-m for viaduct. Maximum design dead weight in underground section can be permitted more depending upon design proposed by contractor duly complying clearances in underground section as per SOD.</p> <p>Contractor has to propose track structure accordingly.</p> |

Apprx.
 ST/ET/GC/T/...



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|---|---------|---------|--|--|--------|-------------|------|--|--|--|--|---------|---------|---------|---------|---------|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|
| 42 | Vol 1 / NIT Cl. 1.1.4.2 Page no 6 | Notes:(ii) All member of JV/Consortium shall have experience of value atleast 10% of NIT Value from construction of ballastless/ballasted track with or without supply of track components OR supply of precast concrete components of ballastless track such as precast plinth, slab, sleepers etc. with or without supply of track components..... (iv) T4 - Annual Turnover: The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted trackcomponents/fastening system in last five financial years should be Rs.106 Crores | As the major component of the Project involves Ballastless Works and the nature of Works is very different from Ballasted Works, each member of JV/Consortium should have expertise in Ballastless Track works construction. Hence, kindly remove Ballasted as highlighted in the referred Clause as the required experience for JV/Consortium member. This shall ensure that only companies experienced in Ballastless Trackwork will qualify for the Project. | As per Tender condition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | Vol 1 / NIT Cl. 1.1.4.2 B (iv) Page no 8 | (iv) T4 - Annual Turnover: The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted trackcomponents/fastening system in last five financial years should be Rs.106 Crores | As the major component of the Project involves Ballastless Works and the nature of Works is very different from Ballasted Works, hence in the best interest of the Project, kindly remove average turnover from Ballasted Track works and consider only Ballastless Track works Turnover in the referred clause. | Please refer Annexure 3 of Addendum 1. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | Vol 1 / NIT Cl. 1.1.4.2: (A2) Page no 6 | A2. The Tenderer should have a past experience in construction of ballast less track for a track length of at least 80 kms (in case of double/multiple line, each line will be counted separately) either on MRTS or Railway System. | Since this Track package is Ballastless Track work, the experience in construction of Ballastless Track is very important to evaluate the technical capability of Bidders. The current EQC allows the referred criteria to be met by all members together in case of a JV / Consortium. This may lead to a scenario where a JV / consortium with an inexperienced lead bidder may qualify. Considering the complexity and tight timelines in the project, it is very important that the Lead member of a JV /Consortium has the necessary technical capability. In view of the above, we request you to modify the clause such as "The Sole Bidder / Lead Member of the JV/Consortium should have the minimum experience in construction of Ballastless Track for a track length of at least 80 kms". | As per Tender condition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | Vol 1 / NIT Cl. 1.1.4.3 Page no 8 & Vol 1 / Annexure 3A Page no. 17 |Available Bid Capacity = 2*A*N – B Where, A = Maximum of the value of construction works executed in any one year during the last five financial years (updated to 30.09.2020 price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year). N = No. of years prescribed for completion of the work B = Value of existing commitments (as on 30.09.2020) for on-going construction works during period of 48 months w.e.f. 01.10.2020. <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th colspan="6" style="text-align: center;">Financial Data for Last 5 Audited Financial Years (All amounts in Rupees in Crores)</th> </tr> <tr> <th rowspan="2" style="width: 5%;">S. No.</th> <th rowspan="2" style="width: 20%;">DESCRIPTION</th> <th colspan="5" style="text-align: center;">Year</th> </tr> <tr> <th style="width: 10%;">2015-16</th> <th style="width: 10%;">2016-17</th> <th style="width: 10%;">2017-18</th> <th style="width: 10%;">2018-19</th> <th style="width: 10%;">2019-20</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> </tr> <tr> <td colspan="7">Total value of construction works/contracted/awarded/signed and supply of ballastless/ballasted track components/fastening system as per audited financial statements</td> </tr> </tbody> </table> | Financial Data for Last 5 Audited Financial Years (All amounts in Rupees in Crores) | | | | | | S. No. | DESCRIPTION | Year | | | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total value of construction works/contracted/awarded/signed and supply of ballastless/ballasted track components/fastening system as per audited financial statements | | | | | | | Most of the Indian Construction companies execute multiple domain construction works and the turnover used to calculate the Bid Capacity is generally not limited to a specific activity (only Track work construction) turnover. This may not be the correct representation of a Company's Bid capacity. In Kanpur Metro Electrical Package (KNPE – 1&2), the Bid capacity calculation was done based on the Construction work turnover and not restricted to Railway/Metro Electrification work. Thus, we request the Annexure 3A to be modified as below: *Total value of construction of ballastless/ballasted track and supply of ballastless/ballasted track-component/fastening system work done as per audited financial statements. | Please refer Annexure 5 of Addendum 1. |
| Financial Data for Last 5 Audited Financial Years (All amounts in Rupees in Crores) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S. No. | DESCRIPTION | Year | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total value of construction works/contracted/awarded/signed and supply of ballastless/ballasted track components/fastening system as per audited financial statements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Avis.
(STI/EC/Track)

Reply to Pre-Bid Queries - KNPAGT-03

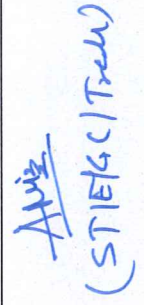
| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 46 | Vol 1 / NIT Cl. 1.1.4.2 B (iv) Page no 8 | <p>Note:- Financial data for latest last five audited financial years has to be submitted by the tenderer in Annexure-2 of NIT along with audited balance sheets. The financial data in the prescribed format shall be certified by the Independent Financial Auditor (Statutory Auditor) of the company appointed under the Company Act or by a Chartered Accountant with his stamp and signature in original. In case any discrepancy in data is found between the balance sheet and the financial information submitted, the data as available in the balance sheet will be considered.</p> | <p>Most of Indian Construction companies executes multiple domain construction works and the audited balance sheets reflect only the total Construction Turnover. The average annual turnover from construction of specific activities like ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system, may not be readily available in the audited balance sheets. Therefore, in order to substantiate the same, we request to kindly allow the bidders to submit a certificate from a Chartered Accountant/ Company Auditor.</p> | Please refer Annexure 3 of Addendum 1. |
| 47 | Vol 3 PS Cl. 4.2.4 Page no. 25 | <p>4.2.4.2 Indicative Schedule for Supply of UIC 60/60E1, 1080 grade HH Rails Rails shall be supplied in Kanpur and Agra in Contractor's Store or at site in Kanpur and Agra Progressively.....& 4.2.4.2 Indicative Schedule for Supply of UIC 60/60E1, 1080 grade HH Rails Rails shall be supplied in Kanpur and Agra in Contractor's Store or at site in Kanpur and Agra Progressively.....</p> | <p>We understand that rails shall be supplied by Employer in stacks in Contractor's Store. Kindly Confirm.</p> | Please refer clause 4.2.4 of PS |
| 48 | Vol 2 SCC Cl. 8.5 Page no. 17, 18 & Vol 3 PS Cl. 4.3 Page no. 27 to 33 | <p>e) Every section of track is subject to Key Dates and therefore the application of Liquidated Damages on delay. The total amount of Liquidated Damages payable by the Contractor in respect of the delay to the whole of the Works or for failing to achieve any Key Date, shall be limited to 10% of the Total lump sum price quoted in Schedule 'A' of BOQ. & SCHEDULE OF KEY DATES FOR KNPAGT-3</p> | <p>From the referred clause, we understand that the limit of liquidated damages on delay shall be 10%. We request the employer to indicate the rate of liquidated damages in terms of percentage of contract value for any delay per Day or per Week. Further, request the employer to confirm that any liquidated damages recovered from the contractor's bill shall be returned, provided the contractor meets the subsequent key milestones on time.</p> | Please refer Annexure 10 of Addendum 1. |
| 49 | Cl. 6.9 Page. 53 & Vol 5 BOQ Bill No. SPM 1 / Item No 6 / Page no. 35 & Vol 5 BOQ Bill No. BLT 1 / Item No 5 / Page no. 37 & | <p>..... Buffer stop for main lines. Out of 24, 18 nos. buffer stops have to be designed for 3 car train sets. Remaining 6 nos. buffer stop has to be designed in such a way..... Buffer stops for depots. Out of 78, 62 nos. buffer stops have to be designed for 3 car train sets. Remaining 16 nos. buffer stop has to be designed in such a way that initially main body of buffer should take care of all impact loads without requiring any friction shoes behind the buffer stop for 3 car train set and in future they can be made compatible with 6 car train sets</p> | <p>We request the employer to note that the total quantity of buffer stops mentioned in referred clauses are not consistent. Request the employer to modify the quantities suitably.</p> | Please refer Annexure 21 of Addendum 1 |



Ahs
 (STIEKA/IND)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|--|
| 50 | Vol 5 / BOQ Bill No. BT 1 / Item No 7 & 8 Vol 1 / NIT Cl. 1.1.4.3 Page no 8 & Annexure 3B | <p>Available Bid Capacity = 2*AN - B B = Value of existing commitments (as on 30.09.2020) for on-going construction works during period of 48 months w.e.f. 01.10.2020 & during period of 48 months w.e.f. 01.10.2020 & .</p> <p>Every section of track is subject to Key Dates and therefore the application of Liquidated Damages on delay. The total amount of Liquidated Damages payable by the Contractor in respect of the delay to the whole of the Works or for failing to achieve any Key Date, shall be limited to 10% of the Total lump sum price quoted in Schedule 'A' of BOQ.</p> <p>However, this limit of liquidated damage shall be 15% of the lump sum BOQ price after including any sums accepted by employer for payment to any designated contractor on account of default of Track work contractor.</p> | <p>We understand that the Value of existing commitments (as on 30.09.2020) for on-going construction works during period of 48 months w.e.f. 01.10.2020 would be considered for calculation of Bid Capacity. However, in Annexure 3B the format states Works in Hand As on first day of the month of tender submission. Kindly remove the ambiguity.</p> | <p>Please refer Annexure 6 of Addendum 1.</p> |
| 51 | Vol. 2 SCC Cl. 8.5 Page no. 18 | <p>Adjustment in contract price on FOREIGN PORTION of the rate of the BOQ items on account of inflation shall be applicable only for item no. 7.1 & 7.2 (Buffer Stop) of Bill No. SPM-1 &</p> | <p>The referred Schedule 'A' of BOQ is not available. Kindly Clarify.</p> | <p>Please refer Annexure 27 of Addendum 1.</p> |
| 52 | Vol 5 / BOQ / Bill No SPM 1 / Item No. 6.1 & 6.2 / Page no. 25 | <p>Adjustment in contract price on FOREIGN PORTION of the rate of the BOQ items on account of inflation shall be applicable only for item no. 7.1 & 7.2 (Buffer Stop) of Bill No. SPM-1 &</p> | <p>We understand that the Items referred would be for item no. 6.1 & 6.2 (Buffer Stop) of Bill No. SPM-1. Kindly modify accordingly.</p> | <p>Please refer Annexure 11 & 12 Addendum 1.</p> |
| 53 | General | <p>After preliminary scrutiny and certification by the Engineer, payment of 80% of the certified interim amount shall be made by the Employer within 14 days. The amount certified shall account for all deductions, including statutory deductions, recoveries for advances and any amounts due from the Contractor. The balance 20% shall be paid within 28 days, from the date of the preliminary certification of the bill by the Engineer.....</p> | <p>We understand that the Addendums and Reply to Queries shall be a part of Contract. Kindly Confirm.</p> | <p>Please refer Schedule 1 of SCC.</p> |
| 54 | Vol 2 GCC Cl/ 11.6.1 / Page no. 57 | <p>After preliminary scrutiny and certification by the Engineer, payment of 80% of the certified interim amount shall be made by the Employer within 14 days. The amount certified shall account for all deductions, including statutory deductions, recoveries for advances and any amounts due from the Contractor. The balance 20% shall be paid within 28 days, from the date of the preliminary certification of the bill by the Engineer.....</p> | <p>Kindly indicate the number of days required for preliminary scrutiny and certification from the date of submission of statement.</p> | <p>As per Tender Conditions</p> |


 (S. T. I. E. G. C. / Track)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|--|
| 55 | Vol 2 SCC Sl. No. 51 / Page no. 31 | Safe Custody Bank Guarantee for materials to be supplied by the Employer. The contractor shall submit a safe custody Bank guarantee in the format given in schedule 8 for the materials to be supplied by the Employer to the contractor at Kanpur/Agra for the work. The bank Guarantee shall be for an amount equal to Rupees 218 million (which is about 10% of the cost of the materials in terms of equivalent Indian Rupees) ... | Contract specifies the requirement of performance bank guarantee equal to Rupees 218 million which is about 10% of the cost of the materials. Indirect Stage retention by means of higher cost center weightage (~10%) for interface, Testing and commissioning works is also specified in the contract. Over and above these requirement, provision of Safe Custody Bank guarantee results in additional financial burden on the Contractors. This shall lead to increase in the project cost. Hence, we request you to kindly waive off the requirement of Safe Custody Bank Guarantee. It may kindly be replaced with an Indemnity bond as has been in practice for other metro projects. | Please refer Annexure 13, 14 of Addendum 1 |
| 56 | Vol 1 NIT Cl. 1.1.3 / Page no 5 | Source of Funds: The Kanpur and Agra Metro Projects are being funded through the through the equity participation by the Government of India and Government of Uttar Pradesh and loan from bilateral/multilateral agencies. | Request you to confirm the name and details of the bilateral/multilateral funding agencies. | As per Tender Conditions |
| 57 | Vol 1 IIT Cl. C16.1 / Page no 42 | C16 Currencies of Tender and Payment C16.1 The Tenderer may give his priced offer for BOQ in Indian Rupees, and US Dollar / Euro or any combination of these currencies. | We understand that the Prices may be Quoted in INR + 2 Foreign Currency (USD, EUR). Kindly Confirm. | As per Tender Conditions. |
| 58 | Vol. 3 PS Clause No. 4.3 / Schedule of Key Dates for KNPAGT- 3 / Page no 27-29 | Priority Section: Package -1 (IIT Kanpur to Motijheel including depot connecting lines) "Stage 1: Partial completion of track works and shared access to electrical traction contractor / signalling contractor Stage 2: Completion of track works in all respect with final finishes Stage 3: Completion of acceptance tests and taking over of the system" | We understand from the referred clause that the completion timelines of highlighted sections in the priority stretch are very stringent. We request the employer to note that certain key items like fastening systems shall be required for partial completion of trackworks (Stage 1), however, the lead time for supply of such items is generally 16 weeks after order finalization In view of the above, we request you to kindly review and modify the key dates of stage 1 and stage 2 for the Priority Section: Package -1 (IIT Kanpur to Motijheel including depot connecting lines) | Please refer Annexure 19 of addendum 1 |
| 59 | Vol-4 / Tender Drawings/ Drg. No 004 | TYPICAL CROSS SECTION OF TRACK STRUCTURE ON ELEVATED STATION (WITH MSS) | We request the employer to provide the width of MSS strip and width of filler material. These details are required for estimation purpose. | Width of MSS & Filler Material shall be designed by KNPAGT-3 contractor based on his proposal, design, tender requirements/specification and site requirements.. |
| 60 | Vol 5 BOQ Bill No BLT 1 / Item No 3 Page no37 | 2.3 BILL NO. BLT1: INSTALLATION OF BALLASTLESS TRACK (CONTRACT KNPAGT-3), ITEM NO.3 | We understand that the referred BOQ item does not include the requirement of MSS in transition zone. We request the employer to include a separate item for installation of MSS in transition zone to clear the ambiguity regarding transition zones amongst bidders. Alternatively, the total length of transition zones where MSS needs to be installed over and above the referred BOQ item may be indicated by the employer. | Please refer Annexure 28 of addendum 1 |



Ave
STI/FAC/Track

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|--|
| 61 | Vol 3 PS Cl. 3.1.1.1 Page no 14 | Cl 3.1.1.1 Additional requirement of 750V DC Power supply & traction system (PST)- Item Track Work ...CAD Welding in rails for return cable connections as well as for rail/track bonding as per the specified requirements , interface specifications and in coordination with PST Contractor.... | We understand from the referred clause that the track contractor shall be only responsible for confirmation of locations of CAD welding and the responsibility of provision of CAD welding shall lie with PST contractor. Kindly confirm. | As per Tender conditions. Please refer chapter 3 of PS. |
| 62 | General | Proof checking by Lead Design Checker | We understand that requirement of provision of design checker is not in the scope of KNPAGT-3 Contract. Kindly Confirm. | Please refer clause C7 of ITT. Track contractor's design will be proof checked by Engineer/DDC. |
| 63 | Vol 3 PS Cl. 2.3 Page no 10 | Cl 2.3, Schedule of Dimension ...The schedule of dimension shall be supplied to Contractor by the Engineer... | We request the employer to provided Schedule of Dimensions (SOD) for bidder's understanding. | Kindly refer chapter 2 of PS and Tender Drawings. SOD will be provided to successful Bidder |
| 64 | Vol-4 / Tender Drawings Drrr_no.001 | TYPICAL CROSS SECTION OF TRACK STRUCTURE ON STRAIGHT ON VIADUCT | We understand that P1 & P2 shall be measured at the end of the plinth. Kindly confirm. | Please refer Explanatory Notes to BOQ for BLT Item No. 9 of BOQ |
| 65 | Vol 3 PS Cl 6.3.6 Page no 45 | Dowels will be provided by traction contractor free of cost. | We request the employer to note that the dowels provided free of cost to track contractor should include dowel cap to avoid the risk of Dust & debris's contamination during construction. | Yes the dowels will be provided with dowel caps free of cost. |
| 66 | Vol 3 PS Cl. 3.1.1 / Sl. No. 12 Page no 13 | Cl 3.1.1 Interface specification (12) ...Shall install the stray current collection rebars in track slabs... | Kindly confirm whether Structural Rebars can be used for Stray current mitigation or extra rebars over and above structural rebars are foreseen as dedicated stray current collection rebars. | The structural rebars shall be used for stray current mitigation purpose. Connection of all longitudinal rebars through last structural ring by welding at both ends of plinth / slab are to be done and further its connection to the plinth / slab jumper using MS GI plates, shall be required. |

Atiz.
(STIEG-Trade)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 67 | Vol 3 PS Cl. 6.4.4 / Point no. 1 / Page no 49 & Vol 3 PS Cl. 6.4.8 / Point no. 1-6 / Page no 51 | 6.4.4 Design of Track Slab with MSS i. Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc..... & 6.4.8 Acceptance Criteria of Track Slab with MSS: Acceptance Criteria for Track Slab with MSS is given below: 1. Natural frequency of the whole system with MSS should be less than 20 Hz. 2. Maximum rail deflection (for slab + fastening) is to be limited to 5 mm. 3. Minimum insertion loss of 20 VdB in the relevant frequency band beyond 30Hz of the track system without MSS..... | As mentioned in the referred Cl. 6.4.8 we understand that a system with minimum insertion loss of 20 VdB is required for the Project. In case a system with higher insertion loss is required, it shall be treated as variation. Kindly Confirm. | Track Contractor has to comply, achieve and fulfill the requirements given in the Tender Documents. Please refer point no 5 of clause 6.4.8 of PS, Annexure 20 of Addendum 1. |



Apur
STIEGLITZ

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 68 | Vol 3 PS Cl. 6.4.4 / Point no. 1 / Page no 49 & Vol 3 PS Cl. 6.4.8 / Point no. 1- 6 / Page no 51 | 6.4.4 Design of Track Slab with MSS i. Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc..... & 6.4.8 Acceptance Criteria of Track Slab with MSS: Acceptance Criteria for Track Slab with MSS is given below: 1. Natural frequency of the whole system with MSS should be less than 20 Hz. 2. Maximum rail deflection (for slab + fastening) is to be limited to 5 mm. 3. Minimum insertion loss of 20 VdB in the relevant frequency band beyond 30Hz of the track system without MSS..... | We understand that the scope of Basic Vibration Study is Limited to identification of locations where vibration mitigation is required for the system with minimum insertion loss of 20 VdB as mentioned in Cl. 6.4. 8. Kindly Confirm. In case a detailed NV study is required to check the suitability of system as per provisions of Cl. 6.4.8 the same along with any change in the scope of vibration mitigation system arising out of such study shall be treated as variation. Kindly Confirm. | Please refer reply at Sl. No 5, 19 and 20 above. Track contractor has to comply and fulfill / achieve the tender requirements. |
| 69 | Vol 3 PS Cl. 6.4.8 / Point no. 6 / Page no51 | Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost. | We suggest that as per prevalent best industry practices only measurement of Insertion Loss shall be sufficient for validation of acceptance criteria. Further, there are several methods at MSS locations of demonstrating insertion loss without a need of measurements during train running conditions. This facilitates the validation of MSS before the start of train operation. Kindly confirm if it is allowed to carry out measurement for establishing the insertion loss without the train running conditions. Kindly Confirm. | Please refer Annexure 20 of Addendum 1 |

Alia
(STIE/GC/Track)



Reply to Pre-Bid Queries - KNPAGT-03

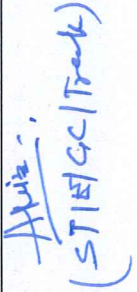
| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|---|
| 70 | Vol-1, Annexure-6 to ITT, Page No. 62 | Notwithstanding Clause | <p>As per the instruction issued by State Bank of India on 02.04.2016, "Notwithstanding Clause" needs to be added in each bank Guarantee.</p> <p>In view of above, we would request you to kindly allow the bidder to submit the Bank Guarantee with the below mentioned Notwithstanding Clause:</p> <p>Notwithstanding anything contained herein:</p> <p>(a) Our liability under this Bank Guarantee shall not exceed Rs..... (Rupee only)</p> <p>(b) This Bank Guarantee shall be valid upto..... (the Expiry Date), and</p> <p>(c) We are liable to pay up to the guaranteed amount only and only if we receive from you a written claim or demand not later than (extended claim period) all your rights as well as our liability under this bank Guarantee shall stand extinguished unless a written claim or demand is made under this Guarantee on Bank Details (Address) not later than..... (Extended Claim Period)</p> | As per Tender Condition |
| 71 | Clause F5.1: Performance Security; Volume-1: ITT Page no 49 | The Performance Security required in accordance with Clause 4.2 of the GCC shall be for 10% of the Contract Price from the Scheduled Commercial Banks (including Scheduled Commercial Foreign Banks) in India in the currency in which the Contract Price is payable. | <p>Due to the current situation arising out of COVID-19 and the recent changes in Bank's support system to infrastructure companies, there is a severe strain on their banking limits. Government of India recently has announced several measures to provide relief to infrastructure companies in terms of liquidity and cash flows.</p> <p>Organizations like Indian Railway, IRCON, Konkan Rail etc. have changed the requirement of Performance Security to 5% of the Contract Amount.</p> <p>The proposed work is to be completed in phases and by the time contractor starts working for the next phase or priority, the work in previous phase shall be commissioned or under operation. Therefore, performance security for the total work at a time may not be required.</p> <p>It is requested to kindly consider to change the amount of Performance Security to 5% in place of 10% of contract amount.</p> | Please refer Annexure 41 of Addendum 1. |
| 72 | VOL-2 SCC Clause 51: Additional Clause; Safe Custody Bank Guarantee for materials to be supplied by the Employer; Page no 31 | The contractor shall submit a safe custody Bank guarantee in the format given in schedule 8 for the materials to be supplied by the Employer to the contractor at Kanpur/Agra for the work. The bank Guarantee shall be for an amount equal to Rupees 218 million (which is about 10% of the cost of the cost of the materials in terms of equivalent Indian Rupees). | <p>The scope of supplies of small items like track fittings etc. which are more prone to pilferages/loss is with the track work contractor.</p> <p>The client is only supplying major items like Rails & Turnouts. The Rails get welded into Long Rail Panels and there is negligible chance of pilferage/loss.</p> <p>The proposed work is to be completed in phases and by the time contractor starts working for the next phase or priority, the work in previous phase shall be commissioned or under operation.</p> <p>Hence the total material shall supplied by the client shall never remain in the custody of contractor.</p> <p>It is therefore requested that the bidders shall be allowed to submit Safe Custody Bank Guarantee in parts equivalent to 5% value of the material supplied and remaining uninstalled (in the custody of the contractor).</p> | Please refer Annexure 13, 14 of Addendum 1. |



Attn: (S) EGC/Trak
 Date: 22/05/2022

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|--|
| 73 | <p>NOTICE INVITING TENDER (NIT)</p> <p>1.1 GENERAL</p> <p>1.1.1 Name of Work:</p> <p>Vol 1, Page no 5</p> <p>1.1.4</p> <p>QUALIFICATION CRITERIA:</p> <p>1.1.4.1 Eligible Applicants: Please refer Clause A3 of ITT</p> <p>1.1.4.2 Minimum Eligibility Criteria: Notes, Vol 1, Page no 6</p> | <p>1.1 GENERAL</p> <p>1.1.1 Name of Work:</p> <p>Uttar Pradesh Metro Rail Corporation (UPMRC) Ltd. invites Open Tenders on local competitive basis from eligible applicants who fulfil qualification criteria as stipulated in clause 1.1.4 of NIT, for the work, "KNPAGT-3; Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots."</p> <p>(iii) There must be an Indian partner with a minimum of 26% participation in the JV/Consortium. Any substantial partner (equal to or more than 26% participation) can act as a lead partner.</p> | <p>Request the client to please confirm whether foreign companies can bid for this tender in Joint Venture with Indian companies (min 26% share) as mentioned.</p> | <p>Foreign companies can bid for this tender in Joint Ventures with Indian Companies. However minimum share of Indian company should be 26%.</p> |
| 74 | <p>1.1.4</p> <p>QUALIFICATION CRITERIA:</p> <p>1.1.4.1 Eligible Applicants: Please refer Clause A3 of ITT</p> <p>1.1.4.2 Minimum Eligibility Criteria: Vol 1, Page no 6</p> | <p>"Similar Work" for this contract shall be work of:</p> <p>i. Construction of Ballastless Track with or without Supply of Fastening System for Ballastless Track. or</p> <p>ii. Supply of Precast concrete component of ballastless track such as precast plinth, slab, sleeper etc. with or without Supply of Fastening System for Ballastless Track.</p> | <p>Request the client to please confirm whether tramway projects including scope of work - supply of pre-fabricated slab be considered in similar work experience.</p> | <p>As per Tender Condition. Tramway work experience will not be considered against clause 1.1.4.2 A of NIT.</p> |
| 75 | <p>NOTICE INVITING TENDER (NIT)</p> <p>1.1.2 Key Details: Vol 1, Page no 5</p> | <p>Date & time of Submission of Tender - 24.11.2020 @ 15:00 Hrs.</p> | <p>Considering the ongoing festive season and holidays and challenges in travel (for site survey) due to CORONA virus pandemic, request the client to please extend the bid submission date by at least 4 weeks, i.e. from current date of 24-Nov-2020 until 22-Dec-2020.</p> | <p>Please refer Annexure 1 of Addendum 1</p> |
| 76 | <p>Vol 1 NIT</p> <p>1.1.4.2 Minimum Eligibility Criteria "Similar Work" Page no 6</p> | <p>Supply of Precast Concrete Component</p> | <p>This is an Design and Execution job, considering Supply experience as experience of "Similar Work" donot does not suite the work requirement. Similar Work should only include Construction experience.</p> | <p>As per Tender Conditions</p> |
| 77 | <p>Vol NIT</p> <p>1.1.4.3 & Notes Page no 8 Annexure-3A Page no 17</p> | <p>Bid Capacity Criteria</p> | <p>Please refer description table in Annexure 3A and definition of parameter "A" in Bid Capacity Criteria (2*A*N-B). Both should be same.</p> | <p>Please refer Annexure 5 of Addendum 1.</p> |



 (STIA/GC/Track)



DGM / 

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|--|
| 78 | Vol-1 ITT A4.1 Page no 23 | To qualify for award of Contract, the Tenderer shall submit a written power of attorney authorising the signatory (ies) of the Tender to commit the tenderer of each member of the partnership, consortium or joint venture. | No specific format for Power of Attorney is given in Vol-1. Please clarify whether PoA shall be for this specific Tender Submission or a copy of General Power of Attorney will suffice the Tender Requirement. | General Power of Attorney is to be given by all members of consortium / JV to the signatory (ies) of the Tender, authorizing / giving full power related to works of KNPAGT-3 Tender till signing of Contract Agreement (if awarded) and deployment of Project Leader as per contract. |
| 79 | Vol-1 ITT C7.2 & C7.3 Page no 35 | Consent of the proposed Designer intended to be engaged and their experience shall be submitted with the tender. The Tenderer shall submit with his Tender either the proposed terms and conditions upon which the Designer would be appointed in the event of acceptance of the Tender (excluding the financial and commercial terms thereof) or at least a statement of the heads (salient features) of such an agreement. | IRCON being PSU, has limitations to tie up with Design Firm at such an advance stage. It is requested to please allow for proposing a panel of Design Firms out of which Design Consultant shall be finalized at a later stage with set requirement meeting the tender conditions. | As per Tender Conditions. Please submit consent letter from leading Design Firm/s proposed to be engaged under this contract. |
| 80 | General | | Is it necessary to install Concrete Batching Plant at site or Procurement form and RMC source shall be suffice ? | For better quality control and reliability, contractor's own batching plant would be required. |
| 81 | Para 2 of Annexure 6 of ITT, Vol-1 (Form of Bank Guarantee) Page no 62 | WHEREAS (Name of Tenderer) (hereinafter called "the Tenderer") has submitted its tender dated _____ for (Name of the work as per clause 1.1.1 of NIT) hereinafter called the tender. | has submitted its tender dated _____ for _____ Which date is to filled in the blank space assigned for Date ? | As per Tender Conditions. Date of submission of tender to be filled in the blank space. |
| 82 | Vol-1 ITT C14.3 Page no 38 | The Tenderer shall show, in outline, his proposed site layouts for: (a) accommodation and other facilities. (b) fabrication and storage areas. (c) concrete batching plants. The Tenderer shall indicate his proposals for the provision of utility services to the Site. | Is the Proposal be rigid or can be changed depending upon actual site conditions at a later stage ? | The submitted proposal can be later modified as per site condition with approval of Engineer. |
| 83 | Vol-3 PARTICULAR SPECIFICATION 4.3 Page no 27 | Schedule Key Dates | The Access Dates for Tunnel Portion is not mentioned. | As per Tender Condition. Please refer clause 4.3 of PS |



Attn: STI/EC/PAW

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|--|
| 84 | Vol-2 GCC 11.2.5 Page no 55 | Interest in Case of Delay in Repayment of Advances. Should there be delay in the progress and completion of work, as a result of which it is not possible to recover the advance and interest thereon, before the date of completion stipulated in the Contract, then the interest to be charged from the Contractor on the remaining portion of the advance beyond the original completion date specified in the Contract, shall be the State Bank of India prime lending Rate plus 2% per annum or 10% per annum whichever is higher. | What are the consequences on charging the interest charges if the delay is attributable to the Employer or due to an interfacing Contractor? In such a case, interest shall not be levied upon the Contractor. | As per Tender Conditions |
| 85 | Vol-2 GCC 12.4 Variation Procedure Page no 63 | The Engineer shall, as soon as practicable after receipt of proposals under sub-clauses 12.2 and / or 12.3, respond with approval, rejection or comments. | Any variation shall follow which method for arriving at cost ? | As per Tender Conditions |
| 86 | Vol-1 NIT Clause 1.1.2 Page no 5 | Bid due date | The last date for issuing addendum being 17.11.2020 and the date falling amidst Festive period before and after this date, it is kindly requested to the Employer to extend the Bid Submission date for at least 30 days after 24.11.2020. This will give adequate time and enable the bidder to study and act upon the tender requirement after 17.11.2020. This request may please be considered. | Please refer Annexure 1 of Addendum 1. |
| 87 | Bill of Quantity: Volume 5, 2.2 Bill no SPM1 Page no.34 | 2.2 Bill No SPM 1: Supply of Permanent Way Material | Supply of MSS item not included in the Bill no SPM 1 | As per Tender Condition Please refer Explanatory Notes of BOQ for Item no. 3 of Bill No. BLT. |

Anir
(STIETGC1 Track)



Reply to Pre-Bid Queries - KNPAAGT-03

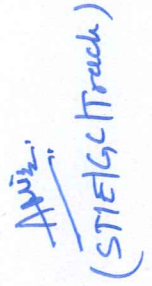
| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
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| 88 | <p>Cl. 6.4.1 Objective under</p> <p>Cl. 6.4 Mass Spring System (MSS) KNPAAGT-3/Vol-3/Employer's Requirement/Particular Specification Page no 47</p> | <p>6.4.1 Objective: MSS is to be strip bearing type with adjoining filler material of same quality and specification having less stiffness.</p> | <p>a) As per RDSO Guidelines CT 38-2015, Clause 7.3.4 Page 80, the first resilient elements recommended for Floating Slab is Discrete Supports (Steel Springs or Elastomer Pads). As it is mentioned in RDSO CT38, Clause 7.3.4 Page 79, 2nd Para, it is recommended that after impact assessment, it is possible to know the required frequency range and attenuation level needed to comply with limiting vibration level as recommended in RDSO CT 38 Table 3.9 & Table 3.10, Page 40.</p> <p>b) As per RDSO CT 38, Table 7.2 Page 81, Floating Slab with Continuous and Full Support system has achievable frequency range of 15-22 Hz. Strip Type MSS as specified in RDSO CT 38 Table 7.2, is without any filler material and this is only for range 12-18 Hz. Therefore, if higher attenuation level and lower frequency range is required based on impact assessment, Contractor should have option to select suitable MSS type for lower frequency range (Discrete Pad or Discrete Steel spring system for less than 12 Hz) in accordance with RDSO CT 38 Table 7.2.</p> <p>c) Full surface (strip + filler) is non replaceable type MSS. If test measurement indicates non-compliance of RDSO Table 3.9 & Table 3.10, there will be no recourse for contractor to comply specified values in Table 3.9 and Table 3.10.</p> | <p>Please refer Annexure 20 of Addendum 1.</p> |
| 89 | <p>Cl. 6.4.4 Design of Track Slab with MSS under</p> <p>Cl. 6.4 Mass Spring System (MSS) KNPAAGT-3/Vol-3/Employer's Requirement/Particular Specification Page no 49</p> | <p>i) Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc.</p> | <p>a) As per RDSO CT 38, Table 7.2 Page 81, Strip Type MSS as specified in RDSO CT 38 Table 7.2, is without any filler material. Strip Type MSS recommended by RDSO is essentially providing a line bearing support to the floating slab and not full surface support. Floating Slab with Continuous and Full Support system is different than strip support as recommended by RDSO.</p> <p>b) Full surface support type MSS has achievable frequency range of 15-22 Hz and only Strip type MSS has achievable frequency range of 12-18 Hz as specified in RDSO Table 7.2. Attenuation level and lower frequency range is required based on impact assessment, Contractor should have option to select suitable MSS type for lower frequency range (Discrete Pad or Discrete Steel spring system for less than 12 Hz) in accordance with RDSO CT 38 Table 7.2.</p> <p>c) Specifying full surface MSS (like Strip+Filler) with a limited attenuation capability compared to discrete PUR pads & Steel Spring elements will impose significant technical constraints to Contractor to ensure MSS performance & attenuation in accordance with RDSO recommendation.</p> | <p>Please refer Annexure 20 of Addendum 1.</p> |



Advise.
 (STIEGGL/Track)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|---|
| 90 | <p>Cl. 6.4.8 Acceptance criteria of Track Slab with MSS under</p> <p>Cl. 6.4 Mass Spring System (MSS)</p> <p>KNPAGT-3/Vol-3/Employer's Requirement/Particular Specification Page no 51</p> | <p>Cl. 6.4.8 Acceptance Criteria of Track Slab with MSS</p> <p>4) Reduction in vibrations (Measured in Vdb) in comparison with the similar section where MSS has not been provided, should be minimum 20 Vdb.</p> | <p>Pls clarify what measure shall be taken if more than 20 Vdb mitigation is required to comply with RDSO CT38 specified limits in Table 3.0 and Table 3.10.</p> | <p>Please refer reply at Sl. No 19 and 20 Above</p> |
| 91 | <p>Cl. 6.4.8 Acceptance criteria of Track Slab with MSS under</p> <p>Cl. 6.4 Mass Spring System (MSS)</p> <p>KNPAGT-3/Vol-3/Employer's Requirement/Particular Specification Page no 51</p> | <p>Cl. 6.4.8 Acceptance Criteria of Track Slab with MSS</p> <p>6) Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost.</p> | <p>Full surface (strip + filler) is non replaceable type MSS. If test measurement indicates non-compliance of RDSO Table 3.9 & Table 3.10, there will be no recourse for contractor to comply specified values in Table 3.9 and Table 3.10.</p> | <p>Please refer Reply at <u>Sl.No.</u> 19 & 20 above. Also refer Annexure 20 of Addendum 1.</p> |
| 92 | <p>Volume-1: Instruction to Tenderers, C6.6 Regarding Fastening System for Ballastless Track C6.6.1.(i) Page No. 33</p> | <p>For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & track plinth/slab.</p> | <p>Stray current is dependent on overall system design of the traction power supply and track structure as per clause 5.1 of EN 50122-2 standard. The requirement of EN 50122-2 is applicable to entire track structure. Therefore, we kindly request UPMRC to rephrase the clause as below: For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The track structure with the proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless T rack Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab.</p> | <p>Please refer Annexure 4 & 7 of Addendum 1.</p> |



 (STIE/GC/Track)



Reply to Pre-Bid Queries - KNPA GT-03


| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|---|---|
| 93 | <p>Volume 3 Particular Specification (Including Appendices) 3, Interface 3.1.1.1 Page No. 14</p> | <p>3.1.1. Additional requirement of 750V DC Power Supply and Traction System (PST) of Kanpur and Agra Metro Rail Project Track Insulation: The rails forming the return current path shall be nominally insulated from earth in order to discourage stray earth currents. The insulation level between the structure earth and the rails shall be no less than 10 ohm/km of single track under normal operating conditions. The insulation level of each section shall be tested, on completion of the track works for the section, and the results recorded. The commissioning acceptance value shall be 100 ohm/km. Values less than this, but of the same order may be accepted by the Employer under exceptional conditions. The above track insulation level shall be maintained through points and crossing work. All the work related to track insulation shall be within scope of track work contractor. The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following: - 100 MO DC resistance in dry condition - 1 MO DC resistance in wet condition - 20000 O AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles</p> | <p>The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements - 100 MQ DC resistance in dry condition - 1 MQ DC resistance in wet condition - 20000 Q AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles Further, the requirement of "20000 Q AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable. The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2. Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 K-ohm instead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current.</p> | <p>Please refer Annexure 15 of Addendum 1.</p> |
| 94 | <p>Volume 3 Particular Specification (Including Appendices) 3, Interface 3.1.1.3. (2) Page No. 15</p> | <p>(2) The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following: - 100 MQ DC resistance in dry condition - 1 MQ DC resistance in wet condition - 20000 Q AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles Necessary test certificates in this regard shall be shared with the Contractor. The Employer / Engineer may also like to witness the tests in the factory / laboratory.</p> | <p>The test to determine electrical insulation of individual fastening system (between running rails and earth) is non-standard test which is not defined in EN standards for below requirements - 100 MQ DC resistance in dry condition - 1 MQ DC resistance in wet condition - 20000 Q AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles Further, the requirement of "20000 Q AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles" is related to AC impedance while the traction system proposed for the project is DC traction. Therefore, this test may not be applicable. The standard test to measure electrical insulation of individual fastening system (between rail to rail) is defined in EN 13146-5 which is also referred in Table-1 in clause 4.7 of RDSO Annex-C2. Therefore, we kindly request to remove the non-standard tests referred in the clause and keep only standard test as per EN 13146-5. We also recommend min requirement on electrical insulation (rail to rail) of 10 K-ohm instead of 5 K-ohm based on experience from other 750 V DC traction project to minimize the stray current.</p> | <p>Please refer Annexure 16 of Addendum 1.</p> |



Amir
(S.T.E./G.C./Track)

Reply to Pre-Bid Queries - KNPAGT-03


| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|---|---|
| 95 | Volume-1: Instruction to Tenderers, C6.6 Regarding Fastening System for Ballastless Track C6.6.1 (vii) Page No. 33 | MoU with Supplier: Submit copy of the MoU entered into between the Tenderer and the Supplier for supply of complete ballastless track fastening system as per tender specification. Single Point Warranty for the complete ballastless track fastening system and its individual components supplied by Supplier shall be with Tenderer for the defect liability period. | The intended MOU with all the proposed EPC contractors is not feasible as it may breach the competition law. Same MOU with all proposed EPC contractors will not be, thus, appropriate. We, therefore, request UPMRC to allow the bidders to provide 'Manufacturer's Authorization Letter' as per standard practice followed in other tenders. | Please refer Annexure 8 of Addendum 1. |
| 96 | Volume-1: Instruction to Tenderers, C6.7 Regarding Type of Plinth/Slab Track for Main Lines including Entry/Exit Lines to Depot C6.7.1. Page No. 34 | Tenderer can choose cast-in-situ plinth/slab type track structure or pre-cast type plinth/slab track structure for main line on elevated and in underground section without MSS. In case of MSS, track structure will be slab type only. Ballastless track structure in main line for turnout and scissor shall be cast-in-situ Slab type. | The drawings given in the tender document are of typical plinth Cast-in-situ type. Generally, for a Slab Structure with Pre-Cast Rail Seat the self-weight of the track structure is heavier than the typical plinth type track structure. We request UPMRC to kindly provide the Maximum Design Self Weight considered for the Civil Structure. | Maximum design dead weight for track structure (slab/plinth, fittings and rails) is 1.85 T/Track-m for viaduct. Maximum design dead weight in underground section can be permitted more depending upon design proposed by contractor duly complying clearances in underground section as per SOD. Contractor has to propose track structure accordingly. |
| 97 | Vol-3 PS 6.4.1 Mass Spring System Page no 47 | The objective of providing MSS is to substantially reduce structural vibrations propagating from track structure while passage of trains. MSS is to be strip bearing type with adjoining filler material of same quality and specification having less stiffness. | Any specific reason for strip bearing & filler material combination may be reviewed. MSS specification should be performance based and not material or layout based. The specification promotes usage of a particular proprietary product / party and restricts participation of other products which has already been well established in Metro projects in India. Limiting the specification to this specific design will allow only limited suppliers to participate. The ultimate objective is to attain the required mitigation values pertaining to insertion loss and natural frequency. The system which is economical and yet qualify with the desired requirements should be preferred. Request to get the clause amended accordingly. | Please refer Annexure 20 of Addendum 1. |
| 98 | Vol-3, PS 6.4.2 Mass Spring System Page no 47 | The general layout of full surface MSS with differential stiffness is given in the tender drawing (volume 4). It comprises of two separate materials having different stiffness values. The stiffener material in this system is named strip bearing and the softer material is named filler material. | Noted. Comments same as above. | Please refer Annexure 20 of Addendum 1. |


 (STIE/GC/Track)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 99 | <p>Vol 3, PS 6.4.3 Mass Spring System Page no 47,48</p> | <p>General Requirements of Strip and Filler Mass Spring System</p> <p>I. It should be full-surface (strip + filler) support for the slab.</p> <p>VII. The elasticity of the pad must be based on the compressibility of the material & not on the shape of the product structure.</p> <p>VIII. Any geometrical forms like dimples or notches or groves on the material surface must be avoided as this might influence the elasticity of the material in a negative manner due to sediments or dust.</p> <p>IX. Use of Binders/ softening agents/ plasticizers may be avoided in pad material as diffusion of same may stiffen the system.</p> | <p>Strip + filler combination requirement needs to be amended as per comments above.</p> <p>Strip + filler combination requirement needs to be amended as per comments above.</p> <p>This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. It may not be incumbent upon a system to derive its elasticity from the product only in a specific way and thus such a requirement should not be used to restrict any system. The clause should be deleted or suitably modified as this specifies a particular type of material.</p> <p>This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. Pandrol MSS have a wavy form but they are covered on top and on the sides by geotextile mats which prevent any ingress of sediment or dust. Hence, this clause should be deleted or suitably modified as this specifies a particular type of material.</p> <p>This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. Such impositions on the required material should not be made to restrict any system. The clause should be deleted or suitably modified as this specifies a particular type of material.</p> | <p>Please refer Annexure 20 of Addendum 1.</p> |


 (ST/E/GC/Track)



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|---|---|
| 100 | Vol-3 PS 6.4.4 Mass Spring System, Design of Track Slab with MSS Page no 49 | VIII. Thickness of MSS mat (to be provided in single layer only) should not exceed 40 mm. IX. Structural Design of Track Slab with MSS: As the Track slab will be supported by two longitudinal MSS strip primarily, the proper structural design of the track slab including proper detailing of reinforcement should be done by the contractor to ensure serviceability and stability of track slab for its design life. The structural design of track slab with MSS shall include Ultimate Limit State, Serviceability Limit State and Fatigue Design according to relevant codes for concrete structures (e.g. Euro code 1992 or similar). | Limiting the mat to a certain thickness and to a single layer limits the possibilities for the choice of the material used to manufacture the mats and for the choice of the right stiffness in order to ensure proper performance. Mats in 2 layers is permitted by note 1 under Clause 5.1.1.2 of DIN 45673-7:2010-08: - "NOTE 1 Elastomeric mats can also be laid in multiple layers." This is necessary to ensure performance as required. Every material has a different ratio thickness/stiffness and limiting the thickness to a maximum goes against the principle of "performance driven" specifications as recommended by RDSO's Noise and Vibration guidelines, Sept'15. (Note- There is no limitation also on thickness as per DIN 45673-7:2010-08). Further, mats installed in 2 layers, offer an easier installation for the contractor in the sense that it will limit the risk of incorrect installation or incorrect joints between each piece of mat. Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1. |
| 101 | Vol-3 PS 6.4.6 Page no 50 | Technical Specifications of MSS (for strip and filler material) | Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1. |
| 102 | Vol. 1: NIT_1.1.2 Key Details Page no 5 | Last date of Seeking Clarification 09.11.2020 | We request you to extend the deadline for seeking clarification by minimum 2 weeks | As per Tender Conditions |
| 103 | Vol. 1: NIT_1.1.2 Key Details Page no 5 | Date & time of Submission of Tender 24.11.2020 @ 15:00 Hrs. | We would like to highlight that Bidder shall require adequate time to review the response provided by the Client and incorporate the same after Addendum replies are issued by UPMRCL. So we request UPMRCL to extend the bid submission deadline by minimum of 6 weeks from issuance of Replies to Bidders query | Please refer Annexure 1 of Addendum 1. |
| 104 | Vol. 1: NIT_1.1.3. Source of Funds Page no 5 | The Kanpur and Agra Metro Projects are being funded through the through the equity participation by the Government of India and Government of Uttar Pradesh and loan from bilateral/multilateral agencies. | Request clarity on the funding of Kanpur and Agra Metro Trackworks. Whether this project is being funded by Government of India and Government of Uttar Pradesh or from bilateral/multilateral agencies. | As per Tender Conditions |

Ashu
(S/TE/GC/Track)



Reply to Pre-Bid Queries - KNPAGT-03

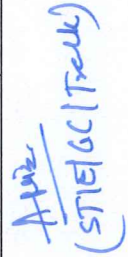
| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|--|
| 105 | Vol. 1: NIT_ 1.1.4.2 A2 Minimum Eligibility Criteria: Page no 6 | Notes: (iii) There must be an Indian partner with a minimum of 26% participation in the JV/Consortium. Any substantial partner (equal to or more than 26% participation) can act as a lead partner. | We would request you to waive off this minimum participation requirement, in case the consortium members are from same group/sister companies. As a result of this clause, international participants who form a consortium with their Indian subsidiaries would be required to have at least 26% participation if they bring in the technical/financial credentials. This would prevent them from localising their operations. This also goes against the spirit of the "Make in India" initiative that invites foreign players to setup local operations in India. Any concerns on the performance of the Indian subsidiary would be alleviated as the members of the consortium are jointly and severally liable. | As per Tender Conditions |
| 106 | Vol. 1: NIT_ 1.1.4.2 Minimum Eligibility Criteria: B. Financial Standing: Page no 7 | T2 - Profitability: Profit before Tax should be Positive in at least 2 (two) years out of the last five audited financial years. In Case of JV/Consortium - The profitability of only lead member shall be evaluated | We believe that the Financial capability of any company shall be checked by its Net-worth and its ability to have a sufficient credit line for project execution (Liquidity). Also, Net-worth reflects the true worth of the company whereas profitability can change very quickly for various reasons and doesn't give correct insight into company's ability to get credit or invest to execute projects in future. So, we request UPMRCL to waived off the profitability requirement of Lead Member. | As per Tender Conditions |
| 107 | Vol. 1: NIT_ 1.1.4.2 A1 Minimum Eligibility Criteria: Page no 6 | "Similar Work" for this contract shall be work of: i. Construction of Ballastless Track with or without Supply of Fastening System for Ballastless Track. or ii. Supply of Precast concrete component of ballastless track such as precast plinth, slab, sleeper etc. with or without Supply of Fastening System for Ballastless Track. | We understand that the project scope includes Design of the track work also in the scope of the Contractor, however Design experience is not being asked for qualifications purpose. This would lead to participation of entities without have required credentials for this project. Thus request you to also add design credentials for qualification of this tender. | As per Tender Conditions |
| 108 | Vol. 1: ITT_ 7. Cl A3.4(7)(ii) Purchase Preference to Local Suppliers/Preference to Make in India: Page no 23 | In case of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company or from a practicing cost accountant or practicing chartered accountant giving the percentage of local content after completion of works to the Engineer. | We request UPMRCL to allow local supplier to submit self-certification confirming the item offered meets the minimum local content, even in case of procurement for a value in excess of Rs. 10 crores, at tender stage. However, it shall be mandatory for Lowest bidder to submit the certificate from the statutory auditor or cost auditor of the company confirming the percentage of local content, after opening of financial Bid. | As per Tender Conditions. Certification from Chartered Accountant in this regard shall be allowed. |
| 109 | Vol. 2: ITT_ C2.6(b) Documents Comprising the Tender Page no 31 | C 2.6 b) Change in Taxes/Duty: The contract price shall not be adjusted to take into account any change in taxes, duties, levies or introduction of any new tax, duty or levy except otherwise mentioned in GCC or SOC till the completion date including the date of extended period of contract. | Future changes in Taxes and Duty cannot be envisaged by the Bidder at this stage and thus would lead to speculation and Price Increase of Bid. So, we request UPMRCL to allow adjustment of Bid Price for any change in taxes, duties, levies or on introduction of any new tax, duty or any change in explanation of tax legislations | Please refer Annexure 10, 37 & 39 of Addendum 1. |
| 110 | Vol. 2: ITT_ C19.2 Performance Guarantee, Undertaking and Warranties Page no 39 | C.19.2 If the Tenderer comprises a partnership, Consortium or Joint Venture, a parent company of each member or participant will be required to execute the Guarantees, Undertakings and Warranties. | We request to delete the provision of Parent company Guarantee or Parent company Undertaking in case Bidder is not using parent or group company credentials for qualification purpose. Else, Bidder should be allowed to use parent or group company credentials for qualification purpose in case PCG/PCU is being submitted. | Please refer Annexure 31 & 40 of Addendum 1. |




 (STIE/GC/Trak)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|---|
| 111 | Vol. 1: FOT_ FORM OF TENDER – APPENDIX-1 Page no 136 | Amount of advance payment Clause 11.2 of the GCC & 30 & 31 of SCC Mobilisation Advance - 5% of original contract value in two equal instalments. Equipment advance - 3% of original contract value | Mobilisation cost form substantial part of overall contract price. So we request UPMRCL to provide minimum 10% mobilisation advance in 2 equal instalments. Same is also being provided in most of other metro tenders | As per Tender Conditions |
| 112 | Vol. 1: FOT_ FORM OF TENDER – APPENDIX-1 Page no 137 | Period in which all insurances have to be effected Clause 15.5 of the GCC Within 4 weeks from the "date of commencement" and valid till issue of performance certificate / completion of defect liability period except PII which shall be valid for 5 years after issue of Performance Certificate. | Request UPMRCL to limit the validity of PII till 3 years after issue of Performance Certificate instead of 5 years. | As per Tender Conditions |
| 113 | Vol-1 FORM OF TENDER – APPENDIX-1/ Sno IX Page no 136 | Amount of Third Party Insurance - INR 0.50 Million for any one incident, with no. of incidents unlimited. | With unlimited number of incidents cover under TPL section will be provided by any insurer subject to some extent of Total Aggregate limit (AOY). Per event 0.50 MN INR (AOA) is ok for us, but there should be some Total Aggregate Limit. Please advise on this AOY limit. | As per Tender Conditions |
| 114 | Vol-2 GCC Clause No 11.2.1 Page no 54 | Mobilisation Advance shall be generally 5% of original contract value payable in two equal instalments or as mentioned in the Special Conditions of Contract. The first instalment shall be paid after mobilisation has started and next instalment shall be paid after satisfactory utilization of earlier instalment. | Bidder request UPMRCL to revise the clause as Mobilisation Advance shall be generally 10% of original contract value payable in two equal instalments or as mentioned in the Special Conditions of Contract. The first instalment shall be paid after mobilisation has started and next instalment shall be paid after satisfactory utilization of earlier instalment. | As per Tender Conditions |
| 115 | Vol-2 GCC Clause No 11.2.1 Page no 54 | Mobilisation Advance shall be generally 5% of original contract value payable in two equal instalments or as mentioned in the Special Conditions of Contract. The first instalment shall be paid after mobilisation has started and next instalment shall be paid after satisfactory utilization of earlier instalment. | Bidder request UPMRCL to provide Mobilisation Advance 5% of original contract value payable in single instalments. | As per Tender Conditions |
| 116 | General | BOCW (Building and Other Construction Works) Cess | Bidder understanding "BOCW will be applicable on BLT & BT installation Schedules milestones only & No BOCW on General , SPM & Misc. schedule milestones" Please confirm. | As per Tender Conditions |
| 117 | Vol-1 ITT, Clause No C12.2 Page no 37 | The majority of the Key Staff shall be regular members of the firm/JV for the previous six months. | Bidder request to revise the clause as The majority of the Key Staff shall be/shall not be regular members of the firm/JV for the previous six months. | As per Tender Conditions |
| 118 | Vol-1 NIT, Clause No 1.1.4.5 Page no 9 | Minimum Key Staff Requirement | Bidder understanding as per Annexure 8, Key personal are to be common for both Agra & Kanpur location. Please confirm | Key Staff to be deployed as per Tender Condition and has to supervise works for Kanpur and Agra both as per Tender and as directed by the Engineer. |



 (SIT/EGC/Txuk)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|---|
| 119 | Vol-1 ITT, Annexure 8 Page no 68 | Minimum Key Staff Requirement (Mobilisation) | Bidder request UPMRCL to allow minimum 08 weeks from the commencement date for mobilisation of key personal based on Annexure 8 | As per Tender Conditions |
| 120 | Vol-2 GCC, Clause No 15.1 Page no 72 | Professional Indemnity Insurance - The Contractor shall effect and maintain professional indemnity insurance, preferably in the name of UPMRC, for the amount in Indian Rupees stipulated in Appendix to the Form of Tender in respect of any design of the Works to be carried out by, or on behalf of the Contractor. This insurance, which shall ensure the Contractor's liability by reason of professional negligence and errors in the design of the works, shall be valid from the date of commencement of Works, until 5 years after the date of issue of Performance Certificate. Alternatively the Contractor shall redeem the insurance before the expiry of the Yearly Insurance in such a way that the entire validity period is covered. | Bidder request UPMRCL to revise the clause as "The Contractor shall effect and maintain professional indemnity insurance, preferably in the name of UPMRC, for the amount in Indian Rupees stipulated in Appendix to the Form of Tender in respect of any design of the Works to be carried out by, or on behalf of the Contractor. This insurance, which shall ensure the Contractor's liability by reason of professional negligence and errors in the design of the works, shall be valid from the date of commencement of Works, until 03 years after the date of issue of Performance Certificate. Alternatively the Contractor shall redeem the insurance before the expiry of the Yearly Insurance in such a way that the entire validity period is covered." | As per Tender Conditions |
| 121 | Vol-2 SCC, 29, Clause 11.1.3 Page no 21 | Adjustment in Contract Price to = Consumer Price Index for Industrial workers, published in the Reserve Bank of India Bulletin, as applicable to Kanpur/Agra area for the month in which the tender was opened. Wso = All India Price Index (with base Oct' 12=100) for Reinforcement bars (TMT-500) for primary manufacturers, issued by Central Public Works Department (CPWD) for the month in which the tender was opened. Wco = All India Price Index (with base Oct' 12=100) for Cement (OPC) issued by Central Public Works Department (CPWD) for the month in which the tender was opened. Wfo = Whole Sale Price Index (Averages) for Fuel & Power, as published in the RBI Bulletin for the month in which the tender was opened. Wmo = Whole Sale Price Index (Averages) for Machinery and Machine Tools as published in the RBI Bulletin, for the month in which the tender was opened. | Bidder understanding is "Tender was opened" means the date mentioned in the NIT Clause 1.1.2 Date & time of opening of Tender. Please confirm | As per Tender Conditions. |
| 122 | Vol-2 SCC, Clause No 51 Page no 31 | Safe Custody Bank Guarantee for materials to be supplied by the Employer. The contractor shall submit a safe custody Bank guarantee in the format given in schedule 8 for the materials to be supplied by the Employer to the contractor at Kanpur/Agra for the work. | Bidder request UPMRCL to delete the requirement of safe custody Bank Guarantee for material to be supplied by the employer, instead allow Indemnity Bond for the same | Please refer Annexure 13, 14 of Addendum 1. |

Apv. -
 CSTI/E/GC/Tread



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|---|--|
| 123 | Vol-2SCC, Clause No 51 Page no 31 | The insurance policies to be obtained by the contractor under Clause 15 of GCC shall also cover the cost of materials (as mentioned above) to be supplied by the Employer. | Bidder request UPMRCL to remove the insurance requirement for the Employer supplied materials from contractor scope of work. | As per Tender Conditions |
| 124 | Vol 5, BOQ KNPA GT-3 (Part-2) | Price Schedule & BOQ | Bidder request UPMRCL to provide the Price Schedule & BOQ in excel or word format. | Attached (online UPMRC website) with reply to pre bid queries. However, data / details given in hard copy of Tender documents shall prevail. |
| 125 | Vol 5, BOQ KNPA GT-3 (Part-2) 2.5 Bill No M1 Page no 42 | 2.5 BILL NO. M1: MISCELLANEOUS ITEMS Miscellaneous items based on DSR, 2019 (of CPWD) schedule items (for Lump Sum Value of Rs. 200 Lakhs) | Bidder request UPMRCL to provide the DSR, 2019 (of CPWD) schedule items | As per Tender Conditions. Please refer clause 5.3 of PS |
| 126 | Vol-2 SCC, Clause No 8, Sub Clause No 4.2.3 Page no 4 | Release of Performance Security Amount (Bank Guarantee) - On completion of the entire work, issue of Taking over Certificate by the Engineer in accordance with Sub-Clause 9.1 and 9.2 of GCC and issue of final payment certificate as per 11.10 of GCC, one half of the Performance Security shall be refunded to the Contractor. This shall not relieve the Contractor from his obligations and liabilities, to make good defects that may be detected during the Defects Liability Period | Bidder request UPMRCL to provide Taking Over Certificate section wise & allow bidder to reduce the performance security amount (BG) in same proportion | As per Tender Conditions. Please refer Annexure 41 of Addendum 1. |
| 127 | Volume-1 ITT, Page 35, Clause C6.8.2 | Provision of long sleepers with suitable dowels at certain interval shall be made by track contractor for fixing of 3rd Rail for 750V DC Traction by traction contractor. Similarly, in turnout and scissor portion also, similar arrangement has to be made in consultation with Traction Contractor. Typical arrangement for 3rd rail fixing has been shown in tender drawing. | Bidder understand that the Dowels for Ballasted Track of Depot shall also be provided by Traction contractor free of Cost. | As per Tender Conditions. Please refer Explanatory Notes to BOQ. |
| 128 | Volume-1 ITT, Page 35, Clause C8.2 | The Tender Programme shall be prepared in terms of weeks from the Date of issue of Letter of Acceptance which shall be the date for Commencement of Works. | Since the project duration is 48 months, preparing tender programme in weeks will create complication. Bidder will prepare the tender programme in terms of month. Bidder request UPMRCL to accept the same. | As per Tender Conditions. However, it can be prepared in terms of month also. |
| 129 | Volume-1 ITT, Annexure 8, Page 1 of 3, | Experience required for Key Personnel | Bidder request to amend the Minimum Qualification of key personnel to Graduate Engineer/ Diploma Engineer in Civil or Mechanical Engineering with mentioned year of experience for each respected post | As per Tender Conditions. |
| 130 | Volume-1 Form of Tender, Appendix-1, Page 136, Sr. No. iv | Liquidated Damages | Bidder request to provide rate or amount per day or month by which Liquidated Damages will be applicable on total/ partial value of original contract, as the same is not available in Clause 8.5 of GCC and Clause 25 of SCC | Please refer Annexure 10 of Addendum 1. |

APU
(STIETAC/Track)



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 131 | Volume-1 Form of Tender, Appendix-1, Page 136, Sr. No. IV | Liquidated Damages | Bidder understand that any Liquidated Damages amount if deducted will be returned provided contractor is able to achieve final Key dates of particular section of tender. | As per Tender Conditions. |
| 132 | Annexure 6 (P.No 62-63) Vol-1 ITT | Tender Security Format | Bank may request us to add the below NWC Clause in Tender security format Notwithstanding anything contained herein above : i) Our liability under this bank guarantee shall not exceed ii) This bank guarantee shall be valid upto iii) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand (and which should be received by us), on or before before 14.00 hours (Indian standard time) whereafter it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us. | As per Tender Conditions. |
| 133 | Vol-2 SCC Schedule 6 Page no 56-57 | Bank Guarantee for Advance Payments | Can we replace existing NWC clause and mention as below : "Notwithstanding anything contained herein above : i) Our liability under this bank guarantee shall not exceed ii) This bank guarantee shall be valid upto iii) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand (and which should be received by us), on or before before 14.00 hours (Indian standard time) whereafter it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us." | As per Tender Conditions. |
| 134 | Vol-2 SCC Schedule 8 Page no 62-63 | Bank Guarantee for Safe Custody | Bank may request us to add the below NWC Clause in SCBG format Notwithstanding anything contained herein above : i) Our liability under this bank guarantee shall not exceed ii) This bank guarantee shall be valid upto iii) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand (and which should be received by us), on or before before 14.00 hours (Indian standard time) whereafter it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us. | As per Tender Conditions. |
| 135 | Volume-5, BOQ Part-1, General Principles, Clause 1.3.3, Page-3 | Non Priced Items Items against which no rate or sum is entered by the Tenderer, whether quantities are stated or not shall be regarded as covered by other rates in the Bills of Quantities | Bidder understand that unit rate should be quoted for zero quantity line item also. Kindly confirm | As per Tender Conditions. However, there is no item in BOQ having zero quantity. |



Akinz.
(STIEGCI/Track)

Reply to Pre-Bid Queries - KNPAGT-03


| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|---|
| 136 | Volume-5, BOQ Part-1, General Principles, Clause 1.3.4, Page-4 | The Tenderer shall price the Bills of Quantities in Indian Rupees and/or in freely convertible international trading currencies only. Attention is drawn to Clause 19 of the Special Conditions of Contract. | Bidder understand that the Clause 19 of Special Conditions of Contract is not related to tender pricing. | As per Tender Conditions. |
| 137 | Volume-5, BOQ Part-1, General Principles, Clause 2.2, Item 2, Page-9 | Handling/rehandling, transportation loading, unloading, stacking/storing up to project site in Lucknow. | Bidder understand that the Supply of Standard Gauge Turnout PSC Sleepers for UIC 60/60E1 rails will be required at respected Depots of Kanpur and Agra and not in Lucknow. Kindly confirm the same. | Please refer Annexure 24 of Addendum 1. |
| 138 | Volume-3, Particular Specification, Clause 4.2.4.4, Page-26 | Rail and Fittings to be transferred from Transport Nagar depot (Lucknow) to Kanpur project site | Bidder understand that the quantity mentioned in this clause which need to be transferred from Transport Nagar Depot (Lucknow) is an additional quantity as mentioned in BOQ of Vol-5 and this quantity will be transferred to contractor free of cost | This will be handed over to Track contractor free of cost. However transportation shall be done by track contractor from Lucknow to Kanpur/Agra and no separate payment for the same shall be made. |
| 139 | Volume-3, Particular Specification, Clause 4.3, Page-27 | Schedule of Key Dates for KNPAGT-3 | Bidder request UPMRCL to provide the Key Dates and Access dates in the form of date of Notice to Proceed + No. of Days/Weeks. This will ease the bidder to understand and plan the work of the contract. | As per Tender Conditions. |
| 140 | Volume-2, Special Conditions of Contract, Clause 13, Page-6 | Clauses 4.13 Programmes The Engineer on receipt of a programme shall inform the Contractor in writing within 21 days after receipt of the above information (a) that the programme has received his consent; or (b) that the programme is rejected, in which case reasons for such rejection shall be given; or (c) that further information is required to clarify or substantiate the programme or to satisfy the Engineer as to its reasonableness, or (d) that the programme has received his consent subject to incorporation of comments attached to the Notice of No Objection | Considering stringent time line required to commission the Priority Section of Kanpur Metro Track Work, Bidder request to review the programme submitted by contractor within 7 days of receipt. | As per Tender Conditions |
| 141 | Volume-2, Special Conditions of Contract, Clause 13, Page-7 | The contractor will be responsible for interfacing with the civil works contractors for the access for track work execution and review and rework his resources to achieve the targets. | Bidder understand that the track contractor responsibility is to interface with the Civil work contractors, however providing access to the site will lie with UPMRCL and the access date will be consider from the date track contractor receives access on site. Kindly confirm the same | As per Tender Conditions |



Apik!
(STIEGCI/Track)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|---|
| 142 | Volume-2, Special Conditions of Contract, Clause 19, Page-13 | Submission of Design Data Following receipt of a submission of Design Data the Engineer shall, within 28 days, return one copy of the Design Data to the Contractor, together with either a Notice of No Objection, or a statement of objections which shall identify the aspects of the Design Data which do not conform to the above requirements. If the Engineer returns any Design Data with a Notice of No Objection, the Contractor shall proceed with the Works in accordance with the Contract. | Considering stringent time line required to commission Priority Section of Kanpur Metro Track Work, Bidder request to review the Design Data submitted by contractor within 7 days of receipt. | As per Tender Conditions |
| 143 | Volume-2, Special Conditions of Contract, Clause 24, Page-16 | Clause 8.3 Ground for Extension of Time | Bidder understand that the time is the essence of contract for both employer and contractor, hence bidder request to provide extension of time along with cost compensation in case the delay in project do not occur because of the fault of track contractor. | As per Tender Conditions |
| 144 | Volume-2, Special Conditions of Contract, Clause 34, Page-26 | Clause 12.5 Variation in the Bill of Quantities Rates shall be negotiated only if the variation in individual items is more than 25% on plus side and if the variation is on minus side (saving) in any item, the payment shall be made as per the rates in the contract for the actually executed quantity of the item | Bidder request that the negotiation of rate should be applicable for both increase and decrease of quantity over and above of 25%. Kindly confirm the same | As per Tender Conditions |
| 145 | Volume-2, Special Conditions of Contract, Clause 48, Page-30 | Supervision of Maintenance The number of man-months of Experts shall, however, be the same as provided in the Contract. | Bidder request to provide the detail of Man-month required for the maintenance, in the BOQ provided, and the qualification and the experience required for the personnel required for maintenance | As per Tender Conditions |
| 146 | Volume-2, Special Conditions of Contract, Clause 25, Page-18 | Every section of track is subject to Key Dates and therefore the application of Liquidated Damages on delay. The total amount of Liquidated Damages payable by the Contractor in respect of the delay to the whole of the Works or for failing to achieve any Key Date, shall be limited to 10% of the Total lump sum price quoted in Schedule 'A' of BOQ. However, this limit of liquidated damage shall be 15% of the lump sum BOQ price after including any sums accepted by employer for payment to any designated contractor on account of default of Track work contractor. | Bidder request ot provide Schedule A of BOQ | Please refer Annexure 27 of addendum 1. |


 (ST/E/GC/Track)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|---|
| 147 | Volume-2, General Conditions of Contract, Clause 4.21, Page-27 | It shall be the responsibility of the Contractor to provide at his own expense the required sheds, store houses, and yards for both Permanent and Temporary Works and provide free access to the Engineer and the Engineer's Representative who will have right of inspection including that of instructing the Contractor to remove a particular material from the stores and not to use the same on the Works. | Bidder request Employer to provide Land free of cost both at Kanpur and Agra near to the alignment of track for the establishment of Shed, Store, site office etc. till the completion period of DLP | Please refer Appendix 8 of GS |
| 148 | Volume-2, General Conditions of Contract, Clause 10.1, Page-51 | "Defects Liability Period" shall mean the defects liability period stated in the Special Conditions of Contract calculated from the date of taking over of the Works. Provided that, if any part of the Works or subsystems or component of that part has been replaced, renewed or repaired except minor repair, the "Defects Liability Period" in respect of that part or sub-system or components of that part shall start from the date such replacement, renewal or repair has been completed to the satisfaction of the Engineer | Bidder request to cap the total Defect Liability Period maximum upto 3 years from taking over even if any part of the work or subsystem or component of that has been replaced. | As per Tender Conditions |
| 149 | Instruction to Tenderers - Clause No -A.3.1 Volume 1. Page No 20 | Eligible Tenderers - A Tenderer may be either a single entity or any combination of entities in the form of a joint venture or association (JVA) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JVA: (a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; and (b) The JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the tendering process and, in the event the JVA is awarded the Contract, during contract execution. | We understand that, 1. Bidding by consortium consist of foreign entity and Indian entity is allowed. 2. Consortium is not required to be registered as a taxable entity. Please confirm | As per Tender Conditions |

Atika
(STIEGCI/Track)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|---|--|
| 150 | Instruction to Tenderers - Clause No -C.2.6(a) Volume 1. Page No 30 | <p>Custom Duty: UPMRC project is covered under Project Import chapter 98.01 of Custom Tariff Act according to which basic custom duty & applicable cess will be reimbursed. The tenderer should avail this benefit. Related IGST applicable on imported component/custom duty shall also be reimbursed. As regards registration under Project Import, after the award of the contract, UPMRC at the written request of a contractor shall facilitate the contractor for obtaining sponsoring / recommendation letter from the Ministry of Urban Development for getting themselves registered for availing Project Import benefits. The responsibility to avail the concessional benefits under Project Import shall solely rest with the contractor.</p> | <p>We understand that -</p> <p>Employer will issue necessary documents required to import of raw-material / Components / Spares at project import rate under chapter-98.01 by Contractor and sub-contractor</p> <p>Please confirm.</p> | As per Tender Conditions. Please refer clause no 28 of SCC also. |
| 151 | Instruction to Tenderers - Clause No -C.2.6(c) Volume 1. Page No 31 | <p>Goods and Services Tax (GST): GST is included in the contract price. However, the contractor shall maintain details of GST paid to "Trade and Taxes" department and required documents like GSTR3B, GSTR 1 & GSTR 2, Challans, Certificate of CA etc.</p> | <p>In case of bidding by consortium consist of Indian entity & Foreign entity, GST will be applicable as below -</p> <ol style="list-style-type: none"> 1. In case work of any consortium member is covered as works contract, the GST as applicable and charged in the invoice on works contract will be applicable. 2. In case if any work of any consortium member is not covered in works contract the GST as applicable and charged in the Invoice for supplies and services as per will be reimbursed by employer to contract. 3. In case of offshore supplies and services by foreign consortium member, the employer will be importer on records and employer's IEC will be used for customs clearance. Similarly in case of offshore services by consortium member, the employer will deduct from the contractor's invoice and deposit RCM GST. <p>Please confirm the same.</p> | Please refer Annexure 10, 37 & 39 of Addendum 1. |
| 152 | Vol-2 GCC Clause GCC 7.8 Page 42 | <p>Ownership of Plant, Rolling Stock and Materials - Each item of Plant, goods, and Material shall become the property of the Employer, when it is delivered to Site or payment thereof, either in part or full, has been made. The Contractor shall however continue to bear the risk in respect of such items which continue to remain in his custody.</p> | <p>Please clarify whether -</p> <p>In case of offshore supplies by foreign consortium member, ownership will be transferred to employer on CIF / CIP Indian port of entry basis.</p> <p>Please confirm the same.</p> | As per Tender Conditions |




 (ST/ET/GC/Team)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|---|---|
| 153 | Vol-2 SCC - Clause 28 Page 18 | <p>The Contract Price Sub Clause 11.1.1 (i) of GCC is replaced as under: (A) The tenderer is required to note the following while quoting the prices: - The rates and prices quoted in the bill of Quantities shall be inclusive of all taxes (including GST), levies, duties, cess, freight, insurance and any other charges leviable, including tax deducted at source except the: (a) The Basic Customs Duty, cess and other surcharges (as applicable) on imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc. (b) Goods and Services Tax (GST) on imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc. No other GST, during any intermediate stage or otherwise, shall be reimbursed.</p> | <p>We understand that in case of bidding by consortium consist of Indian entity & Foreign entity, Customs Duty and GST on imported material will be reimbursed as below -</p> <p>1. In case offshore supplies by offshore consortium member, employer will be importer on records & IEC of employer will be used for customs clearance. In such case if Customs Duties and GST on imported material is paid by local consortium member in the name of employer.</p> <p>2. In case of imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc imported in the name of contractor, employer will reimburse the import duty paid by contractor along with applicable GST there on. The GST charged by contractor on billing of such items to employer, employer to reimburse GST charged in the invoice of contractor relating to imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc.</p> <p>3. In case imports by contractor, reimbursement of Customs Duty will be made along with applicable GST on Customs Duty reimbursement.</p> <p>Please confirm our understanding.</p> | <p>Please refer Annexure 10, 37 & 39 of Addendum 1.</p> |
| 154 | Vol-2 SCC - Clause 29, (IV) Page 24,25 | <p>Change in Taxes/Duty (Also refer Clause 11.1.4 of GCC)</p> <p>a) "Change in Taxes/Duties/Levies" means the occurrence or coming into force of the following, at any time after the date of submission of tender. (i) Any new tax which is imposed on Composite Works Contracts applicable on Metro Project.</p> | <p>Please clarify whether -</p> <ol style="list-style-type: none"> 1. Change in Taxes / Duties / Levies to cover change in Tax rates and change in interpretations. 2. Change in Taxes / Duties / Levies to cover the portion of contract executed by other consortium member whose scope is not covered in works contract definition. 3. Change in Taxes / Duties / Levies to cover inputs taxes and output taxes. | <p>Please refer Annexure 10, 37 & 39 of Addendum 1.</p> |
| 155 | Vol-2 GCC - Clause 11.4.1 Page 56 | <p>Application for Interim Payment Certificate In case of 'Lump Sum' contract with cost centre and Milestone payment, the fixed Lump Sum Price shall be apportioned by the Contractor amongst the various Cost Centres. The amount thus apportioned under each Cost Centre will be further apportioned amongst various Milestones with the approval of the Employer. The Contractor shall be entitled to submit to the Engineer requests for interim payments only upon the achievement of one or more of the Milestones described in the Cost Centre.</p> | <p>In case of bidding by consortium of foreign entity and Indian entity -</p> <ol style="list-style-type: none"> 1. Each consortium member can raise separate invoices for their respective scope and get paid separately. 2. Each consortium member's scope will have clear billing breakup identifying the details of currency wise split for their respective scope as per consortium agreement. <p>Please confirm</p> | <p>As per Tender Conditions</p> |


 Apis
 (S/ETAC/Trade)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|--|
| 156 | Vol-1 Cl.A3.4(6) ITT_6 Participation by Subsidiary Company / Parent Company with credential of other Company Page no 21 | a) Applicant in the capacity of a Subsidiary Company as a single entity is not permitted to use the credential of its Parent Company and/or its Subsidiary Company/ Companies unless the Applicant participates in tender as JV/Consortium with its Parent Company and/or its Subsidiary Company/ Companies as a member(s) in JV with minimum 26% participation each (as substantial member) for such member(s). b) Applicant in the capacity of a Parent Company as a single entity is not permitted to use the credential of its Subsidiary Company/ Companies unless the Applicant participates in tender as JV/Consortium with its Subsidiary Company/ Companies as a member(s) in JV with minimum 26% participation each (as substantial member) for such member(s). | We request UPMCL to allow bidder to use the credentials of Associate company for meeting qualification criteria, without considering the associate company in JV/consortium. Definition of Associate with respect to the applicant: is one who directly/indirectly controls, or are controlled by, or are under common control. As used in this definition, the expression "control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 70% (Seventy per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person by operation of law. | As per Tender Conditions |
| 157 | Vol-1 ITT_ C24.4 Pre-Tender Meeting Page no 40 | C24.4 The text of the questions raised by all the tenderer and the responses given, will be transmitted without delay to all purchasers of the Tender Documents. Any modification of the Tender Documents listed in paragraph B1 which may become necessary as a result of the Pre-Tender meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to paragraph B4. | We understand that the Addendum/ clarification issued by the Employer will form part of Contract Agreement. Kindly Confirm | Please refer Schedule 1 of SCC |
| 158 | Volume - 3, PS Cl 6.3.9 Page no 47 | 6.3.9 Approved Manufacturers The Contractor shall submit to the Engineer for each item or component to be manufactured, full details of the previous relevant experience of the proposed manufacture in the production of that item, and also previous experience of manufacturing similar products for the Railway industry. | Requesting customer to clarify that any minimum revenue service (or) Manufacturing years experience required for the key Products | As per Tender Conditions |
| 159 | Volume-4, Tender Drawing | AGR_C2_DEPOT_01, Depot Layout | Please provide AUTO Cad file of alignment and depot layout drawings. Depot layout drawing does not specify different type of trackforms and its lengths. Please provide the detail drawings specifying type of track structure and it's length. It is required to estimate quantities of construction materials which is not a BOQ item. | Please refer Tender Drawings Volume-4 |
| 160 | Volume-4, Tender Drawing | KNP AGT-3, DWG NO-005 KNP AGT-3, DWG NO-006 KNP AGT-3, DWG NO-008 KNP AGT-3, DWG NO-009 | Drainage arrangement of Civil contractor is not indicated for cut and cover station Box with and without MSS slab and Circular Tunnel section with or without MSS.. | As per Tender Conditions. Please refer Explanatory notes of BOQ |


 (ST/EGC/Track)
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Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|-------------------|----|-----------------|----|--|--|-----------------|----|--|--|----------------|----|--|--|-----------------------------|----|-----------------------------|----|---|--|------------------|----|-----------------------------|----|-----------------------|----|--------------------------------|----|-----------------------------|---|---|--|---------------------|----|------------------------|----|--------------|------------|---|--------------------------|
| 161 | Volume-4, Tender Drawing | KNP AGT-3, DWG NO-005 KNP AGT-3, DWG NO-006 | No drainage arrangement for track slab in cut and cover station Box with and without MSS is indicated in the drawings. Please clarify. | As per Tender Conditions. Please refer Explanatory notes of BOQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 162 | Volume-4, Tender Drawing | KNP AGT-3, DWG NO-008 KNP AGT-3, DWG NO-009 | We understand that in circular tunnel section with or without MSS no drain is proposed towards Third Rail Bracket side even though it may be on inner side of curve | Based on the available space and other constraints, provision of drainage on the third rail bracket side of the tunnel shall be decided during the design stage and if required then same has to be provided by Track contractor without any additional cost. Planning and provision of drainage in the track slab in the circular tunnel is in the scope of the track contractor upto the sump. Please refer Explanatory notes of BOQ. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 163 | Volume-4, Tender Drawing | KNP AGT-3, DWG NO-006 | We understand that the arrangement of shear key in Cut and Cover sections will be similar to Circular Tunnel section. | 1. Shear key/Stopper for Track slab with MSS may not be required in circular tunnel. However, same has to be confirmed by designer. In case designer proposes any shear key / stopper for Track slab with MSS in circular tunnel then same shall be provided by contractor without any extra cost. 2. Shear key / Stopper shall be needed for track slab with MSS on the viaduct station as well as in cut and cover tunnel. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 164 | Vol-6 APPENDIX NO. 5 Page no 137 | As per the requirement below requirement is given: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Position</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>Chief SHE Manager</td> <td>01</td> </tr> <tr> <td>Sr. SHE Manager</td> <td>01</td> </tr> <tr> <td colspan="2">Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift.</td> </tr> <tr> <td>Tp. SHE Manager</td> <td>01</td> </tr> <tr> <td colspan="2">Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift.</td> </tr> <tr> <td>Safety Steward</td> <td>01</td> </tr> <tr> <td colspan="2">Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift.</td> </tr> <tr> <td>Sr. SHE Electrical Engineer</td> <td>01</td> </tr> <tr> <td>Tp. SHE Electrical Engineer</td> <td>01</td> </tr> <tr> <td colspan="2">Adequate, qualified and trained Electrical Engineers / supervisors to be deployed at each worksite at each shift.</td> </tr> <tr> <td>Sr. Fire Manager</td> <td>01</td> </tr> <tr> <td>Occupational Health Officer</td> <td>01</td> </tr> <tr> <td>Environmental Manager</td> <td>01</td> </tr> <tr> <td>Senior Safety Traffic Engineer</td> <td>01</td> </tr> <tr> <td>Barricade Maintenance Squad</td> <td>1</td> </tr> <tr> <td colspan="2">One Barricade Manager supported by required personnel and workers as suggested by the contractor.</td> </tr> <tr> <td>House Keeping Squad</td> <td>01</td> </tr> <tr> <td>Labour Welfare Officer</td> <td>01</td> </tr> <tr> <td>Total</td> <td>13*</td> </tr> </tbody> </table> | Position | Qty | Chief SHE Manager | 01 | Sr. SHE Manager | 01 | Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | Tp. SHE Manager | 01 | Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | Safety Steward | 01 | Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | Sr. SHE Electrical Engineer | 01 | Tp. SHE Electrical Engineer | 01 | Adequate, qualified and trained Electrical Engineers / supervisors to be deployed at each worksite at each shift. | | Sr. Fire Manager | 01 | Occupational Health Officer | 01 | Environmental Manager | 01 | Senior Safety Traffic Engineer | 01 | Barricade Maintenance Squad | 1 | One Barricade Manager supported by required personnel and workers as suggested by the contractor. | | House Keeping Squad | 01 | Labour Welfare Officer | 01 | Total | 13* | The requirement of EHS Manpower is enormous. Bidder requesting UPMRCL to allow to provide efficient EHS manpower requirements as per project requirement. Proposed EHS Organization: 08 Full Time & 02 PT 01-Chief SHE Manager-Full Time 01-Sr SHE Manager-Full Time 01-Jr. SHE Manager- Full Time 01-Sr. Fire Manager- Full Time 01- Environmental Manager- Full Time 02-Site Safety Stewards-Full Time 01-Labour Welfare Officer-Full Time 02-Occupational Health Officer (Doctor) –Part Time | As per Tender Conditions |
| Position | Qty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chief SHE Manager | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sr. SHE Manager | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tp. SHE Manager | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Safety Steward | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adequate, qualified and trained SHE Professionals with required support staff to be deployed at each worksite at each shift. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sr. SHE Electrical Engineer | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tp. SHE Electrical Engineer | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adequate, qualified and trained Electrical Engineers / supervisors to be deployed at each worksite at each shift. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sr. Fire Manager | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Occupational Health Officer | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental Manager | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Senior Safety Traffic Engineer | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Barricade Maintenance Squad | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| One Barricade Manager supported by required personnel and workers as suggested by the contractor. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| House Keeping Squad | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Labour Welfare Officer | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 13* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 165 | Vol-6 Cl. 42.2.1 Page no 83 | The contractor shall ensure at a construction site of a building or other construction work that a dedicated ambulance van and room are provided at such construction site. | Bidder requesting UPMRCL that instead of full time Ambulance van and Room, Bidder will have tie up with nearest hospitals and we will arrange ambulance from those hospitals in case of any emergency. | As per Tender Conditions. However it may be agreed as per location of site and nearest hospital. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |


 (SHE/GC/Team)



Reply to Pre-Bid Queries - KNPAQT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|---|
| 166 | Vol 3,GS Cl. 2.4.1.1 Page no 10 | Within 7 days of the Commencement Date of the Works, the Contractor shall submit for review by the Engineer, his proposed initial version of the Works Programme which shall provide full programme details for the complete period of the Contract | Bidder requests UPMRC to consider the submission date for work program as 30 days from commencement day of works | As per Tender Conditions |
| 167 | Vol 3, Cl. 2.4.1.2 Page no 10 | Within 21 days of the Commencement Date of the Works, the Contractor shall submit for review by the Engineer the proposed full version of the Works Programme. | Bidder requests UPMRC to consider the submission date for work program as 30 days from commencement day of works | As per Tender Conditions |
| 168 | Vol 3 GS, Cl. 3.1.2 Page no 17 | Unless otherwise stated in the PS, all plans and documents shall be submitted in preliminary form within 15 days of the Commencement Date of the Works followed by detailed plans within 30 days of the preliminary submission. | Bidder requests UPMRC to consider the submission date for preliminary form of plan and documents as 30 days from commencement date and Date of the Works followed by detailed plans within 60 days of the preliminary submission | As per Tender Conditions |
| 169 | Vol-2 GCC 1.1.3.1 Commencement Date Page no 7 | "Commencement Date" means the date on which the Contractor shall commence the Works on the written instructions of the Employer contained in the Notice to Proceed. | <p>The clause on Commencement of Works also should link to the following pre-conditions prior to commencement. Further, the clause does not provide an outer date by which the Employer is required to issue the NTP. Accordingly following change is requested under the definition:</p> <p>The Commencement Date shall be the date upon fulfillment of all of the following conditions by the Parties and shall in no event be later than 28 days from the LoA:</p> <p>(a) Submission of performance bank guarantee by the Contractor; (b) Signing of Contract Agreement; (c) Release of advance payment by the Employer against submission of Advance Bank Guarantee of equivalent amount by the Contractor; (d) achievement of financial closure by the Employer. (e) The Employer has opened the Letter of Credit and the Contractor's bank has confirmed the opening of the letter of credit.</p> <p>Should there be any delay beyond 28 days, the Contractor shall be entitled to additional costs for any such delays suffered by the Contractor.</p> | As per Tender Conditions |



Aliza
 (SME/AC/Track)

D. M. Singh

Reply to Pre-Bid Queries - KNPAQT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|---|
| 170 | Vol-2 GCC 2.2, Page no 12 Rights of Access to the Site | <p>If the Contractor suffers delay from failure on the part of the Employer to grant right of access to, or possession of the Site, the Contractor shall give notice to the Engineer in a period of 28 days of such occurrence. After receipt of such notice the Engineer shall proceed to determine any extension of time to which the Contractor is entitled and shall notify the Contractor accordingly.</p> <p>For any such delay in handing over of site, Contractors will be entitled to only reasonable extension of time and no monetary claims whatsoever shall be paid or entertained on this account.</p> <p>Site access schedule will be consistent with the resettlement plan for the section and status of civil works.</p> | <p>Only reasonable extension of time has been allowed and monetary compensation has been barred. As we are aware that access and input delays have adverse financial implications on the Contractor. In view of the above we request to include financial compensation for delays attributable to Employer/Engineer.</p> | As per Tender Conditions |
| 171 | Vol-2 GCC 2.3 Permits, Licenses or Approvals Page no 13 | <p>It shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contract. However, the Employer shall (where he is in a position to do so) provide reasonable assistance to Contractor at the request and cost of the Contractor in getting Permits, License or Approvals required during the Contract.</p> <p>Facilities for and coordination with Others.</p> <p>(g) If the Contractor shall suffer delay by reason of failure by any Designated Contractor to meet the specified installation interfacing and co-ordination, completion dates, which delay shall be caused otherwise than by fault of the Contractor, or, if compliance with sub-clause (f) herein shall involve the Contractor in delay beyond that which could be reasonably foreseen by an experienced contractor at the time of tender, then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under the Contract.</p> | <p>Pls Confirm: Our understanding is that, The Contractor shall not be responsible for obtaining approvals required for the starting the revenue operations such as CMRS and/or RDSO approval and other approvals/permits unless specifically agreed between the parties and the Contractor will only provide the necessary technical documentation which may be required by the Employer for obtaining such approvals.</p> | As per Tender Conditions |
| 172 | Vol-2 GCC, Cl.4.4.(g) Page no 20 | <p>(g) If the Contractor shall suffer delay by reason of failure by any Designated Contractor to meet the specified installation interfacing and co-ordination, completion dates, which delay shall be caused otherwise than by fault of the Contractor, or, if compliance with sub-clause (f) herein shall involve the Contractor in delay beyond that which could be reasonably foreseen by an experienced contractor at the time of tender, then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under the Contract.</p> | <p>We proposed the clause to be revised as below: (g) If the Contractor shall suffer delay by reason of failure by any Designated Contractor to meet the specified installation interfacing and co-ordination, completion dates, which delay shall be caused otherwise than by fault of the Contractor, or, if compliance with sub-clause (f) herein shall involve the Contractor in delay beyond that which could be reasonably foreseen by an experienced contractor at the time of tender, then the Engineer shall take such delay into account in determining any extension of time and payment of cost to which the Contractor is entitled under the Contract.</p> | As per Tender Conditions |



Anil
 STI/EC/Tech
 45

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|---|---|
| 173 | Vol-2 GCC, Cl.4.4 Page no 21 | <p>If any act or omission of the Contractor whether directly or indirectly results in the delay in the execution of the works of a Designated Contractor, the Contractor, in addition to his liability in respect of liquidated damages if they become due, shall pay to the Employer, or the Engineer may deduct from Interim Payment Certificates such amount as the Engineer shall have certified in respect of additional payments or costs to the Designated Contractor in respect of such delay, subject to the ceiling limit specified in Clause 8.5.</p> <p>GCC 4.5.3 - The Contractor shall be responsible for observance by all Sub-contractors of all the provisions of the Contract. The Contractor shall be responsible for the acts or defaults of any Sub-contractor, his representatives or employees, as fully as if they were the acts or defaults of the Contractor, his representatives or employees and nothing contained in Sub-clause (a) of clause 4.5.2 shall constitute a waiver of the Contractor's obligations under this contract. The Contractor shall provide to the Engineer of all the Sub Contracts including terms, conditions and pricing. The Contractor shall endeavour to resolve all matters and payments amicably and speedily with the sub-contractors.</p> | <p>We proposed the clause to be revised as below:</p> <p>If any act or omission of the Contractor whether directly or indirectly results in the delay in the execution of the works of a Designated Contractor, the Contractor, in addition to his liability in respect of liquidated damages, if they become due, shall pay to the Employer, or the Engineer may deduct from Interim Payment Certificates such amount as the Engineer shall have certified in respect of additional payments or costs to the Designated Contractor in respect of such delay, provided such deductions shall be reasonable and shall be subject to the maximum limit of 5% of the Contract Price.</p> | As per Tender Conditions |
| 174 | Vol-2 GCC 4.5.3 Sub-Contractors Page no 21 | <p>GCC 4.5.3 - The Contractor shall be responsible for observance by all Sub-contractors of all the provisions of the Contract. The Contractor shall be responsible for the acts or defaults of any Sub-contractor, his representatives or employees, as fully as if they were the acts or defaults of the Contractor, his representatives or employees and nothing contained in Sub-clause (a) of clause 4.5.2 shall constitute a waiver of the Contractor's obligations under this contract. The Contractor shall provide to the Engineer of all the Sub Contracts including terms, conditions and pricing. The Contractor shall endeavour to resolve all matters and payments amicably and speedily with the sub-contractors.</p> | <p>Contractor can provide to the Engineer all the Sub Contracts including terms and conditions but without pricing. Also please remove the requirement of no claim undertaking from Sub Contractor. Accordingly, GCC 4.5.3 to be replaced as under:</p> <p>The Contractor shall be responsible for observance by all Sub-contractors of all the provisions of the Contract. The Contractor shall be responsible for the acts or defaults of any Sub-contractor, his representatives or employees, as fully as if they were the acts or defaults of the Contractor, his representatives or employees and nothing contained in Sub-clause (a) of clause 4.5 shall constitute a waiver of the Contractor's obligations under this contract. The Contractor shall provide to the Engineer of all the Sub Contracts including terms, conditions excluding the and pricing. The Contractor shall endeavor to resolve all matters and payments amicably and speedily with the sub-contractors.</p> | As per Tender Conditions |



Apis -
 (STI/GC/Track)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|---|
| 175 | Vol-2 GCC 4.5.4 Sub-Contractors Page no 21 | The contractor shall ensure that their sub contractors, material/equipment suppliers, consultants and other agencies deployed by them in connection with execution of the contract do not make any claim or raise any dispute before UPMRC. For this, necessary provision is to be made in the agreement between contractor and their sub contractors/consultants/other agencies. Similarly the agreement should also incorporate the provision of dispute resolution. An undertaking in the following format shall be submitted by contractor in respect of each agency:- "Name of work..... In connection with above work, M/s....., Contractor has/is engaging M/s....., as sub contractor (or consultant or material/equipment supplier or service provider). For this, the terms and conditions of agreement include necessary provisions for resolution of dispute if any arising between contractor and sub contractor. It is confirmed by the sub contractor that any claim/dispute arising out of the above work shall be resolved in terms of agreement and shall not be raised before UPMRC and also shall not make any claim against UPMRC before any forum/court, if entirely paid by the Employer to the Contractor. Signature of Contractor | The Sub-contractor's choice of any action upon any breach under the contract to be allowed without any restraintment. Accordingly, GCC 4.5.4 to be replaced as under: GCC 4.5.4 - The contractor, upon no breach of any payment obligation by UPMRC to the Contractor, shall ensure that their sub contractors, material/equipment suppliers, consultants and other agencies deployed by them in connection with execution of the contract do not make any claim or raise any dispute before UPMRC. For this, necessary provision is to be made in the agreement between contractor and their sub contractors/consultants/other agencies. Similarly the agreement should also incorporate the provision of dispute resolution. An undertaking in the following format shall be submitted by contractor in respect of each such agency..... "Name of work..... In connection with above work, M/s....., Contractor has/is engaging M/s....., as sub contractor (or consultant or material/equipment supplier or service provider). For this, the terms and conditions of agreement include necessary provisions for resolution of dispute if any arising between contractor and sub contractor. It is confirmed by the sub contractor that any claim/dispute arising out of the above work shall be resolved in terms of agreement and shall not be raised before UPMRC and also shall not make any claim against UPMRC before any forum/court, if entirely paid by the Employer to the Contractor. Signature of Contractor | As per Tender Conditions |
| 176 | Vol-2 GCC 4.10 Sufficiency of Accepted Contract Amount Page no 24 | The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price. Unless otherwise stated in the Contract, the Contract Price shall cover all his obligations under the Contract and all things necessary for the proper design, execution and completion of the Works, testing and commissioning (including Integrated Testing and Commissioning) and remedying of any defects | We understand that the accepted Contract amount is limited to the Pricing Document as provided by Employer and limited to the timelines provided under the Contract. Please confirm | As per Tender Conditions |
| 177 | Vol-2 GCC 5.8 Intellectual Property Rights and Royalties Page no 36 | If any patent, registered design or software is developed by the Contractor specifically for the Works, the title thereto shall vest in the Employer and the Contractor shall grant to the Employer a non-exclusive irrevocable and royalty-free licence (carrying the right to use, repair, copy, modify, enhance, adapt and translate in any form such Software for his own use. | Please note that any IPR developed by the Contractor shall vest in the Contractor. Accordingly, this clause should be modified as under: If any patent, registered design or software is developed by the Contractor specifically for the Works, the title thereto shall vest in the Employer Contractor and the Contractor shall grant to the Employer a non-exclusive irrevocable and royalty-free license (carrying the right to grant sub-license) to use, repair, copy, modify, enhance, adapt and translate in any form such Software for his own use for the Project. | As per Tender Conditions |

APRIL
(S T E L G C / T R A C K)



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|---|
| 178 | Vol-2 GCC 6.4 Labour Laws Page no 38 | The decision of Engineer with regard to the merits of imposition of penalty, determination of non-compliance and amount of penalty shall be final and binding on Contractor. The 'Contract' under this sub-clause shall include any workmen employed by contractor working within premises of Works at Employer's establishment whether directly or through Sub-Contractor etc. | Please note that there is a dispute resolution mechanism provided in the contract and either party should be entitled to have recourse to such dispute resolution. Accordingly request for deletion of the sentence which states that the Engineer's decision shall be final and binding. In para e) following change is required: The decision of Engineer with regard to the merits of imposition of penalty, determination of non-compliance and amount of penalty shall be final and binding on Contractor. The Contract under this sub-clause shall include any workmen employed by contractor working within premises of Works at Employer's establishment whether directly or through Sub-Contractor etc. | As per Tender Conditions |
| 179 | Vol-2 GCC, Cl.7.8 Ownership of Plant and Materials Page no 42 | Each item of Plant, goods, and Material shall become the property of the Employer, when it is delivered to Site or payment thereof, either in part or full, has been made. The Contractor shall however continue to bear the risk in respect of such items which continue to remain in his custody. | ALSTOM proposes to transfer the ownership upon delivery at Site. Accordingly, we request to change this clause 7.8 as under: The plant, goods & material shall become the property of the Employer, when it is delivered to Site and payment against which have been made in part or full against Indemnity Bond/ Safe Custody Bank Guarantee. will remain under the contractor's custody. The contractor shall be responsible for its safety and will bear all the risks till taken over by the employer. | As per Tender Conditions |
| 180 | Vol-2 GCC 7.12.4 Failure to Pass Tests Page no 45 | If the Works, or a part thereof, or a Section, fail to pass Integrated Testing and Commissioning and the Contractor in consequence proposes to make any adjustment or modification to the Works or a part thereof, or a section, the Engineer may, with the approval of the Employer, instruct the Contractor to carry out such adjustment or modification, at his own cost and to satisfy the requirements of Integrated Testing and Commissioning within such time as the Employer / Engineer may deem to be reasonable. | Please specify Contractor's entitlement to extension of time and cost in the event of failure to pass test/delay in tests due to reasons not attributable to the Contractor. | As per Tender Conditions |
| 181 | Vol-2 GCC SCC Cl.8.5 Page no 47 | Liquidated Damages for Delay | Please confirm if the Liquidated Damages applicable on a particular Key Date shall be refunded on the achievement of the subsequent Key Date. | As per Tender Conditions |



Amit
(SME/GC/Trade)

D. K. Singh

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|---|
| 182 | Vol-2 GCC 8.8 Consequence of Suspension Page no 49 | <p>The Contractor shall not be entitled to extra cost (if any), incurred by him, during the period of suspension of Work, if such suspension is</p> <p>a. provided for in the Contract, or b. necessary for proper execution of Works or by reasons of weather condition or by the part of the Contractor, or c. necessary for the safety of Works or any part thereof or d. necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site or e. to ensure safety and to avoid disruption of traffic and utilities, as also to permit fast repairs and restoration of any damaged utilities, or</p> <p>If suspension is ordered by the Engineer for reasons other than those mentioned in sub-clause 8.8 then the Contractor shall be entitled for extension of time and the compensation for this extension period shall be paid for idle labour as per the daily rate of wages as per Minimum Wages Act and 70% of the rate for hire charges for idle plant & machinery (excluding cost of fuel and lubricant). The contractor shall have to submit documentary proof for idleness of these resources. In addition to this 15% extra on this amount shall be paid to cover overhead cost.</p> | <p>Contractor not entitled to cost compensation if suspension is provided for in the Contract. Also limits imposed on the amount of cost entitlement. The reason for suspension virtually generic. No right for termination for the Contractor in the event of pro-longed suspension. Accordingly, we request the following changes to the clause:</p> <p>The Contractor shall not be entitled to extra cost (if any), incurred by him, during the period of suspension of Work, if such suspension is below 90 days; and</p> <p>a. provided for in the Contract; or b. necessary for proper execution of Works or by reasons of weather condition or by some reason of default on the part of the Contractor, or c. necessary for the safety of Works for the reasons attributable to Contractor's default or any part thereof or d. necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site, provided such necessity is arising out of Contractor's default solely or e. to ensure safety and to avoid disruption of traffic and utilities, as also to permit fast repairs and restoration of any damaged utilities, or</p> <p>If suspension is ordered by the Engineer for reasons other than those mentioned in sub-clause 8.8 then the Contractor shall be entitled for extension of time and the compensation for this extension period shall be paid for idle labour as per the daily rate of wages as per Minimum Wages Act and 70% of the rate for hire charges for idle plant & machinery (excluding cost of fuel and lubricant). The contractor shall have to submit documentary proof for idleness of these resources. In addition to this 15% extra on this amount shall be paid to cover overhead cost. If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 30 days or 45 days in the aggregate together with all other previous suspensions, the Contractor may request the Employer's permission to proceed. If the Employer does not give permission within 14 days after being requested to do so, the Contractor may, by giving notice to the Employer, terminate the Contract and the Contractor shall be compensated as per Sub-Clause 13.3.4 [Payment on Termination].</p> | As per Tender Conditions |
| 183 | Vol-2 GCC 8.9 Resumption of Work Page no 50 | <p>After receipt of permission or of an instruction to proceed, the Contractor shall, after notice to the Engineer, and together with the Engineer, examine the Works, Plant, Rolling Stock and Materials affected by the suspension. The Contractor shall, make good any deterioration or defect in or loss of the Works, Plant, Rolling Stock and Materials, which has occurred during the suspension.</p> | <p>After receipt of permission or of an instruction to proceed, the Contractor shall, after notice to the Engineer, and together with the Engineer, examine the Works, Plant, Rolling Stock and Materials affected by the suspension. The Contractor shall at the cost of the Employer make good any deterioration or defect in or loss of the Works, Plant, Rolling Stock and Materials, which has occurred during the suspension.</p> | As per Tender Conditions |



Apply (ST/EGC/Track)
 DCM/2019/03

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 184 | Vol-2 GCC 9.1 Taking Over of the works Page no 50 | <p>(a) issue the Taking Over Certificate to the Contractor, stating the date on which the Works or Section were completed, including the Tests on Completion and Integrated Testing and Commissioning where ever applicable as per the contract in accordance with the Contract if defects and/or outstanding works are minor that does not affect the use and safety of the Works or Section for their intended purposes. The list of such works along with the target date of completion for each work shall be enclosed with the taking over certificate and completion of all these works /rectification of defects within the stipulated time shall be the responsibility of the contractor and any failure in it may be considered a reason by the Engineer to cancel the taking over certificate issued earlier; or</p> <p>(b) reject the application, giving his reasons and specifying the work required to be done by the Contractor to enable the Taking Over Certificate to be issued. The Contractor shall then complete such work before issuing a further notice under this Sub-Clause.</p> | <p>Deemed taking over to be allowed. Request addition of the following text at the end of sub-clause 9.1:</p> <p>"(c) In the event of failure to issue the Taking Over Certificate within such 14 days as specified aforesaid or fails to reject the application by giving the reason/s which is/are not complied in accordance with the Contract, in such event the Works or any part thereof shall be deemed to have been taken over on the day of notice applied to the Engineer for issuance of Taking Over Certificate. Taking Over Certificate shall be construed deemed issued accordingly."</p> | As per Tender Conditions |
| 185 | Vol-2 GCC, Cl.9.2 Taking over of Parts of the Works Page no 51 | <p>The Engineer may, at the sole discretion of the Employer issue a Taking Over Certificate for any part of the Permanent Works by following the procedure stipulated in Clause 9.1 above if:</p> <p>(a) The Employer uses that part of the Works for revenue service before the Taking Over Certificate is issued for the entire work.</p> <p>(b) The balance part is not completed not due to the fault of the contractor and contractual date of completion for the completed part is over.</p> | <p>Use of any part of the Works for revenue service or not due to the fault of the contractor, shall be subject to taking over. Accordingly, we request to change GCC clause 9.2 as under:</p> <p>The Engineer shall may, at the sole discretion of the Employer issue a Taking Over Certificate for any part of the Permanent Works by following the procedure stipulated in Clause 9.1 above if:</p> <p>(a) the Employer uses that part of the Works for revenue service before the Taking Over Certificate is issued for the entire work.</p> <p>(b) the balance part is not completed not due to the fault of the contractor and contractual date of completion for the completed part is over.</p> | As per Tender Conditions |



Amiz.
ST/ET/AC/Travee)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|---|
| 186 | Vol-2 GCC 10.1 Completion of Outstanding Work and Remedying Defects Page no 51 and Special Conditions of Contract – Schedules-4 (CONTRACTOR'S WARRANTY) Page no 47 | "Defects Liability Period" shall mean the defects liability period stated in the Special Conditions of Contract calculated from the date of taking over of the Works. Provided that, if any part of the Works or sub-systems or component of that part has been replaced, renewed or repaired except minor repair, or sub-system or components of that part shall start from the date such replacement, renewal or repair has been completed to the satisfaction of the Engineer. Schedule-5 (c) He will replace free of cost to the Employer any defect or failure of equipment provided in the Works for a period of 24 months from the last date of taking over of a Section of the Works; and (d) He agrees that should any modification be required to any equipment or component as a consequence of failure, the period of 24 months shall recommence from the date when the modified part is commissioned into service, and such modification shall be carried out free of cost to the Employer to all such equipment or component. However, the DLP in all cases (including those for repair/replacement shall not be extended beyond 24 months from the date of Taking over of that part of the Works. | Please provide a cut off date for the defect liability period of the parts repaired/replaced/renewed. The defect liability period (including that of the repaired/replaced/renewed part) should come to an end after a certain period of taking over. Likewise, the extension of Contract Period should also have a cut off date. Please amend GCC 10.1 and Schedule-5 as under: "Defects Liability Period" shall mean the defects liability period stated in the Special Conditions of Contract calculated from the date of taking over of a Section of the Works. Provided that, if any part of the Works or sub-systems or component of that part has been replaced, renewed or repaired except minor repair, the "Defects Liability Period" in respect of that part or sub-system or components of that part shall start from the date such replacement, renewal or repair has been completed to the satisfaction of the Engineer. However, the DLP in all cases (including those for repair/replacement shall not be extended beyond 24 months from the date of Taking over of that part of the Works. Schedule-5 (c) He will replace free of cost to the Employer any defect or failure of equipment provided in the Works for a period of 24 months from the last date of taking over of a Section of the Works; and (d) He agrees that should any modification be required to any equipment or component as a consequence of failure, the period of 24 months shall recommence from the date when the modified part is commissioned into service, and such modification shall be carried out free of cost to the Employer to all such equipment or component. However, the DLP in all cases (including those for repair/replacement shall not be extended beyond 24 months from the date of Taking over of that part of the Works. | As per Tender Conditions |
| 187 | Vol-2 GCC 10.3 Extension of Contract Period Page no 51 | The Contract Period shall be extended by a period, after the Works are taken over, during which the Works or any Section or item of Plant, Rolling Stock, cannot be used, for the purposes for which they are intended, by reason of a defect or damage. However, the DLP in all cases (including those for replacement, renewal or repair) shall not be extended beyond 36 months from the date of Taking over of the Works. | Please provide a cutoff date for the defect liability period overall. Accordingly, please modify clause 10.3 as under: The Contract Period shall be extended by a period, after the Works are taken over, during which the Works or any Section or item of Plant, Rolling Stock, cannot be used, for the purposes for which they are intended, by reason of a defect or damage. However, the DLP in all cases (including those for replacement, renewal or repair) shall not be extended beyond 36 months from the date of Taking over of the Works. | As per Tender Conditions |



Alia
(STIE/G/T/Track)

Reply to Pre-Bid Queries - KNPA GT-03

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| 188 | Vol-2 GCC 11.2.5 Interest in Case of Delay in Repayment of Advances Page no 55 | Should there be any delay in progress and completion of work, as a result of which it is not possible to recover the advance and interest thereon, before the original date of completion stipulated in the contract, then the interest to be charged from the contractor on the remaining portion of advance beyond the completion date specified in the contract, shall be 2% above State Bank of India prime lending Rate or 10% whichever is higher. | Delay LD is applicable hence no interest to be levied and hence this sub-clause 11.2.5 (a) needs to be deleted. Should there be any delay in progress and completion of work, as a result of which it is not possible to recover the advance and interest thereon, before the original date of completion stipulated in the contract, then the interest to be charged from the contractor on the remaining portion of advance beyond the completion date specified in the contract, shall be 2% above State Bank of India prime lending Rate or 10% whichever is higher. | As per Tender Conditions |
| 189 | Vol-2 GCC 12.3 and 12.4 Employer's Variation & Variation Procedure Page no 63 | "Employer's Variation" means a change in the Employer's Requirements which makes necessary alteration or modification of the Design, quality or scope of Works as described by or referred to in the Employer's Requirements. Changes to any sequence, method or timing of manufacture, testing and Commissioning including Integrated Testing and Commissioning and changes to any part of the Site or access there to will not constitute Employer's Variation. An Employer's Variation shall be requested and implemented in accordance with and subject to the following provisions: In the event of the Employer: a. failing to pay the Contractor, without reasonable cause, the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.5 within which payment has to be made, subject to any deduction that the Employer is entitled to make under the Contract, or b. becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, | Changes called by the Employer to any sequence, method or timing of manufacture, testing and Commissioning including Integrated Testing and Commissioning and changes to any part of the Site or access should be construed as Employer's Variation. Accordingly, we request following change: "Employer's Variation" means a change in the Employer's Requirements which makes necessary alteration or modification of the Design, quality or scope of Works as described by or referred to in the Employer's Requirements. Changes to any sequence, method or timing of manufacture, testing and Commissioning including Integrated Testing and Commissioning and changes to any part of the Site or access there to will not constitute Employer's Variation. An Employer's Variation shall be requested and implemented in accordance with and subject to the following provisions: | As per Tender Conditions |
| 190 | Vol-2 GCC 13.3.1 Notice by Contractor Page no 67 | In the event of the Employer: a. failing to pay the Contractor, without reasonable cause, the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.5 within which payment has to be made, subject to any deduction that the Employer is entitled to make under the Contract, or b. becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, | Please also add that in the event of breach of any other obligation by the Employer, the Contractor shall be entitled to terminate the Contract. Accordingly, we request to add the following: "(c) the Employer substantially fails to perform its obligations under the Contract. | As per Tender Conditions |



Handwritten:
Amit
(S/TE/GC/Track)

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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|---|---|
| 191 | Vol-2 GCC 13.3.2 Contractor's Entitlement to Suspend the Work Page no 68 | The Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.6, within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work or reduce the rate of work. | Please also add that in the event of breach of any other obligation by the Employer, the Contractor shall be entitled to suspend the Contract and in case the suspension is prolonged then the Contractor shall be entitled to terminate the Contract. Accordingly request for following changes to the provision: "The Contractor may, (a) if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.6, within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, or (b) if the Employer substantially fails to perform its obligations under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work." If the suspension has continued for more than 30 days or 45 days in the aggregate together with all other previous suspensions, the Contractor may request the Employer's permission to proceed. If the Employer does not give permission within 14 days after being requested to do so, the Contractor may, by giving notice to the Employer, terminate the Contract and the Contractor shall be compensated as per Sub-Clause 13.3.4 [Payment on Termination]. | As per Tender Conditions |
| 192 | Vol-2 GCC 11.2.1 Mobilisation Advance Page no 54 | Mobilization advance shall be paid against acceptable Bank Guarantee of 110% of the advance taken by the contractor, from a scheduled commercial bank in India. In case of advance, the Contractor, once the 50% mobilization advance has been recovered, shall have a one-time option to reduce the Bank Guarantee for the mobilization advance by the amount recovered. | Contractor should be given opportunity to reduce the Advance Bank guarantee proportionate to the recovered amount once in every 3 months. Accordingly request following modification: "Mobilization advance shall be paid interest free against acceptable Bank Guarantee from a scheduled commercial bank in India; The value of Bank Guarantee taken towards security of "Mobilization advance" shall be 110% of the advance taken by the contractor. The Contractor, once the 50% mobilization advance has been recovered, shall have a one-time option once in every three months to reduce the Bank Guarantee for the mobilization advance by the amount recovered. | As per Tender Conditions |



Apur
 (S) T/E/GC/Track

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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|---|
| 193 | Vol-2 GCC 14.1 Indemnity Page no 69 | <p>The Contractor shall indemnify and hold harmless the Employer, the Engineer, the Designated Contractors, representatives and employees from and against all actions, suits, proceedings, claims, damages, losses, expenses and demands of every nature and description, by reasons of any act or omissions of the Contractor, his representative or his employees in the execution of the Works, including professional services provided by the Contractor or in the guarding the same.</p> <p>These indemnification obligations shall include but not be limited to claims, damages, losses, damage proceedings, charges and expenses which are attributable to:</p> <p>(a) sickness, or disease, or death of, or injury to any person; and</p> <p>(b) loss of, or damage to, or destruction of any property (other than the Works) including consequential loss of use; and</p> <p>(c) loss, damage or costs arising from the carriage of Plant, Rolling Stock and Materials and/or ownership or chartering of marine vessels by the Contractor, or any sub-contractor of any tier.</p> <p>The Contractor shall also indemnify and save harmless the Employer from and against all claims and proceedings on account of infringements of patents rights, design, trademark name etc as detailed out in clause 5.8.</p> <p>All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to the Employer, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.</p> | <p>The Contractor's liability for indemnity should also taken into consideration the negligent acts/omissions of the Employer and other personnel engaged by the Employer. Also consequential losses cannot be accepted. The decision of the Engineer as to compensation claimed shall be not final and binding. Accordingly, we request to change GCC clause 14.1 as under:</p> <p>The Contractor shall indemnify and hold harmless the Employer, the Engineer, the Designated Contractors, representatives and employees from and against all actions, suits, proceedings, claims, damages, losses, expenses and demands of every nature and description, by reasons of any act or omissions gross negligence or wilful misconduct of the Contractor, his representative or his employees in the execution of the Works, including professional services provided by the Contractor or in the guarding the same.</p> <p>These indemnification obligations shall be for include but not be limited to claims, damages, losses, damage proceedings, charges and expenses which are attributable to:</p> <p>a) sickness, or disease, or death of, or injury to any person; and</p> <p>b) loss of, or damage to, or destruction of any property (other than the Works) including consequential loss of use arising out of gross negligence of the Contractor; and</p> <p>c) loss, damage or costs arising from the carriage of Plant, Rolling Stock and Materials and/or ownership or chartering of marine vessels by the Contractor, or any sub-contractor of any tier.</p> <p>The Contractor shall also indemnify and save harmless the Employer from and against all claims and proceedings on account of infringements of patents rights, design, trademark name etc as detailed out in clause 5.8.</p> <p>All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to the Employer, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.</p> | As per Tender Conditions |



Alia
(SPE/GC/Task)

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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|---|
| 194 | Vol-2 SCC, 14.1 Page no 26 | The last para of Clause 14.1 of GCC shall not be applicable in this contract and the Contractor shall include such risks also in his insurance cover | Request GCC last para to be reinstated as under, after aforesaid rewording of replaced para: The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover. | As per Tender Conditions |
| 195 | Vol-2 GCC 14.6 Limitation of Liability Page no 72 | Except as provided otherwise in these Conditions, neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. The total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price. Except that this Sub-Clause shall not limit the liability of the Contractor: (a) under Sub-Clauses 4.18, 4.19 and 14.1 (b) under any other provisions of the Contract which expressly impose a greater liability, (c) in cases of fraud, willful misconduct or illegal or unlawful acts, or (d) in cases of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances. | Please delete reference to Clause 14.1 (Indemnity) as the carve out to Limit of Liability and to align the clause with generally prevalent contract standards. Accordingly, the following change is requested under GCC 14.6: Except Notwithstanding as provided otherwise in these Conditions, neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. The total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price. Except that this Sub-Clause shall not limit the liability of the Contractor: (a) under Sub-Clauses 4.18, 4.19 and 14.1 (b) under any other provisions of the Contract which expressly impose a greater liability, (c) in cases of fraud, willful misconduct or illegal or unlawful acts, or (d) in cases of acts or omissions arising out of gross negligence of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances. | As per Tender Conditions |
| 196 | Vol-2 GCC 17.3 No legal action till dispute settlement procedure is exhausted Page no 77 | Any and all Disputes shall be settled in accordance with the provisions of Clause 17. No action at law concerning or arising out of any Dispute shall be commenced unless and until all applicable Dispute resolution procedures set out in Clause 17 shall have been finally exhausted in relation to that Dispute or any Dispute out of which that Dispute shall have arisen with which it may be or may have been connected. | Please delete this provision since it is against the legal right of the affected to seek legal remedy as may be available to it prior to or during the dispute resolution process. Accordingly, the following change is requested under GCC 17.3: Any and all Disputes shall be settled in accordance with the provisions of Clause 17. No action at law concerning or arising out of any Dispute shall be commenced unless and until all applicable Dispute resolution procedures set out in Clause 17 shall have been finally exhausted in relation to that Dispute or any Dispute out of which that Dispute shall have arisen with which it may be or may have been connected | As per Tender Conditions |



Anis
(STIEGC/Trade)

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| 197 | Vol-2 GCC 17.5 Two Stages for Dispute Resolution Page no 77 | <p>Disputes shall be settled through two stages:</p> <p>a. Conciliation procedures as established by "The Arbitration and Conciliation Act-1996" & amended by the Arbitration & Conciliation (Amendment) Act, 2015 and any statutory modification or reenactment thereof and in accordance with this Clause. In the event this procedure fails to resolve the Dispute then;</p> <p>b. Arbitration procedures undertaken as provided by "The Arbitration and Conciliation Act -1996" & amended by the Arbitration & Conciliation (Amendment) Act, 2015 and any statutory modification or re-enactment thereof and in accordance with this Clause.</p> | <p>Arbitration procedures undertaken as provided by Rules of Arbitration of ICC "The Arbitration and Conciliation Act -1996" (as amended from time to time) and in accordance with this Clause</p> | <p>As per Tender Conditions</p> |

Avian
STIEGLY (Tolu)



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| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 198 | Vol-2 GCC 17.9 Arbitration Page no 79 | <p>17.9..... (a) Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is upto Rs.5 million and to a panel of three Arbitrators if total value of claims is more than Rs.5 million. The Employer shall provide a panel of three arbitrators which may also include UPMRC officers for the claims upto Rs.5 million and a panel of five Arbitrators which may also include UPMRC officers for claims of more than Rs.5 million. The Contractor may opt 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 or if the Contractor choose not to appoint any arbitrator from the panel provided by UPMRC, then the Contractor may choose to appoint retired judge of any High Court or Supreme Court of India are to be appointed. The Employer may shall also opt choose one Arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only or may choose to appoint retired judge of any High Court or Supreme Court of India. The Arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/ demand of appointment of Arbitrator from either party.</p> <p>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 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. The arbitration proceedings shall be held in Lucknow/UP only. The language of proceedings that of documents and communication shall be English.</p> | <p>We request to modify the procedure with respect to the appointment of arbitrators. Accordingly, the following change be made to GCC 17.9:</p> <p>(a) Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is upto Rs.5 million and to a panel of three Arbitrators if total value of claims is more than Rs.5 million. The Employer shall provide a panel of three arbitrators which may also include UPMRC officers for the claims upto Rs.5 million and a panel of five Arbitrators which may also include UPMRC officers for claims of more than Rs.5 million. The Contractor may opt 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 or if the Contractor choose not to appoint any arbitrator from the panel provided by UPMRC, then the Contractor may choose to appoint retired judge of any High Court or Supreme Court of India are to be appointed. The Employer may shall also opt choose one Arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only or may choose to appoint retired judge of any High Court or Supreme Court of India. The Arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/ demand of appointment of Arbitrator from either party. 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. The arbitration proceedings shall be held in Lucknow/UP only. The language of proceedings that of documents and communication shall be English.</p> | As per Tender Conditions |
| 199 | Vol-2 GCC 17.10 Interest on Arbitration Award Page no 83 | <p>Where the arbitral award is for the payment of money, no interest shall be payable on whole or any part of the money for any period, till the date on which the award is made.</p> | <p>Interest on Arbitration Award to be allowed. Accordingly, we request GCC clause 17.10 to be deleted:</p> <p>Arbitration Award- 17.10-Where the arbitral award is for the payment of money, no interest shall be payable on whole or any part of the money for any period, till the date on which the award is made.</p> | As per Tender Conditions |



Avin (STI/SC/Track)

Reply to Pre-Bid Queries - KNPAAGT-03


| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
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| 200 | Additional Clause to be included Change in laws and regulations | | As of now the scope of change in law is very limited and does not take into consideration changes to other statues etc., Kindly include additional clause to cover the same as under Change in laws and regulations If, after the date 28 days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. We request to delete the requirement of Indemnity Bond. Accordingly, seek to delete SCC clause 50: | As per Tender Conditions |
| 201 | Vol-2 SCC 50, Page no 31 | Indemnity Bond for materials to be supplied by the Contractor. The Contractor shall submit a indemnity bond in the format given in Schedule 7 against payments made for Plant and Equipment delivered to Kanpur/Agra Stores/works. | Indemnity Bond- The Contractor shall submit a indemnity bond in the format given in Schedule 7 against payments made for Plant and Equipment delivered to Kanpur/Agra Stores/works. | As per Tender Conditions |
| 202 | Vol-2 SCC 51 Page no 31 | Safe Custody Bank Guarantee for materials to be supplied by the Employer. The contractor shall submit a safe custody Bank guarantee in the format given in schedule 8 for the materials to be supplied by the Employer to the contractor at Kanpur/Agra for the work. | We request to delete the requirement of Safe Custody Bank Guarantee. | Please refer Annexure 13, 14 of Addendum 1. |
| 203 | Vol-5 B.O.Q. (PART I) – GENERAL PRINCIPLES 1.3.2(c) Page no 2 | 1.3.2 Allowances in rates c) Paying fees and giving notices to Authorities; | We understand that all the statutory permission required to be taken for the project shall be the responsibility of the Employer. Only the permits which are necessarily to be taken by the Contractor in the name of the Contractor for execution of the project shall be in the scope of the Contractor. Kindly Confirm | As per Tender Conditions |
| 204 | Vol-5 B.O.Q. (PART I) – GENERAL PRINCIPLES 1.3.2(h) Page no 3 | 1.3.2 Allowances in rates h) The protection and safety of UPMRC trains and services; | Requirement of protection and safety of UPMRC trains and services in Allowances in rate is not clear. Request UPMRC to delete the requirement as being Track contractor can not be solely responsible for protection of UPMRC train. Else elaborate the UPMRCL requirement under this account | As per Tender Conditions |

Alia
(STI/SC/Track)



Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 205 | Vol-2 GCC Cl. 4.2.4 Page no 18 & SCC Schedule 3 Page no 43 | Parent Company Guarantee (PCG) | We request to delete provision of PCG wherever appearing under the Contract. | Please refer Annexure 31 & 40 of Addendum 1. |
| 206 | Vol. 1: NIT_ 1.1.4.2 Minimum Eligibility Criteria: Page no 6 | A. Work Experience: The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: A.1. Work Experience: i. At least one "Similar Work" of value of Rs. 212 Crores or more. or ii. Two "Similar Works" each of value Rs.132.50 Crores or more. or iii. Three "Similar Works" each of value Rs.106 Crores or more. | We understand that if any project has been completed in last 7 years, the complete value of that project/credentia shall be considered against this requirement if full value of the work is done by the same joint venture or in their percentage participation in that JV. Kindly Confirm. | As per Tender Conditions Please refer clause 1.1.4.2 A(vii) of NIT |
| 207 | Vol. 1: NIT_ 1.1.4.2 (B) Minimum Eligibility Criteria Page no 8 | (iv) T4 - Annual Turnover: The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system in last five financial years should be Rs.106 Crores. | We request UPMRCL to allow bidder to include complete construction turnover to meet the requirement of Annual Turnover of INR 106 Cr. Instead of annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted track components /fastening systems only | Please refer Annexure 3 of Addendum 1. |
| 208 | Vol. 1: NIT_ 1.1.4.2 (B)(IV) Minimum Eligibility Criteria: Page no 8 | All partners put together should meet the minimum requirement as per their percentage participation. Example: Let Member-1 has percentage participation = M and Member - 2 has =N. Let the average annual turnover of Member-1 is 'A' and that of Member-2 is 'B', then the average annual turnover of JV will be = (AM+BN)/100. | We request UPMRCL to allow bidder to meet the Average Turnover requirement in totality after applying algebraic sum of all members in case of Joint Venture / Consortium. For e.g., if there are three members in a Joint Venture/Consortium and the Average Turnover of the respective members are 'X', 'Y' and 'Z', then the evaluation for the above criteria will be based on the algebraic aggregate of all 3 members i.e. 'X+Y+Z'. | As per Tender Conditions |
| 209 | B. Financial Standing: Clauses No 1.1.4.2 (Page no-8) Vol-1 | (iv) T4 - Annual Turnover: The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system in last five financial years should be Rs.106 Crores. | T4 - Annual Turnover: The average annual turnover from construction in last five financial years should be Rs.106 Crores. As most of the projects executed by contractors are composite works and bifurcating the components in the balance sheet is not possible. | Please refer Annexure 3 of Addendum 1. |
| 210 | Vol-1 Annexure-3A of NIT Page no 17 | Description: Total value of construction of ballastless/ballasted track and supply of ballastless/ballasted track component/fastening system as per audited financial statements. | Kindly consider the complete construction turnover for evaluation as most of the project done by contractor's are composite work and balance sheets are made accordingly, it would be hard to bifurcate the turnover item wise. | Please refer Annexure 5 of Addendum 1. |


 U.P. Metro Rail Corporation Ltd.
 DGM/Track
 (ST/EG/Track)
 Date:

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|--|
| 211 | Vol-1 Annexure -3B of NIT Page no 18 | 3rd Column of table Contract value in Rupees equivalent (give only the value of work assigned to the applicant) (Assume inflation as given in Annexure-1) | Kindly remove - (Assume inflation as given in Annexure-1) as inflation has no implication and make no reliance on work on hand value. | As per Tender Conditions. |
| 212 | Vol-1 Form of Tender Appendix-1 vi. Amount of advance payment Page no 136 | Mobilization Advance - 5 % of original contract value in two equal installments. | We request you to kindly increase the mobilization advance to 10% of the contract value.As the project is a combination of 2 different site at two different location. | As per Tender Conditions. |
| 213 | Vol-3 PS Clause 2 Scope Point no 07 Page no 8 | Scope of work One 4 wheeler vehicle for kanpur and Agra project shall be provided for site engineer and Employer by the contractor to facilitate inspection and execution of track work during entire contractual period. | Contractual period = Completion period = 48 months or Contractual period = Completion period + DLP = 48 + 24 = 72 months | 1. One Vehicle during entire Contractual Period excluding DLP. 2. One Vehicle in Kanpur during installation of ballastless track in the night. 3. One Vehicle in Agra during installation of ballastless track in the night. |
| 214 | Vol-2, SCC Cl. 51 Additional Cl. Page no 31 & Schedule 8 Page no 62 | Special Conditions of Contract Clause 51 & Schedule -8 (Bank Guarantee for Safe Custody for material supplied by UPMRC to the contractor. | Value of free issue material Bank Guarantee mentioned as INR 218 million in clause 51 & INR 222 million in the format. Kindly clarify. | Please refer Annexure 13, 14 of Addendum 1. |
| 215 | Vol-2, SCC Clause 11.1.3(b) Page no 22 | Special Conditions of Contract Clause 11.1.3 Adjustment in Contract Price (b) Adjustment in contract price on FOREIGN PORTION of the rate of the BOQ items on account of inflation shall be applicable only for item no. 7.1 & 7.2 (Buffer Stop) of Bill No. SPM-1 | Kindly provide the price variation on Bill No SPM-2 as it includes the imported items and during the current scenario lots of fluctuation is happening in foreign currency market. | As per Tender Condition |
| 216 | Vol-5, Clause 1.3.4 of BOQ Part I - General Principles Page no 4 | The Tenderer shall price the Bills of Quantities in Indian Rupees and/or in freely convertible international trading currencies only. Attention is drawn to Clause 19 of the Special Conditions of Contract. | There is no clause 19 in Special Conditions of Contract. | Please refer page no. 12 of SCC |


 (S1/E/GC/Track)

Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | JPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 217 | Vol-5 (Page No-46) APPENDIX C PART PAYMENT SCHEDULE | <p>i) Supply of MSS at site/store in Kanpur & Agra in, undamaged conditions along other necessary documents & inspection reports – Supply of MSS schedule should strictly match with tentative requirement at site and Contractor is to take approval of Engineer for MSS supply schedule. Engineer may of Engineer for MSS supply schedule. Engineer may prepone or delay the supply of MSS after assessing the actual requirements at site.-Percentage for part payment -35%</p> <p>ii) Surveying, Placing of MSS and track slab construction etc-Percentage for part payment -35%</p> <p>iii) Rear work, loose bolt grouting and complete cleaning of the section as per employer's requirement, etc-Percentage for part payment -15%</p> <p>iv) Final tolerances and destressing as per employer's requirement, etc -Percentage for part payment -5%</p> <p>v) Testing and Commissioning of the section and Validation of Effectiveness of MSS by Independent Inspecting Agency-Percentage for part payment -10%</p> | <p>Kindly increase the supply percentage for part payment to 70% as it a major component & effect cash flow.</p> <p>Kindly lower to 10%</p> <p>Kindly lower to 5%</p> <p>Same</p> <p>Same</p> | Please refer Annexure 29 of Addendum 1. |
| 218 | Vol-1 NIT Cl. 1.1.2 Page no 5 | Date of Tender Submission -24.11.2020 | Request you to kindly extend the submission of tender by atleast 1 Month as we are required to prepare extensive technical submission & price from vendor .Who are taking longer than expected time. | Please refer Annexure 1 of Addendum 1 |
| 219 | Vol-1 (Page No-41) Clause C.25 | Format and signing of Tender | As per understanding we are required to submit one set of Original, one set of Copy & no soft copy with submission Kindly confirm. | As per Tender Conditions. Please refer clause D1.2 of ITT and 1.1.12 of NIT. |



Amit

(STE/GC/Track)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|--|--|
| 220 | Point no. 1 of Clause no. 6.4.4 (page no 49) of Chapter 6, Volume 3: Particular Specification | <p>6.4.4 Design of Track Slab with MSS</p> <p>i. Location of MSS: The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc. ii. The static and dynamic stiffness of the elastic pad must be</p> | <p>The Clause 6.4.8, points (1, 2 and 3) specify the functional requirement of MSS i.e. natural frequency less than 20Hz and insertion loss minimum 20Vdb at relevant frequency. Further, the clause no. 6.4.8, point (6) also mentions testing of MSS based on this functional requirement. As UP metro has already defined the functional requirement of MSS, we understand that the primary objective of the vibration study is to identify the locations where vibrations need to be mitigated which amounts to "Basic vibration study".</p> <p>A part of clause 6.4.4, point (i) reads "The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer". This scope amounts to detailed NV study and will have significant impact on the cost and scope of vibration study, cost of MSS (depending upon the thickness of the material according to the mitigation requirement), and the cost and scope of validation testing.</p> <p>On this background, we request you to delete following portion from the clause 6.4.4 – point (i) Location of MSS.</p> <p>"The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer".</p> | <p>The Employer has already identified tentative locations for provision of MSS in Kanpur and Agra both. The primary objective of the basic vibration study through Expert is to assess the requirement of vibration mitigation in the proposed areas identified by Employer and accordingly design the track structure with MSS to fulfill the requirement of the Tender and to achieve the vibration within the permissible limit.</p> |
| 221 | Point no. 6 of Clause no. 6.4.8 (page no 51) of Chapter 6, Volume 3: Particular Specification | <p>Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost.</p> | <p>This clause refers the validation of SN 1 to 4 (i.e. natural frequency, rail deflection and insertion loss) mentioned in the same section by site testing. However, as per the common practice followed world over, "insertion loss" value is the only measurement that is carried out to validate the effectiveness of installed MSS. The measurement of natural frequency and rail deflection is not carried out separately as insertion loss takes into account both these parameters.</p> <p>Compliance of rail deflection and natural frequency criteria specified in the tender can anyway be verified from the technical calculations of MSS. Hence, we suggest only a single parameter "insertion loss" to be measured by way of comparing vibration measurements at the tunnel walls of MSS and Non MSS section to validate the performance of MSS. Kindly confirm the acceptance of the same.</p> | <p>Please refer Annexure 20 of Addendum 1.</p> |
| 222 | Point no. 6 of Clause no. 6.4.8 (page no 51) of Chapter 6, Volume 3: Particular Specification | <p>Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each section where MSS has been provided. Employer may also engage a third party agency to substantiate above criteria at his own cost.</p> | <p>As UP metro has envisaged the use of MSS at three different section i.e. circular tunnel, box tunnel and viaduct station, one measurement at each of these location for both Kanpur and Agra metro (i.e. in all 6 measurements locations for track with MSS) will be done. Kindly confirm.</p> | <p>Please refer Annexure 20 of Addendum 1.</p> |


 (SIT/EG/Track)



Reply to Pre-Bid Queries - KNPA GT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--|---|
| 223 | Point no. (f) of Clause 6.4. (Page no 50) Chapter 6, Volume -3, PS | f. Design of the transition zone to avoid the sudden change in stiffness of the track and smoothen out the rail deflection. Two transition zones are to be adopted at entry and exit of each section of MSS. The transition zones should consist of suitable number of sections of each 15 metres. | The quantity of MSS material for transition zone depends on the number of MSS track stretches, number of sections in transition zone and length of each transition zone. The track length of required transition zones is not mentioned separately in BOQ. Kindly provide the same to estimate the quantity of MSS material for the transition zones. | Please refer Annexure 28 of Addendum 1. |
| 224 | Vol-3, PS Clause 6.4.1 Page no 47 | The objective of providing MSS is to substantially reduce structural vibrations propagating from track structure while passage of trains. MSS is to be strip bearing type with adjoining filler material of same quality and specification having less stiffness. | Any specific reason for strip bearing & filler material combination may be reviewed. MSS specification should be performance based and not material or layout based. The specification promotes usage of a particular proprietary product / party and restricts participation of other products which has already been well established in Metro projects in India. Limiting the specification to this specific design will allow only limited suppliers to participate. The ultimate objective is to attain the required mitigation values pertaining to insertion loss and natural frequency. The system which is economical and yet qualify with the desired requirements should be preferred. Request to get the clause amended accordingly. | Please refer Annexure 20 of Addendum 1. |
| 225 | Vol-3, PS Clause 6.4.2 Page no 47 | The general layout of full surface MSS with differential stiffness is given in the tender drawing (volume 4). It comprises of two separate materials having different stiffness values. The stiffer material in this system is named strip bearing and the softer material is named filler material. | Noted. Comments same as above. | Please refer Annexure 20 of Addendum 1. |
| 226 | General Requirements of Strip and Filler Mass Spring System | | Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1. |
| 227 | I. It should be full-surface (strip + filler) support for the slab. | | Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1. |
| 228 | Vol-3 Clause 6.4.3 of PS Page no 47,48 | VII. The elasticity of the pad must be based on the compressibility of the material & not on the shape of the product structure. | This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. It may not be incumbent upon a system to derive its elasticity from the product only in a specific way and thus such a requirement should not be used to restrict any system. The clause should be deleted or suitably modified as this specifies a particular type of material. | As per Tender Conditions. |
| 229 | | VIII. Any geometrical forms like dimples or notches or groves on the material surface must be avoided as this might influence the elasticity of the material in a negative manner due to sediments or dust. | This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. Pandrol MSS have a wavy form but they are covered on top and on the sides by geotextile mats which prevent any ingress of sediment or dust. Hence, this clause should be deleted or suitably modified as this specifies a particular type of material. | As per Tender Conditions. |
| 230 | | IX. Use of Binders/ softening agents/ plasticizers may be avoided in pad material as diffusion of same may stiffen the system. | This is in violation of provisions of DIN 45673-7 Clause 5.1.1.2. Such impositions on the required material should not be made to restrict any system. The clause should be deleted or suitably modified as this specifies a particular type of material. | As per Tender Conditions. |
| 231 | | Design of Track Slab with MSS | | Please refer Annexure 20 of Addendum 1. |



Apurva
 (STIE/GC/Track) DCam/Track

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|---|--|--|
| 232 | Vol-3 Clause 6.4.4 of PS Page no 49,50 | VIII. Thickness of MSS mat (to be provided in single layer only) should not exceed 40 mm. | Limiting the mat to a certain thickness and to a single layer limits the possibilities for the choice of the material used to manufacture the mats and for the choice of the right stiffness in order to ensure proper performance. Mats in 2 layers is permitted by note 1 under Clause 5.1.1.2 of DIN 45673-7:2010-08. - "NOTE 1 Elastomeric mats can also be laid in multiple layers." This is necessary to ensure performance as required. Every material has a different ratio thickness/stiffness and limiting the thickness to a maximum goes against the principle of "performance driven", specifications as recommended by RDSO's Noise and Vibration guidelines, Sept'15. (Note- There is no limitation also on thickness as per DIN 45673-7:2010-08). Further, mats installed in 2 layers, offer an easier installation for the contractor in the sense that it will limit the risk of incorrect installation or incorrect joints between each piece of mat. | As per Tender Conditions. |
| 233 | | IX. Structural Design of Track Slab with MSS: As the Track slab will be supported by two longitudinal MSS strip primarily, the proper structural design of the track slab including proper detailing of reinforcement should be done by the contractor to ensure serviceability and stability of track slab for its design life. The structural design of track slab with MSS shall include Ultimate Limit State, Serviceability Limit State and Fatigue Design according to relevant codes for concrete structures (e.g. Euro code 1992 or similar). | Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1 |
| 234 | Vol-3 Clause 6.4.6 of PS Page no 50 | Technical Specifications of MSS (for strip and filler material) | Strip + filler combination requirement needs to be amended as per comments above. | Please refer Annexure 20 of Addendum 1 |
| 235 | Vol-1 Clause 1.1.4.2 Qualification Criterion Page no 6 | The tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below: At least one "Similar Work" of value of Rs. 212 Crores or more | As we, all are aware that in Indian only few companies have such value of the completed ballast less tracks works experience. This will restrict the participation. May we request authority to revise the single completed similar work value to 25% of estimated project cost, which is 40% as per tender condition. | Please refer Annexure 2 of Addendum 1. |
| 236 | Vol-1 Clause B(IV) Qualification Criterion Page no 8 | The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system in last five financial years should be Rs.106 Crores. | Since current FY i.e. 20-21 yet to be completed, we understand that for calculation of annual average turn over only completed financial years shall be considered i.e. FY 15-16 to FY 19-20. Please confirm. | As per Tender Conditions. Please refer Annexure 2 & 3A of NIT |
| 237 | Vol-1 Clause B(iv) Qualification Criterion, Page No 8 | The average annual turnover from construction of ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system in last five financial years should be Rs.106 Crores. | We understand that average annual turnover from railway/MRTS construction, entails turnover from formation works, construction of structures and ballasted/ballast less track, fastening system etc. Please confirm. | Please refer Annexure 3 of Addendum 1. |



Aparna
(STIE/SCT/Track)

Reply to Pre-Bid Queries - KNPAGT-03

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|---------|---|---|---|--|---------|----------------------|----------|------|------|--------|---|---|-----|-----|---|---------|--|---|---|------|------|----------------------|--|--|---|---|------|------|----------------------|--|--|---|---|------|------|----------------------|--|--|---|---|------|------|----------------------|--|--|---|---|------|------|----------------------|--|--|---------------------------|
| 238 | Vol-1 NIT Clause 1.1.4.2 Qualification Criterion Notes (VI) Page No 7 | Updating to price level of 30.09.2020. | <p style="font-size: small;">For projects with the value of contracts work shall be updated to 30.09.2020 price as indicated.</p> <table border="1" style="font-size: x-small; width: 100%;"> <thead> <tr> <th>#</th> <th>TY</th> <th>Value of work in Rs.</th> <th>Quantity</th> <th>Unit</th> <th>Rate</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A</td> <td>Nil</td> <td>Nil</td> <td>A</td> <td>5 = 413</td> <td></td> </tr> <tr> <td>2</td> <td>B</td> <td>1.10</td> <td>1.10</td> <td>Cm²/100</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>C</td> <td>1.15</td> <td>1.15</td> <td>Dm²/100</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>D</td> <td>1.15</td> <td>1.15</td> <td>Dm²/100</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>E</td> <td>1.20</td> <td>1.20</td> <td>Fm²/100</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>F</td> <td>1.20</td> <td>1.20</td> <td>Fm²/100</td> <td></td> <td></td> </tr> </tbody> </table> <p>Please confirm. Year 1 is base year. P3-P5.</p> | # | TY | Value of work in Rs. | Quantity | Unit | Rate | Amount | 1 | A | Nil | Nil | A | 5 = 413 | | 2 | B | 1.10 | 1.10 | Cm ² /100 | | | 3 | C | 1.15 | 1.15 | Dm ² /100 | | | 4 | D | 1.15 | 1.15 | Dm ² /100 | | | 5 | E | 1.20 | 1.20 | Fm ² /100 | | | 6 | F | 1.20 | 1.20 | Fm ² /100 | | | As per Tender Conditions. |
| # | TY | Value of work in Rs. | Quantity | Unit | Rate | Amount | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | A | Nil | Nil | A | 5 = 413 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | B | 1.10 | 1.10 | Cm ² /100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | C | 1.15 | 1.15 | Dm ² /100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | D | 1.15 | 1.15 | Dm ² /100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | E | 1.20 | 1.20 | Fm ² /100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | F | 1.20 | 1.20 | Fm ² /100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 239 | Vol-1, NIT Annexure-2 Financial DATA Page No 16 | Historic financial statements shall be audited by Statutory Auditor of the Company under their seal & stamp and shall be strictly based on Audited Annual Financial results of the relevant period(s). | We understand Historic financial data here refers to Audited balance sheets of last five years. Please confirm | As per Tender Conditions. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240 | Vol-1 ITT A4.3 Page no 24 & C2.3(a) Page No 29 | The Tenderer shall submit Tenderer is a partnership, joint venture or consortium, full details of ownership and control of each member thereof. | Please elaborate what details/documents of ownership and control of each member are to be provided in case of Joint venture | As per Tender Conditions. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 241 | Vol-1 ITT C18.1 Page No 39 | The tender security shall be submitted in a sealed envelope clearly marked on top "Tender Security for KNPAGT-3. In case of JV or consortium, the Bank Guarantee for Tender Security shall be from JV/Consortium and not from individual members. | We understand that any member can submit bank guarantee but it should be in the name of proposed joint venture. Please confirm. | Bid security / EMD can be submitted by any member of JV/Consortium. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 242 | Vol-1 Clause A4.1 ITT Page No 23 | To qualify for award of Contract, the Tenderer shall submit a written power of attorney authorising the signatory (ies) of the Tender to commit the tenderer of each member of the partnership, consortium or joint venture | Please provide format for POA | General Power of Attorney is to be given by all members of consortium / JV to the signatory (ies) of the Tender, authorizing / giving full power related to works of KNPAGT-3 Tender till signing of Contract Agreement (if awarded) and deployment of Project Leader as per contract. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 243 | Vol-5 BOQ Part-1 Clause 1.2 Page No 1 | Quantities :No alteration of any rate or price shall be allowed on account of any difference between the quantities executed and the quantities Measured from the drawings. | The revision of rate or price should be consider if increase or decrease in BOQ quantity/quantities is 10% or more. Clause may be modified accordingly. | Variation in BOQ Quantities shall be dealt as per GCC and SCC. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 244 | Vol-5 PART II - BILL OF QUANTITIES Clause 2.2, Page No 34 | Plain line PSC sleepers for UIC 60 rails with dowels at certain sleeper to fix bracket of 3rd Rail | Kindly provide the RDSO Drawing Nos. to be followed | Please refer Vol- 4 of Tender Document and Explanatory Notes of BOQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 245 | Vol-5 PART II - BILL OF QUANTITIES Clause 2.2 Page No 34 | 1 in 7 turnout, 1 in 7 Scissor's X-over (4.500m track center) & 1 in 7 derailling switch | Kindly provide the RDSO Drawing Nos. to be followed. | Please refer Vol- 4 of Tender Document | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



(Stamp/Track)
 (Stamp/Track)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--|--|
| 246 | Vol-5 PART II - BILL OF QUANTITIES Clause 2.2 Page No 34 | 1 in 7 turnout : | Please clarify –are there any curved turnouts, if yes, requested to specify clearly in BOQ description, because cost of curved turnout and straight turnout is not same. | Please refer Vol- 4 of Tender Document |
| 247 | Vol-5 PART II - BILL OF QUANTITIES Clause 2.3, Item 4.1 Page No 37 | 1 in 9 turnout, 1 in 9 Scissor (4.6m track centre) & Installation of Friction Type Buffer Stops | Kindly provide the RDSO Drawing Nos. to be followed | Please refer Vol- 4 of Tender Document |
| 248 | Vol-5 PART II - BILL OF QUANTITIES Clause 2.3, Item 8 Page No 38 | Supply and Installation of Check Rails UIC-33. Check Rails UIC-33 will be supplied by UPMRC free of cost. | Please specify the free issue location. | In Kanpur and Agra at Track Contractor's Store |
| 249 | Vol-3 GS Chapter-18 MOCK-UPS, PROTOTYPES AND SAMPLES page 127 | The Contractor shall produce mock-ups, prototypes and samples as specified in the PS. | We presume that the cost incurred for producing mock-ups, prototypes and samples will be paid vide relevant item of BOQ. Please Confirm. | As per Tender Conditions. However, no separate payment shall be made other than for BOQ items. |
| 250 | General | Supply of spares | We understand that all spares are already accounted in BoQ and the contractor shall be required to supply only the quantity mentioned in BoQ inclusive of spares. Kindly confirm. | As per Tender Conditions |
| 251 | Vol-1, NIT Cl. 1.1.2 Page no 5 | Extension time for submission of Bid | Due to present Covid pandemic situation and project being in 2 cities, it is taking more than expected time to accomplish the pre bid activities therefore; it is requested to extend the bid due at least by 4 weeks | Please refer Annexure 1 of Addendum 1. |
| 252 | Vol-2 SCC Additional Clause 51 Page No 31 | Safe Custody Bank Guarantee for materials to be supplied by the Employer The Bank Guarantee shall be for an amount equal to Rupees 218 million (which is about 10% of the cost of the cost of the materials in terms of equivalent Indian Rupees). The said Bank guarantee will be required to be submitted within 56 days of issue of "Letter of Acceptance" | We request you to allow for submission of Safe Custody Bank Guarantee in parts prior to issue of the material in proportion of actual value of material issued to the Contractor and release the Safe Custody Bank Guarantee for the material that has been installed and certified for payment. | Please refer Annexure 13, 14 of Addendum 1. |



(S.T/E/GC/Track)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|---|---|
| 253 | Vol-3 Employer's Requirement/Particular Specification Clause 6.6 Buffer Stops Page No 53 | Please provide the stopping distance of 25 KMPH & 15 KMPH Buffer stop Is any buffer stop required to be installed at curve and in gradient? If yes, kindly provide the curve radius and gradient percentage. | Please provide the stopping distance of 25 KMPH & 15 KMPH Buffer stop Is any buffer stop required to be installed at curve and in gradient? If yes, kindly provide the curve radius and gradient percentage. | Please Refer Tender Drawings. There will be certain Buffer stops in curve as well as in gradient. |
| 254 | Vol-3 Employer Requirement GS Appendix 8 Page No 149 | WORKS AREAS provides as: The Site is divided into a series of Works Areas that will be made available to the track contractor at different times and for various duration subject to availability and in consultation with designated civil contractor. Employer may also provide some work areas for site office and for storage of P-Way materials i.e. 1080 grade HH rails (KNPAGT-01 contract), turnouts (KNPAGT-02 contract), 880 grade rails (KNPAG-04 contract) and also materials to be supplied under this contract (KNPAGT-3) in respective depots and also along the main lines as per availability. In case of non-availability or requirement of more work area by contractor then the contractor has to arrange the same at his own cost. | Please provide details of work areas that will be allotted & its location for storage of Pway material, set up of store & temporary site office. | As per Tender Conditions. Please refer Appendix 8 of GS |
| 255 | VOL-1 Form of Tender-Appendix-1 Page 136 | Insurance cover for Contractor's All Risk and other requirements as specified in the GCC & SCC - 100% of the Total Contract Price plus 100% value of materials supplied by Employer (Clause 51 of SCC) | Request you to waive requirement of 100% insurance of material supplied by employer, since provision of Safe Custody Bank Guarantee already exists in the tender. Requirement of Multiple insurance and Bank Guarantee only increases the cost of execution and also prevents wider competition too. | As per Tender Conditions. |
| 256 | Vol-3 Employer Requirement Clause 3.1.1 Page 11 | 3.1.1 INTERFACE WITH DESIGNATED CONTRACTORS Earthing, bonding and stray current protection measures | We request you to please share Stray Current Drawing with GI plate arrangement for proper cost estimation at bidding stage Please also confirm whether longitudinal stray current collection bar could be the same as structural rebar of the plinth/slab track structure or it has to be separate bars in addition to structural rebar. | Please refer reply at Sl. No 15 |
| 257 | Vol-2 SCC Clause 25 Page 17 | Liquidated Damages for Delay. | We understand that LD for not achieving key dates is equal to 10% of Quoted BOQ price of Schedule A and Maximum ceiling limit will be 15% of contract value. We request you to consider an LD of Maximum limit as 5% of contract value as per the norms of other similar major contracts. | As per Tender Conditions. |



Aniz:
(STI/E/GC/Track)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|--|---|---|
| 258 | Vol-5 BOQ Part 1 Item No. 9 under Bill BT1 Page 25 | Laying Plinth and installation of Track work for Plain Track on Washable Apron etc. UIC 60/60E1 IRS-T-12-2009, 880 Grade Rails with all Fittings and Fastenings etc Complete | Only minimum depth of 185mm is specified in the tender drawing. Please confirm Maximum depth of RCC for Washable Apron for cost estimation. | Maximum Slab Height for Embedded Track and Track on Washable Apron shall be 250mm. Beyond this slab height, payment shall be made as per BLT Item No. 9 of BOQ for extra RCC. |
| 259 | Vol-5 BOQ Part 1 Item No. 11 under Bill No. BT1 Page 27 | First Stage concrete depth of Embedded Track Fitting & fastening for installation of Embedded Track | - Please confirm Maximum depth of RCC for 1st Stage Concrete of embedded track. In interface specification it is stated 1st stage of embedded track will be poured by civil contractor and 2nd stage will be executed by track contractor. In tender drawing its vice versa. Please clarify. | Please refer Annexure 17 of Addendum 1. For Maximum Depth of 1st Stage - Please Refer Reply at Sl. No. 258. |
| 260 | Vol-4 Tender Drawings | Tender Drawing for Turnout Sleeper & Scissor Crossover | Please Clarify the TO supplier vendor | M/s Voestalpine VAE VKN India Pvt. Ltd. |
| 261 | Vol-4 Tender Drawings | Diameter of Tunnel & First Stage Concrete Thickness | Please confirm the Tunnel Diameter and first stage concrete thickness, so that width of track slab to be constructed in tunnel can be estimated. Please provide detailed drawing of anchor Bolt with split pin arrangement to be installed in steel column Track. | Internal diameter of Tunnel Lining shall be 5.6m to 5.8m. |
| 262 | Vol-5 - BOQ Item 6 of Bill No. SPM (Page 35) | Supply & Installation of Buffer Stop | Installation of 25KMPH Buffer stop is 56 Nos, but supply of buffer stop in BOQ is limited only to 24 Nos. Please review and clarify. | As per Tender Condition. Due to opening of sections in stages, requirement for installation of main line buffer stop will be more as compare to supply. |
| 263 | Vol- 5 - Appendix C - Part Payment Schedule - Bill No. SPM-1 & SPM-2 - All Items (Page 45) | Part Payment Schedule of SPM 1 & SPM2 | Request you to change payment schedule as 100% against SPM 1 & SPM2 once material reached at site in undamaged condition and submission of inspection report and indemnity bond. Since SBG and Insurance, indemnity Bond are available for the same. Similar provision is made in Bengaluru Metro Phase II track. | As per Tender Conditions. |
| 264 | Annexure of NIT Vol | Page numbering | | Page number 14 to 20 of annexure of NIT volume to be read as Page no 13R to 19R |
| 265 | Volume 6 | Page numbering | | There is mistake in page numbering, however document is complete and continuous. |
| 266 | Clause no 4.2.4.4 of PS (page no 26) Volume 3 | Rail and fittings to be transferred from Transport Nagar depot to Kanpur Project site | | Please refer Annexure 18 of Addendum 1. |
| 267 | Chapter 8 of PS of V | Installation Methodology - Chapter 8 stipulates installation of insitu track slab and track plinths. | | In case, contractor proposes precast track slab / plinth as per tender then installation methodology shall be proposed by contractor and will be scurtunise and approved by the Engineer. However, the contractor has to achieve completion schedule and key dates with proposed track structure. |


 (S)IE/GC (Trwy)

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|--|---|--------------------------------|---|
| 268 | Tender Drawing Volu | Curve Details | | Please refer Annexure 30 of Addendum 1. These curve details are tentative and may change in future. No additional cost will be paid or deducted due to change (addition, deletion and modification) in curves. |
| 269 | Clause no A3.4 (5) of ITT Volume 1 | All member of JV/Consortium shall have some experience of construction of ballastless/ballasted track with or without supply of Track components..... | | Please refer Annexure 32 of Addendum 1 |
| 270 | Clause no B3.3 of ITT Volume 1 | Expect for any such any such written clarification by CE/Contract, UPMRC which is expressly stated to be by way of an addendum to the documents referred to in paragraphs B1.1 (a) to (i) above..... | | Please refer Annexure 33 of Addendum 1 |
| 271 | Clause no C6.4 of ITT volume 1 | The tenderer shall enclose a list of companies for the manufacturing of the items in bill no. SPM1 & SPM2 of vol 5 including ballastless track fastening from whom the contractor intends to procure these items, along with the manufacturing record of the units, as specified in volume 5 of these documents. Each list shall consist of a minimum of two companies per item whose product specifications and manufacturing processes fully conform to the relevant Codes and Railway Standards | | Please refer Annexure 34 of Addendum 1 |
| 272 | Form of Tender point no 1 of volume 1, page no 133 | Having inspected the Site, examined the General Conditions of Contract, Special Conditions of Contract, Design Basis report, Tender Drawings and Instruction to Tenderers including Bill of Quantities, and addenda thereto (if any) issued by the UPMRC for the design and construction of the above-mentioned Works, and the matters set out in Appendix 1 hereto, and having completed and prepared Appendices 2, 3, 4, 5, 6, 7, 8, & 9 hereto, we hereby (jointly and severally)* offer to design, construct and complete the whole of the said Works and Commissioning and remedying any defects therein, in conformity with the above documents within the completion period of 48 months (from the date of commencement) for the sum stated in the Bill of Quantities (Volume 5 of Tender Documents) as completed by us and appended hereto. | | Please refer Annexure 35 of Addendum 1 |



Anita
 (SME/GC/Track) DGM/UPMRC

Reply to Pre-Bid Queries - KNPAGT-03

| Sl. No. | Reference Clause No. of Tender | Existing Clause as per Bidders Pre-Bid Query | Bidder's Query / Clarification | UPMRC's Reply to Reference Clause Given in Column 2 |
|---------|---|--|--------------------------------|---|
| 273 | Form of Tender point no 11 of volume 1, page no 134 | We, including any subcontractors or suppliers for any part of the contract, have or will have nationalities from eligible countries., in accordance with A3.2 of ITT | | Please refer Annexure 36 of Addendum 1 |
| 274 | Clause 39 & 40 of SCC volume 2 | 39. Clause 17.7 40. Sub-Clause 17.11 | | Please refer Annexure 38 of Addendum 1 |

Apurva
(SRIE/GC/Track)



| Addendum for KNPAGT-3 | | | | | | |
|-----------------------|---------------|-----------------|----------|-------------|--|------------------------------|
| Sl. No. | Tender Volume | Section | Page No. | Replaced by | Remarks / Changes | Annexure |
| 1 | Vol-1 | NIT | 5 | 5R | Related to Tender Submission date. | Annexure 1 |
| 2 | Vol-1 | NIT | 6 | 6R | Minimum Eligibility criteria | Annexure 2 |
| 3 | Vol-1 | NIT | 8 | 8R | Related to Annual Turnover | Annexure 3 |
| 4 | Vol-1 | NIT | 10 | 10R | Related to Traction / Insulation | Annexure 4 |
| 5 | Vol-1 | NIT | 17 | 17R | Related to Construction Work (Annex-3A of NIT) | Annexure 5 |
| 6 | Vol-1 | NIT | 18 | 18R | Related to Works in Hand (Annex-3B of NIT) | Annexure 6 |
| 7 | Vol-1 | ITT | 33 | 33R | Related to Traction / Insulation | Annexure 7 |
| 8 | Vol-1 | ITT | 34 | 34R | Related to Manufacturer / supplier Authorization letter. | Annexure 8 |
| 9 | Vol-1 | FOT | 136 | 136R | Related to PII & PBG | Annexure 9 |
| 10 | Vol-2 | SCC | 18 | 18R | Related to Liquidated Damage and GST | Annexure 10 |
| 11 | Vol-2 | SCC | 22 | 22R | Related to correction in Buffer stop Item No. | Annexure 11 |
| 12 | Vol-2 | SCC | 23 | 23R | | Annexure 12 |
| 13 | Vol-2 | SCC | 31 | 31R | Related to Safe Custody BG | Annexure 13 |
| 14 | Vol-2 | SCC | 62 | 62R | | Annexure 14 |
| 15 | Vol-3 | PS | 14 | 14R | Related to Traction / Insulation | Annexure 15 |
| 16 | Vol-3 | PS | 15 | 15R | | Annexure 16 |
| 17 | Vol-3 | PS | 16 | 16R | Related to Embedded / washable Apron Track | Annexure 17 |
| 18 | Vol-3 | PS | 26 | 26R | Related to Shifting of Material | Annexure 18 |
| 19 | Vol-3 | PS | 27 | 27R | Related to key dates | Annexure 19 (page 1 to 7) |
| 20 | Vol-3 | PS | 28 | 28R | | |
| 21 | Vol-3 | PS | 29 | 29R | | |
| 22 | Vol-3 | PS | 30 | 30R | | |
| 23 | Vol-3 | PS | 31 | 31R | | |
| 24 | Vol-3 | PS | 32 | 32R | | |
| 25 | Vol-3 | PS | 33 | 33R | | |
| 26 | Vol-3 | PS | 47 | 47R | Related to MSS | Annexure 20 (Page 1 to 4) |
| 27 | Vol-3 | PS | 49 | 49R | | |
| 28 | Vol-3 | PS | 50 | 50R | | |
| 29 | Vol-3 | PS | 51 | 51R | Related to Buffer Stop | Annexure 21 |
| 30 | Vol-3 | PS | 53 | 53R | | |
| 31 | Vol-3 | PS | 70 | 70R | Related to MSS | Annexure 22 |
| 32 | Vol-3 | PS | 84 | 84R | Related to Traction / Insulation | Annexure 23 |
| 33 | Vol-5 | BOQ | 9 | 9R | Related to location of supply items | Annexure 24 |
| 34 | Vol-5 | BOQ | 12 | 12R | Related to Track slab in Under Ground | Annexure 25 |
| 35 | Vol-5 | BOQ | 14 | 14R | Related to MSS | Annexure 26 (page 1 to 3) |
| 36 | Vol-5 | BOQ | 15 | 15R | | |
| 37 | Vol-5 | BOQ | 16 | 16R | | |
| 38 | Vol-5 | BOQ | 32 | 32R | Related to Grand Summary (Schedule A) | Annexure 27 |
| 39 | Vol-5 | BOQ | 37 | 37R | Related to Item for Transition zone MSS | Annexure 28 |
| 40 | Vol-5 | BOQ | 46 | 46R | Related to Part Payment of Track slab with MSS | Annexure 29 |
| 41 | Vol-4 | Tender Drawings | - | - | Curve Details | Annexure 30 |
| 42 | Vol-1 | ITT | 39 | 39R | Related to Parent Company Undertaking and Parent Company Guarantee and PBG | Annexure 31 |
| 43 | Vol-1 | ITT | 21 | 21R | Related to Experience criteria | Annexure 32 |
| 44 | Vol-1 | ITT | 27 | 27R | Related to referred documents | Annexure 33 |
| 45 | Vol-1 | ITT | 32 | 32R | Related to list of companies for SPM1 & SPM2 | Annexure 34 |
| 46 | Vol-1 | FOT | 133 | 133R | Related to appendices 10,11,12 | Annexure 35 |
| 47 | Vol-1 | FOT | 134 | 134R | Related to reference deletion | Annexure 36 |
| 48 | Vol-2 | SCC | 19 | 19R | Related to GST | Annexure 37 |
| 49 | Vol-2 | SCC | 27 | 27R | Clause deleted | Annexure 38 |
| 50 | Vol-1 | ITT | 31 | 31R | Related to GST | Annexure 39 |
| 51 | Vol-2 | SCC | 4 | 4R | Related to PCG and PCU. | Annexure 40 |
| 52 | Vol-2 | GCC | 16 | 16R | Related to Performance Security Amount | Annexure 41 |
| 53 | Vol-2 | GCC | 17 | 17R | | |

ANU
(SITE/GC/Track)



NOTICE INVITING TENDER (NIT)

1.1 GENERAL

1.1.1 Name of Work:

Uttar Pradesh Metro Rail Corporation (UPMRC) Ltd. invites Open Tenders on local competitive basis from eligible applicants who fulfil qualification *criteria* as stipulated in clause 1.1.4 of NIT, for the work, "KNPAGT-3: Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots."

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

1.1.2 Key Details:

| | |
|---|---|
| Approximate cost of work | INR 530.00 Crores |
| Tender Security amount | INR 5.30 Crores valid upto 31.07.2021 |
| Completion period of the Work | 48 months |
| Tender documents on sale | From 16.10.2020 to 06.11.2020 (between 10:00 Hrs. to 17:00 Hrs.) on working days |
| Cost of Tender documents | INR 23,600/- (inclusive of 18% GST) By (Demand Draft in favour of "Uttar Pradesh Metro Rail Corporation Ltd") payable at Lucknow. |
| Last date of Seeking Clarification | 09.11.2020 |
| Pre-bid Meeting | 10.11.2020 @ 11:00 Hrs.(through VC) |
| Last date of issuing addendum | 17.11.2020 04.12.2020 |
| Date & time of Submission of Tender | 24.11.2020 @ 15:00 Hrs. 18.12.2020 @ 12:00 Hrs |
| Date & time of opening of Tender | 24.11.2020 @ 15:00 Hrs. 18.12.2020 @ 12:05 Hrs |
| Authority and place for purchase of tender documents, seeking clarifications and submission of completed tender documents | Chief Engineer Contract Uttar Pradesh Metro Rail Corporation Limited, Administrative Building, Vipin Khand, Gomti Nagar, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal Lucknow (UP) – 226010, INDIA Email: cecontractlmrc@gmail.com |

1.1.3. Source of Funds:

The Kanpur and Agra Metro Projects are being funded through the through the equity participation by the Government of India and Government of Uttar Pradesh and loan from bilateral/multilateral agencies.

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

1.1.4 QUALIFICATION CRITERIA:

1.1.4.1 Eligible Applicants: Please refer Clause A3 of ITT

1.1.4.2 Minimum Eligibility Criteria:

A. Work Experience: The Tenderers will be qualified only if they have completed work(s) during last 7 years ending 30.09.2020 as given below:

A1. Work Experience:

- i. At least one "Similar Work" of value of Rs. 212 Crores or more.
or
- ii. Two "Similar Works" each of value Rs.132.50 Crores or more.
or
- iii. Three "Similar Works" each of value Rs.106 Crores or more.

"Similar Work" for this contract shall be work of:

- i. Construction of Ballastless / Ballasted Track with or without Supply of Fastening System for Ballastless Track.
or
- ii. Supply of Precast concrete component of ballastless track such as precast plinth, slab, sleeper etc. with or without Supply of Fastening System for Ballastless Track.

A2. The Tenderer should have a past experience in construction of ballastless track for a track length of at least 80 kms (in case of double/multiple line, each line will be counted separately) either on MRTS or Railway System.

Notes:

- (i) The Tenderer will be qualified only if they satisfy the criteria as given in para A1 & A2 above (during last seven years ending 30.09.2020).
- (ii) All member of JV/Consortium shall have experience of value atleast 10% of NIT Value from construction of ballastless/ballasted track with or without supply of track components OR supply of precast concrete components of ballastless track such as precast plinth, slab, sleepers etc. with or without supply of track components. Total value of work/works should be equal or more than 53 Crores in last 7 years ending 30.09.2020. Annexure-1 of NIT shall be used for submission of details under this para duly certified by Chartered Accountant and with documentary proof from the Clients.
- (iii) There must be an Indian partner with a minimum of 26% participation in the JV/Consortium. Any substantial partner (equal to or more than 26% participation) can act as a lead partner.
- (iv) The tenderer shall submit details of work executed by them in the Performa of Annexure-1 of NIT for the works to be considered for qualification of work experience criteria. 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, copy of work order, bill of



AP/2
ST/EGC/Track

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

(iii) T3 - Net Worth: Net Worth of tenderer should be positive in last 2 audited financial balance sheets.

In Case of JV/Consortium, each members of the JV should have positive Net Worth in the last two financial years.

(iv) T4 - Annual Turnover: The average annual turnover from construction of ~~ballastless/ballasted track and supply of ballastless/ballasted track components/fastening system~~ in last five financial years should be Rs.106 Crores.

In Case of JV/Consortium – the tenderer must fulfil the following conditions:

1. Each partner to have minimum 25% of minimum requirement.
2. At least one partner to have 40% of minimum requirement.
3. All partners put together should meet the minimum requirement as per their percentage participation.

Example: Let Member-1 has percentage participation = M and Member - 2 has =N. Let the average annual turnover of Member-1 is 'A' and that of Member-2 is 'B', then the average annual turnover of JV will be = (AM+BN)/100.

Note

- Financial data for latest last five audited financial years has to be submitted by the tenderer in Annexure-2 of NIT along with audited balance sheets. The financial data in the prescribed format shall be certified by the Independent Financial Auditor (Statutory Auditor) of the company appointed under the Company Act or by a Chartered Accountant with his stamp and signature in original. In case any discrepancy in data is found between the balance sheet and the financial information submitted, the data as available in the balance sheet will be considered.
- In case audited balance sheet of the last financial year is not made available by the bidder, he has to submit an affidavit certifying that 'the balance sheet has actually not been audited so far'. In such a case the financial data of previous '4' audited financial years will be taken into consideration for evaluation. **If audited balance sheet of any other year than the last year is not submitted, the tender will be considered as non-responsive.**
- Where a work is undertaken by a group, only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.

1.1.4.3 Bid Capacity Criteria:

Bid Capacity: The tenderers will be qualified only if their available bid capacity is more than the approximate cost of work as per NIT. Available bid capacity will be calculated based on the following formula:

$$\text{Available Bid Capacity} = 2 * A * N - B$$

Where,

A = Maximum of the value of construction works executed in any one year during the last five financial years (updated to 30.09.2020 price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year).

N = No. of years prescribed for completion of the work

B = Value of existing commitments (as on 30.09.2020) for on-going construction works during period of 48 months w.e.f. 01.10.2020.

Notes:

- Financial data for latest last five financial years has to be submitted by the tenderer in **Annexure-3A** along with audited financial statements. The financial data in the prescribed format shall be certified by the Independent Financial Auditor (Statutory



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

- f. **Chief Quality Assurance Manager** - having minimum 8 years of total experience out of which 2 years should be in quality control in installation of ballastless / ballasted track.
- g. **Deputy Project Manager (DPM) Design & Interface** - having minimum 8 years of total experience out of which 2 years should be in Design of similar projects.
- h. **Survey In-Charge** - having minimum 8 years of total experience out of which 2 years should be in installation of ballastless track.
- i. **Chief SHE Manager** –As per the qualification and experience given in General Instruction – 2 of UPMRC SHE manual.

NOTE – Please submit the CV of above Key Personals as per Annexure – 5 of NIT

1.1.4.6 The fastening system for ballastless track is also to be provided by the contractor in this contract. Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The track structure with the proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab. Bidder should also take note of clause C6.6 of ITT.

1.1.4.7 The tenderer should either own mobile flash butt welding plant for deploying the same for this contract or should furnish a concrete proposal to hire / subcontract the same along with the names /details of source /agencies for the same.

1.1.4.8 **Restriction of Bidders from Countries sharing Land Borders with India as per Ministry of Finance order (Public Procurement No. 1) F.No.6/18/2019-PPD dated 23.07.2020.**

Any bidder from a country which shares a land border with India will be eligible to bid either as a single entity or as a member of a JV / Consortium with others, in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. The Competent Authority for registration will be the Registration Committee constituted by the Department for Promotion of Industry and Internal trade (DPIIT). Political & Security clearance from the Ministries of External and Home Affairs respectively will be mandatory. However, above condition shall not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. *Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs.*

"The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority".

Definitions pertaining to "Restriction of Bidders from Countries sharing Land Borders with India" Clause

"Bidder" (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

ANNEXURE- 3AFINANCIAL DATA

(CONSTRUCTION WORK DONE DURING THE LATEST LAST FIVE FINANCIAL YEARS)

NAME OF THE TENDERER (CONSTITUENT
MEMBER IN CASE OF JV/CONSORTIUM) :

(All amounts in Rupees in Crores)

| S. No. | DESCRIPTION | Financial Data for Last 5 Audited Financial Years | | | | |
|--------|---|---|--------------|--------------|--------------|--------------|
| | | Year 2015-16 | Year 2016-17 | Year 2017-18 | Year 2018-19 | Year 2019-20 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Total value of construction <u>work</u> of ballastless/ballasted track and supply of ballastless/ballasted track component/fastening system as per audited financial statements | | | | | |

NOTE:

1. Separate Performa shall be used for each member in case of JV/Consortium.
2. Attach attested copies of the Audited Financial Statements of the last five financial years as Annexure.
3. All such documents reflect the financial data of the tenderer or member in case of JV/Consortium, and not that of sister or parent company.
4. The financial data in above prescribed format shall be certified by Chartered Accountant / Company Auditor under his signature & stamp.
5. Foreign applicants, in whose country calendar year is also the financial year, may submit all relevant data for the last 5 years i.e. 2015, 2016, 2017, 2018 and 2019.
6. The above financial data will be updated to 30.09.2020 price level assuming 5% inflation for Indian rupees every year and 2% for foreign currency portions per year. The above financial data will be updated to 30.09.2020 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.



UPMRC/KNPAGT-3/Vol-1/NIT

Atul
(STI/GR/Track)

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

ANNEXURE 3B

Works in Hand

As on first day of the month of tender submission 30.09.2020

Applicant's legal name Date.....

Group Member's legal name..... Page of pages

| 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 Annexure1) | Value of balance work yet to be done in Rupee equivalent as on 30.09.2020 | Date of Completion as per Contract Agreement | Expected Completion Date | Delay if any, with reason | Value of work to be done in 2020-21 (1 st Oct 2020 to 31 st Mar 2021) | Value of work to be done in 2021-22 (1 st Apr 2021 to 31 st Mar 2022) | Value of work to be done in 2022-23 (1 st Apr 2022 to 31 st Mar 2023) | Value of work to be done in 2023-24 (1 st Apr 2023 to 31 st Mar 2024) | Value of work to be done in 2024-25 (1 st Apr 2024 to 30 th Sep 2025) |
|--|---|--|---|--|--------------------------|---------------------------|---|---|---|---|---|
| | | | | | | | | | | | |

(STIETG/Trn)

Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

With respect to the fastening system for ballastless track proposed by the Tenderer, the following minimum information/ certification should be provided by the Tenderer.

C6.6.1 Performance Certificate of Fastening System for Ballastless Track on Metro Railways/MRTS System is attached as Annexure 11 of ITT. In regard to proposed fastening system, tenderer has to note/submit:

- i. For Kanpur and Agra MRTS Project, Ballastless track fastening system already approved (vide letter No. CT/EF/Global EOI-2017/Ballastless Track dated 25.10.2019) by RDSO/MOR or installed & commissioned in any MRTS project in India and under observation & approval of RDSO/MOR as per clause 1.2 of Annexure-C2 of performance criteria of fastening system for ballastless track (attached as Annexure 11 of ITT), can only be proposed under this contract. The track structure with the proposed ballastless track fastening system shall adequately meet the insulation requirement for stray current of 750V DC Bottom 3rd Rail Traction System as per EN 50122-2 and as per requirement of Tender. The proposed Ballastless Track Fastening System should also have two layer of insulations i.e. between rail & fastening and between fastening & track plinth/slab.
- ii. Approval Letter of RDSO/MOR: Tenderer to submit approval letter along with approved design/drawing of proposed ballastless track fastening by RDSO/MOR. Tenderer to also submit all annexure and compliance of all observations of RDSO/MOR along with proof.

For ballastless track fastening under approval as mentioned above, tenderer to submit all technical details as per performance criterial and also letter of RDSO/MOR for use of said system and CRS sanction letter for opening of the line with that system.

- iii. Certificate/s of performance: from any one user railway administration, including proof of use of the same fastening system encompassing the same set of components (as is being offered by the Tenderer in this Tender). The certificate should be accompanied with the drawing of the fastening system and its components to clearly establish that the fastening system including its components whose performance has been certified is exactly same as the fastening system including its components that has been proposed by the Tenderer in this Tender.
- iv. Tests reports of the fastening system: In terms of Paragraph 4.7 and specification given in table 1 of Performance Criteria of ballastless track fastening system contained in Annexure C2, enclosed at Annexure 11 of ITT Vol.1 of this Tender documents, the Tenderer should submit test report for the fastening system from reputed independent institute/laboratory. The test reports should be accompanied with the drawing of the fastening system and its components to clearly establish that the fastening system including its components which have been tested and reported upon is exactly same as the fastening system including its components that has been proposed by the Tenderer in this Tender.
- v. Statement of compliance with the Performance Criteria: With respect to the Performance Criteria of fastening System contained in Annexure C2, enclosed at Annexure 11 of ITT Vol. 1 of this Tender documents, the Tenderer should submit a



- statement showing compliance or otherwise, in juxtaposition to each clause and sub-clause of the performance criteria.
- vi. Specifications, Inspection and test plan of fastening system for ballastless track: The tenderer should submit the standard specifications, allowable tolerances, dimensions of assembly and components of fastening system. The Tenderer is also required to submit inspection test plan of all components of fastening systems.
 - vii. MoU with Supplier: Submit copy of the MoU entered into between the Tenderer and the Supplier for supply of complete ballastless track fastening system as per tender specification. Single Point Warrantee for the complete ballastless track fastening system and its individual components supplied **from the fastening system supplier, shall be obtained by tenderer** by Supplier shall be with Tenderer for the defect liability period **and same shall be submitted to UPMRC for its satisfaction and record. A legally signed fastening system supplier authorization letter shall also be acceptable in regard to the above with an undertaking that in case of award of contract no KNPAGT-03 to the tenderer, MoU with fastening system supplier shall be executed and submitted as mentioned above.**
 - viii. MoU with Patent Holder: Submit copy of the MoU entered into between the Tenderer/Supplier and the Patent holder permitting the Tenderer/Supplier to use the Patented items for the tendered work.
 - ix. Details of Manufacturing Units: Submit details of proposed qualified manufacture for individual component of proposed ballastless track fastening systems along with details of successful supply in the past to the user railway administration.
- C6.6.2 Based on the use of ballastless track fastening system in the other Metros like DMRCL, UPMRCL has decided to use 2-hole ballastless track fastening system for more than 1000m radius of curve and in straight portion of alignment for all fittings whose transfer of forces are through Anchor Bolts. Alignment with less than or equal to 1000m radius of curve, 4-hole ballastless track fastening system shall be used. Quantity in BOQ has been given accordingly.
- After award of contract, contractor has to submit detailed anchor bolt calculation for fitness of 2-hole anchor bolts fastening system beyond 1000m radius of curve. If adoption of 4-hole fastening system is deemed necessary by UPMRCL on its review of anchor bolt calculation, then contractor shall be bound to use the 4-hole fastening system. In such cases, the contractor shall be paid as per BOQ Item for 2-hole fastening system.
- C6.6.3 For ballastless track fastening system whose transfer of forces to plinth/slab are other than through Anchor Bolts, in that case use of 2-hole fastening system shall be allowed for equal or less than 1000m radius of curve also. However, contractor has to submit detailed design calculation for fitness of the same for scrutiny and approval of Engineer.
- NOTE:** The above documents should be submitted in English language. In case any document is in any other language then it should be accompanied by an English translation thereof.
- C6.7 Regarding Type of Plinth/Slab Track for Main Lines including Entry/Exit Lines to Depot**
- C6.7.1 Tenderer can choose cast-in-situ plinth/slab type track structure or pre-cast type plinth/slab track structure for main line on elevated and in underground section without MSS. In case of MSS, track structure will be slab type only. Ballastless track structure in main line for turnout and scissor shall be cast-in-situ Slab type.
- C6.7.2 Provision of derailment guard shall be made for all type of track structure in the entire ballastless track of main line and its connection to depot. Typical arrangement of derailment guard has been shown in tender drawing for elevated as well as underground sections.

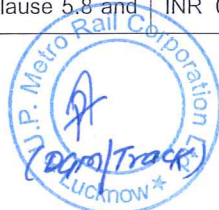
Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

FORM OF TENDER – APPENDIX-1

[REQUIREMENTS UNDER GENERAL CONDITIONS OF CONTRACT (GCC)]

| S. N | DESCRIPTION | REF TO CLAUSE NO. | REQUIREMENT |
|------|--|--|---|
| i | Amount of Performance Security | Clause 4.2 of the GCC | 40 3 % of the Contract Price in types and proportions of currencies in which the contract price is payable. In the event of variations during the execution of the contract which result in payments to the Contractor over and above the contract price, the Performance Security shall be suitably adjusted. |
| ii | Latest 'date for commencement' of the Works | Clause 8.1 of the GCC | Date given in LOA or Employer's Notice to Proceed |
| iii | 'Time for completion' of the work from the date of commencement of the work | Clause 8.2 of the GCC and 23 of SCC | <u>48</u> months |
| iv | Liquidated Damages | Clause 8.5 of the GCC and Clause 25 of SCC | As per the referred clauses of GCC and SCC |
| v | 'Defects Liability Period' for the whole of the Works | Clause 10 of the GCC & Clause 27 of SCC | 104 weeks after the date of issue of Taking-Over Certificate for the Whole of the Works |
| vi | Amount of advance payment | Clause 11.2 of the GCC & 30 & 31 of SCC | Mobilisation Advance - 5% of original contract value in two equal instalments. Equipment advance - 3% of original contract value |
| vii | Amount of Professional Indemnity Insurance (PII). | Clause 15.1 and 15.5 of the GCC | AOA (any one accident) limit equal to 6% of the contract value against Bill No. SPM1, & BLT1 of BOQ in respect of 'design and construct' with AOY (any one year) limit of 2 incidents in a year. In the Professional Indemnity Insurance Policy, the deductible amount shall not be more than 5% of AOA limit. PII Policy shall be obtained within four weeks from 'date of commencement' and shall be valid for five years after date of issue of 'Performance Certificate'. Wherever the contractor submits policy for shorter period / annual renewable policy, the same shall be renewed before its expiry date. In such situation, the performance guarantee (5% of contract value) shall be retained till required validity period. The contractor's submission of such shorter period / renewable policy shall be construed as their irrevocable consent for retention of the performance guarantee. |
| viii | Insurance cover for Contractor's All Risk and other requirements as specified in the GCC & SCC | Clause 15 of the GCC | 100% of the Total Contract Price plus 100% value of materials supplied by Employer (Clause 51 of SCC) |
| ix | Amount of Third Party Insurance | Clause 5.8 and | INR 0.50 Million for any one incident, with no. of |

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- d) All sums payable by the Contractor to the Employer pursuant to GC Clause 8.6 shall be paid as Liquidated Damages for delay and not as a penalty.
- e) Every section of track is subject to Key Dates and therefore the application of Liquidated Damages on delay. The liquidated damage shall be levied at the rate of 0.01% of Total contract value per week of delay per key date. The total amount of Liquidated Damages payable by the Contractor in respect of the delay to the whole of the Works or for failing to achieve any Key Date, shall be limited to 10% of the Total lump sum price quoted in Schedule 'A' of BOQ. However, this limit of liquidated damage shall be 15% of the lump sum BOQ price after including any sums accepted by employer for payment to any designated contractor on account of default of Track work contractor.

26. Clause 9.1 Taking Over Certificate

Following is added in the last of Clause 9.1 of GCC

If some part of work is not completed along with rest of the works in the contract and the Employer agreed for such splitting of work in writing, the Taking Over Certificate can be issued for that part of work which has been completed and accepted by the Employer. However, such splitting of work for issue of taking Over Certificate is sole discretion of the Employer and the contractor have no right what so ever.

27. Clause 10.1 Defect liability period

Following is added in the last of Clause 10.1 of GCC

The Defect liability period (DLP) shall be 104 weeks after the date of issue of Taking-Over Certificate for the whole of the works. If Taking over Certificate is issued in parts, the defect liability period for different parts of works shall start from the date of issue of Taking-Over Certificate for that part of work and shall end after 104 weeks after issue of taking over certificate of that part of works.

28. Clause 11.1.1 The Contract Price

Sub Clause 11.1.1 (i) of GCC is replaced as under:

(A) The tenderer is required to note the following while quoting the prices: -

The rates and prices quoted in the bill of Quantities shall be inclusive of all taxes (~~including GST~~), levies, duties, cess, freight, insurance and any other charges leviable, including tax deducted at source **except** the:

- (a) The Basic Customs Duty, cess and other surcharges (as applicable) on imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc.
- (b) Goods and Services Tax (GST) on ~~imported components/equipments, Spares, Jigs, Fixtures, Special Tools and Testing and Diagnostic equipments, etc. No other GST, during any intermediate stage or otherwise, shall be reimbursed.~~

UPMRCL projects are eligible for availing concessional duty benefits under Chapter 98.01 of Customs Tariff Act. UPMRC



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published in the RBI Bulletins for the period of work under consideration.

Wmo = Whole Sale Price Index (Averages) for Machinery and Machine Tools as published in the RBI Bulletin, for the month in which the tender was opened.

Wm = Wholesale Price Index (Averages) Machinery and Machine Tools as published in the RBI Bulletins for the period of work under consideration.

(b) Adjustment in contract price on FOREIGN PORTION of the rate of the BOQ items on account of inflation shall be applicable only for item no. 7.1 & 7.2 6.1 & 6.2 (Buffer Stop) of Bill No. SPM-1

Price schedule shall be subject to adjustment in accordance with the following Price variation formula, and other terms given herein, to provide for variation in the market rates during the currency of contract.

Vs- Adjustment (increase or decrease) on account of change in the rates for steel during the period under consideration.

P1- Percentage of steel component (55%)

R- Value of work in foreign currency for item mentioned above.

S1- Price of steel Billets in the London Metal Exchange (cash seller's rate) applicable as on the date 28 days prior to the closing date of submission of the tender.

S2- The average price of steel Billets in the London Metal Exchange for the period of work under consideration.

Price adjustment for increase or decrease in the cost of items in respect of running and final bill shall be paid in accordance with following formula.

$$Vs = \frac{P1 \times R(S2 - S1)}{S1}$$

Note 1. London Metal Exchange (LME) rates may be available in the currency in which the tenderer may have quoted his contract Price. However, in case the Foreign currency in which the contract Price is quoted is different from any of the currencies in which LME rates are available, the LME price in US Dollars will be converted to the currency as in the contract by applying ratio of exchange rate between the two currencies, as prevailing in Bank of England on the opening of the day



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in consideration for S-1 and opening of the respective days for S-2. For this purpose, conversion of individual prices will be made before working out the average price.

- (c) No adjustment in contract price on account of inflation shall be done on items under Bill No. G1 & SPM-2 of BOQ during currency of contract. Also no adjustment in contract price on account of inflation shall be done on foreign component of any item except item no. 7.1 & 7.2 6.1 & 6.2 of SPM-1 of BOQ during currency of contract.

Period of work under consideration will mean as under:

(a) In the case of first "On- account Bill" the period from the date of receipt of "Letter of Acceptance" to the date of measurement of the first bill.

(b) In the case of second and subsequent "On-account" and Final bills, the period from the date of measurement for previous bill to the date of measurement of that bill.

Note:

1) Responsibility of arranging the RBI Bulletins, price index issued by CPWD and price of Billets in London Metal Exchange desired by the Employer or the Engineer shall rest with the Contractor.

2) If at any date during the execution of Contract, RBI or CPWD has modified its base year of the Indices then the Price adjustment from that date shall be adjusted based on the revised indices.

3) If for some reason at any latter date during the execution of Contract, RBI or CPWD has modified the methodology, then the adjustment shall be made based on mutually agreement between the parties.



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50. Additional Clause Indemnity Bond for materials to be supplied by the Contractor.

The Contractor shall submit a indemnity bond in the format given in Schedule 7 against payments made for Plant and Equipment delivered to Kanpur/Agra Stores/works.

51. Additional Clause Safe Custody Bank Guarantee for materials to be supplied by the Employer.

The contractor shall submit a safe custody Bank guarantee in the format given in schedule 8 for the materials to be supplied by the Employer to the contractor at Kanpur/Agra for the work. The bank Guarantee shall be for an amount equal to Rupees ~~248~~ 109 million (which is about 40% 5% of the cost of the cost of the materials in terms of equivalent Indian Rupees). The said Bank guarantee will be required to be submitted within 56 days of issue of "Letter of Acceptance". The values of the materials (to be supplied by Employer) may be taken as under mentioned as under

1. 60kg Rails of grade 880 - . Rs. 260 million
2. 60kg Rails of grade 1080 HH - Rs. 1270 million.
3. Points & crossings, derailing switches, scissors cross over – Rs. 650 million
4. This safe custody Bank Guarantee shall cover the Contractor's responsibility towards safe transportation, safe custody, and protection against all kinds of damage /loss /theft of materials, supplied by the Employer. The cost of any such loss/damage to the materials, irrespective of the reason thereof, shall be recoverable from the said safe custody Bank Guarantee furnished by the Contractor.

The Bank guarantees shall be released after the materials are installed satisfactorily, the spare materials have been returned by the contractor satisfactorily and "Taking Over Certificate" is issued by the Engineer.

The insurance policies to be obtained by the contractor under Clause 15 of GCC shall also cover the cost of materials (as mentioned above) to be supplied by the Employer.

In addition, the contractor shall be required to furnish indemnity bond for the safe custody of materials to be supplied by the Employer in the format prescribed in schedule 9 of SCC.

52. Additional Clause Contractor's obligations towards tax laws

The Contractor shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. He shall submit copies of acknowledgements evidencing filing of returns every year and shall keep the Employer fully indemnified against liability of tax, interest, penalty etc. of the Contractor in respect thereof, which may arise.



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**BANK GUARANTEE FOR SAFE CUSTODY
FOR MATERIALS SUPPLIED BY UPMRC TO THE CONTRACTOR**

(Refer Clause 51 of SCC)

(To be stamped in accordance with Stamp Act, of the country of issuing bank)

To: UTTAR PRADESH METRO RAIL CORPORATION LIMITED Administrative Building, Vipin Khand, Gomtinagar, Lucknow (Uttar Pradesh) – 226010 India, herein after called the "Employer";

WHEREAS – the Consortium/ Joint venture consisting of:

1. (Name of Lead Member of the Group and address)
2. (Name of Member of the Group and address)
3. (Name of Member of the Group and address)

(hereinafter called "the Contractor"), with M/s----- as the lead member has undertaken, in pursuance of Contract No. KNPAGT-3 datedfor [Note 4] "Supply, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with associated Ballasted/Ballastless Tracks in 4 Depots." hereinafter called "the Contract"),

AND WHEREAS according to the said Contract UPMRC is to supply materials (procured by UPMRC) to the contractor at storage site at Lucknow which shall be held in safe custody by the contractor

The contractor is obliged to provide a Bank Guarantee in the terms hereof for an amount of Rs. 222.00 109 million (which is ~~10%~~ 5% of the total cost of UPMRC supplied material in equivalent Indian Rupees).

AND WHEREAS we (Insert name and address of a Scheduled Commercial Bank based in India) have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor up to a total of -----(amount of Guarantee)----- (in words), and we hereby unconditionally, irrevocably and without demur undertake to immediately pay you, upon your first written demand and without cavil or argument any sum or sums within the limits of ----- (amount of guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

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UPMRC/KNPAGT-3/Vol-2/SCC



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

3.1.1.1 Additional requirement of 750V DC Power Supply and Traction System (PST) of Kanpur and Agra Metro Rail Project

| Item | Description |
|------------------|---|
| Track Work | <p>Provision of earthing, bonding and stray current control measures in the track structure as per specified requirements, interface specifications and in coordination with PST Contractor.</p> <p>Implementation of stray current protection measures for insulation of the running rails and in the track slab / plinth construction as per specifications, drawings and in coordination with the Power Supply Contractor.</p> <p>CAD welding in rails for return cable connections as well as for rail/track bonding as per the specified requirements, interface specifications and in coordination with PST Contractor.</p> <p>Installation of depot tracks in a coordinated manner with PST requirements in respect of positioning of sleepers with third rail fixing arrangement.</p> <p>Installation of IRJs as per specified requirements, interface specifications and in coordination with PST Contractor.</p> <p>Measurement of track insulation as per prescribed method in line with EN 50122-2</p> |
| Track insulation | <p>The rails forming the return current path shall be nominally insulated from earth in order to discourage stray earth currents. The insulation level between the structure earth and the rails shall be no less than 10 ohm/km of single track under normal operating conditions. The insulation level of each section shall be tested, on completion of the track works for the section, and the results recorded. The commissioning acceptance value shall be 100 ohm/km. Values less than this, but of the same order may be accepted by the Employer under exceptional conditions. The above track insulation level shall be maintained through points and crossing work. All the work related to track insulation shall be within scope of track work contractor.</p> <p>The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following:</p> <ul style="list-style-type: none"> • 100 MΩ DC resistance in dry condition • 1 MΩ DC resistance in wet condition • 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Necessary test certificates in this regard shall be shared with the Contractor.</p> <p>The Track Contractor shall be responsible for track conductance measurement of installed track as per the specified requirements, interface specifications and in coordination with PST Contractor.</p> |



3.1.1.2 Requirements in Sleepers and Bearers: -

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| | |
|----------------------------|--|
| Plain Line Sleepers | <p>Supplier shall take into consideration the installation of third rail support bracket on certain sleepers at approx. interval of 5m. An indicative drawing of PSC sleeper for plain line with third rail bracket installation arrangement is attached with these specifications for reference / guidance of the Supplier.</p> <p>In order to consider the installation of brackets for the Third Rail system embedded dowels shall be provided at one end of the longer length sleeper.</p> |
| Turnout Sleepers / Bearers | <p>Supplier shall take into consideration the installation of third rail support bracket on certain sleepers where the third rail brackets will be installed.</p> <p>For this purpose, the Supplier shall share the complete sleeper/bearer arrangement for various types of turnouts and Employer (or his nominated Agency / Engineer) will mark the sleepers where the third rail brackets need to be installed.</p> <p>In order to consider the installation of brackets for the Third Rail system embedded dowels shall be provided at one end of the sleeper.</p> |

3.1.1.3 Requirements in Fasteners: -

| | |
|-----------|--|
| Fasteners | <p>(1) The rails forming the return current path shall be nominally insulated from earth in order to discourage stray earth currents.</p> <p>(2) The electrical insulation of individual fastening system (between running rails and earth) shall not less than the following: <u>be such as to meet the insulation requirement of track structure as per the interface clause 3.1.1.1 Track insulation</u></p> <p><u>The necessary tests of fastening system shall be carried out as per relevant standard complying requirement with 3rd rail 750 V DC power supply Traction system</u></p> <ul style="list-style-type: none"> • 100 MΩ DC resistance in dry condition • 1 MΩ DC resistance in wet condition • 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles <p>Necessary test certificates in this regard shall be submitted by the Contractor. The Employer / Engineer may also like to witness the tests in the factory / laboratory.</p> <p>(3) The Track Contractor shall obtain all the technical details & drawings of the components including technical specifications, standards & codes to be followed, inspection & acceptance tests, their procedure & acceptance criteria, dimensional and other manufacturing tolerances from OEM and submit for approval of the Engineer.</p> |
|-----------|--|



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3.1.2 Interface specification: Track work installation Contractor Vs Depot (Civil Works) Installation Contractor

| Sl. No. | Item | Responsibility of Depot Contractor | Responsibility of Track Contractor |
|---------|--|--|---|
| 1 | Depot Layout Drawing. | Shall supply depot layout drawing & its mathematisation to Track Contractor. Depot Contractor shall also supply detailed interface drawing of utility & depot construction. Depot Contractor shall modify the depot layout based on any discrepancy noticed by Track Contractor. | Shall install track based on depot layout drawing maintaining the clearance based on interface drawing supplied by Depot Contractor. |
| 2 | Installation of track in Workshop, Inspection Bay, Stabling Lines, ETU Workshop, Washing Plant, Blow down plant Pit Wheel lathe, Emergency shed building and other areas of depot. | <p>Ballasted track: Prepare the ground with grading and drainage, take care that all pipes and culvert crossing are laid.</p> <p>Track on Column: Supply & installation of column Track embedded in concrete & track on plinth in washing line - Prepare 1st 2nd pour concrete in the <u>Embedded track</u> bed.</p> | <p>Install the track</p> <p>Install track on column</p> <p>Install track including laying of 1st 2nd pour concrete in the <u>Embedded Track and Washable Apron.</u></p> |

3.1.3 Interface specification: Track work installation Contractor Vs Civil Construction Contractors

| Sl. No. | Item | Responsibility of Civil Contractor | Responsibility of Track Contractor |
|-----------------------------------|------------------------------------|--|---|
| A. STATIONS | | | |
| 1 | Installation of track in stations. | Shall supply the track base according to layout drawing, prepare the track base with shear connectors, grading and drainage, take care that all pipes and culvert crossing are laid. | Shall install track based on layout drawings. |
| B. VIADUCT / AT GRADE / UG | | | |
| 2. | Construction of precast elements | <p>Construction: Construction of precast elements for elevated structures (viaduct) in final position. Provision of vertical stirrups / connection (shear connector).</p> | Construction of concrete plinth using the provisions of vertical stirrups /connection (shear connector) between precast |



Handwritten signature and initials: *Atish (STIET/GC/Track)*

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damage, same has to be brought in the notice of Engineer and Rail Supplier immediately. Further, it will be responsibilities of KNPAGT-3 contractor for safe custody of these rails till these rails are installed in section and section is commissioned and taking over certificate is issued. Spare Rails are to be handed over to UPMRC in undamaged condition at designated location in Kanpur and Agra and nothing shall be paid on this account.

4.2.4.4 Rail and Fittings to be transferred from Transport Nagar depot (Lucknow) to Kanpur project site

Following P-Way materials are available in Transport Nagar depot at Lucknow and contractor is required to immediately transport this P-way materials to Kanpur & Agra and start the work. No additional Payment shall be made for shifting of these material from Lucknow to Kanpur & Agra.

The approximate quantity of items available in Transport Nagar depot at Lucknow is tabulated below: -

| SI No. | Item | Unit | Quantity |
|--------|---------------------------------------|------|----------|
| 1 | HH Rails 1080 grade | MT | 100 |
| 2 | 880 grade rails | MT | 50 |
| 3 | S/G sleeper | Nos | 1,000 |
| 4 | RB Plate 2 hole | Nos | 4,008 |
| 5 | Elastomeric Pad (2 hole) | Nos | 4,008 |
| 6 | Eva Rail Pad | Nos | 4,008 |
| 7 | Insulating Bush | Nos | 8,016 |
| 8 | Intermediate Pad (2 hole) | Nos | 4,008 |
| 9 | T-Head bolt with nut and plain washer | Nos | 8,016 |
| 10 | Tension Clamp | Nos | 8,016 |



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(STI/SC/Track)

ANNEXURE ~ 19
(1 of 7)

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

INTERFACES

4.3 SCHEDULE OF KEY DATES FOR KNPAGT-3

| SI. No | Status | Agriculture University depot and Polytechnic depot | | IIT Kanpur to Naubasta | | Agriculture University to Barra 8 | |
|--------|---|--|---|--|--|--|---|
| | | Location | Date | Location | Date | Location | Date |
| 1 | Partial Completion of track & shared access to signalling & traction contractor (Stage 1) | <p>Test track at polytechnic Depot</p> <p>Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. at Polytechnic depot</p> <p>Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg etc. at Polytechnic depot</p> | <p>Mar-2021</p> <p>Mar-Apr-2021</p> <p>Jun-Jul-2021</p> | <p>Package -1 (IIT Kanpur to Motijheel including depot connecting lines)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For all balance stations</p> <p>iv. For balance full stretch in viaduct</p> <p>Package -2 (Motijheel to Bada Chauraha)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -3 (Bada Chauraha to Transport Nagar)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -4 (Transport Nagar to Naubasta)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For all balance stations</p> <p>iv. For balance full stretch in viaduct</p> | <p>Feb-Apr-2021</p> <p>Mar-May-2021</p> <p>May-Jul-2021</p> <p>July-2022</p> <p>Mar-2023</p> <p>Nov-2022</p> <p>May-2023</p> <p>Nov-2022</p> <p>Feb-2023</p> <p>Jul-2023</p> <p>Nov-2023</p> | <p>Package -1 (Agriculture University to Double Pulia including depot connecting lines)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -2 (Double Pulia to Barra 8)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For balance full stretch in viaduct</p> | <p>Sep-2023</p> <p>Jun-2024</p> <p>Jun-2023</p> <p>Dec-2023</p> <p>Jun-2024</p> |



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Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

| SI. No | Status | Agriculture University depot and Polytechnic depot | | IIT Kanpur to Naubasta | | Agriculture University to Barra 8 | |
|--------|------------------------------------|---|--|--|--|---|--|
| | | Location | Date | Location | Date | Location | Date |
| 2 | Completion of track work (Stage 2) | Test track at Agriculture University Depot Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. At Agriculture University Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc at Agriculture University | Sep-2023 Oct-2023 Mar-2024 | Package -1 (IIT Kanpur to Motijheel including depot connecting lines) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct Package -2 (Motijheel to Bada Chauraha) i. Between first pair of stations | Mar-Jun-2021 May-Jul-2021 Jul-Sep-2021 Sep-2021 | Package -1 (Agriculture University to Double Puita including depot connecting lines) i. Between first pair of stations ii. Entire section including stations Package -2 (Double Puita to Barra 8) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For balance full stretch in viaduct | Dec-2023 Sep-2024 Sep-2023 Mar-2024 Sep-2024 |



Amiz
(STIE/4c/Track)

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| SI. No | Status | Agriculture University depot and Polytechnic depot | | IIT Kanpur to Naubasta | | Agriculture University to Barra 8 | |
|--------|--|---|----------|---|--|-----------------------------------|----------|
| | | Location | Date | Location | Date | Location | Date |
| 3 | Completion of Acceptance test and taking over the system (Stage 3) | Test track at Agriculture University Depot | Dec-2023 | ii. Entire section including stations Package -3 (Bada Chauraha to Transport Nagar) | May-2023 | | |
| | | Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. At Agriculture University | Apr-2024 | i. Between first pair of stations ii. Entire section including stations | Feb-2023 Aug-2023 | | |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc at Agriculture University | Aug-2024 | Package -4 (Transport Nagar to Naubasta) i. Min 2 Km for <u>and</u> any two stations ii. Min 2 Km for <u>and</u> any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Feb-2023 May-2023 Oct-2023 Feb-2024 | | |
| | | Polytechnic Depot | Nov-2021 | Priority section | Nov-2021 | Corridor 2 | |
| | | Agriculture university depot | Dec-2024 | Balance Corridor 1 | Jun-2024 | | Dec-2024 |



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Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

| Sl. No | Status | Agriculture University depot and Polytechnic depot | | IIT Kanpur to Naubasta | | Agriculture University to Barra 8 | |
|--------|--|---|---|--|---|--|---|
| | | Location | Date | Location | Date | Location | Date |
| 4. | Access for Installation for track work (Stage 0) | <p>Test track at polytechnic Depot</p> <p>Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. at Polytechnic depot</p> <p>Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc. at Polytechnic depot</p> <p>Test track at Agriculture University Depot</p> <p>Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. At Agriculture University</p> <p>Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc at Agriculture University</p> | <p>Jan-2021</p> <p>Jan-2021</p> <p>Mar-2021</p> <p>Jun-2023</p> <p>Jul-2023</p> <p>Dec-2023</p> | <p>Package -1 (IIT Kanpur to Motijheel including depot connecting lines)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For all balance stations</p> <p>iv. For balance full stretch in viaduct</p> <p>Package -2 (Motijheel to Bada Chauraha)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -3 (Bada Chauraha to Transport Nagar)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -4 (Transport Nagar to Naubasta)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For all balance stations</p> <p>iv. For balance full stretch in viaduct</p> | <p>Jan-2021</p> <p>Feb-2021</p> <p>Apr-2021</p> <p>May-2021</p> <p>Apr-2022</p> <p>Dec-2022</p> <p>Sep-2022</p> <p>Mar-2023</p> <p>Aug-2022</p> <p>Dec-2022</p> <p>Apr-2023</p> <p>Aug-2023</p> | <p>Package -1 (Agriculture University to Double Pulia including depot connecting lines)</p> <p>i. Between first pair of stations</p> <p>ii. Entire section including stations</p> <p>Package -2 (Double Pulia to Barra 8)</p> <p>i. Min 2 Km for and any two stations</p> <p>ii. Min 2 Km for and any two stations</p> <p>iii. For balance full stretch in viaduct</p> | <p>Jun-2023</p> <p>Oct-2023</p> <p>Mar-2023</p> <p>Sep-2023</p> <p>Feb-2023/4</p> |



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Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

| SI. No | Status | Fatehabad depot and Kalindi Vihar depot | | Sikandara to Taj East Gate | | Agra Cantt to Kalindi Vihar | |
|--------|---|--|----------|---|-----------------------------------|--|--|
| | | Location | Date | Location | Date | Location | Date |
| 1 | Partial Completion of track & shared access to signalling & traction contractor (Stage 1) | Test track at Fatehabad depot | Oct-2022 | Package -1 (Taj East Gate Dead end to Fatehabad including depot connecting lines) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Jul-2022 Oct-2022 Jan-2023 | Package -1 (Kalindi Vihar Dead end to MG Road including depot connecting lines) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Feb-2023 Jun-2023 Sep-2023 Jan-2024 |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg etc. at Fatehabad depot | Nov-2022 | Package -2 (Fatehabad to Jama Masjid) i. Between first pair of stations ii. Entire section including stations | Oct-2022 Jan-2023 | Package -2 (MG Road to Agra Cantt dead end) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Jul-2023 Dec-2023 Mar-2024 Aug-2024 |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc at Fatehabad depot | Jan-2023 | Package -3 (Jama Masjid to RBS collage) i. Between first pair of stations ii. Entire section including stations | Feb-2024 Jul-2024 | | |
| | | Test track at Kalindi Vihar depot | Mar-2024 | Package -4 (RBS Collage to Sikandara Dead end) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Nov-2023 Mar-2024 July-2024 | | |



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| SI. No | Status | Fatehabad depot and Kalindi Vihar depot | | Sikandara to Taj East Gate | | Agra Cantt to Kalindi Vihar | |
|--------|--|--|----------------------|---|----------------------------------|--|--|
| | | Location | Date | Location | Date | Location | Date |
| 2 | Completion of track work (Stage 2) | Test track at Fatehabad depot | Dec-2022 | Package -1 (Taj East Gate Dead end to Fatehabad including depot connecting lines) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Nov-2022 Jan-2023 Apr-2023 | Package -1 (Kalindi Vihar Dead end to MG Road including depot connecting lines) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | May-2023 Sep-2023 Jan-2024 May-2024 |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg.etc. at Fatehabad depot | Jan-2023 | Package -2 (Fatehabad to Jama Masjid) i. Between first pair of stations ii. Entire section including stations | Jan-2023 Apr-2023 | Package -2 (MG Road to Agra Cantt dead end) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Oct-2023 Mar-2024 Jul-2024 Nov-2024 |
| 3 | Completion of Acceptance test and taking over the system (Stage 3) | Test track at Kalindi Vihar depot | Apr-2023 Jun-2024 | Package -3 (Jama Masjid to RBS collage) i. Between first pair of stations ii. Entire section including stations | Jun-2024 Oct-2024 | | |
| | | Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. At Kalindi Vihar depot | Jul-2024 | Package -4 (RBS Collage to Sikandara Dead end) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Feb-2024 May-2024 Nov-2024 | | |
| | | Fatehabad depot | Jun-2023 | Priority section | Jun-2023 | | |
| | | Kalindi Vihar Depot | Dec-2024 | Balance Corridor 1 | Dec-2024 | Corridor 2 | Dec-2024 |



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| Sl. No | Status | Fatehabad depot and Kalindi Vihar depot | | Sikandara to Taj East Gate | | Agra Cantt to Kalindi Vihar | |
|--------|--|--|----------|---|----------------------------------|--|--|
| | | Location | Date | Location | Date | Location | Date |
| 4. | Access for installation for track work (Stage 0) | Test track at Fatehabad depot | Jun-2022 | Package -1 (Taj East Gate Dead end to Fatehabad including depot connecting lines) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Mar-2022 Jul-2022 Oct-2022 | Package -1 (Kalindi Vihar Dead end to MG Road including depot connecting lines) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Nov-2022 Mar-2023 Jun-2023 Sep-2023 |
| | | Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. at Fatehabad depot | Aug-2022 | | | | |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg etc. at Fatehabad depot | Oct-2022 | Package -2 (Fatehabad to Jama Masjid) i. Between first pair of stations ii. Entire section including stations | Jul-2022 Sep-2022 | Package -2 (MG Road to Agra Cantt dead end) i. Min 2 Km for and any two stations ii. Min 2 Km for and any two stations iii. For all balance stations iv. For balance full stretch in viaduct | Mar-2023 Sep-2023 Dec-2023 Apr-2024 |
| | | Test track at Kalindi Vihar depot | Dec-2023 | Package -3 (Jama Masjid to RBS collage) i. Between first pair of stations ii. Entire section including stations | Nov-2023 Mar-2024 | | |
| | | Stabling lines & other lines excluding workshop lines, pit lathe & ETU etc. At Kalindi Vihar depot | Jan-2024 | Package -4 (RBS Collage to Sikandara Dead end) i. Min 2 Km for and any two stations ii. For all balance stations iii. For balance full stretch in viaduct | Aug-2023 Dec-2023 Mar-2024 | | |
| | | Workshop lines, inspection Bay & PW lathe/BD plant/IC bldg. etc at Kalindi Vihar depot | May-2024 | | | | |



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Contractor to take prior approval of paints and rail painting methodology from Engineer. Paint and primer shall be of reputed brands or as approved by RDSO. Proper cleaning with wire brush of rail from all sides including foot side shall be done before applying the primer. Rail shall be raised at a certain height for its proper cleaning. Rail painting shall be done in accordance with IS 9862.

6.3.9 Approved Manufacturers

The Contractor shall submit to the Engineer for each item or component to be manufactured, full details of the previous relevant experience of the proposed manufacture in the production of that item, and also previous experience of manufacturing similar products for the Railway industry. The major items that require particular and specific previous manufacturing expertise and require prior approval of the Employer are as follows:

- (a) Friction buffer stops
- (b) Concrete sleepers for plain line and turnouts;
- (c) Fastening components of ballasted track.
- (d) Fastening components of ballastless track.
- (e) Mass spring system

6.4 Mass Spring System (MSS)

6.4.1 Objective

The objective of providing MSS is to substantially reduce structural vibrations propagating from track structure while passage of trains. ***MSS is to be strip bearing type with adjoining filler material of same quality and specification having less stiffness. Bidder may also propose alternatively floating slab with discrete / strip pads type MSS with or without filler material complying the technical specification and performance requirement of the Tender.***

6.4.2 The general layout of full surface MSS with differential stiffness is given in the tender drawing (volume 4). It comprises of two separate materials having different stiffness values. The stiffer material in this system is named strip bearing and the softer material is named filler material. **Drawing for alternate proposal shall be submitted by the contractor and approved by the Engineer.**

6.4.3 General Requirements of Discrete, Strip and Filler Mass Spring System

- i. It should be discrete, strip or full-surface (discrete / strip + filler) support for the slab.
- ii. The surface of the pad should be free from cracks & damages that affect the performance of the pad.
- iii. The elastic pad should be reliable, homogeneous and having lasting elasticity.
- iv. It should be possible to overload the elastic pad for short term without deterioration and it should not damage when heavy vehicle is driven over it.
- v. It should have high efficiency & should provide long term stability.



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| | | |
|----|--|--|
| 9 | Vibration mitigation along with frequency range (VdB) (Measurement of operation) | |
| 10 | Acceptance criterion and test protocol followed by reference metro | |
| 11 | Any problems encountered during installation? | |
| 12 | Any problems noticed after installation? | |
| 13 | Is the performance satisfactory as per the design criterion and as per client requirements as on the date of issue of certificate. | |
| 14 | Any other comments on the performance | |
| 15 | Date of issue of certificate | |

- xiv. MSS shall have design service life of 35 years.
- xv. The elastic pads should be volume compressible.
- xvi. It is to be labelled at the manufacturer's premises indicating the manufacturer and year of manufacturing.

6.4.4 Design of Track Slab with MSS

- i. **Location of MSS:** The contractor should conduct basic vibration study through expert in order to evaluate the frequency & intensity of noise and vibration that will be produced by the train without MSS and list out locations where vibrations are required to be mitigated. The vibration mitigation required shall be evaluated and accordingly the MSS shall be proposed. These identified locations where vibration values are beyond the prescribed limit shall be reviewed and approved by the Engineer. Employer has envisaged the provision of MSS in tunnel having low ground cover, alignment near sensitive / heritage structures, elevated stations and alignment below dense residential structures etc.
- ii. The static and dynamic stiffness of the elastic MSS pad must be evaluated in order to achieve the performance of MSS in terms of natural frequency, transmissibility, insertion loss and rail deflection and further to determine the acceptance criteria of the elastic pad at the time of testing.
- iii. Design requirements for mitigation performance should achieve natural frequency < 20 Hz and insertion losses of at least 20 15 VdB in the relevant frequency band of 30 Hz and 20 Vdb in the relevant frequency band of 40 Hz beyond (with consideration of train mass) and vibration in the structures above/adjoining underground section with MSS are within permissible limits.
- iv. Calculation of MSS should be done based on actual drawings of MSS section submitted during tender for viaduct, circular and cut & cover tunnel.
- v. Total rail deflection due to running train (for slab + fastening) to be limited to 5 mm.
- vi. Width of filler MSS shall be 80 to 100 mm more than the width of track slab i.e. 40 to 50 mm projection on either side of track slab to support the formwork and proper



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pouring/vibration of concrete.

- vii. The size of MSS (length and width) shall be approved by the Engineer.
- viii. Thickness of MSS mat (to be provided in single layer only) should not exceed 40 mm.
- ix. **Structural Design of Track Slab with MSS:** As the Track slab will be supported by discrete MSS or two longitudinal MSS strip primarily, the proper structural design of the track slab including proper detailing of reinforcement should be done by the contractor to ensure serviceability and stability of track slab for its design life.
The structural design of track slab with MSS shall include Ultimate Limit State, Serviceability Limit State and Fatigue Design according to relevant codes for concrete structures (e.g. Euro code 1992 or similar).
- x. **Drainage:** A proper drainage system has to be designed for the proposed Mass Spring System by the designing authority.

6.4.5 Submission of Documents: The track contractor should submit the following document to the Engineer for approval:

- a. Basic vibration study report.
- b. Detailed specification of the elastic pad including size, to be laid between the 1st and 2nd pour of concrete.
- c. Detailed calculation of natural frequency, transmission function, insertion loss & rail deflection based on 2 Mass 2 Spring Model.
- d. Calculation for the Prognosis of the Proposed Mass Spring System.
- e. Method statement for laying & installation of track slab with MSS.
- f. Design of the transition zone to avoid the sudden change in stiffness of the track and smoothen out the rail deflection. Two transition zones are to be adopted at entry and exit of each section of MSS. The transition zones should consist of suitable number of sections of each 15 metres.
- g. Certificates of tests carried out earlier on MSS material as per the relevant standards and also furnish the copy of those standards.
- h. Method statement for testing of the system after completing the installation & maintenance manual.
- i. Quality Assurance Plan

6.4.6 Technical Specifications of MSS (for discrete, strip and filler material)
Material should comply technical requirements of vertical static stiffness / bending modulus, vertical dynamic bending modulus / stiffness, loss factor, water resistance, ageing factor, dimensional check, Mechanical fatigue strength, Tensile stress at break, elongation at break, compression set and other important parameters as given in DIN 45673-7, DIN EN ISO 527-3/5/100, EN ISO 1856 etc. or equivalent. The contractor should provide the detailed inspection test plan (ITP) from MSS supplier and get it approved by the employer before the supply of MSS.

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6.4.7 Calculation for the Prognosis of the Proposed Mass Spring System

The following parameters have to be used when calculating the natural frequency and the insertion loss of the system (Prediction):

- Unsprung mass: max. 15% of the wheel-set mass
- Max Axle Load: 16 Tons
- Operating speed: 90 Km/h
- Rail Type: UIC 60
- Gauge: Standard Gauge
- Distance between fastening system: 700 mm in UG, 600 mm in elevated
- Stiffness of fastening system (Cstat): 22.5 KN/MM
- Grade of Concrete: M35. The grade of concrete of track slab with MSS may be suitably enhanced (with respect to M35) as per design considering fatigue stress etc. without any additional cost.
- Track cross-sections: According to Tender drawings.
- Weight of the slab and the fastening system
- Theoretical Model: (MDOF) Multi-degree of freedom model.

Output of the calculation should clearly show

- Natural frequency of the whole system
- Insertion loss curve comparing the following two systems
 - Normal track structure fitted with Elastic Fastening system.
 - Track structure fitted with MSS and elastic fastening system
- Dynamic bedding modulus / stiffness of material at the operating load levels of running train and at the natural frequency
- Deflection of rail at operating speed (load levels to be considered: mass of superstructure plus mass of train and considering the effect of elastic rail fastening system)
- Static bedding modulus / stiffness between load range of minimum load and operating load
- If systems are calculated as (MDOF) Multi Degree of Freedom Model, the output shall be natural frequencies and the dynamic interaction (transfer function over the whole frequency range)

6.4.8 Acceptance Criteria of Track Slab with MSS:

Acceptance Criteria for Track Slab with MSS is given below:

1. Natural frequency of the whole system with MSS should be less than 20 Hz as per design.
2. Maximum rail deflection (for slab + fastening) is to be limited to 5 mm as per design.
3. Minimum insertion loss of 15 Vdb and 20 Vdb in the relevant frequency band of beyond 30Hz and 40 Hz (without MSS) respectively in of the track system without MSS as per design.
4. Reduction in vibrations (Measured in Vdb) in comparison with the similar section where MSS has not been provided, should be minimum 15 Vdb and 20 Vdb in the relevant frequency band of 30 Hz and 40 Hz (without MSS) respectively. Also vibration in the structures above/adjoining the underground section with MSS are to be within permissible limit.
5. Compliance of above criteria (Sl. No. 1 to 4 above) will indicate achievement of objective of providing MSS is fulfilled in achievement of vibration attenuation ~~for each stretch of~~ where MSS has been installed.
6. Contractor has to arrange all necessary testing required for above validation of acceptance criteria (Sl. No. 1 to 4 above) from any independent third party after approval of Engineer at his own cost for each 12 locations / sections where MSS has been provided. Employer may also engage a third party agency to substantiate above

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sleepers shall be manufactured only after all the interface issues with S&T designated contractor & design of turnout/derailing switches and scissors x-over (to be supplied by the Employer) have been resolved/finalised & the relevant details including those pertaining to the sleepers of turnouts/derailing switches, scissors x-over have been approved by the engineer. The sleepers for turnouts/derailing switches and scissors x-over to be supplied and manufactured by the contractor, shall be fully compatible to the turnout/derailing switches and scissors x-over design as finalised & approved by the Employer.

6.6 BUFFER STOPS

On main lines and depot lines friction buffer with mechanical impact absorption (non-hydraulic type) shall be provided. The design and specification of friction buffers shall be submitted by the contractor for Engineer's approval. The contractor shall interface with the designated Rolling Stock Contractor for the details required for the design of friction buffer stops. However, the following details shall be followed.

Standard Gauge -

- Weight of empty train is equal to 126 tonnes for 3-car train set without passengers.
- Weight of empty train is equal to 252 tonnes for 6-car train set without passengers.
- Weight of train is equal to 192 tonnes for 3-car train set with passengers.
- Weight of train is equal to 384 tonnes for 6-car train set with passengers
- Impact velocity for main line & test track: 25 km/h
- Impact velocity for depot line: 10 km/h.
- **Buffer stop for main lines**
 - Out of 24, 18 nos. buffer stops have to be designed for 3 car train sets.
 - Remaining 6 nos. buffer stop has to be designed in such a way that initially main body of buffer should take care of all impact loads without requiring any friction shoes behind the buffer stop for 3 car train set and in future they can be made compatible with 6 car train sets by providing additional shoes behind the buffer stops. Extra buffer shoes to make the Buffer Stop compatible for 6 car train sets shall not be supplied under this contract.
- **Buffer stops for depots**
 - Out of ~~78, 62~~ 56, 40 nos. buffer stops have to be designed for 3 car train sets.
 - Remaining 16 nos. buffer stop has to be designed in such a way that initially main body of buffer should take care of all impact loads without requiring any friction shoes behind the buffer stop for 3 car train set and in future they can be made compatible with 6 car train sets by providing additional shoes behind the buffer stops. Extra buffer shoes to make the Buffer Stop compatible for 6 car train sets shall not be supplied under this contract.



Apis
(S1E/GC/Inda)

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

steel plates of appropriate thickness and dimensions shall be supplied & provided below the intermediate pad on all base plates by the contractor at the time of assembling these for installation. Concreting shall be done up to 15-20 mm below bottom of these plates and the gap shall be grouted with an appropriate material as approved by the engineer.

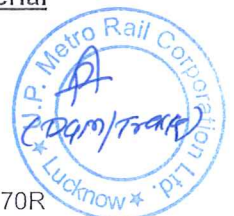
8.8 Installation of Mass Spring System

The Contractor is required to ensure the following during installation of track with MSS:

- a. MSS shall be installed duly keeping the drainage in view.
- b. Track bed should be properly cleaned and all dust and dirt shall be removed.
- c. Any undulation in the track bed shall be filled to concrete mortar.
- d. All protrusions (steel or concrete both) from track bed shall be removed using grinders etc.
- e. The elastic MSS pad should be fixed with proper sturdy arrangement so that during 2nd stage concreting, there should not be any movement of pad from its desired position.
- f. Elastic MSS pad design and installation should be such that it does not permit dirt or cement slurry from slab track to seep into the elastic MSS pad thereby affecting the life and performance of the MSS. Proper adhesive tape shall be used to lock the joints of MSS.
- g. It is important to keep the number of joints as low as possible and joints shall be sealed with tape to prevent the concrete mixture from entering & creating structure borne sound bridges.
- h. ~~The resilient mat installation must be completed in the full width and length of the track substructure and on the vertical sides in order to obtain a truly floating concrete slab.~~
- i. The installation has to be done under strict supervision of the MSS material supplier and in accordance with the installation guidelines given by the supplier. The concreting of the slab has to be done only after the clearance from the supplier's inspection supervisor.
- j. If there are shear keys/stopper, a full decoupling of the shear key from the floating slab shall be achieved by covering the shear key with the elastic pad of same quality as specified by MSS supplier.
- k. Larger cover blocks at higher frequency shall be required to support track slab reinforcements to reduce localised compression in MSS.
- l. For support of Gauge Support Frame (GSF) on MSS, sufficiently thick & large GI plates with smooth corners at both side and without having any burr shall be used to avoid any damage to MSS and to reduce localized compression in MSS. Shape of this plate can rectangle / circular.
- m. Use of damaged MSS shall not be allowed. Any damaged MSS during installation, shall be replaced by contractor with fresh MSS. Joining of damaged MSS shall also not be allowed. Contractor has to take proper precaution in the handling of MSS to avoid damage. Cost of damaged MSS shall be borne by contractor.
- n. All cut outs in Track slab with MSS shall be fully covered / closed for proper movement of public in emergency conditions.
- o. In case of MSS, all track slab joints to be properly sealed with proper material / arrangement as approved by Engineer

8.9 DESTRESSING OF CWR

8.9.1 General



Atiz
(STIE/GC/Red)

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

tracks in worst weather conditions. The insulation level of each section shall be tested, on completion of the track works for the section, and the results recorded. The commissioning acceptance value shall be 100 ohm/km.

2. The rail to earth test shall be undertaken after the track has been completed and cleaned but before it is finally formed into a continuously welded system and before all the bonding is installed.
3. The test shall be undertaken on rail lengths up to maximum length of 1000 m.
4. The track shall not be finally formed into a continuous length, until the rail insulation to earth tests have been undertaken and approved.
5. Measurement of track insulation as per prescribed method in line with EN 50122-2.
6. The electrical insulation of individual fastening system (between running rails and earth) shall be not less than the following:
 - 100 MΩ DC resistance in dry condition
 - 1 MΩ DC resistance in wet condition
 - 20000 Ω AC impedance in dry conditions to the frequencies from 20 cycles to 10 kilocycles

9.5.4 Rail to Rail insulation test

9.5.4.1 Ballast Resistance Test

1. A ballast resistance test shall be undertaken on all track lengths over 50 metres as a check of the leakage of current through the track base and rail fastening system from one rail to the other.
2. The ballasted track base resistance test shall be undertaken after the track has been complete and cleaned but before it is finally formed into a continuous length and all the bonds are attached.
3. The testing procedure and the minimum resistance shall comply with the requirements proposed by interfacing with designated Signalling contractors and as approved by Engineer.

9.5.4.2 Ballastless Track Base Resistance Test

1. A ballastless track base test shall be undertaken on all track lengths over 50 metres as a check of the leakage of current through the track base and rail fastening system from one rail to the other.
2. The ballastless track base resistance test shall be undertaken after the track has been complete and cleaned but before it is finally formed into a continuous length and all the bonds are attached.
3. The testing procedure and the minimum resistance shall comply with the requirements proposed by interfacing with designated Signalling contractors.

Aviz
(ST/IGC/Track)



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

manufactures of Monoblock PSC Broad Gauge (1673 mm) sleepers for turnout, scissors cross-over and derailing switch available in India approved by RDSO.

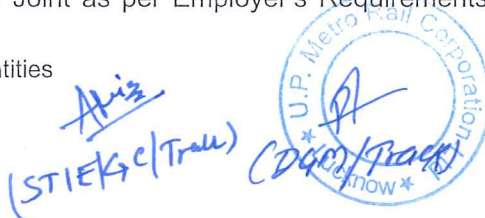
- Design of the Monoblock PSC sleepers for the turnout, scissors cross-over and derailing switch for standard gauge shall be broadly in accordance with the design parameters, specifications of raw materials, specifications of finished products, codes and drawings of manufacturing broad gauge (1673mm) Monoblock PSC sleepers for the turnout, scissors cross-over and derailing switch used on Indian Railway.
- In case Monoblock PSC sleeper sets for turnouts are different for LH and RH turnouts as per design furnished by turnouts manufacture in contract KNPAGT-2, contractor (KNPAGT-3) shall arrange turnouts sleeper sets accordingly.
- Cost of all material including modification in moulds, SGCI Inserts & their positions, dowels, dowel position, sleeper dimensions, mounting arrangement for S&T fixtures etc.
- Cost of all provisions required to be made for installation of turnout assembly on PSC sleepers
- Cost of all provisions required to be made on PSC sleepers for fixation of point drive machines, double pull arrangement & any other arrangement required for fixation of S&T equipment.
- Cost of all material, including SGCI inserts, labour deployment of equipment, plant and machinery etc.
- Cost of tests, testing facilities and arranging test equipment in plant/material testing centre.
- Manufacturing, inspection and testing of PSC sleeper.
- Handling/rehandling, transportation loading, unloading, stacking/storing up to project site in Lucknow Kanpur and Agra.
- Further spare Sleepers are to be handed over to Store of O&M / Kanpur & Agra. No additional payments shall be made for handling, rehandling, loading unloading, transportation or for any other activities involve while handing over of spare Sleepers to Kanpur & Agra at designated place as decided by Engineer.

Item 3 Glued Insulated Joints:

Item 3.1: Shop Fabricated Glued Insulated Joint G3(L) type as per RDSO drawing for UIC 60/60E1, 1080 grade HH rails.

Item 3.2: Site Fabricated Glued Insulated Joint G(3)L type) as per RDSO drawing for UIC 60/60E1, 1080 grade HH rails.

The price for item nos. 3.1 and 2.2 shall include the cost of supplying of glued Insulated Rail Joint as per Employer's Requirements and drawings,



version

The price shall include the cost of supplying of ballastless track fittings as per Employer's Requirements and Performance Criteria laid down by RDSO, mainly consisting but not limited to:

- Cost of developing, manufacturing & supplying of ballastless track fittings including cost of deployment of all plant, machinery required
- Cost of all material & labour including all fittings fastening & fixtures etc. complete for installation on track.
- Cost of inspection & acceptance test. The contractor will appoint a third party experienced and reputed inspection Agency with the approval of employer and carry out all tests at his own cost.
- Detailed documentation including drawings, Technical details & calculations & procurement as per Employer's Requirements.
- Shipping, Handling, transportation loading, unloading, stacking/storing up to project site in Kanpur & Agra at designated place as decided by Engineer.
- Further spare Fastening systems are to be handed over to Store of O&M / Kanpur & Agra. No additional payments shall be made for handling, rehandling, loading unloading, transportation or for any other activities involve while handing over of spare buffer stop to O&M / Kanpur & Agra at designated place as decided by Engineer.

2.3 Bill No. BLT-1: Installation of Ballastless Track

Item 1: Laying plinth/slab as designed by contractor and installation of track work for plain track with UIC 60/60E1 head hardened rail with all fittings and fastenings etc. complete in all respect in underground i.e. box/NATM/circular tunnel.

Item 2: Laying plinth/slab as designed by contractor and installation of track work for plain track with UIC 60/60E1 HH rail with all fittings and fastenings etc. complete on viaduct.

The Price of item No 1(a) & 2 (a) shall include complete laying of track on reinforced concrete plinth/slab as per Employer's Requirements and drawings mainly consisting but not limited to the following:

- Design of Track Structure to suit proposed ballastless Track Fittings and tender requirements. Typical Drawing of Ballastless Track Structure has been given in Volume - 4 for viaduct as well as underground (Circular/Box/NATM) section. Some interface requirements but not all, are listed as below:
 - Design of Plinth/Slab considering forces of 3rd Rail for 750V DC Traction and its arrangement of fixing on plinth/slab as shown in typical tender drawing (volume 4).

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

- Detailed documentation and records.
- Cost of handling /rehandling, transportation/placement of rail panels of all lengths.
- Cost of all interface work as per tender document
- Cost of providing dowels for fixing of 3rd Rail Bracket for 750 V DC Traction at interval of 3m to 5m tentatively depending upon the curvature of alignment. Dowels will be provided by Traction Contractor free of Cost. Fixing of 3rd Rail with bracket will also be done by Traction Contractor. Scope of Track Contractor is limited to installation of dowels only as per approved drawing.

The above cost shall consider the following:

1(a) & 2 (a): Shear Connector already provided.

1(b) & 2(b): Rates over and above 1 (a) & 2(a) if, Shear Connector to be provided by contractor as per tender drawings.

Item 3a Laying slab with MSS (including supply of MSS) as designed by contractor and installation of track work for plain track with UIC 60/60E1 head hardened rail with all fittings and fastenings etc. complete in all respect in underground circular portion.

Item 3b Laying slab with MSS (including supply of MSS) as designed by contractor and installation of track work for plain track with UIC 60/60E1 HH rail with all fittings and fastenings etc. complete on viaduct and in underground Station and Box/NATM tunnel portion.

The Price of item No 3(a) & 3 (b) shall include complete laying of track on reinforced concrete slab as per Employer's Requirements and drawings mainly consisting but not limited to the following:

- Design of Track Structure with MSS to suit proposed ballastless Track Fittings and tender requirements through a specialized agency/expert. Typical Drawing of Ballastless Track Structure has been given in Volume - 4 for viaduct/NATM/box tunnel as well as for underground circular tunnel. Some interface requirements but not all, are listed as below:
 - Design of Plinth/Slab considering forces of 3rd Rail for 750V DC Traction and its arrangement of fixing on plinth/slab as shown in typical tender drawing (volume 4).
 - Design of Plinth/Slab for Fixing Check Rail for section having less than 190m radius of Curve. Check Rail will be provided by Employer Free of Cost and payment of supply of brackets and fixing etc. of Check Rail will be made as per Item 8 of this Bill of BOQ.
- MSS will be as per clause 6.4.1 of PS, strip type below the rail-seat area of track structure and in remaining area filler MSS will be



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

provided. All filler materials will be also of same brand/type/specification/design life except with less stiffness.

- Design of Track Structure with MSS should such that it breaks the vibration propagation from track structure to the surrounding structure and results in substantial reduction in vibration as per tender requirement.
- Tenderer to take note of surrounding conditions while designing the track structure with MSS.
- Design of reinforced shear key and it should be such that it holds track slab safely/stably with MSS on viaduct and in NATM/box tunnel.
- Cost of RCC for plinth/slab track and all associated expenditure for providing super elevation as per alignment drawing and site requirement.
- Scope/range of Height of Track plinth/slab (excluding MSS height) has been given in the tender drawings for this item. Payment of Extra Reinforced Cement Concrete (RCC) shall be made beyond plinth/slab height range as mentioned in tender drawing and as per Item No. 9 of this Bill.
- Cost of survey and setting out including cost of deployment of all survey equipment, pegging markers, reference markers etc.
- Loading, handling/rehandling, transportation and unloading of all materials (including the materials supplied by the employer) from stock area to site including cost of deployment of plant, equipment & machinery.
- All related Cost of installing of Shear Key/Stopper in Viaduct and Underground Station and Box/NATM portion as per design.
- Cost of all temporary works including service/temporary track & permanent works etc. to carry out the work.
- Setting up of formwork, false work including deployment of all equipment, plant & machinery and cost of track supporting work including jigs and fixtures.
- Supply and Fixing of slab and shear key reinforcement
- Assembling and laying of track with all fittings & fastenings including Glued Insulated Joints, etc. complete.
- Cost of RCC, supply & welding of M.S. GI Plate to the plinth reinforcement, supply & connecting aluminum cables with M.S. GI Plates for electrical continuity.
- Destressing of the CWR and final fastening down of track including cost of deployment of necessary equipment.
- Cost of all temporary/permanent markers including paint markers on

Amiz
(SITE/GC/Track)

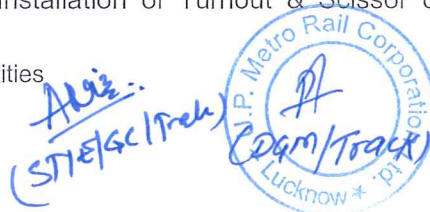


Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

rail.

- Cost of cutting, drilling, jointing, except rail welded joints
- Cost of all rail welding shall not be included in this item and shall be paid separately under the item of rail welding.
- Provision of track drainage and provision of screed concrete where ever necessary for providing reverse slope as per Employer's Requirements and drawings.
- Cost of handling /rehandling, transportation/placement of rail panels of all lengths.
- In case of MSS with Filler Material, Width of Filler Material MSS should be such that it protrudes beyond track slab by 40-50mm during installation of track structure. Size/shape of Filler Material MSS should be such that it reduces unnecessarily joints.
- Each section of MSS will be equipped with the transition zone of adequate length on both ends of such stretch of MSS as per design, consisting of half thickness of MSS.
- The contractor will be responsible for proper grading of the base for achieving uniform Rail level in main as well as transition zone.
- Preparation of surface by applying suitable mortar or grinding to achieve a uniform level before placing the MSS.
- The shear keys/stopper will be covered with similar MSS materials at top and appropriate material in all four sides shown in the tender drawing for reference or as per design.
- This item also includes cost of procurement of MSS and filler materials including Inspection and testing, shipping, handling, transportation to site and placing / fixing etc. at the correct location below track plinth / slabs.
- Inspection, Measurement & Acceptance Test after installation of MSS during train operation as per tender document.
- Detailed documentation and records.
- Cost of all interface work as per tender document
- Cost of providing dowels for fixing of 3rd Rail Bracket for 750 V DC Traction at interval of 3m to 5m tentatively depending upon the curvature of alignment. Dowels will be provided by Traction Contractor free of Cost. Fixing of 3rd Rail with bracket will also be done by Traction Contractor. Scope of Track Contractor is limited to installation of dowels only as per approved drawing.
- The MSS experts for supervision of work / installation of MSS should be arranged.

Item 4: Laying RCC Slab and installation of Turnout & Scissor crossover with UIC



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

GRAND SUMMARY

(Collection of Bills)

Schedule "A"

| Bill No. | Sections | TOTAL Brought Forward from Bills of Quantity | |
|---|--|--|----------------------|
| | | Foreign Currency Amount | Indian Rupees Amount |
| G1 | General Requirements | | |
| SPM1 | Supply of Permanent Way Material | | |
| SPM2 | Supply of Fastening System For Ballastless Track | | |
| BLT1 | Installation of Ballastless Track | | |
| BT1 | Installation of Ballasted track | | |
| M1 | Miscellaneous Items | | |
| GRAND SUMMARY (TOTAL FOR ALL BILLS) CARRIED TO TENDER PRICE) | | | |

Amiz
(STIE/GC/Amiz)



Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

| Item no. | Description of Items | Unit | Kanpur | Agra | Total Quantity | Rate in Indian Rupees (INR) | Rate in Foreign Currency | Amount in Indian Rupees (INR) | Amount in Foreign Currency |
|----------|---|---------|-----------------------|-----------------------|-------------------------|-----------------------------|--------------------------|-------------------------------|----------------------------|
| 3 | Laying of slab with derailment guard & MSS and installation of track work for plain track with UIC 60/60E1 head hardened rails with all fittings & fastenings and shear key where required etc. with necessary dowels for fixing of 3rd Rail. | | | | | | | | |
| (a) | In Circular Tunnel with MSS | Track m | 8,500 <u>7,700</u> | 7,000 <u>6,700</u> | 15,500 <u>14,400</u> | | | | |
| (a1) | In Circular Tunnel - Transition zone MSS | Track M | 800 | 300 | 1,100 | | | | |
| (b) | In Underground Station, Box/NATM Tunnel and Elevated Stations with MSS | Track m | 5,500 <u>4,150</u> | 4,200 <u>3,100</u> | 9,700 <u>7,250</u> | | | | |
| (b1) | In Underground Station, Box/NATM Tunnel and Elevated Stations - Transition zones MSS | Track M | 1350 | 1,100 | 2,450 | | | | |
| 4 | Laying RCC slab & installation of turnout with UIC 60/60E1 head hardened rails with all fittings and fastenings etc. | | | | | | | | |
| 4.1 | 1 in 9 turnout | Set | 26 | 26 | 52 | | | | |
| 4.2 | 1 in 9 Scissor (4.6m track centre) | Set | 5 | 3 | 8 | | | | |
| 5 | Installation of Friction Type Buffer Stops | | | | | | | | |
| 5.1 | 25 Kmph Speed Potential | Nos. | 24 | 24 | 48 | | | | |
| 6 | Welding of UIC 60/60E1, 1080 Grade HH Rails | | | | | | | | |
| 6.1 | Flash Butt Welds | Nos. | 7,100 | 6,750 | 13,850 | | | | |
| 6.2 | Alumino Thermic Weld | Nos. | 1,480 | 1,365 | 2,845 | | | | |

Contract-KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

track with UIC 60/60E1 HH rails with all fittings and fastening etc. complete in rectangular box/circular tunnel and on viaduct.

| Item No. | Description of items | Percentage for Part Payment | Cumulative Percentage |
|----------|--|-----------------------------|-----------------------|
| 1. | Supply of MSS at site/store in Kanpur & Agra in undamaged conditions along other necessary documents & inspection reports – Supply of MSS schedule should strictly match with tentative requirement at site and Contractor is to take approval of Engineer for MSS supply schedule. Engineer may prepone or delay the supply of MSS after assessing the actual requirements at site. | 35% <u>40%</u> | 35% <u>40%</u> |
| 2. | Surveying, Placing of MSS and track slab construction etc. | 35% <u>30%</u> | 70% |
| 3. | Rear work, loose bolt grouting and complete cleaning of the section as per employer's requirement, etc. | 15% | 85% |
| 4. | Final tolerances and destressing as per employer's requirement, etc. | 5% | 90% |
| 5. | Testing and Commissioning of the section and Validation of Effectiveness of MSS by Independent Inspecting Agency | 10% | 100% |

Bill No. BLT-1

Item No. 4: Laying RCC slab and Installation of turnouts with UIC 60 HH rails with all fittings and fastening etc. complete, 1 in 7, 1 in 9 turnouts and all scissors,

| Item No. | Description of items | Percentage for Part Payment | Cumulative Percentage |
|----------|--|-----------------------------|-----------------------|
| 1. | Surveying, etc. | 5% | 5% |
| 2. | Assembling, laying of T/O provision of Shear connectors, slab construction etc. | 65% | 70% |
| 3. | Rear work, Turnout grouting and complete cleaning of the section as per employer's requirement, etc. | 15% | 85% |
| 4. | Final tolerances and destressing as per employer's requirement, etc. | 5% | 90% |
| 5. | Interface, requirement of Electrical and signal contractor Measurement of final tolerance, acceptance tests, marker, testing and commissioning employer other requirement etc. | 10% | 100% |

Bill No. BLT-1 - Item 5.1 & 5.2

Bill No. BT-1 – Item No. 7 & 8

Installation of friction type buffer stops 25 kmph and 10 kmph speed potential.

| Item | Description of items | Percentage for | Cumulative |
|------|----------------------|----------------|------------|
|------|----------------------|----------------|------------|



| PROPOSED/TENTATIVE DN LINE CURVE TABLE: KANPUR CORRIDOR-01 (May change including addition and deletion of curves) | | | | | | | |
|--|-----------|-------------------|-------------------|-----------------|-----|----|---------------------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| DN LINE | | | | | | | |
| 1 | 1004.600 | 30.000 | 55 | 36 | 0 | 36 | |
| 2 | 1504.600 | 35.000 | 70 | 38 | 0 | 38 | IIT STATION |
| 3 | 2504.600 | 25.000 | 90 | 38 | 25 | 13 | |
| 4 | 1500.000 | 30.000 | 90 | 64 | 45 | 19 | |
| 5 | 6000.000 | 20.000 | 90 | 16 | 0 | 16 | |
| 6 | 613.000 | 45.000 | 80 | 123 | 80 | 43 | |
| 7 | 540.000 | 50.000 | 80 | 140 | 80 | 60 | |
| 8 | 40004.600 | 20.000 | 90 | 2 | 0 | 2 | |
| 9 | 6024.600 | 20.000 | 90 | 16 | 0 | 16 | |
| 10 | 22500.000 | 20.000 | 90 | 4 | 0 | 4 | |
| 11 | 1000.000 | 30.000 | 85 | 85 | 50 | 35 | |
| 12 | 1004.600 | 35.000 | 70 | 58 | 0 | 58 | GURUDEV CHAURAHA |
| 13 | 329.600 | 45.000 | 65 | 151 | 90 | 61 | |
| 14 | 2600.000 | 25.000 | 90 | 37 | 25 | 12 | |
| 15 | 2000.000 | 25.000 | 90 | 48 | 30 | 18 | |
| 16 | 760.000 | 40.000 | 85 | 112 | 65 | 47 | |
| 17 | 2004.600 | 25.000 | 90 | 48 | 30 | 18 | |
| 18 | 1004.600 | 45.000 | 70 | 58 | 0 | 58 | RAWATPUR STATION |
| 19 | 580.000 | 55.000 | 80 | 130 | 80 | 50 | |
| 20 | 255.000 | 40.000 | 60 | 167 | 90 | 77 | |
| 21 | 380.000 | 25.000 | 55 | 94 | 50 | 44 | |
| 22 | 740.000 | 40.000 | 85 | 115 | 65 | 50 | |
| 23 | 370.000 | 45.000 | 70 | 156 | 90 | 66 | |
| 24 | 855.000 | 30.000 | 80 | 88 | 50 | 38 | |
| 25 | 1004.600 | 30.000 | 70 | 58 | 0 | 58 | MOTI JHEEL STATION |
| 26 | 704.600 | 40.000 | 85 | 121 | 65 | 56 | |
| 27 | 275.000 | 45.000 | 60 | 154 | 85 | 69 | |
| 28 | 191.500 | 40.000 | 50 | 154 | 85 | 69 | |
| 29 | 454.600 | 50.000 | 75 | 146 | 80 | 66 | |
| 30 | 304.600 | 55.000 | 70 | 190 | 110 | 80 | |
| 31 | 250.000 | 45.000 | 60 | 170 | 90 | 80 | |
| 32 | 1000.000 | 30.000 | 70 | 58 | 0 | 58 | CHUNNI GANJ STATION |
| 33 | 800.000 | 35.000 | 80 | 94 | 60 | 34 | |
| 34 | 1015.100 | 40.000 | 90 | 94 | 60 | 34 | |
| 35 | 300.000 | 55.000 | 65 | 166 | 90 | 76 | |
| 36 | 300.000 | 55.000 | 65 | 166 | 90 | 76 | |
| 37 | 265.900 | 55.000 | 60 | 160 | 100 | 60 | |
| 38 | 265.900 | 50.000 | 60 | 160 | 100 | 60 | |
| 39 | 550.000 | 50.000 | 85 | 155 | 75 | 80 | |
| 40 | 365.900 | 45.000 | 45 | 65 | 0 | 65 | JHAKARKATI STATION |
| 41 | 800.000 | 40.000 | 85 | 107 | 55 | 52 | |
| 42 | 420.000 | 40.000 | 58 | 95 | 80 | 15 | |
| 43 | 300.000 | 25.000 | 55 | 119 | 55 | 64 | |
| 44 | 1500.000 | 25.000 | 90 | 64 | 30 | 34 | |
| 45 | 1300.000 | 25.000 | 90 | 74 | 35 | 39 | |
| 46 | 4700.000 | 25.000 | 90 | 20 | 0 | 20 | BARADEVI STATION |
| 47 | 1800.000 | 25.000 | 90 | 53 | 20 | 33 | |
| 48 | 5500.000 | 25.000 | 90 | 17 | 0 | 17 | |
| 49 | 3000.000 | 25.000 | 90 | 32 | 15 | 17 | |
| 50 | 2200.000 | 25.000 | 90 | 43 | 30 | 13 | |
| 51 | 750.000 | 50.000 | 90 | 127 | 70 | 57 | |

Ans.
(SITE/GC/Track)



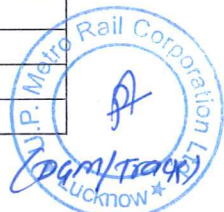
| PROPOSED/TENTATIVE DN LINE CURVE TABLE: KANPUR CORRIDOR-01 (May change including addition and deletion of curves) | | | | | | | |
|--|----------|-------------------|-------------------|-----------------|----|----|----------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| 52 | 8200.000 | 25.000 | 90 | 12 | 0 | 12 | |
| 53 | 3200.000 | 25.000 | 90 | 30 | 15 | 15 | |
| 54 | 2800.000 | 25.000 | 90 | 34 | 15 | 19 | |
| 55 | 1800.000 | 25.000 | 90 | 53 | 25 | 28 | |
| 56 | 5000.000 | 25.000 | 90 | 19 | 0 | 19 | |
| 57 | 5404.600 | 25.000 | 90 | 18 | 0 | 18 | |
| 58 | 754.600 | 50.000 | 90 | 127 | 70 | 57 | |
| 59 | 2100.000 | 25.000 | 90 | 46 | 25 | 21 | |
| 60 | 554.600 | 45.000 | 80 | 136 | 65 | 71 | |
| 61 | 2000.000 | 25.000 | 90 | 48 | 25 | 23 | |
| 62 | 1804.600 | 25.000 | 70 | 32 | 0 | 32 | NAUBUSTA |
| 63 | 1100.000 | 35.000 | 25 | 7 | 0 | 7 | |

Amiz
(STIET/GC/Track)



| PROPOSED/TENTATIVE UP LINE CURVE TABLE: KANPUR CORRIDOR-01 (May change including addition and deletion of curves) | | | | | | | |
|--|-----------|-------------------|-------------------|-----------------|-----|----|---------------------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| UP LINE | | | | | | | |
| 1 | 1000.000 | 30.000 | 55 | 36 | 0 | 36 | |
| 2 | 1500.000 | 35.000 | 70 | 39 | 0 | 39 | IIT STATION |
| 3 | 2500.000 | 25.000 | 90 | 38 | 25 | 13 | |
| 4 | 1504.600 | 30.000 | 90 | 64 | 45 | 19 | |
| 5 | 6004.600 | 20.000 | 90 | 16 | 0 | 16 | |
| 6 | 590.000 | 45.000 | 80 | 128 | 80 | 48 | |
| 7 | 524.000 | 50.000 | 80 | 144 | 80 | 64 | |
| 8 | 40000.000 | 20.000 | 90 | 2 | 0 | 2 | |
| 9 | 6020.000 | 20.000 | 90 | 16 | 0 | 16 | |
| 10 | 22504.600 | 20.000 | 90 | 4 | 0 | 4 | |
| 11 | 1004.600 | 30.000 | 85 | 85 | 50 | 35 | |
| 12 | 1000.000 | 30.000 | 70 | 58 | 0 | 58 | GURUDEV CHAURAHA |
| 13 | 348.900 | 45.000 | 70 | 166 | 90 | 76 | |
| 14 | 2604.600 | 25.000 | 90 | 37 | 25 | 12 | |
| 15 | 2004.600 | 25.000 | 90 | 48 | 30 | 18 | |
| 16 | 748.000 | 40.000 | 85 | 114 | 65 | 49 | |
| 17 | 2000.000 | 25.000 | 90 | 48 | 30 | 18 | |
| 18 | 1000.000 | 45.000 | 70 | 58 | 0 | 58 | RAWATPUR STATION |
| 19 | 535.000 | 52.000 | 80 | 141 | 80 | 61 | |
| 20 | 250.000 | 40.000 | 60 | 170 | 90 | 80 | |
| 21 | 425.000 | 32.000 | 65 | 117 | 70 | 47 | |
| 22 | 760.000 | 40.000 | 85 | 112 | 65 | 47 | |
| 23 | 335.000 | 45.000 | 70 | 173 | 90 | 83 | |
| 24 | 859.600 | 30.000 | 80 | 88 | 50 | 38 | |
| 25 | 1000.000 | 30.000 | 70 | 58 | 0 | 58 | MOTI JHEEL STATION |
| 26 | 700.000 | 40.000 | 85 | 122 | 65 | 57 | |
| 27 | 285.000 | 40.000 | 60 | 149 | 90 | 59 | |
| 28 | 195.100 | 40.000 | 50 | 151 | 90 | 61 | |
| 29 | 450.000 | 50.000 | 75 | 148 | 85 | 63 | |
| 30 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 31 | 310.000 | 55.000 | 70 | 187 | 110 | 77 | |
| 32 | 1015.100 | 30.000 | 70 | 57 | 0 | 57 | CHUNNI GANJ STATION |
| 33 | 815.100 | 35.000 | 80 | 93 | 60 | 33 | |
| 34 | 1000.000 | 40.000 | 90 | 96 | 60 | 36 | |
| 35 | 284.900 | 55.000 | 65 | 175 | 100 | 75 | |
| 36 | 284.900 | 55.000 | 65 | 175 | 100 | 75 | |
| 37 | 250.000 | 55.000 | 60 | 170 | 100 | 70 | |
| 38 | 250.000 | 50.000 | 60 | 170 | 100 | 70 | |
| 39 | 565.900 | 50.000 | 85 | 151 | 80 | 71 | |
| 40 | 350.000 | 45.000 | 45 | 68 | 0 | 68 | JHAKARKATI STATION |
| 41 | 800.000 | 40.000 | 80 | 94 | 45 | 49 | |
| 42 | 427.950 | 40.000 | 70 | 135 | 80 | 55 | |
| 43 | 315.900 | 55.000 | 65 | 158 | 90 | 68 | |
| 44 | 1350.000 | 25.000 | 85 | 63 | 35 | 28 | |
| 45 | 1650.000 | 25.000 | 90 | 58 | 25 | 33 | |

Atiqe
(S11E/GC/Track)



| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|----|----|------------------|
| 46 | 4704.600 | 25.000 | 90 | 20 | 0 | 20 | BARADEVI STATION |
| 47 | 1804.600 | 25.000 | 90 | 53 | 15 | 38 | |
| 48 | 5504.600 | 25.000 | 90 | 17 | 0 | 17 | |
| 49 | 3004.600 | 25.000 | 90 | 32 | 15 | 17 | |
| 50 | 2204.600 | 25.000 | 90 | 43 | 20 | 23 | |
| 51 | 754.600 | 50.000 | 90 | 127 | 70 | 57 | |
| 52 | 8204.600 | 25.000 | 90 | 12 | 0 | 12 | |
| 53 | 3204.600 | 25.000 | 90 | 30 | 15 | 15 | |
| 54 | 2804.600 | 25.000 | 90 | 34 | 15 | 19 | |
| 55 | 1804.600 | 25.000 | 90 | 53 | 25 | 28 | |
| 56 | 5004.600 | 25.000 | 90 | 19 | 0 | 19 | |
| 57 | 5400.000 | 25.000 | 90 | 18 | 0 | 18 | |
| 58 | 750.000 | 50.000 | 90 | 127 | 75 | 52 | |
| 59 | 2104.600 | 25.000 | 90 | 45 | 35 | 10 | |
| 60 | 550.000 | 45.000 | 80 | 137 | 70 | 67 | |
| 61 | 2004.600 | 25.000 | 90 | 48 | 20 | 28 | |
| 62 | 1800.000 | 25.000 | 70 | 32 | 0 | 32 | NAUBUSTA |
| 63 | 1100.000 | 35.000 | 55 | 32 | 0 | 32 | |

AW
(S115/GC/Trade)



| PROPOSED/TENTATIVE DEPOT (ENTRY & EXIT) LINES CURVE TABLE: KANPUR CORRIDOR-01 (May change including addition and deletion of curves) | | | | | | | |
|--|---------|-------------------|-------------------|-----------------|----|----|---------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| Entry Line | | | | | | | |
| 1 | 430.000 | 20.000 | 50 | 69 | 45 | 24 | |
| 2 | 150.000 | 15.000 | 25 | 49 | 0 | 49 | |

| Exit Line | | | | | | | |
|-----------|----------|--------|----|----|----|----|--|
| 1 | 300.000 | 0.000 | 25 | 25 | 0 | 25 | |
| 2 | 1000.000 | 25.000 | 65 | 50 | 0 | 50 | |
| 3 | 250.000 | 15.000 | 35 | 58 | 30 | 28 | |
| 4 | 500.000 | 20.000 | 50 | 59 | 40 | 19 | |
| 5 | 400.000 | 20.000 | 50 | 74 | 45 | 29 | |
| 6 | 320.000 | 15.000 | 35 | 45 | 30 | 15 | |
| 7 | 250.000 | 10.000 | 25 | 30 | 20 | 10 | |
| 8 | 220.000 | 10.000 | 25 | 34 | 20 | 14 | |
| 9 | 145.400 | 15.000 | 25 | 51 | 0 | 51 | |

Amiz.
(SITE/GC/Track)



PROPOSED/TENTATIVE DN LINE CURVE TABLE: KANPUR CORRIDOR-02
(May change including addition and deletion of curves)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|-----|----|-----------------|
| 1 | 1007.300 | 30.000 | 70 | 57 | 0 | 57 | |
| 2 | 504.600 | 55.000 | 85 | 169 | 90 | 79 | |
| 3 | 500.000 | 55.000 | 85 | 171 | 90 | 81 | |
| 4 | 235.000 | 50.000 | 60 | 181 | 100 | 81 | |
| 5 | 260.000 | 45.000 | 60 | 163 | 90 | 73 | |
| 6 | 266.000 | 55.000 | 65 | 187 | 110 | 77 | |
| 7 | 270.000 | 55.000 | 65 | 185 | 110 | 75 | |
| 8 | 2000.000 | 25.000 | 90 | 48 | 30 | 18 | |
| 9 | 316.000 | 55.000 | 70 | 183 | 100 | 83 | |
| 10 | 850.000 | 25.000 | 75 | 78 | 45 | 33 | |
| 11 | 450.000 | 25.000 | 60 | 94 | 55 | 39 | |
| 12 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 13 | 1100.000 | 30.000 | 85 | 78 | 45 | 33 | |
| 14 | 904.600 | 35.000 | 85 | 94 | 55 | 39 | |
| 15 | 700.000 | 40.000 | 80 | 108 | 70 | 38 | |
| 16 | 610.000 | 45.000 | 80 | 124 | 70 | 54 | |
| 17 | 224.600 | 55.000 | 60 | 189 | 110 | 79 | |
| 18 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 19 | 600.000 | 55.000 | 90 | 159 | 85 | 74 | |
| 20 | 3004.600 | 20.000 | 90 | 32 | 25 | 7 | |
| 21 | 1200.000 | 35.000 | 90 | 80 | 55 | 25 | |
| 22 | 1000.000 | 35.000 | 90 | 96 | 55 | 41 | |
| 23 | 1004.600 | 35.000 | 90 | 95 | 55 | 40 | |
| 24 | 554.600 | 35.000 | 75 | 120 | 65 | 55 | |
| 25 | 1004.600 | 30.000 | 70 | 58 | 0 | 58 | BARRA-8 STATION |

Anish
(STIE/GC/Track)



PROPOSED/TENTATIVE UP LINE CURVE TABLE: KANPUR CORRIDOR-02

(May change including addition and deletion of curves)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|-----|----|-----------------|
| 1 | 1002.700 | 30.000 | 70 | 58 | 0 | 58 | |
| 2 | 500.000 | 55.000 | 85 | 171 | 90 | 81 | |
| 3 | 504.600 | 55.000 | 85 | 169 | 90 | 79 | |
| 4 | 212.700 | 50.000 | 55 | 168 | 100 | 68 | |
| 5 | 225.000 | 45.000 | 55 | 159 | 100 | 59 | |
| 6 | 250.000 | 55.000 | 60 | 170 | 100 | 70 | |
| 7 | 288.000 | 55.000 | 65 | 173 | 100 | 73 | |
| 8 | 2016.000 | 25.000 | 90 | 47 | 30 | 17 | |
| 9 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 10 | 500.000 | 25.000 | 60 | 85 | 55 | 30 | |
| 11 | 1500.000 | 30.000 | 90 | 64 | 45 | 19 | |
| 12 | 304.600 | 55.000 | 70 | 190 | 110 | 80 | |
| 13 | 1104.600 | 30.000 | 85 | 77 | 45 | 32 | |
| 14 | 900.000 | 35.000 | 85 | 95 | 55 | 40 | |
| 15 | 704.600 | 40.000 | 80 | 107 | 70 | 37 | |
| 16 | 614.600 | 45.000 | 80 | 123 | 70 | 53 | |
| 17 | 220.000 | 55.000 | 60 | 193 | 110 | 83 | |
| 18 | 304.600 | 55.000 | 70 | 190 | 110 | 80 | |
| 19 | 604.600 | 55.000 | 90 | 158 | 85 | 73 | |
| 20 | 3000.000 | 20.000 | 90 | 32 | 25 | 7 | |
| 21 | 1204.600 | 35.000 | 90 | 79 | 55 | 24 | |
| 22 | 1004.600 | 35.000 | 90 | 95 | 55 | 40 | |
| 23 | 1000.000 | 35.000 | 90 | 96 | 55 | 41 | |
| 24 | 550.000 | 35.000 | 75 | 121 | 65 | 56 | |
| 25 | 120.000 | 10.000 | 25 | 61 | 0 | 61 | BARRA-8 STATION |

APR 2012
(SITE/GC/Track)



PROPOSED/TENTATIVE DEPOT (ENTRY & EXIT) LINES CURVE
TABLE: Kanpur CORRIDOR-02
(May change including addition and deletion of curves)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd |
|--------------|---------|-------------------|-------------------|-----------------|----|----|
| Entry Line | | | | | | |
| 1 | 150.000 | 20.000 | 25 | 49 | 0 | 49 |
| 2 | 124.600 | 20.000 | 25 | 59 | 0 | 59 |
| Exit Line | | | | | | |
| 1 | 120.000 | 10.000 | 20 | 39 | 0 | 39 |
| 2 | 120.000 | 10.000 | 20 | 39 | 0 | 39 |

Apurva
(SITE/ACC/Track)



PROPOSED/TENTATIVE DN LINE CURVE TABLE: AGRA CORRIDOR-01
(May change including addition and deletion of curves)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|-----|----|---------|
| DOWN LINE | | | | | | | |
| 1 | 414.600 | 30.000 | 45 | 58 | 0 | 58 | |
| 2 | 1000.000 | 30.000 | 85 | 85 | 50 | 35 | |
| 3 | 174.600 | 55.000 | 50 | 169 | 90 | 79 | |
| 4 | 394.600 | 85.000 | 75 | 168 | 105 | 63 | |
| 5 | 780.000 | 55.000 | 85 | 109 | 60 | 49 | |
| 6 | 504.600 | 45.000 | 80 | 150 | 70 | 80 | |
| 7 | 500.000 | 45.000 | 80 | 151 | 80 | 71 | |
| 8 | 200.000 | 55.000 | 55 | 178 | 110 | 68 | |
| 9 | 267.000 | 55.000 | 60 | 159 | 100 | 59 | |
| 10 | 1017.000 | 25.000 | 80 | 74 | 35 | 39 | |
| 11 | 250.000 | 55.000 | 60 | 170 | 90 | 80 | |
| 12 | 717.000 | 35.000 | 80 | 105 | 55 | 50 | |
| 13 | 717.000 | 35.000 | 80 | 105 | 55 | 50 | |
| 14 | 230.000 | 55.000 | 60 | 185 | 110 | 75 | |
| 15 | 237.000 | 55.000 | 60 | 179 | 105 | 74 | |
| 16 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 17 | 1017.000 | 30.000 | 85 | 84 | 45 | 39 | |
| 18 | 300.000 | 55.000 | 70 | 193 | 110 | 83 | |
| 19 | 2117.000 | 25.000 | 90 | 45 | 20 | 25 | |
| 20 | 275.000 | 35.000 | 55 | 130 | 70 | 60 | |
| 21 | 700.000 | 45.000 | 85 | 122 | 55 | 67 | |
| 22 | 450.000 | 40.000 | 75 | 148 | 75 | 73 | |
| 23 | 430.000 | 53.600 | 75 | 154 | 90 | 64 | |
| 24 | 800.000 | 35.000 | 85 | 107 | 55 | 52 | |
| 25 | 120.000 | 55.000 | 40 | 157 | 90 | 67 | |

Ariz
(STI/CL/Track)



PROPOSED/TENTATIVE UP LINE CURVE TABLE: AGRA CORRIDOR-01
(May change including addition and deletion of curve)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|-----|----|---------|
| UP LINE | | | | | | | |
| 1 | 410.000 | 30.000 | 45 | 58 | 0 | 58 | |
| 2 | 1004.600 | 30.000 | 80 | 75 | 50 | 25 | |
| 3 | 174.600 | 55.000 | 50 | 169 | 90 | 79 | |
| 4 | 390.000 | 85.000 | 75 | 170 | 105 | 65 | |
| 5 | 784.600 | 55.000 | 80 | 96 | 60 | 36 | |
| 6 | 500.000 | 45.000 | 80 | 151 | 80 | 71 | |
| 7 | 504.600 | 45.000 | 80 | 150 | 80 | 70 | |
| 8 | 200.000 | 55.000 | 55 | 178 | 110 | 68 | |
| 9 | 250.000 | 55.000 | 60 | 170 | 100 | 70 | |
| 10 | 1000.000 | 30.000 | 85 | 85 | 45 | 40 | |
| 11 | 267.000 | 55.000 | 65 | 187 | 110 | 77 | |
| 12 | 700.000 | 35.000 | 80 | 108 | 55 | 53 | |
| 13 | 700.000 | 35.000 | 80 | 108 | 55 | 53 | |
| 14 | 247.000 | 55.000 | 60 | 172 | 100 | 72 | |
| 15 | 220.000 | 55.000 | 60 | 193 | 110 | 83 | |
| 16 | 317.000 | 55.000 | 65 | 157 | 90 | 67 | |
| 17 | 1000.000 | 35.000 | 85 | 85 | 45 | 40 | |
| 18 | 317.000 | 55.000 | 65 | 157 | 90 | 67 | |
| 19 | 2100.000 | 25.000 | 85 | 41 | 20 | 21 | |
| 20 | 275.000 | 35.000 | 55 | 130 | 70 | 60 | |
| 21 | 2000.000 | 25.000 | 90 | 48 | 20 | 28 | |
| 22 | 450.000 | 40.000 | 75 | 148 | 75 | 73 | |
| 23 | 430.000 | 55.000 | 70 | 134 | 90 | 44 | |
| 24 | 804.600 | 35.000 | 85 | 106 | 55 | 51 | |
| 25 | 420.000 | 60.000 | 50 | 70 | 0 | 70 | |

APR:
(STIET/GC/Track)



PROPOSED/TENTATIVE DEPOT (ENTRY & EXIT) LINES CURVE TABLE:
AGRA CORRIDOR-01
(May change including addition and deletion of curves)

Uttar Pradesh Metro Rail corporation

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|---------|-------------------|-------------------|-----------------|----|----|---------|
| Entry Line | | | | | | | |
| 1 | 500.000 | 20.000 | 60 | 85 | 45 | 40 | |
| 2 | 150.000 | 15.000 | 25 | 49 | 0 | 49 | |
| 3 | 150.000 | 20.000 | 25 | 49 | 0 | 49 | |
| 4 | 125.000 | 20.000 | 25 | 59 | 0 | 59 | |
| 5 | 120.000 | 15.000 | 25 | 61 | 0 | 61 | |

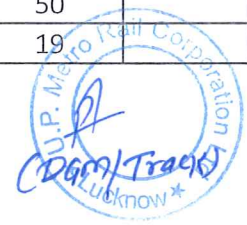
| | | | | | | | |
|-----------|---------|--------|----|----|----|----|--|
| Exit Line | | | | | | | |
| 1 | 300.000 | 20.000 | 45 | 80 | 45 | 35 | |
| 2 | 155.000 | 15.000 | 25 | 48 | 0 | 48 | |
| 3 | 150.000 | 20.000 | 25 | 49 | 0 | 49 | |
| 4 | 120.000 | 20.000 | 25 | 61 | 0 | 61 | |
| 5 | 125.000 | 15.000 | 25 | 59 | 0 | 59 | |

APB:-
(STI/GC/Track)



| PROPOSED/TENTATIVE DN LINE CURVE TABLE: AGRA CORRIDOR-02 (May change including addition and deletion of curves) | | | | | | | |
|--|----------|-------------------|-------------------|-----------------|-----|----|---------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| DN LINE | | | | | | | |
| 1 | 200.000 | 0.000 | 0 | 0 | 0 | 0 | |
| 2 | 200.000 | 0.000 | 0 | 0 | 0 | 0 | |
| 3 | 804.600 | 15.000 | 55 | 44 | 30 | 14 | |
| 4 | 800.000 | 15.000 | 60 | 53 | 30 | 23 | |
| 5 | 194.600 | 55.000 | 55 | 183 | 105 | 78 | |
| 6 | 200.000 | 55.000 | 55 | 178 | 100 | 78 | |
| 7 | 1200.000 | 35.000 | 80 | 63 | 50 | 13 | |
| 8 | 124.600 | 55.000 | 40 | 152 | 90 | 62 | |
| 9 | 5004.600 | 15.000 | 80 | 15 | 0 | 15 | |
| 10 | 4504.600 | 20.000 | 80 | 17 | 0 | 17 | |
| 11 | 254.600 | 55.000 | 60 | 167 | 100 | 67 | |
| 12 | 300.000 | 53.500 | 65 | 166 | 95 | 71 | |
| 13 | 500.000 | 45.000 | 75 | 133 | 80 | 53 | |
| 14 | 204.600 | 55.000 | 55 | 174 | 100 | 74 | |
| 15 | 200.000 | 55.000 | 55 | 178 | 100 | 78 | |
| 16 | 194.700 | 55.000 | 55 | 183 | 105 | 78 | |
| 17 | 300.000 | 55.000 | 65 | 166 | 95 | 71 | |
| 18 | 124.600 | 55.000 | 40 | 152 | 90 | 62 | |
| 19 | 140.000 | 55.000 | 45 | 171 | 90 | 81 | |
| 20 | 190.000 | 55.000 | 55 | 188 | 105 | 83 | |
| 21 | 204.600 | 55.000 | 55 | 174 | 100 | 74 | |
| 22 | 400.000 | 55.000 | 75 | 166 | 95 | 71 | |
| 23 | 504.600 | 50.000 | 80 | 150 | 85 | 65 | |
| 24 | 250.000 | 55.000 | 60 | 170 | 95 | 75 | |
| 25 | 600.000 | 45.000 | 80 | 126 | 75 | 51 | |
| 26 | 500.000 | 45.000 | 80 | 151 | 80 | 71 | |
| 27 | 604.600 | 45.000 | 80 | 125 | 75 | 50 | |
| 28 | 400.000 | 45.000 | 70 | 145 | 90 | 55 | |
| 29 | 204.600 | 55.000 | 55 | 174 | 100 | 74 | |
| 30 | 194.600 | 55.000 | 55 | 183 | 105 | 78 | |
| 31 | 150.000 | 55.000 | 45 | 159 | 110 | 49 | |
| 32 | 120.000 | 55.000 | 40 | 157 | 90 | 67 | |
| 33 | 1004.600 | 30.000 | 85 | 85 | 50 | 35 | |
| 34 | 234.600 | 55.000 | 60 | 181 | 105 | 76 | |
| 35 | 750.000 | 34.500 | 80 | 101 | 60 | 41 | |
| 36 | 600.000 | 34.900 | 75 | 111 | 60 | 51 | |
| 37 | 604.600 | 35.000 | 75 | 110 | 60 | 50 | |
| 38 | 1400.000 | 30.000 | 80 | 54 | 35 | 19 | |

APK
(SITE/GC/Track)



ANNEXURE - 30
(13 of 15)

| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|----|----|---------|
| DN LINE | | | | | | | |
| 39 | 500.000 | 50.000 | 80 | 151 | 85 | 66 | |
| 40 | 504.600 | 50.000 | 80 | 150 | 85 | 65 | |
| 41 | 1600.000 | 30.000 | 80 | 47 | 30 | 17 | |
| 42 | 1000.000 | 35.000 | 80 | 76 | 50 | 26 | |
| 43 | 1204.600 | 35.000 | 80 | 63 | 40 | 23 | |
| 44 | 1000.000 | 35.000 | 80 | 76 | 50 | 26 | |
| 45 | 502.600 | 40.000 | 75 | 132 | 70 | 62 | |
| 46 | 500.000 | 40.000 | 75 | 133 | 70 | 63 | |
| 47 | 2004.600 | 18.000 | 80 | 38 | 25 | 13 | |
| 48 | 7000.000 | 15.000 | 80 | 11 | 0 | 11 | |
| 49 | 600.000 | 45.000 | 80 | 126 | 55 | 71 | |
| 50 | 3500.000 | 20.000 | 80 | 22 | 0 | 22 | |
| 51 | 829.600 | 45.000 | 45 | 29 | 0 | 29 | |

Apuz.
(STIETGC/Track)



| PROPOSED/TENTATIVE UP LINE CURVE TABLE: AGRA CORRIDOR-02 (May change including addition and deletion of curves) | | | | | | | |
|--|----------|-------------------|-------------------|-----------------|-----|----|---------|
| Uttar Pradesh Metro Rail corporation | | | | | | | |
| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
| UP LINE | | | | | | | |
| 1 | 200.000 | 0.000 | 0 | 0 | 0 | 0 | |
| 2 | 200.000 | 0.000 | 0 | 0 | 0 | 0 | |
| 3 | 800.000 | 15.000 | 55 | 45 | 30 | 15 | |
| 4 | 804.600 | 15.000 | 60 | 53 | 30 | 23 | |
| 5 | 190.000 | 55.000 | 55 | 188 | 105 | 83 | |
| 6 | 204.600 | 55.000 | 55 | 174 | 100 | 74 | |
| 7 | 1204.600 | 35.000 | 80 | 63 | 50 | 13 | |
| 8 | 120.000 | 55.000 | 40 | 157 | 90 | 67 | |
| 9 | 5000.000 | 15.000 | 80 | 15 | 0 | 15 | |
| 10 | 4500.000 | 20.000 | 80 | 17 | 0 | 17 | |
| 11 | 250.000 | 55.000 | 60 | 170 | 100 | 70 | |
| 12 | 304.600 | 53.500 | 65 | 164 | 95 | 69 | |
| 13 | 504.600 | 45.000 | 75 | 132 | 80 | 52 | |
| 14 | 200.000 | 55.000 | 55 | 178 | 100 | 78 | |
| 15 | 204.600 | 55.000 | 55 | 174 | 100 | 74 | |
| 16 | 190.100 | 55.000 | 55 | 188 | 105 | 83 | |
| 17 | 304.600 | 55.000 | 65 | 164 | 95 | 69 | |
| 18 | 120.000 | 55.000 | 40 | 157 | 90 | 67 | |
| 19 | 144.600 | 55.000 | 45 | 165 | 90 | 75 | |
| 20 | 194.600 | 55.000 | 55 | 183 | 105 | 78 | |
| 21 | 200.000 | 55.000 | 55 | 178 | 100 | 78 | |
| 22 | 404.600 | 55.000 | 75 | 164 | 95 | 69 | |
| 23 | 500.000 | 50.000 | 80 | 151 | 85 | 66 | |
| 24 | 254.600 | 55.000 | 60 | 167 | 95 | 72 | |
| 25 | 604.600 | 45.000 | 80 | 125 | 75 | 50 | |
| 26 | 504.600 | 45.000 | 80 | 150 | 80 | 70 | |
| 27 | 600.000 | 45.000 | 80 | 126 | 75 | 51 | |
| 28 | 404.600 | 45.000 | 70 | 143 | 90 | 53 | |
| 29 | 200.000 | 55.000 | 55 | 178 | 100 | 78 | |
| 30 | 190.000 | 55.000 | 55 | 188 | 105 | 83 | |
| 31 | 154.600 | 55.000 | 50 | 191 | 110 | 81 | |
| 32 | 124.600 | 55.000 | 40 | 152 | 90 | 62 | |
| 33 | 1000.000 | 30.000 | 85 | 85 | 50 | 35 | |
| 34 | 230.000 | 55.000 | 60 | 185 | 105 | 80 | |
| 35 | 754.600 | 34.500 | 80 | 100 | 60 | 40 | |
| 36 | 604.600 | 34.900 | 75 | 110 | 60 | 50 | |
| 37 | 600.000 | 35.000 | 75 | 111 | 60 | 51 | |
| 38 | 1404.600 | 30.000 | 80 | 54 | 35 | 19 | |
| 39 | 504.600 | 50.000 | 80 | 150 | 85 | 65 | |
| 40 | 500.000 | 50.000 | 80 | 151 | 85 | 66 | |
| 41 | 1604.600 | 30.000 | 80 | 47 | 30 | 17 | |
| 42 | 1004.600 | 35.000 | 80 | 75 | 50 | 25 | |
| 43 | 1200.000 | 35.000 | 80 | 63 | 40 | 23 | |
| 44 | 1004.600 | 35.000 | 80 | 75 | 50 | 25 | |
| 45 | 498.000 | 40.000 | 75 | 133 | 70 | 63 | |
| 46 | 504.600 | 40.000 | 75 | 132 | 70 | 62 | |
| 47 | 2000.000 | 18.000 | 80 | 38 | 25 | 13 | |

Amiz
(S.T/G/C/Track)



| CURVE NUMBER | Radius | Transition Length | Permissible Speed | Equivalent Cant | Ca | Cd | Remarks |
|--------------|----------|-------------------|-------------------|-----------------|----|----|---------|
| UP LINE | | | | | | | |
| 48 | 7004.600 | 15.000 | 80 | 11 | 0 | 11 | |
| 49 | 604.600 | 45.000 | 80 | 125 | 55 | 70 | |
| 50 | 3504.600 | 20.000 | 80 | 22 | 0 | 22 | |
| 51 | 825.000 | 45.000 | 45 | 29 | 0 | 29 | |

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Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

be required to extend the validity of his Tender Security up to 56 days beyond the original tender validity period.

C18 Tender Security

C18.1 The Tenderer shall submit with his Tender a Tender Security for the sum mentioned in NIT in the form of

- a. an irrevocable bank guarantee issued by a Scheduled Commercial bank (including scheduled Commercial Foreign Banks) in India in the form given in Annexure 6 to these Instruction to Tenderers.
- b. An irrevocable Letter of Credit
- c. A Demand Draft

The tender security shall be submitted in a sealed envelope clearly marked on top "Tender Security for KNPAGT-3. In case of JV or consortium, the Bank Guarantee for Tender Security shall be from JV/Consortium and not from individual members.

C18.2 Any Tender not accompanied by an acceptable Tender Security shall be rejected by the Employer considering it as non-responsive and their Technical package shall not be opened and if opened then it will NOT be evaluated.

C18.3 The Tender Security of the successful Tenderer shall be returned upon the execution of the Contract and the receipt by the Employer of the Performance Security in accordance with Sub-Clause 4.2 of the GCC.

C18.4 The Tender Security of the unsuccessful Tenderers shall be released after issuance of LOA to successful bidder.

C18.5 The Tender Security shall be forfeited:

- (a) if the Tenderer withdraws his Tender during the period of Tender validity; or
- (b) if the Tenderer does not accept the correction of his Tender price, pursuant to Sub-paragraph E 5.2 below;
- (c) if the successful Tenderer refuses or neglects to execute the Contract or fails to furnish the required Performance Security within the time specified by the Employer.

C19 Performance Guarantee, Undertaking and Warranties

C19.1 The Tenderer shall submit full details of the identity of the proposed parties who shall provide or issue the Performance Guarantee in accordance with Clause 4.2.1 of General Conditions of Contract.

C19.2 If the Tenderer comprises a partnership, Consortium or Joint Venture, a parent company of each member or participant will be required to execute the Guarantees, Undertakings and Warranties.

C19.3 The Tenderer should note that, in the event of award, all Guarantees are required to be executed prior to the signing of the Contract.

Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

- A3.3 A Tenderer shall not have a conflict of interest. All Tenderers found to have a conflict of interest shall be disqualified. A Tenderer may be considered to have a conflict of interest with one or more parties in this tendering process, if:
- (a) a Tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement for or implementation of the project;
 - (b) a Tenderer is any associates/affiliates (inclusive of parent firms) mentioned in subparagraph (a) above; or
 - (c) a Tenderer lends, or temporarily seconds its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.
- A3.4 A Tenderer shall submit only one tender in the same tendering process, either individually as a Tenderer or as a partner of a JVA. A Tenderer who submits or participates in, more than one tender will cause all of the proposals in which the Tenderer has participated to be disqualified.
1. A Tenderer (applies to each individual member in case of a Joint Venture/Consortium) that has been determined to be ineligible by the Funding Agency in accordance with Clause A4.4 of ITT, shall not be eligible to be awarded a contract.
 2. Tenderers shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
 3. A firm, who has purchased the tender document in their name, can submit the tender either as individual firm or in joint venture/Consortium.
 4. The Tenderer/applicant (applies to each individual member in case of a Joint Venture/Consortium) must not have been blacklisted or debarred as on the due date of submission of bid by Funding Agency/Government of India/ State Government / Government undertaking from participating in the tenders. The tenderer should submit an undertaking to this effect in Form of Tender. **The tenderer shall also submit a "Verification Statement" to this effect as per proforma placed at Annexure 1 of ITT.**
 5. **Substantial / Non-Substantial Partners in Case of JV/Consortium**
 - a. There must be an Indian partner with a minimum of 26% participation in the JV/Consortium. Any substantial partner (equal to or more than 26% participation) can act as a lead partner.
 - b. Substantial Partners should have at least 26% participation, otherwise they 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.
 - 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.
 - d. All member of JV/Consortium shall have ~~some~~ experience as per NIT for of construction of ballastless/ballasted track with or without supply of track components **OR** supply of precast concrete components of ballastless track such as precast plinth, slab, sleepers etc. with or without supply of track components.
 6. **Participation by Subsidiary Company / Parent Company with credential of other Company**

Amir
(STIE/GCI/Track)



Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

- B3.2 Should the Tenderer for any reason whatsoever, be in doubt about the meaning of anything contained in the Invitation to Tender, Tender Documents or the extent of detail in the Employer's Requirements, Outline Design Specifications, Outline Construction Specifications and Tender Drawings, the Tenderer shall seek clarification from CE/Contract. The UPMRC will respond in writing to any request for clarification received in writing from tenderers prior to dead line for such clarification or modification in NIT.

Written copies of the response will be sent to all prospective tenderers who have purchased the tender document. All communications between the Tenderer and UPMRC shall be conducted in writing.

- B3.3 Except for any such written clarification by CE/Contract, UPMRC which is expressly stated to be by way of an addendum to the documents referred to in paragraphs B1.1(a) to (i,j) above and/or for any other document issued by the Employer which is similarly described, no written or verbal communication, representation or explanation by any employee of the Employer or the Engineer shall be taken to bind or fetter the Employer or the Engineer under the Contract.
- B3.4 **Correspondence:** All correspondence from UPMRC pertaining to this tender till the award of the work with tenderer shall be done by Chief Engineer/ Contract, UPMRC.

B4 Amendment to Tender Documents

- B4.1 During the tender period, the Employer may issue further instructions to tenderers or any modifications to existing tender documents in the form of an addendum. Such an amendment in the form of an addendum will be sent in writing or by fax within the date given in NIT, to all prospective tenderers who have purchased the tender document in the tender period. In case of delay beyond the last date of issuing addendum given in NIT, the date of submission, at its sole discretion may be extended by UPMRC under Clause D-2 of ITT.

Without prejudice to the order of preference as specified in Clause 1.5 of General Conditions of Contract, the provisions in such addenda shall take priority over the Invitation to Tender and Tender Documents issued previously. Tenderers should acknowledge receipt of such addenda and include them in the tender submittal

- B4.2 The Tenderer should note that there might be aspects of his Tender and/or the evaluation documents submitted with the Tender that will necessitate clarification. It is intended that any aspect of the said evaluation documents and any amendments or clarification which are to have contractual effect will be incorporated into the Contract either:
- (a) by way of Special Conditions of Contract to be prepared by the Employer and agreed in writing by the Tenderer prior to and conditional upon acceptance of the Tender; or
 - (b) by the Tenderer submitting, at the written request of the Employer, documents which are expressly stated to form part of the Tender, whether requested before or after submission of the documents forming part of the Tender, identified in paragraphs C2.3(a) to C2.3(i) below, and whether as supplements to, or amended versions of such documents.

Save as aforesaid, all such amendments or clarifications shall not have contractual effect. Requests for clarification and the tenderers responses shall be made in writing.

Amir
(STIE/GC/Track)



Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

mechanism by which they will be implemented for ensuring safety as required by Clause 6 of the Employer's Requirements-Construction (Volume 3) and Clause 14 & 15 of the SCC.

- C5.2 The Outline Safety, Health and Environment Plan shall be headed with a formal statement of policy in relation to safety, health & environment and shall be sufficiently informative to define the Tenderer's safety plans and set out in summary an adequate basis for the development of the Site Safety, Health and Environment Plan to be submitted in accordance with Clause 14 & 15 of the SCC.
- C5.3 The Tenderer may be requested by UPMRC in writing to amplify, explain or develop his Outline Safety, Health and Environment Plan prior to the date of acceptance of the Tender and to provide more details with a view to reaching provisional acceptance of such a plan.

C6 Tenderer's Technical Proposals

- C6.1 The Tenderer shall submit as part of his Tender, the Tenderer's Technical Proposals as described in Clause C2, Clause C6 and Annexure 4 of this ITT.
- C6.2 The Technical Proposal shall clearly demonstrate the understanding and comprehension of the work involved, including Preliminary Scheme/drawings of the slab track /plinth track proposed for installation in Tunnels and Viaducts, Turnouts, details of the track Fastenings proposed for to be used, Track Forms and Fastenings proposed for the Depot Tracks, keeping in mind the required approvals from, and sanctions granted by, the Ministry of Railways /RDSO, Govt. of India (Annexure 11 of ITT) and General Functional Cross-sections given in the Tender Drawings.
- C6.3 The Tenderer shall be required to amplify, explain and develop the Tenderer's Technical Proposals in substantially greater detail during the Tender evaluation period such that they may be confirmed as complying clearly with Volume 3 Employer's Requirements and in accordance with Clause C2 of this ITT, and can be incorporated into the Contract.
- C6.4 The Tenderer shall enclose a list of companies for the Manufacturing of items in Bill No. SPM1 & SPM2 of Vol.-5 including ballastless track fastenings, from whom the Contractor intends to procure these items, along with the Manufacturing Record of the Units, as specified in Volumes 5 of these Documents. Each list shall consist of a minimum of two companies per item for SPM1 and one company for SPM2, whose product specifications and manufacturing processes fully conform to the relevant Codes and Railway Standards, and the requirements of these Contract Documents. Adequate documentary evidence to prove the authenticity, and confirmation that these manufacturing units are acceptable, shall be enclosed with these lists, which may include test results, reports, certificates, brochures, etc.
- C6.5 The Tenderer shall submit as part of his Technical Proposal a completed and signed certificate as attached to Annexure 3 of this ITT, identifying any minor deviations without any costs allocated to the deviations. If no minor deviations are to be reported, Annexure 3 must still be completed and signed by the Tenderer confirming that no minor deviations exist.

Any Tenders containing any material deviations or reservations or conditions as described in Sub-Clause E4.4 of the Instructions to Tenderers in this Volume 1 may be deemed by the Employer to be non-responsive.

- C6.6 Regarding Fastening System for Ballastless Track

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Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

TRACK CONTRACT “KNPAGT-3”

FORM OF TENDER

Date:

To :

Chief Engineer/Contract
Uttar Pradesh Metro Rail Corporation Limited,
Administrative Building,
Vipin Khand, Gomti Nagar
Lucknow (UP)– 226010
INDIA

Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

CONTRACT KNPAGT-3

GENTLEMEN,

1. Having inspected the Site, examined the General Conditions of Contract, Special Conditions of Contract, Design Basis report, Tender Drawings and Instruction to Tenderers including Bill of Quantities, and addenda thereto (if any) issued by the UPMRC for the design and construction of the above-mentioned Works, and the matters set out in Appendix 1 hereto, and having completed and prepared Appendices 2, 3, 4, 5, 6, 7, 8, & 9, 10, 11 & 12 hereto, we hereby (jointly and severally)* offer to design, construct and complete the whole of the said Works and Commissioning and remedying any defects therein, in conformity with the above documents within the completion period of 48 months (from the date of commencement) for the sum stated in the Bill of Quantities (Volume 5 of Tender Documents) as completed by us and appended hereto.
2. We undertake (jointly and severally) *:
 - (a) to keep this Tender open for acceptance without unilaterally varying or amending its terms for the period stated in Notice of Invitation to Tender hereto (the withdrawal of any member or any other change in the composition of the partnership/joint venture/consortium on whose behalf this Tender is submitted shall constitute a breach of this undertaking)*; and
 - (b) if this Tender is accepted, to provide Guarantees, Undertakings & Warranties for the due performance of the Contract as stipulated in the General Conditions of Contract, Special Conditions of Contract and Appendix 1 hereto; and
 - (c) to hold in confidence all documents and information whether technical or commercial supplied to us at any time by or on behalf of the UPMRC in connection with this Tender or with the above-mentioned Works and, without your written authority or as otherwise required by law, not to publish or otherwise disclose the same.

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(SME/CL/Track)

Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

3. We submit with this Tender a duly executed Tender Guarantee in respect of our obligations under this Tender.
4. Unless and until a formal agreement is prepared and executed, this Tender together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.
6. We declare that the submission of this Tender confirms that no agent, middleman or any intermediary has been; or will be engaged to provide any services, or any other item of work related to the award and performance of this Contract. We further confirm and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price does not include any such amount. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Tender to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
7. ("Guidelines"). This Tender shall be governed by and construed in all respects according to the laws for the time being in force in India. The courts at Lucknow will have exclusive jurisdiction in the matter.
8. We acknowledge that the Appendix forms an integral part of the Tender.
9. We have independently considered the amount shown Clause 8.5 of the General Conditions of Contract as liquidated damages and agree that they represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed in time.
10. If our Tender is accepted we understand that we are to be held solely responsible for the due performance of the Contract.
11. We, including any subcontractors or suppliers for any part of the contract, have or will have nationalities from eligible countries., in accordance with A3.2 of ITT
12. We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with A3.3 of ITT
13. We are not participating, as a Tenderer, in more than one tender in this tendering process and we are not sub-contractor to any other tenderer participating in this tendering process in accordance with A3.4 of ITT.
14. We do hereby undertake that we have not been banned for business by any central / state government department or public sector undertaking and also that none of our work was rescinded by any metro corporation in India after award of contract during last 5 years due to non-performance.

We are, Gentlemen,

Yours faithfully,

Signature:

Alvin
(STIE/K&C/Track)



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KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

shall facilitate the contractor for obtaining sponsoring letter for getting them registered for availing the Project Import Benefits. Imports can also be made on FOB basis by Contractor who does have their business unit incorporated in India. However, the responsibility to avail the concessional benefits under Project Import or otherwise as extended in accordance with the law of the land shall solely rest with the Contractor. The contractor shall indemnify UPMRC for the process of Project Import Registration and assessment of custom duty and completion of whole process.

Accordingly, UPMRCL shall reimburse the eligible Basic Custom Duty, applicable Cess and GST paid by the Contractor on imported items. The term Basic Custom Duty shall mean the Custom Duties excluding the input tax credits/IGST available to the Contractor. **Accordingly, GST shall also be reimbursed after submission of documentary proof / actual.**

The Contractor shall ensure that the input Credit(GST) as available and applicable, as per GST rules, shall be fully utilized for the payment of GST applicable on the supply of all the imported goods and services.

The Contractor shall be fully responsible for ensuring that all necessary documentation/ information as may be required, for reimbursement of paid duties are correctly prepared by them and are timely submitted to Employer. Any deductions/ rejections made by the Statutory Authorities from the claimed amounts on account of reasons attributable to the contractor shall not be reimbursed by Employer.

Should the Employer, during execution of the contract, obtain a waiver for GST at Para A (a) to (b) above, in full or part thereof, the Contractor will be advised on the process to be followed to obtain exemption/ refund of such taxes, duties etc., from the concerned Authorities. The Contractor shall arrange for the remittance of the refund so obtained to the Employer. In case of failure by the Contractor to obtain and remit the refund within reasonable time (to be decided by the Employer & intimated to Contractor) to the Employer, the same will be recovered by the Employer from the amounts due as payment to the Contractor or as debt due from the Contractor. The decision of the Employer shall be final and binding. If the Contractor fails to take the required action to obtain refund or exemption, the Employer may take action in accordance with conditions of Contract.

- (B) Any taxes, duties, levies cess, which are required / may be required to be paid by the Employer in the fulfilment of the tender condition including on reverse charge basis should also be included by the tenderer in the Contract Price.

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(STIE/GC/Track)



KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

when the work is prevented for a continuous period of 120 days.

39. ~~Clause 17.7~~ Deleted

40. ~~Sub-Clause 17.14~~ Deleted

41. Additional Clause Record of Taxes, Duties etc.

The Contractor shall maintain complete records in respect of payments made for taxes, duties, octroi, and other levies taxes including GST on works contract payable to various concerned authorities and advise the Employer complete details of such payment every month. These details will be kept separately for:

- (a) Customs Duties & GST on all imported Materials and Plant, as actually paid by the Contractor;
- (b) GST on locally produced Materials and Plant, as actually paid by the Contractor;
- (c) Customs Duties & GST actually paid by the Contractor on the imported components and equipment installed in the locally manufactured Materials and Plant for the Works;
- (d) GST on the local components and equipment installed in the locally manufactured Materials and Plant, as actually paid by the Contractor;
- (e) Similar details as in a, b, c and d above should be kept in respect of Spares, Jigs, fixtures etc.; and
- (f) Any other taxes, duties etc. paid by the Contractor.

These records shall remain open for inspection by the Employer or the Engineer at any time. The amount payable/recoverable from the contractor in accordance with the conditions of the tender will generally be calculated based on these records. However, Employer at his sole discretion, if not satisfied with the veracity of the records or records are incomplete or otherwise, may separately determine the amount payable/recoverable from the contractor in accordance with the conditions of the tender, which shall be final and Binding.

42 Additional Clause Functions of the Engineer

The Engineer, subject to Clause 42 of SCC:

- (a) shall watch and inspect the Works, monitor the test results and examine any Material to be used and workmanship employed by the Contractor in connection with the Works;
- (b) shall carry out such duties and exercise such powers vested in the Engineer in accordance with the provisions of the Contract;
- (c) shall issue instructions which in his opinion are necessary for the execution of the Works; and
- (d) may issue any other instruction that in his opinion is desirable in connection with the Works.

Contract-KNPAGT-3 – Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots

b) **Change in Taxes/Duty:**

The contract price shall not be adjusted to take into account any change in taxes, duties, levies or introduction of any new tax, duty or levy except otherwise mentioned in GCC or SCC till the completion date including the date of extended period of contract.

c) **Goods and Services Tax (GST):**

GST is included excluded in the contract price. However, the contractor shall maintain details of GST paid to 'Trade and Taxes' department and required documents like GSTR3B, GSTR 1 & GSTR 2, Challans, Certificate of CA etc. and GST shall be reimbursed on submission of actuals / documentary proof.

d) In view of above, the tenderer is advised to quote the price inclusive of all duties (including excluding GST), levies, cess and all other incidental charges etc. required to fulfil the tender conditions including statutory deduction viz., TDS towards Income Tax / Labour Cess etc. after considering all contract clauses including C2.4, C2.5 & C2.6 above except Basic Custom Duty and GST as mentioned in the point a) & b) respectively above.

e) Any duties, levies cess, royalties etc. and all other incidental charges which are required/may be required to be paid by the Employer in the fulfilment of the tender condition under any law on reverse charge basis should also be included by the tenderer in the Contract Price.

C3 Form of Tender

The Form of Tender shall be completed and signed by a duly authorised and empowered representative of the Tenderer. If the Tenderer comprises a partnership, consortium or a joint venture the Form of Tender shall be signed by a person who is duly authorised by each member or participant thereof or by authorized signatory of each member. Signatures on the Form of Tender shall be witnessed and dated. Copies of relevant powers of attorney shall be attached.

C4 Outline Quality Plan

The Tenderer shall submit Appendix-3 of Forms of Tender to form part of his Tender an Outline Quality Plan illustrating the intended means of compliance with Appendix 6 of the Employer's Requirements (Volume 3) and setting out in summary form an adequate basis for the development of the more detailed document required under Clause 21 of the SCC. The Outline Quality Plan shall contain sufficient information to demonstrate clearly the proposed method of achieving the Tenderer's quality objectives with regard to the requirements of the Contract.

C5 Outline Safety, Health and Environment Plan

C5.1 The Tenderer shall submit Appendix-4 of Forms of Tender to form part of its Tender an Outline Safety, Health and Environment Plan which shall contain sufficient information to demonstrate clearly the Tenderer's proposals for achieving effective and efficient safety, health & environment procedures. The Outline Safety, Health and Environment Plan should include an outline of the safety procedures and regulations to be developed and the



KNPAGT-3 –Design, Installation, Testing & Commissioning of Ballastless Track of Standard Gauge in 4 Corridors in Elevated as well as Underground Sections of Kanpur and Agra Metro Project along with supply of fastening systems and associated Ballasted/Ballastless Tracks in 4 Depots.

in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 12 [Variations] of GCC and shall notify the Contractor accordingly, with a copy to the Employer.

7. Clause 3.3 Engineer's Authority to Delegate

Following is added to paragraph 3 of Clause 3.3 of GCC:

The Engineer's decision on the suitability and qualification of the assistants will be final.

8. Clause 4.2.3 Release of Performance Security Amount (Bank Guarantee)

~~On completion of the entire work, issue of Taking over Certificate by the Engineer in accordance with Sub-Clause 9.1 and 9.2 of GCC and issue of final payment certificate as per 11.10 of GCC, one half of the Performance Security shall be refunded to the Contractor. This shall not relieve the Contractor from his obligations and liabilities, to make good defects that may be detected during the Defects Liability Period~~

The balance amount Performance security amount / Bank Guarantee shall become due and shall be paid / released to the Contractor on signing of the Performance Certificate after the expiry of the final Defects Liability Period as per Clause 10.9 of these conditions and no claim certificate by the contractor in the form acceptable to employer.

9. Clause 4.2.4 Guarantees, Warranties and Undertakings

Para (a) & (b) are deleted and *Following is added below para (c) in the GCC Clause 4.2.4:*

The form of contractor warranty shall be in the format given in Schedule- 4 of these Special Conditions of Contract to be enclosed.

Related reference / requirement of parent company undertaking and parent company guarantee are deleted from further paras after para (c) under clause 4.2.4 of GCC. Schedule 2 & 3 of SCC are also deleted and not applicable under this contract.

10. Clause 4.5 Sub-Contractors

Following is added to Clause 4.5.1 of GCC:

The sub-contracting, excluding design and Supply of Ballastless Track Fastening work shall be generally limited to 65% of the balance Contract Value. The value of a sub-contract, other than for Design work and supply of ballastless track fastening system should be intimated by the Contractor to the Engineer and it should also be certified that the cumulative value of the sub-contracts awarded so far is within the aforesaid limit of 65%. A copy of the contract between the Contractor and Sub-Contractor shall be given to the Engineer within 15 days of signing and in any case 7 days before the Sub Contractor



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STIE/GC/Track

General Conditions of Contract (GCC)

- (d) the character of equipment and facilities needed preliminary to and during the manufacture, installation, execution, testing, Integrated Testing, and commissioning of the Works and remedying of any defects;
- (e) the protection of the environment and adjacent structures which will be necessary preliminary to and during the manufacture, installation, execution, testing, Integrated Testing, and commissioning of the Works and remedying of any defects;
- (f) the location of and the authorisation required for and the means of diversion of any services and facilities required for the purposes of the Works.

The Contractor shall whenever required by the Engineer, submit details of the arrangement and methods which the Contractor proposed to adopt for the execution of the Works. No alteration to these arrangements or methods shall be made without the approval of the Engineer.

Performance security Amount 4.2
4.2.1

Within 30 days from date of issue of the Letter of Acceptance, the successful Tenderer shall furnish Performance Security, for an amount of ten per cent of the Contract value in types and proportions of currencies in which the Contract Price is payable either in the form of a Bank Draft, FDR or in the form of a Bank Guarantee from a branch in India of a scheduled foreign bank or from a scheduled commercial bank in India acceptable to the Employer. In case the Contractor fails to submit the requisite Performance Security within 30 days from the date of issue of LOA, the Contract shall be annulled duly forfeiting Tender Security and other dues, if any payable against the Contract. The failed Contractor shall be debarred not only from participating in re-tender for that work but also in any other tender of UPMRC for a period of one year from date of issue of LOA. The approved form provided in the "Instructions to Tenderers" shall be used for Bank Guarantee.

The successful Tenderer shall have the following options for submission of Performance Security;

- i) Performance Security for an amount of ~~10~~ 3 % of Contract value, if the same is in the form of Bank Guarantee/FDR, it shall be valid up to 6 months beyond the Defect Liability Period, or
- ii) ~~Performance Security in the form of two Bank Guarantees/FDRs, each for an amount of 5% of Contract Value with one Bank Guarantee/FDR valid up to 6 months beyond the date of completion of work and second Bank Guarantee/FDR valid up to 6 months beyond the Defect Liability Period, or~~



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(STIE/GC/Track)

General Conditions of Contract (GCC)

~~iii) One part of Performance Security for an amount of 5% of Contract value, if the same is in the form of Bank Guarantee/FDR, it shall be valid up to 6 months beyond the Defect Liability Period. For 2nd part of Performance Security for an amount of 5% of Contract value, amount shall be deducted at the rate of 5% of the gross amount of each running on account bill, The Performance Security so deducted from running on account bill, shall be released on completion of entire work in terms of Clause 4.2.3(i) of CCC. After achieving every 25% of financial progress w.r.t. Original Contract Value, Contractor can ask for release of such amount deducted towards Performance Security on submission of Bank Guarantee/FDR for an equal amount with validity up to 6 months beyond the date of completion Of work. The Contractor shall always have the option during the currency of Contract to submit 2nd part of Performance Security for an amount of 5% of Contract value in the form of Bank Guarantee/FDR with validity up to 6 months beyond the date of completion of work. In such a case, further deduction of Performance Security amount from running on account bill shall be stopped and the amount deducted towards Performance Security shall be released.~~

In case, if Contract is terminated due to Contractor's default in terms of GCC Clause 13.2, the full ~~10~~ 3 % Performance Security amount shall be forfeited. Shortfall amount, if any, shall be recovered by the Employer from monies due to the Contractor under the Contract including, without limitation, and the Employer shall have the power to recover any balance from monies due to the Contractor under any other Contract the Employer and the Contractor.

In case the Contract value exceeds beyond 25% of the Original Contract Value, the Contractor shall have to submit additional Performance Security as follows:.

- (a) If variation amount on plus side exceeds 25% of the Original Contract Value either due to Employer's variation or due to Contractor's variation, the Contractor shall submit additional performance security equal to an amount of 10% of the variation amount exceeding 25% of the Original Contract Value.
- (b) No additional Performance Security will be required to be submitted if the variation amount on plus side is within 25% of the Original Contract Value.

Forfeiture 4.2.2 Failure of the successful Tenderer to furnish the required Performance Security shall be a ground for the annulment of the award of Contract and forfeiture of the tender security.

Release 4.2.3 The whole of the Performance Security amount shall be liable to be forfeited by the Employer at the discretion of the Employer, in the event of any breach of contract on the part of the Contractor.

- i. On completion of the entire work, one half of the Performance Security shall be refunded to the Contractor, on issue of Taking over Certificate by the Engineer, in accordance with Sub-Clause 9.1 and 9.2 of these conditions. This shall not relieve the Contractor from his obligations and liabilities, to make good that may be detected during the Defects Liability Period

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